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Part 1 of 2

August 17, 2001

Philippe dePizzo, Executive Director  
Nunavut Water Board  
4616 Cool Draw  
Yellowknife, NT  
X1A 2K4

Nunavut Water Board  
2001  
Public Registry

INTERNAL	
PC	✓
LA	Sept 2001
OM	
	from
INFO	

Dear Philippe:

**Re: Paul Crowley v. Municipality of Iqaluit, Nunavut Court of Justice file #01 00 241 cv**

Please signify your acceptance of service of the following documents filed with the Nunavut Court of Justice in the above-noted action by returning a signed copy to me for filing with the Nunavut Court of Justice:

- Originating Notice;
- Notice of Motion;
- Affidavit of Paul Crowley;
- Pre-Hearing Brief of the Applicant;
- Draft Order.

Please further note that the Application set forth in the above Notice of Motion has been adjourned by Order of the Nunavut Court of Justice to September 11, 2001.

Philippe dePizzo  
Name (please print)

P. dePizzo  
Signature

Nunavut Water Board  
Organization

21/VIII/2001  
Date

Yours truly,  
Paul Crowley  
Paul Crowley

IN THE NUNAVUT COURT OF JUSTICE

B E T W E E N:

PAUL CROWLEY

Applicant

- and -

MUNICIPALITY OF IQALUIT

Respondent

**AFFIDAVIT OF RICHARD KENNETH ROY BUTLER**

I, Richard Kenneth Roy Butler, of the City of Iqaluit in the Nunavut Territory, **MAKE OATH AND SAY AS FOLLOWS:**

1. I am the Chief Administrative Officer of the City of Iqaluit and as such have knowledge of the matters deposed to herein, except where stated to be based upon information and belief.
2. For many years the City of Iqaluit has operated a waste disposal site in the West 40 area across Koojesse Inlet from the Town. The current site, which is referred to as Site 3, has been used for the disposal of municipally collected waste since 1995. The total site area is approximately 3.6 hectares. Since the 1940's, it has been the practice of the City to burn municipal waste in open fires to reduce waste volume and increase site capacity. It is my information and belief that every other community in Nunavut burns waste. I am advised by the City's engineering consultants and verily believe that burning of food wastes at the site also reduces the attraction of the site for birds, thereby reducing a potential hazard to airport traffic.

3. Municipal staff take all reasonable care when waste is burned. Burning is only commenced under favourable wind conditions. Unfortunately, smoke is occasionally blown into town when there are sudden shifts in wind direction. It is difficult to simply extinguish a burn when this happens, but more can be done when the burn pile is relatively small. As a result, our staff try to burn with smaller piles but more frequently. During the recent labour dispute, it did become necessary to burn large accumulated quantities of waste at one time. The five burning conditions listed in Part E #2 of Water Licence NWB31QA0103 reflect the City's standard operating procedures.
4. Until the creation of the Nunavut Territory, the City was subject to the licensing requirements of the *Northwest Territories Waters Act*, (and formerly the *Northern Inland Waters Act*), for municipal undertakings involving the use of water and the deposit of waste into water. The last Licence issued by the Northwest Territories Water Board, which was signed by the Minister of Indian Affairs and Northern Development in accordance with Section 14 of the *Northwest Territories Waters Act*, was issued on January 1, 1996.
5. It is my information and belief that licensing authority over the use of water and the deposit of waste into water in Nunavut was transferred in 1996 to the Nunavut Water Board, in accordance with Article 13 of the Nunavut Land Claims Agreement. The Nunavut Water Board has issued two Licences to the City, (December 31, 1999 and December 31, 2000). Neither Licence has been signed by the Minister of Indian Affairs and Northern Development. Copies of the Licences are attached as Exhibits "B" and "F" to the Affidavit of Paul Crowley dated August 11, 2001.
6. It is my information and belief that the activities of the City in the areas of water supply and distribution, wastewater collection and treatment and waste management are also subject to Territorial statutes and regulations administered by the Nunavut Department of Sustainable Development and the Nunavut Department of Health and Social Services.
7. I am advised by the City's legal counsel and verily believe that the jurisdiction of the Nunavut Water Board and the Northwest Territories Water Board is limited to the use of, and disposal

of waste into, inland waters. The City is located on the shores of Koojesse Inlet, which forms part of Frobisher Bay, and which I understand to be marine waters, not inland waters.

8. On September 15, 2000, the City applied to the Nunavut Water Board for renewal of Licence NWB31QA0103, which was due to expire on December 31, 2000. The Board held a hearing on the application on November 22, 23 and 24, 2000. The Board issued a Licence dated December 31, 2000 and released its Reasons for Decision on January 26, 2001, (attached as Exhibits "F" and "E" to the Affidavit of Paul Crowley dated August 11, 2001).
9. The City has received legal advice that, in order to be valid and in effect, a Licence must be approved by the Minister of Indian Affairs and Northern Development. The City has also received legal advice that the Board exceeded its jurisdiction by purporting to regulate burning at the City's waste disposal site. On February 15, 2001, Mayor John Matthews wrote to the Honourable Robert Nault, Minister of Indian Affairs and Northern Development, to ask for his assistance in resolving these matters. Attached as Exhibit "A" to this my affidavit are copies of letters from Minister Nault to Mayor Matthews and to the Chair of the Nunavut Water Board, wherein the Minister states that conditions dealing with waste burning are beyond the jurisdiction of the Board and that he "cannot approve the Iqaluit municipal licence as issued". This advice is entirely consistent with previous advice received from Department officials.
10. As a result of a lengthy labour dispute between the City and its employees, there are a number of deadlines in the Board's conditions that we have not or cannot meet. Mayor Matthews wrote to the Board on May 31, 2001 respecting this issue, (see Exhibit "G" to the Affidavit of Paul Crowley).
11. The City of Iqaluit burns waste because it reduces the need for landfill capacity. I am advised by my staff, and verily believe, that significant volume reduction is achieved through burning.

12. There is a critical shortage of landfill capacity at the current site. We advised the Board at the 2000 hearing that we expected to reach capacity at the site by October 2001, even with burning. That estimate has turned out to be accurate. The area currently used for waste disposal will reach its design capacity by November 2001.
13. The City is working diligently towards a new system of waste disposal. In September 2000, following a year long process that involved extensive public consultation, our consultants J.L. Richards & Associates Limited and Golder Associates Limited completed a Solid Waste Management Planning Study. The purpose of the study was to develop an environmentally responsible, socially acceptable, and cost effective Solid Waste Management Plan for the next twenty years. Municipal Council accepted the recommendations of the study and approved the implementation of a new waste disposal system consisting of an incinerator and an engineered landfill for ash and metal waste.
14. Studies are presently ongoing to evaluate incinerator technologies and to select a site for the new incinerator. Attached as Exhibit "B" to this my affidavit is a document prepared by Dillon Consulting Limited in May of this year that summarizes the proposed solid waste disposal facilities. The document attached as Exhibit "A" to the Supplementary Affidavit of Paul Crowley is an information update to City Council on the status of the Solid Waste Management Plan.
15. Capital funding remains an issue. Despite continuing and aggressive efforts to secure dollars, the City still requires an additional seven to nine million dollars to implement the incinerator and new landfill. To date, no government agency has provided any commitment to provide funding.
16. Until the new waste disposal facilities are constructed, the City needs to continue landfilling as

it has always done. Our current best estimate is that, subject to the availability of capital funding, the earliest implementation date for our new incinerator is either 2003 or 2004. We therefore need enough interim landfill capacity for two to three years.

17. The City's consultants, Dillon Consulting Limited, have prepared a preliminary design report for a three-year expansion of the existing landfill. That report was forwarded on August 17, 2001 to the Nunavut Water Board, the Nunavut Department of Community Government and Transportation, Environment Canada, the Nunavut Department of Health & Social Services, the Nunavut Department of Sustainable Development, the Department of Indian Affairs and Northern Development and the Department of Fisheries and Oceans. Attached as Exhibit "C" to this my affidavit is a copy of the Dillon Report, entitled "City of Iqaluit Landfill Facility Expansion Preliminary Design Report – Regulatory Submission".
18. I am advised by the City's consultants, and verily believe, that in order to minimize the interim requirements for landfill capacity, it has based its design for the three year expansion on the assumption that burning will continue in the interim period. As a result, it has designed a three-year expansion, (termed "Cell #1" in the attached Exhibit "C"), for a landfill volume of approximately 25,000 cubic metres. I am further advised, and verily believe, that if the practice of waste burning were to cease, this capacity could be exhausted by the end of 2002. This would mean that we would run out of interim capacity a year or two before the new incinerator becomes operational.
19. We learned during the recent labour dispute what it is like to deal with waste without the ability to burn. In a relatively short period of time, a large quantity had to be managed. We found that it was almost beyond our technical capabilities, since our entire waste disposal infrastructure is not set up to handle landfilling unburned waste. If we were to be required to stop burning waste now, I fear that our staff and equipment would be unable to handle the higher volumes of waste at the landfill.

20. We advised the Board in our written evidence at the November hearing that allowing garbage to collect at the present site without burning could result in other health hazards. We remain concerned that accumulation of garbage containing food waste could pose a danger to planes using the Iqaluit Airport due to the congregation of birds at the site. We remain concerned with landfilling unburned garbage at a site that is not a modern landfill with any means to contain or collect leachate. Our new ashfill landfill is planned to be properly engineered with a liner.
21. It is my understanding and belief that the practical effect of Condition #3 in Part E is to simply prohibit the burning of waste, despite the apparent continuing ability to burn a “segregated” waste stream. I am advised by my staff, and verily believe, that it is not practically possible or feasible to segregate for burning “food waste, paper products, paperboard packaging and untreated wood” as contemplated by the Board's Condition #3 in Part E of the latest Licence. To do so would require either the immediate implementation of a fundamentally different method of collecting garbage, which would require a completely new waste collection infrastructure, or a labour-intensive sorting operation for collected waste. Neither alternative could be implemented without either a major new burden to local taxpayers or a funding commitment from other government agencies. Either alternative, if practical at all, would require significant time to implement.
22. Like all Canadian municipalities, the City of Iqaluit is evolving towards greater diversion of recyclable materials from its waste stream. We have devised a new waste recycling program based on “blue bag” collection to separate recyclable materials, such as plastics and aluminum, from the waste stream. This program will be launched in about two months time, as noted in the document in Exhibit “A” of the Supplementary Affidavit of Paul Crowley. Although our blue bag program, when implemented, will help divert some materials from landfill, it will not result in a segregated waste stream that would meet the Board's condition. I do not know of

one Canadian municipality that collects a separate stream that would comply with the Board's condition.

23. The City, like the Applicant, would like to end the practice of burning waste at the landfill. We hope, with focus on our current solid waste disposal and recycling plans, coupled with sufficient funding and financing efforts, to be in a position to do so within two or three years when the new waste disposal system is operational.
24. As Chief Administrative Officer, I find it counter-productive and a waste of very scarce resources to engage in a jurisdictional debate about regulatory authority over waste management. The City of Iqaluit has attempted to cooperate with the Nunavut Water Board and all other regulatory agencies to the extent that it is possible to do so, while at the same time continuing to provide adequate services to its rapidly expanding population. The City has urged the Minister to clarify the jurisdiction issue. I hope that Minister Nault's August 13, 2001 letter achieves that goal. In the meantime, the City is attempting to abide by the spirit of the Board's decision in every way that is practical and affordable.
25. I make this Affidavit in support of the Respondents's submissions on an application by Paul Crowley for an interlocutory injunction, and for no other purpose.

SWORN BEFORE ME at the City )  
of Iqaluit, in the Nunavut Territory, )  
this day of , 2001 )

)  
)  
)  
)  
A Commissioner for Taking Affidavits, etc. )

RICHARD KENNETH ROY BUTLER

Court File No. 01 00 241 CU



**IN THE NUNAVUT COURT OF JUSTICE**

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**B E T W E E N:**

**PAUL CROWLEY**

Applicant

- and -

**MUNICIPALITY OF IQALUIT**

Respondent

---

**AFFIDAVIT OF RICHARD  
KENNETH ROY BUTLER**

---

This Affidavit filed by:

MILLER THOMSON LLP  
600 – 60 Columbia Way  
Markham ON L3R 2X6

John R. Tidball  
Counsel for the Respondent

Tel: (905) 415-6710  
Fax: (905) 415-6777

# Fax

*Bill Tikeman*

**Name:** John Tidball, Miller Thompson (905) 415-6777 ✓  
Laury Pelly, NTI (867) 983-2723 ✓  
Philippe de Pizzo, NWB (867) 873-9052  
Doug Wallace, G.N. Dept. of Justice 975-6349  
Lee Webber, Fed. Dept. of Justice (867) 920-4022

**From:** Paul Crowley  
**Date:** August 23, 2001  
**Subject:** Supplemental Affidavit - Paul Crowley v. Municipality of Iqaluit  
**Pages:** 16

**Comments:**

Please signify acceptance by signing and returning to the undersigned (by fax and original by post) the letter of acceptance of service.

Thank you

Paul Crowley  
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X0A 0H0  
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**WITHOUT PREJUDICE**

August 23, 2001

John Tidball, Barrister and Solicitor  
Miller Thompson  
600 60 Columbia Way  
Markham, Ontario  
L3R 0C9

Via Fax: (905) 415-6777

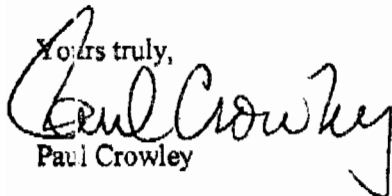
Dear Mr. Tidball:

**Re: Paul Crowley and the Municipality of Iqaluit**

Please find attached a filed copy of my supplemental affidavit in support of my application for an interim injunction in the above noted case. Please signify acceptance by signing and returning to the undersigned (by fax and original by post) the letter of acceptance of service.

In addition, please be aware that I have contacted the Nunavut Court of Justice in Iqaluit to inquire as to the services of a Court reporter to record possible cross-examinations on affidavits. I made them aware of my availability on August 28, 29, 30 and on September 6 and 7. I am advised that the Court Reporter is usually attached to the Court for criminal proceedings but that they try to accommodate Parties in civil proceedings. In any event, they will get back to me as soon as they can determine the Court Reporter's availability.

Yours truly,

  
Paul Crowley

c.c. Philippe de Pizzo, NWB  
Laury Pelly, NTI  
Doug Wallace, G.N. Justice Dept  
Lee Webber, Fed. Dept. of Justice

att. supplemental affidavit of Paul Crowley

From: Paul Crowley  
P.O. Box 1226  
Iqaluit, Nunavut  
X0A 0H0  
Tel.: (867) 979-3396  
Fax: (867) 979-2100  
Email: [pcrowley@nunanut.com](mailto:pcrowley@nunanut.com)

**Re: Paul Crowley v. Municipality of Iqaluit, Nunavut Court of Justice file #01 00 241 cv**

Please signify your acceptance of service of the following documents filed with the Nunavut Court of Justice in the above-noted action by returning a signed copy for filing with the Nunavut Court of Justice:

- Supplemental Affidavit of Paul Crowley

Philippe DiPizzo  
Name (please print)

P DiPizzo  
Signature

Nunavut Water Board  
Organization

23/8/2001  
Date

Court File No. \_\_\_\_\_

**IN THE NUNAVUT COURT OF JUSTICE**

**BETWEEN:**

**PAUL CROWLEY**

Applicant

- and -

**MUNICIPALITY OF IQALUIT**

Respondent

**SUPPLEMENTAL AFFIDAVIT  
OF  
PAUL CROWLEY**

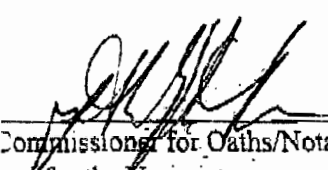
I, Paul Crowley, of the Town of Iqaluit in the Nunavut Territory, MAKE OATH AND SAY  
THAT:

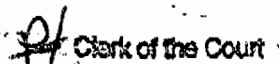
1. I am a resident of the Municipality of Iqaluit and the Applicant in this action and as such have personal knowledge of the matters deposed to herein, except where stated to be based upon information and belief.
2. I have read the "City of Iqaluit's Solid Waste Management Plan Implementation Update" dated August 2001 (a copy of which is attached as Exhibit 'A' to this my Affidavit). The City of Iqaluit set out that it will continue to contravene the existing Water Licence until such time that it may have an operational incinerator which is projected for July 2003.

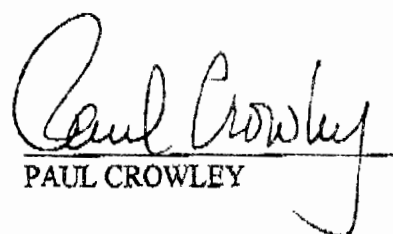
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3. I have read the public posting to the Qaggivik Political Discussion Forum which can be found at the internet address [www.nunanut.com/discus](http://www.nunanut.com/discus) made by Matt Spence on Wednesday August 22, 2001 at 9:36 (a copy of the posting is attached as Exhibit 'B' to this my Affidavit) whereby Deputy Mayor Matthew Spence in response to a posting by Marcel Mason states: *"This adversarial relationship whereby you are trying to impose your will upon the community is not democratic (court action and the Water Board's requirements under its so called licence). You must realise the dangers of having appointed agencies impose their will upon elected representatives. Again I will ask you who better represents the will of this community - the elected council, a judge, or the NWMB (sic)?"*
4. I make this Supplemental Affidavit in support of an application for an interim injunction enjoining the Respondent from burning garbage in contravention of the Iqaluit Water Licence NWB3IQA0103.

SWORN BEFORE ME at the Town of  
Iqaluit in Nunavut  
this 23<sup>rd</sup> day of August, 2001

  
A Commissioner for Oaths/Notary Public  
in and for the Nunavut

  
Clerk of the Court  
Commissioner for Oaths in and for  
Nunavut

)  
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PAUL CROWLEY

**CITY OF IQALUIT'S  
SOLID WASTE MANAGEMENT PLAN  
IMPLEMENTATION UPDATE**

This is exhibit "A" referred to in the  
Affidavit of

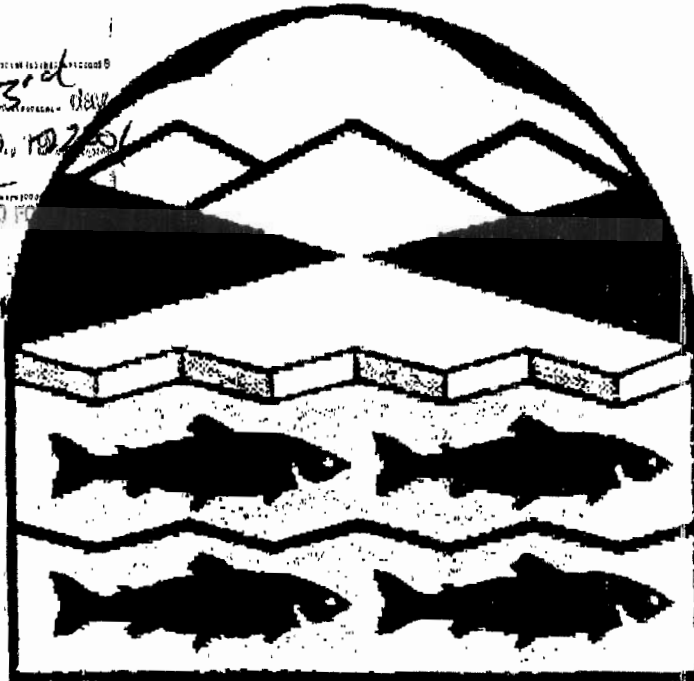
**PAUL CROWLEY**

Sworn before me this **23rd** day

of **August** AD 19**2001**

A COMMISSIONER FOR OATHS IN AND FOR

**Clerk of the Court  
Commissioner for Oaths in and for  
Nunavut**



**August 2001**

**Prepared By: Crystal Jones  
Written By: Matthew Hough**



**CITY OF IQALUIT'S SOLID WASTE MANAGEMENT PLAN IMPLEMENTATION  
UPDATE**

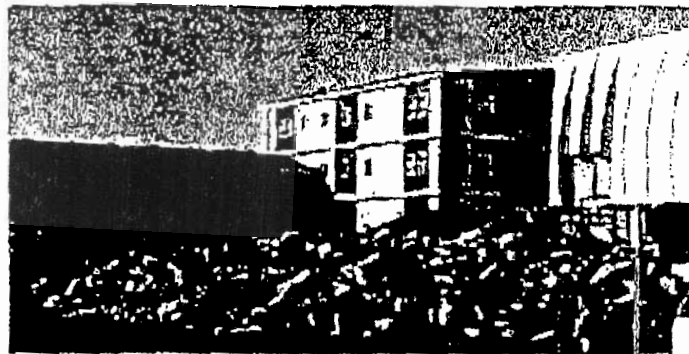
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**CITY OF IQUALUIT'S SOLID WASTE MANAGEMENT PLAN IMPLEMENTATION  
UPDATE****1. WHAT HAPPENS IF WE STOP BURNING?**

The Municipal Landfill would be full by the end of August (1 month).

- Under normal operating conditions the landfill site is going to be full by October 31<sup>st</sup>, 2001.
- Estimated that 11,125m<sup>3</sup> of bulk waste enters landfill in a 3 month period, not enough space available.
- Assuming 80% reduction due to burning it leaves 2,225m<sup>3</sup> ash and residual material.
- Advantage of burning garbage saves 8,900m<sup>3</sup> of landfill space over 3 months.



Landfill would be unmanageable in 2 weeks.

- The City could not pick up garbage from residents.
- Decomposing garbage combined with summer construction waste would create an untenable situation (would have to burn waste eventually).
- Volume of garbage would be overwhelming (remember Labour dispute experience).
- 3,708 m<sup>3</sup> in 1 month yields a pile the length of City Hall, width of City Hall and 1.4 metres high.
- 11,125 m<sup>3</sup> in 3 months yields a pile 4.2 metres high.

## CITY OF IQUALUIT'S SOLID WASTE MANAGEMENT PLAN IMPLEMENTATION UPDATE

### 2. WHAT HAVE WE DONE?

#### *Recycling Programs*



Set up a temporary recycling depot.

- Residents can now separate their recyclables (household plastics & metals).
- There is now a depot establish in West 40 area.
- Council has committed itself to not burning the recycled material.

Designed a Blue Bag Recycling Program.

- For household plastics and metals.
- Residents will be asked to separate their recyclables and put them in a clear blue bag.
- Two month supply of blue bags and a blue recycle bin, will be supplied to each dwelling unit.
- There was a proposal call was issued for consulting services for a communications firm to develop and implement a promotional strategy for the Blue Bag Recycling Program. This RFP has closed and a decision should be made on the acceptance of a bid in the near future.
- Another RFP is in circulation asking for quotations from contractors on the following:
  - Collection of garbage
  - Collection of recyclables
  - Operation of a MRF (Material Recovery Facility)
- We are negotiating with the airlines to establish an economically viable source of shipping recyclables to Ottawa where they will be received.

Currently operating a paper recycling program.

- Paper recycling program is so successful that it will have to be reviewed with the Government of Nunavut, Public Works Department to determine whether they can maintain the high volume of paper that is being recycled.

## CITY OF IQALUIT'S SOLID WASTE MANAGEMENT PLAN IMPLEMENTATION UPDATE

### 2. WHAT HAVE WE DONE? CONTINUED

Iqaluit Clean Up Week September 4-7<sup>th</sup>, with hazardous waste day planned for September 8<sup>th</sup>.

- As part of the preparations for Arctic Winter Games all garbage and scrap metals that residents want taken away from their yards will be removed for them.
- City staff will be targeting local businesses and residents with large volumes of waste in their yards to have it removed by September.
- An intensive campaign to encourage residents and local businesses to participate in this clean up will take place throughout the month of August.



**CITY OF IQUALUIT'S SOLID WASTE MANAGEMENT PLAN IMPLEMENTATION  
UPDATE****3. WHAT IS THE TIMELINE FOR STARTUP OF BLUE BAG  
RECYCLING PROGRAM?*****Timeline:***

Proposal call for a Public Relations firms has closed. There will be a recommendation before Council at the next meeting. The public relations strategy will be ready for implementation on October 1<sup>st</sup>, 2001.

Request For Quotation for pick up of garbage and recycling of Material Recovery Facility is now in circulation. Closing date is August 17<sup>th</sup>, 2001. Analysis and recommendation will be before Council on August 28<sup>th</sup>, 2001.

Negotiations and establishment of contract with successful proponents will take 4 weeks minimum. Depending on Council decisions this program could be running by November of this year.

**4. WHAT IS OUR CONTINGENCY PLAN?*****Contingency Plan:***

The City is implementing a 3 year contingency plan at the current landfill site.

- The landfill site must be expanded in order to operate past October 31<sup>st</sup>, 2001.
- Contingency plan, as voted upon by Council many months ago, continues present disposal methods, i.e. burning garbage and storing metals.
- Tender call will be going out on the Expansion of the Current Landfill site and a contract will be established in August.
- Construction is to take place in September and October for operation at start of November.

## CITY OF IQALUIT'S SOLID WASTE MANAGEMENT PLAN IMPLEMENTATION UPDATE

### 5. INCINERATOR OPTION.

#### *Incinerator:*

A siting report for incinerator is in it's final stages.

- An incinerator has been selected as the preferred new waste disposal method by the public (through S.W.M.P process), by the S.W.M.S.C and by Council. Dillon consulting is completing a report on where best to place a new incinerator.
- Proposed location for incinerator and ashfill are North 40 for incinerator and West 40 for ashfill.
- Outstanding issues includes an analysis of the smoke and prevailing winds blowing North and South through the City.

Dillon Consulting will be pursuing regulator approval and funding for the construction of the incinerator. Correspondence and meetings with regulators are ongoing. Little input has been received thus far. There is a need to establish a much more detailed design to attain good commentary from the regulators.

Investigation of alternative funding sources is ongoing. There is a report expected shortly from Dillon Consulting.

#### *Timeline:*

Siting report is to be finalized by the end of September. Regulatory approvals will continue to be sought throughout project implementation. Funding options before Council in October, November and December during budget time.

Assuming funding is available in 2002 Budget...

Proceed to pre-design stage January 2002. Design and tendering during April, May, and June 2002. Construction of Ashfill and metal dump in August 2002. Materials arrive and construction begins on incinerator in September 2002.

Incinerator operational by July 2003. May be able to reduce construction time if given additional dollar assistance. Fast tracking this type of project risky, e.g. Sewage Treatment Plant experience.

**CITY OF IQUALUIT'S SOLID WASTE MANAGEMENT PLAN IMPLEMENTATION  
UPDATE****5. INCINERATOR OPTION. CONTINUED****Cost:**

To build an incinerator the estimated cost is \$11,312,00.00. This is a class D estimate of an incinerator and ashfill/metal dump in the North 40 and West 40 areas respectively.

The Government of Nunavut has promised to contribute \$2.65 million in 2002-03. This is in addition to the \$1.175 million in 2001-02 for the contingency plan, which will assist with the ashfill construction. An extra \$1.2 million is hoped to come from the Department of Health and Social Services for the construction of the incinerator facility to deal with medical waste.

The City needs an additional \$7.5 million in funding to build the incinerator. This does not include the issue of operation and maintenance estimated at \$611,000.00 a year.

Capital cost of landfill is estimated at \$5,546,000.00. Still requires \$2,896,000.00 above the Government of Nunavut commitment, as Health and Social Services Department money would not be available. The estimated \$538,000.00 operation and maintenance cost may prove to be even more costly due to the requirement of granular material and the constant use of heavy equipment.

Our current operation and maintenance budget for the dump is approximately \$200,000.00. This does not include vehicle maintenance.

\*Estimated costs of construction include the closure costs.

\*\* It may be possible to reduce the size of an incinerator with an effective recycling program, thus reducing the cost to build an incinerator.

**CITY OF IQUALUIT'S SOLID WASTE MANAGEMENT PLAN IMPLEMENTATION  
UPDATE****6. SUMMARY.***Summary:*

If we stop burning completely we will have an enormous mountain of garbage and an unusable landfill site. If we are unable to burn garbage the residents will then have to store their own garbage.

We are attempting to change the composition of garbage being burned at the landfill site by establishing a recycling program. There are several seacans available out in the West 40 area to store household recyclables, i.e. household plastic and metals. The public is encouraged to take their household recyclables there until Blue Bag Program is in effect.

Blue Bag Program will be in effect in October 1<sup>st</sup>; City will then collect recyclables from the residents of Iqaluit.

The City is encouraging all residents to clean up their yards and get rid of any unwanted waste, to help beautify Iqaluit. This will be done during Clean up Week September 4-7<sup>th</sup>, hazardous waste being picked up on September 8<sup>th</sup>.

We are continuing our preparations to build an incinerator in 2002. We need money to build and operate our new waste disposal program.

All of these tasks must fit financially and operationally and be undertaken in priority order with many priorities facing the City and our organization, e.g. water, sewage, roads, Arctic Winter Games, etc.



## Maybe they are not aware?

**Qaggiig: Politics: Maybe they are not aware?**

**By Marcel Mason (Marcel)** on Tuesday, August 21, 2001 - 09:53 pm :

The CBC news this morning had a quote from our Deputy Mayor (M. Spence) regarding the potential Municipal incinerator project that went something like,

"There was broad consultation here that I guess maybe our Citizens For A Clean Iqaluit are not aware of"

Come now Matthew, as you are fully aware (I know because I noted it at the last Council meeting) absolutely every member from the general public that held positions on the Municipal "Solid Waste Management Steering Committee" that went through that decision making process is now involved at some level with Citizens For A Clean Iqaluit.

At last check the remaining members of the Solid Waste Management Steering Committee (you are, or the administration staff at the Town office should have made you aware that I resigned from the committee and why) were unsure if the committee still existed or not in more than name.

There has been no current information provided to them by the City administration, no meetings have been called by either the Council member that heads the committee or the administration, and no consultation regarding the current solid waste management initiatives has taken place.

We are fully aware of what the plan was up until the last meeting of the SWMSC and unless I am mistaken (however I did consult with others from the SWMSC) the plan was to have a facility in place well before 2003 or 2004.

The broad consultation process you mention was a couple of [unfortunately] poorly attended public meetings and a few issues of a 'newsletter' placed in peoples post office boxes, the majority of which ended up on the floor.

**By Matt Spence** on Wednesday, August 22, 2001 - 09:36 am :

Marcel, while I admire your activism I would hate for you to become caught up in your own position on this issue. It seems to be that it is a little late to criticise the public consultation process that took place for the solid waste management plan. If nothing else it is clear that the public consultation process undertaken by the City was more extensive than the one undertaken by the Citizens for a Clean Iqaluit.

I also wonder what possible benefit you see in resigning from a committee that was set up to push the plan forward. As the City has said on numerous occasions, let's work together to solve the problem. This adversarial relationship whereby you are trying to impose your will upon the community is not democratic (court action and the Water Board's requirements under its so called licence). You must realise the dangers of having appointed agencies impose their will upon elected representatives. Again I will ask you who better represents the will of this community - the elected council, a judge or the NWMB?

Add a Message

This is Exhibit " B " referred to in the Affidavit of

PAUL CROWLEY

Sworn before me this 23<sup>rd</sup> day of August 2001

A Commissioner for Oaths in and for Nunavut

Clerk of the Court  
Commissioner for Oaths in and for  
Nunavut

Court File No. 01 00 241 CV

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**IN THE NUNAVUT COURT OF JUSTICE**

---

**BETWEEN:**

**PAUL CROWLEY**

Applicant

- and -

**MUNICIPALITY OF IQALUIT**

Respondent

---

**SUPPLEMENTAL AFFIDAVIT OF  
PAUL CROWLEY**

---

This Supplemental Affidavit issued by:

**PAUL CROWLEY**

P.O. Box 1226/House #285

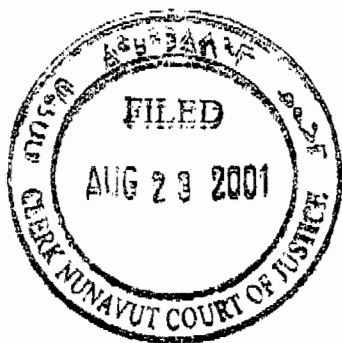
Iqaluit, Nunavut

X0A 0H0

Tel: (867) 979-3396

Fax: (867) 979-2100

Applicant



Court File No. 01 00 241 CV

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**IN THE NUNAVUT COURT OF JUSTICE**

---

**BETWEEN:**

**PAUL CROWLEY**

Applicant

- and -

**MUNICIPALITY OF IQALUIT**

Respondent



---

**PRE-HEARING BRIEF**

---

This Pre-Hearing Brief issued by:

**PAUL CROWLEY**

P.O. Box 1226/House #285

Iqaluit, Nunavut

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Applicant

**IN THE NUNAVUT COURT OF JUSTICE**

**BETWEEN:**

**PAUL CROWLEY**

Applicant

- and -

**THE MUNICIPALITY OF IQUALUIT**

Respondents

**ORIGINATING NOTICE OF MOTION**

You are hereby advised that the Paul Crowley (Applicant) will be making an application to the Court, on a day and at a time and place to be set by the Court, for the purpose of obtaining an Order:

1. a *mandamus* directing the Respondent to observe the conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103 issued by the Nunavut Water Board on January 1, 2001;
2. a prohibition against the Respondent from burning items other than items set out in Part E #2 of the Iqaluit water licence NWB3IQA0103;
3. for costs;
4. granting such other relief as this Honourable Court may deem appropriate.

### **Background:**

This application arises out of a decision of the Respondent to burn unsorted hazardous, industrial, commercial and residential waste in an open pit contrary to Part E #2 of the Iqaluit water licence NWB3IQA0103 issued on January 1, 2001 by the Nunavut Water Board.

The Nunavut Water Board was appointed to conduct matters in accordance with Article 13 of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, commonly referred to as the Nunavut Land Claims Agreement, which is ratified, given effect and declared valid pursuant to the *Nunavut Land Claims Agreement Act* and is constitutionally protected pursuant to section 35 of the *Constitution Act, 1982*.

On July 20, 2001 and on each day thereafter the Respondent, by its actions and its public declarations to continue the practice of open pit burning of unsorted hazardous, commercial and residential waste at the Iqaluit dump, made a decision to disregard Part E #2 of the Iqaluit water licence NWB3IQA0103 which prohibits after June 1, 2001 the burning of any items at the Iqaluit dump save for food waste, paper products, paperboard packaging and untreated wood.

### **Grounds:**

This application is based upon the following grounds:

1. **The Iqaluit water licence NWB3IQA0103 was issued *prima facie* in accordance to Article 13 of the Nunavut Land Claims Agreement unless otherwise stated by a court of appropriate jurisdiction.**
2. **Part E #2 of the Iqaluit water licence NWB 3IQA0103 falls *prima facie* within the jurisdiction of the Nunavut Water Board unless otherwise stated by a court of appropriate jurisdiction.**
3. **The Iqaluit water licence NWB3IQA0103 stands and must be complied with unless modified by the Nunavut Water Board in accordance to the Nunavut Land Claims Agreement, the Nunavut Water Board's procedures and the rules of natural justice or is declared invalid, in total or in part, by a court of appropriate jurisdiction.**
4. **The Respondent as made an application for amendment of the terms and conditions of Iqaluit water licence NWB3IQA0103 on May 31, 2001. However, Nunavut Water Board has not yet made a decision as to the said amendments and will only do so after holding a public hearing.**
5. **The Respondent has acted unlawfully since July 20, 2001 in contravention of the Iqaluit water licence NWB3IQA0103, in particular the conditions set out in Part E**

**#2 thereby seriously endangering the waters, environment, the residents of Iqaluit and the Applicant.**

6. **The Respondent has made a decision to disregard and act unlawfully in contravention of the requirements of the Iqaluit water licence NWB3IQA0103, in particular the Respondent has made the decision to act unlawfully in contravention of the conditions set out in Part E #2 of the said licence thereby endangering the waters, the environment, the residents of Iqaluit and the Applicant.**

DATED AT IQALUIT, this 12<sup>th</sup> day of August, 2001.



**PAUL CROWLEY**

P.O. Box 1226/House #285

Iqaluit, Nunavut

X0A 0H0

Tel. (867) 979-3396

Fax (819) 979-2100

**TO: MUNICIPALITY OF IQALUIT**

P.O. Box 460  
Iqaluit, Nunavut  
X0A 0H0

Tel: (867) 979-5600  
Fax: (867) 979-5922

**TO: ATTORNEY GENERAL OF NUNAVUT**

P.O. Box 1000  
Iqaluit, Nunavut  
X0A 0H0

Tel: (867) 975-6195  
Fax: (867) 975-6180

NOTICE TO THE RESPONDENT:

Court File No. 01 00 241 CV

- (1) "You are required forthwith after service of this notice to return to the Clerk of the Nunavut Court of Justice at Iqaluit the judgment, order or decision (*or as the case may be*) to which this notice refers and reasons, if any, together with the process commencing the proceeding, the evidence and all exhibits filed, if any, and all things touching the matter as fully and entirely as they remain in your custody and power, together with this notice.

Date: .....

To: .....

.....  
the Applicant".

- (2) This Originating Notice of Motion is filed by Paul Crowley .

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IN THE NUNAVUT COURT OF JUSTICE

---

BETWEEN:

PAUL CROWLEY

Applicant

- and -

MUNICIPALITY OF IQALUIT

Respondent

---

ORIGINATING NOTICE OF MOTION

---

This Originating Notice of Motion issued by:

PAUL CROWLEY

P.O. Box 1226/House #285

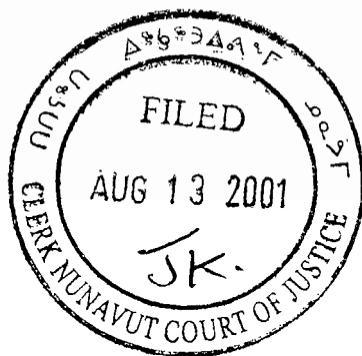
Iqaluit, Nunavut

X0A 0H0

Tel: (867) 979-3396

Fax: (867) 979-2100

Applicant





**IN THE NUNAVUT COURT OF JUSTICE**

**BETWEEN:**

**PAUL CROWLEY**

Applicant

- and -

**THE MUNICIPALITY OF IQALUIT**

Respondents

**NOTICE OF MOTION**

TAKE NOTICE that an application will be made to the presiding judge in Chambers at the Court House, in Iqaluit, Nunavut on the 16 th day of August, 2001, at 1:30, or so soon after that time as the Applicant may be heard, for the purpose of obtaining an Order:

1. An interlocutory injunction pursuant to Rule 445 of the *Rules of the Nunavut Court of Justice* restraining and ordering the Respondents and their agents, successors, representatives and substitutes, and any persons acting under their instructions or the instructions of any of them or any persons having knowledge of this Order from burning unsorted hazardous, commercial and residential waste in contravention of Part E #2 of the Iqaluit water licence NWB3IQA0103 until:
  - a. The Respondents, by motion, satisfy this Honourable Court that they have diligently pursued all means of meeting the conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103; or
  - b. The conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103 are modified by the Nunavut Water Board in accordance to the Nunavut Land

Claims Agreement, the Nunavut Water Board Rules of Procedures and the rules of natural justice; or

- c. The conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103 are struck down by a court of appropriate jurisdiction; or
  - d. By Order of this Honourable Court upon rendering a decision in judicial review of the matters set out in the Originating Notice of Motion to this case.
2. Further Order that upon a person restrained hereby being in breach of any terms of the within Order, then, in such an event, any officer of the Iqaluit RCMP Detachment shall forthwith arrest and restrain that person and bring them, at the earliest possible date, before a Justice of the Nunavut Court of Justice to show cause why they should not be committed in contempt.
  3. An Order for dispensation of an undertaking for damages by the Applicant.
  4. An Order that service of the Order upon the Respondent shall be deemed effective as of the date of the Order.
  5. Costs of this application be awarded to the Applicant.
  6. Such further and other relief as the Nunavut Court of Justice may deem just.

AND TAKE FURTHER NOTICE that this application is made on the grounds as set out in the Applicant's Pre-Hearing Brief.

AND TAKE FURTHER NOTICE that in support of this application will be read the following documents:

1. The Originating Notice of Motion;
2. This Notice of Motion;
3. The Affidavit of Paul Crowley;
4. The Applicant's Pre-Hearing Brief; and
5. A Draft Form of Order.

DATED AT Iqaluit on August 13<sup>th</sup>, 2001.

Per:   
Paul Crowley  
Applicant

**TO: MUNICIPALITY OF IQALUIT**

P.O. Box 460  
Iqaluit, Nunavut  
X0A 0H0

Tel: (867) 979-5600  
Fax: (867) 979-5922

Court File No. 0100 241 CV

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IN THE NUNAVUT COURT OF JUSTICE

---

BETWEEN:

**PAUL CROWLEY**

Applicant

- and -

**MUNICIPALITY OF IQALUIT**

Respondent

---

NOTICE OF MOTION

---

This Notice of Motion issued by:

**PAUL CROWLEY**

P.O. Box 1226/House #285

Iqaluit, Nunavut

X0A 0H0

Tel: (867) 979-3396

Fax: (867) 979-2100

Applicant



**IN THE NUNAVUT COURT OF JUSTICE**

**BETWEEN:**

**PAUL CROWLEY**

Applicant

- and -

**THE MUNICIPALITY OF IQALUIT**

Respondents

**DRAFT ORDER**

BEFORE THE HONOURABLE

)  
)  
)  
)  
)

Iqaluit, Nunavut

\_\_\_\_\_

\_\_\_\_ day, this \_\_\_\_ day of August, 2001

IN CHAMBERS

UPON THE APPLICATION of the Applicant, Paul Crowley, and upon hearing the Applicant and Counsel on behalf of the Respondents, AND UPON having read the Originating Notice, the Notice of Motion, the Affidavit of Paul Crowley and the draft form of Order, all filed:

**IT IS ORDERED AS FOLLOWS:**

1. An Interlocutory Order enjoining the Respondents and their agents, successors, representatives and substitutes, and any persons acting under their instructions or the instructions of any of them or any persons having knowledge of this Order from burning

unsorted hazardous, commercial and residential waste in contravention of Part E #2 of the Iqaluit water licence NWB3IQA0103 until:

- a. The Respondents, by motion, satisfy this Honourable Court that they have diligently pursued all means of meeting the conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103; or
  - b. The conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103 are modified by the Nunavut Water Board in accordance to the Nunavut Land Claims Agreement, the Nunavut Water Board Rules of Procedures and the rules of natural justice; or
  - c. The conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103 are struck down by a court of appropriate jurisdiction; or
  - d. By Order of this Honourable Court upon rendering a decision in judicial review of the matters set out in the Originating Notice of Motion to this case.
2. Further Order that upon a person restrained hereby being in breach of any terms of the within Order, then, in such an event, any office of the Iqaluit RCMP Detachment shall forthwith arrest and restrain that person and bring them, at the earliest possible date, before a Justice of the Nunavut Court of Justice to show cause why they should not be committed in contempt.
  3. A dispensation of an undertaking for damages by the Applicant.
  4. Service of this Order upon the Respondent shall be deemed effective as of the date of this Order.
  5. Costs of this application be awarded to the Applicant.

---

Clerk of Nunavut Court of Justice

Court File No. \_\_\_\_\_

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**IN THE NUNAVUT COURT OF JUSTICE**

---

**BETWEEN:**

**PAUL CROWLEY**

Applicant

- and -

**MUNICIPALITY OF IQALUIT**

Respondent

---

**DRAFT ORDER**

---

This Draft Order issued by:

**PAUL CROWLEY**

P.O. Box 1226/House #285

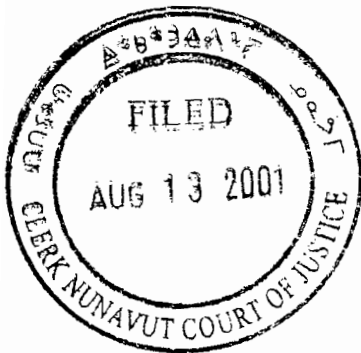
Iqaluit, Nunavut

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Tel: (867) 979-3396

Fax: (867) 979-2100

Applicant



**IN THE NUNAVUT COURT OF JUSTICE**

**BETWEEN:**

**PAUL CROWLEY**

Applicant

- and -

**THE MUNICIPALITY OF IQALUIT**

Respondents

**PRE-HEARING BRIEF OF THE APPLICANT**

**Part I - Introduction**

1. This is an application by the Applicant, Paul Crowley, for an interlocutory injunction restraining the Respondent, the Municipality of Iqaluit, from burning unsorted hazardous, industrial, commercial and residential waste in contravention of Part E #2 of the Iqaluit water licence NWB3IQA0103 (also referred to as the “Water Licence”) until:
  - a. The Respondents, by Motion, satisfy this Honourable Court that they have diligently pursued all means of meeting the conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103; or
  - b. The conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103 are modified by the Nunavut Water Board in accordance to the Nunavut Land Claims Agreement, the Nunavut Water Board Rules of Procedures and the rules of natural justice; or
  - c. The conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103



- are struck down by a court of appropriate jurisdiction; or
- d. By Order of this Honourable Court upon rendering a decision in judicial review of the matters set out in the Originating Notice of Motion to this case.

2. The application is made pursuant to Rule 445 of the *Rules of the Nunavut Court of Justice*, which provides as follows:

445. A party to a pending or intended proceeding may apply for an interlocutory injunction or a mandatory order.

## **Part II - Summary of Argument**

3. The Respondent has a history of not complying with environmental regulations.
4. The Respondent has clearly stated that it will not comply with the conditions set out in the Water Licence. To date the Respondent's actions have reflected its declarations.
5. Unlawful burning unsorted hazardous, industrial, commercial and residential waste in contravention of the Water Licence endangers the environment, the public and the Applicant.
6. Flouting the terms of the Water Licence is a serious issue that is reviewable by this Honourable Court.
7. Such unlawful actions jeopardize the Nunavut Water Board's authority and the public confidence in the environmental regulatory scheme set up by the Nunavut Land Claims Agreement.

8. The harm caused by the noxious and toxic emissions from the Respondent's unlawful burning of unsorted hazardous, industrial, commercial and residential waste is by its very nature irreparable.
9. The magnitude of the inconvenience of an Order enjoining the unlawful activity is in the hands of the Respondent. Should the Respondent, by motion, be able to satisfy this Honourable Court that it has diligently pursued all manner of abiding by the conditions set out in Part E #2 of the Water Licence then the Order will lift. As such, the balance of convenience test favours the Applicant.

### **Part III - Facts**

#### The Respondent Has a History of Failing to Comply with Environmental Regulations.

10. The Respondent has a history of not complying with environmental regulations, as far back as 1990.

- *Canada (Environment Canada) v. Northwest Territories (Commissioner)*  
[1994] 1 W.W.R. 441 at 457 (N.W.T. Terr. Ct.), Applicant's Authorities Tab 1.

11. The Department of Indian and Northern Development reported non-compliance with the requirements of the 1995-1999 Iqaluit water licence. Particularly troubling was non-compliance with planning requirements for the closure of the Iqaluit dump and deficient planning for future solid waste management.

- "1995-1999 Compliance Report". Attached as Exhibit 'A' to the Affidavit of Paul Crowley.

12. In its 2000 Reasons for Decisions, the Nunavut Water Board noted five major issues of non-compliance with the 1999 Iqaluit Water Licence.

- Decision attached as Exhibit 'E' to the Affidavit of Paul Crowley.

The Respondent Has Not and Does Not Intend to Abide by the Conditions of the Water Licence

13. The Mayor of Iqaluit, John Matthews and the Respondent's Director of Public Works have openly questioned the validity of the conditions set out in Part E #2 of the Water Licence.

- Paragraphs 36 and 50 of the Affidavit of Paul Crowley.  
 - July 10, 2001 letter from John Matthews to the Nunavut Water Board, attached as Exhibit 'X' to the Affidavit of Paul Crowley.

14. The Mayor of Iqaluit, John Matthews has clearly stated that the Respondent does not intend to comply with the conditions set out in Part E #2 of the Water Licence.

- Paragraphs 36, 37, 40, 44, 50 of the Affidavit of Paul Crowley.

15. The Respondent's Director of Public Works has clearly stated that the Respondent does not intend to comply with the conditions set out in Part E #2 of the Water Licence.

- Paragraph 37 of the Affidavit of Paul Crowley.

16. The Respondent has burned unsorted hazardous, industrial, commercial and residential waste in contravention of the Water Licence.

- Paragraphs 30, 51, 52, 53, 54, 55 of the Affidavit of Paul Crowley.

Emissions from the Unlawful Burning Are a Danger to the Environment and to the Public

17. Emissions from the open burning of unsorted garbage likely contain toxic by-products such as dioxins and furans in high levels.

- Report entitled "Emissions of PCDDs, PCDFs and PCBs in Waste Landfill Fires" attached as Exhibit 'AA' to the Affidavit of Paul Crowley

18. Contaminants such as dioxins and furans are considered Persistent Organic Pollutants (also known as POPs). They tend to bioaccumulate in living organisms, persist in the environment and have long term toxic effects. POPs cause significant adverse effects to human health and wildlife. They move through the food chain to humans and they are passed on from mother to child across the placenta, and through mothers' milk.

- Environment Canada Web site, [http://www.ec.gc.ca/air/pops\\_e.shtml](http://www.ec.gc.ca/air/pops_e.shtml) attached as Exhibit 'BB' to the Affidavit of Paul Crowley.

19. POPs are semi-volatile chemicals that can also travel from around the world to the Arctic through the grasshopper effect where they tend to accumulate because of our low temperatures. Scientific evidence shows levels of certain POPs to be nine times higher in Inuit women's breast milk as compared to women who live in southern Canada.

- Environment Canada Web site, [http://www.ec.gc.ca/air/pops\\_e.shtml](http://www.ec.gc.ca/air/pops_e.shtml) attached as Exhibit 'BB' to the Affidavit of Paul Crowley.

20. Dioxins and furans were declared toxic under the *Canadian Environmental Protection Act*.

- Environment Canada Web site, [http://www.ec.gc.ca/air/pops\\_e.shtml](http://www.ec.gc.ca/air/pops_e.shtml) attached as Exhibit 'BB' to the Affidavit of Paul Crowley.

21. The report entitled "Tracking Dioxins" issued by the North American Commission for

Environmental Cooperation states that “[d]ioxins are a public health and environmental concern because some types have known carcinogenic and toxic properties that may produce a broad spectrum of adverse effects in humans. These include reproductive dysfunction and developmental abnormalities, suppression of the immune system, chloracne (a severe acne-like disease that sometimes persists for many years), and cancer.”

- Attached as Exhibit ‘CC’ to the Affidavit Paul Crowley.

22. Dioxins have “hormone like effects, causing changes that not only lead to cancer but to infertility and other sexual changes.”

- Environmental News Network article entitled “U.S. Report to Firmly Link Dioxin With Cancer” attached as Exhibit ‘EE’ to the Affidavit of Paul Crowley.

23. Burning garbage in an open pit as practiced by the Respondent is worse than burning garbage in a burn barrel as the burn temperatures are likely lower. Burning garbage in a burn barrel likely emits 10,000 times more total dioxins, 1,000 times more total furans and 3,000 polycyclic aromatic hydrocarbons than a municipal incinerator. The Michigan State Government warns that small children, pregnant women, older adults and people with asthma are especially sensitive to the effects of emissions from burning garbage.

- Paragraph 65 of the Affidavit of Paul Crowley.

- Air Quality Michigan brochure entitled “Burning Household Waste” attached as Exhibit ‘FF’ to the Affidavit of Paul Crowley.

24. Open burning is not permitted in most jurisdictions. For example, Manitoba does not allow open burning of garbage.

- Manitoba Environment Information Bulletin entitled “Implications of Open Burning of Garbage at Waste Disposal Grounds” attached as Exhibit ‘GG’ to the

Affidavit of Paul Crowley.

25. In fact, Canada has signed on the Stockholm Convention which requires signatories to reduce or eliminate persistent organic pollutants such as PCBs, DDT and dioxins.

- Nunatsiaq News report entitled “POPs Treaty Signed” attached as Exhibit ‘HH’ to the Affidavit of Paul Crowley.

26. Burning of unsorted hazardous, industrial, commercial and residential waste also produces other toxic cancer-causing by-products in addition to dioxins and furans.

- Oswego Daily News Web site report entitled “EPA Reports that Garbage Burning Is a Health Threat” attached as Exhibit ‘DD’ to the Affidavit of Paul Crowley.

27. While open burning may have been a long-time practice in Iqaluit, the consequences of such a practice are now quite different than as recently as five years ago. The Municipality has grown considerably and the type of garbage produced in Iqaluit has likely also changed.

*“Some people may argue that their families have burned garbage for generations without adverse health effects. That may have been true in the past when garbage was composed of mainly paper and food waste. The households who continue to burn their garbage today may not realize this, but they could be potentially damaging their health and the health of their families. Today’s trash contains large amounts of plastics.”*

- Paragraph 70 of the Affidavit of Paul Crowley.  
 - Oswego Daily News Web site report entitled “EPA Reports that Garbage Burning Is a Health Threat” attached as Exhibit ‘DD’ to the Affidavit of Paul Crowley.

## Part IV - Argument

### Test for an Interlocutory Injunction

28. In *RJR-MacDonald Inc. v. Canada (A-G)* (1994), 111 D.L.R. (4<sup>th</sup>) 385 at 400 (S.C.C.) the Supreme Court of Canada set out a three-prong test for an interlocutory injunction:

- a. a serious issue to be tried;
- b. irreparable harm if the injunction is refused; and
- c. balance of convenience favours granting the injunction.

- Applicant's Authorities Tab 2.

### Serious Issue to Be Tried

#### The Respondent Must Not Be Allowed to Flout the Terms of the Water Licence

29. The Respondent's declarations that it would not comply with the conditions set out in Part E #2 of the Water Licence and its actions to breach Part E #2 of the Water Licence constitute a decision that is subject to judicial review by this Honourable Court.

30. It is respectfully submitted that Respondent's decision not to comply with the conditions set out in Part E #2 of the Water Licence, is a serious issue. The Respondent is flouting the law laid down by the Nunavut Water Board and is likely to seriously jeopardize the public confidence in the natural resource and environmental protection scheme set out in the Nunavut Land Claims Agreement.

- Nunavut Land Claims Agreement: Preamble, Articles 10, 11, 12, 13,  
Applicant's Authorities Tab 3.

31. The Nunavut Water Board is set up under Article 13 of the Nunavut Land Claims Agreement to “provide for [...] Inuit to participate in decision-making concerning the use, management and conservation of land, water and resources [...]”

- Nunavut Land Claims Agreement Preamble as emphasized by Wilson J. in *Qikiqtani Inuit Assn. v. Canada* [1999] 3 C.N.L.R. 213 at 223. Applicant’s Authorities Tab 4.

32. As the Nunavut Water Board is an Institution of Public Government under Article 10 of the Nunavut Land Claims Agreement, the public has a justifiable expectation that the licences issued by the Board will be diligently followed.

- Article 10 of the Nunavut Land Claims Agreement. Applicant’s Authorities Tab 3.

33. The Nunavut Water Board performs a quasi-judicial function and confronts complex questions while taking into account the need to protect the environment and the public. In *Qikiqtani Inuit Assn. v. Canada (Attorney General)* Madame Justice Wilson noted that the decisions rendered by the Nunavut Water Board require extensive expertise. Such tribunals are given a high level of deference by the courts because of the nature of their function and the expertise that they develop. They are integral to the administration of law in Canada.

- *Supra* at 236, Applicant’s Authorities Tab 4.

34. The Water Licence issued by the Nunavut Water Board is *prima facie* valid and applies to the Municipality of Iqaluit unless it is modified by the Nunavut Water Board in accordance to the Nunavut Land Claims Agreement, its own rules of procedures and the rules of natural justice or it is declared invalid in full or in part by a court of appropriate jurisdiction.



- Letter, dated July 3, 2001, from the Nunavut Water Board, Exhibit 'I' to the Affidavit of Paul Crowley.

35. The Nunavut Water Board has not modified the Water Licence. It intends to hold a public hearing with regards to the Municipality's amendment request.

- Decision, dated July 11, 2001, of the Nunavut Water Board, Exhibit 'Y' to the Affidavit of Paul Crowley.

36. No court of appropriate jurisdiction has declared the Water Licence invalid in total or in part.

- Decision, dated July 11, 2001, of the Nunavut Water Board, Exhibit 'Y' to the Affidavit of Paul Crowley.

37. The Applicant and the public have a justifiable expectation that government will diligently seek to abide by laws and regulations, such as the Water Licence which have been put in place to protect the environment and the public. Mr. Justice de Weerd in *Canada (Environment Canada) v. Canada (Northwest Territories (Commissioner))* [1994] N.W.T.R. 354 at 367 (N.W.T. S.C.), stated:

*"The public deserves to have its laws respected by its governments, and their officials, who owe us all no less than that. If it takes prosecution and a sentence to bring this about, then so be it. In this sense the Court is duty bound to act to protect the public, so far as necessary and within the Court's powers, from the actions (or inaction) of governments or officials who flout the law. They must not be allowed to do so with impunity."*

- Applicant's Authorities Tab 5.

38. With regards to conditions set out in Part E #2 of the Water Licence, the evidence demonstrates that the Respondent questions the validity of the conditions, has not complied to the conditions and does not intend to abide by the conditions.

- Paragraphs 30, 36, 37, 40, 44, 50, 51, 53, 54, 55 of the Affidavit of Paul Crowley.
- Exhibit 'X' to the Affidavit of Paul Crowley.

39. It is therefore respectfully submitted that the decision of the Respondent to unlawfully burn hazardous, industrial, commercial and residential waste in contravention of the Water Licence is in effect flouting the law and is a serious issue that is subject to judicial review by this Honourable Court. The Applicant and the public have a justifiable expectation that a licence issued by the Nunavut Water Board will diligently be followed by the Respondent. Should the Respondent not be enjoined from breaching the terms of the Water Licence, it will jeopardize the administration of the environmental regulatory scheme put in place by the Nunavut Land Claims Agreement.

#### Unlawful Burning Is a Serious Public and Environmental Hazard

40. The Applicant further respectfully submits that the Respondent's unlawful burning of unsorted hazardous, industrial, commercial and residential waste in contravention of Part E #2 of the Water Licence is endangering the waters, the environment, the public and the Applicant. And is a serious issue that is subject to judicial review by this Honourable Court.

41. By unlawfully burning unsorted hazardous, industrial, commercial and residential waste, the Respondent is responsible for noxious and toxic emissions from the Iqaluit dump that are a danger to the environment and to the public.

- See *supra* paragraphs 15-25 of this Pre-Hearing Brief.

42. While the exact make-up of the emissions from the unlawful burning of unsorted hazardous, industrial, commercial and residential waste at the Iqaluit dump is not

precisely known, enough information is available to infer its toxic and dangerous nature. Madame Justice L'Heureux-Dubé of the Supreme Court of Canada recently noted how the principle of international law known as the 'precautionary principle' should be used to inform the context of judicial review. Madame Justice L'Heureux-Dubé quoted para. 7

of the *Bergen Ministerial Declaration on Sustainable Development* (1990):

*In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.*

*114957 Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town)*, 2001 SCC 40 at para. 31., Applicant's Authorities Tab 6.

43. The Nunavut Water Board noted the dangers of open burning. Before imposing the limitations on burning unsorted hazardous, industrial, commercial and residential waste, the Nunavut Water Board made the following statement.

*"Therefore, as the material at the landfill site is burned, particles from this process can enter the water cycle, thus becoming a waste as it can degrade the quality of the water. As no person is allowed to "dispose of waste into water without approval of the NWB," the Board can make conditions with respect to activities that can create air emissions that can ultimately affect fresh waters. In the previous licence, the Board ordered that appropriate studies be performed to determine the link that may exist between emissions from burning waste at the landfill and deposits in fresh waters. **The Town did not complete these studies.** Until it can be conclusively established that there is no link, the Board will continue to make conditions to protect the environment and the waters within its jurisdiction. We know that the study to establish the link—or disprove it—costs money, and CGT reminded us of this. However, we feel strongly about protecting the quality of the fresh waters of Nunavut, especially for humans, and we believe Nunavut's waters should be protected almost regardless of cost. Though this statement seems extreme, we are not prepared to accept the alternative possibility, which is that humans become sick or in extreme cases die if pathogens or other toxic matters enter the public's water supply."* [Emphasis in the original. Footnotes omitted]

- Nunavut Water Board, Decision Re.: Iqaluit Licence Renewal 2000, at 33, Exhibit 'E' to the Affidavit of Paul Crowley.

44. It is therefore respectfully submitted that the decision of the Respondent to unlawfully burn hazardous, industrial, commercial and residential waste in contravention of the Water Licence is endangering the environment, the Applicant and the public and is a serious issue subject to judicial review by this Honourable Court.

## **Irreparable Harm**

### Harm to the Environment

45. "Irreparable" harm refers to the nature of the harm suffered rather than to its magnitude. It is harm that cannot be quantified in monetary terms or cannot be cured.

- *RJR-MacDonald v. Canada (A.G.)*, *supra* at 405, Applicant's Authorities Tab 2.

46. The Supreme Court of Canada and the British Columbia Court of Appeal have held that examples of irreparable harm include situations where irreversible or long term environmental damage occurs should an injunction not issue.

- *RJR-MacDonald v. Canada (A.G.)*, *supra* at 405, Applicant's Authorities Tab 1; citing *MacMillan Bloedel Limited v. Mullin*, [1985] 3 W.W.R. 577 (B.C.C.A.), Applicant's Authorities Tab 7.

47. The U.S. Supreme Court has held that environmental injury will almost always be irreparable. The U.S. Supreme Court stated:

*"Environmental injury, by its nature, can seldom be adequately remedied by money damages and it is often permanent or at least of long duration, i.e. irreparable. If such injury is sufficient likely, therefore, the balance of harms will usually favor the issuance of an injunction to protect the environment."*

- *Amoco Production Co. v. Village of Gambell, Alaska*, 107 S.Ct. 1396 at 1404 (1987); [1987] SCT-QL 1390 at 7 para 30. Applicant's Authorities Tab 8.

48. Once unsorted hazardous, industrial, commercial and residential waste is burned dangerous contaminants are released into the environment. It is respectfully submitted that once the toxic by-products of the unlawful activity are released, it is impossible to put the 'genie back in the bottle'.
49. The possible health effects of the emissions from burning garbage are, among others, reproductive dysfunction, developmental abnormalities, immune suppression and cancer. Because Persistent Organic Pollutants such as dioxins and furans bioaccumulate and because of the nature of the possible health effects of such toxins, the harm from the unlawful activities may be inter-generational as well as more immediate.
- Report entitled "Tracking Dioxins" issued by the North American Commission for Environmental Cooperation attached as Exhibit 'CC' to the Affidavit of Paul Crowley.
  - Environment Canada Web site, [http://www.ec.gc.ca/air/pops\\_e.shtml](http://www.ec.gc.ca/air/pops_e.shtml) , printed copy attached as Exhibit 'BB' to the Affidavit of Paul Crowley.
  - Environmental News Network article entitled "U.S. Report to Firmly Link Dioxin With Cancer" attached as Exhibit 'EE' to the Affidavit of Paul Crowley.
50. It is submitted that by their nature, the possible environmental and health effects of the noxious and toxic emissions from the unlawful burning of unsorted hazardous, industrial, commercial and residential waste are difficult, if not impossible, to quantify and as such the harm is irreparable.

#### Unlawful Act

51. In the alternative, it is respectfully submitted that the test of irreparable damage may not be applicable where the rights of third parties are affected. Referring to picket line incidents, Laycraft C.J.A. of the Alberta Court of Appeal stated:

*"It is not a mere private dispute in the law of contract or tort. In my view the test*

*of irreparable damage required to be met to obtain relief in a private dispute is not applicable where the rights of third parties are affected. Where unlawful acts have occurred the court in its discretion may enjoin a recurrence: A.G. Alta. V. Plantation Indoor Plants Ltd. 17 Alta. L. R. (2d) 289, [1982] 2 W.W.R 167, 65 C.C.C. (2d) 544, 133 D.L.R. (3d) 741, 31 A.R. 348 (C.A.).”*

*- International Union, et al. v. Pacific Western Airlines Ltd. (1986) 43 Alta. L. R. (2d) 289 at 295 (Alta. C.A.). Applicant’s Authorities Tab 9.*

52. It is respectfully submitted that the same principle also applies to the case at hand. This case touches on the public welfare of the environment.

53. Bourassa Terr. Ct. J. clearly stated the role of the Courts in this regard: the “courts are the protectors of the public welfare of the environment.”

*- Canada (Environment Canada) v. Canada (Northwest Territories (Commissioner)) [1994] 1 W.W.R. 458 at 463 (N.W.T. S.C.) . Applicant’s Authorities Tab 10.*

54. Bourassa, Terr. Ct. J.. further noted that government defendants should not receive preferential treatment. The government must act with the public interest in mind as the public relies on the government to protect the public interest. Citing Ayotte Terr. Ct. J. in *R. v. Echo Bay Mines Ltd.*, 3 F.P.R. 47 [AT P. 51] Bourassa, Terr. Ct. J. emphasized that:

*“The legislation is not intended to encourage compliance after an environmental mishap but rather to demand compliance before those mishaps occur so as to prevent them.”*

*- Canada (Environment Canada) v. Canada (Northwest Territories (Commissioner)) supra at 466. Applicant’s Authorities Tab 10.*

55. It is therefore respectfully submitted that this Honourable Court may enjoin the Respondent from unlawfully burning waste in contravention of the Water Licence and need not apply the test of irreparable harm. The Respondent’s unlawful burning of unsorted hazardous, industrial, commercial and residential waste is not only affecting the

Applicant but also the public. This Honourable Court may exercise its discretion to protect the public welfare of the environment.

### **Balance of Convenience**

56. If the relief is not granted, it is respectfully submitted that the authority of the Nunavut Water Board will be undermined and the public confidence in the administration of the regulatory scheme set out in the Nunavut Land Claims Agreement will be jeopardized.
57. Further, the above evidence indicates that if the relief is not granted, toxic and noxious emissions will be released by the unlawful burning of hazardous, industrial, commercial and residential waste at the Iqaluit dump. The emissions will endanger the environment, the public and the Applicant.
58. Also, since the Respondent cannot control the weather and it takes 8 hours to put out the burning pile of hazardous, industrial, commercial and residential waste, it is likely that the noxious and toxic emissions from the dump will on occasion engulf the main residential section of the Municipality, including the Applicant's home. At such times, it is respectfully submitted that the residents of Iqaluit, the Applicant and the Applicant's family will not be able to avoid breathing the noxious and toxic emissions.

- Paragraphs 30, 31, 32, 33, 51, 53, 54, 55 of the Affidavit of Paul Crowley.

59. If, on the other hand the relief is granted, taking into account the Order sought by the Applicant, the Respondent will have to diligently pursue methods of waste treatments that conform to the conditions set out in Part E #2 of the Water Licence. The Respondent can, by motion, apply to have the injunction order lifted if the Respondent can prove its diligence in complying with the Water Licence to the satisfaction of this Honourable Court. The Respondent, therefore, will determine itself the level of inconvenience it must endure.

60. In the recent past, garbage has accumulated at the Iqaluit dump.

61. The Respondent was able to dispatch the backlog of waste accumulated during the recent labour dispute in approximately 18 days.

- Paragraphs 27 to 34 of the Affidavit of Paul Crowley.

62. The Respondent has also accumulated waste while tanker ships have been unloading fuel.

- Paragraph 51 of the Affidavit of Paul Crowley.

63. In addition, it is clear that the Respondent has not seriously investigated all alternative methods of lawfully disposing of the waste.

- Paragraphs 45, 48 of the Affidavit of Paul Crowley.

64. In 1967, Lacourciere J. stated:

*"[...] it is not a defence to the municipality to say that the operation of the garbage dump is beneficial to its residents or that the chosen site is the only suitable one in the municipality; nor can it be said that open air burning is a necessary and inevitable part of the garbage disposal process."*

- *Platter v. Town of Collingwood et al.* [1968] 1 O.R. 81; QL at 4-5 (Ont. H.C.J.).  
Applicant's Authorities Tab 11.

65. It is respectfully submitted that 'necessity is the mother of invention.' While unlawful burning of unsorted hazardous, industrial, commercial and residential waste is an option that can be exercised by the Respondent with impunity, no other solutions are likely to be found. The Order will see to it that the Respondent pursues avenues of solid waste



treatment that are lawful and meet the requirements of Part E #2 of the Water Licence.

66. Further, it is respectfully submitted that, should the Respondent not succeed in having the Order lifted, the Respondent will have an additional opportunity to make its case for an amendment to the Water Licence at the public hearing which will be held by the Nunavut Water Board on the matter.

- Letter, dated July 11, 2001, from the Nunavut Water Board, attached as Exhibit 'Y' to the Affidavit of Paul Crowley.

67. It is therefore respectfully submitted that, in view of the order sought, the balance of convenience test should be viewed in favour of the Applicant.

#### **Undertaking for Damages**

68. Canadian courts often will waive the need for an undertaking for damages when one of the following factors is present:

- a. Serious environmental damage will result if the injunction is not granted;
- b. The Applicant's case is strong;
- c. The Applicant is bringing the action in order to secure a public benefit;
- d. The order will be in place for only a short period of time.

- *MacMillan Bloedel Limited v. Mullin*, *supra*, Applicant's Authorities Tab 7

- *Chetwynd Environmental Society v. British Columbia (Ministry of Forests)*, [1995] B.C.J. No. 2080. Applicant's Authorities Tab 12.

- *Pasco v. C.N.R.* [1986] C.N.L.R. 35 (B.C.S.C.) Applicant's Authorities Tab 13.

69. In the United States, although the Federal Court Rules require the posting of a bond, courts regularly require only a 'nominal bond' from plaintiffs acting in the public interest with strong cases seeking to enforce environmental laws. The law on this point is well summarized in the case of *Wilderness Society v. Tyrrel*:

*"In setting the amount of the bond, I note that all four plaintiff organizations are non-profit corporations that have brought suit to ensure that the federal government complies with federal environmental laws. Since I have found have a likelihood of success on the merits. I must also recognize that if these types of groups were 'required to post substantial bonds in order to secure preliminary injunctions...' the bonds might undermine mechanisms for private enforcement of environmental law. Friends of the Earth v. Brinegar, 518 F.2d 322,323 (9<sup>th</sup> Cir. 1975) (reducing bond in NEPA case from \$4,500,000 to \$1000). Accord Morton, 337 F.Supp. At 169 (bond set at \$1000). Environmental Defense Fund v. Corps of Engineers, 331 F.Supp. 925 (D.D.C. 1971) (bond set at \$1). While I recognize that the government has a significant economic stake in the proposed timber sale, and the intervenor would also have a stake if its anticipated contract is in fact awarded, I am nonetheless 'unwilling to close the courthouse door in public interest litigation by imposing a burdensome security requirement' State of Ala. Ex rel. Baxley v. Corps of Engineers, 411 F.Supp. 1261, 1276 (N.D. Ala. 11976) "*

*- Wilderness Society v. Tyrrel*, 701 F.Supp. 1473 at 1492 (U.S. Dist. Ct. E.D. Cal, 1988), Applicant's Authorities Tab 14.

70. It is therefore respectfully submitted that the Applicant should not be required to provide an undertaking as he has a strong *prima facie* case, the potential for environmental harm is serious, and the Applicant is seeking to ensure the public welfare to the environment and the sound administration of the environmental regulatory scheme set out in the Nunavut Land Claims Agreement. Lastly, the length of the Order is dependent on the actions of the Respondent itself.

## **Part V - Order Requested**

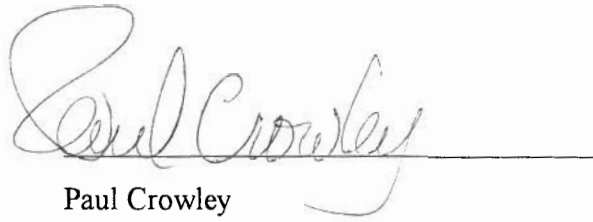
71. The Applicant therefore requests an interlocutory order enjoining the Respondents and their agents, successors, representatives and substitutes, and any persons acting under their instructions or the instructions of any of them or any persons having knowledge of this Order from burning unsorted hazardous, commercial and residential waste in contravention of Part E #2 of the Iqaluit water licence NWB3IQA0103 until:
- a. The Respondents, by motion, satisfy this Honourable Court that they have

diligently pursued all means of meeting the conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103; or

- b. The conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103 are modified by the Nunavut Water Board in accordance to the Nunavut Land Claims Agreement, the Nunavut Water Board Rules of Procedures and the rules of natural justice; or
  - c. The conditions set out in Part E #2 of the Iqaluit water licence NWB3IQA0103 are struck down by a court of appropriate jurisdiction; or
  - d. By Order of this Honourable Court upon rendering a decision in judicial review of the matters set out in the Originating Notice of Motion to this case.
72. The Applicant further requests that upon a person restrained hereby being in breach of any terms of the within Order, then, in such an event, any office of the Iqaluit RCMP Detachment shall forthwith arrest and restrain that person and bring them, at the earliest possible date, before a Justice of the Nunavut Court of Justice to show cause why they should not be committed in contempt.
73. The Applicant further requests a dispensation of an undertaking for damages by the Applicant.
74. The Applicant further requests that service of this Order upon the Respondent shall be deemed effective as of the date of this Order.
75. The Applicant further requests the costs of this application be awarded to the Applicant.
76. Such further and other relief as this Honourable Court may deem just.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

August 12, 2001

A handwritten signature in cursive script, reading "Paul Crowley", is written over a horizontal line.

Paul Crowley

Applicant



Court File No. \_\_\_\_\_

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**IN THE NUNAVUT COURT OF JUSTICE**

---

**BETWEEN:**

**PAUL CROWLEY**

Applicant

- and -

**MUNICIPALITY OF IQALUIT**

Respondent

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**AFFIDAVIT OF PAUL CROWLEY**

---

This Affidavit issued by:

**PAUL CROWLEY**

P.O. Box 1226/House #285  
Iqaluit, Nunavut  
X0A 0H0

Tel: (867) 979-3396

Fax: (867) 979-2100

Applicant

Court File No. 01 00 241 CV.

**IN THE NUNAVUT COURT OF JUSTICE**

**BETWEEN:**

**PAUL CROWLEY**



Applicant

- and -

MUNICIPALITY OF IQALUIT

Respondent

**AFFIDAVIT  
OF  
PAUL CROWLEY**

I, Paul Crowley , of the Town of Iqaluit in the Nunavut Territory, MAKE OATH AND SAY THAT:

1. I am a resident of the Municipality of Iqaluit and have been a participant in Nunavut Water Board hearings in Iqaluit and as such have personal knowledge of the matters deposed to herein, except where stated to be based upon information and belief.
2. On September 8-9, 1999 the Nunavut Water Board held a public hearing in Iqaluit (hereinafter referred to as the "1999 Public Hearing") with regards to a request from the Municipality of Iqaluit for a new water licence pursuant to the Nunavut Land Claims Agreement.
3. At the 1999 Public Hearing, a presentation was made by Paul Smith of the Department of

Indian and Northern Development (a copy of which is attached as Exhibit 'A' to this my Affidavit) which indicated the Municipality of Iqaluit had not complied with the terms of the water licence that had been in place from 1995 to 1999 (hereinafter referred to as the "1995-1999 Water Licence). Upon hearing the presentation, I was particularly concerned about the lack of planning undertaken by the Municipality regarding the Iqaluit dump site.

4. During the 1999 Public Hearing submissions were made opposing the practice of open pit burning of unsorted waste at the Iqaluit dump from:
  - a. The Government of Nunavut Department of Sustainable Development - Environmental Protection.
  - b. The Government of Canada Department of Fisheries and Oceans.
  - c. Environment Canada - Environmental Protection Branch, Prairie and Northern Region.
  - d. Mr. Marcel Mason.
  - e. The Amarok Hunters and Trappers Association.

These submission are summarized in the Nunavut Water Board Reasons for Decision (hereinafter referred to as the "1999 Reasons for Decision") to issue the Municipality of Iqaluit water licence NWB3IQA9900 on December 15, 1999 (a copy of which is attached as Exhibit 'B' to this my Affidavit).

5. Based on the submissions referred to in paragraph 3 above and my own research, I believed that open pit burning of unsorted hazardous, industrial, commercial and residential waste at the Iqaluit dump was a dangerous practice that should be discontinued. I made a presentation at the 1999 Public Hearing to that effect.
6. The Nunavut Water Board in page 23 of its 1999 Reasons for Decision, acknowledged that emissions from the burning of garbage, including possible dioxins can be released into the air and transported to the surrounding area. The Nunavut Water Board nonetheless refrained

from regulating air emissions until the Municipality of Iqaluit completed its Solid Waste Management Plan.

7. During the 1999 Public Hearing, it became evident that the Municipality of Iqaluit had not fulfilled a substantial number of conditions of the 1995-1999 Water Licence. In particular, the Town of Iqaluit had not prepared adequate plans for a new dump site. The current dump site was opened in 1995 as a temporary measure with a five year life span until a long-term waste management plan was developed.
8. On October 12, 1999, I appeared before the Iqaluit Town Council to express my concerns over the lack of due diligence the Town was exerting to fulfill its obligations under the 1995-1999 Water Licence, including the development of a long-term solid waste management plan. I also expressed my concerns about the Municipality's practice of open pit burning of garbage. This was reported in the Nunatsiaq News on October 22, 1999, (a copy of the article is attached as Exhibit 'C' to this my Affidavit).
9. In January, 2000, the Nunavut Water Board issued a water licence (hereinafter referred to as the "2000 Water Licence") for a period of one year to the Municipality of Iqaluit. The reaction of certain Town Councillors was reported in the Nunatsiaq News (see copy of Nunatsiaq News, "Iqaluit Councillor Dumps on Nunavut Water Board", dated January 14, 2000, attached as Exhibit 'D' to this my affidavit).
10. On November 22, 23 and 24, 2000, the Nunavut Water Board held another public hearing (hereinafter referred to as the "2000 Public Hearing") as the 2000 Water Licence was due to expire on December 31, 2000.



11. I have read the Reasons for Decision (hereinafter referred to as the 2001 Reasons for Decision”)(a copy of which is attached as Exhibit ‘E’ to this my Affidavit) issued by the Nunavut Water Board following the 2000 Public Hearing and verily believe that the Nunavut Water Board once again heard submissions expressing concern about the practice of open pit burning of garbage at the Iqaluit dump.
12. In the 2001 Reasons for Decision, the Nunavut Water Board noted that the Municipality of Iqaluit did not comply with five major requirements of the 1999 Water Licence. In particular when I read the 2001 Reasons for Decision, I was concerned that the Municipality had failed to conduct required studies to determine the link between emissions from burning waste at the dump and deposits into fresh waters (page 32 of Exhibit ‘E’ to this my Affidavit).
13. The Nunavut Water Board issued Iqaluit water licence NWB3IQA0103 (hereinafter referred to as the “2001 Water Licence”)(a copy of which is attached as Exhibit ‘F’ to this my Affidavit) with the conditions regarding open pit burning found in Part E. Those conditions were also stated at page 33 of the 2001 Reasons for Decision as follows:

*“However, the Board decides that it would be in the public interest that the Town not only improves its current practices of open burning at the solid waste disposal site but also adheres to its own Operation and Maintenance Manual for this site. With this in mind, the Board authorizes the Town to continue open burning practices at the current solid waste disposal facilities under the following conditions: a 5-m buffer zone is maintained around the combustion area; the wind is from the north or the south and the air temperature is below 15 degrees Celsius; if the wind is not blowing towards the Town. If wind shifts during burnings, attempts to reduce the size of burn shall be made; if the wind does not blow from the northwest between May 1<sup>st</sup> and September 30<sup>th</sup>; burning is prohibited during periods of higher risk for the fuel tank farm (i.e., tank filling, venting of tank during high wind, or site spill at the tank farm). In addition, effective June 1, 2001, the Licensee shall limit open burning at the Solid Waste Disposal Facilities to food waste, paper products, paperboard*

packaging and untreated wood, subject to the conditions listed above in this paragraph.”  
[emphasis added]

14. I was pleased with the Decision of the Nunavut Water Board. I was looking forward to June 1, 2001 when the dangerous practice of burning unsorted hazardous, industrial, commercial and residential waste would come to an end.
15. On April 11, 2001 a labour dispute arose between the Municipality of Iqaluit and its employees. As a result of the labour dispute the Municipality did not collect garbage, place it at the dump and burn it.
16. On May 31, 2001 the Municipality of Iqaluit applied to the Nunavut Water Board for an amendment to the 2001 Water Licence, (a copy of the request for amendment is attached as Exhibit ‘G’ to this my affidavit).
17. In the amendment request to the 2001 Water Licence, the Municipality of Iqaluit did not request an amendment to the burn provisions set out in Part E #2 of the 2001 Water Licence but stated that it would soon be forwarding a plan to the Nunavut Water Board asking for permission to use the existing dump in the same manner as before until an incinerator could be put in place.
18. The Nunavut Water Board responded to the amendment request on June 8, 2001 by letter (a copy of which is attached as Exhibit ‘H’ to this my Affidavit) indicating that it would likely hold a written hearing.
19. The Nunavut Water Board further responded to the request for amendment on July 3, 2001 by letter (a copy of which is attached as Exhibit ‘I’ to this my Affidavit) proposing a written hearing process after which the Nunavut Water Board would make a decision.

20. The Nunavut Water Board in their letter of July 3, 2001 also clearly indicated that until it made a decision on the amendment request to the 2001 Water Licence that the licence and all its terms and conditions remain in effect.
21. At that time, I assumed that the Municipality of Iqaluit would abide by the conditions set out in Part E of the Iqaluit water licence NWB3IQA0103 until such time the Nunavut Water Board made a determination with respect to the amendment request.
22. A number of Iqaluit citizens made written interventions to the Nunavut Water Board with regards to the Municipality's amendment request to the water licence. Particularly, a number of citizens opposed any amendment of the conditions set out in Part E #2 of the 2001 Water Licence which prohibit open burning of unsorted hazardous, industrial, commercial and residential waste. Those interventions include:
  - a. a letter, dated June 21, 2001, from Neida Gonzales (a copy attached as Exhibit 'J' to this my Affidavit);
  - b. an e-mail, dated June 22, 2001, from Lynn Peplinski (a copy attached as Exhibit 'K' to this my Affidavit);
  - c. an e-mail, dated June 22, 2001, from Elise Maltin (a copy attached as Exhibit 'L' to this my Affidavit);
  - d. an e-mail, dated June 22, 2001, from Julia and Peter Krizan (a copy attached as Exhibit 'M' to this my Affidavit);
  - e. a phone call from Miali Coley recorded in written form by Dionne Filiatrault dated, June 28, 2001 (a copy of which is attached as Exhibit 'N' to this my Affidavit);
  - f. a phone call from Jim Little recorded in written form by Dionne Filiatrault, dated June 28, 2001 (a copy attached as Exhibit 'O' to this my Affidavit);
  - g. a letter, dated June 29, 2001, from Keith Hay (a copy attached as Exhibit 'P' to this my Affidavit);
  - h. a fax, dated June 30, 2001, from Paul Landry (a copy attached as Exhibit 'Q' to this my Affidavit); and

- i. a letter, date stamped July 1, 2001, from Jim Little (a copy attached as Exhibit 'R' to this my Affidavit).
23. I wrote a letter, dated June 22, 2001, sent by e-mail to the Nunavut Water Board also indicating my concern about the possible resumption of open pit burning of unsorted garbage (a copy of which is attached as Exhibit 'S' to this my Affidavit).
24. The Nunavut Water Board also received interventions from citizens about the lack of diligence and good faith shown by the Municipality. Those interventions include:
  - a. a letter, date stamped July 1, 2001, from Jim Little (a copy attached as Exhibit 'R' to this my Affidavit);
  - b. a letter, dated June 29, 2001, from Keith Hay (a copy attached as Exhibit 'P' to this my Affidavit);
  - c. a letter, dated June 22, 2001, from Doug Workman (attached as Exhibit 'T' to this my Affidavit);
  - d. an e-mail, dated June 22, 2001, from Elise Maltin (a copy attached as Exhibit 'L' to this my Affidavit);
  - e. an e-mail, dated June 22, 2001, from Lynn Peplinski (a copy attached as Exhibit 'K' to this my Affidavit);
  - f. a letter, dated June 21, 2001, from Mary Ellen Thomas (a copy attached as Exhibit 'U' to this my Affidavit); and
  - g. an e-mail, dated June 11, 2001, from Marcel Masson (a copy attached as Exhibit 'V' to this my Affidavit).
25. On June 11, 2001, I verily believe that a Health Officer appointed under the *Public Health Act* issued an order directing the Municipality to remove a large amount of garbage that had accumulated near the Municipal Offices as a result of the earlier labour dispute.
26. On June 28, 2001, Ann Roberts, the Chief Medical Health Officer for Nunavut appointed

under the *Public Health Act* issued an order directing the Municipality to render the waster present in the dump sanitary by burning at such times as the local atmospheric conditions permit (a copy of which is attached as Exhibit 'W' to this my Affidavit).

27. The Municipality commenced burning of unsorted hazardous, industrial, commercial and residential waste on July 2, 2001.
28. On July 10, 2001 Mayor John Matthews sent a fax to the Nunavut Water Board suggesting that the Water Licence may not be valid (a copy of the letter is attached as Exhibit 'X' to this my Affidavit).
29. On July 11, 2001, the Nunavut Water Board issued a decision on submissions with regards to the Municipality of Iqaluit's amendment request (a copy of the decision is attached as Exhibit 'Y' to this my Affidavit). The Nunavut Water Board stated that it would hold a public hearing on the matter. The Nunavut Water Board further reiterated that the terms of the 2001 Water Licence remain valid unless set aside by a Federal Court Judge.
30. On a number of occasions, particularly but not limited to July 20, 2001, atmospheric conditions were such that the smoke from the dump engulfed our home, House #285 near the cemetery gates in Iqaluit, where I live with my spouse, Lynn Peplinski and my two daughters: Alashua, age 3, and Halina, age 5 months.
31. On July 20, 2001, I was very concerned, not only for my own health but particularly for the health of my daughters, as the smoke from the dump came into our house despite closing the windows.
32. During the morning of July 20, 2001, I made a call to the Iqaluit fire Department to see if the fire at the dump could be extinguished. I was advised by the Iqaluit Fire Department and verily believe that it would take over 8 hours for the Fire Department to extinguish the fire,

that attempting to do so would likely cause more smoke to be emitted from the burning garbage and that the Fire Department could not risk having its trucks out at the dump for such an extended period of time in case there was an emergency elsewhere in Iqaluit.

33. During the morning of July 20, 2001, I contacted Julia Krizan who lives at House #2664, approximately 1 kilometer from our house, to see if I could go there with our daughters to escape the fumes. Ms Krizan told me and I verily believe that her home was also engulfed by the smoke from the dump.
34. On July 20, 2001, I also contacted Mayor John Matthews. Mayor John Matthews advised me and I verily believe that the order issued Ann Roberts, the Chief Medical Health Officer for Nunavut on June 28, 2001 was rescinded that same day.
35. Mayor John Matthews further indicated to me that the Municipality would not stop burning unsorted garbage in the near future and that it would not comply with the burn conditions set out in the 2001 Water Licence. He further questioned whether those conditions were valid.
36. On July 23, 2001, I heard Mayor John Matthews on CBC radio say that the Municipality of Iqaluit would continue to burn unsorted garbage and had no intention of ending this practice in the near future.
37. On July 24, 2001 I heard Matthew Hough, Professional Engineer in Training and Director of Public Works for the Municipality of Iqaluit, on CBC radio to say that the Municipality of Iqaluit would soon institute a voluntary program for residents to separate plastic and metal items from their garbage. Matthew Hough also stated that the City had no intention of changing the practice of burning garbage.
38. Upon hearing that the Municipality would not comply with the burn provisions of the Water

Licence, I questioned the value of participating in the hearings of the Nunavut Water Board as the Municipality seemed to flout the requirements of the Water Licence..

39. On July 24, 2001, I attended a City Council meeting and made a presentation on behalf of an *ad hoc* group of citizens called Citizens for a Clean Iqaluit (a copy of my presentation is attached as Exhibit 'Z' to this my Affidavit). At the end of my presentation Mayor John Matthews said that the Municipality would continue to burn unsorted waste. After hearing my presentation, Mayor John Matthews deferred discussion of the issue to later in the Council meeting. The issue was never discussed, however, as Council refused to extend the meeting beyond the usual time to allow for the discussion.
40. On July 27, 2001, I learned that City Council would hold a meeting the following Tuesday to discuss the subject.
41. On July 31, 2001, I and approximately 20 other citizens appeared at Iqaluit City Hall at 3:30 p.m. to attend the Council meeting. However, there was not a sufficient number of Councillors present to make a *quorum* and the meeting did not proceed.
42. On behalf of Citizens for a Clean Iqaluit, I requested that the Mayor order a *moratorium* on burning unsorted waste in contravention of the Water Licence until Council could meet to discuss the issue. Matthew Hough stated in response that if the City could not burn unsorted garbage then they would simply refuse to pick up garbage. Mayor John Matthews said that he would get back to me with a decision regarding a *moratorium* and a date for the next Council meeting.
43. On August 1, 2001, Mayor John Matthews called me to say that the City was refusing to put a *moratorium* on burning in contravention of the Water Licence and that he was not sure when a Council meeting would be held.

44. On August 1, 2001, I contacted Peter Tympany, Professional Engineer, of the company Stantech in Calgary, Alberta to ascertain if there are possible technical solutions that would allow the City to meet the requirements of the Water Licence. Mr. Tympany said that he believed that such solutions did indeed exist. I arranged for a teleconference call with Mayor John Matthews the next day.
45. On August 2, 2001, I presented myself at City Hall for the teleconference. Before the beginning of the teleconference, I confirmed with Mayor John Matthews that the City had not retained any technical expertise to assist the City to meet the conditions of the Water Licence in the interim while financial resources to purchase an incinerator could be secured.
46. Before the beginning of the teleconference, Director of Public Works and Professional Engineer in Training, Matthew Hough stated that if I sought legal remedy to seek enforcement of the Water Licence, the City would retain “a big Toronto law firm to beat the snot out of me in court.” Despite such comments the teleconference proceeded
47. Present on the teleconference call were: Mayor John Matthews, Councillor Stu Kennedy, Director of Public Works and Professional Engineer in Training Matthew Hough, residents of Iqaluit Marcel Mason and myself, as well Stantech was represented by Peter Tympany, Professional Engineer, Doug Lavallee a Professional Engineer.
48. During the teleconference, a number of possible concepts were suggested that might allow the Municipality to meet the requirements of the Water Licence. It became clear that the City had not seriously investigated some of the available technical options which would allow the Municipality of Iqaluit to comply with the terms of the 2001 Water Licence. These technical solutions include, but are not limited to, using mechanical compaction of the waste to reduce volume instead of burning unsorted garbage to reduce the volume of the waste.
49. At the end of the teleconference Mayor John Matthews said he would present a letter



outlining possible solutions to the Council should one be sent by Stantech but that he did not believe that any such solutions did in fact exist. The City would continue its current practice of burning unsorted garbage.

50. As we were leaving the meeting, Matthew Hough clearly stated that he did not believe that the conditions set out in the Water Licence regarding the burning of garbage were valid.
51. I have witnessed smoke emanating from the Iqaluit dump every day since July 20, 2001, save on July 27- 28, 2001 and August 5-9, 2001 when a tanker ship was unloading fuel.
52. On a number of occasions I have witnessed from my home, which is approximately 1 kilometer from the dump across Kujussee Inlet, smoke heading close to the land towards the Sylvia Grinnell Park and Causeway areas of Iqaluit which are traditionally used by families to camp during the summer months.
53. On a number of occasions I have witnessed the smoke from the dump heading close to the land towards the main residential and commercial part of the Municipality. In particular on July 23, 2001 I was walking with my daughter Halina near the downtown core of Iqaluit in the afternoon and smelled the smoke from the dump.
54. At approximately 9:30 pm on July 25, 2001, I opened the window to my daughter's room in preparation for her bedtime. Her room was quickly engulfed in fumes during a period of less than five minutes before I closed the window.
55. We also had to close our windows on the evenings of July 26, 2001 and August 10, 2001, to prevent our house from being engulfed by fumes from the dump.
56. I am very concerned about the health and environmental effects of the emissions caused by burning unsorted hazardous, industrial, commercial and residential waste in contravention


of the 2001 Water Licence.

57. I have read and verily believe a report (a copy of the report entitled “Emissions of PCDDs, PCDFs and PCBs in Waste Landfill Fires” is attached as Exhibit ‘AA’ to this my Affidavit) that states that emissions from the open burning of unsorted garbage likely contain toxic by-products such as dioxins and furans in high levels.
58. In reading the Environment Canada Web site, [http://www.ec.gc.ca/air/pops\\_e.shtml](http://www.ec.gc.ca/air/pops_e.shtml) (a printed copy of which is attached as Exhibit ‘BB’ to this my Affidavit) I have learned and verily believe to be true that contaminants such as dioxins and furans are considered Persistent Organic Pollutants (also known as POPs). They tend to bioaccumulate in living organisms, persist in the environment and have long term toxic effects. POPs cause significant adverse effects to human health and wildlife. They move through the food chain to humans and they are passed on from mother to child across the placenta, and through mother’s milk.
59. I have further read on the Environment Canada Web site and verily believe to be true that POPs are semi-volatile chemicals that can also travel from around the world to the Arctic through the grasshopper effect where they tend to accumulate because of our low temperatures. Scientific evidence shows levels of certain POPs to be nine times higher in Inuit women’s breast milk as compared to women who live in southern Canada.
60. I have further read on the Environment Canada Web site and verily believe to be true that dioxins and furans were declared toxic under the *Canadian Environmental Protection Act*.
61. I have further read on the Environment Canada Web site and verily believe to be true that the Canadian International Development Agency has funded over \$8 million in projects for the Russian Arctic to introduce sound environmental management and to encourage more sustainable practices.

62. I have read and verily believe to be true the background report entitled "Tracking Dioxins" issued by the North American Commission for Environmental Cooperation (a copy of which is attached as Exhibit 'CC' to this my Affidavit) which states that "*[d]ioxins are a public health and environmental concern because some types have known carcinogenic and toxic properties that may produce a broad spectrum of adverse effects in humans. These include reproductive dysfunction and developmental abnormalities, suppression of the immune system, chloracne (a severe acne-like disease that sometimes persists for many years), and cancer.*"
63. I have read and verily believe that dioxins have "hormone like effects, causing changes that can not only lead to cancer but to infertility and other sexual changes"( see copy of Environmental News Network article entitled "U.S. Report to Firmly Link Dioxin With Cancer" attached as Exhibit 'EE' to this my Affidavit).
64. I have read and verily believe that burning garbage in a burn barrel likely emits 10,000 times more total dioxins, 1,000 times more total furans and 3,000 polycyclic aromatic hydrocarbons than a municipal incinerator and that small children, pregnant women, older adults and people with asthma are especially sensitive to the effects of emissions from burning garbage (see copy of Air Quality Michigan brochure entitled "Burning Household Waste" attached as Exhibit 'FF' to this my Affidavit).
65. I have been told and verily believe that the toxins emitted from the burning of unsorted hazardous, industrial, commercial and residential waste at the Iqaluit dump are likely worse then those emitted by burning garbage in a barrel as the burn temperatures in the barrel are likely higher then those at the dump.
66. I have read and verily believe that open burning is not permitted in most jurisdictions. In particular, Manitoba does not allow open burning of garbage (see a copy of the Manitoba

Environment Information Bulletin entitled “Implications of Open Burning of Garbage at Waste Disposal Grounds” attached as Exhibit ‘GG’ to this my Affidavit.

67. I have read and verily believe the Nunatsiaq News report that Canada signed on May 23, 2001 the Stockholm Convention which requires signatories to reduce or eliminate persistent organic pollutants such as PCBs, DDT and dioxins (a copy of the report entitled “POPs Treaty Signed” is attached as Exhibit ‘HH’ to this my Affidavit).
68. I have read and believe to be true the news report found on the Oswego Daily News Web site (a printed copy of the article entitled “EPA Reports that Garbage Burning Is a Health Threat” is attached as Exhibit ‘DD’ to this my Affidavit) where it is stated that *“Although dioxin is the most notable toxin released from burning of household garbage, several other possible cancer causing agents have been found in the smoke and ash.”*
69. The same news report when on to state:  
*“Some people may argue that their families have burned garbage for generations without adverse health effects. That may have been true in the past when garbage was composed of mainly paper and food waste. The households who continue to burn their garbage today may not realize this, but they could be potentially damaging their health and the health of their families. Today’s trash contains large amounts of plastics.”*
70. Since I moved to Iqaluit in 1995, I verily believe that the population has grown substantially, both major grocery stores, Northmart and Arctic Ventures have expanded considerably and a bottling plant for plastic pop bottles was established. I verily believe that our garbage contains much more materials that emit dangerous by-products when they are burned at low temperatures now then it did in 1995.
71. If the Municipality of Iqaluit is not enjoined from burning unsorted waste in contravention of the conditions set out in Part E #2 of the Iqaluit Water Licence, I verily believe that the emissions from the Iqaluit dump will be harmful to the environment and the public.

  
A Commissioner for Oaths/Notary Public  
in and for the Nunavut

PAUL CROWLEY

This is Exhibit "A" referred to in the  
Affidavit of

PAUL CROWLEY

Sworn before me this 11TH day

of AUGUST AD. 1999

[Signature]  
A COMMISSIONER FOR OATHS IN AND FOR  
NUNAVUT TERRITORY

**1995 - 1999 COMPLIANCE REPORT**

**TYPE "A" WATER LICENCE**

**WATER REGISTER N6L3 - 0087**

**MUNICIPALITY OF IQALUIT**

**NUNAVUT**

**Prepared by:**

**Paul Smith**

**Water Resource Officer  
Inspector under the Northwest Territories Waters Act  
Iqaluit, Nunavut**

**June 1999**

**1995 Compliance**

There are some outstanding 1995 compliance issues that are relevant to the current licence.

The laboratory that the Licensee was using (NovaMann International) was not able to provide faecal coli form results in an acceptable manner. Their standard notation was ">1600." It took the Licensee an extended period of time to switch labs in order to correct this reporting error. In addition to this, the laboratory did not receive approval for the analytical techniques used to determine nitrogen ammonia and mercury.

The long term Waste Management Plan was a requirement of the previous licence. This condition was not

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met and the condition restated in the renewed licence. The revised date was January 1, 1997 and the Licensee also did not meet this meet this revised dates.

### 1996 Compliance

The Licensee did not address the faecal coli levels reporting requirements. (as noted above).

The Licensee was failing to maintain the required one metre of freeboard at the lagoon. At the time, the Licensee committed to establishing a reference marker. This was not done in 1996. Additionally, the Licensee never received approval from a geotechnical engineer to run the lagoon level with less than one metre of freeboard.

The Licensee did not meet the deadline of providing the design proposal related to mechanical screening of sewage. The Municipality was advised to notify the Board and request an extension.

The Licensee was more than three (3) months late in submitting the report on Wetlands Sewage Treatment options.

The Licensee was to have submitted a Spill Contingency Plan by June 30, 1996. The Plan was not submitted until 1998.

The Licensee did not conduct all SNP sampling. The Licensee reported in their Annual Report that there was no flow at SNP stations 0087-5 for the months of August, September and October. During October, the Inspector collected a water sample. PCB and PAH samples should have also been collected. On June 11, the Licensee was advised that there was flow at SNP station 0087-6. No samples were collected by the Licensee.

The Licensee did not get NovaMann International approved for the analysis of ammonia nitrogen and mercury. The Licensee did not report which laboratory (ie: NovaMann) processed their samples.

The Licensee did not provide the as-built drawings for the 1.5 metre extension to the dam and completion of a treated water reservoir within the required 90 days. Drawings were provided at a later date.

The Licensee did not revise their Operation and Maintenance Plan for the Solid Waste Disposal facility as



a result of directions made to the Licensee by the Inspector relating to the discharge pipe (SNP station 0087-7). The Inspector required that the discharge pipe should be kept in the closed position until such time that if the need arose that it would be opened, at which point a sample could be collected.

### 1997 Compliance

The Licensee did not address the units of measurement for reporting total and faecal coli form levels. This concern was first identified in 1996 and was not addressed until 1998 when the Licensee switched to Taiga Laboratory. The concerns with ammonia nitrogen and mercury analysis were resolved when the Licensee switched laboratories.

The Licensee continued to experience problems maintaining the required one metre freeboard at the sewage lagoon. In early 1998, Dillon Consulting Ltd. surveyed the lagoon level and determined that the level was approximately 10% over the allowable freeboard limit (i.e., 10cm).

In the fall/early winter of 1997, the primary lagoon dyke at SNP station 0087-02 was observed to be seeping. The dyke did not seep until the mid-to-late-1980's and again in 1990 and 1991. It is reported that the dyke has no structural problems since it was rebuilt.

The Licensee did not submit the Spill Contingency Plan until June of 1998. The Plan was due by June 1998. The Licensee did not request an extension from the Board, although the Inspector advised the Licensee to request an extension.

The Licensee did not submit the long term Waste Management Plan until August of 1998. The Plan was due by January 1, 1997. The Licensee did not request an extension.

The Licensee was late in submitting the Abandonment and Restoration Plans for both the West 40 and Apex abandoned waste disposal sites. When submitted, the Nunavut Water Board was found deficient and the Licensee was required to resubmit by December 31, 1997. The Licensee met the new deadline, but the Plan was not accepted by the Board on September 21, 1998. To date, the Licensee has not resubmitted the Plans. The Board did not request the Licensee submit the plans by a specific date.

Immediately after the Municipality submitted the Abandonment and Restoration Plan for the West 40 site to the Board for approval, the Licensee initiated work on the site. The Inspector requested that work be halted, until the plan was approved.

### 1998 Compliance

The Nunavut Water Board determined that the long term Waste Management Plan was deficient. The Inspector advised the Board that the Plan did not to address the requirements of the licence.

The Spill Contingency Plan was submitted two years late.

The Inspector observed that the NE corner of the current Solid Waste Disposal site had experienced settling and erosion problems. The area was observed to collect run off waters. When this area was constructed, this area was not bermed, as it was near the high point. The erosional effects had resulted in water from within the dump to flow out at this corner and bypassing SNP station 0087-7. The Inspector identified this concern in the last inspection and the Municipality was ordered to correct it. The Municipality extended the existing berm, to eliminate water flow in the waste disposal area to the Inspector's satisfaction.

In the fall/early winter of 1998, the dyke at the sewage lagoon was observed to be seeping.

# NUNAVUT WATER BOARD

## DECISION

Date of Hearing: September 8 and 9, 1999

Date of Decision: December 15, 1999

IN THE MATTER OF Article 13 of the *Nunavut Land Claims Agreement*,

- and -

IN THE MATTER OF the renewal of the Town of Iqaluit's municipal  
licence.

Cite as: re: Iqaluit Licence Renewal 1999

This is Exhibit "B" referred to in the  
Affidavit of

.....  
PAUL CROWLEY

Sworn before me this 11TH day

of AUGUST A.D. 1999

.....  
A COMMISSIONER FOR OATHS IN AND FOR

NUNAVUT TERRITORY

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## APPEARANCES

TOWN OF IQALUIT

Denis Bédard  
Matthew Hough  
David Murray

DEPARTMENT OF JUSTICE NUNAVUT (DOJ)

979-6000 Susan Hardy\*

DEPARTMENT OF COMMUNITY GOVERNMENT  
AND TRANSPORTATION NUNAVUT (CGT)

975-5368 Michele Bertol

AMAROOK HUNTERS AND TRAPPERS ASSOCIATION

Linda Gunn

NUNAVUT TUNNGAVIK INC.

away til  
Nov. - Laurie Pelly

CITIZENS

Marcel Mason  
Paul Crowley

DEPARTMENT OF SUSTAINABLE DEVELOPMENT  
NUNAVUT - ENVIRONMENT PROTECTION (EP)

975-5800 Robert Eno

BAFFIN REGIONAL BOARD OF HEALTH  
AND SOCIAL SERVICES (BRBHSS)

979-5119 Eon Beddoe  
979-4334 Nicole Ritchie

DEPARTMENT OF FISHERIES  
AND OCEANS CANADA (DFO)

Margaret Keast

ENVIRONMENT CANADA (EC)

Ann Wilson

DEPARTMENT OF INDIAN AND  
NORTHERN AFFAIRS (DIAND)

Peter Kusugak  
David Jessiman

DEPARTMENT OF JUSTICE CANADA

Lee F. Webber

Dec. 31, 2000

## SUMMARY

On March 12, 1999, the Nunavut Water Board received an application for the renewal of licence N5L4-0087 from the Town of Iqaluit. The Board decided to hold a hearing on September 8 and 9, 1999 before approving the application. Following submissions from several parties, including the Town, DIAND, DFO, Environment Canada, Mr. Marcel Mason, and Mr. Paul Crowley, the Board decided to renew the Town's water licence for a term of one year. The Board attaches several conditions, including provisions for the use of freshwater for municipal purposes from Lake Geraldine, the submission of a Solid Waste Management Plan, a study to assess the link between air emissions from burning of refuse at the municipal dump and impacts on fresh water, the operation of a new sewage treatment plant and decommissioning of the current sewage lagoon. The decision provides the Town and interested parties with the opportunity to reconvene in a public hearing in the fall of 2000 to assess the Solid Waste Management Plan and the conclusion of the study on impacts of air emissions from the dump on freshwater.

## **I. Procedural History and Background**

### **Procedural History**

This matter involves the renewal of the water licence of the Municipality of Iqaluit, in Nunavut. The Municipality is located on Commissioner's Land, and a water licence regulates water use and waste disposal activities for municipal purposes. The previous water Licence was issued by the Northwest Territories Water Board on January 1, 1996 and was valid until December 31, 1998. This licence authorized the Municipality of Iqaluit to use water and dispose of waste in conjunction with municipal services.

On September 1, 1998, the Municipality of Iqaluit requested a delay of six months to file an application for the renewal of Licence N5L4-0087. The Board granted the request and decided to extend the expiry of the licence until it could make a final decision following submission of the application for licence renewal. On March 12, 1999, the Municipality of Iqaluit filed an application for licence renewal.

Upon initial review of the application, the Board decided to hold a hearing before approving it. A pre-hearing was held May 18, 1999 in Iqaluit with the applicant and interested parties. In consultation with the parties, the date of the public hearing was set for July 13, 1999. In subsequent consultation with the applicant and interested parties, the Board postponed the hearing to July 20, 1999 at the request of the Town of Iqaluit. On July 12, 1999, the Nunavut Water Board had to adjourn the hearing until further notice because the term of appointment of several members of the NWB expired and new members had not been formally appointed by the Minister of Indian and Northern Affairs Canada. Upon the appointment of new members of the Board, the hearing was re-scheduled for September 1 and 2, 1999. Again, at the request of the Town of Iqaluit, the Board decided to postpone the hearing until the week of September 6, 1999.

A public hearing was held on September 8 and 9, 1999 in Iqaluit. Following the hearing and in light of issues raised at the hearing, the Board gave all parties the opportunity to respond or comment on any matter related to the application. Deadline to receive submissions was set for October 12, 1999 and a deadline to reply to the submissions was set for October 26, 1999. At the request of the Nunavut Department of Justice, the Board decided to extend the deadlines to October 25, 1999 and November 5, 1999 respectively.

### **Background**

Iqaluit, known as Frobisher Bay until January 1, 1987 when the town reverted to its original Inuktitut name, is located near the site of a traditional Inuit fishing camp, at 2,261 air km east of Yellowknife, and 2,060 air km north of Montréal. It is located on rocky, irregular coastline in rocky lowland area, flanked by mountains on the northeast and southwest. The vegetation is typical of the sub-arctic tundra bio-region. Average annual precipitation is 19.2 centimetres of rainfall, 255 centimetres of snowfall, for 43.3 centimetres of total precipitation. July mean high temperature is 11.4 °C, and low is 3.7 °C. January mean high is -21.5 °C, and low is -29.7 °C. Winds are NW in the fall, SE in summer, at an annual average speed of 16.7 km/h. Iqaluit is located in the continuous permafrost area.

The site of Iqaluit remained relatively undisturbed since the first recorded contact with Europeans in 1576. Most of the development of Iqaluit occurred because of the United Air Force's construction of the largest airbase in the North on the site in 1942-43. The USAF was active until 1963, with a variety of projects: construction of a radar station, expansion of in-flight refueling capabilities, sending men and supplies to the eastern part of the Distance Early Warning (DEW) line then under construction. Iqaluit is also the site of a Forward Operating Location (FOL) since the beginning of the 1990s.

The Municipality of Iqaluit obtained Town status on October 1, 1980. In June 1981, the population was estimated at 2,333. The 1986 Census established the population at 2,947. A June 1988 GNWT assessment estimated the population at 3,039. The 1996 Census established the population at 4,220; according to the Nunavut Department of Community Government and Transportation, the estimated growth rate over the next five years is 3.7% per year.

Over the years, Iqaluit became the major administrative and political centre for the Baffin region; it is now the capital of the new territory of Nunavut, which was formally proclaimed April 1, 1999.

Access to Iqaluit is by air. Access by sea is possible during the ice-free season, generally from July to October. Heavy machinery, vehicles, dry goods, construction material and supplies, fuel and lubricants, are transported by ship from Southern Canada.



## **II. Issues**

Several parties raised a number of related issues regarding the water licence for Iqaluit. These issues include:

- A. the remediation of the existing sewage lagoon; the maintenance of the dykes containing the lagoon; and the continuance of the surveillance network program (SNP) which requires the Municipality to sample and analyze effluent from the lagoon;
- B. the water treatment plant; access to the plant's raw water source in Geraldine Lake; the formulation of a spill contingency plan for the plant;
- C. solid waste disposal and reduction; the elimination of open burning at the existing dump; the development of a long-term solid waste management plan; implementing recycling initiatives; and the treatment of hazardous wastes;
- D. abandonment and restoration of abandoned solid wastes sites in the Municipality of Iqaluit;
- E. the approval and construction of a sewage treatment system, including its operation and maintenance and the disposal of sludge;
- F. jurisdiction of the NWB to address the enforcement of licensing provisions; and
- G. the circulation of the draft licence to all parties.

### III. Summary of Evidence

#### A. Department of Sustainable Development Nunavut- Environmental Protection (EP)

EP made an initial submission to the NWB regarding the Municipality of Iqaluit's application for a water licence on July 9, 1999. In its initial submissions, EP suggested that the existing lagoon be upgraded and left in place as an emergency discharge repository. And while EP approved the plan to compost sludge, EP suggested that pilot testing first be conducted to determine if this option is feasible. EP also recommended in its initial submissions that the water licence include a provision to ensure that the Municipality of Iqaluit closely monitor the structural integrity of the dyke.

EP also suggested that the water licence contain a provision requiring the Municipality to develop a contingency plan for the water treatment plant. According to EP, this plan should include a training program for water plant employees and a description and use of all spill response equipment.

With regards to solid waste management, EP recommended that the waste management plan, required by the water licence, include a provision that properly addresses solid waste volume reduction of garbage in a proposed new solid waste disposal facility. EP noted in its initial submissions that burning is likely to continue at the current dump, but suggested that it be limited to paper products and untreated wood.<sup>1</sup>

EP recommended that the water licence contain a stipulation that would require the Municipality to develop and present for review, a plan for the establishment of a new solid waste disposal facility and an accompanying comprehensive waste management plan. EP further recommended that acceptance of the proposed plan should be subject to approval by the appropriate regulatory agencies. In addition, EP recommended that the Municipality develop and execute a program to address recycling options as a means of reducing the volume of solid waste.

While EP was in agreement with the proposed ZenoGem sewage effluent treatment system, it recommended that the water licence contain a stipulation that requires the Municipality to develop and present for review, comprehensive and realistic abandonment and restoration plans for *all* former and current sewage disposal sites in Iqaluit, within one year of the issuance of the

<sup>1</sup>

EP further recommended that the municipality consider obtaining an incinerator for Iqaluit.

water licence. And EP noted that acceptance of the plans should be subject to approval by the appropriate regulatory agencies.

## **B. The Baffin Regional Health and Social Services (BRHSS)**

The BRHSS noted in its initial submission<sup>2</sup> that before licence approval was granted, more information was required on the proposed method and schedule for the abandonment and restoration of the present sewage lagoon. The BRHSS also requested more information on the proposed O & M Plans for the Waste Water Reclamation Facility and the proposed method of treating and disposing of de-watered sludge from the Waste Water Reclamation Facility.

With regards to the proposed water plant, the BRHSS recommended that system upgrades be implemented to meet increasing community water demand to support residential expansions. BRHSS also suggested that more information be provided on specific short-term upgrades planned for this system, including a schedule for completion.

On the issue of solid waste management, the BRHSS indicated that a short and/or long term Solid Waste Management Plan (but not a study) is required. According to BRHSS, central to a new Solid Waste Management Plan is the requirement for a *new* solid waste facility. The BRHSS further recommended that the Municipality encourage new recycling initiatives, a recycling program and system development.

## **C. The Department of Fisheries and Oceans (DFO)**

DFO suggested in its initial submission that the Municipality investigate the possibility of using the existing sewage lagoon as a backup facility. If the sewage lagoon was used, DFO recommended that the Municipality monitor the integrity of the existing dykes while using the sewage lagoon.

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<sup>2</sup>

The BRHSS made initial submissions to the NWB regarding the Town of Iqaluit's application for a water licence on July 9, 1999.

On the issue of solid waste management, DFO recommended that there be no uncontrolled burning at the site and that the Municipality ensure that garbage is sorted when brought to the dump. DFO also suggested that the Municipality consider a proportional fees structure for industrial users. DFO further recommended that plans for a new solid waste management facility should be made a condition of the licence renewal. If an incinerator is chosen, DFO suggested that the Municipality modify the existing site to house the ash. *Burning*

DFO expressed concerns over abandonment and restoration of waste sites within the Municipality. In its initial submissions, DFO recommended the Municipality initiate a study to determine what is contained in the Municipality's abandoned sites. This study should identify drainage patterns around the sites which may affect receiving water bodies. DFO recommended that the Municipality submit a revised Abandonment and Restoration plan to the NWB for the abandoned sites, including an implementation schedule and long-term monitoring program, and that the Municipality determine ownership of the remaining abandoned sites. As well, the DFO recommended that the Municipality submit an abandonment and restoration plan for the sewage lagoon before the opening of the new sewage facility. DFO recommended that an abandonment and restoration plan be developed for the dump.

DFO also recommended that a construction/operational schedule be submitted for the new sewage treatment facility and that the schedule be incorporated as a condition of the water licence renewal. DFO requested that the Municipality provide the following information on the sludge: the composition of the sludge; the method and location of sludge storage; the length of time required to compost sludge in a northern environment; and the potential use as a greening material. Furthermore, DFO noted that any abandonment and restoration plan ought to include environmental studies to identify the composition of sludge from the existing lagoon, and determine whether the new facility is able to process it.

#### **D. The Environmental Protection Branch, Prairie and Northern Region, Environment Canada (EC)**

In its initial submission, due to concerns that effluent from the sewage treatment facility will enter Frobisher Bay, EC recommended that bioassay tests be included as a condition of the licence SNP, on a four times yearly basis. In addition, EC recommended that the transition to the new facility be made as soon as possible, in order to improve the quality of effluent currently entering Frobisher Bay. EC also recommended that the dykes in the existing sewage facility

should be regularly monitored while in use. Regarding the integrity of the dykes, EC recommended that a geotechnical inspection be done during the open water season, and necessary remedial measures identified. EC also suggested the possibility of keeping the present lagoon intact as backup facility. EC noted that the lagoon could be used as a holding pond for trucked sewage prior to routing through the new system, as a surge pond for temporary storage for unexpectedly high sewage flows, or for extra effluent prior to release in the environment. Regardless of what plan is chosen, EC recommended that the Town be required to evaluate the options before deciding the final fate of the lagoon, and noted that any plan should address supernatant treatment, sludge testing and disposal options, and final reclamation measures.

Regarding solid waste management, EC recommended that there be no uncontrolled burning permitted at the dump. EC further recommended that hazardous materials waste stream should be characterized, and that provision be made for secure storage and handling of hazardous wastes.

For the new landfill site, EC recommended that the Town develop a practical plan which includes planning site engineering, operation, and final abandonment and reclamation. EC also recommended that the new landfill site should include an area for land farming of hydrocarbon-contaminated soils.

With regards to the abandonment of existing sites, EC recommended that all abandoned waste sites be identified and classified for site contents, ownership and responsibility for site restoration. Further, EC suggested that drainage patterns around these sites should be verified, relative to receiving water bodies. In response to the Town's request to remove sampling stations and reduce the frequency for SNP testing, EC recommended that the Town be required to provide all past samples and a rationale explaining why these sites and parameters should no longer be monitored.

As well, EC recommended that a proactive plan should also be developed aimed at reducing waste generation, and firm funding commitments for this made by the Municipality, with final designs and schedules drawn up as soon as possible, and made a requirement under the new licence. EC noted that improvements were required in the means of reducing solid waste volumes other than through burning, e.g., incineration, and development of a new waste facility. EC also recommended that the licence renewal be circulated as a draft for review by intervenors such that comments could be made for consideration by the NWB. Lastly, EC recommended that the licence duration be limited to the time frame of the implementation schedule for the proposed system changes.

## **E. The Department of Indian Affairs and Northern Development ( DIAND)**

DIAND made an initial submission to the NWB regarding the application of the Town of Iqaluit=s application for water licence renewal. DIAND recommended in its initial submission that the existing SNP stations should remain and that additional stations may have to be added to address the proposed Sewage Disposal Facility and monitoring of any additional waste disposal sites. DIAND also recommended that the >sampling and analysis= requirements remain in the Renewed Water Licence, until the Municipality has not only implemented approved Abandonment and Restoration Plans but can also demonstrate that the run-off is not affecting downstream waters.<sup>3</sup>

In order to ensure that quality of the water in Iqaluit is properly monitored and controlled, DIAND suggested that the Municipality be required to submit a Quality Assurance/Quality Control (QA/QC) Plan to the Departmental Analyst designed under the Northwest Territories Waters Act for approval within three months following licence issuance. The DIAND recommended in its initial submissions that the requested increase for the water use limit be approved to reflect the increasing population. In addition, the Department recommended the Municipality document the annual water use volumes during the next licence term.<sup>4</sup> DIAND recommended that provisions be included that require the Municipality to have the Lake Geraldine Reservoir Dam inspected within six months of the licence issuance and during open and high water conditions, by a qualified geotechnical engineer. As well, the engineer=s reports shall be submitted to the Board within 60 days of inspection.

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<sup>3</sup> DIAND also suggested that provisions be included that require the Municipality to provide justification before the Municipality is able to remove and/or reduce the sampling requirements under the SNP. DIAND further suggested that provisions be included which require the Municipality to collect water and effluent quality samples. And further, that the samples be submitted to an accredited environmental laboratory.

<sup>4</sup> With regards to water supply, DIAND recommended that the Municipality consider options to access the ridged portion of Geraldine Lake. DIAND also suggested that the Municipality implement water conservation methods so as to ensure sufficient raw water supply is available throughout the year and for the duration of the licence. In addition, DIAND suggested that the Municipality address whether additional sources would be required to meet raw water demand during the licence term.

DIAND recommended that the Spill Contingency Plan requirements remain in the renewed Water Licence and that the Board review any plans regarding the Spill Contingency Plan in a timely manner.

DIAND recommended that the Licensee be required to submit construction approvals to the NWB a minimum of 60 days prior to the commencement of the project.<sup>5</sup>

DIAND further recommended that the Board adopt a key leadership role by working closely with the Municipality in solving the complex issues surrounding waste management in Iqaluit.<sup>6</sup> DIAND recommended that Iqaluit be required to submit a revised Waste Management Plan, and that major issues and concerns should be discussed and reviewed in consultation with the Board and stakeholders.

DIAND recommended that one and Restoration Plan be submitted by Municipality to form the framework for all additional site specific waste disposal sites and that all plans be subject to review and approval; but that the Licensee is provided specific dates as to when the revised plan is due for re-submission.

DIAND also made submissions to the NWB on October 25, 1999; in particular, DIAND was concerned with the Nunavut Water Board=s jurisdiction. The DIAND submitted that the NWB must confine itself to its authority to regulate matters relating to water.<sup>7</sup>

DIAND also made submissions relative to the Board=s authorities concerning enforcement.<sup>8</sup>

<sup>5</sup> DIAND also recommended that the design drawings should require the stamp of a qualified geotechnical engineer, in the Northwest Territories, whose principal field of specialization is the design and construction of earthworks in a permafrost environment.

<sup>6</sup> These issues include the following: uncontrolled burning; burning after normal business hours; limited recycling programs; expansion of the metal recycling program and the addition of the recently constructed berm to restrict the previous uncontrolled discharge of water into two cells of the current waste disposal site.

<sup>7</sup> The DIAND suggested that the Board did not have the authority to regulate emissions pertaining to conditions appurtenant to the licence because there was not a substantial or reasonable link to the use of water or deposits on water or a controlling of waste entering water. With respect to the imposition of licensing conditions by the NWB regarding recycling, DIAND submitted that the subject was not within the Board=s jurisdiction. Similar to the emissions issue, the DIAND suggested there was not a substantial enough link between recycling and the use or protection of water.

<sup>8</sup> The DIAND suggested that the Board make provisions in the licence clarifying the responsibility for enforcement. The DIAND further suggested that the provision should include notice that a violation

On November 5, 1999, DIAND reiterated its position on the Board=s jurisdiction by stating that (i) open burning of solid waste, (ii) airborne emissions produced by open burning, (iii) recycling, are beyond the NWB=s jurisdiction. As well, DIAND was of the opinion that enforcement of licensing provisions was beyond the NWB=s jurisdiction.

DIAND further commented about the Municipality=s stated intention to build a storage facility for sludge cakes generated by the sewage treatment plant. DIAND noted that such a facility would of necessity be related to water use or the deposit of waste into water; accordingly authorization would have to be obtained from the NWB via a water licence.<sup>9</sup> In the same submission, DIAND also asked the NWB to circulate a draft licence for review.

#### **F. Mr. Mason**

Mr. Mason recommended that attention needed to be paid to wind patterns and that no burning ought to be permitted during any time of the year when the wind direction could cause smoke from the landfill to move into the community. In particular, Mr. Mason thought that no burning should occur between April 15<sup>th</sup> and October 1<sup>st</sup> when the wind direction could cause smoke from the open burn to move over the causeway area or the Sylvia Grinnell Park area. Mr. Mason also recommended that the Municipality state how further separation of waste will be accomplished at the solid waste site and how the Municipality will be encouraging re-use and re-cycling of waste materials. In addition, Mr. Mason recommended restoration of the dump as well as diversion of any runoff.

#### **G. Amarok Hunters & Trappers Association (Amarok)**

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of the licence will constitute a violation of the *Northwest Territories Waters Act*, and will be subject to punishment under the authority of that Act. The DIAND further noted that any licence condition purporting to give an Inspector under the Act the power to fine ought to be omitted as an excess of jurisdiction by the NWB and a Charter violation.

<sup>9</sup> DIAND also commented on the EP=s recommendation that acceptance of a proposed plan should be subject to approval of regulatory agencies. The DIAND noted that such a condition might be viewed as giving the regulatory agencies a veto power, and the DIAND remarked that the ultimate power to approve or reject a plan rests with the NWB alone.



The Amarok submitted initial submissions to the NWB regarding the water licence for Iqaluit. The Amarok expressed concerns over the Municipality's current solid waste treatment and its current practice of open burning. The Amarok's concern over the solid waste treatment focused on possible negative impacts to the environment and people.

The Amarok also raised the issue of the possible negative effects of the existing sewage lagoon on the marine ecosystem. The Amarok urged the prompt cleanup of the old dumps within the Municipality and the replacement of old technology with more environmentally friendly technology. The Amarok also noted the possibility that toxic leachate may presently be running from the old dump into Tarr Inlet and polluting the Municipality's marine ecosystem. Finally, the Amarok made a point of commenting on the Inuit's traditional practice of living in harmony with the natural environment and suggested that this should continue to be a top priority in Municipal practices.

#### **H. Municipality of Iqaluit (Iqaluit)**

Iqaluit acknowledged that the preliminary Sewage Treatment Facility drawings submitted to the NWB did not meet the needs of the Board for the purposes of making a final decision and for that reason, Iqaluit submitted final design drawings at the public hearing. Iqaluit also committed that the new system will meet all discharge requirements established by the NWB.

In its October 25, 1999 submission, Iqaluit provided information on current actions being taken by the Municipality and its future plans. These plans include:

- C the current renovation of the Water Treatment Plant with the replacement of pumps, and the re-building of the chlorine storage room;
- C the construction of a new sewage treatment plant (currently in progress)
- C abandonment and restoration of present sewage lagoons;
- C building a facility for the proper storage of sludge cakes from the sewage treatment plant;
- C the recognition by the Municipality for a comprehensive Solid Waste Management Plan which will address appropriate methods of disposing of solid waste, restoration of existing waste sites, and the implementation of re-cycling programs;
- C the Municipality retained an environmental consulting team to develop and the implement a Solid Waste Management Plan; and
- C Iqaluit re-iterated its request for a licence term of six years.



## **I. Community Government and Transportation (CGT)**

The CGT of Nunavut made submissions to the NWB on September 17, 1999 during the first round of submissions regarding the Town of Iqaluit's application for a water licence. In its submission, the CGT expressed concern over the fact that the Town of Iqaluit had proceeded to construction of a sewage treatment plant prior to the issuance of a construction approval by the NWB.

## **J. Nunavut Tunngavik Incorporated (NTI)**

The NTI made submissions to the NWB during the 2nd Round of Submissions re: Public Hearing on October 30, 1999, primarily regarding the extent of the Nunavut Water Board's jurisdiction.<sup>10</sup>

## **K. Nunavut Department of Justice (NDJ)**

The NDJ also made submissions regarding the jurisdiction of the NWB, on November 5, 1999.<sup>11</sup> The NDJ submitted that it is well within the Board's mandate and jurisdiction to consider and implement measures which address monitoring and enforcement concerns in the issuance of the Town of Iqaluit's Municipal Water Licence. In fact, the NDJ suggested that the NWB's jurisdiction must be exercised to connect the terms imposed from the potential impacts of burning on territorial waters which, according to the NDJ, evoke concerns relating to public health or environmental stewardship. Unlike DIAND, the NDJ does not see the connection (between regulating burning emissions and water protection) as a difficult one to establish.

<sup>10</sup>

NTI submitted that when the NWB was established in July, 1996, it assumed the powers of the Northwest Territories Water Board under the *Northwest Territories Water Act* in Nunavut, except to the extent of inconsistency between the Act and *Nunavut Agreement*. The NTI noted that the *Northwest Territories Waters Act* continues to apply in Nunavut by virtue of s. 29(4) of the *Nunavut Act*. Accordingly, it was NTI's submission that water licences issued by the NWB are fully enforceable under the provisions of the *Northwest Territories Waters Act*. Therefore, enforcement of NWB licences are available through the provisions allowing for security, inspection, remedial measures, penalties and licence cancellation by the NWB. NTI also submitted that a non-compliant water licence holder may be subject to additional remedies under territorial legislation.

<sup>11</sup>

The NDJ submitted that while there is no *Nunavut Waters Act* in place yet, NDJ argues that the enforcement provisions of the *Northwest Territories Waters Act* may continue to operate in Nunavut under the authority of s.29 (4) of the *Nunavut Act* which provides for the continued operation of the Act until it is repealed, amended altered or rendered inoperable in respect of Nunavut.

## **L. Mr. Paul Crowley**

Mr. Crowley submitted that the NWB regulate activities in a manner which best reflects reality, suggesting that the NWB exercise its jurisdiction to regulate emissions from burning at the dump. On the issue of enforcement, Mr. Crowley submitted that the NWB ought to refrain from issuing any licence that does not contain real and effective enforcement mechanisms.<sup>12</sup>

Lastly, Mr. Crowley criticized the NWB for a failure to facilitate meaningful public participation in the hearing.<sup>13</sup>

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If, for example, it is evident that the NWB cannot properly enforce standards of air emissions from the dump, Mr. Crowley submits, the NWB should explicitly prohibit burning to take place under its water licence.

<sup>13</sup>

Mr. Crowley was of the view that many residents of Iqaluit did not and possibly still do not know the extent of what the water licence hearing would be covering. Mr. Crowley further suggested that in the next hearing the proponent should bear some of the burden of ensuring meaningful public participation.

### **III. Analysis**

#### **A. Remediation of the existing sewage lagoon.**

##### **(i) The use of the existing sewage lagoon as a back-up facility.**

The existing sewage lagoon is a facultative lagoon with a continuous discharge. The retention time is approximately 5 days. Previous study results from bioassay tests have indicated that, during warmer months, effluent from facultative lagoons is non-toxic. However, shortly after ice forms, the performance of the lagoon deteriorates and does not improve until after spring break-up. The Municipality has indicated that the old sewage lagoon will be remediated and filled in, and the old sludge will be composted/treated.

Several parties presented submissions on the issue of the existing sewage lagoon. EP for example suggested that the existing lagoon be upgraded and left in place as an emergency discharge repository.<sup>14</sup> This position was supported by DFO which recommended that the Municipality investigate the possibility of leaving the lagoon intact as a backup facility.<sup>15</sup> The EC was in agreement as well,<sup>16</sup> and recommended that the existing sewage lagoon be kept as a surge pond for temporary storage for unexpectedly high sewage flows, or for extra polishing of effluent prior to release in the environment.

After reviewing all of the submissions on the fate of the existing sewage lagoon, and recognizing that the current sewage (non)-treatment is totally unacceptable, the NWB has decided to approve *in principle* the use of the existing sewage lagoon or part of it as a back up facility. Iqaluit is therefore required to submit to the NWB for approval a plan for the use of the existing sewage lagoon or part of it as a back-up or polishing facility; this plan shall also address in detail the abandonment and reclamation of any portion of the lagoon, and the final treatment and disposal of sludge from the lagoon.

##### **(ii) Monitoring the integrity of the dykes.**

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<sup>14</sup> Letter dated July 9, 1999 from the Nunavut Department of Sustainable Development to the Technical Advisor, NWB at p.2.

<sup>15</sup> Letter dated July 9, 1999 from the DFO to the NWB at p.3.

<sup>16</sup> Letter dated July 9, 1999 from the DFO to the NWB at p.4.

Iqaluit's water application indicates the sewage lagoon dykes are satisfactory. The Board rejects this assertion due to the well-documented and extensive history of dyke breaches. In fact, the existing dykes may not be able to sustain the increase in volume until the new facility becomes operational. EP<sup>17</sup>, the DFO<sup>18</sup> and EC<sup>19</sup> have each recommended that the Municipality be required to monitor the integrity of the existing dykes while using the sewage lagoon. Amarok and other parties are concerned with the potential negative effect that the sewage lagoon is having on the marine ecosystem.<sup>20</sup>

The NWB agrees that the satisfactory maintenance of the dykes is critical to the protection of adjacent waters. Therefore, the NWB concludes that the effective monitoring of the dykes will be a requirement of the Water Licence. The dykes shall be inspected in accordance with the Dam Safety Guidelines.<sup>21</sup>

### **(iii) The Surveillance Network Program (SNP)**

The existing SNP requires the Municipality to sample and analyze effluent from the sewage lagoon and run-off from the waste disposal sites. The Municipality is also required to record the monthly and annual water usage in cubic metres from the Lake Geraldine Reservoir and record the annual quantity of sewage solids from the sewage disposal facility.

The Board has decided that the same requirements regarding the SNP in the current licence will be included in the new licence, including for the monitoring of PAHs and PCBs as Iqaluit has not provided justification to remove and reduce the monitoring requirement.<sup>22</sup> In addition, the NWB has accepted the recommendation of the EC, and included the requirement for bioassay testing to

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17 Letter dated July 9, 1999 from the EP to the Technical Advisor, NWB at p.2.

18 Letter dated July 9, 1999 from the DFO to the NWB at p.3.

19 Letter dated July 9, 1999 from the DFO to the NWB at p.4.

20 Letter dated May 18, 1999 from the Amarok Hunter & Trapper Association to the Technical Advisor, NWB at p.1

21 Canadian Dam Safety Association, January 1, 1995

22 The maintenance of the existing SNP was supported by the DIAND. This position was supported by EC who further recommended that bioassay testing be included as a condition of the licence SNP, on a four times yearly basis.

be done four times yearly. The Board notes that the Municipality of Iqaluit did not object to this request at the hearing and that EC offered to provide assistance to the town to perform the test.<sup>23</sup>

## **B. The Water Treatment Plant**

### **(i) Water Use**

The Municipality obtains raw water from Lake Geraldine where it is pumped to the Water Treatment Plant and reservoir. The raw water is treated through the use of pre-chlorination, pH control, settling tanks, filtration, and fluoridation. Potable water is distributed through a heated pipe system and truck delivery system. The current Water Licence water use limit is 1.1 million cubic metres per year.

The Board has reviewed the submissions and agrees to maintain the current water use volume in light of the increasing population<sup>24</sup>. As noted above, the NWB has determined that the existing provisions regarding monitoring water use volumes in the SNP will be maintained in the new licence.

### **(ii) Accessing the ridged section of Geraldine Lake.**

There is a naturally occurring rock ridge in Geraldine Lake which may cause water to be trapped in the ridged section during low water conditions. This potentially could cause a water shortage during periods of high water use with ice cover and, prior to the run-off period when Lake Geraldine may not recharge quickly enough to compensate for increased water consumption.

The Municipality has previously indicated that they may require additional and emergency raw water sources. The NWB has reviewed the evidence on the Geraldine Lake issue, and concludes that it is necessary to ensure an adequate long-term water supply for the Municipality. The Town agrees that there is a lack of supporting hydrological data on the Lake Geraldine watershed.<sup>25</sup> Accordingly the NWB requests detailed hydrological information and in particular storage volume of Lake Geraldine. Iqaluit shall also identify alternative water source options

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<sup>23</sup> Public Hearing Transcript, page 46.

<sup>24</sup> The Municipality has requested the approval of 1.1 million cubic metres/year of raw water from Lake Geraldine. The BRHSS and the DIAND made submissions regarding the Municipality's request for approval of a 1.1 million cubic metres/year. Both parties were in support of the Municipality's request to the water use limit. DIAND submissions of July 9, 1999 at page 4.

<sup>25</sup> Public Hearing Transcript, page 32, Denis Bédard

including the possibility of accessing the ridged portion of Lake Geraldine as recommended by DIAND.<sup>26</sup>

**(iii) Inspection of the Lake Geraldine Reservoir and Dam.**

The DIAND also made a recommendation to the NWB that the Lake Geraldine Reservoir Dam be inspected within six months of the licence issuance and during open and high water conditions, by a qualified geotechnical engineer and that the engineer's report be submitted to the Board within 60 days of inspection.<sup>27</sup> The NWB agrees with this recommendation for engineering reasons to ensure safety in all respects, and orders the inspection of the Lake Geraldine Reservoir and Dam in accordance with the Dam Safety Guidelines<sup>28</sup>.

**(iv) Spill Contingency Plan.**

The Current Water Licence requires the Municipality to submit a Spill Contingency Plan (Part D, Item 10) to the Northwest Territories Board by June 30, 1996. The Licensee submitted the Plan to the NWB in June, 1998; this plan was deemed deficient by the NWB. The NWB requested the re-submission of the plan in accordance with recommendations submitted to Iqaluit on July 13, 1999. The EP<sup>29</sup> and the DIAND made submissions on the issue of a Spill Contingency Plan. Both parties recommended that the water licence contain a provision requiring the Municipality to develop a spill contingency plan. The Board has considered the spill contingency requirements and concluded that as a matter of public safety and environmental protection, it will require the Municipality to submit a revised spill contingency plan in accordance with the recommendation previously provided by the NWB. Accordingly, a provision is included in the attached licence.

**(v) Conditions on Construction.**

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<sup>26</sup> DIAND made recommendations that the Municipality be permitted to access the ridged section of Geraldine Lake. DIAND submissions of July 9, 1999 at page 4.

<sup>27</sup> DIAND initial submissions, dated July 9, 1999 at page 5.

<sup>28</sup> Canadian Dam Safety Association. Edmonton, Alberta. January 1, 1995.

<sup>29</sup> EP recommended that the water licence contain a provision for the Municipality to develop a contingency plan for the water treatment plant. This plan should include a training program for water plant employees and a description and use of all spill response equipment. See letter dated July 9, 1999 from the Nunavut Department of Sustainable Development to the Technical Advisor, NWB at p.2.

The current Water Licence requires the Municipality to submit to the Board for approval the design drawings certified by a qualified engineer in the Northwest Territories of any dams, dykes or structures intended to contain, withhold, divert or retain water or waste, *prior to their construction*. The municipality submitted design plans for the reservoir building and the 1.5 metre raising of the Lake Geraldine Reservoir Dam, the as-built drawings were submitted to the NWB.<sup>30</sup>

The NWB agrees with the need for stricter conditions on future construction. The NWB has concluded that there will be a 60-day review period of construction drawings, and that these must be approved by a qualified engineer in Nunavut.

### **C. The Landfill**

#### **(i) The Long-term Plan.**

During the previous water licence application hearing in 1995, the approval stipulated that open burning as a means of volume reduction was permitted *provided* that the Municipality developed a long-term (post-temporary site) plan. This plan was to be carried out within two years. A plan was submitted by the Municipality in 1998 but it was determined to be deficient and the NWB provided comments to the Licensee on June 10, 1999. Almost all of the parties expressed concerns regarding the need for a comprehensive plan to address the problems associated with the landfill and the other waste sites in the Municipality.<sup>31</sup>

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<sup>30</sup> DIAND recommended (Initial submissions of DIAND at page 11) that the Municipality be required to submit the construction approvals to the NWB a minimum of 60 days prior to the commencement of the project, and that the design drawings should be stamped by a qualified geotechnical engineer, in the Northwest Territories, whose principal field of specialization is the design and construction of earthworks in a permafrost environment.

<sup>31</sup>

\$ EP recommended that the water licence contain a stipulation that requires the Municipality to develop and present for review, a plan for the establishment of a new solid waste disposal facility and accompanying comprehensive waste management plan. See letter dated July 9, 1999 from the EP to the Technical Advisor, NWB at p.3.

\$ The BRHSS indicated that a short and/or long term Solid Waste Management Plan (note: not a study) is required. See letter dated July 9, 1999 from the BRHSS to the NWB at p.1.



The current facility is expected to reach capacity within 6 months and to date, the Municipality does not have any immediate plans as to what actions are being planned for solid waste management in the first half of 2000. Although there is a pressing need to find a solution to the landfill problem, in the absence of good information the NWB cannot approve a landfill which may lead to potentially negative long-term water quality consequences. At the public hearing we learned that the Municipality has, with the financial support of the Government of Nunavut,<sup>32</sup> engaged consultants to assist in putting in place a comprehensive Solid Waste Management Plan.<sup>33</sup> The Municipality expects the development process of this plan will be tabled no later than March 31, 2000. The NWB has decided that it is best to defer landfill approval until the study is completed, tabled, and approved by the Board. This information will be assessed by the Board and interested parties and reviewed at the next Iqaluit hearing (discussed below).

**(ii) Open burning at the dump.**

At present, the Municipality currently practices open burning at the dump. Wind blows garbage from the dump across the tundra or into the water. This has no doubt harmful to marine<sup>34</sup> and freshwater aquatic life. Emissions from the burning garbage, including potential dioxins can be released into the air and transported to the surrounding area. If so, runoff from the rain and spring melt may carry contaminants from the dump into the surrounding land and the water.

- \$ DFO recommended that plans for a new facility be a condition of the licence renewal. If an incinerator is chosen, it is recommended the Municipality modifies the existing site to house the ash. See letter dated July 9, 1999 from the DFO to the NWB at p.4.
- \$ The DIAND recommended that a plan was necessary. Initial submission of DIAND at page 4.
- \$ EC recommended that a proactive plan should also be developed aimed at reducing waste generation, and that firm funding commitments be made by the Municipality, with final designs and schedules drawn up as soon as possible, and those be required under the licence. Submissions from the EC to the NWB, dated July 9, 1999 at p.5.

<sup>32</sup> Department of Community Government and Transportation.

<sup>33</sup> The Municipality of Iqaluit has recognized a need to put in place a comprehensive Solid Waste Management Plan to:

- \$ Find a new, appropriate, method of disposing of their solid waste;
  - \$ restore three waste sites around Iqaluit including the Apex Dump, the Iqaluit Landfill Site, and the present temporary site; and
  - \$ Start a recycling program.
- See Municipality's letter dated October 25, 1999, to the Executive Director, NWB at p.2.

<sup>34</sup> The Board does not have jurisdiction over marine water.

Due to uncontrolled burning the fire department has been called to the site 10 times from June 1st, 1998 to June 30th, 1999.<sup>35</sup> There has been considerable concern over the resulting potential effects on human health and the environment. Complaints have been lodged regarding the noxious smoke. Everyone recognizes the problems associated with open burning at the dump. Some parties recognized the practical necessity of burning in Iqaluit given the Municipality's circumstances regarding the limited space for landfill. Others strongly feel that the need to prevent potential harm resulting from emissions<sup>36</sup> is paramount and therefore wish an immediate halt to the open burning.<sup>37</sup>

The NWB recognizes that the landfill is an environmentally sensitive area but for the reasons noted above, it has decided to refrain from issuing a decision regulating air emissions until the solid waste management plan is reviewed and approved by the Board. The landfill will continue to operate in accordance with Iqaluit's approved Operations and Maintenance Plan, subject to the restrictions currently in place and all levels of government (BRHSS, municipal, federal, territorial) will continue to monitor and enforce as per their respective legal responsibility.

### **(iii) Jurisdiction of the NWB to regulate burning.**

The issue of burning raised another issue related to the jurisdiction of the NWB. The DIAND submitted that the regulation of burning was beyond the scope of the NWB's jurisdiction because it does not relate to the use of water or the deposit of waste on or into water.<sup>38</sup> The DIAND argued that there must be a substantial link between the subject matter and the regulation of water. According to the DIAND, the link between the emissions resulting from burning at the dump and the regulation of the use of water would be difficult to establish. The NDJ disagrees, at least in part.

We prefer the position advocated by the NDJ, which submitted that the link<sup>39</sup> between the emissions and water quality is not a difficult one to establish.

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<sup>35</sup> Letter dated July 9, 1999 from the DFO to the NWB at p.4.

<sup>36</sup> Letter dated November 5, 1999, from Mr. Paul Crowley to the NWB, at p.1. Letter dated May 18, 1999, from the Amarok Hunter & Trappers Association to the Technical Advisor, NWB.

<sup>37</sup> Letter dated July 9, 1999 from the DFO to the NWB at p.4.

<sup>38</sup> Letter dated October 25, 1999 from DIAND to NWB at page 2, and letter dated November 5, 1999 from DIAND to NWB.

<sup>39</sup> Letter dated November 5, 1999 from the NDJ to the NWB at page 2.

The NWB concludes that the link between emissions and water quality would probably not be hard to establish and that once established, the NWB has jurisdiction to regulate air emissions. Indeed, the issue is not emissions at all, it is *waste*. Section of the NLCA 13.7.1 states: A... no person may use water or dispose of *waste* into water without the approval of the NWB.@ The definition of waste is broad. Section 2 of the Northwest Territories Waters Act defines waste to include:

- A. any substance that, if added to water, would degrade or alter or form part of a process of degradation or alteration of the quality of the water to an extent that is detrimental to its use by people or by any animal, fish or plant, or
- B. water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed, by heat or other means, that it would, if added to any other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water to the extent described in paragraph (a),
- C. and without limiting the generality of the foregoing, includes
- D. any substance or water that, for the purposes of the *Canada Water Act*, is deemed to be waste,
- E. any substance or class of substances prescribed by regulations made under subparagraph 33(1)(b)(i),
- F. water that contains any substance or class of substances in a quantity or concentration that is equal to or greater than a quantity or concentration prescribed in respect of that substance or class of substances by regulations made under subparagraph 33(1)(b)(ii), and
- G. water that has been subjected to a treatment, process or change prescribed by regulations made under subparagraph 33(1)(b)(iii).

Waste is defined in Funk and Wagnall's Standard Dictionary (page 1514) to include Garbage, rubbish, trash@. In the circumstances of the town of Iqaluit, where solid waste is dumped unsorted, dozens of materials could through burning (or leachate), enter fresh waters.<sup>40</sup>

At this time we acknowledge that there is a lack of evidence to firmly establish a link between waste from air emissions and water quality. Accordingly, the NWB has decided that

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These materials include: commercial waste, hazardous waste, medical waste, institutional waste, inorganic waste, post-consumer waste, toxic waste, sanitary waste, solid waste, street waste, organic waste, municipal waste, bulky waste, chemical cleaning waste, household hazardous waste, mixed waste, industrial refuse, infectious waste, household waste.

investigative/monitoring studies are needed to demonstrate whether this causal link exists and, if so, its significance.

The NWB, therefore, orders that appropriate studies be performed to establish the evidential proof or lack thereof that there is a link between the emissions that result from burning at the landfill and fresh water. In the event that emissions monitoring establishes sufficient proof of the effect of burning and water quality deterioration, the NWB will at that point exercise its jurisdiction to regulate burning at the landfill and will do so if necessary by amendments to the licence. The Licensee is therefore required to submit to the Board for approval the Terms of Reference for an investigative monitoring program to address, among other things, whether there is a linkage to the current dump as point source of contamination; the potential contaminants of concern determined through air emission testing; and, the levels of water quality contamination. The Terms of Reference shall consider but are not limited some or all of the following, in addition to air emission testing, water sampling, sediment sampling, precipitation sampling, snow pack sampling, toxicity testing, and gradient station sampling.

**(iv) Re-cycling.**

The current recycling practice in Iqaluit is not effectively diverting recyclable material from the general waste stream.<sup>41</sup> Almost all of the parties recognize the merit of and the need for recycling.<sup>42</sup> And while the NWB supports the need to employ recycling practices, the Board does not see the direct link in this case B at least not between recycling bottles and the deposit of waste into water. In conclusion, the NWB strongly encourages any action on the Municipality's behalf to recycle bottles but the NWB does not have the jurisdiction to regulate it, at least not based on the submissions we have received.

**D. Abandonment and Restoration of Existing Solid Waste Sites.**

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Approximately 12,000 plastic bottles are produced every day at the Coca-Cola bottling plant at Iqaluit. There is a recycling depot in Iqaluit but the operator has been forced to store a large quantity of aluminum cans at the landfill site due to a tremendous backlog of stored material.

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\$ Letter dated July 9, 1999 from the EP to the Technical Advisor, NWB at p.4.  
\$ Letter dated July 9, 1999 from the BRHSS to the NWB at p.1.  
\$ Submissions of the EC to the NWB dated July 9, 1999 at p.5.

The AMunicipality of Iqaluit Solid Waste Management Study@ lists six abandoned solid waste sites around Iqaluit. The NWB has a number of comments on the study. First, the management plan was not approved by the NWB. As well, the abandonment and restoration plans listed in the application were reviewed and found to be deficient. Second, as noted above, no plan was developed that properly addresses the issue of abandonment and restoration in the Municipality of Iqaluit. Obviously, the NWB is aware of the pressing need to deal with these environmentally sensitive and potentially hazardous sites. As well, the NWB is sympathetic to the concerns of those wishing to see these sites immediately dealt with.<sup>43</sup>

The NWB, however, simply cannot make a decision in this licence application, at this time, because it does not have adequate information before it. Accordingly the NWB has decided to await the final report of the consultants engaged by the Municipality to assess the situation and review the plan, and then approve or reject it.

Again, this review will occur at the next hearing in the fall 2000. The NWB feels that this time period will allow for three beneficial things to occur: first, the adjournment will allow for the consultants to complete their report which will be circulated to participants in April/May and this will facilitate an informed decision by the NWB at the next hearing; second, this will allow time for testing to be completed to find any link between airborne emissions from the dump and fresh water; third, the time will allow for any possible agreement on monitoring and/or enforcement to be reached between DIAND and the Nunavut Government.

#### **E. The Sewage Treatment Plant**

The proposed sewage treatment system is the ZenoGem Filtration system. Raw sewage treated by the new facility will produce a liquid effluent allegedly with excellent environmental qualities, and a sludge-like material. The effluent will be released into Frobisher Bay (Koojessee Inlet), and the sludge will be stored. The need to replace the existing (out-dated) technology<sup>44</sup> with more

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<sup>43</sup> Letter dated May 18, 1999 from the Amarok Hunter & Trapper Association to the Technical Advisor, NWB at p.1.

<sup>44</sup> Letter dated July 9, 1999 from the Nunavut Department of Sustainable Development to the Technical Advisor, NWB at p.2.

environmentally sound technology was recognized by almost all parties at the hearing.<sup>45</sup> Two parties, the EP and the DFO,<sup>46</sup> recommended the NWB approve the proposed sewage treatment system. Both parties, however, also requested that the Municipality provide more information on the composition and the planned treatment of, the sludge.<sup>47 48</sup> The BRHSS also requested additional information on the proposed method of treating the de-watered sludge from the Waste Water Reclamation Facility. The Solid Waste Management Study referred above in Section C, Paragraph (i) shall provide long-term disposal and treatment options for sludge. Meanwhile, the Town shall submit to the Board interim sludge treatment and disposal options.

The DFO has recommended that a construction/operational schedule should be submitted for the new facility and that the schedule is incorporated as a condition of the water licence renewal. The NWB agrees that a schedule for implementation is essential to effective planning, because, unfortunately and regrettably, the Town has built the new facility before receiving approval from the NWB to modify the old system in contravention of Part G, Item 1 of Licence N5L3-0087.<sup>49</sup> This leap-frogging of the approval process should never happen again. Furthermore, the Board notes that there is no correspondence in the NWB Public Registry to confirm or suggest that the DIAND Inspector designated to enforce licences issued under the *NWT Waters Act*, took any action with respect to this violation of a licence condition. The NWB is extremely disappointed by the absence of any enforcement, more so since the inspector's office is located in Iqaluit; the NWB urges DIAND in the strongest possible terms to take any action required to enforce the terms and conditions contained in licences issued under either the *NWT Waters Act* or the NLCA.

After reviewing the evidence and submissions relating to this issue the NWB has set the schedule for the operation of the sewage treatment plant to begin operation on or before February 1, 1999.

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<sup>45</sup> See, e.g., Letter dated May 18, 1999 from the Amarok Hunter & Trapper Association to the Technical Advisor, NWB at p.1

<sup>46</sup> Letter dated July 9, 1999 from the DFO to the NWB at p.2.

<sup>47</sup> Letter dated July 9, 1999 from the EP to the Technical Advisor, NWB at p.1.

<sup>48</sup> Letter dated July 9, 1999 from the DFO to the NWB at p.2.

<sup>49</sup> Part G: Conditions Applying to Construction

1. Prior to construction of any dams, dykes or structures intended to contain, withhold, divert or retain water or Wastes, the Licensee shall submit to the Board for approval design drawings stamped by a qualified engineer registered in the Northwest Territories.

The licensee shall submit an Operation and Maintenance manual prior to the discharge of any effluent.

The DIAND also recommended that in relation to the new sewage treatment plant that the NWB adopt a key leadership role and works closely with the Municipality, Government of Nunavut, and stakeholders to coordinate the Water Licence conditions, timing and funding commitments, and the review and implementation of a new sewage treatment plant. The NWB agrees that it has a vital role to play in the development and application of the new Water Licence; the NWB will endeavour to meet its obligations arising from this role and strongly encourages others to do the same.

#### **F. Jurisdiction of the NWB to address Enforcement of the Licensing Provisions.**

The issue of the jurisdiction of the NWB to address the enforcement of licensing provisions was raised in the written submissions. The DIAND submitted that the NWB does not have the legislative authority to include enforcement provisions in the Water Licence.<sup>50</sup> NTI submitted that the NWB had the power by virtue of the *Nunavut Act* and the NDJ agreed.

It is NTI's position that the NWB assumed the powers of the Northwest Territories Water Board under the *Northwest Territories Water Act* in Nunavut, except to any inconsistency with the *Nunavut Land Claims Agreement*. Accordingly, the NWB has the power to regulate enforcement of its licences by virtue of the provisions allowing for security, inspection, remedial measures, penalties and licence cancellation under the *Northwest Territories Water Act*<sup>51</sup>. The NDJ differs from the NTI's interpretation of the legislation in the respect that it recognizes the authority of both the NWB under the *NTWA* and the authority of the federal government under *Northern Inland Waters Act*. The NDJ maintains that it is necessary to obtain administrative agreement on this issue to avoid duplication of powers.<sup>52</sup>

Another intervenor, Mr. Paul Crowley, submitted that it is less important to view *which* public body was properly delegated enforcement authority, than evidence that someone is in fact

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<sup>50</sup> Letter dated October 25, 1999 from DIAND to NWB at page 5. Letter dated November 5, 1999 from DIAND to NWB at page 2.

<sup>51</sup> Letter dated October 30, 1999 from the NTI to the NWB at p.2.

<sup>52</sup> Letter dated November 5, 1999 from the NDJ to the NWB at p.3.

enforcing proper environmental controls--over all aspects of the permitted operation. Mr. Crowley further submitted that the NWB should refrain from issuing a Water Licence which does not contain real and effective enforcement mechanisms.<sup>53</sup>

The NWB has carefully reviewed the relevant legislation and concludes that it does not have jurisdiction to appoint inspectors or establish an enforcement and penalty regime. The NWB derives its powers from the *Nunavut Land Claims Agreement*.<sup>54</sup> The Agreement provides for the regulation by the NWB of the use of waters and the deposit or discharge of waste into water. It does not, however, set out measure for enforcement or penalties for offences. These must be gleaned from the NWT Waters Act, or from the NIWA, to the extent that it as a reference point in the NLCA, might apply.

no  
enforcement  
unless  
agreement

#### G. Circulation of Draft Licence

DIAND and Environment Canada have both recommended that the draft licence be circulated for review. The NWB does not accept this recommendation. However, by issuing a short-term licence and by deciding to reconvene in the fall of 2000, the Board is in effect giving all parties the opportunity to present additional submissions to the Board.

<sup>53</sup> Letter dated November 5, 1999, from Mr. Paul Crowley to the NWB at p.2.

<sup>54</sup> The Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada, signed May 25, 1993.



#### IV. CONCLUSION

For the reasons listed above and pursuant to Article 13 of the *Nunavut Agreement*, the Board approves the application for the Town of Iqaluit subject to the following conditions and the details provided in the licence attached in Appendix C:

- (A) The existing sewage lagoon may be used as an emergency back-up facility. A condition of the emergency use of the existing sewage lagoon is that 1 metre of freeboard will be maintained and the integrity of the dykes will be monitored.
- (B) System upgrades to the Water Treatment Plant and the Water Use Limit of 1.1 million m<sup>3</sup> per year per year have been approved.
- (C) The NWB refrains from issuing a decision on the Landfill and the abandonment and restoration of existing waste sites until the consultant's final report is issued. The final report shall be submitted to the NWB by May 1, 2000. Public review of the written material, will occur during the summer of 2000, with a full public hearing in fall 2000.
- (D) The NWB orders the Municipality to conduct complete testing on the effect of airborne emissions from burning at the landfill on the quality of water in Geraldine Lake.
- (E) The NWB approves the construction of the new sewage disposal system.
- (F) In all other respects, the term of the Water Licence issued to the Municipality of Iqaluit is for one year, commencing December 31, 1999 and ending December 31, 2000. The term may be extended, subject to the results of the fall 2000 NWB hearing; and
- (G) The Board does not circulate the draft licence but will hold a hearing in the fall of 2000.

Dated December 15, 1999 at Baker Lake, Nunavut.

ORIGINAL SIGNED BY

Thomas Kudloo, Chairperson

## **APPENDIX A - LIST OF SUBMISSIONS AND CORRESPONDENCE**

Application for water licence for the Municipality of Iqaluit. Received March 12, 1999.

### **Initial Submissions:**

1. Letter dated May 18, 1999. Pitseolak Alainga, Chairman. Amarok Hunters & Trappers Association. Iqaluit.
2. Letter dated July 9, 1999 with AEnvironment Canada=s Submission to the Nunavut Water Board on an Application for Water Licence Renewal N5L4-0087 by the Town of Iqaluit, Nunavut.@ Laura Johnston, Manager, Northern Division. Environment Canada. Yellowknife.
3. Letter dated July 9, 1999. Mason Marcel. Iqaluit.
4. Submission received July 9, 1999. ADepartment of Fisheries & Oceans Submission to the Nunavut Water Board on an Application for Water Licence Renewal N5L4-0087 By the Town of Iqaluit, Nunavut.@ Department of Fisheries and Oceans.
5. Letter dated July 9, 1999 with APublic Hearing Submission to the Nunavut Water Board on the Application by the Municipality of Iqaluit for a Municipal Water Licence Renewal.@ David Livingstone, Director. Department of Indian and Northern Affairs Canada. Yellowknife.
6. Letter dated July 9, 1999. AIqaluit Water Licence Application Comments.@ Nichol Ritchie, Environmental Health Officer. Baffin Regional Health Services. Iqaluit.
7. Letter dated July 9, 1999. AIqaluit Water Licence Application.@ Earl G. Baddaloo, Manager - Environmental Protection. Department of Sustainable Development, Government of Nunavut. Iqaluit.

### **1<sup>st</sup> Round of Submissions re: Public Hearing**

1. Letter dated September 17, 1999. AIqaluit Sewage Treatment Facility.@ Denis Bédard, Director. Municipality of Iqaluit, Iqaluit.
2. Letter dated September 17, 1999. AConstruction of Iqaluit Sewage Treatment Plant.@ Michele Bertol, Manager, Capital Planning. Department of Community Government and Transportation, Government of Nunavut. Iqaluit.
3. Letter dated October 25, 1999. AGN Written submissions to the Nunavut Water Board.@ Earl G. Baddaloo, Manager - Environmental Protection. Department of Sustainable Development, Government of Nunavut. Iqaluit.

4. Letter dated October 25, 1999. A Submissions concerning Application by Municipality of Iqaluit for renewal of water licence. @ Lee F. Webber, Legal Counsel to the Intervenor DIAND. Department of Justice Canada. Yellowknife.
5. Letter dated October 25, 1999. A Supplementary Written Submission for Iqaluit License Renewal. @ Denis Bédard, Director of Engineering & Planning. Municipality of Iqaluit. Iqaluit.
6. Letter dated October 25, 1999. A Nunavut Written Submissions - Open Burning and Enforcement. @ Susan Hardy, Legal Counsel. Nunavut Department of Justice. Iqaluit.

## **2<sup>nd</sup> Round of Submissions re: Public Hearing**

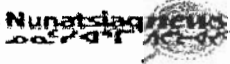

8. Letter dated October 30, 1999. A Application by the Municipality of Iqaluit for Renewal of Water Licence. @ Laurie Pelly, Director of Legal Services. Nunavut Tunngavik Inc., Cambridge Bay.
9. Letter dated November 5, 1999. @ Nunavut Written Submissions - Open Burning and Enforcement. @ Susan Hardy, Legal Counsel. Nunavut Department of Justice. Iqaluit.
10. Letter dated November 5, 1999. A Rely submissions concerning Application by Municipality of Iqaluit for renewal of water licence. @ Lee Webber, Legal Counsel to the Intervenor DIAND, Department of Justice Canada. Yellowknife.
11. Letter dated November 5, 1999. A Submissions concerning application of Municipality of Iqaluit for Renewal for Water Licence. @ Paul Crowley. Iqaluit.
12. Transcript and tapes. A Public Hearing of the Nunavut Water Board on the Renewal of Licence N5L4-0087 for the Town of Iqaluit, Iqaluit Nunavut, September 8-9, 1999 @ Nunavut Water Board.

## **APPENDIX B - LIST OF EXHIBITS FILED AT SEPTEMBER 8, 9, 1999 PUBLIC HEARING**

13. Public Registry. AMunicipality of Iqaluit.@ Nunavut Water Board. Gjoa Haven.
14. Design Drawing D-0199-A004. AMunicipality of Iqaluit, Nunavut -Waste Water Reclamation Facility Elevations.@ Sidney, B.C.: Hill, Murray, & Associates, Inc.  
  
Design DrawingD-0199-G004. AMunicipality of Iqaluit, Nunavut - Water Reclamation Facility. General Assembly - First Floor.@ Sidney, B.C.: Hill, Murray & Associates, Inc.
15. Letters dated December 30, 1996 and May 25, 1996 with AIqaluit Shellfish Monitoring Program.@ Margaret Keast. Habitat Management Biologist. Department of Fisheries and Oceans Canada. Iqaluit.
16. Video Tape dated August 19, 1999. Lake Geraldine Dam and Water Intake Inspection. Municipality of Iqaluit. Iqaluit.
17. Design Drawings. Set 3. AMunicipality of Iqaluit, Nunavut. 1999. Water Reclamation Facility. Project 0199.@ Sidney, B.C.: Hill, Murray & Associates, Inc.
18. Dated August 16, 1999. ATerms of Reference - Comprehensive Solid Waste Management Plan.@ Municipality of Iqaluit. Iqaluit.
19. AMillennium Eco-Communities@ and AEcoAction 2000 Community Funding Program.@ Environment Canada.
20. Report dated March, 1993. AMunicipal Wastewater Treatment Technologies Capable of Achieving Compliance with the Fisheries Act in the Northwest Territories.@ Environment Protection. Environment Canada.
21. Duong, Diep and Ron Kent. AGuidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories.@ Municipal and Community Affairs - Community Development. Northwest Territories. October, 1996.
22. Overhead Slides dated September 8 and 9, 1999. Department of Indian Affairs and Northern Development.
23. Water Quality DIAND with respect to Lakes Surrounding Lake Geraldine.
24. Letter dated March 18, 1998. ASewage Effluent Parameters.@ Dionne Filiatrault, Technical Advisor. Nunavut Water Board. Gjoa Haven.

25. Letter dated August 3, 1999. ALevel 1 Environmental Screening.@ with ACEAA Screening Form - Level 1.@ David Livingstone, Director- Renewable Resources and Environment. Department of Indian and Northern Affairs.
26. Floppy disk dated September 9, 1999. Photos. Marcel Mason. Iqaluit.
27. Internet References dated September 9, 1999. Marcel Mason. Iqaluit.
28. Document dated September 7, 1999. AProposed Budget Distribution by Fiscal Year.@ Department of Community Government and Transportation. Government of Nunavut. Iqaluit.
29. Letter dated August 27, 1998. APermission to Occupy - New Sewage Treatment Facility.@ John Graham, Airport Manager. Iqaluit Airport. Government of Northwest Territories.
30. Heinke, Gary W. and James Crum. ASolid and Hazardous Waste Management.@ Section 16.

PAUL CRAWLEY

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## Special Editions

# Iqaluit hires consultants to produce waste management plan

The Town of Iqaluit's first waste management plan was trashed by the Nunavut Water Board. Now they've hired a new set of consultants to do another one.

**MICHAELA RODRIGUE**  
**Nunatsiaq News**

**IQALUIT** — Iqaluit Town Council is looking for new ways to get rid of Iqaluit's garbage, but that's no guarantee that open burning of garbage at Iqaluit's dump will stop, an Iqaluit town councillor says.

Iqaluit's Town Council awarded a \$225,000 contract last week to two consulting firm who will prepare a waste management plan aimed at finding solutions to Iqaluit's burgeoning garbage problem.

The contract was awarded to J.L. Richards and Associates of Ottawa, and Golder Associates of Yellowknife.

Right now, Iqaluit burns as much as 13,000 cubic meters of plastic pop bottles, household waste and other garbage at its dump site each year.

Faced with growing criticism from the public and various government agencies about the effects of open burning on the environment and people, Iqaluit's municipal officials must find new ways of disposing of Iqaluit's garbage.

Iqaluit's new waste management plan is expected to be used for the next 20 years.

The consultants are also expected to come up with remediation plans for three of Iqaluit's six old dump sites, and they will study ways of increasing the amount of waste that can be recycled.

April 1, 1999

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But the Town of Iqaluit hasn't officially ruled out open burning beyond 2001, and one councillor says he believes that the practice may have to continue.

Coun. Matthew Spence says no matter what recommendations the consultants come up with, in the end, money will determine how Iqaluit gets rid of its trash.

"That will be dictated by finances. If we don't have any money we won't be able to implement it," Spence said, adding that every community in Nunavut uses an open-burn dump.

If government agencies decide that Iqaluit must stop open burning, pressure will mount on the Nunavut government to find money for a new waste management in Iqaluit, Spence said.

The Nunavut government is paying for Iqaluit's new waste management study.

But at least one Iqaluit resident says the Town of Iqaluit has ignored its garbage problems for too long.

When he appeared at an Iqaluit Town Council meeting last week, Paul Crowley admonished the Town of Iqaluit for not fulfilling the environmental obligations set out within its last water licence, which has now expired. He said that open burning should have come to a halt in Iqaluit years ago.

"I feel it is unacceptable to continue open pit burning," Crowley said. "There's no excuse."

Iqaluit's dump was opened in 1995 as a temporary five-year site. Open burning was considered to be a stop-gap measure aimed at extending the life of the dump until the Town was able to produce long-term waste management plan.

Four years later, open burning continues, the Town wants to continue to use the dump until 2001, and a waste management plan submitted to the Nunavut Water Board in 1998 was rejected in 1998.

Iqaluit is now waiting to find out if the Nunavut Water Board will renew its water licence. The board is expected to make a decision next month on Iqaluit's water licence next month.

Crowley called Iqaluit's lack of planning "worrisome," and told Iqaluit councillors he wants open burning to stop immediately.

Iqaluit Mayor Jimmy Kilabuk thanked Crowley for his comments, but said Iqaluit doesn't have the money to deal with the problem right now.

Coun. Matthew Spence said he, like Crowley, wants open burning to come to



an end, but he said that right now, Iqaluit can't afford any of the more expensive alternatives to open burning.

"We don't have another technology that is as cheap as open burning. It's going to take longer than six months," Spence said.

But in an interview after the meeting, Crowley said there's no reason for open burning to continue, and he called on the Iqaluit council to make sure it's stopped.

"It's not enough to say 'we've awarded a contract.' They have to take a leadership role," he said.

Crowley said he is "cautiously optimistic" that this latest round of planning will produce a good solution, but he wants the Town of Iqaluit to make sure that public consultation takes place.

"They've got to do more than get out one big document and say 'we're going to be talking about this on Tuesday at the Parish Hall,'" Crowley said.

Instead, Crowley wants the consultants to approach special interest groups such as the Hunters and Trappers Association and elders.

The consultants are expected to finish their plan by March 31, 2000. A new system would be up and running by the time the current dump becomes full in 2001.

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