



December 22, 2010

Via: Email

Mr. Ed Murphy, SAO
Hamlet of Arviat
Arviat, Nunavut X0C 0E0

**Re: Addendum to Environmental Contingency Plan – Hamlet of Arviat
File No. N-O15746**

Dear Mr. Murphy,

1.0 Introduction

The Hamlet of Arviat operates its Water Supply Facility, Sewage Treatment Facility, and Solid Waste Management Facility under a licence issued by the Nunavut Water Board (NWB). The licence requires that the Hamlet have an Environmental Emergency Contingency Plan for the facilities in case of an environmental emergency.

In 2008, the NWB licence NWB3ARV0308 expired and the Hamlet applied for a new licence. An Environmental Emergency Contingency Plan specifically for the operation of the NWB licensed facilities dated May 2009, was prepared by Nuna Burnside Engineering and Environmental Ltd (Nuna Burnside), as required by the original license and in support of the application for a new license. In May 2010 an update of the Plan was submitted to the NWB to addresses comments provided by review agencies during the license renewal application process.

A new licence (3AM-ARV1015) was issued to the Hamlet dated August 23, 2010. This memorandum has been provided to fulfill the condition in the new licence Part F, Item 5, and is an addendum to the report entitled "Environmental Emergency Contingency Plan, Hamlet of Arviat" May 2009, revised May 2010.

This memorandum addresses the following:

- Procedures for the movement of hazardous waste
- Clean up methods and procedures for spills on water or ice
- Contact information for the Government of Nunavut Department of Environment Manager of Pollution.

2.0 Procedures for Transportation of Hazardous Waste

The Government of Nunavut Department of Environment (GN-DOE) monitors the movement of hazardous wastes from generators, carriers and receivers of wastes, through the use of a tracking document known as a Waste Manifest. A Waste Manifest must accompany all movements, and all parties must register with DOE by contacting:

- Robert Eno, Director, Environmental Protection Division (867) 975-7729
reno@gov.nu.ca
- Ian Rumbolt, Manager of Pollution, Department of Environment (867) 975-7748
irumbolt@gov.nu.ca
- Alain, Chouinard, Environmental Protection Officer – Arviat (867) 857-2828
AChouinard@gov.nu.ca
- Registration forms must be filled out before transport of the waste and sent to the Environmental Protection Division, Government of Nunavut. The forms may be downloaded from the government's website
<http://env.gov.nu.ca/programareas/environmentprotection>. Copies of the forms are attached.

3.0 Methods and Procedures for Spill Clean-Up

Methods and procedures for cleaning up spills are described in Sections 4 and 5 of "Environmental Emergency Contingency Plan, Hamlet of Arviat" May 2009, revised May 2010. Table 1 provides a summary of procedures for cleaning up spills on water and ice.

Table 1 Cleanup Procedures for Spills on Water and Ice

Type of Contaminant	Water	Ice
Hydrocarbons	<ul style="list-style-type: none">• Use containment boom to capture spill for recovery after vapours have dissipated• Use absorbent pads to capture small spills• Use a petroleum skimmer for larger spills	<ul style="list-style-type: none">• Build a containment berm around spill using snow• Remove spill using absorbent pads or particulate sorbent material• The contaminated ice and snow must be scraped and shovelled into plastic buckets with lids, 205 litre drums, and/or polypropylene bags
Sewage	<ul style="list-style-type: none">• Use containment boom to capture spill, and pump contaminated water into vacuum trucks• Deposit contaminated water in the Hamlet sewage lagoon	<ul style="list-style-type: none">• Build a containment berm around spill using snow• Remove spilled sewage and contaminated snow and ice to the Hamlet sewage lagoon

Type of Contaminant	Water	Ice
	<ul style="list-style-type: none">As a minimum, monitor the affected water body by sampling for Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), ammonia (NH₃), and faecal coliforms (FC)	
Solid Waste	<ul style="list-style-type: none">Use containment boom to capture soil waste for recoveryPhysically remove the spilled solid waste from the water, and deposit in the Hamlet Solid Waste Management FacilityCapture any sheen from the water using absorbent pads or skimmer, and deposit any used absorbent pads to the Hamlet Solid Waste Disposal facility	<ul style="list-style-type: none">Build a containment berm around spill using snowPhysically remove the spilled solid waste and deposit in the Hamlet Solid Waste Management Facility
Hazardous Waste	<ul style="list-style-type: none">Use containment boom to capture solid hazardous waste for recoveryPhysically remove the spilled solid waste from the water, and store in the Hazardous Waste Storage Area at the Hamlet Solid Waste Management FacilityCapture any sheen from the water using absorbent pads or skimmer, and store any used absorbent pads as hazardous waste.	<ul style="list-style-type: none">Build a containment berm around spill using snowPhysically remove the spilled hazardous solid waste and store in the Hazardous Waste Storage Area at the Hamlet Solid Waste Management Facility.

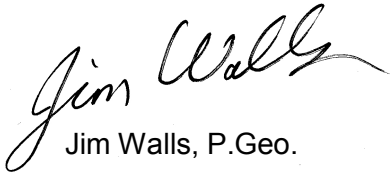
Environment Canada should be notified regarding all clean-up methods.

4.0 References

GN-DOE, 2010. Contingency Planning and Spill Reporting in Nunavut, Government of Nunavut, Department of Environment.
<http://env.gov.nu.ca/sites/default/files/Spill%20Planning%20and%20Reporting%20Guide_0.pdf> Accessed Nov 26 2010.

Nuna Burnside, 2010. Environmental Emergency Contingency Plan, Hamlet of Arviat,
Nuna Burnside Engineering and Environmental Ltd, May 2009, revised May 2010.

Nuna Burnside Engineering and Environmental Ltd.


Jim Walls, P.Geo.



cc: Mr. Richard Dwyer, Nunavut Water Board
Mr. Wayne Thistle, Regional Projects Director, Community and Government
Services, Government of Nunavut
Mr. Balihar Antaal, Project Officer, Community and Government Services,
Government of Nunavut

JW:mm

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NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

EMAIL: spills@gov.nt.ca

[illegible]

Section 3 - Waste Management Information

Mode of Transport (check all that apply) Road _____ Rail _____ Marine _____ Air _____

Hazardous Waste Generator(s) Used _____

Hazardous Waste Receiver(s) Used _____

Do you have an approved Emergency Response and Spill Contingency Plan? Yes _____ (attach copy) No _____

Section 4 - Certification

I certify that the information provided on this form is correct, accurate and complete.

Signature of Contact Person _____ Date (dd/mm/yy) _____

Print Name of Contact Person _____ Title _____

Phone _____ Email _____

For Department Use Only

Carrier Number NUC# _____ Approved by _____ Date _____

Users' Guide to the Hazardous Waste Carrier Registration Form

Section 1 – Identification

Provide the carrier's full legal name and contact information. The legal name of the Company as it is registered in Nunavut is to be provided. The corporate and site (dispatch) addresses are to be provided if they are not the same. If the carrier is located in a remote area (i.e. mining camp), provide the geographic coordinates (UTM and Latitude/Longitude) and name of the most prominent nearby geographic feature (i.e. "Sam Hill Bay").

Section 2 – Description of Waste Transported

Shipping Name, TDG Number and TDG Class. Provide the proper shipping name, TDG Number and TDG Class in accordance with the federal *Transportation of Dangerous Goods Act and Regulations*. This is the same shipping name, number and class that must be recorded on the manifest form or movement document.

Quantity Transported. Provide the estimated average quantity of each waste transported during a single monthly period. Liquid wastes are reported in litres (L) while solid wastes are reported in kilograms (Kg). For one-time only transport of waste, provide the actual quantity to be transported in litres or kilograms.

Frequency of Transport. Enter the appropriate code from the following list which best describes the frequency at which each waste is transported – ongoing, intermittent or one-time only.

Section 3 – Waste Management Information

Mode of Transport. Identify the mode of transport used. Check all that apply.

Hazardous Waste Generator(s) Used. Only generators that have been registered in Nunavut or the province or territory in which the company is based may transfer hazardous waste to another party. Provide the name and registration number of each known company from which waste will be transported. If applying for registration in anticipation of transporting waste at an unspecified future time, provide this information at a later date.

Hazardous Waste Receiver(s) Used. Only receivers and hazardous waste management facilities that have been registered in Nunavut or the province or territory in which the company is based may receive hazardous waste. Provide the name and registration number of each known company that will receive the transported waste. If applying for registration in anticipation of transporting waste at an unspecified future time, provide this information at a later date.

Emergency Response and Spill Contingency Plan. An Emergency Response and Spill Contingency Plan sets out the contacts, equipment and procedures to be used in the event of a spill or accident involving dangerous goods or hazardous waste. Provide a copy of your company's plan if one has been developed. Plans in electronic format are preferred.

Section 4 – Certification

The carrier's contact person or authorized representative must sign and date the form to certify the information provided is correct, accurate and complete. Include the date and person's signature, printed name, position title, phone number and email address.

Use additional pages as required in order to provide complete information.

Return the completed registration form to:

Environmental Protection Division
Department of Environment
Government of Nunavut
Inuksugait Plaza, Box 1000, Station 1360
Iqaluit, Nunavut, X0A 0H0
Phone: (867) 975-7729
Email: EnvironmentalProtection@gov.nu.ca

After processing, a copy of the form and carrier number will be provided to the contact person.



Instructions

- Section 1 - Identification

Phone _____ Email _____

Section 2 - Description of Waste Generated provide a separate table if required

[illegible]

Section 3 - Waste Management Information

General Type of Business _____

Source of Waste _____

Hazardous Waste Carrier(s) Used _____

Hazardous Waste Receiver(s) Used _____

Do you have an approved Emergency Response and Spill Contingency Plan? Yes ____ (attach copy) No ____

Section 4 - Certification

I certify that the information provided on this form is correct, accurate and complete.

Signature of Contact Person _____ Date (dd/mm/yy) _____

Print Name of Contact Person _____ Title _____

Phone _____ Email _____

For Department Use Only

Generator Number NUG# _____ Approved by _____ Date _____

Users' Guide to the Hazardous Waste Generator Registration Form

Section 1 – Identification

Provide the generators' full legal name and contact information. The legal name of the Generating Company as it is registered in Nunavut is to be provided. If the generator is located in a remote area (i.e. mining camp), provide the geographic coordinates (Latitude/Longitude) and name of the most prominent nearby geographic feature (i.e. "Sam Hill Bay").

Section 2 – Description of Waste Generated

Site Location(s) where Waste is Generated. Provide the actual physical site location(s) at which the hazardous waste is generated. Identify more than one site as required. The site location should include street name and community or, if located in a remote location, provide the geographic coordinates (Latitude/Longitude) and name of the most prominent nearby geographic feature (i.e. "Sam Hill Bay").

Shipping Name, TDG Number and TDG Class. Provide the proper shipping name, TDG Number and TDG Class in accordance with the federal *Transportation of Dangerous Goods Act and Regulations*. This is the same shipping name, number and class that must be recorded on the manifest form or movement document.

Quantity Generated. Provide the estimated average quantity of each waste generated during a single monthly period. Liquid wastes are reported in litres (L) while solid wastes are reported in kilograms (Kg). For one-time only generators of waste, provide the actual quantity generated in litres or kilograms.

Frequency of Generation. Enter the appropriate code from the following list which best describes the frequency at which each waste is generated – ongoing, intermittent or one-time only.

Section 3 – Waste Management Information

General Type of Business. Provide the general type of business being conducted (i.e. automotive repair, construction, health care, mining, oil and gas, etc.).

Source of Waste. Provide a brief description of the source or process generating each waste described in Section 2 of the Registration Form.

Hazardous Waste Carrier(s) Used. Only carriers that have been registered in Nunavut or the province or territory in which the company is based may transport hazardous waste. Provide the name and registration number of each known company that will pick up the waste for transport to registered receivers or hazardous waste management facilities. If applying for registration in anticipation of shipping waste at an unspecified future time, provide this information at a later date.

Hazardous Waste Receiver(s) Used. Only receivers and hazardous waste management facilities that have been registered in Nunavut or the province or territory in which the company is based may receive hazardous waste. Provide the name and registration number of each known company that will receive the waste transported off the generator's site. If applying for registration in anticipation of shipping waste at an unspecified future time, provide this information at a later date.

Emergency Response and Spill Contingency Plan. The *Spill Contingency Planning and Reporting Regulations* require each person to file a contingency plan where the quantity of waste stored exceeds those criteria set out in Schedule A of the *Regulations*. Provide a copy of your contingency plan if one has been developed or if the prescribed stored quantities are exceeded. Plans in electronic format are preferred.

Section 4 – Certification

The generator's contact person or authorized representative must sign and date the form to certify the information provided is correct, accurate and complete. Include the date and person's signature, printed name, position title, phone number and email address.

Use additional pages as required in order to provide complete information.

Return the completed registration form to:

Environmental Protection Division
Department of Environment
Government of Nunavut
Inuksugait Plaza, Box 1000, Station 1360
Iqaluit, Nunavut, X0A 0H0
Phone: (867) 975-7729
Email: EnvironmentalProtection@gov.nu.ca

After processing, a copy of the form and generator number will be provided to the contact person.

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Section 2 – Continued

Attach a complete description of the proposed facility, safety measures, equipment and management processes to be used. Include engineered drawing where applicable.

Section 3 - Waste Management Information

Type of Business (check all that apply) Receiver of Waste _____ Manage Self-generated Waste _____

Type of Activity (check all that apply) Collect and Store _____ Transfer _____

Treat _____ Recycle _____ Dispose _____

Hazardous Waste Generator(s) Used _____

Hazardous Waste Carriers(s) Used _____

Do you have an approved Emergency Response and Spill Contingency Plan? Yes _____ (attach copy) No _____

Section 4 - Certification

I certify that the information provided on this form is correct, accurate and complete.

Signature of Contact Person _____ Date (dd/mm/yy) _____

Print Name of Contact Person _____ Title _____

Phone _____ Email _____

For Department Use Only

Management Facility Number NUF# _____ Approved by _____ Date _____

Users' Guide to the Hazardous Waste Management Facility Registration Form

Section 1 – Identification

Provide the Applicant's full legal name and contact information. The legal name of the Company as it is registered in Nunavut is to be provided. The corporate address and facility addresses are to be provided if they are not the same. If the facility is located in a remote area (i.e. mining camp), provide the geographic coordinates (Latitude/Longitude) and name of the most prominent nearby geographic feature (i.e. "Sam Hill Bay").

Section 2 – Description of Waste to be Managed

Site Location(s) where Waste is Managed. Provide the actual physical site location(s) at which the hazardous waste is managed. Identify more than one site as required. The site location should include street name and community or, if located in a remote location, provide the geographic coordinates (Latitude/Longitude) and name of the most prominent nearby geographic feature (i.e. "Sam Hill Bay").

Shipping Name, TDG Number and TDG Class. Provide the proper shipping name, TDG Number and TDG Class in accordance with the federal *Transportation of Dangerous Goods Act and Regulations*. This is the same shipping name, number and class that must be recorded on the manifest form or movement document.

Quantity Managed. Provide the estimated average quantity of each waste managed during a single monthly period. Liquid wastes are reported in litres (L) while solid wastes are reported in kilograms (Kg). For one-time only managers of waste, provide the actual quantity managed in litres or kilograms.

Frequency of Acceptance. Enter the appropriate code from the following list which best describes the frequency at which each waste is received for management – ongoing, intermittent or one-time only.

Description of Facility. Provide a complete description of the proposed facility, safety measures, equipment and management processes to be used on-site. This includes, but is not limited to, maps and descriptions of the adjacent area (i.e. roads and ditches, houses and other buildings, sensitive environments including streams, rivers, lakes and marine shorelines), facility site and building floor plans, spill containment structures, fire suppression, security and other safety-related systems, equipment and processes for the collecting, storing, transferring, recycling, treating or disposing of waste and maximum daily waste management capacities. Engineered drawings are to be provided of all relevant structural, mechanical, electrical and safety systems.

Section 3 – Waste Management Information

Type of Business. Is waste received from other generators or generated on site? Check all that apply.

Type of Activity. Provide the general type of management activity being conducted with the waste (collect and store, transfer, treat, recycle or dispose). Check all that apply.

Hazardous Waste Generator(s) Used. Only generators that have been registered in Nunavut or the province or territory in which the company is based may transfer hazardous waste to another party. Provide the name and registration number of each known company from which waste will be received. If applying for registration in anticipation of managing waste at an unspecified future time, provide this information at a later date.

Hazardous Waste Carrier(s) Used. Only carriers that have been registered in Nunavut or the province or territory in which the company is based may transport hazardous waste. Provide the name and registration number of each known transport company through which waste will be received. If applying for registration in anticipation of managing waste at an unspecified future time, provide this information at a later date.

Emergency Response and Spill Contingency Plan. The *Spill Contingency Planning and Reporting Regulations* require each person to file a contingency plan where the quantity of waste stored exceeds those criteria set out in Schedule A of the *Regulations*. Provide a copy of your contingency plan if one has been developed or if the prescribed stored quantities are exceeded. Plans in electronic format are preferred.

Section 4 – Certification

The applicant's contact person or authorized representative must sign and date the form to certify the information provided is correct, accurate and complete. Include the date and person's signature, printed name, position title, phone number and email address.

Use additional pages as required in order to provide complete information.

Return the completed registration form to:

Environmental Protection Division
Department of Environment
Government of Nunavut
Inuksugait Plaza, Box 1000, Station 1360
Iqaluit, Nunavut, X0A 0H0
Phone: (867) 975-7729
Email: EnvironmentalProtection@gov.nu.ca

After processing, a copy of the form and management facility number will be provided to the contact person.

REGISTRATION FORM HAZARDOUS WASTE RECEIVER

Instructions

1. The following information must be provided in order to register as a hazardous waste receiver in Nunavut and to obtain a receiver number. Incomplete applications will be returned to the applicant.
2. A receiver who operates a commercial business for the purpose of collecting, storing, transferring, treating, recycling or disposing of hazardous waste may be required to register the facility as a hazardous waste management facility. Refer to section 3.2.2 of the *Environmental Guideline for the General Management of Hazardous Waste* for further information.
3. Completed registration forms are to be forwarded to the Manager of Pollution Control, Department of Environment, Government of Nunavut, Box 1000, Station 1360, Iqaluit, Nunavut, X0A 0H0. Electronic registration forms are preferred and may be forwarded to EnvironmentalProtection@gov.nu.ca.
4. Use additional pages to provide information as required.
5. Applicants should refer to the accompanying users' guide for further assistance on completing the receiver registration form.

Section 1 - Identification

Receiver (Legal Name) _____

Mailing Address _____

_____ Postal Code _____

Principle Contact Person _____ Title _____

Phone _____ Email _____

Alternate Contact Person _____ Title _____

Phone _____ Email _____

Section 2 - Description of Waste Received provide a separate table if required

Site Location(s) where Waste is Received _____

Shipping Name (Description)	TDG Number	TDG Class	Quantity Received each Month (L or Kg)	Frequency of Acceptance

Attach a brief description of the proposed facility.

Section 3 - Waste Management Information

General Type of Business _____

General Type of Activity _____

Hazardous Waste Generator(s) Used _____

Hazardous Waste Carriers(s) Used _____

Hazardous Waste Management Facilities Used _____

Do you have an approved Emergency Response and Spill Contingency Plan? Yes ____ (attach copy) No ____

Section 4 - Certification

I certify that the information provided on this form is correct, accurate and complete.

Signature of Contact Person _____ Date (dd/mm/yy) _____

Print Name of Contact Person _____ Title _____

Phone _____ Email _____

For Department Use Only

Receiver Number NUR# _____ Approved by _____ Date _____

Users' Guide to the Hazardous Waste Receiver Registration Form

Section 1 – Identification

Provide the receiver's full legal name and contact information. The legal name of the Receiving Company as it is registered in Nunavut is to be provided. If the receiver is located in a remote area (i.e. mining camp), provide the geographic coordinates (Latitude/Longitude) and name of the most prominent nearby geographic feature (i.e. "Sam Hill Bay").

Section 2 – Description of Waste Received

Site Location(s) where Waste is Received. Provide the actual physical site location(s) at which the hazardous waste is received. Identify more than one site as required. The site location should include street name and community or, if located in a remote location, provide the geographic coordinates (Latitude/Longitude) and name of the most prominent nearby geographic feature (i.e. "Sam Hill Bay").

Shipping Name, TDG Number and TDG Class. Provide the proper shipping name, TDG Number and TDG Class in accordance with the federal *Transportation of Dangerous Goods Act and Regulations*. This is the same shipping name, number and class that must be recorded on the manifest form or movement document.

Quantity Received. Provide the estimated average quantity of each waste received during a single monthly period. Liquid wastes are reported in litres (L) while solid wastes are reported in kilograms (Kg). For one-time only receivers of waste, provide the actual quantity received in litres or kilograms.

Frequency of Acceptance. Enter the appropriate code from the following list which best describes the frequency at which each waste is accepted – ongoing, intermittent or one-time only.

Description of Facility. A brief narrative should describe facilities to be used, adjacent area and site location as well as the activities to be conducted on-site.

Section 3 – Waste Management Information

General Type of Business. Provide the general type of business being conducted (i.e. automotive repair, construction, health care, mining, oil and gas, etc.).

General Type of Activity. Provide the general type of activity being conducted with the waste (i.e. collection and storage, transfer, treatment, recycling or disposal).

Hazardous Waste Generator(s) Used. Only generators that have been registered in Nunavut or the province or territory in which the company is based may transfer hazardous waste to another party. Provide the name and registration number of each known company from which waste will be received. If applying for registration in anticipation of receiving waste at an unspecified future time, provide this information at a later date.

Hazardous Waste Carrier(s) Used. Only carriers that have been registered in Nunavut or the province or territory in which the company is based may transport hazardous waste. Provide the name and registration number of each known transport company through which waste will be received. If applying for registration in anticipation of receiving waste at an unspecified future time, provide this information at a later date.

Hazardous Waste Management Facilities Used. Only hazardous waste management facilities that have been registered in Nunavut or the province or territory in which the company is based may receive, treat, recycle or dispose of hazardous waste. Provide the name and registration number of each known company that will subsequently receive the waste described in Section 2 of the Registration Form. If applying for registration in anticipation of receiving waste at an unspecified future time, provide this information at a later date.

Emergency Response and Spill Contingency Plan. The *Spill Contingency Planning and Reporting Regulations* require each person to file a contingency plan where the quantity of waste stored exceeds those criteria set out in Schedule A of the *Regulations*. Provide a copy of your contingency plan if one has been developed or if the prescribed stored quantities are exceeded. Plans in electronic format are preferred.

Section 4 – Certification

The receiver's contact person or authorized representative must sign and date the form to certify the information provided is correct, accurate and complete. Include the date and person's signature, printed name, position title, phone number and email address.

Use additional pages as required in order to provide complete information.

Return the completed registration form to:

Environmental Protection Division
Department of Environment
Government of Nunavut
Inuksugait Plaza, Box 1000, Station 1360
Iqaluit, Nunavut, X0A 0H0
Phone: (867) 975-7729
Email: EnvironmentalProtection@gov.nu.ca

After processing, a copy of the form and receiver number will be provided to the contact person.