APPENDIX-A

NT-NU SPILL REPORT FORM





Canada NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130 FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

		The state of the s								R	EPORT LINE USE ONLY
Α	REPORT DATE: MON	ITH - DAY - YEAR			REPO	ORTTIME	☐ ORI	GINAL SPILL REPO	ORT, OR	REF	PORT NUMBER
В	OCCURRENCE DATE	E: MONTH - DAY - YEA	NR.		occi	JRRENCE TIME	UPD TO THE	OATE# EORIGINAL SPILL	REPORT		
С	LAND USE PERMIT N	NUMBER (IF APPLICABI	LE)			WATER LICENCE N	NUMBER	(IF APPLICABLE)			
D	GEOGRAPHIC PLACE	E NAME OR DISTANCE	E AND DIRECTION FRO	OM THE N	AMED	LOCATION		REGION	AVUT 🗆 A	ADJACE	ENT JURISDICTION OR
Е	LATITUDE DEGREES M	MINUTES SECO	ONDS			LONGITUDE DEGREES	MINUTE	ES SECO	ONDS		
F	RESPONSIBLE PART	Y OR VESSEL NAME		RESPON	NSIBLE	PARTY ADDRESS (OR OFFIC	CELOCATION			*
G	ANY CONTRACTOR II	NVOLVED		CONTRA	ACTOF	RADDRESS OR OFF	ICE LOCA	ATION			
Н	PRODUCT SPILLED			QUANTI	TYINL	TRES, KILOGRAMS	OR CUB	IC METRES	U.N. NUN	/BER	
	SECOND PRODUCTS	SPILLED (IF APPLICABI	LE)	QUANTI	TYINL	TRES, KILOGRAMS	OR CUB	IC METRES	U.N. NUN	/BER	
ı	SPILL SOURCE			SPILL CA	AUSE			AREA OF C	CONTAMIN	IATION	IN SQUARE METRES
J	FACTORS AFFECTING	G SPILL OR RECOVER	Y	DESCRIE	BE AN	Y ASSISTANCE REQ	UIRED	HAZARDS	TO PERSO	ONS, PR	ROPERTY OR ENVIRONMENT
K	ADDITIONAL INFORM	ATION, COMMENTS, A	ICTIONS PROPOSED	OR TAKE!	N TO C	ONTAIN, RECOVER	OR DISP	OSE OF SPILLED	PRODUCT	AND C	CONTAMINATED MATERIALS
L	REPORTED TO SPILL	LINE BY	POSITION		EM	PLOYER	LC	OCATION CALLING	FROM		TELEPHONE
M	ANY ALTERNATE CON	VTACT	POSITION		EM	PLOYER	AL	TERNATE CONTA	CT LOCAT	ПОМ	ALTERNATE TELEPHONE
REPOR	T LINE USE ONLY										
N	RECEIVED AT SPILL L	INE BY	POSITION Station operator	r	EM	PLOYER		OCATION CALLED ellowknife, NT			REPORT LINE NUMBER (867) 920-8130
LEAD AC	SENCY EC CCG	G GNWT GN G	ILA 🗌 INAC 🗆 NEI	в 🗆 тс	SIG	NIFICANCE MIN	OR M	AJOR UNKNO	WN I	FILE STA	ATUS OPEN CLOSED
AGENCY	<u> </u>	CONTACT NAME			co	NTACT TIME	RE	EMARKS			
LEAD AC	ENCY										
FIRST SU	UPPORT AGENCY		1.00								
SECONE	SUPPORT AGENCY										
THIRD SI	UPPORT AGENCY					an ear					

Instructions for Completing the NT-NU Spill Report Form

This form can be filled out electronically and e-mailed as an attachment to spills@gov.nt.ca. Until further notice, please verify receipt of e-mail transmissions with a follow-up telephone call to the spill line. Forms can also be printed and faxed to the spill line at 867-873-6924. Spills can still be phoned in by calling collect at 867-920-8130.

	24. Spins can still be prioried in by calling collect at 867-920-8130.
A. Report Date/Time	The actual date and time that the spill was reported to the spill line. If the spill is phoned in, the Spill Line will fill this out. Please do not fill in the Report Number: the spill line will assign a number after the spill is reported.
B. Occurrence Date/Time	Indicate, to the best of your knowledge, the exact date and time that the spill occurred. Not to be confused with the report date and time (see above).
C. Land Use Permit Number /Water Licence Number	This only needs to be filled in if the activity has been licenced by the Nunavut Water Board and/or if a Land Use Permit has been issued. Applies primarily to mines and mineral exploration sites.
D. Geographic Place Name	In most cases, this will be the name of the city or town in which the spill occurred. For remote locations – outside of human habitations – identify the most prominent geographic feature, such as a lake or mountain and/or the distance and direction from the nearest population center. You must include the geographic coordinates (Refer to Section E).
E. Geographic Coordinates	This only needs to be filled out if the spill occurred outside of an established community such as a mine site. Please note that the location should be stated in degrees, minutes and seconds of Latitude and Longitude.
F. Responsible Party Or Vessel Name	This is the person who was in management/control/ownership of the substance at the time that it was spilled. In the case of a spill from a ship/vessel, include the name of the ship/vessel. Please include full address, telephone number and email. Use box K if there is insufficient space. Please note that, the owner of the spilled substance is ultimately responsible for any spills of that substance, regardless of who may have actually caused the spill.
G. Contractor involved?	Were there any other parties/contractors involved? An example would be a construction company who is undertaking work on behalf of the owner of the spilled substance and who may have contributed to, or directly caused the spill and/or is responding to the spill.
H. Product Spilled	Identify the product spilled; most commonly, it is gasoline, diesel fuel or sewage. For other substances, avoid trade names. Wherever possible, use the chemical name of the substance and further, identify the product using the four digit UN number (eg: UN1203 for gasoline; UN1202 for diesel fuel; UN1863 for Jet A & B)
I. Spill Source	Identify the source of the spill: truck, ship, home heating fuel tank and, if known, the cause (eg: fuel tank overfill, leaking tank; ship ran aground; traffic accident, vandalism, storm, etc.). Provide an estimate of the extent of the contaminated/impacted area (eg: 10 m²)
J. Factors Affecting Spill	Any factors which might make it difficult to clean up the spill: rough terrain, bad weather, remote location, lack of equipment. Do you require advice and/or assistance with the cleanup operation? Identify any hazards to persons, property or environment: for example, a gasoline spill beside a daycare centre would pose a safety hazard to children. Use box K if there is insufficient space.
K. Additional Information	Provide any additional, pertinent details about the spill, such as any peculiar/unique hazards associated with the spilled material. State what action is being taken towards cleaning up the spill; disposal of spilled material; notification of affected parties. If necessary, append additional sheets to the spill report. Number the pages in the same format found in the lower right hand corner of the spill form: eg. "Page 1 of 2", "Page 2 of 2" etc. Please number the pages to ensure that recipients can be certain that they received all pertinent documents. If only the spill report form was filled out, number the form as "Page 1 of 1".
L. Reported to Spill Line by	Include your full name, employer, contact number and the location from which you are reporting the spill. Use box K if there is insufficient space.
M. Alternate Contact	Identify any alternate contacts. This information assists regulatory agencies to obtain additional information if they cannot reach the individual who reported the
	spill.

4/67

APPENDIX-B

WATER QUALITY MONITORING

Drinking Water Chlorination Test Results

The chlorine pump is	set at 90, fixed rat	e % is set at				
Reading has to be be-	tween 0.10 and 0.5	0 (idealy it	should be	hetween	0.30 and	0.40)

<u>Date</u>	Name of Tester	Start Time of Testing		% Adjusted to	New Reading	Finish Time
	0.00		3			
						1.75
			HAND:			
	A SECULAR VI					
		Band Free				
	•					
	Land American					77
	11 T					
		Argue II			16	167

CHLORINE MIXING INSTRUCTIONS FOR CALCIUM HYPOCHLORITE 65 %

- 1. Put on rubber apron, rubber gloves, and face shelld.
- 2. Read manufacturer's safety data sheet for Calciun Hypochlorite.
- 3. Close valves on tanks.
- 4. Fill mix tank on work bench with (120) litres of water.
- 5. Add four (4) kilo-gram (bottles) of calcium hypochlorite 65% to water.
- 6. Mix solution for two (2) hours.
- 7. Fill feed tank by opening valve at bottom of mix tank.
- 8. Rinse mix tank and agitator with water.
- 9. Reintroduce clear one inche pipe from mix tank in feed tank.
- 10. Test first truck of day for adequate chlorination by using HATCH Colorimeter test kit. Let the sample sit for 20 minutes then test for FREE CHLORINE per the manual. The chlorine dosage should read between 0.5 and and 1.0 mg/litres before delivery.
- 11. Adjust the stroke and/or rate of the injection pump to either increase or decrease the chlorine dosage if required. Retest FREE CHLORINE after adjusting the stroke and/or rate.



Department of Health & Social Services: Baffin

Phone: Þ\$ - Þ. Fonia: (867) 975-4800 Fax: Jb b b c Faxkot: (867) 975-4830

Drinking Water Disinfection

If you are drinking raw water from a lake, stream, or river, you should disinfect the water to kill amy disease causing bacteria.

There are two simple ways to kill the bacteria:

Boiling and Chlorination

- Boiling: Water must be heated to a rolling boil for at least 1 minute. If there is a flat taste, pouring the water back and forth between two clean containers will put air back into the water and make it taste better.
- 2. Chlorination: Mix household chlorine bleach with water.
 - Make sure your container is clean
 - · Clear water is the best to use

	CONVE	RSIONS	
	/ATER	CHLO	RINE BLEACH
4.5 litres (L)	1 gallons (U.K.)	0.25 mL	5 drops
22.5 L	5 gal	1.25 mL	25 drops
45 L	10 gal	3 mL	0.5 tsp.
450 L	100 gal	25 mL	5 tsp.
2250 L	500 gal	125 mL	0.5 cup
4500 L	1000 gal	250 mL	1 cup
5625 L	1250 gal	313 mL	1.25 cups
6750 L	1500 gal	375 mL	1.5 cups
7875 L	1750 gal	438 mL	1.75 cups
9000 L	2000 gal	500 mL	2 cups

How to mix:

- 1. Add the bleach to the container.
- 2. Add water and mix well.
- 3. Let it sit for at least 20 minutes to allow the chlorine to kill any harmful organisms.

Chlorine smell: A chlorine smell indicates that the disinfectant is working. Leaving the water in a refrigerator for a few hours will remove the smell.

Chlorine taste: If after 20-30 minutes the water has a definite chlorine <u>taste</u>, you may have added too much chlorine bleach. For cloudy water containing sediment, increase the above amounts of bleach by one half.

For more information on drinking water disinfection, Please contact an Environmental Health Officer at (867) 975-4800.

APPENDIX-C

PROCEDURES AND GUIDELINES OF GN-DOE ON DRINKING WATER QUALITY MANAGEMENT



Department of Health & Social Services: Baffin לפסלים יירים ביירים ביי

lqaluit, NU Δ٠۵٥, בפב XOA 0H0

Phone: ▷% ८० Fonia (867) 975-4800

Fax: المالة Faxkot: (867) 975-4833 or (867) 975-4830

Environmental Health

WATER SAMPLING

- Samples must be submitted at least once per month. Please send a sample from each water truck, one from the water storage tank(if applicable), a raw water sample, and one from any public building (school, health center etc.)
- 2. When sampling, be careful not to let the mouth of the bottle or lid touch anything including the sampler's <u>fingers</u> as they are often contaminated with bacteria.
- 3. Fill the bottle to the 200 mL line from a water tap, valve, or water truck delivery hose nozzle. When sampling from a water tap, remove screen, aerator, or other attachment from tap and allow the cold water to run for 2-3 minutes before collecting. Do not dip into the filled water truck tank to take a sample.
- 4. **Do not** overfill the bottle or rinse it out as it has been treated with sodium thiosulphate that will spill out with excess water. This chemical combines with your free chlorine disabling it and preserving any bacteria present.
- Ensure each attached sample form includes:
 - a. Date and time sample was taken.
 - b. Sample point location (e.g. Community X water truck # 3).
 - c. Name of person who took the sample.
 - d. Where to send sample results.
- 6. Sample <u>must be kept cold but not frozen</u> and may be sent via the health centre lab box if they can spare the space. You will have to discuss this possibility with the Nurse In Charge to obtain approval for this. Otherwise, it is the water plant operator's responsibility to ensure the samples are transported under refrigeration to:

Environmental Health Department Health and Social Services, Baffin P.O. Box 1000, Station 1046 Iqaluit, NU X0A 0H0

7. Samples <u>must</u> arrive at the Environmental Health Office within 24 hours of sampling otherwise the results may not be accurate. Please fax or phone notice to the Environmental Health Officer when you are sending samples.

20/67



Department of Health & Social Services: Baffin

Λ⊂ΛΛΦ΄ ΦΦΦΕΦΕΡΙΚΑΝΙΙΚΙΟΙ Olasilikiot

Okoa Kavamat Monakhikakvilikiot Olasilikiot

Ministère de la Santé et des Services Sociaux

P.O. Box 1000 Stn 1046; ΠΠΦΒΦΦΑ 1000; C.P. 1000 Stn 1046

Iqaluit, NU ΔΦΔΦ, ΔΦΣ ΧΟΑ 0Η0

Phone: ▷ΦΕΦΕ Fonia (867) 975-4800 Fax: ΔΦΕΦΘ΄: Faxkot:(867)975-4833

CLEANING AND DISINFECTING WATER STORAGE TANKS

Instructions:

- 1. Drain any water from the tank.
- 2. Close any drains and add <u>5 gallons</u> of warm water to the tank.
- 3. Add <u>2 cups</u> of liquid household bleach (i.e. javex) for disinfection.
- 4. Using a new or clean brush (mop or long handled brush is recommended), thoroughly <u>clean</u> the entire inside.
- 5. <u>Drain</u> the tank and flush the interior with fresh (treated) water. Ensure all dirt, etc. has been removed.
- 6. Refill tank with treated water for storage and use.

NOTE:

Tank cleaning and disinfection is recommended once per year or more often if necessary.



Department of Health & Social Services: Baffin

۸ - ۱۹۹۰ کو ۱۹۹ کو ۱۹ کو ۱۹ کو ۱۹۹ کو ۱۹۹ کو ۱۹۹ کو ۱۹ کو ۱۹ کو ۱۹۹ کو ۱۹۹ کو ۱۹۹ کو

Okoa Kavamat Monakhikakvilikiot Olasilikiot Ministère de la Santé et des Services Sociaux

P.O. Box 1000 Stn 1046; ∩∩\$6646 1000; C.P. 1000 Stn 1046

lqaluit, NU Δ%عوم 5 X0A 0H0

Phone: ▷ⓑ८▷º: Fonia: (867) 975-4800 Fax: ぺ७८७5: Faxkot: (867) 975-4830

Drinking Water Disinfection

If you are drinking **raw water** from a lake, stream, or river, you should disinfect the water to kill any disease causing bacteria.

There are two simple ways to kill the bacteria:

Boiling and Chlorination

- 1. **Boiling:** Water must be heated to a rolling boil for at least 1 minute. If there is a flat taste, pouring the water back and forth between two clean containers will put air back into the water and make it taste better.
- 2. Chlorination: Mix household chlorine bleach with water.
 - Make sure your container is clean
 - · Clear water is the best to use

	CONVE	RSIONS	
W	ATER	CHLO	RINE BLEACH
4.5 litres (L)	1 gallons (U.K.)	0.25 mL	5 drops
22.5 L	5 gal	1.25 mL	25 drops
45 L	10 gal	3 mL	0.5 tsp.
450 L	100 gal	25 mL	5 tsp.
2250 L	500 gal	125 mL	0.5 cup
4500 L	1000 gal	250 mL	1 cup
5625 L	1250 gal	313 mL	1.25 cups
6750 L	1500 gal	375 mL	1.5 cups
7875 L	1750 gal	438 mL	1.75 cups
9000 L	2000 gal	500 mL	2 cups

How to mix:

- 1. Add the bleach to the container.
- 2. Add water and mix well.
- 3. Let it sit for at least 20 minutes to allow the chlorine to kill any harmful organisms.

Chlorine smell: A chlorine <u>smell</u> indicates that the disinfectant is working. Leaving the water in a refrigerator for a few hours will remove the smell.

Chlorine taste: If after 20-30 minutes the water has a definite chlorine <u>taste</u>, you may have added too much chlorine bleach. For cloudy water containing sediment, increase the above amounts of bleach by one half.

For more information on drinking water disinfection, Please contact an Environmental Health Officer at (867) 975-4800.



Department of Health & Social Services: Baffin Munarhiligiyikkut Inuuhiriknirmullu Ministère de la Santé et des Services sociaux P.O. Box 1000 Stn 1046; tt6v4f=4 1000; C.P. 1000 Stn 1046

lgaluit. NU wclw5, kNK5 X0A 0H0

Phone: s]cMs5: Fonia: (867) 975-4800 Fax: h4vJ4f5: Faxkot: (867) 975-4830

Environmental Health

Guidelines for Drinking Water Delivery

An adequate supply of safe drinking water is important to ensure the good health and well-being of your community.

The following are guidelines for the safe delivery of drinking water:

- 1. A water delivery truck for the bulk delivery of drinking water must not be used for any other purpose, except with the prior written approval of a health officer.
- 2. All equipment on a water delivery truck which is in contact with drinking water, including but not limited to hoses, valves, couplers, fittings, nozzles and pumps, shall be constructed of materials that are suitable (e.g., corrosive resistant) for drinking water use; and shall be maintained in a clean and sanitary condition.
- 3. When a water truck intended to deliver potable water is stored in a garage or similar structure, it and any related water delivery equipment shall be kept in an area separated from any source of contamination, including any sewage transporting equipment.
- 4. When the water delivery truck is not in use, being cleaned, or drained dry;
 - a) delivery hoses should be capped at both ends or as otherwise recommended by the hose manufacturer, and
 - b) delivery hoses and related couplers fittings and nozzles shall be placed in the hose compartment.
- 5. Immediately prior to the first delivery of each day, the delivery hose nozzle and/or coupler shall be disinfected by spraying with a solution of 15 millilitres of household bleach (5.25% sodium hypochlorite) per litre of water (2.4 ounces per Imp. gallon) using a spray bottle or other similar device.
- 6. Should the water delivery nozzle and/or coupler come into contact with the ground or any other source of contamination, it shall immediately be cleaned of debris and then disinfected by spraying with a solution of 15 ml of household bleach (5.25% sodium hypochlorite) per litre of water (2.4 oz per Imp. gallon) using a spray bottle or other device.
- 7. Drinking water shall not be retained in a water delivery truck longer than 24 hours after the time of loading, upon which time any remaining water in the tank shall be drained; and shall not be used for drinking water.
- 8. An air gap must be maintained between the fill pipe and the water tank at all times.
- 9. All drinking water shall be chlorinated and shall have a free chlorine residual concentration of no less than 0.4 milligrams per litre (mg/L) at the time of loading into the water delivery truck and a free chlorine residual concentration of no less than 0.2 mg/L at the time of delivery.
- 10. A chlorine test kit must be available for the purpose of measuring chlorine residuals. A free residual concentration of 0.2 mg/L must be measured from the delivery hose nozzle after a thorough mixing of the chlorine and water and 20 minutes of contact time after the mixing.
- 11. The potable water hauler shall be trained and tested in the accepted method(s) of adding chlorine and testing for chlorine residuals and be familiar with the material safety data sheets (MSDS).
- 12. There shall be no dipping into the filled water tank for the purposes of obtaining a water sample for testing purposes.
- 13. Accurate records shall be maintained of raw water quality, finished water quality, and amounts of chemicals
- 14. Water samples must be collected and submitted once per month for bacteriological testing (see Water Sampling sheet attached). The following samples are recommended:
 - a) 1 raw water sample (untreated source water)
 - b) 1 sample from each water truck delivery hose

Please refer to the Public Water Supply Regulations pursuant to the Public Health Act for additional information.



Department of Health & Social Services: Baffin

Λ へんく くっくじょっしっしゃっく マイン・カーン: ヤタン・ウーン・ローストゥーン: ヤタン・ローストゥーン: ヤタン・ローストゥーン: ヤタン・ローストゥーン: ヤタン・ローストゥーン: ヤタン・ローストゥーン: ヤタン・ローストゥーン: ヤタン・ローストゥーン: ヤタン・ローストゥーン: アクシーン: Fonia (867) 975-4800 Fax: マート・カーン・ローストゥーン: Fonia (867) 975-4800 Fax: マート・ローストゥーン: Faxkot:(867) 975-4833

SUPER-CHLORINATION PROCEDURES FOR WATER TRUCKS

To ensure safe drinking water, follow the procedures outlined below at least twice a year or as required:

- 1. If there is excessive rust present in the interior, please ensure that this rust is scraped out.
- 2. The interior should then be rinsed in order to remove particles of rust.
- Fill tank with water and add 1 gallon of 5% chlorine bleach (Javex) per 1000 gallons of water.
- 4. If possible, drive the truck around town to allow for proper mixing and to ensure the surface area in the interior is superchlorinated.
- 5. Let this solution stand for 12-24 hours to ensure proper contact time for super-chlorination.
- 6. Drain truck completely and fill with drinking water.
- 7. Contact the Environmental Health Officer to submit a water sample for bacterial analysis.

NOTE:

Ensure that during the super-chlorination procedure the hose is also filled with chlorinated water for complete sanitation.



Department of Health & Social Services: Baffin

Λーヘイグ グライザー インートゥグ イベトキンー・トゥヴェー・ドゥグーン・
Okoa Kavamat Monakhikakvilikiot Olasilikiot

Ministère de la Santé et des Services Sociaux

P.O. Box 1000 Stn 1046; ハハキゥックト 1000; C.P. 1000 Stn 1046

Iqaluit, NU ムサンムゲ, コーシャ X0A 0H0

Phone: トゥート・Fonia (867) 975-4800 Fax: トゥトゥ・ドゥート・
Faxkot:(867)975-4830

TAKING CARE OF WATER STORAGE TANKS

Taking sanitary care of water storage tanks helps to protect your family's good health and safeguard the well-being of the entire community.

Important Things To Know In Caring For Water Storage Tanks:

- People can become very sick from drinking water from a tank contaminated with bacteria, viruses, or parasites.
- 2. To prevent tanks from being contaminated:
 - Keep the tank clean both inside and out at all times.
 - Keep the lid of the tank on and tight at all times.
 - Use only the tap to obtain water.
 - Do not use a dipper or cup to scoop water from the tank. (Bacteria on the dipper can stay in the tank and grow there.)
 - Do not store things on top of the water tank.
 - CLEAN your water tank <u>at least once a year</u> or more often as required.
- 3. If you are not sure how to clean your tank properly, contact your Environmental Health Officer or local Community Health Representative for more information.
- If your water tank is in poor condition, contact your Housing Association about obtaining a new one.

REMEMBER:

Odd <u>tastes</u> or <u>smells</u> from the water in your water tank may mean that it has been contaminated with bacteria. Don't take chances, have your tank cleaned out regularly.

To disinfect drinking water from a lake, river, stream, snow, or ice source, make sure you <u>BOIL THE WATER FOR AT LEAST 1 MINUTE</u> to kill any harmful bacteria, viruses, or parasites.