



Tłıchq All-season Road Waste Management Plan

Insert applicable LWB project numbers

March 2016

Version 1

Government of
Northwest Territories



PLAN MAINTENANCE AND CONTROL

The Environmental Health and Safety Manager of <a contractor name> is responsible for the distribution, maintenance and updating of the Waste Management Plan (WMP). Final plan details must be approved by the Department of Transportation (DOT) and the Wek'èezhì Land and Water Board (WLWB).

This Waste Management Plan will be reviewed and possibly revised as needed but at least annually, taking into account changes in the law, environmental factors, DOT – GNWT and Contractor policies, and any other pertinent site-specific changes.

Changes in phone numbers, names of individuals, etc. that do not affect the intent of the plan are to be made on a regular basis. Plan updates will be issued as per the Waste Management Plan distribution list. The Waste Management Plan holder is responsible for adding new and/or removing obsolete pages upon receipt of updates.

Waste Management Plan Document History

Revision #	Section(s) Revised	Description of Revision	Prepared by	Issue Date

Additional copies of the Waste Management Plan can be obtained from the Environmental Health and Safety Manager of <a contractor name> and/or the GNWT representative responsible for the proposed TASR. See Section 1.4 for contact information.

Note: This WMP is being submitted in draft form to the WLWB to support the review of the Land Use Permit (LUP) and Water License (WL) applications for the TASR. Any text highlighted in yellow in this draft document will be deleted/changed/updated in the final WMP that is submitted to the WLWB for review and approval after the issuance of the LUP and the WL but in advance of project construction.



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DRAFT



ACRONYMS

DFO	Fisheries and Oceans Canada
DOT – GNWT	Department of Transportation of the Government of the Northwest Territories
DOT	Department of Transportation
ENR	Environment and Natural Resources
GNWT	Government of the Northwest Territories
PDR	Project Description Report
SCP	Spill Contingency Plan
TASR	Tłıchq All-season Road
TDGR	Transportation of Dangerous Goods Regulations
WLWB	Wek'èezhìı Land and Water Board
WMP	Waste Management Plan

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1 INTRODUCTION

The DOT-GNWT has selected <a contractor name> to be the construction contractor for the proposed Tłıchq All-season Road (TASR). This Waste Management Plan (WMP) has been developed for use by the Department of Transportation of the Government of the Northwest Territories (DOT – GNWT) and <a contractor name> for the TASR.

The purpose of the WMP is to provide a guide to all site personnel on the waste management goals, objectives and procedures to be followed during construction of the proposed TASR. The WMP has been developed in accordance with the *Guidelines for Developing a Waste Management Plan* prepared by the Mackenzie Valley Land and Water Board (2011). The goal of the WMP is to:

- Ensure components of our environment, including the air, water, land, vegetation, wildlife and fish, are not negatively affected by construction of the proposed TASR
- Ensure aesthetic and land use values surrounding the proposed TASR corridor remain intact following completion
- Ensure construction of the proposed TASR will comply with all applicable acts and regulations, as well as conditions outlined in the DOT's land use permit and water licence.

This WMP was reviewed and approved by both the DOT-GNWT and the WLWB.

The effective date of this WMP will be upon Wek'èezhìr Land and Water Board (WLWB) approval of the final version prior to project construction. The WMP will be updated and possibly revised as needed or at least annually to reflect site-specific conditions. Revisions will be submitted to the WLWB for review and approval prior to those revisions becoming effective.

1.1 Environmental Policy and Procedures

This WMP deals specifically with procedures and policies for the safe and responsible handling, storage and disposal of waste materials, which have served their original purpose and are scheduled for disposal. It provides background information on the handling of wastes and details the operational requirements to ensure that construction of the TASR is conducted in an environmentally responsible manner.

1.2 Legislation and Guidelines

This plan been developed in consideration of the applicable Territorial legislation including the following guidelines:

- *Northern Land Use Guidelines: Camp and Support Facilities* (Lands 2014a)
- *Northern Land Use Guidelines: Roads and Trails* (Lands 2014b)
- *Guideline for the General Management of Hazardous Waste in the NWT* (ENR 1998)



- *Guidelines for Developing a Waste Management Plan* (MVLWB 2011)

1.3 Project Details

The proposed Tłıchq all-season road (TASR) involves changing the location of the existing Tłıchq Winter Road System between Highway 3 and the community of Whatı to the overland all-season alignment illustrated in Map 1. The proposed TASR is defined as an all-season road approximately 94 km in length and 60 m in width with a cleared driving surface of approximately 8.5 m in width to accommodate a two lane gravel road with culverts and/or two lane bridges over water crossings as necessary.

The project is located within Mqwhı Gogha Dè Nııttèè, the traditional territory of the Tłıchq Dene. The proposed TASR is intended to provide improved service to the Tłıchq community of Whatı, which is currently serviced by the existing winter road.

The route is within the Taiga Plains and is within the zone of discontinuous permafrost (ECG 2007). The region provides habitat for a wide range of wildlife, fish and vegetation species. A description of environmental conditions within and surrounding the proposed TASR corridor is included in the Project Description Report (PDR).

The location of the 94 km all-season road begins at KM 196 along Highway 3 and continues in a northwesterly direction to the community government boundary of Whatı. The alignment is situated within the geographic coordinates 62°28'54" to 63°10'37" N latitude and 116°29'07" to 117°00'05" W longitude. The proposed footprint is entirely contained within the Wek'èezhıı area and begins approximately 40 km southwest of Behchokq off Highway 3. Approximately 17 km of the road is located on Tłıchq lands.

Map 1 illustrates the proposed TASR corridor, major bridges, waterbodies, nearby communities, and roads, while archaeological sites and significant traditional knowledge sites are discussed in the PDR.

In-depth construction details are available in the PDR; however, a brief description of expected activities is outlined below:

1. Initial construction activities will involve clearing of vegetation along the proposed corridor.
2. Four to five borrow sources and their associated access roads will be required for construction of the proposed TASR. Blasting, excavation, crushing and stockpiling of gravel materials may occur within these sources..
3. Construction equipment and labour will mobilize from the nearby communities of Behchokq and Whatı once a construction schedule is confirmed. It is expected that construction will begin from the south end with camps being used in order to reduce the distance workers must commute. One 150-person camp will be required at a borrow source located near KM 25. This camp will then move to a borrow source located near KM 50 once road construction has progressed.
4. Waste disposal will include incineration, temporary storage and removal to approved facilities. Waste will not be buried and no sumps will be required.

Final maps indicating storage locations of waste (including hazardous material), direction of flow on land and in water, catchment basins, locations of all spill response equipment, topography, approved disposal



sites, estimated waste volumes and any other important on or off-site features will be added to this WMP when these details have been finalized.

1.4 Project Contacts

Main DOT Contact	Tłıchq Government Contact	Contractor Contact
Michael Conway Regional Superintendent, North Slave Department of Transportation Government of the Northwest Territories Box 1320 Yellowknife, NT X1A 2L9	Laura Duncan Tłıchq Executive Officer Tłıchq Government Box 412, Behchokq, NT X0E 0Y0	To be Determined
Phone: (867) 767-9089 ext. 31186 Fax: (867) 873-0120 Email: michael_conway@gov.nt.ca	Phone: (867) 392-6381 Fax: (867) 392-6389 Email: lauraduncan@tlicho.com	Phone: TBD Fax: TBD Email: TBD

1.5 Distribution List

This plan and the most recent revisions have been distributed to:

1. Environmental Health and Safety Manager
2. Project Engineer
3. Public Relations
4. Camp Manager
5. Contractor
6. Applicable DOT Employees

Names, addresses and contact information will be added to the final WMP.

Regulatory Agency	Contact
Workers' Safety and Compensation Commission – 24 Hour Incident Reporting Line	1-800-661-0792
Department of Lands, GNWT (Inspector)	(867) 767-9188
Environment and Natural Resources, GNWT	(867) 392-6941
Wek'èezhii Land and Water Board	Wekweèti: (867) 713-2500 Yellowknife: (867) 765-4592
Fisheries and Oceans Canada	1-866-290-3731
Environment Canada	(780) 951-8600



2 DEFINITIONS

Under the authority of the Environmental Protection Act, the GNWT, Environment and Natural Resources has produced a series of 'Environmental Guidelines' for the management of specific hazardous wastes commonly produced by NWT industries. The Environmental Guidelines for the management of waste solvents, batteries, antifreeze, asbestos, paint and ozone depleting substances have been referred to during the preparation of this plan.

The *Environmental Guideline for the General Management of Hazardous Waste in the NWT* provides definitions of terms used in the EPA and Environmental Guidelines and describes the principles of acceptable waste management practice. The following definitions are particularly important to this document.

2.1 Hazardous Waste

A contaminant is a dangerous good that is no longer used for its original purpose and is intended for recycling, treatment, disposal or storage.

A 'hazardous waste' does not include a contaminant that is:

- Household in origin;
- Included in class 1 (explosives) or class 7 (radioactive materials) of the TDGR;
- Exempted as a small quantity;
- An empty container; or
- Intended for disposal in a sewage system or by land filling that meets the applicable standards set out in Schedules 1, III or IV of the Guideline for Industrial Waste Discharges in the NWT.

2.2 Empty Container

A container that has been emptied, to the greatest extent possible, using regular handling procedures, but its contents shall not exceed 1% of the container's original capacity or 2 litres, whichever is less. This does not include containers which previously contained mercury, or Class 2.3, 5.1 or 6.1 materials of TDGR.

2.3 Small Quantity

Hazardous wastes are considered to be small quantities if it is generated in an amount that is less than 5 kg per month if a solid, or 5 L per month if a liquid; and where the total quantity accumulated at any one time does not exceed 5 kg or 5 L. This does not apply to wastes that are mercury or in Class 2.3, 5.1 or 6.1 of the TDGR. These wastes must be generated in an amount less than 1 kg per month if a solid or 1 L



per month if a liquid; and where the total quantity accumulated at any one time does not exceed 1 kg or 1 L.

3 IDENTIFICATION OF WASTE TYPES

Over the course of construction, several types of waste will or may be generated by equipment and crews working within the proposed TASR corridor, borrow sources and associated access roads. Potential waste types are listed in the table below with further management descriptions provided in Section 5:

Table 1 Segregated Waste Streams for Construction of Proposed TASR

Waste Stream	Description	Handling Method	Disposal Method
Domestic wastes (organic and non-organic)	Organic and non-organic waste including garbage, rubbish or food scraps.	Place in odour proof secure waste containers.	Combustible domestic non-hazardous waste will be incinerated daily. Non-combustible waste will be progressively removed from site to approved facilities.
Construction materials (non-combustible)	Pieces of material such as metals.	Collect and store in bins at designated area on site.	Non-combustible construction waste will be progressively removed from site to an approved facility.
Rubber/used tires	Old or faulty tires used on vehicles or equipment, belts, etc.	Collect and place in designated area on site.	Disposed of with approved methods at acceptable facilities.
Cleared vegetation	Slashed trees and shrubs with possible grubbing.	Set aside trees larger than 12 cm in diameter for use by others. Follow approved methods in <i>Northern Land Use Guidelines: Roads and Trails</i> (Lands 2014).	Cleared vegetation will most likely be disposed by way of burning, but in all cases will follow the approved methods outlined in <i>Northern Land Use Guidelines: Roads and Trails</i> (Lands 2014).
Bulky metals (vehicles, equipment)	Any broken vehicles, equipment or bridge/culvert materials	Collect and place in designated area on site.	Disposed of with approved methods at acceptable facilities.
Contaminated soils and snow	Soil or snow contaminated with either diesel, oil or other spill materials.	Pick up contaminated soils or snow and place in lined facility or drum.	Soils or liquid residue will be placed in drums and removed by registered hazardous waste carrier to an approved facility.
Sewage	All human excreta and associated products (greywater).	Collected by an onsite sewage lift station and transferred to a heated/insulated holding tank. Contained within greywater storage removed from site by a licenced contractor.	Sewage waste generated from the camp facilities will be removed from site by a licenced contractor and disposed of at the approved sewage lagoon in Behchokq.



Ash or incinerator residue	Incinerator	Place in odour proof secure containers.	Disposed of with approved methods at acceptable facilities.
Waste oils		Store in "Lube cubes" provided by the petrochemical products supplier.	Disposed of with approved methods at acceptable facilities.
Used filters	Process (glycol, dips, water)	Store in filter containers in a temporary storage located in a designated lined facility on site.	Disposed of with approved methods at acceptable facilities.
Used hydrocarbon containers and absorbents	Containers used to store hydrocarbons and absorbent materials used for spill cleanup.	Place in steel drums in a temporary storage located in a designated lined facility on site.	Disposed of with approved methods at acceptable facilities.
Waste antifreeze	From engines possibly contaminated with heavy metals.	Place into empty containers in a temporary storage located in a designated lined facility on site.	Disposed of with approved methods at acceptable facilities.
Waste solvents	Solvents used to remove grease and oil from engine components and other machinery.	Place into empty containers in a temporary storage located in a designated lined facility on site.	Disposed of with approved methods at acceptable facilities.
Explosives	Explosive materials used for blasting.	Explosive material to only be handled and maintained by licenced explosives contractor.	Licenced explosives contractor responsible for disposal.
Animal carcasses	Dead or decomposing animal parts.	No storage of animal carcasses will be allowed.	If encountered, animal carcasses will be removed from site through discussions with the Department of Environment and Natural Resources, GNWT.
Lead acid batteries and alkaline batteries	From personnel and equipment.	Place into empty containers in a temporary storage located in a designated lined facility on site.	Disposed of with approved methods at acceptable facilities.

3.1 Non-Hazardous, Non-Mineral Wastes

Non-hazardous, non-mineral wastes generated during construction will primarily include domestic wastes, vegetation from clearing operations, bulky metals (vehicles, equipment) and rubber products (tires). Domestic waste will be created by site personnel and camp facilities, etc., while bulky metals and rubber products will be attributed to vehicles and equipment use.

Vegetation along the 60 m corridor will be cleared during construction of the proposed TASR. Vegetation removal will include tree and shrub slashing and possible grubbing. With an estimated distance of 94 km



and 60 m width, up to 564 hectares of vegetation are expected to be cleared for the roadway (though it is expected to be less as parts of alignment are already disturbed). Additional vegetation is expected to be cleared for borrow source access roads.

The potential environmental effects arising from unmanaged non-hazardous, non-mineral wastes include increased wildlife attractants, a change in the aesthetics to the area surrounding the proposed TASR, degradation of water quality, and wildlife and fish habitat quality.

3.2 Hazardous Wastes

Potential hazardous wastes generated on the alignment include waste oil, fuel, lubricants, oil filters, batteries and solvents from use and maintenance of heavy equipment. While it is expected that vehicle maintenance will occur in existing facilities within communities, there may be occasions where equipment requires servicing within the proposed TASR corridor or borrow pits. Other potential hazardous wastes may include contaminated soil, snow or water and sewage if a spill occurs during construction activities. The potential environmental effects arising from unmanaged hazardous wastes include degradation of soil quality, degradation of water quality, wildlife and fish habitat, and harm to on-site personnel.

4 WASTE MANAGEMENT FACILITIES

Various wastes will be generated during the construction of the proposed TASR. It is essential that these wastes are handled, stored and managed in a safe and environmentally responsible manner.

The 150-person camp will include temporary fuel storage, dining trailer, accommodation trailers for personnel, toilet and bathing facilities, waste storage facility and mechanic shop. All fuel storage will consist of double-walled fuel tanks and/or approved storage containers with secondary containment (e.g. lined tray and berms). The waste storage facility will include designated areas for the various waste streams. **This area will include either secondary containment structures in the form of trays/popup berms or a lined berm.** An incinerator, sewage lift station and larger holding tank that will be heated and insulated will also be included as part of the waste management facilities. Camp and waste management facilities will be located at least 100 metres from all waterbodies.

5 MANAGEMENT OF WASTE TYPES

This section of the plan describes the general procedures and principles that are to be followed by site personnel in handling and storing wastes. The waste management program will attempt to minimize waste production by applying the principles of reducing the use of materials, reusing materials whenever possible, recycling materials and recovering value from used materials. Additional programs for handling, disposal and recycling of other wastes will be developed as needed. The subsections listed below deal with specific wastes that may be encountered during construction.



5.1 Non-Hazardous, Non-Mineral Wastes

During construction of the proposed TASR, the following management and mitigation techniques will be implemented to reduce the potential for environmental effects associated with non-hazardous, non-mineral wastes.

5.1.1 Domestic Wastes

Waste management practices will be implemented that minimize attractants to wildlife, including:

- Minimizing and properly disposing of garbage, food wastes and other edible and aromatic substances into odour proof secure containers (wildlife proof).
- Separating recyclables such as beverage containers, plastics, alkaline batteries and possible electronics for proper disposal offsite.
- Incinerating combustible waste daily.
- Organizing non-combustible wastes into containers with secure lids to store onsite. This material will then be progressively removed from site throughout construction operations. The community governments of Whatı and Behchokq have stated non-hazardous non-combustible waste can be transferred to their respective landfills (Appendix A). Based on a review of the Inuvik-Tuktoyaktuk Highway (ITH) construction project, it is estimated that there will be approximately 75 m³ of non-combustible waste per year that will need to be diverted to the community government landfills.
- Ensuring work crews inspect work areas and collect and properly dispose of any waste that may have been discarded.

5.1.2 Construction Waste

Non-combustible construction waste will be stored in a designated section of the waste management facility located in the same borrow pit that will house the camp facilities. This material will then be progressively removed from site throughout construction operations and disposed of at either the landfill in Behchokq or Whatı.

Combustible construction waste will be incinerated daily.

5.1.3 Rubber/Used Tires

Used tires and belts that cannot be recycled will be stored in a designated section of the waste management facility located in the same borrow pit that will house the camp facilities. This material will then be progressively removed from site throughout construction operations and disposed of at either the landfill in Behchokq or Whatı.



5.1.4 Vegetation

Felled trees and shrubs will be cleared off the alignment progressively as clearing proceeds and will follow approved methods described in the *Northern Land Use Guidelines: Roads and Trails* (Lands 2014). Cleared trees that are suitable for firewood (diameter larger than 12 cm) will be available for collection by community residents. Excess brush will be burned in the middle of the cleared area and adequately monitored to minimize the risk of fire spreading. Other disposal methods mentioned in the *Northern Land Use Guidelines* may be utilized if construction warrants it. If warranted, a burn box may be utilized for untreated wood burning as it could provide added security in preventing wildfires.

5.1.5 Bulky Metals

Vehicle and equipment failure may occur on the alignment; if this does occur, all materials will be hauled off the alignment and repaired at a designated facility or will be properly disposed of in an approved waste facility.

5.2 Hazardous Waste

As the proponent of the proposed TASR, DOT is responsible for the proper management and disposal of hazardous waste generated on the project site either directly by DOT or by its contractors. As a result, any and all hazardous waste that is managed by <a contractor name> will be submitted under DOT's registered generator of hazardous waste number 'NTG027'. <a contractor name> will be responsible for completing and managing the hazardous waste movement documents according to the *Guideline for the General Management of Hazardous Waste in the NWT* (ENR 1998), while maintaining contact with DOT to ensure proper management of the waste.

If hazardous materials and wastes (fuels, oils and lubricants) are transported onto the alignment, they will be stored within an enclosure providing secondary containment at least 100 m away from the high water mark of any watercourses, as per the Spill Contingency Plan (SCP) for the project. Any hazardous wastes will be stored in clearly marked containers with lids (i.e., drums) and in clearly marked areas (e.g. signs and flagging). Containers will be kept clear of debris and snow to facilitate route inspections for leaks. Hazardous wastes will be removed from the designated storage area as often as possible, but at the end of construction at minimum. Wastes will be transported to an approved facility for treatment/disposal in their facilities. If other contaminated materials require disposal (i.e. spill pads), these will be disposed of through a licenced facility. On behalf of the DoT (the waste generator), <a contractor name> will complete the appropriate waste manifest to fulfill *Transportation of Dangerous Goods Regulations* requirements and the requirements of the *Guideline for the General Management of Hazardous Waste in the NWT*. Any contaminated snow, soil, and/or water will also be transported to an approved facility for treatment/disposal.



5.2.1 Contaminated Soils and Snow

Contaminated soils and/or snow as a result of hydrocarbon spills or other spill material is anticipated to be minimal as all site personnel will be familiar with the TASR's Spill Contingency and Emergency Response Plans and will follow proper safe operating procedures.

In the instance that a spill should occur, it is expected that contaminated soils/snow will be picked up and placed in drums which will then be removed by a registered hazardous waste carrier to an approved facility. Should a larger spill occur, a secondary containment structure or lined facility may be required. All spills will follow SCP procedures.

5.2.2 Sewage

Sewage and greywater from camp will be collected in a sewage lift station fitted with floats, switches and then transferred with a macerating pump to a larger holding tank that will be heated and insulated. The Community Government of Behchok̓q̓ has indicated that they are able to perform sewage removal services. <a contractor name> will ensure that heated, insulated and bermed effluent watertight storage tanks are installed within the temporary construction camp located within a borrow pit. These tanks will be large enough to store wastewater generated by a 150-person camp for up to 5 days in the event of adverse weather conditions. This should allow for a comfortable cushion if severe weather hampers the travel of mobile equipment.

Sewage will be transported offsite by means of a tandem or off road LGP vacuum truck to Behchok̓q̓'s sewage lagoon on a daily basis. Tanks on the transport vehicles will be watertight, baffled tanks and will be maintained to the manufacturer's specifications to ensure dependable performance. No raw sewage, treated effluent or other wastewater will be discharged on the land.

Based on the ITH project, it is estimated that 500 m³ of sewage will be produced monthly.

5.2.3 Ash or Incinerator Residue

Combustible waste will be incinerated daily and will be operated and maintained as per manufacturers expectations. This incineration is not expected to impact air quality. Incinerator use will follow Environment Canada's Guideline for Batch Waste Incineration and meet applicable standards (Canadian Standards Association or Underwriters' Laboratories of Canada).

Incinerators will be required to log daily weights of batch waste (dry and wet) and log the temperature of primary and secondary cylinders. Operation and maintenance logs will be available as well as the technical details of the incinerator model for inspectors.

No waste fuel, oily rags, sewage or plastics (unless contaminated with food odours) will be incinerated. Incinerator residue will be placed in odour proof secure containers and removed from site to approved facilities.

Based on the ITH project, it is estimated that 5-10 m³ of incinerator ash will be produced annually.



5.2.4 Waste Oils

Waste oil will be stored in 'lube cubes' (1000L totes) provided by **the petrochemical products supplier**. Waste material will be removed from the cubes by **the supplier**, as required. Other waste types, such as antifreeze or solvents will not be stored in the same container as waste oils. Based on the ITH project, it is expected that waste oil can be highly variable.

5.2.5 Used Filters

Used filters will be temporarily stored in filter containers and will then be disposed of at **an approved registered facility**. Based on the ITH project, it is expected that 5-10 m³ of used filters will be produced annually.

5.2.6 Used Hydrocarbon Containers and Absorbents

Used hydrocarbon containers, absorbents and rags produced onsite and any used spill response materials, such as fiber pads or granular absorbents ('floor dry') will be placed in steel drums and temporarily stored in the waste management area. Accumulated contaminated absorbents will be removed from site disposed of in accordance with regulatory requirements. Based on the ITH project, it is expected that less than 10 m³ of used oil containers and absorbent pads will be produced annually.

5.2.7 Waste Antifreeze

Waste antifreeze will be placed into empty containers and temporarily stored in the waste management area. Accumulated waste antifreeze will be removed from site and disposed of in accordance with regulatory requirements. Based on the ITH project, it is expected that less than 5 m³ of used antifreeze will be produced annually.

5.2.8 Waste Solvents

Solvents such as Varsol are used to remove grease and oil from engine components and other machinery. Waste solvents will be temporarily stored in steel or plastic drums, fitted with stoppers in the waste management area. Waste solvents will be placed into empty container, removed from site and disposed of in accordance with regulatory requirements.

5.2.9 Explosives

A Quarry Operations Plan (QOP), in conjunction with a Quarry Permit, is required for borrow source development. Each QOP will include **the licensed explosives contractor's** details pertaining to explosives use and handling. Explosive material will only be handled and maintained by **a licenced explosives contractor** and they will be responsible for the disposal of any and all explosives.



5.2.10 Animal Carcasses

If encountered, animal carcasses will be removed from site through discussions with the Department of Environment and Natural Resources (ENR).

5.2.11 Batteries

Lead acid batteries and alkaline batteries will be placed into empty containers and taken to **an approved registered facility**. Based on the ITH project, it is expected that approximately 5 m³ of used batteries will be produced annually.

6 REFERENCES

Ecosystem Classification Group (ECG). 2007 (rev. 2009). Ecological Regions of the Northwest Territories: Taiga Plains. Department of Environment and Natural Resources, GNWT. Yellowknife, NT. viii + 173 pp. + folded insert map.

Environment and Natural Resources (ENR). 2003. Used Oil and Waste Fuel Management Regulations – Plain Language Guide. GNWT. Yellowknife, NT. Retrieved January 2016 from: http://www.enr.gov.nt.ca/sites/default/files/guidelines/used_oil_guide.pdf.

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Mackenzie Valley Land and Water Board (MVLWB). 2011. Guidelines for Developing a Waste Management Plan. MVLWB, Yellowknife, NT. Retrieved August 2014 from: <http://mvlwb.com/resources/policy-and-guidelines>.

TDIC HRN Contracting Joint Venture. DOT. Tetra Tech EBA. 2015. Construction of the Norman Wells to Canyon Creek Access Road: Waste Management Plan.



APPENDIX A

Landfill Support E-mails

DRAFT

Katie Rozestraten

From: Michael Conway
Sent: Tuesday, August 18, 2015 3:36 PM
To: Katie Rozestraten
Subject: FW: Whatì Road PDR
Attachments: image003.jpg

Katie:

For your records.

Michael...

Michael Conway
Regional Superintendent
Department of Transportation
Yellowknife, Northwest Territories
867-767-9089 Ext 31194

From: Larry Baran, Whatì SAO [mailto:sao@whati.ca]
Sent: Tuesday, August 18, 2015 3:00 PM
To: Michael Conway; 'Lisa Nitsiza'
Cc: Alfonz Nitsiza
Subject: RE: Whatì Road PDR

Mike:

This email is to confirm that the Community Government of Whatì would be prepared to permit the deposit of residential-type refuse in our landfill that would be generated from service camps during the construction of the All-Season Road from Whatì to Highway 3.

Certainly, we would negotiate tipping fees with the camps and there might be some restrictions, however I am confident that none of these will be unduly onerous.

The Community Government of Whatì supports the development of the All Season Road and we are prepared to assist contractors in this way.

Kindest regards,

Larry Baran, SAO
Community Government of Whatì
P.O. Box 71
Whatì, NT X0E 1P0
(867) 573-3401 Work
(867) 573-3018 FAX
(867) 446-0092 Cell
sao@whati.ca

“Try a little harder to be a little better.” *(Gordon B. Hinckley)*

**MY COMMUNITY
MATTERS**

Katie Rozestraten

From: johnhazenberg@theedge.ca
Sent: Wednesday, October 28, 2015 7:35 AM
To: Michael Conway
Cc: Laura Duncan (lauraduncan@tlicho.com); Katie Rozestraten
Subject: Re: Whatì Road PDR

Hello Michael,

Yes, of course our landfill site will be available for use by third parties involved with the construction of the all season road.

The existing landfill has reached its capacity and we have initiated the closure process. We are at the final stage of constructing a new landfill for the long term future. There has been a considerable investment in the new landfill.

We are also able to provide potable and raw water delivery as well as sewage removal services.

All services are available at economic and fair market value rates.

Mahsi Cho,
John Hazenberg
Acting Senior Administrative Officer
Tlicho Community Government of Behchoko

Sent from my iPhone

On Oct 27, 2015, at 9:25 AM, Michael Conway <Michael_Conway@gov.nt.ca> wrote:

Hello John:

Further to my e-mail of August 18th, I still require an e-mail providing permission to use the BehchoKo Landfill if necessary with respect to the proposed construction of an all-weather road to Whatì.

Thanks

Michael...

Michael Conway
Regional Superintendent
Department of Transportation
Yellowknife, Northwest Territories
867-767-9089 Ext 31194

From: Michael Conway
Sent: Tuesday, August 18, 2015 8:24 AM
To: 'johnhazenberg@theedge.ca'
Cc: Laura Duncan (lauraduncan@tlicho.com)
Subject: Whatì Road PDR

Hello John:

It was nice seeing you again at the Legislative Assembly at the Federal Funding announcements.

I am requesting a simple e-mail to help us finish the final details of the Project Description Report (PDR) for the All Season Road to Whatì.

I require an e-mail from yourself giving permission for the contractor to use the BehchoKo Landfill on occasion for refuse from the camps that are in closer proximity to BehchoKo than Whatì during the construction phase. Most of the waste will be handled at the camps themselves but on occasion they may need to access your dump in BehchoKo.

A quick e-mail stating "the community landfill in BehchoKo will accept refuse from highway construction camps engaged in the construction of the All Season Road to Whatì" is all I require. This will become part of the PDR.

Thanks for your assistance.

Michael...

Michael Conway, MBA
Regional Superintendent
Department of Transportation
Yellowknife, Northwest Territories
867-767-9089 Ext 31194



APPENDIX B

Schematic of Temporary Waste Storage at Camp Location

To be provided in final WMP.

DRAFT



APPENDIX C

Additional Information

To be provided in final WMP.

1. Waste management log form
2. Incinerator details (manufacturer, operating procedure, draft logs)
3. Sewage management system (manufacturer, operating procedure, draft log)
4. Additional waste management facility approvals and/or hazardous waste operators