



NIRB Application for Screening #125540

Installation of an Incinerator

Application Type: New

Project Type: Other

Application Date: 6/10/2020 2:05:54 PM

Period of operation: from 0001-01-01 to 0001-01-01

Proposed Authorization: from 0001-01-01 to 0001-01-01

Project Proponent: Raquel Labranche
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Canada
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DETAILS

Non-technical project proposal description

English: QE currently operates a hazardous waste facility in Iqaluit. We would like to purchase an outdoor biomedical waste incinerator (see i8-M50 PDF attached in this application) to dispose of different types of waste including sharps, pathological and anatomical waste, surgical dressings, bandages, expired medication, pharmaceutical waste, documents, animal carcasses. We do not intend to burn any heavy metals. We would be incinerating approximately 1.5 – 2 m3 of waste daily (with an estimated weight of around 500-750 kg/weekly) and the ash will be sampled and either disposed of at the local landfill or sent south. The waste is produced by the Qikiqtani General Hospital, community health centres, dentists, correctional centers, Veterinarian, RCMP, etc. Right now, we are packaging all their waste in UN-rated boxes and storing them in 20' containers to be disposed of in the south. We would like to receive and install the incinerator this summer and have at least 2 trained operators onsite to operate the unit. The unit would be used about twice a week year-round. The air quality and wind direction will be monitored. We will refer to the Guideline for the Burning and Incineration of Solid Waste, Dept. of Environment, Nunavut Govt. Oct. 2010, Rev. 2012 and the CCME «Guidelines for the Management of Biomedical Waste in Canada rev. 1992 as guidelines for our operations. We will also update our Hazardous Waste Management Site registration. Please let us know of any other applicable regulations or guidelines not previously mentioned. We do not intend to alter the water use and waste disposal conditions covered under the current Water Licence (attached in this application). We do not believe the unit will create more risks for freshwater. Please advise us if an amendment must be made for the addition of the incinerator or if any other modifications are deemed necessary or are recommended. The I8-M50 unit will be operated using diesel fuel and will be installed in a 20 ft container (see containerized example attached). The container will include a pre-installed generator, lighting, flooring and mounted control panel. A fuel tank will be installed inside the container complete with all the necessary piping connections. The unit has a secondary chamber with a retention time of 2 sec at 850degC to reburn the exhaust gases from the waste. The emissions report demonstrates that it is below the EU standards (see Emissions EU and Emissions testing attached). The unit will never be left unattended while it is in use and it will be on a fenced lot and not accessible to the public. There will be a fire extinguisher near the unit.

French: Qikiqtaaluk Environmental (QE) exploite actuellement un centre de gestion des déchets dangereux à Iqaluit et aimerait faire l'achat d'un incinérateur extérieur de déchets biomédicaux afin d'étendre ses services (voir la description de l'incinérateur médical i8-M50 jointe à cette demande). L'incinérateur médical servira à détruire différents déchets médicaux, dont les objets pointus ou tranchants, les déchets pathologiques ou anatomiques, les bandages et pansements chirurgicaux, les médicaments périmés, les déchets pharmaceutiques, des documents et des carcasses d'animaux. Nous n'avons pas l'intention d'incinérer des métaux lourds. Nous incinérerions environ entre 1,5 et 2 m3 de déchets par jour (représentant un poids approximatif de 500 à 750 kg par semaine). La cendre générée sera analysée et acheminée au dépotoir local ou vers le sud. Les déchets détruits sont ceux produits par l'hôpital Qikitani General, les centres de soins communautaires, les dentistes, les centres correctionnels, les vétérinaires, la GRC, etc. Ces déchets sont présentement emballés dans des boîtes catégorisées NU et remisés dans 20 conteneurs à être acheminés vers le sud. Nous aimerions recevoir et installer l'incinérateur cet été et avoir au moins 2 opérateurs sur le site qui auront reçu la formation adéquate. L'incinérateur serait utilisé toute l'année à raison d'environ deux fois par semaine. La qualité de l'air et la direction du vent feront l'objet d'un suivi. Nous nous servirons de la Ligne directrice environnementale sur la combustion et l'incinération des déchets solides du Gouvernement du Nunavut (ministère de l'Environnement, octobre 2010, révisée en 2012) des Lignes directrices sur la gestion des déchets biomédicaux au Canada du CCME (révisées en 1992) pour guider nos opérations. Nous garderons également à jour notre inscription de site de gestion des matières dangereuses. Veuillez nous aviser si d'autres règlements ou lignes directrices doivent également être respectés. Nous ne cherchons pas à changer les modalités de disposition et d'utilisation de l'eau précisées dans notre permis d'eau (joint à cette demande). Nous ne croyons en effet pas que l'incinérateur représentera un risque accru pour l'eau douce. Veuillez nous aviser si une modification doit être faite pour l'ajout de l'incinérateur ou si toute autre modification est jugée requise ou souhaitable. L'incinérateur i8-M50 emploiera du diesel et sera installé à l'intérieur d'un conteneur de 20 pi (voir l'exemple joint). Une génératrice, de l'éclairage, un plancher et un panneau de contrôle seront installés dans le conteneur. Un réservoir d'essence sera également installé dans le conteneur, comprenant les conduites et connexions requises. L'incinérateur comprend une chambre secondaire de rétention brûlant pendant 2 secondes à 850°C les gaz d'échappement provenant des déchets. Les rapports d'émissions montrent des émissions en dessous des normes EU (voir les tests et normes joints). L'incinérateur ne sera jamais laissé sans surveillance lorsqu'il est en fonction et sera installé sur un terrain clôturé auquel le public n'aura pas accès. Un extincteur sera également placé près de l'unité.

[illegible]

Operations Phase: from 2020-06-10 to 2021-05-06

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Environmental Waste Processing Facility	Site Cleanup/Remediation	Municipal	NA	NA	The site is located next to protected park

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Information is not available			

Authorizations

Indicate the areas in which the project is located:

South Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Water Board	File No.: 1BR-THI2027 Type B	Active	2020-01-01	2027-12-31

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	plane	
Water	barge	
Land	truck	

Project accomodation types

Other,

Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Incinerator i8-M50	1	1.52m x 0.92m x 4.4m	Incineration of waste. See project description. And see Product PDF attached

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Diesel	fuel	1	1000	1000	Liters	To operate incinerator

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
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Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Information is not available				

Environmental Impacts:

The air quality and wind direction will be monitored. We will refer to the Guideline for the Burning and Incineration of Solid Waste, Dept. of Environment, Nunavut Govt.Oct. 2010, Rev. 2012 and the CCME «Guidelines for the Management of Biomedical Waste in Canada rev. 1992 as guidelines for our operations. We will also update our Hazardous Waste Management Site registration. Please let us know of any other applicable regulations or guidelines not previously mentioned. We do not intend to alter the water use and waste disposal conditions covered under the current Water Licence (attached in this application). We do not believe the unit will create more risks for freshwater.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

Description of Existing Environment: Physical Environment

Description of Existing Environment: Biological Environment

Description of Existing Environment: Socio-economic Environment

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

Cumulative Effects

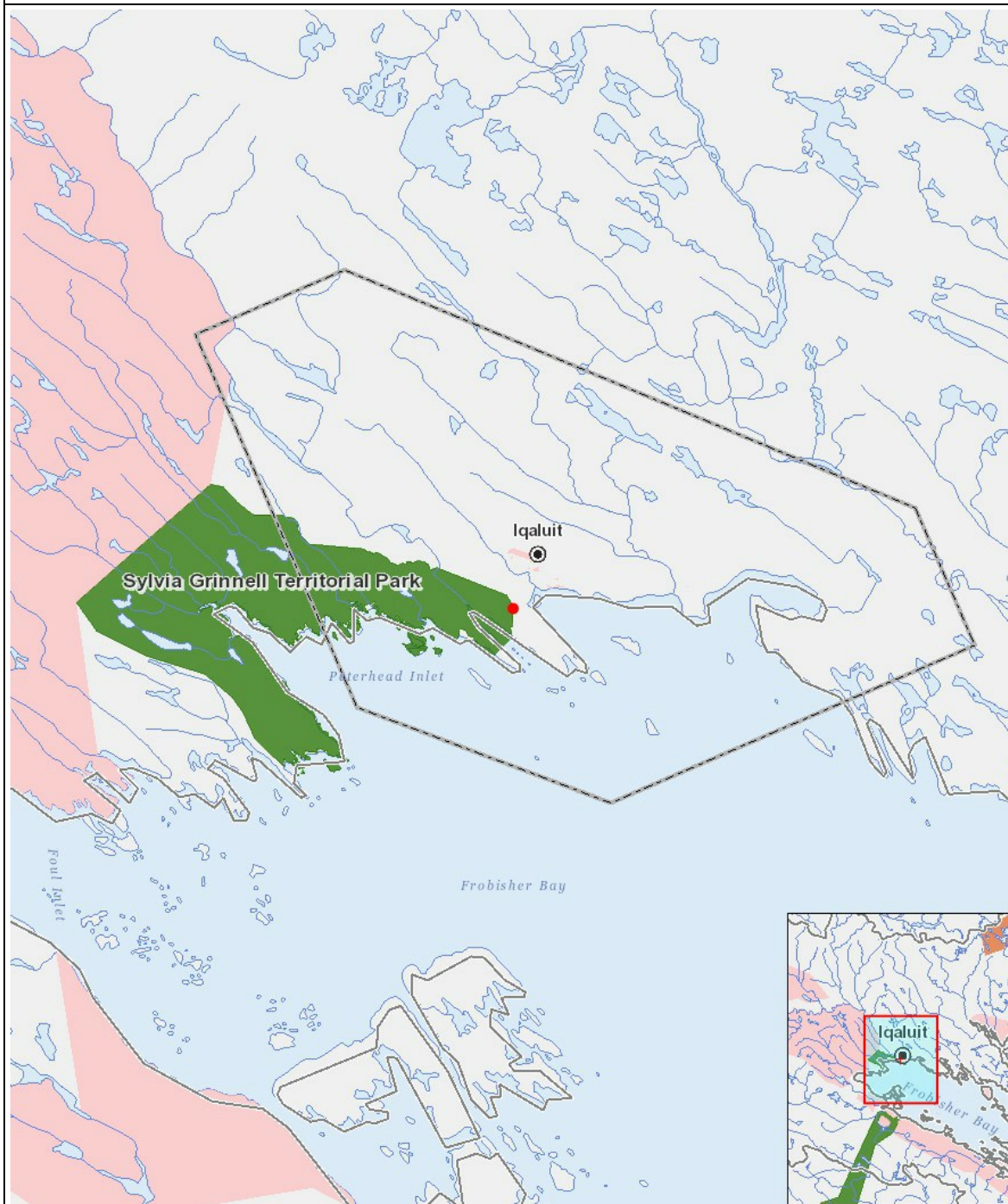
Impacts

Identification of Environmental Impacts

		PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
Construction																										
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Operation																										
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Decommissioning																										
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(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location



List of Project Geometries

1	point	Environmental Waste Processing Facility
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