ᓄᓇᕘᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦᑎᒍᑦ ᑐᒃᓯᖅᑑᑦ ᕐᑭᒥᕐᕈᔭᒃᓴᖅ #125581

Building Demolition and Temporary Camp at Eureka High Arctic Weather Station (HAWS), Amendment and Renewal of Water Licence and Extension of Quarry Permit

ᑐᒃᓯᖅᑑᑕᐅᕙᖅ ᖃᓄᐃᑦᑑᓂᖓ:	New
ᐱᓕᕆᐊᕆᓴᐅᕙᒪᕚᑦ ᖃᓄᐃᑦᑑᓂᖓ:	Site Cleanup/Remediation
ᐅᓪᓗᖓ ᑐᒃᓯᖅᑑᑎᓕᐊᖏᓂᐅᑉ:	2/16/2021 7:14:24 PM
Period of operation:	from 0001-01-01 to 0001-01-01
ᑲᕙᓯᒃᑲᐃᔨᐅᓂᐊᕋᓱᒋᓴᐅᕙᑦ:	from 0001-01-01 to 0001-01-01
ᐱᓕᕆᐊᖃᕈᒪᕙᖅ:	Jean-Philippe Cloutier-Dussault Environment and Climate Change Canada 160 Chemin Tour-de-l'Isle Montreal Quebec H3C4G8 Canada ᐅᖃᓚᐅᑏᑦ: 514-283-4045, ᓱᑲᕙᒃᑯᑦ:

ᑐᓴᐅᒪᔭᒃᓴᑦ

ᖃᓄᐃᑦᑑᑎᓂᒃ ᐱᓕᕆᐊᖅᑲᖅᓂᐊᕆᐊᖕᒐᓐᓂᒃ

ᖃᓪᓗᓈᑎᑐᑦ: Environment and Climate Change Canada (ECCC) is proposing to decommission surplus infrastructure at the Eureka High Arctic Weather Station (HAWS). The HAWS is located on the north side of Slidre Fjord, at the northwestern tip of Fosheim Peninsula, Ellesmere Island, Nunavut. The closest community to HAWS is the Hamlet of Grise Fiord.The project includes the demolition of various structures and infrastructure, the building of a temporary camp to house the workers needed for the demolition, an amendment/extension of the existing water license as well as an extension of the existing quarry permit. Building DemolitionThe Building Demolition includes the demolition of various structures and infrastructure, including the Former Main Complex, Red Quonset, Building 12, Abandoned Reefer, Carpentry/Plumbing Shop, Former Plumbing Building water storage tank (building burnt down in 2019), original Quonset/Storage Shed, Storage Shed, Greenhouse, Old Transient Barracks, former Bunk House and abandoned electrical poles. These buildings and infrastructure are no longer used due to them being abandoned, obsolete, old and/or in disrepair. It is anticipated that all clean, uncontaminated wood waste will be burned on site and all remaining non-hazardous building demolition waste will be stored and disposed on site in a non-hazardous disposal facility. Hazardous waste will be appropriately packed and shipped offsite. The timing of the Building Demolition is scheduled to take place from July 2021 to October 2024.The following plans will be prepared prior to construction start: Environmental Protection Plan, Health and Safety Plan, Emergency Response Plan, Erosion, Sediment and Drainage Control Plan, Spill Contingency Plan, Fire Safety Plan, Worker Orientation Seminar, Building Deconstruction/Decontamination Plan, and Waste Management Plan. The Wildlife and Wildlife Habitat Management Plan that has been developed for Eureka HAWS (SLR, 2018) will also be followed by all onsite personnel. Temporary CampA Temporary Camp for approximately twenty staff will be required for this project. This camp will be installed in a way that will minimize impacts to the environment and will be removed upon completion of the Building Demolition work. Camp facilities will include power generators, fuel storage facilities, garbage disposal containers, heating and cooling units, and necessary appliances and furniture.Amendment/Extension of Water LicenceAs part of this project, an Amendment and Extension of the current Water Licence No. 8B-EUR1621 (Water Licence) is required. An amendment is requested to include water and waste activities associated with the Building Demolition and Temporary Camp. The Water Licence is due to expire August 10, 2021 and so also requires an extension so that current operational water and waste activities can continue at Eureka HAWS.Extension of Quarry PermitQuarrying Permit 2018QP0001 is due to expire on June 17, 2021 and requires an extension so that current quarrying activities can continue at Eureka HAWS.

ᐅᐃᕖᑎᑐᑦ: Environnement et Changement climatique Canada (ECCC) propose de démanteler l'infrastructure excédentaire de la station météorologique de l'Extrême-Arctique (SMEA) Eureka. La SMEA est située sur le côté nord du fjord Slidre, à l'extrémité nord-ouest de la péninsule de Fosheim, sur l'île d'Ellesmere, au Nunavut. La communauté la plus proche de la SMEA est le hameau de Grise Fiord.Le projet comprend la démolition de diverses structures et de divers éléments d'infrastructure, la construction d'un camp temporaire pour loger les ouvriers nécessaires à la démolition, une modification ou une prolongation du permis d'utilisation des eaux existant ainsi qu'une prolongation du permis d'exploitation de carrières existant.Démolition de bâtimentsLa démolition de bâtiments comprend la démolition de diverses structures et de divers éléments d'infrastructure, dont l'ancien complexe principal, la hutte Quonset rouge, le bâtiment 12, le conteneur réfrigéré abandonné, l'atelier de menuiserie/plomberie, le réservoir d'eau de l'ancien bâtiment de plomberie (le bâtiment est passé au feu en 2019), la hutte Quonset ou remise d'entreposage originale, la remise d'entreposage, la serre, l'ancienne caserne transitoire, les anciens baraquements et les poteaux électriques abandonnés. Ces bâtiments et éléments d'infrastructure ne sont plus utilisés parce qu'ils sont abandonnés, obsolètes, anciens ou en mauvais état.On prévoit que tous les déchets de bois propres et non contaminés seront brûlés sur place et que tous les déchets de démolition de bâtiment non dangereux restants seront entreposés et éliminés sur place dans une installation d'élimination des déchets non dangereux. Les déchets dangereux seront emballés de façon appropriée et expédiés hors site.La démolition des bâtiments devrait avoir lieu entre juillet 2021 et octobre 2024.Les plans suivants seront préparés avant le début de la construction : plan de protection de l'environnement, plan de santé et de sécurité, plan d'intervention en cas d'urgence, plan de drainage, de lutte contre l'érosion et de contrôle des sédiments, plan d'urgence en cas de déversement, plan de sécurité incendie, séminaire d'encadrement des travailleurs, plan de déconstruction et de décontamination des bâtiments et plan de gestion des déchets. Le Plan de gestion de la faune et de l'habitat de la faune qui a été élaboré pour la SMEA Eureka (Exigences en matière de niveaux de services, 2018) sera également suivi par tout le personnel sur place.Camp temporaireUn camp temporaire pour environ une vingtaine d'employés sera requis pour ce projet. Ce camp sera installé de façon à réduire au minimum l'incidence sur l'environnement et sera enlevé à la fin des travaux de démolition des bâtiments. Les installations du camp comprendront des générateurs, des installations de stockage de carburant, des contenants à ordures, des unités de chauffage et de refroidissement, ainsi que les appareils et les meubles nécessaires.Modification ou extension du permis d'exploitation des eauxDans le cadre de ce projet, une modification ou une prolongation du permis existant d'utilisation des eaux no 8B-EUR1621 (permis d'utilisation des eaux) est nécessaire. Une modification est demandée pour inclure les activités liées à l'eau et aux déchets qui sont associées à la démolition des bâtiments et au camp temporaire. Le permis d'utilisation des eaux arrive à échéance le 10 août 2021 et nécessite donc également une prolongation afin que les activités opérationnelles actuelles liées à l'utilisation des eaux et à l'élimination des déchets à la SMEA Eureka puissent continuer.Extension du permis d'exploitation de carrièresLe permis d'exploitation de carrières 2018QP0001 arrive à échéance le 17 juin 2021 et nécessite une prolongation afin que les activités actuelles d'exploitation de carrières à la SMEA Eureka puissent continuer.

ᐃᓄᒃᑎᑐᑦ: ᐊᐸᑎᓕᕆᔾᑯᑦ ᐊᒻᒪᓗ ᓯᓚᐅᑉ ᐅᖁᓯᕙᓪᓕᐊᓂᖓᓄᑦ ᐊᓯᑦᔨᖅᑐᖅᑐᓄᑦ ᑲᓇᑕ ᑐᒃᓯᕋᖅᑐᖅ ᐲᔭᖅᑕᐅᓗᑎᒃ ᐊᒥᐊᒃᑯᑦ ᓇᑉᐸᖅᓯᒪᔪᑦ ᔪᕆᑲ ᖁᑎᒃᑐᕐᒥ ᓯᓚᓐᓂᐊᕐᕕᒃ. ᐅᑯᐊ ᔪᕆᑲ ᖁᑎᒃᑐᕐᒥ ᓯᓚᓐᓂᐊᕐᕕᒃ ᑕᐅᕙᓃᑦᑐᖅ ᐃᓂᓕᒃ ᐅᐊᖕᓇᖕᒐᒥ ᓴᓂᐊᓂ ᑲᖏᖅᑯᖕᒥ, ᐅᐊᖕᓇᖕᒐᓂ ᐱᓇᖕᓇᖕᒐᓄ ᖄᖕᒐᓂ ᓄᕗᐊᕐᔪᑰᒃ, ᐅᒥᖕᒪᑦ ᓄᓈᓂ ᐊᐅᓯᐃᑦᑑᑉ ᐅᐊᖕᓇᖕᒐᓂ ᕿᑭᖅᑖᓗᐸ, ᓄᓇᕗᑦ. ᖃᓂᒍᖅ ᓄᓇᓕᒃ ᔪᓕᑲᒧᑦ ᖁᑎᒃᑐᕐᒥ ᓯᓚᓐᓂᐊᕐᕕᒃ ᑖᓇ ᐊᐅᓯᐃᑦᑐᖅ. ᐅᓇ ᐱᓕᕆᐊᖑᔪᖅ ᐃᓚᖅᑐᖅ ᓱᕋᑦᑎᓗᒥᑦ ᐊᔾᔨᓰᓐᖏᑦᑐᑦ ᐋᕿᒃᓱᖅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᓇᐸᔪᑦ, ᐃᒡᓗ ᑕᕝᓛᖅᓯᒪᕕᕕᓂᖅ ᐃᓂᖃᑎᑦᑎᓪᓗᓂ ᓴᓇᔨᓂᒃ ᑕᐃᒪᓐᓇᐅᔭᕆᐊᖃᖅᖏᕐᒪᒃ ᑖᓐᓇ ᓱᕋᑦᑎᕙᐅᓗᓂ, ᐊᒻᒪᓗ ᐋᖅᑭᒋᐊᕐᓗᒍ/ᐊᖏᒡᓕᒋᐊᕐᓗᒍ ᒫᓐᓇᐅᔪᑦ ᐊᑐᖅᑕᐅᔪᖅ ᐃᒪᖕᒪᓄᑦ ᓚᐃᓴᓯ ᐊᒻᒪᓗ ᐊᖏᒡᓕᒋᐊᕐᓗᓂ ᒫᓐᓇ ᐊᑐᖅᑕᐅᔪᖅ ᑐᐊᕋᒃᑕᕝᕕᖕᒍᑦ ᓚᐃᓴᓯ. ᐃᒡᓗᑦ ᓱᕋᑦᑎᕙᐅᓗᑎᒃ ᐃᒡᓗᑦ ᓱᕋᑦᑎᕙᐅᓗᑎᒃ ᐃᓚᖃᖅᑐᖅ ᓱᕋᑦᑎᓗᒥᑦ ᐊᔾᔨᓰᓐᖏᑦᑐᑦ ᐋᕿᒃᓱᖅᓯᒪᔪᑦ ᐊᒻᒪᓗ ᓇᐸᔪᑦ, ᐃᓕᒋᔭᐅᓗᑎᒃ ᑕᒪᐃᓐᓄᑦ ᐃᓂᒋᔭᐅᓂᑯ ᐊᑐᕈᓐᓃᖅᑐᖅ, ᐊᐅᐸᖅᑐᒥᒃ ᐊᒥᐊᖅᓯᒪᔪᖅ ᓴᕕᕋᔭᒃ ᐃᒡᓗ, ᐃᒡᓗ 12, ᐃᒡᓯᓐᓇᑯ ᑲᓕᕝᕕᓂᖅ, ᕿᔪᓕᕆᕕᒃ/ᓯᓪᓗᓕᐅᕝᕕᒃ ᐃᒡᓗ, ᐃᒥᖅᑲᐅᑎᖅᑲᕕᒃ ᐃᒡᓗᕕᓂᖅ (ᐃᒡᓗ ᐃᑯᐊᓪᓚᓚᐅᖅᓯᒪᔪᖅ 2019), ᑕᐃᑲᓃᑦᑐᑐᖅᑲᖅ ᑲᓕ/ᓯᕐᓗᐊᖅ, ᓯᕐᓗᐊᕋᓖᖅ, ᐱᕈᖅᑐᓕᕆᕕᒃ, ᓄᑕᐅᓐᖏᑦᑐᑦ ᖄᖅᑎᑦᑎᔪᖅᑲᖅᑎᓪᓗᒍ ᓄᓇᐅᑉ ᐃᑭᐊᖕᒪᓄᑦ, ᓯᓂᒃᐸᕕᓂᖅ ᐃᒡᓗ ᐊᒻᒪᓗ ᐃᒡᓯᓐᓇᑯ ᐅᐊᔭᓄᑦ ᓇᐸᖃᕕᑦ. ᐅᑯᐊ ᐃᒡᓗᑦ ᐊᒻᒪᓗ ᓇᐸᔪᑦ ᐊᑐᖅᑕᐅᔪᓐᓂᖅᑐᑦ ᐱᔾᔪᑎᒋᓪᓗᒍ ᐃᒡᓯᓇᖅᑕᐅᔪᑦ, ᐊᑐᖅᑕᐅᕙᒍᓐᓂᖅᑐᑦ, ᓄᑕᐅᓐᖏᑦᑐᑦ ᐊᒻᒪᓗ/ᐅᒡᕙᓘᓐᓃᑦ ᓴᓇᑲᓐᓂᓕᒃᓴᐅᔭᓐᓂᖅᑐᑦ. ᓂᕆᐅᓇᖅᑐᖅ ᑕᒪᓐᓇ ᑕᒪᐃᓐᓂᒃ ᓴᓗᒻᒪᖅᓴᐃᓂᖅ, ᓱᕈᖅᓯᒪᓐᖏᑦᑐᑦ ᕿᔪᑦ ᐊᒃᑕᑯᑦ ᐃᑯᐊᓪᓚᒃᑎᑕᐅᓗᑎᒃ ᐃᓂᒥᖕᓂ ᐊᒻᒪᓗ ᑕᒪᕐᒥᒃ ᐊᒥᐊᒃᑯᑦ ᐊᑦᑕᕐᓇᖅᑐᖅᑲᓐᖏᑦᑐᑦ ᐃᒡᓗ ᓱᕋᑦᑎᕙᐅᓗᑎᒃ ᐊᒃᑕᖅᑕᐅᔪᑦ ᑐᕐᖁᖅᓯᒪᓂᐊᖅᑐᑦ ᐊᒻᒪᓗ ᐃᒋᑕᐅᓗᑎᒃ ᐃᓂᖓᓂ ᑕᒪᐅᓐᓇ ᐊᑦᑕᕐᓇᖅᑐᖅᑲᓐᖏᑦᑐᒥᒃ ᐊᒃᑕᕝᕕᖓᓂ. ᐊᑦᑕᕐᓇᖅᑐᖏᑦ ᐊᒃᑕᑯᑦ ᑑᖅᑕᐅᓗᑎᒃ ᐊᒻᒪᓗ ᐊᐅᓪᓚᖅᑎᑕᐅᓗᑎᒃ ᐊᓯᐊᓄᑦ. ᖃᖓᐅᓇᔭᕐᓂᖓ ᐃᒡᓗᓂᒃ ᐃᒍᑦᑎᕐᓗᑎᒃ ᓱᕋᑦᑎᕐᓗᑎᒃ ᐃᓂᖅᑲᖅᑐᑦ ᐱᒋᐊᕐᓗᑎᒃ ᔪᓚᐃ 2021 ᑎᑭᓪᓗᒍ ᐅᒃᑑᐸ 2024.ᐅᑯᐊ ᐊᑖᓂ ᐸᕐᓇᐅᑎᑦ ᐱᓕᕆᔭᐅᓂᐊᖅᑐᖅ ᐃᓗᓕᐅᓚᐅᖕᒥᓂᖕᒥᓐᓂ: ᐊᐸᑎᒍᑦ ᓴᐳᓐᓂᕈᑎᒃᓴᑦ ᐸᕐᓇᐅᑎᖓ, ᐋᓂᐊᓕᖅᑕᐃᓕᑎᑦᑎᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐊᑦᑕᕐᓇᖅᑐᒦᑦᑕᐃᓕᑎᑦᑎᓂᕐᒧᑦ ᐸᕐᓇᐅᑎᑦ, ᑐᐊᕝᕙᖅᑐᖅᑲᖅᑎᓪᓗᒍ ᐸᕐᓇᐅᑎ, ᐊᐅᔪᓄᑦ ᓄᓇᒥ, ᐃᖅᑲᖅᑲᓂᒃ ᐊᒻᒪᓗ ᖁᕕᕕᐅᔪᖅ ᐋᕿᑦᑎᐊᖅᓯᒪᒋᐊᖅᑲᖅᓂᖅᑲᓄᑦ ᐸᕐᓇᐅᑎ, ᑯᕕᔪᖅᑲᖅᐸᑦ ᓴᓗᒻᒪᖅᓴᐅᑎᒃᓴᐃᑦ ᐸᕐᓇᐅᑎ, ᖃᑎᑭᑎᑦ ᐸᕐᓇᐅᑎ, ᓴᓇᔪᑦ ᐊᑦᑕᕐᓇᖅᑐᒦᑦᑕᐃᓕᑎᑦᑎᓂᕐᒧᑦ ᐃᓕᓐᓂᐊᕈᑎ, ᐃᒡᓗ ᓱᕋᑦᑎᕙᐅᓂᖓ/ᓯᕈᖅᓇᖅᑐᑦ ᐲᔭᖅᑕᐅᓂᖕᒥᓐᓄᑦ, ᐊᒻᒪᓗ ᐊᒃᑕᑯᑦ ᐊᐅᓕᑦᑕᓇᐊᓕᖕᒥᓐᓄᑦ ᐸᕐᓇᐅᑎ. ᓂᕐᔪᑎᑦ ᐊᒻᒪᓗ ᓂᕐᔪᑎᑦ ᓇᔪᖅᑕᖏᑦ ᐊᐅᓪᓚᑦᑎᔾᔪᑎᒃᓴᓄᑦ ᐸᕐᓇᐅᑎ ᑎᑎᕋᖅᑕᐅᓯᒪᔪᖅ ᐊᑐᖅᑕᐅᓗᓂ ᔪᕆᑲ ᖁᑎᒃᑐᕐᒥ ᓯᓚᓐᓂᐊᕐᕕᒃ (SLR, 2018) ᐅᑯᐊᑦᑕᐅᖅ ᒪᓕᒃᑕᐅᓗᑎᒃ ᑕᒪᐃᓂᑦ ᓄᓇᖕᒐᓃᑦᑐᑦ ᐃᖅᑲᓇᐃᔭᖅᑎᑦ. ᑕᖕᒫᖅᓯᒪᕕᐅᓂᐊᖅᑐᖅ ᕿᓚᒥᑕᖕᒫᖅᓯᒪᕕᐅᓂᐊᖅᑐᖅ ᕿᓚᒥ ᖃᓂᒌᔭᓂ ᐊᐸᑎᑦ ᐃᖅᑲᓇᐃᔭᖅᑎᑦ ᓇᐸᓇᐊᖅᑲᖅᓂᐊᖅᑐᖅ ᑕᒪᑐᒧᖓ ᐱᓕᕆᐊᖑᓂᖕᒪᓄᑦ. ᐅᓇ ᑕᖕᒫᖅᓯᒪᕕᒃ ᐃᓕᔭᐅᓗᓂ ᑕᐃᒫᒃ ᒥᑭᔪᒥᒃ ᐊᒃᑐᐃᔭᓐᓇᕐᓗᓂ ᐊᐸᑎᑦᑎᓄᑦ ᐊᒻᒪᓗ ᐲᖅᑕᐅᓂᐊᖅᑐᖅ ᐱᔭᕇᖅᐸᑕ ᐃᒡᓗᓂᒃ ᓱᕋᑦᑎᓇᔪᑦ ᓴᓇᔭᕐᒥᑦ. ᑕᖕᒫᖅᓯᒪᕕᒃ ᐃᓚᖅᑲᓯᐊᖅᑐᖅ ᔭᓄᓚᐃᑕᒥᒃ, ᐅᖅᓯᖅᑲᐅᑎᖅᑲᕕᒃ, ᐊᒃᑕᕕᒃ, ᐅᖁᓴᐅᑎᑦ ᐊᒻᒪᓗ ᓂᓪᓚᖅᑎᕈᑎᑦ, ᐊᒻᒪᓗ ᐊᑑᑎᖃᖅᑐᑦ ᐃᒐᐃᑦ ᐊᒻᒪᓗ ᐃᓪᓛᑦ ᕿᐳᐃᑦ ᑕᒪᒃᑯᐊ. ᐋᖅᑭᒋᐊᕐᓗᓂ/ᐅᖓᒡᓕᒋᐊᕐᓗᓂ ᐃᒪᕐᒧᑦ ᓚᐃᓴᓯᐃᓕᒋᓪᓗᒍ ᑕᒪᑐᒧᖓ ᐱᓕᕆᐊᖑᓂᖓᓄᑦ, ᐋᖅᑭᒋᐊᕐᓂᖓ ᐊᒻᒪᓗ ᐊᖏᒡᓕᒋᐊᕐᓂᖓ ᒫᓐᓇᐅᔪᖅ ᐃᒪᕐᒧᑦ ᓚᐃᓴᓯ ᓈᓴᐅᑎᓕᒃ 8B-EUR1621 (ᐃᒪᕐᒧᑦ ᓚᐃᓴᓯ) ᐱᔭᕆᐊᓕᒃ. ᐅᓇ ᐋᖅᑭᒋᐊᖁᔭᐅᔪᖅ ᐃᓚᓕᐅᑎᓗᓂ ᐃᒪᖕᒪᓂ ᐊᒻᒪᓗ ᑯᕕᖅᑕᕝᕕᐅᓂᐊᖅᑐᖅ ᐊᑕᔪᖅ ᐃᒡᓗᓂᒃ ᓱᕋᑦᑎᓇᓂᖕᒥᓐᓂ ᐊᒻᒪᓗ ᕿᓚᒥ ᑕᖕᒫᖅᓯᒪᕕᐅᓂᐊᖅᑐᒥ. ᐃᒪᕐᒧᑦ ᓚᐃᓴᓯᖓ ᐃᓯᓕᕝᕕᒃᓴᖅᑐᖅ ᐋᒍᓯ 10, 2021 ᐊᒻᒪᓗ ᐅᖓᒡᓕᕆᐊᕆᐊᖅᓂᐊᖅᑐᖅ ᑕᐃᒪᓗ ᒫᓐᓇ ᐊᐅᓚᑦᑎᓂᑦᑎᓐᓄᑦ ᐃᒪᖅᑲᕆᐊᖅᑐᖅ ᐊᒻᒪᓗ ᑯᕕᖅᑕᕝᕕᖅᑲᕆᐊᖅᑐᖅ ᑲᔪᓯᓂᐊᕐᒪᑦ ᔪᕆᑲ ᖁᑎᒃᑐᕐᒥ ᓯᓚᓐᓂᐊᕐᕕᒃ. ᐊᖏᒡᓕᒋᐊᕐᓗᓂ ᑐᐊᕋᒃᑕᕝᕕᒃ ᐱᔮᓇᐅᑎᑐᐊᕋᒃᑕᕈᓐᓇᐅᑎ ᓚᐃᓴᓯ 2018QP0001 ᐃᓯᓕᕝᕕᒃᓴᖅᑐᖅ ᔫᓐ 17, 2021 ᐊᒻᒪᓗ ᐅᖓᒡᓕᕆᐊᕆᐊᖅᓂᐊᖅᑐᖅ ᑕᐃᒪᒃ ᒫᓐᓇ ᑐᐊᕋᓕᕐᓂᖅ ᐱᓕᕆᔪᖅ ᑲᔪᓯᓂᐊᕐᒪᑦ ᑕᐃᑲᓂ ᔪᕆᑲ ᖁᑎᒃᑐᕐᒥ ᓯᓚᓐᓂᐊᕐᕕᒃ

Inuinnaqtun: Nunat Avataita unalu Hilaup Aallannguqpallianinga Kanata (ECCC) tukhiutijaat ahivaijumajangit amiakkungit havarjuanganit uvani Eureka Qulvahiktumi Ukiuqtaqtuq Hilaup Havagvia (HAWS). Una taidjuhia HAWS najugaa uvaniittuq tununnganarmi haniraanit haffumani Slidre Fjord, uvani tununngana uataani nuvuani haffumani Fosheim Kangiqhua, Ellesmere Qikiqtaq, Nunavut. Qanitqijaujuq nunalingni uvunga HAWS hamnaujuq Haamalangit Ausuittuq.Una havaaq ilagijaat ahivaijaijut aallatqiit ahiqqungit igluqpagjuangit, iglut ukiiviugaluaq havaktunut ahivaijaijunut, ihuaqhijaujut/ilaaqtuijut tadja atuqtangit imaup laisiat uuminngalu ilaaqtuihimajuq atuqtaujuq huli ujaraqtarvik atiliuqtakhat. Iglu AhivaijainiqUna Iglu Ahivaijainiq ilagijaujuq ahivaijaijut ahiqqungit igluliuqpagjuangit, ilagijaat Atuqhimagaluaqtangit Katimaviat, Aupajaaqtuq Igluqpak, Iglu 12, Ikhinnaqtauhimajuq Umiajuaq Tulagvigaluanga, Hannavik/Tuqhualiqijit Hannavik imautiqarvik (iglu ikulahimagaluaqtuq 2019 mi), nanminiraluangat Havigalit Iglu/Tutquumavik, Tutquumavik, Nauviliurvik, Utuqqak Itiqtirvik, Hiniktarviugaluaq unalu ahiqquit alrujaqarvik nappaqhimajut. Tahapkuat igluqpait igluliuqhimajut atuqtauhuiqtut ikhinnaqhimagamik, utuqqarningit, utuqqat unalu/hanajaulaiqtut. Una ihumagijaujut tamaat halummaqtakhaat, hururningit qijuit hulukuit ikulaniaqtangit najurvingmi tamaat amiakkungillu hivuuranaittut igluit ahivaijaijut iqqarningit tutquqtaulutik uvani hivuuranaittumut iqqakuuqarvik. Hivuuranaqtut iqqakuut ihuaqpiaqtumik ihuaqhijauniaqtut agjaqtaulugillu ahinut. Ikaarningit Iglu Ahivaijaijut havaktaujukhaq aullaqtilihaarniaqtut uvanngat Taaqhivalirvia 2021 uvanngat Tattiarnaqtuq 2024 mut.Hamna uplangujaijaqhimajut hannaijariiqhimajuq hanajauniaqtinnatik aullaqtirvia: Nuna Avatingit Hapummivikhangit Upalungaijaut; Aanniaqtailinirnut unalu Hivuuranaitjutingit Upalungaijaut; Qilanaaqtukkut Kiuvikhangit Upalungaijaut; Autpalliajut, Hiurarnut unalu Imaijaqhimajut Munarijakhaat Upalungaijaut; Ikulahimajut Qajagijarniq Upalungaijaut; Havaktunut Ilitturvikhangit Katimajut; Iglu Ahivaijainiq/Huruqtittailiniq Upalungaijaut, unalu Iqqaqhimajut Munarijakhanut Upalungaijaut. Una Uumajut unalu Uumajut Nunami Najuqpaktangit Munarijakhaat Upalungaijaut hannaijaqhimajuq haffumani Eureka HAWS (SLR, 2018) munarijaujukhat tamainnut najurvingni havaktit. Najullaktut UkiivikNajullaktut Ukiivik qaffiujungnaqhijut qulit malruk havaktit havaarijaujukhaq. Una ukiivik iliuraijukhaq humiliqaak naiglinahuaqtakhaat ihuiluutauningit nunat avatingnut ahivaqtauniaqturlu iniqhimagumik Iglunut Ahivaijaijut havaaq. Ukiivik havagvit ilagijaat alrujaqtuqtunut januviitat, uqhurjuangit tutquumavingit, iqqakuurvik qattait, uunaqutikhanut niklaqhiivikhangit, unalu parnautikhangit ingilrutikhat unalu ihuaqutikhangit.Ihuaqhijaujuq/Ilaaqtuihimajut haffumani Imarnut LaisikhaqIlagijaujut havaaq, una Ihuaqhihimajuq unalu Ilaaqtuihimajuq haffumani tadjamut Imaq Laisikhaq Naahautaa 8B-EUR1621 (Imaup Laisikhaq) kiugialik. Una ihuaqhijaujukhaq kiugiaqaqtuq ilagijakhaat imaq unalu iqqaqtakhaq hulidjuhiit ilagijaujut Iglunut Ahivaijaijut unalu Najullaktangit Ukiivik. Una Imaq Laisikhaq umiktukhaujuq uvani Niqiliqivik 10, 2021 mi taamnalu kiugiaqaqhuni ilaaqtuijukhaq tadja aulattittinirnut imaq unalu iqqaqhimajut hulidjuhiit aulajakhaunngittuq uvani Eureka HAWS.Ilaaqtuijukhaq Ujaraqtarvik AtiliuqtakhaqUjaraqtarvik Atiliuqtakhat 2018QP0001 umingniaqtuq uvani Imaruqtirvia 17, 2021 mi kiugiaqaqhunilu ilaaqtuijakhaq hamna tadja atuqhimajangit ujaraqtarvik hulijakhangit havaktaugiami uvani Eureka HAWS.

Personnel

Personnel on site: 20

Days on site: 429

Total Person days: 8580

Operations Phase: from 2021-07-01 to 2023-10-31

Operations Phase: from 2021-07-01 to 2024-10-31

Post-Closure Phase: from to

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ᓇᒥ	ᖃᓄᐃᓪᑑᒥᑦ ᐱᓕᕆᐊᖃᕐᓂᐊᖅᐸ	ᑭᒃᑯᑦ ᓄᓇᖁᑖᓂ	ᑐᓴᐅᒪᔭᒃᓴᑦ ᓄᓇᐅᑉ ᖃᓄᖅ ᐊᑐᒐᐅᓚᐅᖅᓯᒪᔭᕆᐊᖓᓐᓂᒃ	ᐃᑦᓴᕐᓂᑕᖃᕐᐱᐅᕙᓚᐅᖅᐸ ᐃᓄᒃᓄᑦ ᓇᔪᖅᑕᐅᖃᑦᑕᕐᓂᑰᕙᓗ ᑕᐃᑦᓯᒪᓂᑐᖃᐅᓕᖅᑐᖅ	ᖃᓂᓐᓂᖅᐹᖅ ᓄᓇᓕᒥᔭᐅᔪᖅ ᐊᒻᒪᓗ ᓴᐳᒻᒥᒃᓰᐱᐅᕙᓗ ᓱᓇᓄᑦ
Building Demolition	Site Cleanup/Remediation	Inuit Owned Surface Lands	The Eureka High Arctic Weather Station (HAWS) is located on the north side of Slidre Fjord, at the northwestern tip of Fosheim Peninsula, Ellesmere Island, NU. Since 1947, Environment & Climate Change Canada (ECCC) has owned and managed the overall operations and maintenance of the site under Land Reserve #1021. The total area of the Project is approximately 2.23 hectares. There are presently 15 primary buildings and other facilities at the HAWS. The Eureka runway is located 1.5 km northeast of	The area is disturbed and contains no known sites of archaeological/ paleontological value.	The closest community is the hamlet of Grise Fjord, which has a population of approximately 130(as of the 2011 census), and it is located approximately 400 km south of Eureka, at the southerntip of Ellesmere Island. This Inuit community is the northernmost community in Canada (ParksCanada, 2009b; Statistics Canada, 2012a).The Key Bird Habitat Site – Fosheim Peninsula overlaps the site. The Napaqtulik/Napurtulik Proposed Territorial Park is approximately 50km west of the site.
Temporary Camp Location Options	Camp	Inuit Owned Surface Lands	The Eureka High Arctic Weather Station (HAWS) is located on the north side of Slidre Fjord, at the northwestern tip of Fosheim Peninsula, Ellesmere Island, NU. Since 1947, Environment & Climate Change Canada (ECCC) has owned and managed the overall operations and maintenance of the site under Land Reserve #1021. The total area of the Project is approximately 2.23 hectares. There are presently 15 primary buildings and other facilities at the HAWS.	An archaeological assessment will be completed for all potentially impacted areas that haven't been previously assessed. Archaeological assessments will be conducted in spring 2021 in conjunction with other investigations. If any archaeological areas of significance are identified, they will be protected through fencing and an applied setback. A permit to conduct the archaeological assessment will be	The closest community is the hamlet of Grise Fjord, which has a population of approximately 130(as of the 2011 census), and it is located approximately 400 km south of Eureka, at the southerntip of Ellesmere Island. This Inuit community is the northernmost community in Canada (ParksCanada, 2009b; Statistics Canada, 2012a).The Key Bird Habitat Site

			The Eureka runway is located 1.5 km northeast of	requested from Crown-Indigenous Relations and Northern Affairs Canada prior to March 31st, 20	– Fosheim Peninsula overlaps the site. The Napaqtulik/Napurtulik Proposed Territorial Park is approximately 50km west of the site.
Fuel Tank Storage Location Options	Fuel and chemical storage	Inuit Owned Surface Lands	The Eureka High Arctic Weather Station (HAWS) is located on the north side of Slidre Fjord, at the northwestern tip of Fosheim Peninsula, Ellesmere Island, NU. Since 1947, Environment & Climate Change Canada (ECCC) has owned and managed the overall operations and maintenance of the site under Land Reserve #1021. The total area of the Project is approximately 2.23 hectares. There are presently 15 primary buildings and other facilities at the HAWS. The Eureka runway is located 1.5 km northeast of	An archaeological assessment will be completed for all potentially impacted areas that haven't been previously assessed. Archaeological assessments will be conducted in spring 2021 in conjunction with other investigations. If any archaeological areas of significance are identified, they will be protected through fencing and an applied setback. A permit to conduct the archaeological assessment will be requested from Crown-Indigenous Relations and Northern Affairs Canada prior to March 31st, 20	The closest community is the hamlet of Grise Fjord, which has a population of approximately 130(as of the 2011 census), and it is located approximately 400 km south of Eureka, at the southerntip of Ellesmere Island. This Inuit community is the northernmost community in Canada (ParksCanada, 2009b; Statistics Canada, 2012a).The Key Bird Habitat Site – Fosheim Peninsula overlaps the site. The Napaqtulik/Napurtulik Proposed Territorial Park is approximately 50km west of the site.

ᓄᓇᓕᐅᑉ ᐃᓚᐅᖃᑕᐅᓂᖓ ᓄᓇᓖᓪᓗ ᐊᕕᒃᑐᖅᓯᒪᐅᕐᓂᖓᓄᑦ ᐃᑲᔪᑕᐅᔪᓐᓇᖅᑐᑦ

ᓄᓇᓕᒥᔭᖅ	ᐊᑏᑦ	ᑲᑐᔾᔨᐊᖃᑎᒌᒥᔭᖅ	ᖃᖓ ᑐᓴᖅᑎᑕᐅᓚᐅᓇᐊᖏᓐᓂᒃ
ᐊᐅᓯᐃᑦᑐᖅ	Hamlet of Grise Fiord Administrative Officer	Municipal Office of the Hamlet	2021-01-19
ᐊᐅᓯᐃᑦᑐᖅ	Members of the Hunters & Trappers Organization	Iviq Hunters & Trappers Organization	2021-01-19

ᓇᐃᓴᓐᓰᑦ ᐱᒍᖅᓇᐅᑏ ᐊᖏᖅᑕᐅᓯᒪᔪᑦ

ᓇᒦᒋᐊᖏᓐᓂᒃ ᐱᓕᕆᐊᕆᕝᕕᐅᓂᐊᖅᑐᑦ ᑎᑎᕋᕐᓗᒋᑦ:

North Baffin

ᓇᐃᓴᓐᓰᑦ ᐱᒍᖅᓇᐅᑏ ᐊᖏᖅᑕᐅᓯᒪᔪᑦ

ᒐᕙᒪᒋᔭᐅᔫᑉ ᐊᕕᒃᑐᖅᓯᒪᐅᕐᓂᖓᓂ ᒪᓕᒐᕐᓅᖓᔪᓂᒃ ᐱᖁᔭᕐᓅᖓᔪᓂᒡᓗ ᑲᒪᔩᑦ ᐱᔪᖅᓇᐅᑎᑖᕈᑎᓂᒃ ᓇᐃᓴᓐᓯᓅᓪᓗ ᑲᔪᓯᒃᑲᐃᔩᑦ	ᖃᓄᐃᑦᑐᓪᓚᓇᐅᕙ ᓇᐃᓴᓐᓯᑖᕈᑕᐅᔪᖅ ᐱᔪᖅᓇᐅᑎᑖᕈᑕᐅᔪᖅ ᐊᖏᖅᑕᐅᔪᕐᓘᓐᓃᑦ	ᒫᓐᓇ ᖃᓄᐃᓕᖓᕙ	ᐅᓪᓗᒥ ᑐᓂᔭᖅ/ ᑐᒃᓯᖅᑑᑕᐅᓇᐅᖅᓯᒪᔪᖅ	ᑭᒡᓕᖃᕐᕕᖓ
ᑲᓇᑕᒥ ᓄᓇᖃᖅᑳᖅᑐᓕᕆᔨᒃᑯᑦ ᐅᑭᐅᖅᑕᖅᑐᒥ ᐱᕙᓪᓕᐊᔪᓕᕆᔩᓪᓗ	Land Use PermitPermit/License Number: N2017N0017	Active	2017-07-04	2022-07-03
ᑲᓇᑕᒥ ᓄᓇᖃᖅᑳᖅᑐᓕᕆᔨᒃᑯᑦ ᐅᑭᐅᖅᑕᖅᑐᒥ ᐱᕙᓪᓕᐊᔪᓕᕆᔩᓪᓗ	Land Use Permit (Amended)Permit/License Number: N2017N0017	Active	2018-06-18	2022-07-03
ᑲᓇᑕᒥ ᓄᓇᖃᖅᑳᖅᑐᓕᕆᔨᒃᑯᑦ ᐅᑭᐅᖅᑕᖅᑐᒥ ᐱᕙᓪᓕᐊᔪᓕᕆᔩᓪᓗ	Quarry Permit: 2018QP0001	Active	2018-06-18	2021-06-17
ᑲᓇᑕᒥ ᓄᓇᖃᖅᑳᖅᑐᓕᕆᔨᒃᑯᑦ ᐅᑭᐅᖅᑕᖅᑐᒥ ᐱᕙᓪᓕᐊᔪᓕᕆᔩᓪᓗ	Quarry Permit: 2020QP0002	Active	2020-02-27	2023-02-26
ᓄᓇᕘᒥ ᐃᒪᓕᕆᔨᑦ ᑲᑎᒪᔨᖏᑦ	Water License (Type B)8BC-EUR1621 (2016) and Amendment No. 1 (2018)	Active	2016-08-11	2021-08-10

Project transportation types

Transportation Type	ᓱᓇᒍᑦ ᐊᑐᒐᐅᓂᐊᖅᐸ	Length of Use
Air	Transportation to site will be through the use of chartered aircraft for personnel, food and smaller supplies. Any work/project activities and travel will follow all Territorial, Federal and ECCC Departmental requirements and guidelines regarding COVID 19.	
Water	Transportation to site will be through the use of sealift for equipment and larger supplies. Any work/project activities and travel will follow all Territorial, Federal and ECCC Departmental requirements and guidelines regarding COVID 19.	

Project accomodation types

Temporary Camp

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ᐊᑐᒐᐅᓂᐊᖅᑐᖅ

ᐱᕐᑯᑦ ᐊᒃᑭᔪᖅ ᐊᑐᖅᑕᐅᓂᐅᓴᔪᖅ ᐃᓚᕐᑲᓯᐅᑎᓗᒋᑦ ᐃᑰᑕᐃᑦ, ᒥᓪᓗᐊᕈᑏᑦ, ᖃᖓᑕᓲᖅ, ᓄᓇᓯᐅᑦ ᐊᓯᒃᑭᓪᓗ

ᐊᒃᑭᔪᖅ ᐱᕐᑯᑦ ᐊᑐᒐᐅᓂᐊᖅᑐᖅ ᖃᓄᐃᑦᑑᓂᖓ	ᖃᑦᓯᐅᕙᑦ	ᐊᒃᑭᓂᒃᑭᑦ - ᐳᖅᑐᓂᒃᑭᑦ	ᓱᓇᒧᑦ ᐊᑐᒐᐅᓂᐊᖅᐸ
Pick Up Truck	tbd	various	Crew Transportation
Excavator	tbd	various	Removal and transportation of demolition debris
Dump Truck	tbd	various	Transportation of demolition debris
Bulldozer	tbd	various	Removal and transportation of debris
Small Loader	tbd	various	Excavate demolition material
Till Handler	tbd	various	Removal of demolition material
Bobcat	tbd	various	Transportation of demolition debris
Generator	tbd	various	Temporary camp operations
ATV	tbd	various	Crew Transportation
Side by Sides	tbd	various	Crew Transportation
Tractor and Trailer	tbd	various	Movement of equipment

ᑎᑎᕋᐅᓯᓇᓗᒍ ᐅᖅᓱᒃᓴᐃᑦ ᐊᑦᑕᓇᖅᑐᖅᑕᓖᓪᓗ ᐊᑐᖅᑕᐅᓂᐊᕐᓂᒃᑭᑦ

ᓱᓇᒧᑦ ᐅᖅᓱᒃᓴᒡᒋᐊᖅ ᐊᑐᒐᐅᓂᐊᖅᐸ	ᖃᓄᐃᑦᑐᓪᓚᓇᐅᕙ ᐅᖅᓱᒃᓴᒡᒋᐊᖅ	ᖃᑦᓯᐅᕙᑦ ᐅᖅᓱᒃᓴᕐᑲᐅᑏᑦ	ᓘᒃᓴᐅᒃ ᐃᒪᕐᑲᖅᑎᒋᔪᓐᓇᕐᓂᖓ	ᑲᑎᓪᓗᒍ	ᓘᒃᓴᐃᑦ ᐊᒥᓲᓂᒃᑭᑦ	ᓱᓇᒧᑦ ᐊᑐᒐᐅᓂᐊᖅᐸ
Gasoline	fuel	7	200	1400	Liters	Fuel for equipment
Diesel	fuel	3	60000	180000	Liters	Temporary Camp Use
Gasoline	fuel	52	5000	260000	Liters	Demolition equipment

ᐃᒪᖅ ᐊᑐᖅᑕᐅᔮᖅᑐᖅ

ᐅᓪᓗ ᑕᒫᖅ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᖅ	ᖃᔪᖅ ᐃᒥᖅᑕᕐᑲᑦᑕᕐᓂᐊᖅᐸᑦ	ᓇᑭᑦ ᐃᒥᖅᑕᕐᑲᑦᑕᕐᓂᐊᖅᐸᑦ
0	Pumping from Station Creek	Station Creek

ᐊᒃᑕᑰᑦ

ᐊᒃᑕᑰᓕᓇᓂᐊᕐᓂᖅ

ᐱᓕᕆᐊᕆᔭᐅᔪᒪᔪᒧᑦ ᐱᓕᕆᐊᕆᔭᐅᓂᐊᖅᑐᖅ	ᖃᓄᐃᑦᑐᖅ ᐊᒃᑕᑰᖅ	ᖃᓄᑎᒋ ᐊᒃᑕᑰᑦ ᓴᖅᑭᐊᓂᐊᖅᑐᕆᔭᐅᒍᑦ	ᖃᓄᖅ ᐊᒃᑕᖅᑕᐅᓂᐊᖅᐸ	ᓴᓗᒻᒪᖅᓴᐅᑎᒃᓴᒃᑲᓐᓂᐅᓂᐊᖅᑐᑦ
Site Cleanup/Remediation	ᐊᒃᑕᑰᑦ ᐃᑯᐊᓪᓚᑕᐅᔪᓐᓇᖅᑐᑦ	282m3	Disposed on-site in non-hazardous waste facility	Should hazardous waste be attached, it will be removed and disposed of appropriately.
Site Cleanup/Remediation	ᐊᒃᑕᑰᑦ ᐃᑯᐊᓪᓚᑕᐅᔪᓐᓇᖅᑐᑦ	1m3	Disposed off-site at appropriate facility	Hazardous waste will be containerized and shipped off-site
Camp	ᐊᒃᑕᑰᑦ ᐃᑯᐊᓪᓚᑕᐅᔪᓐᓇᖅᑐᑦ	tbd	food and paper waste to be incinerated on site within existing facility	n/a
Camp	ᐃᒪᐃᑦ ᐊᑐᖅᑕᐅᔭᓈᖅᓯᒪᔪᑦ	tbd	Within existing treatment facility	n/a
Site Cleanup/Remediation	ᐊᑦᑕᓇᖅᑐᖅᑕᓖᑦ	84m3	Disposed off-site at appropriate facility	Hazardous waste will be containerized and shipped off-site
Site Cleanup/Remediation	ᐊᑦᑕᓇᖅᑐᖅᑕᓖᑦ	95m3	Disposed off-site at appropriate facility	Hazardous waste will be containerized and shipped off-site
Site Cleanup/Remediation	ᐊᑦᑕᓇᖅᑐᖅᑕᓖᑦ	<3m3	<3m3	Hazardous waste will be containerized and shipped off-site
Site Cleanup/Remediation	ᐊᑦᑕᓇᖅᑐᖅᑕᓖᑦ	5.5m3	Disposed off-site at appropriate facility	Hazardous waste will be containerized and shipped off-site
Site Cleanup/Remediation	ᐊᑦᑕᓇᖅᑐᖅᑕᓖᑦ	12 Tonnes	Stored on site for future use	Not stated
Site Cleanup/Remediation	ᐊᒃᑕᑰᑦ ᐃᑯᐊᓪᓚᑕᐅᔪᓐᓇᖏᑦᑐᑦ	920m3	Disposed on-site in non-hazardous waste facility	Should hazardous waste be attached, it will be removed and disposed of appropriately.
Camp	ᐊᒃᑕᑰᑦ ᐃᑯᐊᓪᓚᑕᐅᔪᓐᓇᖏᑦᑐᑦ	tbd	Non-hazardous solid waste will be disposed on-site in non-hazardous waste facility	n/a

ᐊᕙᑎᒥᐅᑕᓃᑦᑐᑦ ᐊᒃᑐᖅᑕᐅᓯᒪᔪᑦ

Impacts: • Temporary increase in ambient air concentrations of dust and greenhouse gas emissions. • Potential temporary increase in ambient noise. • Potential to affect the soil. • Potential to affect the hydrology and water and sediment quality of the site. • Increase sediment transport during the summer construction period. • Fugitive dust may suppress plant growth. • The potential to affect nesting birds. Mitigation: • Conduct regular maintenance and keep equipment in good operating condition. Appropriate exhaust emissions controls utilized. Travel distances optimized. • Work completed in accordance with the Environmental Protection Plan and applicable regulations and standards. • Refueling to occur in designated areas. • Effective sediment and erosion control measures installed prior to work start to prevent entry of sediment into watercourses and waterbodies. • Basic petroleum spill clean-up equipment kept on-site. Barriers to prevent contaminated material from entering surface waters. • Water pulling from Station Creek to be conducted during the freshet period. •

Vehicles to remain on pre-established roads/trails. • The Wildlife and Wildlife Habitat Management Plan will be followed. • Station protocols followed for the control and disposal of food and refuse to ensure that local wildlife is not attracted to the site. • Training of temporary workers to avoid contact with all wildlife and their and to report sightings to a supervisor immediately. Movements of workers restricted to ensure nesting sites are not disturbed. • In the event that SARA listed birds or mammals are located in the area, construction crews will be prepared to modify, or delay, activity that might harm the protected species.

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

It is anticipated that all clean, uncontaminated wood waste will be burned on site and all remaining non-hazardous building demolition waste will be stored and disposed on site in a non-hazardous disposal facility. Hazardous waste (polychlorinated biphenyls [PCBs], mercury, household hazardous waste, etc.) will be appropriately containerized and shipped offsite. The non-hazardous disposal facility is currently in the design stage with details to be submitted in early 2021 as part of a separate application.

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

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Physical EnvironmentEureka is located on Ellesmere Island, Nunavut, which is the northernmost island in the CanadianArctic Archipelago. The Arctic Ocean surrounds the Archipelago to the north and west, withGreenland to the east and the Canadian mainland to the south. Eureka itself is on the westernside of Fosheim Peninsula in northern Ellesmere Island. Eureka is located on the north side ofSlidre Fjord and surrounded to the northeast and northwest by ridges that rise about 600 m abovemean sea level.Eureka's climate is typical for the Canadian Arctic Archipelago. Eureka experiences a long, darkwinter and a short, intense summer with continuous daylight. The winter conditions promote astrong surface-based temperature inversion. The transition to summer occurs with a rapidwarming and the breakdown of the Arctic winter vortex.Atmospheric EnvironmentIn an effort to characterize the existing air quality and noise environment within the Project area,a monitoring program was completed in August 2015. Details and results of the monitoringprogram as well as a description of climate and meteorology in the Project area are provided inthe following sections.The weather station at Eureka (WMO ID no. 71917; latitude 79.98°N, longitude 85.93°W) hasbeen operated by the Metrological Service of Canada since 1947. The hourly surface observationrecord begins on 1 January 1953 at 01:00 LST (06:00 UTC) and observations are recorded at analtitude of 10.4 m above mean sea level. Upper-air observation data from radiosondes areavailable starting in 1961. Lesins et al. (2010) provide a comprehensive summary of weather observations made at Eureka from 1953 to 2007, which is briefly discussed in the following sections. Lesins et al. (2010) define the winter months as the three coldest months of the year (January,February, and March) and summer as the three warmest months (June, July, and August).Somewhat unconventionally, autumn is defined to comprise the period of September toDecember, which is based on the fact that the stable winter boundary layer is not fully formed untilJanuary. Spring comprises the rapidly warming months of April and May.Over the 54 year record, the average temperature at Eureka is -19.1°C, with the highest andlowest observed temperatures of 20.0°C and -54.6°C recorded 22 July 2007 and 15 February1979, respectively. Trends in temperature across the entire observing record can be summarizedas follows:•A cooling trend from the early 1950s to early 1970s;•A warming period from the early 1970s to early 1980s;•A brief cooling period in the mid-1980s; and•A warming trend up to the present day.Eureka is typified by a polar desert climate. Annual precipitation averages only 79.1 mm per year,with the majority (60.3 mm on average) falling as snow in the autumn and winter months. Rain istypically confined to the months of July and August, where rainfall events can be intense. Themaximum recorded daily precipitation events observed at Eureka in July and August were20.8 mm (27 July 1997) and 41.7 mm (17 August 1953), respectively.Surface wind speeds at Eureka are greatest in the summer months, averaging about 17 km/hacross the period from 1954 to 2007. Wind speeds in autumn, winter and spring are reduced,ranging between approximately 8 and 11 km/h over the same period. Lesins et al. (2010),however, note that the observations show a weakening trend of approximately -0.6 km/h perdecade over the period from 1954 to 2007, which persists despite the slight weakening of thesurface-based temperature inversion over the same period. Surface winds are primarily out of thewest in the late spring and summer (May to August), switching to the east and southeast for theremainder of the year.Although variable, Lesins et al. (2010) note that there has been no significant change in upper airwind speeds at the 500 mb level.Air QualitySpot measurements of ambient dust were made at seven pre-defined monitoring locations underexisting conditions. The seven monitoring locations are summarized below:•NM-1 – West of the main station•NM-2 – South end of the main station at the sealift unloading location•NM-3 – Northwest of the powerhouse within the main station•NM-4 – North of the existing sewage lagoon within the main station•NM-5 – North end of the main station at the dead line•NM-6 – North of the west end of the runway at the DND facilities•NM7 – South of the west end of the runway at Fort EurekaAmbient particulate matter (PM) data was collected using a DustTrak dust monitor (model DRX8533) in August 2015. Calibration of the dust monitor was completed in the field at test conditionsbefore and after each measurement campaign with a zero filter. Calibration was valid during theperiod of monitoring.Spot measurements of ambient dust (i.e., particulate) levels were completed through multiple1-minute DustTrak logs at each monitoring location at various observation periods. Levels of totalPM, as well as PM less than 10 and 2.5 microns (μm) in diameter (PM10 and PM2.5) weremeasured. The dust monitoring data are summarized in Table 4.3 for total PM, PM10 and PM2.5.At the time of monitoring, construction of the new multipurpose building project was underway.The ongoing activity included clearing and excavation of the footprint for the building foundation.For the purposes of establishing ambient particulate levels in the project area, the minimumrecorded particulate levels are considered to represent the true ambient dust levels and themaximum recorded particulate levels are considered to represent the ambient dust levels asinfluenced by the ongoing project work and other operations within the Project area.Based on the monitoring results, NM-5 would be most reflective of true background and indicativeof a remote wilderness environment where particulate levels are low and influenced by windinduced dust.The monitoring data shows that levels of PM2.5 are high in comparison to total PM, which suggeststhat the PM is primarily influenced by the exhaust of passing vehicles. The fact that the lowestmonitored levels of PM were observed at the monitoring location farthest from an adjacentroadway (i.e., NM-5) supports this conclusion. A comparison of the maximum monitored levels in close proximity to the ongoing activity at NM-3 to the maximum monitored levels at NM-5 shows that the effects of ongoing activity are limited to within 300 metres. If activity level is similar for future project work, local effects are expected to be kept within 300 to 500 metres.A review of an air quality effects assessment submitted to the NIRB for a nearby project (MaryRiver Project, Baffin Island) was completed to characterize ambient air quality in a similarenvironment. The Mary River Project is located approximately 1,000 km south of the HAWS in acomparable setting.The assessment of background air quality for the Mary River Project described in Air QualityBaseline Study, Baffin Iron Mines Corporation, Mary River Project (RWDI Air Inc., December2008) measured total PM concentrations of 3.0 to 7.0 μg/m3 which "represent low, pristine levelsthat can be viewed as typical of remote Arctic areas". Similarly, PM10 concentrations of 1.5 to3.8 μg/m3 were measured. PM2.5 measurements were not performed for the Air Quality BaselineStudy, Baffin Iron Mines Corporation, Mary River Project (RWDI Air Inc., December 2008) because"based on experience in such pristine environments, where particulate matter levelsIn summary, the ambient particulate levels observed at NM-5 are comparable to the particulatelevels identified during the literature search, which are pristine and typical of remote Arctic areas.NoiseSound level data was collected using a Quest SoundPro DL-2-1/1 sound level meter in August2015. Calibration of the sound level meter was completed in the field at test conditions before andafter each measurement campaign with the QC-10 acoustic calibrator. Calibration was validduring the period of monitoring.Spot measurements of ambient sound levels were completed by observing and recording theminimum and maximum slow response A-weighted sound levels within 5-minute observationperiods. For the purposes of establishing ambient noise levels in the project area, the minimumrecorded sound levels are considered to represent the true ambient sound levels and themaximum recorded sound level are considered to represent the ambient sound levels asinfluenced by the ongoing project work and other operations within the project area.The noise monitoring data are summarized in Table 4.4. The true ambient data are indicative ofa remote wilderness environment where noise levels are relatively low and are strongly influencedby sounds of nature and wind induced noise effects.A review of a noise effects assessment submitted to the NIRB for the Mary River Project wascompleted to identify noise levels in a similar environment. The assessment of ambient noise forthe Mary River Project described in Noise Baseline Study, Baffin Iron Mines Corporation, MaryRiver Project (RWDI Air Inc., November 2008) concluded that "average 24-hour sound exposuresranged from 25 to 30 dBA, depending on location". The baseline monitoring locations mostcomparable to the HAWS environment (i.e., in close proximity to Arctic Ocean waterway inlets)had baseline monitoring results of 29 and 30 dBA.In summary, the minimum uninfluenced ambient sound levels observed in the HAWS area (i.e.,natural sounds of nature at NM-2, NM-5, NM-6 and NM-7) are comparable to the sound levelsidentified during the literature search. With consideration of the above information, a conservativeapproach to establishing background sound levels was applied. An existing noise level of 35 dBAwas selected for 24-hour sound levels and applied as the background value for assessing therelevance of potential changes in sound levels as a result of Project Improvement activities at theHAWS.GeologyThe HAWS is situated in the Eureka Hills Ecoregion, within the Northern Arctic Ecozone. Thetopography in the area is rolling and ridged, and reaches altitudes of no greater than 1000 mabove sea level. Underlying strata include Mesozoic and Tertiary sandstone and shale, whichhave large trenches cut out of them. The trenches form the sinuous, curving drainage that isapparent in the area (Phase I ESA - PWGSC, 2007). The geology of the HAWS site was observedby Columbia/Franz (2010) to be composed of silty clay, with some gravel and cobble.HydrogeologyHydrogeologic information was obtained from Columbia/Franz (2010). Regionally, sinuousdrainage formed by carving of the underlying sandstone is apparent, as well as within the studyarea. Water has formed gullies and seasonal creeks that drain into the Slidre Fjord of the FosheimPeninsula, and subsequently into the Eureka Sound and Arctic Ocean. The main natural sourceof surface fresh water at the HAWS is Station Creek, which is seasonally flowing. It flows in earlyJune on the west side of the main facilities at the HAWS, from north to south. Flow from the creekdischarges into the salt water of Slidre Fjord and ultimately into Eureka Sound and the ArcticOcean. The HAWS is in an area of continuous permafrost. In high, dry locations the active layeris at approximately 0.60 metres below surface and in wet, low areas permafrost is located atapproximately 0.80 metres below surface. On south facing slopes, the active layer can reach adepth of approximately 1.2 metres. The water reservoir is the source of domestic water, which isalso located on the west side of the main facilities. The reservoir is replenished yearly by theseasonal pumping of Station Creek. A sewage lagoon is located at the south end of the site'sfacilities on the shore of Slidre Fjord (Columbia/Franz, 2010).SoilsNegligible chemical weathering and plant action in the arctic environment contribute to poor soilprofile development. Thus, soils at the HAWS are composed mostly of sand/gravel fill, underlainby silty, sandy clays – mainly sands, silts, and clays. Specifically, these soils are composed oflithosols and regosols of the Rawmark Great Soil Group, and are typically 18% sands, 47% silts,and 35% clays. Soils include Regosolic Static Crysosols and Orthic Turbic Cryosols over top ofcolluvial, alluvial and marine deposits (Phase I ESA - PWGSC, 2007).

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Vegetation Communities and SpeciesThe site is in ecodistrict 21, situated within the Eureka Hills ecoregion of the Northern Arctic ecozone. The ecoregion includes Axel Heiberg and Ellesmere Islands. General descriptions of plant communities include low-growing herbs and shrubs such as purple saxifrage, Dryas spp., arctic willow, sedge and arctic poppy.The extreme environmental conditions have a significant impact on the ecological recovery ofvegetation at disturbed sites at Eureka. Low light levels, extremely low ambient temperatures andlack of moisture and nutrients limit plant productivity. While a precipitation value of 50-150 mmper year has been used for HAWS assessments (PWGSC 2007), the climate conditions listed byAgriculture Canada for the ecodistrict indicates average precipitation at the lower end of this range.Average total precipitation for the ecodistrict is 68 mm/year, 53 mm of which is snow. Due toevaporation of moisture during summer months, the area experiences a deficit of 361 mm ofmoisture annually. There are only 16 effective growing days annually (days above 5°C adjustedfor day length) in the area around Eureka. The area has >90% continuous permafrost, with <20%ground ice.Changes to vegetation are expected in the High Arctic terrestrial ecosystem as a result of warmingambient temperatures. Long-term monitoring programs were established in Quttinirpaaq NationalPark in 1990 using several measures of environmental change (Broll et al. 2003). Changesrecorded between 1990 and 2002 include warming soil temperatures, with an increase in the depthof the active layer. Changes in permafrost caused changes in the hydrological conditions and soilmoisture. A review of climate changes in the Canadian Arctic indicate that the ambienttemperature has increased 1.5 to 3°C between 1953 and 2007, while precipitation has increasedby roughly 10% (Stein et al. 2013). If these trends continue, the plant community will undergochanges in species and numbers in response to the changing environment.Wildlife Communities and SpeciesThe HAWS has been in place since 1947; however, there are no rigorous surveys of the animalcommunity in the area, the species abundance, or other measures of species presence. While some ecological information is available for many species based on studies conducted in the Arctic, further south of Eureka, important site specific data, such as the numbers of nesting sites for breeding birds, or the density of small mammal species, are not available. For example, the number of ground nesting breeding birds during the summers would allow some estimation of the impacts of disturbed ground from borrow sites or new construction. The Arctic Biodiversity Assessment (CAFF, 2013) estimated that the High Arctic portion of the Canadian Archipelago has a very low biodiversity, with roughly 10 resident mammalian species.Wildlife sightings are recorded weekly at the HAWS and provide some site specific information onwildlife species in the area and potential interactions with workers on site. The most commonsightings are for muskox, arctic hare and wolves, with many sightings within the boundary of thesite. Waterfowl, including red-necked loons, have been observed on the Fjord but their nestingsites relative to the station are unknown. Polar bears have been observed in the area but at somedistance from the HAWS.Some data are available from breeding bird surveys at other sites in the High Arctic. Pattie (1977)reported the numbers of regular and occasional breeding birds on Devon Island, a High Arcticecosystem roughly 500 km to the south of Eureka. Most of the bird species were shorebirds,seabirds and colonial waterfowl. The dominant terrestrial birds that were present every year ofthe survey were the rock ptarmigan, the Lapland longspur and the snow bunting, with the ravenand snowy owl less common. Pattie reported a density of 40 birds per km2 in July 1972 at SildreFjord, with 12 species of birds, equivalent to other high Arctic sites. These results correspondedwith a survey reported by Nettleship and Maher (1973) at Hazen Lake, roughly 300 km to thenortheast of Eureka. Trefry et al. (2010) reported several years of breeding bird survey resultsfrom the east coast of Ellesmere Island. Snow buntings, Lapland longspur and Baird's sandpiperwere the most abundant species. The density of snow buntings was 1.0 to 1.5 pairs per km2,while the Lapland longspur reached 1.5 to 2.0 pairs per km2. These results were used to includethe snow bunting as a representative songbird in the selection of Valued Ecosystem Componentsin the current assessment.Parks Canada has conducted periodic surveys of wildlife on north Ellesmere Island to establishwildlife presence and numbers before the establishment of Quttinirpaaq National Park. Data for1989 to 1997, 2002 and 2008 were obtained in spreadsheet form from J.Chisholm, Nunavut Field Unit, Parks Canada, Iqaluit. No detailed methods were included in thedata, although most transects were flown with two observers in small aircraft in early to mid-June.The 1989 to 1997 data set included a number of marine species, including ringed seal, beardedseal and walrus, however the marine transects extended far north of Ellesmere Island and are notrelevant for Eureka. The surveys indicated that the dominant terrestrial mammal is the muskox,with several dozen in the area at any time. Peary caribou are also present althoughtheir numbers were consistently low. The number of arctic hare is variable with only 10 reportedannually for the 10 year span from 1989 to 1997, yet over 3500 in 2008. The arctic hare was oftenobserved in groups of 20-30 animals. Dominant birds include the gyrfalcon and the snowy owl.Snow geese are also reported in fairly large numbers. The attached EIA provides a summary of species reported to be present in the area, as well as the associated Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and/or SARA status.Aquatic EnvironmentThe HAWS is located in an extreme climate with long, very cold winters and short, cool summers. The field season for the completion of construction activities is, understandably, extremely short. It consists of (at most) July, August and the beginning of September. Outside these months, the ground is frozen and there is no water flowing in the water bodies in the Project location area. Remus Creek and West Remus Creek, and the portions in which the Project will be taking place, are temporary, ephemeral watercourses, which are only filled with water during the spring freshet period.Hydrology assessments have been previously conducted at the HAWS for Station Creek and Black Top Creek and some historical data is available. Generally, flow within all watercourses at the site begins in mid June (around June 15) and ends in late August or Early September. Based on a desktop review and on discussions with station staff regarding local conditions and observations relating to fish and fish habitat at Station Creek, and aquatic species and mammal observations during their time at the HAWS site (Environmental Impact Assessments (EIAs) conducted in 2016 and 2018 (Arcadis)), no species listed under the Species at Risk Act (SARA) or assessed under COSEWIC have been identified within the Project area. Furthermore, no species have been identified under the Nunavut Wildlife Act.

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While Eureka has no permanent residents, a number of research and operational staff rotatethrough the HAWS facility. The closest Inuit community is the hamlet of Grise Fjord, located400 km south of Eureka at the southern end of Ellesmere Island.Pre-contact HistoryThere are hundreds of archaeological sites located on Ellesmere Island, the majority of which areconcentrated in Quttinirpaaq National Park, located approximately 225 km to the north east ofEureka. About 285 archaeological sites have been documented in the national park (ParksCanada, 2009b). Archaeological evidence unearthed in Quttinirpaaq National Park has revealedthat the park and the surrounding region have been occupied by humans for centuries. Peoplehave resided on Ellesmere Island for thousands of years, beginning with the arrival of the Paleo-Eskimos of the Independence I culture (approximately 2000 – 4000 B.C.). They were named afterthe Independence Fjord in northern Greenland, where the first evidence of these people wasidentified by the Danish archaeologist Count Eigel Knuth. These Paleo-Eskimos arrived aftercrossing the Bering Strait from Siberia. Artifacts such as tent rings and stone tools werediscovered. In addition, remains of their campsites found in the national park, characterized bybox-shaped hearths, reveal that they were few in number and that they were present in the areafor only about 300 – 400 years. In these hearths, they burned willow, grasses, driftwood, andmuskox bones. They were resilient people who hunted muskox and caribou, using whatevermaterial they could find to produce heat during the long, dark arctic winters. They lived in aboveground tents year-round, which were most likely covered in muskox hide (Parks Canada, 2009a;Rast, 2015).For many centuries after the existence of the Paleo-Eskimos, no evidence has been found in thenational park to suggest human occupation. Approximately 3000 years ago, a second wave ofPaleo-Eskimo people of the Independence II culture migrated across the arctic islands andreached Quttinirpaaq (1000 – 500 B.C.). The Dorset people later arrived and remained on theisland until approximately

1000 years ago (A.D. 800 – 1000). The Thule people followed (A.D.1600 – 1850) and became skillful hunters of whales and other marine mammals. The Thule culturesurvived elsewhere in the arctic. However, Ellesmere Island and Quttinirpaaq was abandoned bythe Thule as the climate became colder and harsher, leading up to the Little Ice Age. The Thuleare the ancestors of the modern Inuit (Parks Canada, 2009a). In addition to these relics, those ofhistoric Inuit/Inughuit cultures and of exploratory, scientific, and government activities of thenineteenth and twentieth centuries have also been unearthed (Parks Canada, 2009b). It has beenmentioned that a Thule tent ring had been sighted in an area located approximately 10 km fromthe EC reserve at Eureka, during discussions with the HAWS station manager during the site visitwhich took place in August 2015.Post Contact HistoryNorthern Ellesmere Island was first visited by Europeans in 1875, when the British ArcticExpedition sailed through the Nares Strait and established wintering quarters for the HMSDiscovery off Lady Franklin Bay, in the sheltered harbour. The HMS Alert, the sister ship toDiscovery, wintered 160 km to the north on the shore of the Arctic Ocean. The harbour is now known as Discovery Harbour. Sledging parties departed from the ships in the spring of 1876 toexplore the northern terrain. The expedition was forced to return to England later in 1876 due tothe explorers' becoming ill with scurvy (Parks Canada, 2009b).The United States Army's Lady Franklin Bay Expedition arrived at the same site in 1881, underthe leadership of Lieutenant Adolphus Greely, for one of two expeditions staged by the UnitedStates in contribution to the International Polar Year (an undertaking by twelve countries in aneffort to establish scientific stations in regions bordering the North Pole). The US expeditionestablished a station that they named Fort Conger. When supply ships failed to reach the groupin 1882 and 1883, they retreated and became stranded on Pim Island, located on EllesmereIsland's eastern coast. Only seven out of the 26 men survived.In 1899, Robert Peary, and American explorer, arrived at the abandoned Fort Conger, in hopesof using the Fort as a base station to reach the North Pole. This expedition was accompanied byInughuit guides from northwestern Greenland. Aboriginal traditional knowledge including the useof fur and local food, allowed the expedition to better cope with the harsh conditions. Combiningthe traditional knowledge and European technology, the base camp structures at Fort Congerwere modified so as to function well in the cold arctic climate. Peary operated expeditions in 1900- 01, 1905-06, and 1908-09 from the refurbished Fort Conger. The fort later provided shelter to American, Norwegian, Danish, and British/Canadian expeditions in 1915, 1920, 1921, and 1935. The Fort Conger is presently a significant archaeological resource, and it has been designated as Classified Federal Heritage Buildings protected by Quttinirpaaq National Park as important cultural resources (Parks Canada, 2009a).CommunitiesThe closest community is the hamlet of Grise Fjord, which has a population of approximately 130 (as of the 2011 census), and it is located approximately 400 km south of Eureka, at the southern tip of Ellesmere Island. This Inuit community is the northernmost community in Canada (Parks Canada, 2009b; Statistics Canada, 2012a).Other communities on Ellesmere Island consist of transient communities conducting scientificresearch, including universities and government agencies, which is a major activity in the national park region, and in Eureka. The Polar Continental Shelf Project (PCSP) (Natural Resources Canada (NRCan)), based in Resolute Bay, provides logistical support for these activities (Parks Canada, 2009b).The residents of Ellesmere Island include the year-round permanent residents of Grise Fjord, the military and civilian personnel associated with Canadian Forces Station, Alert (locatedapproximately 480 km northeast of Eureka and 45 km northeast of the national park), the summer base of operations for the Canadian Department of National Defence at Eureka, the personnel working at the weather station at Eureka, and Parks Canada.

Miscellaneous Project Information

The following plans will be prepared prior to construction start: Environmental Protection Plan, Health and Safety Plan, Emergency Response Plan, Erosion, Sediment and Drainage Control Plan, Spill Contingency Plan, Fire Safety Plan, Worker Orientation Seminar, Building Deconstruction/Decontamination Plan, and Waste Management Plan. The Wildlife and Wildlife Habitat Management Plan that has been developed for Eureka HAWS (SLR, 2018) will also be followed by all onsite personnel. This plan is attached to this application.

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Air qualityInteractions: Demolition activities have the potential to temporarily increase ambient air concentrations of dust (i.e., particulate) and greenhouse gas emissions. Effects: During demolition, there will be an increase in local airborne particulate (dust) and tailpipe (fuel combustion) emissions from heavy-duty construction equipment operation and construction activities. The tailpipe emissions will include greenhouse gas emissions and therefore have the potential to contribute to climate change. Mitigation: •Optimize fuel consumption and minimize dust production resulting from vehicle/equipment travel: Employ standard operating procedures for equipment/machinery and ensure that regular maintenance is performed in accordance with good engineering practices or as recommended by suppliers such that the equipment is kept in good operating condition. Other activity-specific mitigation measures will include the use of appropriate exhaust emissions controls such as catalytic converters and diesel particulate filters to mitigate fuel combustion emissions from heavy equipment and vehicles. Additionally, the number of equipment/vehicle movements and travel distances will be optimized to reduce fuel consumption and minimize dust and greenhouse gas emissions. Lowering vehicle speeds on unpaved road surfaces, applying water as well as implementing good road maintenance practices will minimize the potential for road dust emissions. Demolition work will be completed by methods that minimize dust generation from operations, in accordance with the Environmental Protection Plan. •Reduce dust resulting from demolition activities: Execute work using methods to minimize raising dust from decontamination operations. Implement and maintain dust and particulate control measures as determined necessary by applicable regulations and standards during demolition work and in accordance with applicable authorities. The use of oil for dust control is prohibited. Prevent dust from spreading to beyond the immediate work area. Departmental Representative or designate may stop work at any time when Contractor's control of dusts and particulates is inadequate for worker exposure relative to indoor conditions, or when air quality monitoring indicates that release of fugitive dusts andparticulates into the work area equals or exceeds specified levels. If Contractor's dust and particulate control is not sufficient for controlling dusts and particulates into atmosphere, stop work. Contractor must discuss procedures that Contractor proposes to resolve problem. Make all necessary changes to operations prior to resuming work that may cause release of dusts or particulates. Prevent sandblasting and other extraneous materials from contaminating air beyond application area, by providing temporary enclosures. Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.NoiseInteractions: Demolition activities have the potential to temporarily increase ambient noise. Effects: During demolition clean up, there will be an increase in noise emissions from heavy-duty construction equipment operation and construction activities. These effects are typical of a construction site, localized, and of a temporary nature. The physiological and ecological impacts of noise on wildlife needs to be considered, acutely loud noises can cause hearing loss in wildlife. Behavior patterns of wildlife may differ from their natural suite of behaviors. Mitigation: •The Project will employ standard operating procedures for equipment/machinery and ensure that regular maintenance is performed. As well, personnel will adhere to conditions outlined in all permits, authorizations and/or approvals.Sediment and soil qualityInteractions: Demolition activities have the potential to affect the soil include removal of buildings, infrastructure, material handling (loading and dumping); and the refueling of vehicles/equipment.Effects: During demolition soil quality is most likely affected as a result of fuel spills and leaks from equipment refueling efforts or otherwise, and from compounds located inside the structures materials. Conduct a complete on-site evaluation of the area to determine exact measures to be taken to protect permafrost.Mitigation: •Prevention of fuel spills/leaks: Refueling of vehicles and equipment to occur in designated areas following all applicable regulations. •Sediment, erosion and drainage control: Effective sediment and erosion control measures will be installed prior to starting work to prevent entry of sediment into watercourses and waterbodies. These measures will be inspected daily and repaired if damaged by construction, precipitation or snowmelt. Sufficient supplies for erosion, sediment and drainage control will be available on site to keep in compliance with federal and territorial fisheries and environmental protection legislation. Aquatic environmentInteractions: Demolition activities have the potential to affect the hydrology and water and sediment quality of the site. These activities include, removal of buildings, infrastructure, material handling (loading and dumping); and the refueling of vehicles/equipment.Effects: surface water contamination could potentially occur due to leaks/spills that may occur during the re-fuelling of vehicles and construction machinery on site. Debris from demolition efforts may end up into the hydrological system. Mitigation: •Suitable erosion and sediment suppression measures will be implemented to prevent sediment from entering Black Top Creek, Station Creek or other water bodies. Erosion control structures (temporary matting, geotextile silt control filter (curtains) fabric, etc.) are to be used. Vehicles/machinery are to be checked for leakage of lubricants or fuel and are maintained in good working order. Re-fueling should occur in designated areas only. Basic petroleum spill clean-up equipment will be kept on-site. Barriers will be required during extraction of contaminated soils to prevent material from entering surface water, Station Creek or the reservoir.Aquatic CommunityInteractions: The demolition work does not involve direct disturbance of the water bodies, Work projects are isolated from the water bodies, although movement of heavy equipment may increase sediment transport during the summer construction period. Effects: Concerns about sediment loading in nearby water bodies are important to address. Mitigation: •Best practice is to mirror aquatic environment mitigations. Should water pulling from Station Creek be required during the demolition period the most appropriate time of year to do so would be during the freshet period.Vegetation Communities and SpeciesInteractions: Physical damage to vegetation during construction and changes in the soil surface layer, leading to potential soil and permafrost erosion, changes in surface water hydrology and thermokarst. Fugitive dust may also suppress plant growth within a zone around construction zones.Effects: The damage to the vegetation will be equal to the footprint of the demolition, storage and the dust footprint. Mitigation: •Due to the extreme conditions at Eureka, construction will be conducted during the brief summer months. Damage can be reduced by covering the ground, possibly using matting, prior to construction to reduce physical disruption of the soil. Fugitive dust can be suppressed at its source. Additionally, vehicles will remain on pre-established roads/trails. Workers are to be advised of sensitivity of environment and limits of equipment travel will be determined.Wildlife Communities and SpeciesInteractions: Demolition activities will occur during the summer, the time that nesting and denning occur for many bird and mammal species. For birds and mammals, the interactions include behavioral changes such as avoidance and/or attraction to the site and changes in the dominant species in areas adjacent to the site.Effects: Effects are unlikely as demolition activities will keep to areas of existing building and established roads. However, minimization of impacts is important as the area in general as the potential for sensitive species migration. Mitigation: •The Wildlife and Wildlife Habitat Management Plan (SLR, 2018) will be followed.•Temporary workers will be informed of station protocols for the control and disposal of food and refuse to ensure that local wildlife is not attracted to the site.•Temporary workers involved with demolition activities will trained to avoid contact with all wildlife and their nests (particularly with species at risk) and to report sightings to a central authority (i.e., supervisors) immediately. Movements of workers in off-hours should also be restricted to ensure nesting sites and denning areas are not disturbed.•In the event that SARA listed birds or mammals are located in the area, construction crews will be prepared to modify, or delay, activity that might harm the protected species. For example, if nests with eggs are located for a protected species, activity in the area might be delayed until after hatching.

Cumulative Effects

There are no adverse residual project effects to be considered in a cumulative effects assessment. That there are no identified adverse residual project effects is not surprising for a construction project such as this, where the works and activities are very limited in geographic extent and time.

Impacts

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	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
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Camp		-	M	M	-	M	-	-	-	M	-	-	-		-	-	-	-	-		-	-	-	-	-
Fuel and chemical storage		-	M	M	-	M	-	-	-	M	-	-	-		-	-	-	M	-		-	-	-	-	-
Site Cleanup/Remediation		-	M	M	-	M	-	-	-	M	-	M	M		M	M	M	M	M		-	-	-	-	-
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(P = ᐊᑲᐅᓈᕈᑎᔪᓐᓇᖅᑐᑦ, N = ᐊᑲᐅᖏᓯᔪᑕᐅᔪᓐᓇᖅᑐᑦ ᐸᓚᐅᒥᔾᔪᓯᖅᑐᖅᑕᐅᔪᓐᓇᕐᓯᑦᑐᓪᓗ, M = ᐊᑲᐅᖏᓯᔪᑕᐅᔪᓐᓇᖅᑐᑦ ᐸᓚᐅᒥᔾᔪᓯᖅᑐᖅᑕᐅᔪᓐᓇᖅᑐᓪᓗ, U = ᖃᐅᔨᒪᓐᓇᕐᓯᑦᑐᖅ)

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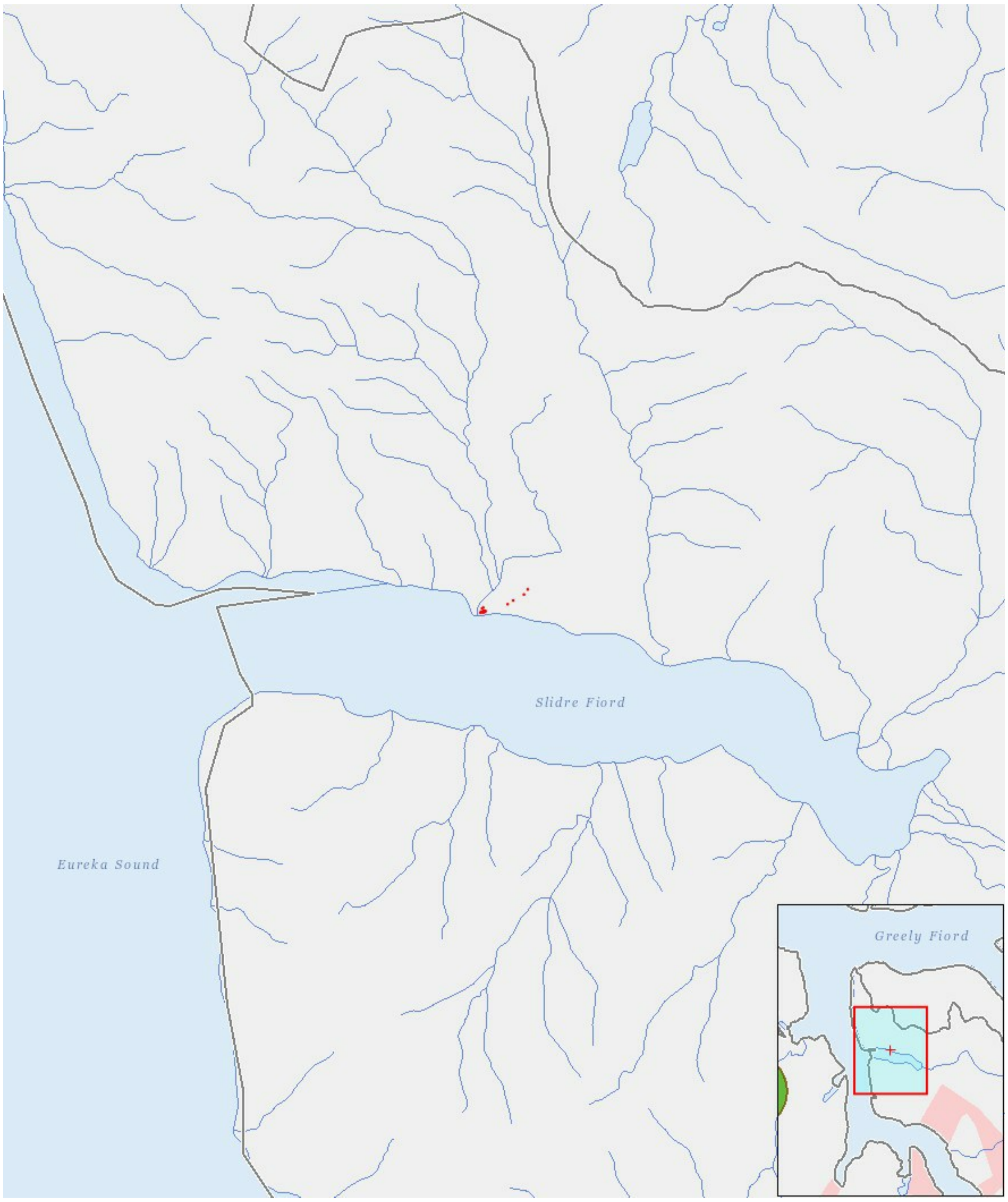

List of Project Geometries

1	polygon	Fuel Tank Storage Location Options
2	polygon	Temporary Camp Location Options
3	polygon	Building Demolition