



NIRB Uuktuutinga Ihivriughikhamut #125620

Gjoa Haven New Power Plant

Uuktuutinga Qanurittuq: New

Havaap Qanurittunia: Ikumatiit Alguyaanut Havakvik

Uuktuutinga Ublua: 6/26/2021 2:19:12 PM

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

Piumayaat Angirutinga: from 0001-01-01 to 0001-01-01

Havauhikhaq Ikayuqtinga: Megan Larose
Qulliq Energy Corporation
PO Box 250
Iqaluit Nunavut X0A 0H0
Canada
Hivayautit Nampanga:: 867 979 7553, Kayumiktukkut Nampanga::

[illegible]

Inuinnaqtun: Qulliq Auladjutiqhanut Kuapuraisinga (QEC) Nunavut Kavamanut (GN) ukiuqtaqtumi kuapuraisiuyuq. Aulapkainitigut 25 nik uqhuryuanik atuqpaktut pauwaqarviit, QEC kut inminiinnak tuniqhaivaktut pauwaqariamingnik 15,000 nguyungnaqhiyut atuyuqtut nunaptingni. Qulliq Auladjutiqhanut Kuapuraisinga uuktuqtut nappaqtirilutik aulapkailugitlu nutaamik pauwaqarviaviqhamik Hamlangganni Uqhuqtuuq ittuq Kitikmeot Avikturvianni Nunavunmi (havaaqhaq). Uqhuqtuuq nunallaaq amigaiquummiktut ihariagiuni pauwaqhamik, ihumagitigiplugu inuriaqhilirmat. Hadja pihimayuq pauwaqarvi nappaktauhimayuq 1977 mi tikiutigiplunilu igluqpaup atugaqhaatigut. Pauwaqarviit utuqqaqpallaaraan'ngamik, ayurnarniaqtuq munaqhiyaami, pauwaqarviiklu ayuqhautipkarniaqtuq. Ihuqaqnggittunik atuqtaqtunik, QEC kut akiliqtuihimmaaqtut ayurnautiqarniaqtut pauwaiqqat. Uuktuutigiyauyuq qaffini ukiuni havaariyaqhaq ilaliutiqarniaqtuq nutaamik hitamanik ingniqutiqaghluni pauwaqariami

januraitaqtuutilutik pawaaqviqhaq iliuraqtauhun'nguyuuq 3,100 kilowatts nik, piliurhimayuuq 40 ni ukiuni atugaqhaatigut pidjutiniaqtuqlu pipkainiaqtuqlu nutaani kayumiktukkuugutiqhanik nakuuhivalliayaanggini ihuaqtumik, ayurnaittumik, aulahimmaariami, aanniqtailiviqhaqmiklu. Nappaktirinirmun ilaliutiniaqtuq uqhuryuaqarvikhamik piqaqtittiluni malruungnik, 90,000 liitasnik uqhuryuaqarviinnik, pampiklugitlu uqhuryuat igluqyuaqpanut. Imaalu, QEC upalunggaqhimayut nappaktiriami Quonset aqhaluutiqaqviqhanut, transformer mik tamayaqaqviqagluni, naparialgit tutquumiviqhainnik, kinggiqtaq glycol mik qattaryuarmiklu tamayaqaqviqagluni iqqakuuqviqhaqagluni tuglianilu piruqviqhamik. Iniqarnia pidjutihun'nguyaat aullaqattaqtunik havakviit itiqtiqviqhainnik, tamayaqaqviqagluti umiat tamayaqaarviinnik, aadlamiklu piqaqlutik qilamiugutauqaqqat januraitamik. Ihuuqhaqtauyuuqhatlu pidjutihimayumut hadja aulaviqhatigut atayuqhaq nutaamut pauwaqaviannut. 50 miitasnik uqhuquyap tuqhua piliurniaqtauyuuq atayaami Uqhuryualiqiyyitkut Uqhuqhanik Havagvianut (PPD) an'ngiumik uqhuquyaaqviqagluni uataani. Tuqhuat piqangniaqtuq qaan'ngani ataanilu nunaup havaktauluni. Nutaag pauwaqaqviqhaq pidjutittaahun'nguyuuq pidjutittaariami atutqiqtaaffaaqtunik auladjutihatigut. Uuktuqtauyuuq nutaag nayuraqhaa aktilaan'nga 10, 110 kiqqariqtunik miitasnik ittumi ihiviuqtauhimanggittumi, atiqanggittunilu hamalatkut nunainni haniraani Nuvu Apqutaa (Apqutaa R36) 50 miitasn'nguyungnaqhiyutlu uataani PPD uqhuquyaaqviannit. Talvani pauwaqaqviqhami piliurhimayuuq Hamalatkut igluqpakyuaqviqhainnut nunait aturniangginnit. Uuktuutaa tuniyaayuuq an'ngiqtaupluni Hamalatkunnit Uqhuqtuumi June 1, 2021 mi. GN kut CGS Upalun'ngaiyainirmun Nunatigunlu Havagvia tunihivaktut iniqhimaluanggittumik titigauyaqhimayumik Upalunggaiaidjutimik An'ngiqtauhimayumik Unniutimik June 18, 2021 mi. Piqanggittuuq nunami qurluarviinnik, imainnarmikluunniit 100 miitasnik havagviuviqhami. Piqanggittuuq huradjaviliqidjutikkut, imarmiuniklu, avikturviuvimi kanatamiluunniit min'nguiriinnik Inuit nunagiyaainnikluunniit hulaqutikpat pauwaqaqviqhaannik nayugaqhaannik. In'ngilraangnitatigun aktumattaqtunik ihivriuqhiniiaqtut July 2021 mi ihumaliuriami in'ngilraangnitani piviqhaqariangginni ihuilidjutiniarman havaatimun naunaiqlugitlu hanaqiyaulimaittaangginni. Havaaqhaq naunaiqhimayuuq talvani Naunaitkutimi

1.Naunaitkut 1: Havaagiyaqhaq Uqhuqtuup PauwaqaqviqhaatHavaaqhaqNiriugiyaayuuq Hivuniqhaa Iniqhimakpiaqlugu Nunatigut Iniktiqlugitlu In'ngilraangnitat Aktumattaqtunik IhivriuqhiniagutaataQiqaiyalirvia 2021 mit Qiqaiyalirvia 2022 Naunaittiaqhimayuuq titirauyaqhimayuuq piliurnia Qitiqqautijuuq 2022 mit Qiqaiyalirvia 2023Kaantraviliqinikkut niuvirnirmunluQitiqqautijuuq 2023 mit Qiqaiyalirvia 2024Nappaktirinirmun Qitiqqautiyuuq 2024 mit Dissaippa 2025 (kitumi ukiumi)Uuktuutiniq HavaktitaulirniqUbluqtuhirnirmi 2026 mit Qiqaiyalirvia 2026 mutPauwaqaqviqhaq tuniyauniaqtuq QEC kunni havaktiinnutQiqaiyalirvia/Qitiqqautiyuuq 2026 21 ni havaktiqhanik naunaillakaffuktauyut piqaqtuqhanik havagviuviqhami nappaktiliqata. Aadjikkiilimaittuuq nampait havaktiqhanik nappaktiliqata. Kaantraaktitaayuuq ihumaliurniaqtuq kaffiuyaaqhainnik havaktiqarniaqtuqhanik tikiutiyaami iniktirutaa havaaqhami. Kaantraaktitaayuuq piyuqhat tikiutilugit piqaqtuqhanik Inuit havaktiqhanik tamainni nappaktirilugumik. QEC kunni haaktiit Uqhuqtuumi munariyaqaqtut ubluq tamaat ubluq tamaat aulaviqhaitigut pauwaqaqvianit. Ilaliutilgitlu havainnaktumik Pauwaqaqviami Atan'nguyamik, malruungnik havakaffuktunik Ikayuqtiuyunik. Havaktut hadja nuutiqhun'nguyut nutaamun pauwaqaqviannut iniktiqqat. Nutaanik havaktiqalimaittuuq talvomit haffuma havaatigut. Amigaingniatigut nappaktirinirmun tamayait Havaaqhamut agyaqtauniaqtut umiakkut. Ilanggit tamayat naunaiqhun'nguyut talvani nunami agyaqtaulutikluunniit tingmitikkut naunaigutilugit aktilaanggit kaffiuyaaqhaitigunlu. Kantraaktitaayuuq munariyaqarniaqtuq naunaiqlugit tamayanik atuqtaqhanik nappaktiliqqat. Ilaliutiniagungnaqhiyuqlu aadlamik kaantraaktitaayuuqhamik nunainnagiyaayumi in'ngilragutikkut tamayanik talvunggaqtitaulutikluunniit nunallaamun umiakkut. Una havaaqhaq niriugiyaayuuq piviqhaqariami Hamalatkunnit Uqhuqtuumi

atuinnaktauyuktumik uqhuqyuanik nautqilimaittuniklu nalvaaqtauhimayumik, ikiqliyuummirnialu puyuqmik anialailaqaatanit. Pipkainiaqtuqlu QEC kunnut nakuuhivalliadjutiqhaatigun pauwaqtautikkut nunallaami, ikayuqtauhimangginnaklugitlu amigaingniat nunaqaqhimayut, tikiutilugulu hivuniquhaliuqtaat aanniqhimaittumik, piqainnaktittilugit pauwaqhainnik nunallaami.

Personnel

Personnel on site: 21

Days on site: 580

Total Person days: 12180

Operations Phase: from 2024-04-01 to 2026-03-31

Operations Phase: from 2026-04-01 to 2046-03-31

Post-Closure Phase: from to

Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtaliyainnit nuna
Lot A - Proposed Power Plant	Fuel and chemical storage	Municipal	The proposed lot is within the Municipality of Gjoa Haven and has been designated for industrial land use. A portion of the selected location is currently being used by Canadrill and XYZ Contractor as a storage location for sea cans, construction materials, unmarked drums, and drilling supplies/equipment.	An archaeological impact assessment will be carried out in summer 2021 to determine if archaeological sites are in potential conflict with the project and identify any necessary avoidance or mitigation measures	Within the Municipality of Gjoa Haven, on the east side of the community, outside the core community area. There are no natural drainages within 100 metres and no designated wildlife areas, marine protected areas, territorial or national parks, or Inuit Owned Lands in conflict with the proposed power plant location.
Lot A - Proposed Power Plant	Municipal and Industrial Development	Municipal	The proposed lot is within the Municipality of Gjoa Haven and has been designated for industrial land use. A portion of the selected location is currently being used by Canadrill and XYZ Contractor as a storage location for sea cans, construction materials, unmarked drums, and drilling supplies/equipment.	An archaeological impact assessment will be carried out in summer 2021 to determine if archaeological sites are in potential conflict with the project and identify any necessary avoidance or mitigation measures	Within the Municipality of Gjoa Haven, on the east side of the community, outside the core community area. There are no natural drainages within 100 metres and no designated wildlife areas, marine protected areas, territorial or national parks, or Inuit Owned Lands in conflict with the proposed power plant location.

Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Urhuqtuuq	Hamlet Council	Hamlet of Gjoa Haven	2020-07-30
Urhuqtuuq	Hamlet Council - Senior Administrative Officer	Hamlet of Gjoa Haven	2021-01-12
Urhuqtuuq	Land Development, Senior Administrative Officer	Hamlet of Gjoa Haven	2021-05-18

Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

Kitikmeot

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Government of Nunavut, Community Government & Services	Lease agreement for new lot	Active		
Hamlets and Municipalities	Development Permit	Not Yet Applied		
Government of Nunavut, Community Government & Services	Building Permit	Not Yet Applied		
Tingmiliqiyiitkut Kaanatami	Aeronautical Assessment (2021- 344)	Active	2021-06-24	
Hamlets and Municipalities	Land application and lease agreement for new lot - applied 2021-05-18	Active		
Nunavut Imaligiyyit Katimayit	Hydrostatic Test - Type B license for water use and disposal of test water	Not Yet Applied		
Alaanut	NavCanada - Land Use Proposal SubmissionNo Objection Letter received 2021-06-30	Active		
Alaanut	Nunavut Airports Division - Project ReviewNo Objection Letter Received - 2021-06-30	Active		

Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Air	Construction labour and some materials will be transported to the community by air	
Water	Construction equipment and materials will primarily be transported to the community by sea lift	

Project accomodation types

Nunauyuq

Ihuaqutivaluin Atuqtauyukhan

Hanalrutit atuqtaunahuat (ukuallu ikuutat, pampiutainnik, tingmitinik, akhaluutunik, hunaluuniit)

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
Excavator	1		excavation as needed on-site
Backhoe	1		excavation as needed on-site, material collection
Bulldozer	1		material excavation and movement on-site
Grader	1		civil construction, level soil/gravel as needed
compactor machine	1		site compaction as required
articulated truck (dump truck)	1		transport of material to and from site
tower crane	1		lifting materials to height
Bored pile drilling equipment	1		pile construction
Boom Truck	1		lifting construction materials to height
Telehandler	1		carrying/transporting heavy loads
Fork lift	1		carrying/transporting materials
trailer	1		transporting materials to and from site
Concrete mixer	1		mix and pour concrete
Welding Machine	2		welding
Generator	4		Four generators will be installed in the power plant with a generating capacity of 3,100 kilowatts

Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Diesel	fuel	1	0	0	Liters	Fuel will be required during construction for all equipment used on site. Fuel storage and handling during construction will be the responsibility of the contractor. Details regarding the location and volume of fuel storage and location of equipment refueling during construction are not known at this time. The contractor will be required to have a fuel management plan.

Diesel	fuel	2	90000	180000	Liters	Fuel will be used/stored at the power plant to run the generators. Fuel will be stored in above-ground horizontal fuel storage tanks.
solvent	hazardous	4	205	820	Liters	generator maintenance and operation
engine oil	hazardous	16	205	3280	Liters	generator maintenance and operation
propylene glycol	hazardous	1	2000	2000	Liters	power plant operations, heat transfer

Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqittagaani qanuq	Atulirumayain imavaluin utiqittagani humi
0	To be determined by the Contractor.	To be determined by the Contractor.

Iqqakuq

Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyauyuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Municipal and Industrial Development	Ikulalaaqtun iqqakuuvaluin	unknown	Disposal of construction waste will be the responsibility of the contractor. If permitted by the Hamlet, some waste may be disposed of at the local landfill.	unknown
Municipal and Industrial Development	Ikulalaaqtun iqqakuuvaluin	unknown	During operations, QEC will dispose of domestic waste in the local landfill if permitted by the Hamlet. Waste that is not permitted in the local landfill will be shipped south as part of QECs annual waste shipment.	none
Fuel and chemical storage	Hivuuranaqtun iqakuuvaluin	2,460 litres	Amount of liquid waste during operation will vary annually. Waste fuel/glycol will be collected in drums, stored within secondary containment and shipped south for disposal.	none
Municipal and Industrial Development	Ikulalimanngittun iqqakuuvaluin	200 litres	Amount of non- combustible waste generated during operation will vary annually. Material will be stored in quatrex bags or other appropriate containment and shipped south for disposal.	none
Municipal and Industrial Development	Ikulalimanngittun iqqakuuvaluin	unknown	Amount of non- combustible waste generated during construction is not known. Appropriate disposal of all non- combustible waste generated during construction will be the responsibility of the contractor.	none
Municipal and Industrial	Atakuin (halumaiqtun nunan,	unknown	Disposal of overburden and	none

Development	iqqakuuvaluillu uyaqqiqivingmin)		soil/rock excavated for power plant to be determined by the contractor in communication with the Hamlet. Volume to be determined. If possible, some overburden material may be used to build up other areas within the plant site.	
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Avatiliriniqmut Ayurhautingit:

Please refer to the attached Project Description (Table 4). Note: The environmental impact identified for permafrost, sediment and soil quality, air quality, and noise levels should be negative/mitigable for the construction and operation phases of the Municipal and Industrial Development activity. The selection seems to change automatically to negative/non-mitigable every time this page is viewed.

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

Qanurittuq Ittunik Avatinga: Avatingalluanga

Please refer to the attached Project Description.

Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga

Please refer to the attached Project Description.

Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga

Please refer to the attached Project Description.

Miscellaneous Project Information

Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikikliyuumiutinahuarutit

Please refer to the attached Project Description.

Tamatkiumayunik Ihuikgutivaktunik

Please refer to the attached Project Description.

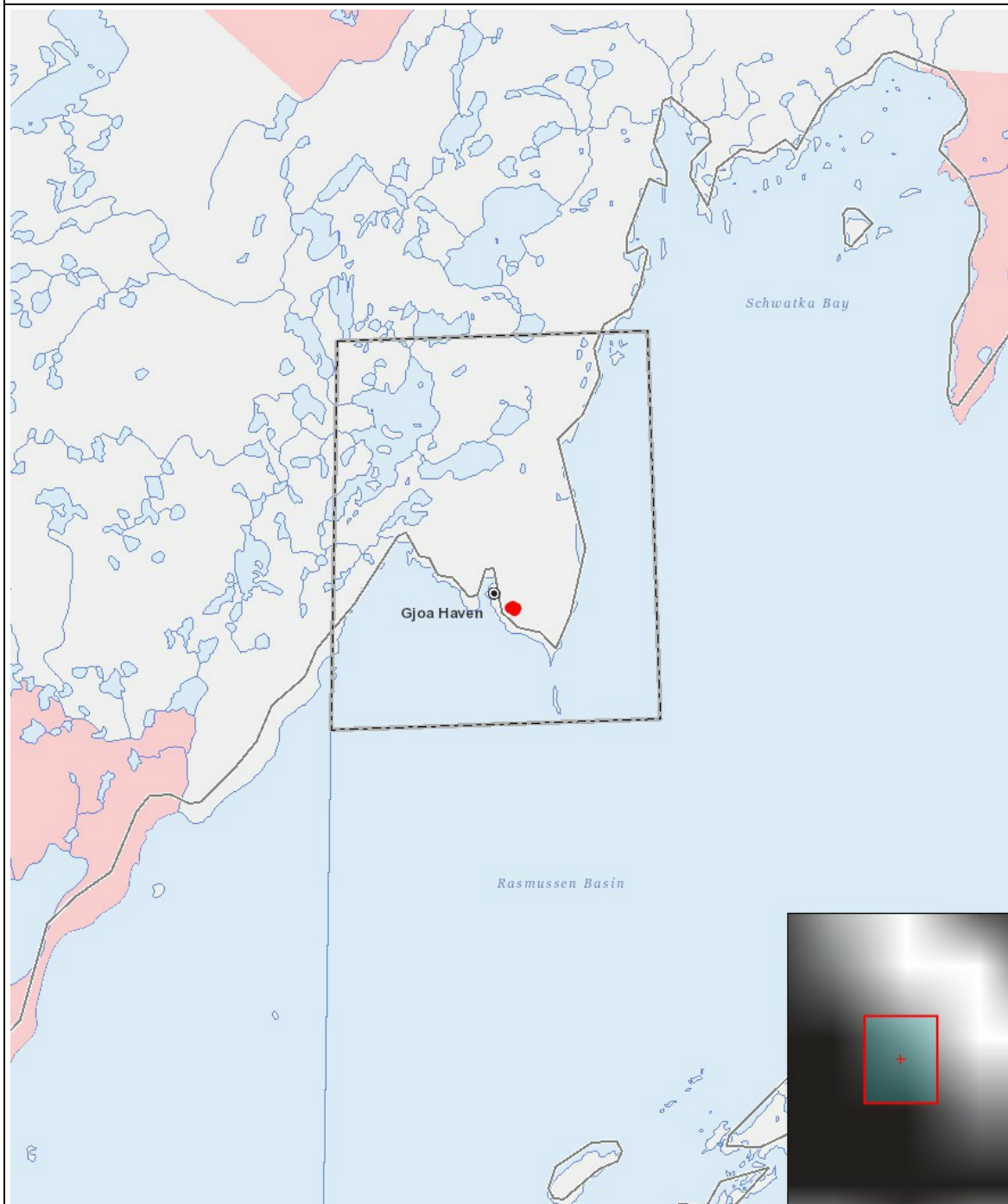
Impacts

Ilitariyauniq Avatiliriniqmut Ayurhautingit

		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
Havakvinga																										
Fuel and chemical storage		-	-	N	-	-	-	-	-	-	N	-	N	N		-	-	-	-	-		U	P	-	P	-
Municipal and Industrial Development		-	-	M	-	-	-	-	-	-	M	-	M	M		-	-	-	-	-		U	P	-	P	-
Aulapkaininnga																										
Fuel and chemical storage		-	-	N	-	-	-	-	-	-	N	-	N	N		-	-	-	-	-		-	-	-	P	-
Municipal and Industrial Development		-	-	M	-	-	-	-	-	-	M	-	M	M		-	-	-	-	-		-	-	-	P	-
Piiqtauniq																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = Nakuuyuq, N = Nakuungittut unalu mikhilimaittuq, M = Nakuungittut unalu mikhittaaqtuq, U = Naluyauyuq)

Havaariyauyukhamut Nayugaa



List of Project Geometries

- | | | |
|---|---------|--|
| 1 | polygon | Lot A - Proposed Power Plant |
| 2 | point | FourCorners-GjoaHaven_Option1_Location |