

Killiniq Environmental Clean-Up Project Phase 1 1995

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Executive Summary

In 1994 an environmental survey was made of the buildings, community infrastructures, materials and debris at the abandoned community site on Killiniq Island. Based on the recommendations contained in this survey, Makivik proposed a three phase clean up project. The initial phase, which concentrates on the elimination, neutralization or removal of hazardous materials was approved for funding by the Department of Indian and Northern Affairs as part of the Action on Waste Program. Work on the site began in July and was completed in late September.

The objectives concerning the hazardous materials were realized. The workers were almost exclusively Inuit who had lived in the community. The Killiniq community boat was used for transportation and, except for safety equipment, all purchases were made in Nunavik. Some equipment and logistical support was provided by the Canadian Coast Guard.

Although much progress has been made toward restoring parts of the site, the overall project is only partly completed.

Background

Killiniq Island is located in the extreme north-east sector of Ungava Bay, at the tip of Labrador and at the southern entrance of the Hudson Strait. The waters around the island are subject to high tides and strong currents. Harsh weather persists during the short summer. The land is hilly and rocky, lacking little vegetation.

In this environment Inuit have lived and prospered for hundreds of years. Killiniq is on the migratory route for a number of bird and marine mammal species. Polar bears, caribou, a variety of seals and whales are all found in the vicinity of the island.

An inlet called Fox Harbor is an excellent safe secure anchorage used by both Inuit and Europeans. It eventually became the site of a permanent community built in the 1960s. A history of Killiniq, provided by Avataq Cultural Institute, is found in Appendix A.

In 1978, government authorities in Ottawa and Yellowknife, decided to close the community. The reasons included difficulty of access, small population, conflicting jurisdictions and administrative efficiency. The Inuit residents and their well-being do not seem to have been considered. The residents of Killiniq were provided with transportation to other communities, mostly in Nunavik and some in Nunavut. Not only were they forced to abandon their homes, but also hunting equipment and personal possessions had to be left behind. They had to relocate to areas far from harvesting zones which for them were familiar and productive.

Those persons in the government responsible for the abandoning of the community did not make adequate provisions to close the community. Quite simply, whereas services were withdrawn and the people relocated, the rest was left. The municipal garage and warehouse were left partly stocked with supplies and equipment. The diesel generators were left along with spare parts and even spare motors. The electrical grid was left standing, including transformers on the poles. Large spools of heavy duty wiring and spare transformers were left in a wooden shed. The Co-op store was left stocked with food. The nursing station was used for storage of cases of oil. The school was left with books and furniture. Houses were left with furnaces, water systems and basic appliances in place. Hundreds of 45 gallon barrels were left, a number of which were full of oil or other petroleum products. Large equipment such as a Muskeg and a bulldozer were abandoned. The large fuel reservoirs with the fuel oil supply for the community were not emptied or secured.

Because this community was built in the 1960s and 1970s, no dikes or other precautions for fuel spills were or are in place for the large fuel reservoirs. The solid waste disposal site was located too close to the shoreline. Although the facilities are abandoned, persons have visited the site, some for a very limited time and others on a seasonal basis. For a number of years the Canadian Coast Guard used some of the buildings and facilities as a communications base. This seasonal occupation ended with the construction of a self-contained non-manned installation. Stoves, refrigerators, freezers and other materials can be found in the buildings used by the CCG during these years.

In the 1980s a fisheries project used some of the houses and the fisheries plant. Materials from this project were also left on the site.

Since the departure of the permanent residents from Killiniq many individuals and groups have visited the site by skidoo, boat, helicopter and float plane. Some have removed materials. A few have vandalized what remains. Even the polar bears have contributed to this destruction. The harsh weather has compounded the deterioration to the buildings and infrastructures.

By the 1990s the site resembled a dump which included materials hazardous to the environment, wildlife and humans.

As a result of an initiative by former Inuit residents of Killiniq and Makivik, an environmental survey of the site was realized in September 1994. This survey was funded by the DINA Action on Waste Program which is part of the Arctic Environmental Strategy. The text of this report is included in Appendix B.

Recommendations from the report are as follows:

- 1.1 **The materials that are or may be hazardous to persons or the environment should be neutralized or disposed of at the site. If this is not possible, they should be shipped to a disposal facility.**
 - 1.1.1 Battery Acid approximately 165 liters
 - 1.1.2 used engine oil approximately 3500 liters
 - 1.1.3 engine oil approximately 1400 liters
 - 1.1.4 oil stored in warehouse approximately 500 liters
 - 1.1.5 oil in nursing station and in cans outside approximately 50 cases and 1100 liters in 5 gallon cans
 - 1.1.6 2 cylinders Freon gas
 - 1.1.7 used 12 volt batteries total approximately 15
 - 1.1.8 Oil in electrical transformers 160 liters
 - 1.1.9 Misc. Paint 360 liters

- 1.2 **The diesel fuel in the two large tanks should be removed and securely stored.**
 - 1.2.1 There is approximately 60,000 liters in the two tanks 29 inches in one and 23 inches in the other. Each tank is 30 feet in diameter. The fuel owned by the Canadian Coast Guard should be transferred to their tanks. Surplus fuel, if any, should be stored for use by Killiniq people.
- 1.3 **The soil in the area of the fuel tanks, garage and generator buildings has been identified as contaminated by oil and grease. However, it should not be disturbed. The soil covering the rocks in these areas is only about 10 inches thick. At any attempt at scraping the contaminated soil would lead to a greater erosion of the surrounding areas. Further toxicological studies might be done to insure a complete evaluation of the potential risk associated to organic compounds in each identified sites.**
- 1.4 **The fuel tanks should be dismantled and removed to a suitable disposal site.**
 - 1.4.1 The two fuel tanks measuring 30 feet in diameter and 22 feet in height should be taken apart and cut in pieces that can be removed.
 - 1.4.2 The two tanks that have been cut down should be dismantled into pieces that can be moved to a disposal site.
 - 1.4.3 The piping system associated with the fuel tanks should be dismantled and removed to a disposable site.
- 1.5 **A disposal site should be established in the area of lot 46. This site should be divided into sections for large metal debris, wood and metal-plastic debris. A small area might be set aside for domestic garbage from the clean up crew, the Coast Guard maintenance crew and visitors to the site. This latter should be burned daily and buried. Where possible the material in the disposal site should be covered.**
- 1.6 **The solid waste disposal site should be permanently closed and remedial measures undertaken.**
 - 1.6.1 Materials should be removed from the area close to the water.

- 1.6.2 The large metal pieces and vehicles should be relocated in the new waste site
- 1.6.3 The remainder should be concentrated in an appropriate area and, if possible, covered.
- 1.7 **The electrical poles and transmission wires should be dismantled and disposed of.**
 - 1.7.1 The electrical poles, numbering approximately 45, and the wiring should be taken down and removed to the disposal site.
 - 1.7.2 The wiring should be disposed in such a way that it poses no danger to wildlife.
- 1.8 **The approximately 600 45 gallon drums should be crushed and removed to the disposal site.**
- 1.9 **The buildings on the site should be dismantled, burned, or stabilized, depending on their condition.**
 - 1.9.1 Some Residential structures (n= 7) and other wooden buildings (n=10) should be demolished or burned. The debris should be removed to the disposal site.
 - 1.9.2 Up to 10 residential units might be stabilized for future use.
 - 1.9.3 The Municipal facilities, that is the warehouse, the garage and the power house, should be emptied as far as possible. Some of the materials such as the generators might be shipped out for recycling. These buildings should be stabilized.
 - 1.9.4 The Nursing Station, containing the oil, should be burned. The debris remaining should be removed to the disposal site.
 - 1.9.5 The Fisheries Processing Building and the Freezer building should be stabilized and cleaned. The wooden structures should be dismantled and or burned and the debris removed.
- 1.10 **The wood and metal debris through out the town site should be collected and removed to the disposal site.**

- 1.10.1 Special consideration should be given to the clean up of the sites of the Co-op building and the School.
- 1.11 Consideration should be given to the transfer of the buildings that are stabilized to the Killiniq Landholding Corporation. They might be utilized in the future for such activities as ecotourism or for shelter for Inuit engaged in harvesting activities. All such structures should be clearly identified in Inuktitut, English and French as to their ownership and use.
- 1.12 Provision should be made for preservation of the cemetery.
- 1.13 A Historic Plaque and a Cairn commemorating the Community of Port Burwell and the People who lived there should be established in collaboration with the responsible agency.
- 1.14 Priority for work on the clean up must be given to the former residents of Killiniq.
- 1.15 The Clean Up Project might be completed in three phases: summer 1995, spring 1996 and summer 1996.

Project Development

Following a review of the survey report, Makivik Corporation in consultation with the Killiniqmuit decided to prepare a project proposal based on the recommendations contained in the survey. Within Makivik, the Department of Renewable Resources under second Vice President Jackie Koneak was designated responsible for the project proposal and realization.

The proposal was drafted in February by Michael Barrett of the Kuujjuaq office, assisted by Bill Doidge and Sandy Suppa of the Kuujjuaq Research Center. Following a review by Department Head, Stas Olpinski and internal approval, the proposal was submitted to the Department of Indian and Northern Affairs for funding consideration under the Action on Waste Program. A copy of the project proposal is attached in Appendix C. In late April the Priorities Committee for Action on Waste recommended funding for the phase one of the proposal, subject to final approval by DINA. Notification of approval by DINA was received in June, following a

consultation with Nunavut Tungavivat Inc. Subsequently, a contribution agreement was signed between DINA and Makivik Corporation in the amount of \$281 000 (see Appendix E). Craig Broome of the Action on Waste Office in Yellowknife, NWT was designated DINA Project Officer.

On May 12, 13 and 14, Sandy Suppa and Michael Barrett met in Kangiqsualujjuaq with the Board of Directors of Killiniq Landholding Corporation and Kenny Assevak, the Killiniq representative on the Makivik Board of Directors. It was explained that the project had been recommended for funding but this was subject to final approval by DINA. Given the short summer season, people felt preparations for the project should be organized as soon as possible. The Discussion included the following points:

- the Killiniqmuit strongly support this project and have discussed the work plan at length;
- the project objectives were discussed, specifically those concerning hazardous waste;
- it was agreed by all that safety on the work site would be an over riding priority;
- there are approximately thirty Killiniqmuit who have already indicated interest in working during the summer on the project. The Board of Directors will screen the applications and make recommendations. This will tentatively include fifteen persons: six manual laborers, 2 equipment operators-welders, two cooks, a coordinator and four alternatives to be employed as funding and work requirements dictate;
- if approved the project would begin the week of July 17 and last approximately six weeks;
- the vessel Aiviq, owned by the Killiniq Landholding Corporation would be made available for charter. It would be used to transport workers, materials, supplies and equipment to the site. It is 45 feet long and is well suited for the waters of the region;
- the charter of the Aiviq would begin July 16 with the routing Kangiqsualujjuaq - Kuujjuaq - Killiniq - Kangiqsualujjuaq - Killiniq - Killiniq;

- workers would be accompanied by their families. At least three smaller boats or canoes would be used in the transportation of the families;
- before leaving Kangiqsualujjuag each employee would have to sign a contract which would set out the terms of employment;
- the workers would be responsible for their own camping equipment, supplies and food. They would be reimbursed based on a fixed daily rate. Some additional supplies would be available in Killiniq;
- an initial list of supplies and equipment was made;
- it was suggested that the D-5 bulldozer might be serviceable. In addition, the CCG might still have a muskeg vehicle in storage at their installations;
- Sammy Unatweenuk would ensure communications and coordination in Kangiqsualujjuag for the project organization.

In preparation for the realization of this project Sandy Suppa was designated as assistant coordinator, Bill Doidge as both technical and professional specialist, Alex Gordon as logistics person, Lucy Tukkiapik administrative support and Michael Barrett as overall project coordinator. In late May and June this group prepared the framework for the organization of the project.

Near the abandoned community, the Canadian Coast Guard operates a communication facility during the shipping season in the eastern Arctic. This site is operated from Iqaluit. Coast Guard personnel are normally only on site during the initial set up (late June) and closure (September) of the station.

In late May, correspondence was sent to the Regional Director of the newly created CCG Northern Region requesting a meeting to discuss the project and possibilities for collaboration. The meeting was arranged by Mr. Len Forrest, the Environmental Coordinator. It was held in Ottawa in June. Items discussed in the course of this meeting included the following:

- the objectives of the project were explained by Makivik and were in principle fully supported by the CCG;

- concern was expressed by CCG regarding the integrity of their installations. A specific concern was safety in the vicinity of the high voltage antennas and cables in some parts of the community site;

- concern was also raised by CCG about possible interference with their communication system if heavy metal objects were located in close proximity to their antennas. Makivik agreed to study alternative disposal sites;

- Makivik requested access to the small garage and the use of the CCG Muskeg vehicle. This was agreed to, subject to some conditions;

- the recommendation to remove the oil from the two large fuel tanks was problematic for the CCG, as they still use these tanks in the resupply of the small tanks located at their installation. This subject will be studied. This issue is being revised by the coast Guard;

- the possibility of some transportation assistance on the CCG vessels was also discussed;

- in order to ensure a close collaboration and coordination, it was suggested that a joint CCG and Makivik group visit the site during the last week in June. This was later agreed to.

The visit to the CCG installations was organized for the week of June 25th. Transportation was by CCG helicopter, which was in Kuujjuaq supporting two CCG technicians preparing the communications equipment. Included in the visit was Coleen Wallford, an environmental student with CCG and a specialist with Environment Canada, Bill Doidge and Michael Barrett of Makivik. CCG technicians were already on site.

The group confirmed the results of the 1994 survey, paying particular attention to the location of the hazardous materials. Field analysis was made of the soil in the area of some of the transformers. The antennas and buried ground cables were identified and marked. An alternative site for the solid waste disposal site was surveyed. The overall project work plan was reviewed.

The CCG Muskeg was examined and found in excellent condition. The vehicle is equipped with a winch and this later proved very useful.

The D-5 bulldozer was re-examined. Allan York, a mechanic from Kuujjuaq later returned with Bill Doidge and concluded that with some basic repairs the bulldozer would be serviceable.

On the outstanding question of the fuel in the large tanks, the CCG requested that this be excluded from the project. They will be responsible for the review of the status and a resolution of the situation in 1997.

The Regional Director of the Department of Public Works and Services, Government of the North West Territories in Iqaluit was contacted for the environmental and government modalities as concerns the project. As a result of this, contact was established with Don Helfrick, a Hazardous Waste Specialist in the Department of Renewable Resources in Yellowknife. During the course of the project he provided assistance specifically with respect to the removal of the electrical transformers.

Following the signing of the contribution agreement, the first two weeks in July were spent confirming the equipment orders, rentals, food, charter contracts, employment contracts and final arrangements.

Project Summary

The Aiviq departed Kuujjuaq on July 17 and arrived in Killiniq on July 19, and departed for Kangiqsualujjuaq July 21. The first work phase continued until August 15 when the Aiviq and the other boats departed Killiniq for Kangiqsualujjuaq. During the first week nine persons worked on the site. With the return of the Aiviq from Kangiqsualujjuaq with the other workers, the number of persons working on the site increased to fifteen. Later, four additional workers, were engaged for a two week period. Including families, the population of Killiniq reached 38 during this period.

A second work phase was undertaken in September. The Aiviq departed Kangiqsualujjuaq September 12 and returned to Kuujjuaq on September 23. Seven persons were engaged on this work phase.

The persons employed at Killiniq during this project were:

Paul Toomas
Tommy Unatweenuk
Kenny Assevak
Matthew Assevak
Bobby Unatweenuk
Johnny Angnatuk
Kitty Angnatuk
Edward Angnatuk
Sammy Unatweenuk
Bobby Assevak
Matthew Unatweenuk
Peter Saluarsiaq
Martha Unatweenuk
David Assevak
Bobby Thomassiah
Tommy Angnatuk
Ned Unatweenuk
Theresa Toomas
Elijah Elijahpik
Sandy Clunas
Sandy Suppa
Bill Doidge
Michael Barrett

With the exception of the last five persons, all other employees are Killiniqmiut and residents of Kangirsualujjuaq. With the exception of the last two persons on the list, all are Inuit beneficiaries of the James Bay and Northern Quebec Agreement.

The first priority was to stabilize several of the buildings to provide accommodation for the persons working on the project. All buildings were full of debris most windows were broken. Once cleaned out, it was possible to occupy them, however no electricity or other conveniences were installed. It will be possible to use some of the buildings in the future as temporary shelters.

A new solid waste disposal site was established, after a consultation with the Killiniqmiut. This site is located far from any water and outside the zone in which visitors and harvesters might be active, and is distant from the CCG installations.

Within the new dump sections were set aside for 45 gallon drums, propane cylinders and other containers. Some of the wood, insulation, petroleum products and other materials were

incinerated. Some wood was located in another section of the dump. A section was set aside for electrical wiring. Domestic garbage from the project, CCG and future visitors to Killiniq was and can be incinerated in the central section of the dump.

Most materials were loaded by hand onto a farm wagon, then hauled by the muskeg or on a tracked wagon hauled by the bulldozer. Roads within the town site had deteriorated and access to the dump was, at the best of times, very rough.

The electrical grid was dismantled. The electrical wire was cut into thirty foot sections and made into bundles that could be transported to a section of the dump. There, they were stretched out straight on the ground in a state that should not pose a danger to wildlife. The large spools of electrical wire were transported to another section of the dump. The electrical poles, with the exception of two near the fisheries plant and two others supporting CCG antennas, were dragged to a location near the Co-op site.

Using an ATV with a trailer, the 45 gallon barrels were collected and transported to the dump. There was a large concentration near the Shell building, but drums were found from one end of the community site to the other. All other drums were collected with the exception of approximately forty located in the old dump site. Drums were rusted and in various states of deterioration. Some contained residues and others, found in isolated locations and not identified in the original survey, contained fuel oil.

The fish plant and the area of the wharf were cleared of debris. Because of the distance to the dump the wood and combustible materials were burned near the plant. The metal was transported to the dump with the bulldozer and tracked trailer as the hill is too steep for the muskeg with the wagon.

The area of the cemetery was cleaned. The graves and markers were not disturbed as was the wish of the Killiniqmuit.

The skidoo shop and an adjacent shed were demolished and removed. Some of the wood was burned at the site due to the distance from the dump. The other materials, including wood, insulation and metal were transported to the dump. Only a few large cement floor sections remain on site.

The building used as a residence for the fisheries project was cleared of debris. This building is in very poor condition. The housing structure of the partly demolished trailer was removed. The metal walls and other debris were transported to the dump. Approximately thirty propane bottles from this site were transported to the container section of the dump.

Seven buildings were used for accommodation during the project. These include two in the lower town, four uphill from the generator plant and garage, and one which had formed part of the nursing station. These buildings were cleaned of all debris. Some of the broken windows were replaced by plexiglass. They were boarded up when the workers departed. These buildings are all in a state of deterioration but may be used by Inuit hunters for a few years. The areas around these building were also cleared of debris. Another building on the hill along the road to the CCG installations was cleaned of debris. However, this building is in poor condition.

The drums of oil found next to the electrical shed were transported to the dump and the contents incinerated. Their contents were primarily used 20W engine oil. Six of the barrels of 20W engine oil had not been opened or used but upon examination were found to be contaminated by rust and water.

The wooden electrical shed was cleaned out. The spools of heavy electrical wiring were removed to the dump. The three transformers were marshaled with the other transformers from the electrical grid.

The generator building was cleared of debris, old spare parts and three drums of engine oil. These were transported to the dump. The generator units along with shelving were left in the building.

The garage was cleared of old spare parts and debris with the exception of the hardened cement on pallets. One of the main doors was in damaged condition and was removed.

The municipal warehouse contained a large quantity of materials. Over the years the electrical, plumbing and maintenance materials that were usable had been removed. What was left of these materials was transported to the solid waste disposal site. The paint, stains, grease, lubricating

and transmission oil were incinerated at the dump site. Materials remaining from CCG use of the warehouse, such as old paper products, were burned at the dump. The large quantity of battery acid and acid for rust removal were packed in a sizable plastic water tank and transported to Kuujjuag.

There still remain materials such as the generators in crates and shelving in the warehouse. None of these materials can be considered hazardous nor are they likely to deteriorate into debris in the short term.

The municipal warehouse, garage and powerhouse where the generators are located are metal buildings with cement floors. They are open to the elements but are structurally sound.

One building that formed part of the nursing station was stabilized. It was used to accommodate a family and can be used in the future. The building in which the engine and skidoo oil was stored was fully cleaned out. Seven hundred quart containers of engine, outboard or skidoo oil, full or partly full, were removed from this building. They were transported to the dump and incinerated. The containers and the interior of the building had been badly vandalized by polar bears. The building is structurally sound but open to the elements. The outside walls are metal on a trailer frame.

The third building in the nursing area had no roof. The walls were removed and the structure cleaned to the floor. The base is a large trailer unit and proved too heavy to move. The metal walls and the debris were transported to the dump.

The area of the nursing station contained considerable debris including a quantity of ten gallon oil cans. These materials were collected and transported to the solid waste disposal site and incinerated.

The housing unit next to the nursing station, the Shell building and the adjacent housing unit were disassembled and removed to the solid waste disposal site. All debris in the area was collected and similarly transported to the dump.

The areas along the roads from the nursing station to the fisheries plant and the road to the CCG installations were cleared of debris.

Some of the fuel tanks, furnaces and other debris in the adjacent areas were transported to the dump site.

This work was undertaken during the July-August work period. The work proceeded well although hampered at times by the weather. The lack of a oxygen connector rendered the welding equipment unserviceable and this proved a difficulty.

No aircraft charter was required and, with the exception of small packages received on the CCG helicopter visits, no resupply missions were needed. Only one minor work-related accident occurred and one non-work related injury was recorded. Neither were of a serious nature and assistance was rendered in each case by the nurse on the CCG vessel Des Grossières, which happened to be anchored offshore at the time.

Rather than leave some people at the site without transportation, all persons departed in mid-August on the Aiviq and the smaller boats. The Aiviq would return later with a smaller group to pack the transformers and transport the equipment and materials. Departure from Killiniq on the Aiviq was on August 15 with arrival of the Aiviq in Kangirsualujjuaq early the next morning.

Following the return from the first work phase at Killiniq, trilingual signs were designed and ordered. The missing parts of the welding equipment were replaced and some supplies were purchased for the September trip.

Following discussions with the specialists in the GNWT Department of Renewable Resources, a second analysis of the liquid in the electrical transformers was made for the level of PCB contamination. The results indicated that the level of PCB was within acceptable limits for transportation.

Tentative arrangements were made to transport the electrical transformers and the transformer oil on the CCGS Radisson. Arrangements were made with the company Sani Mobile to dispose of these materials when delivered by the Radisson at the Port of Quebec City.

On September 12, the Aiviq left Kangirsualujjuaq for Killiniq. The seven persons on board were Tommy Unatweenuk, Sammy Unatweenuk, Bobby Assevak, Pauloosie Toomsie, Elijah Elijahpik, Sandy Suppa and Michael Barrett. High winds and rough water especially in the area of McLelan Strait, turned what should have been a one day trip into a five day passage.

Arriving at Killiniq, it was discovered that thieves had broken into the CCG garage where equipment and supplies for the project had been stored. Ignoring food and other supplies, the thieves systematically stole the tools and easily transportable equipment. This incident was later reported to the RCMP in Iqaluit but so far no progress has been made in finding the responsible persons. The replacement cost of equipment stolen was \$8,243.

Critical to the project was the cylinder of oxygen, which was stolen. Without the oxygen, the welding equipment could not be used to cut and re-seal the barrels. One of the objectives of this trip was to pack the transformers into barrels for transportation by the CCG vessel. This was now impossible. After considering the alternatives, it was decided to transport the electrical transformers and oil to Kuujjuag on the Aiviq so that the objective of removing them from the site would be achieved. From Kuujjuag they could be shipped on sealift to Montreal for recycling and disposal.

Using a freighter canoe for transportation between shore and the Aiviq, the thirteen transformers and two drums of oil were loaded. The transformers weighed up to 670 lbs each. The remaining equipment and materials, including one ATV, propane and acetylene cylinders, food and camping equipment were also loaded. The containers of battery acid and rust remover were carefully packed in a large heavy duty plastic water tank in the hold.

One building had been kept open for our accommodation. This had been vandalized during our absence. Repairs were made and this building was boarded up just prior to departure.

Fourteen trilingual wooden signs with laminated surfaces were posted throughout the site. These signs request visitors to help respect the environment. Information sheets were left in most buildings informing visitors of the clean up project.

Final loads were taken to the dump. The Muskeg was returned to the CCG garage and the bulldozer was parked behind it for the winter.

The fully loaded Aiviq left Killiniq on September 19. With good weather conditions, it arrived 18 hours later at Kangirsualujjuag. After resting one tide, the Aiviq left the mouth of the George River with light winds and good weather.

About five hours later the winds increased to 60 kph and the Aiviq had to ride out very rough water for seven hours until a sheltered area could be reached. During this time the freighter canoe and motor which were being towed, as there was no space on board, broke away and were lost. The high winds kept up for three days.

On September 23, the Aiviq left the sheltered anchorage at Kawa Bay and with light winds made for Kuujjuaq. Within four hours the winds again picked up in the range 40 to 60 kph. After some very rough water the Aiviq made the entrance to the Kuujjuaq River just before dark. The trip from Kangirsualujjuaq should have taken just over fourteen hours.

The equipment and materials were off-loaded. The electrical transformers and the transformer oil were securely stored for next summer's sealift. Quotations for the transportation and disposal of the electrical transformers were received and have been forwarded to the GNWT for consideration.

The Aiviq returned to Kangirsualujjuaq under adverse weather conditions. However, it did arrive safely and shortly after was pulled ashore for the winter.

The Killiniq project drew considerable interest in Nunavik and Nunavuut. Three interviews in Inuktitut were broadcast on the CBC show Tuttavik. An interview and an item on the regional news were broadcast in English on the CBC radio from Iqaluit. One long interview was broadcast in French on the Service du Nord Radio Canada. A video of the survey and a second of the project were prepared by TNI and will be broadcast on TVNC. Articles on this project were published in the Makivik News, distributed to all homes in Nunavik.

Results and Recommendations

With respect to the recommendations of the 1994 survey the following measures have been achieved or partly resolved.

- 1.1 The materials listed that are or may be hazardous to persons or the environment were neutralized or disposed of at the site. In the case of the electrical transformers and acid, they were removed from the site.
- 1.2 In this recommendation, concerning the removal or safe storage of the diesel fuel, no action was undertaken. This matter is being studied by the CCG.
- 1.3 The soil discussed was not disturbed.
- 1.4 The fuel tanks were left intact, as per the CCG's request.
- 1.5 A new disposal site was established. After due consideration, however, it was not located in lot 46 but near lot 23 so that interference with CCG communications would not be an issue.
- 1.6 No material was taken to the old solid waste disposal site. The remedial measures for this site should be undertaken in the next phase of the project.
- 1.7 This recommendation, concerning the electrical lines and poles, was fully implemented.
- 1.8 Over 600 45 gallon barrels were collected and stored in the solid waste disposal site. Approximately 40 barrels remain in the old solid waste disposal site.
- 1.9 The Fish Plant was cleared of debris. The Nursing Station was cleared of debris, one of the buildings was stabilized, one left intact and a third one demolished. With respect to the Municipal facilities, the power house, garage and warehouse were cleared of debris, as described in the project summary. Six residential units were partly stabilized, three were demolished and removed, two were cleared of debris. The remaining buildings were not cleaned during this phase of the project.
- 1.10 Although considerable debris was collected and removed to the disposal site, a number of sites still remain to be cleared.

- 1.11 The transfer of buildings was outside the scope of this project.
- 1.12 The area around the cemetery was cleared of debris.
- 1.13 The establishment of a Historic Cairn was outside the scope of this project.
- 1.14 Priority for work on the clean-up was given to the former residents of Killiniq. Of the 23 people involved, 18 were Killiniqmiut.
- 1.15 There remains significant environmental and remedial measures to be undertaken at the site.

The table on the following page have been updated with a column describing the 1995 measures and results.

ITEM	STRUCTURE OR SITE	MATERIAL	LOCATION	REMEDIAL MEASURE	HAZARD PRIORITY	CONTENT	1995 MEASURES
1.1	Fisheries plant	Metal	Lot 64	Stabilize	Debris	Salt and equipment	Cleared of debris
1.2	Dock	Wood	Lot 64	Stabilize			Cleared of debris
1.3	Freezer	Metal	Lot 64	Stabilize	Hazard	Freon	Cleared of debris, freon removed
1.4	Gen. Shed	Metal	Lot 64	Demolish	Debris		Cleared of debris
1.5	Storage	Wood	Lot 64	Demolish	Unstable	Nets	Cleared of debris
1.6	Storage	Wood	Lot 64	Demolish	Debris	Debris	Cleared of debris
2.1	Tank	Metal	lot 60	Demolish	Hazard	Fuel	No action-CCG
2.2	Tank	Metal	Lot 60	Demolish	Hazard	Fuel	No action-CCG
3.1	Trailer	Metal	Lot 66	Demolish	Unstable	Muskeg	Demolished, muskeg relocated
4	Houses lower section	wood	Lot 53	Stabilize	Debris	Debris	Cleared debris and partly stabilized
5	Power House	Metal	Lot 31	Stabilize	Hazard	Oil	Cleared of debris and oil
5.1	Shed	Wood	Lot 31	Demolish	Hazard	Transformers	Cleared
6	Garage	Metal	Lot 30	Stabilize	Hazard		Cleared
7	Warehouse	Metal	Lot 24	Stabilize	Hazard	Chemical	Cleared of debris
8	House	Wood	Lot 29	Stabilize	Debris	Appliances	Cleared of debris
9	House	Wood	Lot 28	Stabilize	Debris	Appliances	Cleared of debris
10	House	Wood	Lot 26	Stabilize	Debris	Appliances	Cleared of debris
11	House	Wood	Lot 25	Stabilize	Debris	Appliances	Cleared of debris
12.1	Nursing Building	Metal	No lot	Demolish		Oil	Oil removed
12.2	Nursing Trailer	Metal	No lot	Demolish	Debris		Demolished to floor
12.3	House	Wood	No lot	Stabilize	Unstable		Cleaned, partly stabilized
13	Church	Wood	Lot 23	Demolish			No action
14	House	Wood	Lot 19	Demolish			No action
15	House	Wood	Lot 20	Demolish	Debris	Debris	No action
16	School	Rubble	Lot 17	Demolish	Debris	Furnace	No action
17	Recreation Hall	Wood	Lot 8	Demolish	Debris		No action
18	House	Wood	Lot 27	Demolish	Debris		No action
19	Site Co-op Warehouse	Rubble	Lot 6	Clear			No action
20	Site Co-op	Rubble	Lot 6	Clear			No action
21	Site 2nd Co-op warehouse	Rubble	Lot 4	Clear			No action
22	Site old Garbage dump	Material	no lot	Close			No action
23	House	Wood	Lot 27	Demolish	Debris		Cleared of debris
24	Powerline	Poles	No lot	Dismantle	Hazard	Poles, transformers	Dismantled
25	Barrels	Metal	all	Collect		600+ batteries	Collect
26	Ski-doo shop	Wood	Lot 59	Demolish	Unstable		Demolished and cleared
27	House	Wood	Lot 15	Demolish	Unstable		Demolished
28	Shell	Wood	Lot 14	Demolish	Unstable		Demolished and cleared
29	House	Wood	Lot 10	Demolish	Unstable		Demolished and cleared
30	Solid waste disposal		No lot	Established			Established

Conclusion

When a promoter or agency in either Nunavik or Nunavut decides to permanently close a facility, they must follow basic environmental norms. The first priority is to ensure that no conditions are left that may pose a hazard to humans, wildlife or the environment. Normally this includes removal of all buildings, infrastructures, equipment and materials. Remedial and mitigating measures should be undertaken to restore the site, as far as possible, to its original state.

In the case of a site in a sensitive ecological zone, such as Killiniq, these environmental measures should be quite stringent.

The task at Killiniq is the dismantling of the infrastructure of an entire community. Unlike older community sites, the government agencies imported materials into Killiniq that were designed to last a long time.

Phase 1 the 1995 Killiniq Environmental Clean Up had as its primary objective the elimination, neutralization or removal of materials hazardous to the environment. Materials such as acid, batteries, paint, freon, oil and petroleum products are no longer a hazard at the site. The large quantity of diesel fuel in storage tanks was excluded at the request of the Canadian Coast Guard who are studying a solution to this problem.

Conditions that have proven hazardous to wildlife, such as fallen electrical transmission lines in which caribou have been entangled lines, were eliminated. Work was begun in other areas where walls and roofs were falling down.

Visitors to the site have remarked that conditions at Killiniq have visibly changed. The site appears more open. It is evident that a beginning has been made to returning the site to a semblance of order.

Killiniq will continue to be used as a camping site by Inuit Harvesters and by visitors at anchorage in the harbor. With the increasing development of eco-tourism and given the distinct ecology in the area this site could become a more frequent stop for tourists.

One side benefit of this project has been the increase in awareness of the need for groups and individuals to help respect the environment. A large portion of the success of this project can be attributed to the Killiniqmiut, who as a group decided to initiate restoration of the site. The work on the clean up project and the objectives were well diffused through the regional media. This has resulted in discussions concerning a number of other community initiatives.

The clean-up project needs to be continued for another season. With the experience gained this summer by Killiniqmiut and Makivik it may be possible to eliminate Phase 2 and proceed to the Phase 3 of the original project proposal. Work could begin on sites such as the Co-op, school and the houses near the church.

A. History of Killiniq

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Glimpses of a Fading Past

HISTORICAL PHOTOGRAPHS AND TEXTS

1. KILLINIQ

Fragments d'un passé fugace

RECUEIL DE TEXTES ET DE PHOTOGRAPHIES HISTORIQUES

1. KILLINIQ

INSTITUT CULTUREL AVATAQ INC.



AVATAQ CULTURAL INSTITUTE INC.

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PUBLICATION DU CENTRE DE DOCUMENTATION SUR L'HISTOIRE INUIT NO. 2

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PUBLICATION OF THE DOCUMENTATION CENTER ON INUIT HISTORY NO. 2

INTRODUCTION

We are pleased to present the second publication of the Avataq Cultural Institute Documentation Center on Inuit History. This booklet is the first of a series that will cover all the communities of Nunavik (Northern Québec), series to be produced over the next few years.

The present publication does not pretend to be an exhaustive textbook on the history of Killiniq. It is a collection of texts and photographs from several sources; however, it provides historical information which should be useful to the northern schools and population in general. The purpose sought here was to combine historical facts (the chronology) with the Inuit point of view (the interviews), as well as the silent objectivity of the photographs.

The chronology was compiled from a number of documents (quoted in the bibliography). Original sources have been consulted to extract the first accounts of explorers mentioning the village. The selection of photographs has been made from the best available in the collection, which comprises a fair number of documents for Killiniq, as the region has been on the itinerary of northbound ships for several centuries. Finally, the excerpts of interviews with Inuit give a point of view that has been rarely taken into account, if heard, as has been sadly demonstrated by the relocation of the Killiniqmiut in 1978.

We hope that this publication will please our readers and help in some way to preserve the past of the Nunavik Inuit.

Avataq Cultural Institute's Documentation Center on the History of the Nunavik Inuit.

Established in 1984, the Center is comprised of three main sections:

- 1) Oral History. Collection of interviews with Inuit Elders from every Nunavik community. This collection covers a diversity of historical and cultural topics.
- 2) Historical Photographs. A collection of over 4,000 photos taken in Nunavik from 1860 to the present.
- 3) Archives and publications. A collection of reproductions of original documents (explorers reports and northern administration correspondence) as well as more recent publications such as narratives, articles, thesis and bibliographies.

ACKNOWLEDGEMENTS

Special thanks to the members of Makivik Research Department who took the time to read and criticize the manuscript.

INTRODUCTION

NOUS SOMMES heureux de présenter la deuxième publication du Centre de documentation sur l'histoire inuit de l'Institut culturel Avataq. Cette brochure est la première d'une série qui traitera de toutes les collectivités du Nunavik (Nouveau-Québec), et sera produite au cours des prochaines années.

La présente publication ne prétend pas être un manuel exhaustif sur l'histoire de Killiniq. Elle est plutôt une collection de textes et de photographies provenant de plusieurs sources; elle apporte néanmoins des renseignements historiques qui devraient intéresser les écoles et la population nordiques. Le but visé ici était d'unir les faits historiques (par la chronologie) au point de vue des Inuit (par les extraits d'interviews), ainsi qu'à l'objectivité silencieuses des images.

La chronologie a été compilée à partir de nombreux documents (cités dans la bibliographie). Des sources originales ont été consultées afin d'en extraire les premières mentions du village par des explorateurs. Les photographies ont été choisies parmi les meilleures de la collection, qui compte un nombre respectable de documents pris à Killiniq, car cette région a été sur l'itinéraire des navires visitant le nord depuis plusieurs siècles. Enfin, les extraits d'entrevues avec des Inuit font connaître un point de vue rarement pris en considération, comme l'a tristement prouvé le relogement des Killiniqmiut en 1978.

Nous espérons que cette publication plaira aux lecteurs et aidera de quelque manière à préserver le passé des Inuit du Nunavik.

Le Centre de documentation sur l'histoire des Inuit du Nunavik de l'Institut culturel Avataq

Établi en 1984, le Centre est divisé en trois grandes sections:

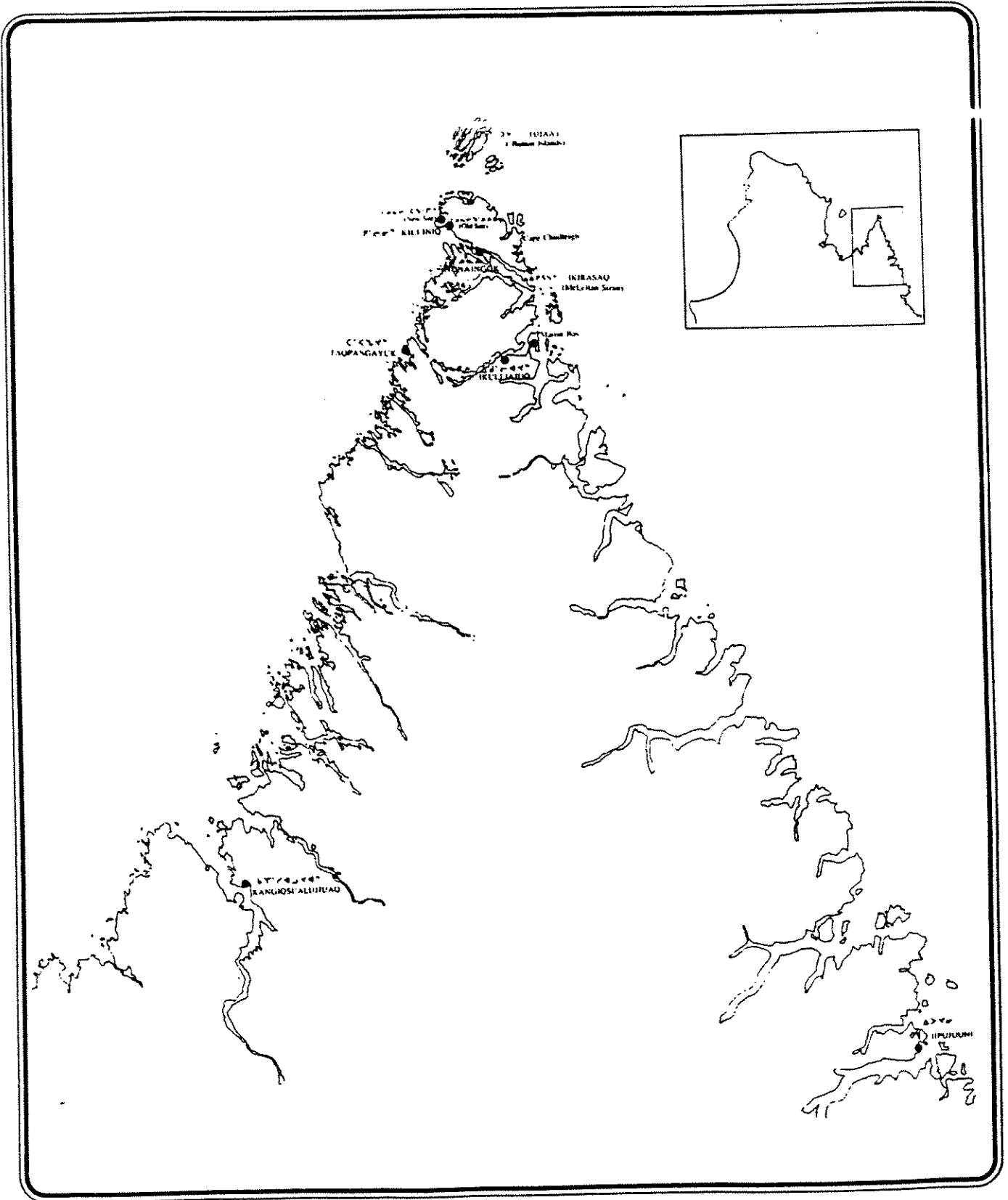
- 1) La section d'histoire orale, une collection d'entrevues avec des Anciens Inuit de toutes les collectivités du Nunavik, porte sur une multiplicité de sujets historiques et culturels;
- 2) La collection de photographies historiques réunit plus de 4,000 clichés photographiés au Nunavik de 1860 à nos jours;
- 3) La section des archives et publications regroupe des documents originaux (rapports d'explorateurs et correspondance d'administrateurs) ainsi que des publications plus récentes (récits, articles, thèses, bibliographies).

REMERCIEMENTS

Merci aux membres du Service de la Recherche de la Société Makivik qui ont pris le temps de lire et de commenter le manuscrit.

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MAP OF THE REGION
CARTE DE LA RÉGION



ᖃᓪᓂᓐ ᑭᓪᓂᓂᓪᓴᓪᓴ
 WHEN THE QALLUNAT CAME TO KILLINIQ
 L'ARRIVÉE DES QALLUNAT À KILLINIQ

ᑭᓪᓂᓂᓪᓴᓪᓴ ᓐᓴᓪᓴᓪᓴ

«ᐱᐅᑭᑭᑭ 5-ᑭ (1884). ᑭᓪᓂᓂᓪᓴᓪᓴ ᓐᓴᓪᓴᓪᓴ Cape Chudleigh-ᐅᓪᓴ ᑭᓪᓂᓂᓪᓴᓪᓴ ᖃᐅᐱᓪᓴᓪᓴ ᑭᓪᓂᓂᓪᓴᓪᓴ ᓴᐅᓂᓪᓴ ᓐᓴᓪᓴᓪᓴᓪᓴ ᑭᓪᓂᓂᓪᓴᓪᓴ ᐅᓪᓴᓪᓴᓪᓴ ᓴᐅᓂᓪᓴ. ᐱᐅᓂᓂᓪᓴᓪᓴ ᐅᑭᐱᓪᓴᓪᓴ ᓴᓴᖃᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ. ᐅᑭᐱᓪᓴᓪᓴ ᑭᓪᓂᓂᓪᓴᓪᓴ 8-ᓂ 10-ᓂ ᓐᓴᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ ᐅᓪᓴᓪᓴᓪᓴ ᐅᓂᐱᓪᓴ ᐅᓂᓪᓴᓪᓴ ᐱᓂᓂᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ. ᖃᐅᐱᓪᓴᓪᓴ ᓴᑭᓴᓂᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ. ᐱᑭᖃᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ ᓴᐅᓂᓪᓴᓪᓴ Mr. Burwell, ᐱᓂᓂᓪᓴᓪᓴ. ᐱᐅᑭᑭᑭ 8-ᑭ. »
 R.F. STUPART, 1886, p. 98-99



1884

ᑭᓪᓂᓂᓪᓴᓪᓴ, R. Bell

The establishment of a meteorological observation station

L'établissement d'une station météorologique

«On August 5th [1884], we anchored in a little harbour just inside Cape Chudleigh, the Commander of the expedition having determined to here establish an observing station. Codfish were so abundant at this place that we actually, in a very short time, were tired hauling them into the boat. There was an Eskimo family living at a distance of 8 or 10 miles from where the ship was anchored, but I did not see them. We left the harbour, called Port Burwell after Mr. Burwell, the officer in charge, on August 8th.» R.F. STUPART, 1886, p. 98-99

«Le 5 août [1884], nous avons jeté l'ancre dans un petit port près du cap Chudleigh, car le commandant de l'expédition avait décidé d'y établir la station d'observation. La morue était tellement abondante à cet endroit qu'en très peu de temps nous étions épuisés à force de remonter les filets. Une famille inuit vivait à environ 8 ou 10 miles de là, mais je ne les vis pas. Nous avons quitté ce port (appelé Port Burwell pour honorer M. Burwell, l'officier responsable de la station) le 8 août.» R.F. STUPART, 1886, p. 98-99

- officers in post were Sergeant J.E.F. Wight and Constable K.C. Butler. At that time, 4 or 5 families resided at Killiniq, but about 150 lived in the region and came to the post to trade.
- 1923 The Moravians closed their trading post and sold the buildings to the HBC.
- 1926 The RCMP built new buildings. There was a lot of sickness and death among the Inuit that year.
- 1927 The Canadian Raider, a ship transporting coal to the communities, wintered in Killiniq.
- 1927-28 Killiniq was used as one of the bases for the Hudson Strait Expedition, the objective of which was to observe the ice patterns of the Strait from the air.
- 1929 A plane was wrecked near Killiniq. Nobody was hurt but the icefloe to which the plane was attached got carried away into Ungava Bay.
- 1936 The RCMP detachment was transferred to Inukjuak.
- 1939 The HBC post closed down. Until 1952, the Inuit were to trade in Kangiqsualujjuaq, after which year the latter closed too. Until 1959, the nearest trading store was in Kuujjuaq. During this period, five families resided in Killiniq: the families of Noah Angnatuk, Willie Angnatuk, Mark Annahatuk, Matthew Assevik and Henry Angnatuk.
- 1942 The HBC warehouse at Killiniq was demolished and rebuilt at Kangirsuk.
- 1943 A German submarine was occasionally sighted around Killiniq. The Germans had established a weather station in Labrador, at Ikulliajuq (Martin Bay). The captain of that submarine is said to have been friendly to the Inuit and to even have saved some people from starvation.
- 1947-50 Fisheries Research Board of Canada oceanographic studies were conducted in Ungava Bay, including Killiniq.
- 1951-52 An experimental fishing project was carried out by the Department of Northern Affairs to provide cod as food to the Inuit. Cod was not a traditional species.
- 1955 The RCMP reported that only two or three families lived at Killiniq.
- 1957-58 A study of economic development was carried out in Ungava Bay by the Department of Indian and Northern Development.
- 1959 The Killiniq co-op, Kikitayok, opened, and a freezer for the fish was built. The first manager was Mathew Assevik.
- 1960 Population: around 20 to 30 people.
- 1964 The population was approximately 95 people. A small classroom was built and a full time teacher hired.
- 1965 The community moved to a better site 2 miles west of the old site, at Fox Harbour. In November, a hurricane caused damage in the community.
- 1971 A report of the Institute of Social and Economic Research of Memorial University gave this image of the community: «On Killiniq Island, the 150 Inuit of Port Burwell (27 families) enjoy flourishing seal, cod and char fisheries, eiderdown collection and handicraft industries based on local products. The co-op around which the community focuses (and to which all 84 adults belong) paid off its loans long ago, and by 1970, was renowned for its financial success, almost unequalled among Arctic settlements... No able-bodied hunter in Port Burwell had received welfare before 1968.»
- 1977 Population was less than 50 people.
- 1978 The local economy dropped and the population had problems with alcohol and sickness, maybe due to the lack of social and health services. On February 8, by federal decree, the remaining inhabitants of Killiniq were moved out without warning to other Nunavik communities.
- 1977-85 Relocation studies for the scattered Killiniq population were carried out by the Makivik Research Department. The site of Taq pangayuk, 40 km south of the old site of Killiniq was chosen as a possible location of the new community. Negotiations with the Federal Government were undertaken

for the proposed Taq pangayuk relocation. From 1983 to 1985, the Killiniq Fisheries Project is led by Makivik Research Department to study the marine resources of the area and their commercial potential.

1987 In the winter of that year, 45 to 50 Killiniq former inhabitants moved to the site of Taq pangayuk, without the help of the government, and without services or commodities.

CHRONOLOGIE

1569 Selon la carte de Mercator établie cette année-là, il semble que les marins européens connaissent déjà la région de Killiniq à l'époque.

1587 Expédition de John Davis qui visite les environs de Killiniq.

1602 George Weymouth visite la région.

1773 Selon un estimé fait par Jens Haven, missionnaire et explorateur morave, la population de Killiniq est d'environ 100 personnes, vivant dans cinq maisons d'hiver (qu'il appelle illuqsuaq), ces maisons pouvant abriter 20 personnes chacune.

1811 Les frères moraves Kohlmeister et Kmoch traversent «un petit village à l'extrémité ouest du détroit de McLellan», mais ne s'y arrêtent pas.

1884 Une station météorologique est installée par les membres d'une expédition météorologique gouvernementale.

1886 Fermeture de la station météorologique.

1898 Job Brothers, une compagnie de Terre-Neuve, exploite une station de pêcheries jusqu'en 1904. À l'époque, la population est de 80 personnes. Ouverture d'une autre station météorologique.

1900 Le révérend Steward fonde une mission anglicane.

1904 Les missionnaires moraves achètent la Job Brothers et construisent une mission ainsi

qu'un poste de traite à Killiniq. La traite est surtout orientée vers la production du phoque (peau et graisse) ainsi que de l'omble arctique. Les frères enseignent aussi aux enfants, en inuktitut. De nombreux Inuit savent déjà lire et écrire le syllabique. Les Moraves remplacent ce système par l'orthographe romaine.

1916 En août, les traiteurs de la Compagnie de la Baie d'Hudson transportent les provisions du poste de la rivière George qui est en piètre état, jusqu'à Killiniq, et jettent les fondations du premier édifice de la CBH. Le poste fera concurrence aux Moraves jusqu'en 1923.

1920 La Gendarmerie royale du Canada fonde un poste dans le but premier d'assurer la souveraineté du Canada sur le territoire nordique. Les premiers à s'y installer sont le sergent J.E.F. Wight et le constable K.C. Butler. À l'époque, 4 ou 5 familles résident à Killiniq, mais environ 150 personnes vivent dans la région et visitent le poste pour y faire la traite.

1923 Les frères Moraves ferment leur poste et en vendent les installations à la Compagnie de la Baie d'Hudson.

1926 La GRC bâtit de nouveaux édifices. Cette année-là, la maladie et la mort font de nombreuses victimes chez les Inuit.

1927 Un navire transportant le charbon aux villages, le Canadian Raider, passe l'hiver à Killiniq.

1927-28 On utilise Killiniq comme l'une des bases de l'Expédition du détroit d'Hudson, qui a pour but de faire des observations aériennes des formations de glace du détroit.

1929 Un avion s'écrase près de Killiniq. Personne n'est blessé mais la banquise à laquelle on attache l'avion dérive dans la baie d'Ungava.

1936 Le détachement de la GRC est transféré à Inukjuak.

1939 Le poste de la CBH ferme. Jusqu'en 1952, les Inuit devront faire la traite à Kangiqsu-alujuaq. À cette date ce poste ferme aussi.

- Jusqu'en 1959, le poste de traite le plus proche est à Kuujjuaq. Durant cette période cinq familles résident à Killiniq: les familles de Noah Angnatuk, de Willie Angnatuk, de Mark Annahatuk, de Matthew Assevik et de Henry Angnatuk.
- 1942 L'entrepôt de la CBH de Killiniq est démoli et reconstruit à Kangirsuk.
- 1943 On aperçoit à quelques reprises un sous-marin allemand près de Killiniq. Les Allemands ont établi une station météorologique au Labrador, plus précisément à Ikulliajuq (Martin Bay). On dit que le capitaine du sous-marin est ami-cale avec les Inuits et sauve même plusieurs personnes de la famine.
- 1947-50 L'Office des recherches sur les pêcheries du Canada organise des études océanographiques dans la Baie d'Ungava, y compris à Killiniq.
- 1951-52 Une pêcherie expérimentale est menée par le ministère des affaires du Nord afin d'approvisionner les Inuit en morue, une espèce non exploitée traditionnellement.
- 1955 Selon la GRC, seulement deux ou trois familles vivent à Killiniq.
- 1957-58 Le Ministère des Affaires indiennes effectue une étude sur le développement économique de la baie d'Ungava.
- 1959 Kikitayok, la coopérative de Killiniq, est fondée, et un congélateur pour le poisson est construit. Le premier gérant est Mathew Assevik.
- 1960 Population: environ 20 ou 30 personnes.
- 1964 La population compte environ 95 personnes. Une petite école est construite, et on engage un professeur à temps plein.
- 1965 La collectivité est transportée sur un meilleur site, environ 2 miles à l'ouest de l'ancien, à Fox Harbour. En novembre, un ouragan cause des dommages au village.
- 1971 Un rapport de l'Institut de recherche socio-économique de l'Université Memorial donne cette image de la collectivité: «Sur l'île de Killiniq, les 150 Inuit de Port Burwell (27 familles) jouissent d'une économie florissante grâce aux pêcheries de phoque, de morue et d'omble, à la récolte de duvet d'eider et aux industries d'artisanat fondées sur les produits locaux. La coopérative, pivot de la collectivité (et à laquelle les 84 adultes appartiennent) a remboursé ses prêts depuis longtemps et dès 1970 était reconnue pour son succès, presque inégalé parmi les collectivités arctiques. Aucun chasseur en santé n'avait reçu de Bien-être social avant 1968.»
- 1977 La population compte moins de 50 personnes.
- 1978 L'économie locale s'est dégradée et la population fait face à des problèmes d'alcool et de maladie, peut-être à cause du manque de services sociaux et de santé. Le 8 février, par un décret fédéral, on relogé sans avertissement les habitants de Killiniq dans d'autres collectivités du Nunavik.
- 1977-85 Le service de la recherche de Makivik effectue des études de relogement pour la population de Killiniq, éparpillée au Nouveau-Québec. On choisit le site de Taqpan-gayuk, à 40 km au sud de l'ancien site de Killiniq, comme emplacement possible pour une nouvelle collectivité. Des négociations avec le gouvernement fédéral sont entreprises afin d'en arriver au relogement proposé. De 1983 à 1985, le Service de la recherche de Makivik évalue le potentiel commercial des ressources marines de la région avec le Projet des pêcheries de Killiniq.
- 1987 À l'hiver, 45 ou 50 anciens habitants de Killiniq se relogent sur le site de Taqpan-gayuk, sans l'aide du gouvernement et sans aucun service.

ΔϑΔ' ρ'εσ'ΓΔ'
 THE PEOPLE OF KILLINIQ
 LES HABITANTS DE KILLINIQ

Δ'ΝΝ, Δ'ερ'δ L'ρ'
 Δ'L δ 'ρδ'ερ'

*A Man, his two wives
 and their children*

*Un homme en compagnie
 de ses deux femmes et de
 leurs enfants*



PAC, PA 45188, R.W. Brock

1910



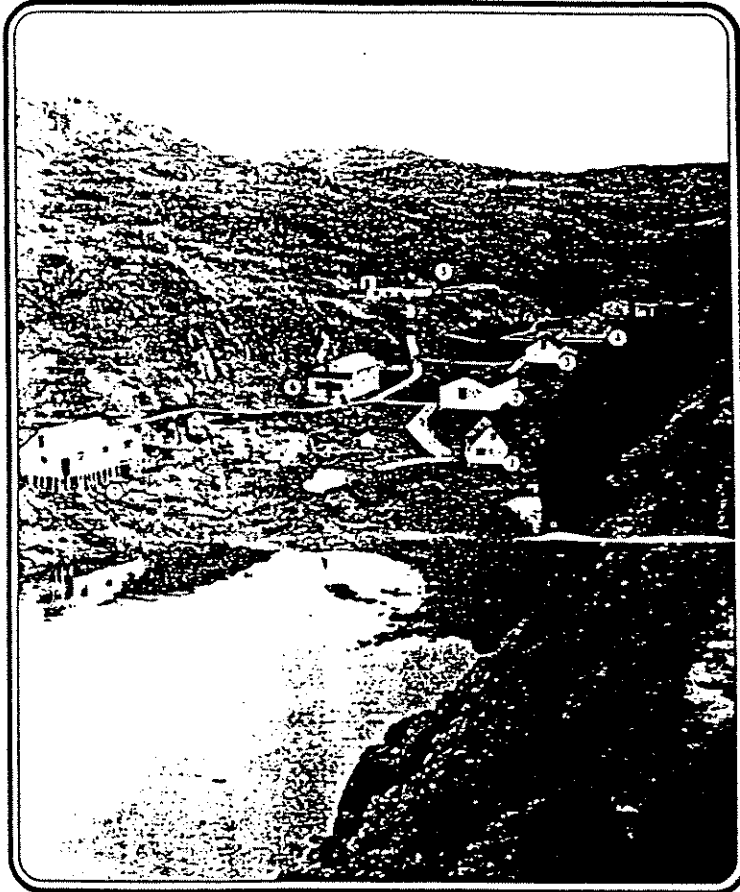
Δϑ' Δ'ε° b'bc'δ

*Inuit woman and
 children*

Femme et enfants inuit

PAC, PA 45208, R.W. Brock

ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ
 THE OLD VILLAGE OF KILLINIQ
 L'ANCIEN SITE DE KILLINIQ



1934

Collection C.K. McLean

- 1- ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ
- 2- ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ
- 3- ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ
- 4- ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ
- 5- ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ
- 6- ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ
- 7- ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ ᑭᑭᑭᑭᑭ

- 1- First house built, later occupied by Tommy Assevik..
- 2- HBC Warehouse for dry food, also used as dance hall.
- 3- RCMP Residence.
- 4- RCMP Warehouse.
- 5- HBC Manager's house.
- 6- HBC Store.
- 7- HBC Warehouse for seal blubber, also used for repairing nets.

- 1- Première maison, occupée à une époque par Tommy Assevik .
- 2- Entrepôt de la CBH pour les aliments secs, aussi utilisée comme salle de danse.
- 3- Résidence de la GRC.
- 4- Entrepôt de la GRC.
- 5- Résidence du gérant de la CBH .
- 6- Poste de traite de la CBH .
- 7- Entrepôt de la CBH, utilisé pour entreposer la graisse de phoque ainsi que pour réparer les filets .

ΔϷΔ' ρ'Ϸσ'ΓϷ'
 THE PEOPLE OF KILLINIQ
 LES HABITANTS DE KILLINIQ



PAC, PA 100115, L.T. Burwash

ΔϷΔ' ϷϷϷ'Ϸσ'ϷΓ' ΔϷϷ'ϷΓ'.
 Douglas Robertson Toronto Telegram-
 ϷΓϷΓ'.

*Group of Inuit with a journalist, Douglas
 Robertson, of The Toronto Telegram.*

*Groupe d'Inuit posant avec un journaliste,
 Douglas Robertson, du Toronto Telegram.*

1931

ΔϑΔ' ρ'σ'ΓΔ'
 THE PEOPLE OF KILLINIQ
 LES HABITANTS DE KILLINIQ

1933

ρ'σ'Γ Δ'βΔ'ρ'
 ΔϑΔ' Δ'βΔ'ρ'
 Δ'β' < Δ'δ'
 > Γ Δ'βΔ'ρ'
 Δ'βΔ'ρ'



HBC Archives, Manitoba Provincial Archives
 Al. 1 no. 13, Max Sauer Jr.



*Coffe Break at Killiniq
 Inuit relaxing after unloading
 a HBC supply boat.*

*Pause café à Killiniq
 Des Inuit se reposent et se
 sustentent après le
 déchargement de la car-
 gaison annuelle du navire
 de la Compagnie de la Baie
 d'Hudson*

HBC Archives, Manitoba Provincial Archives
 Al. 1 no. 12, Max Sauer Jr.

ᐃᐅᐃᑦ ᐱᑦᑕᑦᑎᐱᑦ
 THE PEOPLE OF KILLINIQ
 LES HABITANTS DE KILLINIQ



Photo by C.K. McLean

- 1-ᑕᑦᑎᐱᑦ ᐅᐅᑦᑎᑦ
Joseph Annanack Jr.
- 2-ᑕᑦᑎᐱᑦ ᐅᐅᑦᑎᑦ
Mark Annahatak
- 3-ᑕᑦᑎᐱᑦ ᐅᐅᑦᑎᑦ
George Annanack
- 4-ᐅᐅᑦᑎᑦ ᐅᐅᑦᑎᑦ
Willie Emudluk
- 5-ᑕᑦᑎᐱᑦ ᐅᐅᑦᑎᑦ
Sammy Annanack

- 6-ᑕᑦᑎᐱᑦ ᐅᐅᑦᑎᑦ
Joseph Annanack Sr.
- 7-ᑕᑦᑎᐱᑦ ᐅᐅᑦᑎᑦ
"Big George" from/de
Kuujjuaq

1948

In those days, Inuit were mostly interested in tea and tobacco. All the people I knew then lived in igloos. When people were expecting those who went to trade they listened for dogs barking and when they could hear them approaching they told each other that they would soon have some tea. Adults took out their pipes and got them ready to smoke tobacco. People couldn't drink tea without having meat first.

COMPETITION

[The German trading post] was just across the Hudson's Bay Company post. The two trading posts used to fight over their Inuit customers. Traders went to trade to either one of the posts which had better bargains. I think Inuit gradually realized that it is better to trade with traders who offer better bargains. If an Inuk trader went to sell his fox pelts to the German post, HBC took his gun away from him if he had purchased it from HBC post, no matter how long ago it had been purchased.

The HBC employees ignored even starving Inuit if they didn't have anything to sell. The good thing HBC managers did was waking up even in the middle of the night for trappers who came to trade fox pelts.

The German company was good for us and treated us kindly. They had a motorboat and took Inuit people to their spring camps and supplied them with food. On the other hand, the HBC didn't do such things for their people and I don't think they are any different these days.

THE MORAVIANS

The German trading post was also known as "Ingillisi"(English). The English trading post groceries were cheaper than HBC post's, and gave good bargains for fox pelts but I don't remember how much they gave for sealskins. They were also interested in sealskin boots. They wanted to get as many boots as possible, like the HBC. When the Inuit had made a pair of sealskin boots they took them to the German trading post while they were still damp. I remember the time when the German trading post stopped accepting sealskin boots. The Inuit were selling them while they were damp and

then they froze but when spring came, the boots that had been frozen all winter thawed and then shrivelled up! I don't think those who sold boots to the HBC sold them while they were damp.

SHIP TIME

[The Moravians] had their own ship [The Harmony] which arrived only in autumn, in October when snow had covered the hills. That ship brought in a lot of groceries and other supplies. They had their own barges for unloading which they left behind to use again the next fall. I think the German ship brought in supplies to many trading posts, all the way to Labrador.

When it was time to anchor the sailboat there was so much smoke that you couldn't see the entire ship. It was an old ship and everytime it arrived all the people caught colds and sniffles. I think it brought in all the germs! It arrived so slowly and when someone noticed it arriving, every Inuk customer of theirs screamed with joy! I think they looked forward to eating biscuits. It arrived from the other side of the ocean. The crew of the sailboat fished cod and took in oil which had been frozen, pounded with big rocks inside wooden vessels. It was the Inuit who did all the work to make oil.

THE DEPARTURE OF THE MORAVIANS

Many Inuit lived in Killiniq while the German traders were there. When the German traders had to leave, HBC traders bought all their buildings. The reason for their leaving was because they could no longer compete with the HBC. They planned to come back north to set up stores but they never did. When they left, many of their Inuit customers followed them, some by dogteam and some in summer by boat. The German traders stayed in Iipujuuni (Hebron) for a while so some Inuit moved to that area.

When the German traders left, we were left with just the HBC traders. They hired a few Inuit staff including myself. We labored all day, removing all the snow off the pathways and at the end of the day we were exhausted. I didn't even mind getting 80 cents a day in wages. I labored all day

at 80 cents a day, not even a dollar. After, the HBC moved to another place long after the German traders moved.

When the HBC left Killiniq, there wasn't any trading post there so we had to go to Kangiqsu-alujjuaq to trade.

The word got around that people of Killiniq were left without a store. Someone from Kimmiruq informed others about that and then ships passing by dropped off some food for the people of Killiniq. Also the RCMP arranged to have food taken to them by any ship that passed through there. We were then better off since we also received food for free even from HBC ships.

The HBC left Killiniq because there weren't enough people there and therefore they couldn't afford to have their post there. They planned to leave for a long time and finally left. HBC expected us to be perfect and they wouldn't treat us rairiy unless we satisfied their standards with stuff to sell. In the earlier days they even contributed to support to the elderly and the poor but these days they don't have that service.

NOAH ANGNATUK, Kangiqsu-alujjuaq, formerly of Killiniq, born in 1910. Interviewed in May 1985 by Simeonie Baron for Avataq Cultural Institute.

LA TRAITE À KILLINIQ

LA TRAITE

Les Qallunaat arrivèrent bien avant ma naissance; mes yeux s'ouvrirent quand les postes de traite existaient déjà. En ce temps-là, les Inuit vendaient aux postes de traites des articles comme des bottes en peau de phoque et des fourrures de renard. Les postes de la Compagnie de la Baie d'Hudson s'étaient déjà établis près de nos campements quand je devins assez âgé pour vendre des fourrures; il y avait aussi un poste allemand [Morave] dont le gérant était connu sous le nom de "Nuvattutialuk".

En ce temps-là les Inuit étaient surtout intéressés à obtenir du thé et du tabac. Tous les gens que je connaissais alors vivaient dans des igloos. Quand ils attendaient le retour de ceux qui

étaient allés faire la traite, ils écoutaient les chiens aboyer et quand ils entendaient les gens approcher ils se disaient entre eux qu'ils pourraient bientôt boire du thé. Les adultes sortaient leur pipe et se préparaient à fumer du tabac. Les gens ne pouvaient pas boire de thé sans manger de la viande tout d'abord.

LA CONCURRENCE

Le poste de traite allemand était situé juste en face de celui de la Baie d'Hudson. Les deux postes se disputaient la clientèle des Inuit. Ceux-ci vendaient au poste qui leur offrait le meilleur prix. Je pense que les Inuit se sont rendu compte graduellement qu'il était plus avantageux de faire affaire avec les traiteurs qui leur offrait le plus. Si un Inuk vendait ses fourrures au poste allemand, la CBH reprenait son fusil (s'il l'avait acheté à leur magasin), même si le fusil était en la possession du chasseur depuis très longtemps.

Les employés de la Baie d'Hudson ne se souciaient pas des Inuit affamés s'ils n'avaient rien à vendre. Leur bon côté était de se lever au milieu de la nuit si des Inuit venaient vendre des peaux.

La compagnie allemande était bonne pour nous et nous traitait bien. Ces traiteurs possédaient un bateau à moteur et emmenaient les Inuit à leurs campements de printemps et leur fournissaient de la nourriture. Les gens de la Compagnie de la Baie d'Hudson, cependant, ne se comportaient pas ainsi et je ne crois pas qu'ils aient changé.

LES MORAVES

On appelait aussi le poste de traite allemand "Ingillisi" [Anglais]. Les provisions du magasin anglais coûtaient moins cher que celles de la Baie, et ce poste donnait un bon montant pour les fourrures, mais je ne me souviens pas combien on recevait pour les peaux de phoque. Les traiteurs s'intéressaient aussi aux bottes de peau de phoque. Ils voulaient le plus de bottes possible, tout comme la CBH. Quand les Inuit avait terminé une paire de bottes, ils les apportaient au poste allemand alors qu'elles étaient encore humides. Je me souviens du temps où le poste allemand se mit à refuser les bottes de peau de phoque. Les Inuit les leur vendaient quand elles étaient humides, et elles

gelaient, mais quand le printemps venait et que les bottes dégelaient, elles se ratatinaient! Je ne crois pas que l'on ait vendu des bottes humides à la Compagnie de la Baie d'Hudson.

L'ARRIVÉE DU BATEAU

Les Moraves possédaient leur propre navire [le Harmony] qui arrivait seulement en automne, au mois d'octobre, quand la neige avait couvert les collines. Ce navire apportait des provisions et d'autres marchandises. Ils avaient des barques destinées au débarquement des caisses et les laissaient au village pour les utiliser l'automne suivant. Je pense que le navire allemand fournissait de nombreux postes, le long de la côte du Labrador.

Quand le navire allait jeter l'ancre, il y avait tant de fumée qu'il était impossible de voir tout le bateau. C'était un vieux navire et chaque fois qu'il arrivait tout le monde attrapait des rhumes et des étournements. Il devait apporter tous les microbes! Il arrivait tout doucement et quand quelqu'un le remarquait, tous les clients inuit sautaient de joie! Ils attendaient les biscuits. Ce bateau venait de l'autre côté de l'océan. Son équipage pêchait la morue et entreposait l'huile gelée après qu'elle ait été tassée au fond de barils de bois au moyen de grosses pierres. C'étaient des Inuit qui s'occupaient de faire l'huile.

LE DÉPART DES MORAVES

Les Inuit étaient nombreux à Killiniq au temps des traiteurs allemands. Quand ceux-ci durent partir, les traiteurs de la Baie d'Hudson achetèrent leurs édifices. Ils partirent car ils ne pouvaient plus soutenir la concurrence avec la Baie. Ils préféraient revenir dans le Nord et installer d'autres magasins, mais ils ne revinrent jamais. Quand ils partirent, plusieurs de leurs clients inuit les suivirent, certains en traîneaux à chiens, d'autres en bateau l'été suivant. Les Allemands demeurèrent à Iipujuuni (Hebron) un certain temps, alors plusieurs Inuit déménagèrent dans cette région.

Quand les Allemands partirent, il ne resta plus que les traiteurs de la Baie d'Hudson. Ils

engagèrent du personnel inuit, dont moi-même. Nous travaillions toute la journée à enlever la neige des trottoirs de bois et au soir nous étions épuisés. Il m'était indifférent de recevoir 80 sous par jour de salaire. Je travaillais toute la journée pour 80 sous, même pas un dollar. Beaucoup plus tard, la Baie d'Hudson déménagea aussi. Quand le poste ferma, il n'y avait plus de magasin à Killiniq, alors nous devions nous rendre à Kangiqsualujuaq pour faire la traite.

La rumeur se répandit que les gens de Killiniq n'avaient plus de magasin. Quelqu'un de Kimmirug en informa d'autres personnes et ensuite les bateaux de passage nous laissaient de la nourriture. La GRC prit aussi des arrangements afin que les navires nous apportent de la nourriture. La situation n'était pas trop dramatique puisque nous recevions aussi de la nourriture gratuite même des navires de la Compagnie de la Baie d'Hudson.

Le magasin de la Baie ferma car il n'y avait pas assez d'habitants à Killiniq et ils ne pouvaient pas se permettre d'y maintenir un poste. Ils pensaient à s'en aller depuis longtemps et finalement partirent. La Compagnie s'attendait à ce que nous soyons parfaits et ne nous traitait pas justement à moins que nos marchandises ne satisfassent leurs exigences. Au début ils ont aidé les gens âgés et pauvres, mais de nos jours ils ne le font plus.

NOAH ANGNATUK, Kangiqsualujuaq, anciennement de Killiniq, né en 1910. Interviewé en mai 1985 par Simeonic Baron pour l'Institut culturel Avataq.

LES COOPÉRATIVES

miles to get supplies again. Soon afterwards the co-op flourished. Harp seals brought in some money and trappers brought in fox pelts as well as cod and polar bearskins. And then later on when too many different people started taking up the responsibility of managing it, the co-op started going bankrupt.

NOAH ANGNATUK, Kangiqsualujjuaq, formerly of Killiniq, born in 1910. Interviewed in May 1985 by Simeonie Baron for Avataq Cultural Institute.

The people were thinking of leaving Killiniq for Labrador - it was difficult to get supplies and make a living... Then came the idea of a co-operative through government officers - a change came over the community... Now we are confident we can make a living by staying and working through the cooperatives... In the first year of the co-operative a freezer was set up and the fish were caught and brought to the freezer... That first year the engine did not work properly and we did not do well... A year later the freezer was working good and we got it full of char. We also did jigging of cod and got quite a lot of this fish, and we carried out hunting for seals after the cod fishing... Before we had a co-operative, we almost moved from Killiniq to be near a trading post... We did not want to go to Kuujjuaq as we did not know the area... We were going to go to the Labrador coast.. Now we do not think of this move anymore... With the white man's help we can build up the co-operative and make it better for everyone. We have a co-op store in Killiniq and another person with me looks after this store... The women are making mats, birds and anything else, and also there are carvings by men and women... We are doing pretty well the whole year around with fishing for char and other fish.

HENRY ANNATUK, speaking at the First conference of Arctic co-operatives, Frobisher Bay, N.W.T., March 12-18, 1963.

Je me souviens comme si c'était hier du temps où on fonda une coopérative à Killiniq. Un homme appelé "Silapaalik" [probablement Donald Snowden] réunit les gens afin d'organiser ce projet. Silapaalik vint à Killiniq plusieurs fois par la suite, en avion, afin d'établir une co-op à Killiniq.

Les premières marchandises vendues à la co-op furent des produits animaux et des sculptures. Du thé, de la farine, des munitions étaient aussi disponibles, ainsi que des biscuits et des sardines en conserve, beaucoup de munitions et d'autres sortes de nourriture. Nous avons tous aimé organiser la co-op; ce fut un soulagement de n'avoir pas à voyager des milles et des milles pour s'approvisionner. La coopérative eut du succès en peu de temps. Les phoques d'eau douce constituaient une source de revenus, et les trappeurs apportaient des fourrures de renard, de la morue et des peaux d'ours polaire. Par la suite, trop de personnes s'occupèrent de gérer la co-op et elle fit faillite.

NOAH ANGNATUK, Kangiqsualujjuaq, anciennement de Killiniq, né en 1910. Interviewé en mai 1985 par Simeonie Baron pour l'Institut culturel Avataq.

Les gens pensaient à partir de Killiniq pour le Labrador, tellement il était difficile de s'approvisionner et de survivre. Puis vint cette idée d'une coopérative lancée par des agents du gouvernement; un vent de changement souffla sur la collectivité. Nous pensons maintenant que nous pouvons vivre ici en travaillant pour nos coopératives. La première année, on installa un congélateur, et le poisson fut attrapé et congelé. Cette année-là, le moteur ne fonctionnait pas bien et nous avons eu des difficultés. L'année suivante le congélateur ne fit pas défaut et nous l'avons rempli d'omble chevalier. Nous avons aussi pêché la morue et en avons pris beaucoup, puis nous avons chassé le phoque. Avant la coopérative, nous sommes presque partis de Killiniq afin d'être près d'un poste de traite. Nous ne voulions pas aller

ᑕᑦᑕᖃᑦᑦ ᓄᓇᑦᑕᑦᑕᑦ ᓄᑕᑦ
THE NEW VILLAGE OF TAQPANGAJUK
LE NOUVEAU VILLAGE A TAQPANGAJUK



Photo by Karl Schiller, Kativik School Board

ᑕᑦᑕᖃᑦᑦ ᓄᓇᑦᑕᑦᑕᑦ ᓄᑕᑦ 1988-ᑦ.

Aerial view taken in June 1988.

Vue aérienne prise en juin 1988.



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B. Survey Report 1994

**Port Burwell - Killiniq
An Environmental Survey**

September 1994

M. Barrett
for
Makivik Corporation
Kuujjuaq, Quebec

Contents

1. Summary
 2. Background
 3. Survey
 4. Field Observations
 5. Sampling and Analysis
 6. Historic Perspective
 7. Video Presentation
 8. Recommendations
- Appendix A: Field Notes
Appendix B: Inventory Tables
Appendix C: Sampling Results
Appendix D: Maps

1. Summary

In September of 1994 an environmental survey of the abandoned facilities at Port Burwell on Killiniq Island, NWT was undertaken. The survey was conducted by Makivik Corporation, with funding from the Department of Indian and Northern Affairs Action on Waste Program. The report provides a description of the abandoned materials and facilities, conditions at the site and recommendations for a restoration and clean-up of the site.

2. Background

The abundant marine resources around Killiniq Island have been harvested by Inuit for hundreds of years. The excellent harbor and its key location at the southern entrance of Hudson Strait also attracted the European explorers, traders and missionaries. The 1960's saw the establishment of the second Co-operative in the Eastern Arctic at Port Burwell as well as the development of an extensive community infrastructure.

However, the terrain around the community made the location of a landing strip, within reasonable proximity, impossible. This combined with adverse weather conditions made transportation by aircraft difficult for most of the year. With a decline in the population in the late 1970's a government decision was made to abandon the community.

This was very frustrating to the Inuit families. Not only did they have to leave their homes, equipment and supplies and to locate to a number of distant communities in Nunavik and Nunavut, but they had to leave their harvesting areas. The communities to which they relocated had neither housing nor services for them.

In the years immediately following the closing of the community there were only sporadic visits by Inuit to Killiniq. In 1983 an experimental fisheries project was undertaken by Makivik Corporation. A number of Killiniq families were involved in this project which operated until 1985. During this period some of the building and materials were moved to a site on the mainland. Some families wintered at the Tarpangayuq site in 1985-86.

Until recently the Canadian Coast Guard used some of the buildings and facilities as a weather station, during the summer season. However this changed with the construction of a new, unmanned station just outside the community site.

In the sixteen years since Port Burwell was abandoned there have been a number of comments and reports from visitors to the site about the conditions of the remaining facilities and materials. In recent years these reports have become more numerous. It is evident that there are, or might be environmental problems at the site.

The draft Nunavik Environmental Action Plan identified a survey of Killiniq as a priority. Following discussions, a proposal was prepared

by the Renewable Resources Department of Makivik Corporation. Funding was approved by the Department of Indian and Northern Affairs under their Action on Waste Program. The contribution agreement was signed in mid August 1994.

3. Survey

Following project approval, sampling materials and supplies were purchased and arrangements were made to undertake the survey in early September. Initially it was planned to charter the Aiviq which is owned by the Killiniq Landholding corporation. Unfortunately this boat was not available as it was being used on another project. The vessel Imiakutaaq was selected as an alternative.

The survey team included Lucassie Billy Etok as the Killiniq Representative, Sandy Suppa as the Wildlife Technician, Michael Barrett as the Environmental Specialist and Alex Gordon and Cecelia Andersen who provided logistic support from the Research Center Professional support from William Doidge and Daniel Leclair.

The survey team left Kuujjuaq on September 8th, and with a stop in Kangirsualujjuaq arrived at Killiniq on September 10th.

Using a video camera, a still camera and a tape recorder for field notes, the survey team proceeded with an inventory of the facilities, structures and materials, with particular attention to those which are or might be hazardous to the environment. Following sampling procedures, soil samples were taken in the area of the fuel tanks, the generators and the garage. A liquid sample was taken from one of the electrical transformers. With the on site work completed the group returned to Kuujjuaq arriving on September 14th.

4. Field Observations

The overall observation on the initial walk through the site was of large quantities of rubbish and debris spread at random. Some building appeared, from the outside, to be structurally sound while other appeared to be dangerous to enter. There was evidence of oil spillage in certain areas.

In the course of the inventory of the buildings, facilities and materials some of the following general observations were made.

There were indications of recent spillage of fuel oil in the area of the large fuel tanks. There remains considerable volume of fuel oil in the tanks. This is being used by the Canadian Coast Guard for the generators at their weather station. The fuel oil is also used by visitors to the site. There is considerable metal debris in the area of the large tanks, including sections of two large fuel tanks that were cut up and collapsed a number of years ago.

In the Power House and outside the Electrical Shed are 45 gallon drums containing engine oil. The seventeen drums outside the shed are rusting and some appear to be leaking.

The Electrical Shed contains two transformers. In addition there are transformers on the electrical poles.

The Municipal Warehouse contains considerable quantities of battery acid and paint.

The metal buildings, including the Power House, the Garage, the Municipal Warehouse and the Fisheries Plant, appear structurally sound. They all have cement floors and contain varying amounts of materials and debris. The main doors, in most cases, are open to the elements.

The Walk-In Freezer is structurally sound; however it has not been used as a freezer since the community was abandoned.

The Nursing Station was used to store snowmobile and engine oil. This appears to have been vandalized by a polar bear resulting in considerable damage to the contents and to the building. Outside the nursing station the ground is littered with five-gallon can of engine oil.

The site of the Co-op building contained considerable debris. The building itself was burned a number of years ago because a large amount of stock had been left in the building, with many of the cans rupturing and rotting. The school had also been burned.

The solid waste disposal site is spread over a large area. Some of the waste had been pushed over the bank and carried away by the action of the tides and ice. There is a concentration of 45 gallon drums at one end of this site.

Several of the electrical lines have fallen, but most are still strung on the grid covering the village site.

The status of the wooden buildings, consisting mainly of northern housing units and staff housing, range from completely destroyed to in need of stabilization. Wood and complete sections have been removed from a number of buildings. Most have their windows broken, allowing rain and snow to enter. Many have holes in the roofs. A few have relatively minor damage. All but one that was used recently as a shelter, contain garbage.

Between the buildings and throughout the community site is debris. This includes wood, 250 gallon fuel tanks, pipes, wiring, household appliances, furnaces, 45 gallon drums, propane cylinders, large metal beams, metal siding, and household refuse.

The cemetery is in a state of disarray.

These are general observation and the following tables provide an inventory and recommendations for each specific site.

5. Sampling and Analysis

Following the initial survey it was decided to concentrate the soil analysis to the areas adjacent and down hill from the garage, power house and the fuel tanks. The soil and vegetation in these areas showed signs of possible contamination from either diesel fuel or engine oil or both. There was some evidence that some leakage in these areas was recent.

The soil cover in these areas was to a maximum of 14 inches under which are layers of rock. The vegetation if any is moss. The slope in most cases is very steep.

The soil sampling was done in the manner prescribed in the sampling protocol using materials and containers obtained for this purpose. Samples were taken from up hill from the area for a comparison and one double sample was taken for verification.

The sampling sites are indicated on the attached map.

Samples were analyzed at ECO*CNFS Inc. of Pointe Claire Quebec.

One sample of oil was taken from an electric transformer. Field observations did not indicate the presence of PCBs. As with the soil samples this was analyzed at ECO*CNFS Inc.

There are no streams or standing water within the area of the site. It was decided not to sample the tidal water given the height and volume of the tides.

The results of the analyses are attached.

6. Historic Perspective

7. Video Presentation

1. Introduction

In 1978 the Community of Port Burwell on Killiniq Island was abandoned. One cannot help but sympathize with the frustration and loss that was felt by the Inuit families who had to move far from their homes and hunting region.

The abundant marine resources in the area of Killiniq had sustained Inuit for hundreds of years.

The government agencies withdrew services and this action precipitated the abandoning of the community. However, no systematic closing of the facilities or clean up of the site was undertaken.

It is now sixteen years since the Community was abandoned and reports of visitors to the site have indicated that the conditions on the site are deplorable and possibly hazardous to the environment.

2. Organization of the Survey

A proposal to the Arctic Environmental Strategy for a survey of the site was prepared by the Renewable Resources Management Department of Makivik Corporation as part of the follow up of the draft Nunavik Environmental Action Plan. In August a contribution agreement for funding was signed with the Department of Indian and Northern Affairs as part of their Action on Waste Program .

The survey team left Kuujuaq on September 8th, and, after a stop in Kangirsualujuaq to pick up a representative from the Killiniq Landholding Corporation, arrived in Port Burwell on September 10th.

Using a video camera, a still camera and a tape recorder for field notes, the survey team proceeded with an inventory of the facilities, structures and materials with particular attention to those which are or might be hazardous to the environment. Soil samples were taken in the area of the fuel tanks, the generators and the

garage. Liquid samples were taken from the electrical transformers. All samples were sent to a laboratory for analysis.

The survey crew returned to Kuujuaq on September 13th.

3. Findings and Recommendations

The scenes in this section follow the order of the recommendations. The recommendations are read with appropriate visual references.

8. Recommendations

1. The materials that are or may be hazardous to persons or the environment should be neutralized or disposed of at the site. If this is not possible, they should be shipped to a disposal facility.

1.1 Battery Acid approximately 165 liters

1.2 used engine oil approximately 3500 liters

1.3 engine oil approximately 1400 liters

1.4 oil stored in warehouse approximately 500 liters

1.5 oil in nursing station and in cans outside approximately 50 cases and 1100 liters in 5 gallon cans

1.6 2 cylinders Freon gas

1.7 used 12 volt batteries total approximately 15

1.8 Oil in electrical transformers 160 liters

1.9 Misc. Paint 360 liters

2. The diesel fuel in the two large tanks should be removed and securely stored.

2.1 There is approximately 60,000 liters in the two tanks 29 inches in one and 23 inches in the other. Each tank is 30 feet in diameter. The fuel owned by the Canadian Coast Guard should be transferred to their tanks. Surplus fuel, if any, should be stored for use by Killiniq people.

3. The soil in the area of the fuel tanks, garage and generator buildings has been identified as contaminated by oil and grease. However it should not be disturbed. The soil covering the rocks in these areas is only about 10 inches thick. At any attempt at scraping the contaminated soil would lead to a greater erosion of the surrounding areas.

4. The fuel tanks should be dismantled and removed to a suitable disposal site.

4.1 The two fuel tanks measuring 30 feet in diameter and 22 feet in height should be taken apart and cut in pieces that can be removed.

4.2 The two tanks that have been cut down should be dismantled into pieces that can be moved to a disposal site.

4.3 The piping system associated with the fuel tanks should be dismantled and removed to a disposable site.

5. A disposal site should be established in the area of lot 46. This site should be divided into sections for large metal debris, wood and metal-plastic debris. A small area might be set aside for domestic garbage from the clean up crew, the Coast Guard maintenance crew and visitors to the site. This latter should be burned daily and buried. Where possible the material in the disposal site should be covered.

6. The solid waste disposal site should be permanently closed and remedial measures undertaken.

- 6.1 Materials should be removed from the area close to the water.
- 6.2 The large metal pieces and vehicles should be relocated in the new waste site
- 6.3 The remainder should be concentrated in an appropriate area and, if possible, covered.

7. The electrical poles and transmission wires should be dismantled and disposed of

- 7.1 The electrical poles, numbering approximately 45, and the wiring should be taken down and removed to the disposal site.
- 7.2 The wiring should be disposed in such a way that it poses no danger to wildlife.

8. The approximately 600 45 gallon drums should be crushed and removed to the disposal site.

9. The buildings on the site should be dismantled, burned, or stabilized, depending on their condition.

9.1 Some Residential structures (n= 7) and other wooden buildings (n=10) should be demolished or burned. The debris should be removed to the disposal site.

9.2 Up to 10 residential units might be stabilized for future use.

9.3 The Municipal facilities, that is the warehouse, the garage and the power house, should be emptied as far as possible. Some of the materials such as the generators might be shipped out for recycling. These buildings should be stabilized.

9.4 The Nursing Station, containing the oil, should be burned. The debris remaining should be removed to the disposal site.

9.5 The Fisheries Processing Building and the Freezer building should be stabilized and cleaned. The wooden structures should be dismantled and or burned and the debris removed.

10. The wood and metal debris through out the town site should be collected and removed to the disposal site.

10.1 Special consideration should be given to the clean up of the sites of the Co-op building and the School.

11 Consideration should be given to the transfer of the buildings that are stabilized to the Killiniq Landholding Corporation. They might be utilized in the future for such activities as ecotourism or for shelter for Inuit engaged in harvesting activities. All such structures should be clearly identified in Inuktitut, English and French as to their ownership and use.

12. Provision should be made for preservation of the cemetery.

13. A Historic Plaque and a Cairn commemorating the Community of Port Burwell and the People who lived there should be established in collaboration with the responsible agency.

14. Priority for work on the clean up must be given to the former residents of Killiniq.

15. The Clean Up Project might be completed in three phases: summer 1995, spring 1996 and summer 1996.

Appendix A: Field Notes

Fisheries Complex,
net storage, wooden structure, 24 x 30, windows broken as well as door, some rot in the walls, some debris on floor, three nets from last fisheries project,

Building
Fisheries Complex, Walk in Freezer, metal building in very good condition, door intact, interior clean, cooler, holding and blast freezer sections, building size outside approximately 18 x 45, the two freezer

units mounted outside have been exposed to the weather but there does not appear to be any breaks in the tubing, two other freezer units are outside on the deck, two cylinders of Freon one of which is full,

Dock and wooden walk ways are in relatively good condition

in the area of the Fisheries are cod traps, aluminum tables for fish processing, and assorted debris

Building

Fisheries, generator shed, metal building wooden floor, some holes, approximately 20 x 20, the two generators have been removed, some metal and other debris, 14 bags of hard cement, building in relatively good shape

Building

Fisheries, wooden building 30 x 36 old Northern Housing converted for storage, all windows broken, holes in the roof, structure still appears reasonably solid but will soon deteriorate with water damage, some cod nets remain inside, outside there is wood debris, 12 cod traps

Coast Guard Weather Station

Bulldozer pre 1975 battery removed appears still in running condition this should be verified with the Coast Guard

wooden hulls from two Peterhead boats

Fuel Tank

2 large fuel tanks, 30 feet diameter - 45.8 m³

23 inches remaining in bottom, 58.46m³

steel tank, bolt construction, 29 inches of fuel remaining

Building

Housing unit, located close to the shore below the first buildings after the fuel tanks this one is the farthest in this group from the tanks, all windows intact, dry and appears to be in good condition, 30 x 15, fairly clean inside, debris outside

Building

Housing unit, located close to the water, fairly good condition, windows intact, 30 x 15, freezer,

Building

Housing unit, located close to the last two, 15 x 30, windows intact, stove, mattresses, debris inside

Building

Housing unit, located toward fisheries from the last three, structure appears good, windows intact, table, 15 x 30

Building

Housing unit, located closest of last four to fisheries, doors open, solid structure, 30 x 30, three bedrooms, addition for extra bedroom,

all these previous houses have 250 gallon oil reservoirs, debris outside, the last one has some quart containers of oil,

Building

Shack, 15 x 20, 5 x 45 gallon drums outside

Building

Housing, suspended basement, two story, closest to fisheries in upper area, door off, refrigerator, water tank, furnace, dryer, debris, some windows broken, plywood stripped from some walls, two more refrigerators, one more window out, drum , upstairs, , bed, some internal walls down, structure still appears good, 48 x 40, 250 gallon reservoir inside

Building

Housing unit, located next to first suspended basement, single story, structure good, large front porch, at least one broken window, refrigerator, 50 x 55, little structure damage, some plywood panels missing, furnace intact, water tank, fuel reservoir, dryer, flush toilet, outside wood and metal debris including fuel reservoir, electric stove,

Building

Housing unit, 28 x 65, open area inside, window broken, water damage , structure in poor shape, debris inside, interior walls outside on ground,

Building

Housing, next in line on upper level, good shape inside, some water damage, 50 x 56, some windows out, extra divisions for bedrooms, refrigerator, interior fuel reservoir, water tank, wooden steps from this one goes down to second suspended basement

Building

Housing unit, suspended basement, upper area in line with previous four buildings, cleaner than the other suspended basement, window in basement, filing cabinets, freezer, three refrigerators, pool table, three dryers, some stairs out, in upstairs area roof leak in back bedroom, walls up and good, structure good but there will soon be problems with water damage from roof, stainless freezer, six burner stove, flushable toilet, another refrigerator, six burner electric stove, one window broken, 40 x 50

Building

Nursing station including attached accommodation, outside there is quite a bit of debris including 15 x 5 gallon cans of engine and transmission oil full and in rusting condition, buildings are metal, one side attached is an accommodation windows intact 28 x 12, good condition, main building to one side two freezers, full of debris, on left of main section approximately 50 cases of quart skidoo or motor oil cans trashed by a polar bear spilled all over, windows all broken approximately 115 x 36 this will be corrected later, outside more oil containers and leaked oil, tight to building is a flimsy trailer roof off debris wood and metal outside

Building

Housing unit, just past nursing, 15 x 30, panels out, roof mostly off, taken apart

Building

Housing unit, second in line from nursing, very bad shape, no windows, a number of big holes

Building

Converted building Shell sign on it, very bad shape, match box size, panels off back

Building

Housing located next in line from Shell sign, not in good shape, all windows broken, water and moisture damage, outside much debris including a number of mattresses

Building

Housing 15 x 30, very poor condition

Building

Double match box, 30 x 30, used for storage, very poor condition, all windows out, 11 batteries inside, debris including some oil containers, outside 250 gallon reservoir empty, debris all around wood and metal, two refrigerators, two oil stoves for heating outside, this building is the first structure on the road from the fisheries and oil tanks

Building

roof coming down, windows out, this is number two after the Shell, furnace, 250 gallon reservoir 50 x 45 gallon barrels outside

Building

Housing unit, attached is a one room, no window, empty barrel, full of debris, floor weak, water damage, 30 x 40, complete this section

outside match box on hill with only two walls

after this section went up the hill to church and other housing units

note additional 250 gallon reservoirs

playground intact with slide lots of debris including furnace and two 250 gallon fuel reservoirs

Building

Housing unit, 30 x 20, structure solid, windows intact, debris through out interior, roof appears intact, one battery, windows intact, outside, 250 fuel reservoir, 24 empty propane tanks

Building

metal covered trailer unit, very poor condition, large pieces torn off, covered by thin metal siding, , located just beside housing unit

Building

body of a Muskeg in front of the torn up trailer

Building

Housing unit, located on the hill near the playground, tight on a hydro pole, very poor shape, no windows, floor rotten, large holes in roof, contents include two oil furnaces and debris, size 30 x 36, outside wooden and metal debris

Building

Housing unit, no windows, contents include oil furnace, fuel tank, hot water heater, two bath tubs and debris, holes in the roof, size 45 x 28

Building

Church, windows out, parts of the walls missing, insulation and some panels removed, size 36 x 50, contents include large space heater and 250 gallon oil reservoir

Building

Municipal Warehouse, metal building with cement floor, excellent condition, all windows intact, large door open, contents include shelving, two large diesel generators, plastic and metal piping, electric panels and assorted electrical fittings, assorted plumbing fittings, battery acid 81 x 2 liters, 250 gallon fuel reservoir, scrap metal, paint, linseed oil, size 45 x 90

Building

Municipal Garage, metal building with a cement floor, very good condition, main contents include 2 empty propane cylinders, 6 x 45 gallons of motor oil, pallets of cement, windows intact, ceiling mounted furnaces, a 50 x 50, 250 gallon fuel reservoir some residue, fire extinguishers, empty, 2 batteries, outside 2 of the 2580 gallon fuel reservoirs,

2 x 1000 gallon fuel reservoirs for the generator empty

Building

Powerhouse, metal building with cement floor, two generators, 5 x 45 gallon drums of motor oil, large number of parts for the generators such as filters, size 45 x 32 feet, one 250 gallon reservoir, electrical panels, open containers of oil, oil leakage on floor,

Building

Electrical warehouse shed, wood, two transformers, a number of spools of wire mostly heavy duty, oil furnace

outside a number of barrels of engine oil

along water edge from the fuel tanks is scrap metal and pipes

near site of co-op there are 3 diesel generators abandoned

Site

Co-op store, basic structure was removed, a large mound of building materials and contents of the store remain on the site,

Site

School structure was burned, large mound of building materials and debris remain,

Site

Original area of solid waste disposal site, spread over a large area, includes domestic, building and metal scrap, some of site has been bulldozed over the cliff to the edge of the tidal water, some of debris has been taken out by the ice, surface slightly buried, skidoo bodies, electrical wire, water tanks from muskegs, approximately 400 feet by 300 feet,

Outside dump a pile of approximately 400 x 45 gallon drums

Electrical poles approximately 45 standing wire intact for the most part

Sampling

Field Notes of the Soil Samples

Note: The area for samples one to fifteen is bounded by the road for a distance of 180 feet including the electrical shed, the power house,

the pumping area and the garage. The other side is bounded by the water. Most of the hill is very steep. The surface is thin top soil, gravel or rock. There is only spotty vegetation, mostly moss and grass. The top soil is not more than twelve inches thick. The samples 16 to 22 were taken the area of the large fuel tanks. The slope was not as steep in this area. There was evidence of recent spills in this area and of moss kill.

Sample G-1

near power house, four feet from building near exhaust port on water side

Sample G-2

down hill from power house on water side, thirty feet from building drop of ten feet, ten inch hole

Sample G-3

down hill from power house, ten feet from water, nine inch hole,

Sample G-4

down hill from power house, eight feet from the water. The power house is about fifty feet from the water with a twenty five foot drop. The hill is rock and gravel with some visual evidence of oil leakage.

Sample P-5

between the power house and garage, there are two 1000 gallon tanks in this area and it appears a that a this area was used to fill tanks. Sample taken from near pump about half way between the buildings - twelve inch hole

Sample P-6

directly across the road from the pumping area between the power house and the garage thirty six feet distant, on the up hill side, this should be a relatively unaffected area

Sample P-7

directly down hill from the pumping area between the power house and the garage, five feet from the water, nine inch hole
smell of oil, approximately fifty feet from the area with a drop of thirty feet, soil very rocky, very little vegetation

Sample P-8

in line with the edge of the garage on the fish plant side, down hill, twenty feet from the water, thirty feet from the building, twenty foot drop

Sample P-9

in the pumping area between the power house and the garage, a ten inch hole, twenty feet from the road, twenty feet from the garage, on fisheries side of sample P-5

Sample GR-10

down hill from the area between the garage and the municipal warehouse, twenty feet down hill five foot drop, grassy area

Sample GR-11

down hill from the garage, fifteen feet from the water, fifty feet from the garage, drop of twenty feet,

Sample E-12

near small electrical shed on fisheries side of power house, sample taken on the road side three feet from shed, nine inch hole,

Sample E-13

down hill from electrical shed, fifteen feet towards fisheries, drop of five feet, some evidence of run off, eight inch hole

E-14

down hill from electrical shed, eighteen feet away in line with shed, six inch hole, some evidence of leakage, steep drop to water below, run off from barrels

Sample E-26

same hole as E*-14

Sample T-16

in the area of the large fuel tanks, across the road from the up hill side, control sample, fifty feet from the tanks

Sample T-17

down hill from the fuel tank on the fisheries side, forty feet in a straight line slight drop of four or five feet, no vegetation some evidence of spills, smells of fuel oil, ten inch hole

Sample T-18

down hill from the large fuel tanks, sixty feet away, drop of fifteen feet, grassy area, nine inch hole

Sample T-19

down hill from the large tanks, sixty feet from T-18, close to water, nine inch hole, all moss in the area dead, approximately one hundred and twenty feet from the tanks, The area of moss kill is approximately one hundred feet by two hundred feet,

Sample T-20

down hill from the large tanks, fifty feet towards the fisheries from T-19, fifteen inch hole, thirty feet from the water, in the area of moss kill

Sample of T-21

C. Project Proposal

Killiniq - Port Burwell Environmental Clean Up Project

submitted to

Arctic Environmental Strategy
Action on Waste Program
Department of Indian and Northern Affairs

by

Renewable Resources Department
Makivik Corporation
Kuujuuaq, Quebec

March 1995

Port Burwell - Killiniq Environmental Clean Up Project

The objectives of this project are to remove hazardous materials, effect an environmental clean up and stabilize the abandoned facilities and materials at Port Burwell on Killiniq Island.

Phase 1 July - September 1995

Phase 2 March 1996

Phase 3 July - September 1996

Project Costs

1995-96 fiscal year \$280,324.00

1996-97 fiscal year \$319,330.00

Project Team

Michael Barrett - Coordinator
Bill Doidge - Senior Biologist

Introduction

In 1994, following requests from former residents of Killiniq and from Inuit engaged in harvesting activities in the area of Killiniq, Makivik Corporation prepared a proposal for an environmental survey of the Port Burwell community site. Funding was approved under the Action on Waste Program, administered by the Department of Indian and Northern Affairs. The survey was undertaken in the fall and the report was submitted to DINA in December.

The report has been reviewed by the Executive of Makivik Corporation in consultation with members of the Killiniq families and the community of Kangiqsualujjuaq. The consensus is that the clean up of the abandoned Port Burwell site should be considered as a priority.

Killiniq Island is strategically located in terms of migrations for a number of species of marine mammals, fish and migratory birds. It is considered an ecologically sensitive area of importance to Inuit for subsistence harvesting and has great potential for adventure tourism.

The persons responsible for the decision to abandon the community should have taken the necessary measures to remove the hazardous materials and to restore the site at the time of the withdrawal. The deterioration of the building, facilities and materials left at the site will now prove more difficult and costly to remove and clean up.

Objectives and Methods

The objective of this project is to remove hazardous materials, effect an environmental clean up and stabilize the abandoned facilities and materials at Port Burwell on Killiniq Island.

The methodology used will be based on the recommendations contained in the Port Burwell Environmental Survey 1994.

Recommendations

- 1 The materials that are or may be hazardous to persons or the environment should be neutralized or disposed of at the site. If this is not possible, they should be shipped to a disposal facility.
 - 1.1 Battery Acid approximately 165 liters
 - 1.2 used engine oil approximately 3500 liters
 - 1.3 engine oil approximately 1400 liters
 - 1.4 oil stored in warehouse approximately 500 liters
 - 1.5 oil in nursing station and in cans outside approximately 50 cases and 1100 liters in 5 gallon cans
 - 1.6 2 cylinders Freon gas
 - 1.7 used 12 volt batteries total approximately 15
 - 1.8 Oil in electrical transformers 160 liters
 - 1.9 Misc. Paint 360 liters

- 2 The diesel fuel in the two large tanks should be removed and securely stored.
 - 2.1 There is approximately 60,000 liters in the two tanks 29 inches in one and 23 inches in the other. Each tank is 30 feet in diameter. The fuel owned by the Canadian Coast Guard should be transferred to their tanks. Surplus fuel, if any, should be stored for use by Killiniq people.

- 3 The soil in the area of the fuel tanks, garage and generator buildings has been identified as contaminated by oil and grease. However, it should not be disturbed. The soil covering the rocks in these areas is only about 10 inches thick. At any attempt at scraping the contaminated soil would lead to a greater erosion of the surrounding areas. Further toxicological studies might be done to insure a complete evaluation of the potential risk associated to organic compounds in each identified sites.
- 4 The fuel tanks should be dismantled and removed to a suitable disposal site.
 - 4.1 The two fuel tanks measuring 30 feet in diameter and 22 feet in height should be taken apart and cut in pieces that can be removed.
 - 4.2 The two tanks that have been cut down should be dismantled into pieces that can be moved to a disposal site.
 - 4.3 The piping system associated with the fuel tanks should be dismantled and removed to a disposable site.
- 5 A disposal site should be established in the area of lot 46. This site should be divided into sections for large metal debris, wood and metal-plastic debris. A small area might be set aside for domestic garbage from the clean up crew, the Coast Guard maintenance crew and visitors to the site. This latter should be burned daily and buried. Where possible the material in the disposal site should be covered.
- 6 The solid waste disposal site should be permanently closed and remedial measures undertaken.
 - 6.1 Materials should be removed from the area close to the water.
 - 6.2 The large metal pieces and vehicles should be relocated in the new waste site
 - 6.3 The remainder should be concentrated in an appropriate area and, if possible, covered.

- 7 The electrical poles and transmission wires should be dismantled and disposed of.
 - 7.1 The electrical poles, numbering approximately 45, and the wiring should be taken down and removed to the disposal site.
 - 7.2 The wiring should be disposed in such a way that it poses no danger to wildlife.
- 8 The approximately 600 45 gallon drums should be crushed and removed to the disposal site.
- 9 The buildings on the site should be dismantled, burned, or stabilized, depending on their condition.
 - 9.1 Some Residential structures (n= 7) and other wooden buildings (n=10) should be demolished or burned. The debris should be removed to the disposal site.
 - 9.2 Up to 10 residential units might be stabilized for future use.
 - 9.3 The Municipal facilities, that is the warehouse, the garage and the power house, should be emptied as far as possible. Some of the materials such as the generators might be shipped out for recycling. These buildings should be stabilized.
 - 9.4 The Nursing Station, containing the oil, should be burned. The debris remaining should be removed to the disposal site.
 - 9.5 The Fisheries Processing Building and the Freezer building should be stabilized and cleaned. The wooden structures should be dismantled and or burned and the debris removed.
- 10 The wood and metal debris through out the town site should be collected and removed to the disposal site.
 - 10.1 Special consideration should be given to the clean up of the sites of the Co-op building and the School.

- 11 Consideration should be given to the transfer of the buildings that are stabilized to the Killiniq Landholding Corporation. They might be utilized in the future for such activities as ecotourism or for shelter for Inuit engaged in harvesting activities. All such structures should be clearly identified in Inuitut, English and French as to their ownership and use.
- 12 Provision should be made for preservation of the cemetery.
- 13 A Historic Plaque and a Cairn commemorating the Community of Port Burwell and the People who lived there should be established in collaboration with the responsible agency.

Work Plan

The on-site work has been planned for three periods. Phase one would be for a six week period beginning in late July 1995. The start would depend on the ice conditions and will end before the deterioration of weather conditions in September.

Phase two is planned for a three week period in March of 1996. This was suggested by the representative of the Killiniq families as one of the most suitable times for the removal of some of the heavier materials from their present locations to the disposal sites. Transportation for this phase would be by snowmobile from Kangiqsualujjuaq.

Phase three would be for a six week period, from July to September 1996.

Transportation of supplies and employees, for Phase One and Phase Three, would be by Peterhead boat from Kangiqsualujjuaq. There are two forty foot vessels in Kangiqsualujjuaq.

Priority of employment will be given to members of the Killiniq families and then to the Inuit of Kangiqsualujjuaq and other communities in the region.

The Makivik Research Center in Kuujjuaq will be responsible for logistic support for the project.

PORT BURWELL/KILLINIQ

	PHASE 1	PHASE 1	PHASE 2	PHASE 2	PHASE 2	PHASE 3	PHASE 3
Cost Estimates							
Equipment							
Snowmobiles				(6 x 20 @ \$100.00)	12,000.00		18,000.00
Komatsus				(6 x \$300.00)	1800		10,000.00
Bulldozer D3		18,000.00					4,000.00
Tractor equipped with blade, bucket and winch		10,000.00					2,500.00
ATV 4WD		4,000.00			1,000.00	(50 @ \$80.00)	2,000.00
Generator 5kw		2,500.00					2,000.00
Welding Equipment		2,000.00					2,000.00
Trailers		2,000.00					2,000.00
Radios HF and Portables		2,000.00			1000		1,500.00
Chain Saws 2		1,500.00					1,000.00
Equipment consumables (filters etc..)		1,000.00					1,200.00
Mechanical Tools		1,200.00					1,200.00
Carpenter's Tools		1,200.00					
Supplies							
Protective clothing		2,000.00			500		2,000.00
Propane		1,500.00			1,000.00		1,500.00
Gas		2,500.00			2,400.00		2,500.00
Engine Oil Lubricants		500.00			600		500.00
Oxygene and Acetylene		2,000.00					2,000.00
Plexiglass		4,000.00					
Roofing Materials		2,000.00					2,000.00
Containers for Shipping Hazardous Materials		2,000.00					2,000.00
Signs		1,200.00					
Transportation							
Transportation of Equipment		15,000.00					15,000.00
Charter of Peterhead		15,000.00			15 days		15,000.00
Boat at site		7,500.00				50 days @ \$ 150.00	7,500.00
Aircraft charters		10,000.00			6,000.00		10,000.00
Emergency Charter		6,000.00					4,000.00
Airfare Kuujuaq-Kangirsualujuaq		1,200.00				4 x \$ 300.00	1,200.00
Airfare Montreal - Kuujuaq (special Welder)		1,500.00					1,500.00
Personnel							
Laborers		30,000.00			15,000.00	4 x 50 @ \$ 150.00	30,000.00
Welders/Equipment Operators		20,000.00			20,000.00	2 x 50 @ \$ 200.00	20,000.00

PORT BURWELL/KILLINIQ

Foreman	60 days x \$ 250.0	12,500.00 (25 x \$250.00)	6,250.00 40 x \$ 250.0	10,000.00
Cook	60 x \$ 150.00	9,000.00 (20 x \$125.00)	3,000.00 40 x \$ 150.00	6,000.00
Specialized welder	20 x \$ 300.00	6,000.00	20 x \$ 300.00	6,000.00
Mechanic	20 x \$ 300.00	6,000.00	20 x \$ 300.00	6,000.00
Environmental Specialist	20 x \$ 300.00	6,000.00	20 x \$ 300.00	6,000.00
Project Coordinator	60 x \$ 350.00	21,000.00 (15 x \$350.00)	5,250.00 40 x \$ 350.00	14,000.00
Logistic Clerk	60 x \$ 125.00	9,000.00 (15 x \$125.00)	1,875.00 40 x \$ 125.00	5,000.00
Employers Contribution 12 percent		14,340.00	3,765.00	12,360.00
Insurance		3,000.00	1,000.00	3,000.00
Accomodation and Lodging				
Food	50 days x 10 x \$ 30.00	15,000.00 (7 x 20 x \$30.00)	4,200 40 days x 10 x \$ 30.00	12,000.00
Kitchen Materials		1,000.00	500	1,000.00
Stove		1,000.00		
Mattresses and Bedding		3,000.00		
Travel Expenses		1,000.00		1,000.00
Administration				
Preparation of Report		5,000.00	1,000.00	5,000.00
Consultation Meeting		1,200.00		1,200.00
Administration Costs 10 percent of project costs		25,484.00	6,814.00	22,216.00
Total Per Phase		280,324.00	74,954.00	244,376.00
Project Total				599,654.00

D. Field Notes 1995

Field notes 1995

Summary transcript of audio tapes

18 July Tuesday Kuujjuaq

- all morning last minute packing and purchasing, in afternoon completed loading of Aiviq
- weighted anchor at high tide just before five in the afternoon spent night at Jobies Point
- Aiviq well loaded with equipment, supplies and fifteen persons

19 July Wednesday

- weather foggy all day winds calm heavy rain at night
- weighted anchor just after eight ran fourteen hours from mouth of Kuujjuaq to Saputik
- quite a few seals spotted
- during night wind picked up somewhat had to change anchor

20 July Thursday

- weather overcast, winds moderate, water rough
- moved boat during night when winds picked up, weighted anchor at ten
- seven hours to Killiniq rough all the way
- opened Coast Guard garage started Muskeg unloaded boat
- building in worse shape than in late June more windows broken and additional debris
- cleaned out as far as possible one house
- late night for everyone
- one family had arrived before us and had cleaned out part of the nursing station
- problems with the propane stove had to borrow Coleman stove
- lots of seals

21 July Friday

- weather good winds light
- up early accommodation still a mess spent some time removing glass and debris
- initial cleaning of municipal warehouse and garage
- unpacked equipment note parts are missing from the welding equipment
- refueled Aiviq and crew prepared it for early morning departure
- worked basic eight to five, twelve persons
- in evening made out food orders for Kangirsualujjuaq and notes for missing parts if possible

22 July Saturday

- weather clear, winds calm, temperature warm
- Aiviq left at three in the morning bound for Kangirsualujjuaq to pick up the other workers and the balance of supplies later received news that they had arrived late in the evening
- tried bulldozer got a few puffs of white smoke before the batteries died will try tomorrow
- worked on cleaning out the generator building large volume of metal materials and part as well as four barrels of engine and fuel oil
- incinerated contents of four barrels from cache beside electrical shed in that area difficult due to contamination of fuel with water
- replaced windows on our house
- established new solid waste disposal site east of the old church after a period of consultation and consideration note it was difficult to access sites farther away due to the conditions of the ground which made passage by the Muskeg impossible
- assembled chain saws and other equipment, using rented ATV along with the trailer from the Coast Guard
- metal and debris from garage taken to new dump site
- refueled Muskeg note the engine time when we started it read sixty even it is now seventy three, the glass on the passenger side was broken when we picked it up
- worked eight to five, ten persons some clean up in evening

23 July Sunday

- heavy rain and winds in morning tapered off to overcast with moderate winds by nightfall
- continued work on stabilizing buildings
- cleaned out building below in lower section
- rigged up propane stove for cooking
- collected transformers from broken poles
- material from garage to dump site
- boat arrived en route for Coral Harbour and later another for Iqaluit the Black Jet
- rigged up trail radio checked up telephone system in case of emergencies

24 July Monday

- some fog weather fair
- both boats left early they had fueled up using hose from large tank oil slick left on the surface
- after considerable effort bulldozer started and running well, one hose still leaking slightly, fueled up
- fueled Muskeg which is hauling loads to the dump
- burned wood debris near electrical shed including debris from houses in lower section, metal to dump
- removed walls and what was left of the roof of the metal trailer beside the fish house left only the floor which was too heavy to move burned wood debris
- garbled message from Coast Guard on trail radio checked communication system did not touch
- Aiviq has left Kangirsualujjuaq en route all working eight to five some work after supper

26 July Wednesday

- fog, rain some wind
- Aiviq still wind bound
- most of the electrical lines down, poles very brittle
- completed house in area on road to CCG on hill
- in late afternoon threw a track on the bulldozer
- inventory of oil in barrels
- very foggy at night

27 July Thursday

- worked all day getting track back on the bulldozer helped by winch on muskeg and Lake Harbour boat crew completed about eight at night
- removing debris from houses including other suspended basement
- Coast Guard helicopter with technicians Louise and Louis arrived six thirty in morning later in day another helicopter delivered an amplifier en route Iqaluit to Nain, had a few items on first helicopter

28 July Friday

- light winds, overcast
- Aivik arrived on tide about 3 a.m. with workers and families as well as two small boats in tow
- day spent setting up tents and arranging accommodation in buildings
- meeting held in afternoon with all workers, safety stressed and organized work planned
- operators checked out bulldozer and Muskeg
- Bill departed on CCG helicopter in afternoon
- Killiniq population: 36

29 July Saturday

- CAVU very warm no wind swimming at lake
- started barrel collection with ATV and trailer
- started cutting electrical wires into twenty foot sections which were bundled and pulled to dump with second ATV
- one wall removed on the metal trailer at nursing and started cleaning of intact building containing skidoo and engine oil
- muskeg hauling to dump first flat tire tube tires so the plugs are useless used spare from garage
- sailboat from France with two persons arrived bound for Akulivik
- fisheries guardians arrived by canoe from Kangirsualujuaq

30 July Sunday

- some wind early morning moderate afternoon foggy in evening
- fisheries guardians departed at one on tide for Kangirsualujuaq
- continued cutting wires in upper section
- barrel collection up to ninety-seven
- both machines working at nursing six loads to dump
- connected line from lake so we have water running to the back of the houses
- installed wood stove
- reorganized food supplies

31 July Monday

- very windy last night rain
- fisheries guardians canoe swamped on shore also having motor problems news from HF radio
- worked in rain for half of day
- collected seven hundred quarts of ski-doo and engine oil from nursing
- wire cutting crew on line towards fish plant
- fishermen from trawler visited they said that the collector boat almost went ashore last night
- refueled both the muskeg and bulldozer
- walls removed from metal nursing trailer bed too heavy to move
- started dismantling house next to nursing moving sections to dump with track trailer
- transformers collected and placed in garage
- drum collection total one hundred and ninety
- worked till six with repairs to houses after supper
- problems with the hitch on the tracked trailer
- work started on cleaning metal and debris from fish plant
- repairs to houses at night

1 August Tuesday

- windy all day, fog and rain
- worked on warehouse
- emptied oil from transformers, approximately 60 gallons of transformer oil
- worked in fish plant
- stopped work at 3 p.m., too wet and rainy

2 August Wednesday

- strong winds all night dropping during day clear later
- house next to nursing completely removed to dump
- finding more fuel in drums in isolated locations than originally surveyed
- four persons added to work crews total workers fifteen plus two cooks
- Shell house down only the floor remains there are approximately three hundred barrels next to it these will have to be taken to the barrel dump
- continued barrel collection, cutting and cleaning of fish plant
- moved bulk of full drums to dump
- fisheries guardians still stranded running out of food
- later news they should be in Kangirsualujuaq late tonight

-even with mild weather no bugs

3 August Thursday

- clear and calm in morning rain in afternoon
- took down last transformer on pole near fish plant it was empty someone had put a bullet in it some years ago
- clearing out wire shed found an additional transformer which was under the pile of wires
- cleaned up remaining materials from area of nursing and shell
- inside of fish plant, small generator building and house cleaned out at least four loads of metal for bulldozer to haul as the hill is too steep for the muskeg with the farm trailer
- fueled up muskeg
- set up washing machine
- wire cutting crew continued
- very wet for working stopped outside work at four

4 August Friday

- rain and heavy fog
- Coast Guard vessel Des Grossliere arrived from Kuujjuaq with technicians for communications equipment still some problems
- refueled bulldozer some problems starting it also hitch broke again repaired it and continued hauling material from fish plant almost two hours per load
- dismantled house next to shell building
- one minor injury nail puncture visit to nurse on boat
- met with the Captain regarding arrangement for transportation of materials
- received one piece for welding equipment still a problem with adapter
- another flat tire on trailer second spare being used
- did maintenance on muskeg

5 August Saturday

- foggy and rain all night and early morning cleared up later in day
- Coast Guard helicopter in from ship
- muskeg and bulldozer hauled loads all day
- completed electrical wire there is about two thousand meters of the three strand wire
- continue verified with Coast Guard for welding equipment not successful
- area of fish plant being cleaned
- took insulators off transformers
- repaired hitch on tracked trailer again
- worked till about six thirty
- canoe left early this morning for Kangirsualujjuaq
- had donuts for coffee break
- ran water into the house for washing machine
- organization of dump into sections

6 August Sunday

- sunny and calm in morning
- cleaning up around houses

- cleaned up dump with bulldozer which later did some hauling
- refueled bulldozer some problems with reverse
- muskeg emptied electrical shed sixteen spools some very heavy put in dump separate section
- collection of barrels resumed total over four hundred
- two flat tires only one spare using compressor to fill up flat tire at regular intervals
- everyone worked late tonight
- continued clearing along roads and around areas where houses taken down
- fish plant area worked on
- laundry day for all families hand in wringer accident late in day assistance by nurse on ship
- hauling with both muskeg and bulldozer
- incinerate materials in dump worked till about nine
- reorganization of materials in dump
- burned some combustible at fish plant

7 August Monday

- thunder storm last night echoes off cliffs windy and rain all day
- clean up in lower section
- maintenance on ATV
- collection of electrical poles
- fueling Aiviq with flexible hose and barrels
- Coast Guard helicopter from Des Grossieres arrived for communication maintenance part of the day
- one ATV unserviceable
- worked on removing floor of skidoo shop

8 August Tuesday

- hauling of materials from area of warehouse including drums of engine oil contaminated by rust and water after verification
- drum collection continued
- refueled muskeg
- wind picked up to near one hundred kilometers by early evening

9 August Wednesday

- sunny light winds cool
- cleaning debris in area of cemetery
- surveyed area of tank farm following distribution lines looked for alternatives to current method of refueling boats
- barrel collection up to five hundred
- muskeg using winch collecting metal such as culvert supports also loads on wagon
- wood and debris in upper section being collected

10 August Thursday

- sunny light winds calm at night very high tides
- changed oil on bulldozer

- bulldozer with tracked trailer hauling all day until after six
- two full barrels of oil found between the fish plant and the fuel tanks
- cleaning in area of ski-doo shop
- muskeg collected remaining electrical poles, full barrels, and debris in a number of areas
- cleaning along the road to Coast Guard installations
- inventory of materials
- worked till six

11 August Friday

- sunny light winds
- general clean up and family day

12 August Saturday

- foggy and drizzle cleared up later in day
- fuel bulldozer and muskeg
- completed the two loads from fish plant and other loads from the upper part of the site with bulldozer
- moved debris from lower section to dump with Muskeg
- problems with leaks in tires
- collection of furnace and heavy materials with winch on muskeg
- incinerated materials at dump site
- worked till well after six

14 August Monday

- weather fair winds light
- a Coast Guard helicopter arrived with Fisheries Officers on board on beluga patrol they returned to Kuujjuaq in the early afternoon
- finished pick-up of debris and garbage including large pieces of ski-doo shop floor
- cleaned muskeg and shut down bulldozer
- packed equipment and supplies
- cleaned and boarded up houses in preparation for departure
- loaded Aiviq on the tide
- everyone worked till after midnight

15 August Tuesday

- clear light wind
- everyone up at five, boarded up houses, packed last of materials and supplies, locked equipment in Coast Guard garage, muskeg parked, bulldozer parked behind garage, walked to fish plant dock with sleeping bags and packs
- weighted anchor just after eight twenty-eight persons aboard arrived in Kangirsualujjuaq one-thirty next morning non-stop run good weather all the way until near Kangirsualujjuaq when the wind picked up and the rain started two canoes followed and arrived several days later

End of first work phase

Second work phase

Summary transcript from audio tapes

11 September Monday

- traveled with Sandy Suppa on Air Inuit Kuujuuaq to Kangirsualujjuaq
- packing of equipment
- rough all night

12 September Tuesday

- weather overcast windy waves moderate winds later increasing to 30 knots
- last minute purchases and loaded Aiviq for departure early afternoon seven persons on board
- anchored near Beacon Point about five as it was too rough to go farther

13 September Wednesday

- weather overcast winds decreased during day
- weighted anchor at eight and made Bell Inlet just after five where we anchored for the night

14 September Thursday

- weather overcast winds picked up overnight and increased during day
- departed Bell Inlet seven thirty
- had to pull in to Coates Inlet for shelter about two, winds kept up all afternoon

15 September Friday

- strong winds from west all day white caps on the waves outside the Inlet
- high winds lasted all day stayed at anchor McClullen Strait currents combined with the waves made it far too rough to attempt to cross

16 September Saturday

- weather overcast winds moderate to light late in the day
- some difficulties starting engine had to use auxiliary generator
- weighted anchor at ten one anchor lost during night rough -crossing to Killiniq Island had to load canoe and motor on board
- arrived Killiniq about three
- discovered missing equipment from our stores in the Coast Guard garage
- window broken in the house we used for accommodation cleaned these up and replaced them where possible settled in by dark

17 September Sunday

- weather light winds fog and rain later in day
- oxygen cylinder missing so it was not possible to pack the transformers as the welding equipment was needed after a long discussion it was decided that we would transport the transformers to Kuujjuaq on the Aiviq
- cleaned Coast Guard garage and packed equipment
- clean up of warehouse and around buildings debris to dump
- posted signs throughout the site
- compiled list of equipment and materials missing, note found wheel barrow marks to dock by fish plant
- refueled Aiviq
- the bulldozer was checked for storage behind garage
- worked from eight till after nine at night

18 September Monday

- snow during night, fog and drizzle during day
- packed food, materials and equipment, moved transformers to beach wind picked up later in day
- high tide in late afternoon, loaded transformers with winch on muskeg to canoe then to the Aiviq completed loading in one tide
- hours on Muskeg 170
- refueled Muskeg key in accommodation, left a case of 5W40 in garage left some parts for the bulldozer including air filter
- Aiviq still having problems with generator
- load on Aiviq includes 13 transformers, two drums of transformer oil, ATV, empty propane cylinders, freezer, supplies, food, equipment
- unhooked water lines
- cleaning up and shutting down till after midnight
- stored Muskeg for winter after four more trips to dump
- Aiviq fully loaded low in water
- everyone worked till well after midnight to complete packing and clean up

19 September Tuesday

- weather good winds calm all day
- light wind some fog
- up at four thirty closed up buildings and loaded camping equipment weighted anchor at eight stopped at Bell Inlet to pick up eight persons, arrived at Kangirsualujjuaq three in the morning, a very long day
- problems with the electrical system bilge pump and radar had to keep starting the auxiliary generator
- did the pick up at Bell Inlet directly from cliff as the canoe was searching for the anchor in Coates Inlet

20 September Wednesday

- winds light with some rain showers passing through during day
- arrived at Kangirsualujjuaq three in the morning stayed at anchor until high tide five in the afternoon weighted anchor at six and departed for Kuujjuaq weather good until about ten at night winds picked up to forty to sixty high waves spent night in rough water about two in

the morning lost the canoe and motor which we were towing as there was no space on deck to carry it on board the conditions were too rough during the night to search for it made land just after dawn winds still very high

21 September Thursday

-first anchorage too shallow and exposed so moved back east to Kawa and found a sheltered anchorage, wind very high all day made radio contact in late afternoon with Kangirsualujjuaq

22 September Friday

-winds high all day stayed at anchor all day except for short excursion to get drinking water with help of survival suit -forecast for tomorrow good

23 September Saturday

-up before dawn winds light weighted anchor at five thirty winds picked up during morning about eleven near sixty had to run for shelter at mouth of False River very shallow tried in afternoon on incoming tide very rough but finally arrived at Kuujjuaq eight thirty at night

The Aiviq unloaded on September 24 and after some more rough weather returned safely to Kangirsualujjuaq September 29.

E. Work Plan for Contribution Agreement



Indian and Northern Affairs Canada / Affaires indiennes et du Nord Canada

**AES - ACTION ON WASTE PROGRAM (NWT)
CONTRIBUTION AGREEMENT WITH
MAKIVIK CORPORATION**

This Contribution Agreement, is entered into as of the 1st day of July 1995. *Site Votre référence*
Our file Notre référence

BETWEEN: HER MAJESTY THE QUEEN in Right of Canada represented by the Minister of Indian Affairs and Northern Development (hereinafter called "the Minister")

OF THE FIRST PART

AND: MAKIVIK CORPORATION (herein after called "the Recipient")

OF THE SECOND PART

DEFINITIONS

- Department** The Department of Indian Affairs and Northern Development.
- Minister** The Minister as defined in the Indian Act and for the purposes of this Agreement shall include duly authorized representatives of the Department of Indian Affairs and Northern Development.
- Action on Waste** A component of the Arctic Environmental Strategy empowered to eliminate unsafe, hazardous and unsightly waste in the North.
- Arctic Environmental Strategy** A program being implemented by the Department in the North to preserve and enhance the integrity, health, biodiversity, and productivity of the Arctic ecosystem.



Work Program	The outline set out in Appendix A describing the methodology and services to be rendered by the Recipient.
Expenditure Plan	A statement set out in Appendix A distributing the annual budget for the programs and services in accordance with the Recipient's estimated cash requirement and as appropriated by Parliament

1.0 PURPOSE

- 1.1 Whereas the purpose of this Contribution Agreement is to enable the direct participation of the Makivik Corporation, in the Action on Waste program under the Arctic Environmental Strategy;

And where it is the intent of the Minister to bargain "in good faith" with respect to discussions and decisions regarding the disposal of hazardous wastes and an environmental cleanup at Port Burwell;

And whereas the Minister is authorized to make contributions to finance the cost to the Recipient to undertake the disposal of hazardous wastes and an environmental cleanup of the Port Burwell site, as detailed in Appendix A;

Now therefore this agreement witnesseth that the parties hereto agree as follows:

2.0 THE RECIPIENT

The Recipient Agrees:

- 2.1 To the Work Program and Expenditure Plan as specified in Appendix A attached hereto and to the conditions, clauses and limitations contained in this Agreement.
- 2.2 The Contribution or any part thereof shall not be disbursed for any purpose other than those contained in this Agreement. Failure to comply with the provisions of this Agreement entitles the Minister to recover from the Recipient an amount equivalent to the sums disbursed for a purpose other than those contained herein, and the Recipient agrees that these amounts all constitute disallowed expenses, which shall be due and payable by the Recipient to the Minister (or his representative) within thirty (30) calendar days of so being requested in writing.
- 2.3 To repay any overpayment and unexpended balances, and that these amounts constitute an amount due and payable by the Recipient to the Minister (or his representative) within thirty (30) calendar days of so being requested in writing.
- 2.4 No payment under this Agreement shall be made for activities undertaken prior to July 1, 1995.

- 2.5 To incorporate and utilize appropriate environmental protection measures in relation to the program activities which satisfy the requirements of all federal and/or territorial acts, regulations and guidelines as applicable and to comply with the same
- 2.6 To consent to the Department using the work program and its results for publicity purposes including public announcements; participation in official ceremonies; news releases; use of signs, plaques, or symbols; as deemed appropriate by the Department.
- 2.7 To submit reports or products as outlined below:
- 2.7.1 To submit an interim report to the Manager, Action on Waste, for review by September 31, 1995 and a final report by November 30, 1995 for the work program conducted at Port Burwell.
- 2.8 To maintain a separate account for all receipts and expenditures pursuant to this Agreement, and shall maintain accounting records in a manner consistent with generally accepted accounting principles and practices as issued by the Canadian Institute of Chartered Accountants.
- 2.9 To agree to an audit of all expenditures and financial statements, if one is required by the Department.
- 2.10 To forward the reports and financial statements specified in Section 2 and 3 to the representative as identified for the AES-Action on Waste office on behalf of the Minister by the dates specified.
- 2.11 The Recipient shall indemnify and save harmless the Minister from and against all claims, suits or proceedings of whatever nature and by whomsoever made, brought or prosecuted in any manner based upon, occasioned by or attributable to the activities of the Recipient, its employees or agents,
- 2.12 The Recipient agrees that in any and all subsequent Agreements entered with third parties pursuant to this Contribution Agreement, the Recipient shall ensure that the following clause is included in the terms of such Agreements:
- "The parties hereto agree and fully understand the Recipient is not, and does not act as, the agent of Her Majesty the Queen in Right of Canada in respect of this Agreement or any part thereof. The parties further agree, and hereby acknowledge that each of them acts herein solely as its own Principal and on its own behalf"
- 2.13 No member, director, officer or employee, or other person not at arms length to such member, director, officer or employee should directly or indirectly, be unjustly enriched as a result of the employment position of the member, director, officer or employee or access to "insider" information to which he or she may be privy in the normal course of their employment with the Recipient.

- 2.14 No member or the House of Commons or Senate shall be admitted to any share or part of this Agreement or to any benefit arising therefrom.
- 2.15 The Recipient will disclose the involvement of former federal public servants who are under the Post-employment code by Public Office Holders.
- 2.16 That all capital purchases made with funds from this Contribution Agreement shall become Crown property upon completion of the work program (Appendix A).

3.0 THE MINISTER AGREES:

3.1 PAYMENTS

Port Burwell Hazardous Waste Disposal and Environmental Cleanup

- 3.1.1 Subject to the terms and conditions herein described, and subject to funds being appropriated annually by Parliament for the purposes herein, Her Majesty shall contribute to the Recipient amounts not to exceed **TWO HUNDRED EIGHTY ONE THOUSAND** dollars (\$281,000.00) during the period July 1, 1995 to March 31, 1996.
- 3.1.2 An initial payment of **ONE HUNDRED FORTY THOUSAND FIVE HUNDRED** dollars (\$140,500.00) will be made upon signing of the Agreement.
- 3.1.3 The balance of the Contribution Agreement (less 10 % holdback of \$28,100.00) of: **ONE HUNDRED TWELVE THOUSAND FOUR HUNDRED** dollars (\$112,400.00) will be paid upon receipt of invoices detailing expenses incurred to date in accordance with Section 2.8 of this Agreement.
- 3.1.4 The holdback (10%) of **TWENTY EIGHT THOUSAND ONE HUNDRED** dollars (\$28,100.00) will be paid upon receipt and approval of the final report referred to in Section 2.7 and an audited financial statement itemizing costs incurred on the project.

Such approval will be granted or withheld within 10 days of the recipient notifying the department and such an approval will not be unreasonably withheld.

It is understood and agreed that the Departmental Representative shall be the final judge concerning the quality and acceptability of the work.

4.0 THE PARTIES MUTUALLY AGREE:

- 4.1 This Agreement shall come into effect on July 1, 1995 and shall continue in effect until continue in effect until December 31, 1996, by which time the Recipient agrees to have fulfilled all the terms and conditions of this Agreement. This payment Agreement shall terminate on March 31, 1996.
- 4.2 The Parties acknowledge the Action on Waste Program established under the Arctic Environmental Strategy shall operate in an advisory capacity to the Minister of Indian Affairs and Northern Development.
- 4.3 That the Department of Indian & Northern Affairs (DIAND) shall be the binding agency with respect to clean-up and remediation plans for this site;
- 4.4 That it is acknowledged there is no intent on the part of both parties to create an agency, partnership or alliance with either party through the signing of this Agreement;
- 4.5 This Agreement supersedes all communications, negotiations and agreements either written or oral, between the parties hereto in respect of matters pertaining to this Agreement, prior to its execution and delivery.
- 4.6 The present Agreement shall be deemed to have been entered into at Yellowknife, Northwest Territories, and shall be governed by and interpreted in accordance with the laws of the Northwest Territories.
- 4.7 All amendments to this Agreement are to be made in writing and executed by both parties.
- 4.8 Unless invoked as a result of Section 3.0 termination of this Agreement by either party shall require written notice, received by registered mail at least thirty (30) days prior to the termination date, indicating the intent and reasons for such termination.
- 4.9 In the event of termination of the Agreement, any funds held by the Recipient for the purposes set out in this Agreement shall be paid over to the Receiver General for Canada within thirty (30) days of the termination date, after the payment of all outstanding accounts for proper services rendered up to and including the day of cancellation.

5.0 PROCLAMATION


This Contribution Agreement has been discussed and is understood by both parties, and may be amended by mutual agreement of both parties hereto.

6.0 ACCEPTANCE

ACCEPTED ON BEHALF OF THE MINISTER



Director, Operations
DIAND



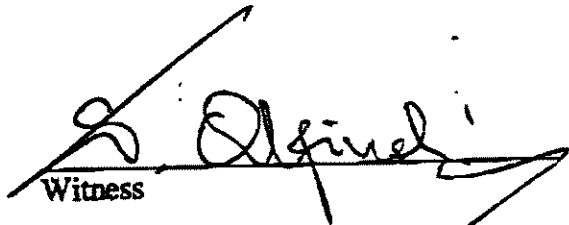
Witness

June 30, 1995
Date

**ACCEPTED ON BEHALF OF
MAKIVIK CORPORATION**

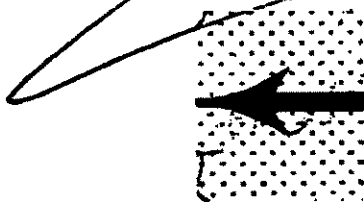


Makivik Corporation




Witness

July 12/95
Date



I certify that this Contribution Agreement meets Treasury Board requirements for the Action on Waste program under the Arctic Environmental Strategy in the Northwest Territories.



Director, Corporate Services
DIAND

July 5/95
Date

APPENDIX A

STATEMENT OF WORK & EXPENDITURE PLAN

**Port Burwell
Hazardous Waste Disposal
&
Environmental Cleanup
1995**

Makivik Corporation



LPA' d<D>ñh'
Makivik Corporation Société Makivik

March 15, 1995

André Theriault
 District Manager
 Department of Indian and Northern Affairs
 P.O. Box 100,
 Iqaluit, N.W.T.
 X0A 0H0

Dear Mr. Theriault,

Please find attached a proposal for funding to conduct an environmental clean up of the abandoned community site at Port Burwell on Killiniq Island. We are directing this funding proposal to the Action on Waste Program of the Arctic Environmental Strategy.

This funding will enable the Inuit of Nunavik to undertake the remedial measures identified in the environmental survey of the site in September 1994.

In reviewing the report of the survey that was transmitted to you last December, it is clear that the conditions at the site stem from the actions that were taken or not taken by those responsible for the closing of the community in 1978. Materials, structures and buildings should have been removed or at least stored in a responsible manner. Now, almost seventeen years later, the site has deteriorated to the point where a complete cleanup is imperative.

The deplorable state of the buildings and debris at the community site have a very negative effect on visitors and on Inuit engaged in harvesting activities in the area. This area is used on a regular basis by Inuit and the site is also one of historic importance to Nunavik and Nunavut. Moreover Killiniq Island is targeted as a potential site for ecotourism. Notwithstanding, no developments can be considered for this area, unless the site is restored or at least cleaned up satisfactorily.

Head Office - Siège Social
 C.P. 179
 Kuujuaq (Québec)
 J0M 1C0
 Tél. (819) 964-2925
 Fax (819) 964-2613

Inukjuak
 Inukjuak (Québec)
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Mirabel
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 Tél. (514) 834-4091
 Fax (514) 834-3817

Québec
 555, Grande-Allee E
 Québec (Québec)
 G1R 2J6
 Tél. (418) 322-2224
 Fax (418) 322-2636

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-2-

Makivik Corporation has prepared this proposal so that Inuit from Kangiqsualujjuaq and specifically those who lived in Killiniq can be involved and direct the clean up of the site. They will have priority of employment.

We believe that this project is important, not only in terms of the environment, but so that some of the economic potential of the area can be realized. The organization of the work has been arranged in such a way as to maximize the participation of the people from Kangiqsualujjuaq and for economic benefits to the community.

Makivik will provide technical and logistical support from its office in Kuujjuaq. Personnel with experience in similar projects have been identified and will be made available as required.

It is realized that other federal agencies, such as the Canadian Coast Guard may be involved in possibly providing support. In addition, the Government of the North West Territories has jurisdiction over and responsibilities toward site.

This project has been reviewed with the Makivik Executive, has been discussed with the community representatives and we have their full support. Should you require further information, Michael Barrett can be contacted at the Makivik Office in Kuujjuaq.

In closing we thank you for your assistance in the realization of the environmental survey phase and trust we will equally have your support to effect a cleanup.

Yours truly,

Stas Olpinski, Head
Renewable Resource
Development Department

cc Jackie Koneak
Michael Barrett
Scott Mitchell

Killiniq - Port Burwell Environmental Clean Up Project

submitted to

Arctic Environmental Strategy
Action on Waste Program
Department of Indian and Northern Affairs

by

Renewable Resource Development Department
Makivik Corporation
Kuujuuaq, Quebec

March 1995

Port Burwell - Killiniq Environmental Clean Up Project

The objectives of this project are to remove hazardous materials, effect an environmental clean up and stabilize the abandoned facilities and materials at Port Burwell on Killiniq Island.

Phase 1 July - September 1995

Phase 2 March 1996

Phase 3 July - September 1996

Project Costs

1995-96 fiscal year \$280,324.00 -

1996-97 fiscal year \$319,330.00

Project Team

Michael Barrett	- Coordinator
Bill Doidge	- Senior Biologist
Sandy Suppa	- Technician

Introduction

In 1994, following requests from former residents of Killiniq and from Inuit engaged in harvesting activities in the area of Killiniq, Makivik Corporation prepared a proposal for an environmental survey of the Port Burwell community site. Funding was approved under the Action on Waste Program, administered by the Department of Indian and Northern Affairs. The survey was undertaken in the fall and the report was submitted to DINA in December.

The report has been reviewed by the Executive of Makivik Corporation in consultation with members of the Killiniq families and the community of Kangisualujuaq. The consensus is that the clean up of the abandoned Port Burwell site should be considered as a priority.

Killiniq Island is strategically located in terms of migrations for a number of species of marine mammals, fish and migratory birds. It is considered an ecologically sensitive area of importance to Inuit for subsistence harvesting and has great potential for adventure tourism.

The persons responsible for the decision to abandon the community should have taken the necessary measures to remove the hazardous materials and to restore the site at the time of the withdrawal. The deterioration of the building, facilities and materials left at the site will now prove more difficult and costly to remove and clean up.

Objectives and Methods

The objective of this project is to remove hazardous materials, effect an environmental clean up and stabilize the abandoned facilities and materials at Port Burwell on Kililniq Island.

The methodology used will be based on the recommendations contained in the Port Burwell Environmental Survey 1994.

Recommendations

- 1 The materials that are or may be hazardous to persons or the environment should be neutralized or disposed of at the site. If this is not possible, they should be shipped to a disposal facility.
 - 1.1 Battery Acid approximately 165 liters
 - 1.2 used engine oil approximately 3500 liters
 - 1.3 engine oil approximately 1400 liters
 - 1.4 oil stored in warehouse approximately 500 liters
 - 1.5 oil in nursing station and in cans outside approximately 50 cases and 1100 liters in 5 gallon cans
 - 1.6 2 cylinders Freon gas
 - 1.7 used 12 volt batteries total approximately 15
 - 1.8 Oil in electrical transformers 160 liters
 - 1.9 Misc. Paint 360 liters

- 2 The diesel fuel in the two large tanks should be removed and securely stored.
 - 2.1 There is approximately 60,000 liters in the two tanks 29 inches in one and 23 inches in the other. Each tank is 30 feet in diameter. The fuel owned by the Canadian Coast Guard should be

transferred to their tanks. Surplus fuel, if any, should be stored for use by Killiniq people.

- 3 The soil in the area of the fuel tanks, garage and generator buildings has been identified as contaminated by oil and grease. However, it should not be disturbed. The soil covering the rocks in these areas is only about 10 inches thick. At any attempt at scraping the contaminated soil would lead to a greater erosion of the surrounding areas. Further toxicological studies might be done to insure a complete evaluation of the potential risk associated to organic compounds in each identified sites.
- 4 The fuel tanks should be dismantled and removed to a suitable disposal site.
 - 4.1 The two fuel tanks measuring 30 feet in diameter and 22 feet in height should be taken apart and cut in pieces that can be removed.
 - 4.2 The two tanks that have been cut down should be dismantled into pieces that can be moved to a disposal site.
 - 4.3 The piping system associated with the fuel tanks should be dismantled and removed to a disposable site.
- 5 A disposal site should be established in the area of lot 46. This site should be divided into sections for large metal debris, wood and metal-plastic debris. A small area might be set aside for domestic garbage from the clean up crew, the Coast Guard maintenance crew and visitors to the site. This latter should be burned daily and buried. Where possible the material in the disposal site should be covered.
- 6 The solid waste disposal site should be permanently closed and remedial measures undertaken.
 - 6.1 Materials should be removed from the area close to the water.
 - 6.2 The large metal pieces and vehicles should be relocated in the new waste site
 - 6.3 The remainder should be concentrated in an appropriate area and, if possible, covered.

- 7 The electrical poles and transmission wires should be dismantled and disposed of.
 - 7.1 The electrical poles, numbering approximately 45, and the wiring should be taken down and removed to the disposal site.
 - 7.2 The wiring should be disposed in such a way that it poses no danger to wildlife.
- 8 The approximately 600 45 gallon drums should be crushed and removed to the disposal site.
- 9 The buildings on the site should be dismantled, burned, or stabilized, depending on their condition.
 - 9.1 Some Residential structures (n= 7) and other wooden buildings (n=10) should be demolished or burned. The debris should be removed to the disposal site.
 - 9.2 Up to 10 residential units might be stabilized for future use.
 - 9.3 The Municipal facilities, that is the warehouse, the garage and the power house, should be emptied as far as possible. Some of the materials such as the generators might be shipped out for recycling. These buildings should be stabilized.
 - 9.4 The Nursing Station, containing the oil, should be burned. The debris remaining should be removed to the disposal site.
 - 9.5 The Fisheries Processing Building and the Freezer building should be stabilized and cleaned. The wooden structures should be dismantled and or burned and the debris removed.
- 10 The wood and metal debris through out the town site should be collected and removed to the disposal site.

10.1 Special consideration should be given to the clean up of the sites of the Co-op building and the School.

- 11 Consideration should be given to the transfer of the buildings that are stabilized to the Killiniq Landholding Corporation. They might be utilized in the future for such activities as ecotourism or for shelter for Inuit engaged in harvesting activities. All such structures should be clearly identified in Inuitut, English and French as to their ownership and use.
- 12 Provision should be made for preservation of the cemetery.
- 13 A Historic Plaque and a Cairn commemorating the Community of Port Burwell and the People who lived there should be established in collaboration with the responsible agency.

Work Plan

The on-site work has been planned for three periods. Phase one would be for a six week period beginning in late July 1995. The start would depend on the ice conditions and will end before the deterioration of weather conditions in September.

Phase two is planned for a three week period in March of 1996. This was suggested by the representative of the Killiniq families as one of the most suitable times for the removal of some of the heavier materials from their present locations to the disposal sites. Transportation for this phase would be by snowmobile from Kangiqsualujjuaq.

Phase three would be for a six week period, from July to September 1996.

Transportation of supplies and employees, for Phase One and Phase Three, would be by Peterhead boat from Kangiqsualujjuaq. There are two forty foot vessels in Kangiqsualujjuaq.

Priority of employment will be given to members of the Killiniq families and then to the Inuit of Kangiqsualujjuaq and other communities in the region.

The Makivik Research Center in Kuujjuaq will be responsible for logistic support for the project.

PORT BURWELL/KILLINQ

Cost Estimates	PHASE 1	PHASE 2	PHASE 3	PHASE 2	PHASE 3	PHASE 3
Equipment						
Snowmobiles		(6 x 20 @ \$100.00)	12,000.00			
Komatsus		(6 x \$300.00)	1800			
Buildozer D3	18,000.00					18,000.00
Tractor equipped with blade, bucket and winch	10,000.00					10,000.00
ATV 4WD	4,000.00			(50 @ \$80.00)		4,000.00
Generator 5kw	2,500.00		1,000.00			2,500.00
Welding Equipment	2,000.00					2,000.00
Trailers	2,000.00					2,000.00
Radios HF and Portables	2,000.00		1000			2,000.00
Chain Saws 2	1,500.00					1,500.00
Equipment consumables (filters etc.)	1,000.00					1,000.00
Mechanical Tools	1,200.00					1,200.00
Carpenter's Tools	1,200.00					1,200.00
Supplies	2,000.00			500		2,000.00
Protective clothing	1,500.00			1,000.00		1,500.00
Propane	2,500.00			2,400.00		2,500.00
Gas	500.00			600		500.00
Engine Oil Lubricants	2,000.00					2,000.00
Oxygene and Acetylene	4,000.00					
Plexiglass	2,000.00					2,000.00
Roofing Materials	2,000.00					2,000.00
Containers for Shipping Hazardous Materials	2,000.00					2,000.00
Signs	1,200.00					
Transportation						
Transportation of Equipment	15,000.00					15,000.00

PORT BURWELL/KILLINIQ

Charter of Peterhead	15 days	15,000.00	15 days	15,000.00
Boat at site	50 days @ \$ 150.00	7,500.00	50 days @ \$ 150.00	7,500.00
Aircraft charters	10,000.00	6,000.00		10,000.00
Emergency Charter	6,000.00			4,000.00
Airfare Kuujuaq-Kangirsua/Iujuaq	4 x \$ 300.00	1,200.00	4 x \$ 300.00	1,200.00
Airfare Montreal - Kuujuaq (special welder)	1,500.00			1,500.00
Personnel				30,000.00
Laborers	4 x 50 @ \$ 150.00	30,000.00 (5 x 20 @ \$150.00)	15,000.00 4 x 50 @ \$ 150.00	20,000.00
Welders/Equipment Operators	2 x 50 @ \$ 200.00	20,000.00	2 x 50 @ \$ 200.00	10,000.00
Foreman	60 days x \$ 250.0	12,500.00 (25 x \$250.00)	6,250.00 40 x \$ 250.0	6,000.00
Cook	60 x \$ 150.00	9,000.00 (20 x \$125.00)	3,000.00 40 x \$ 150.00	6,000.00
Specialized welder	20 x \$ 300.00	6,000.00	20 x \$ 300.00	6,000.00
Mechanic	20 x \$ 300.00	6,000.00	20 x \$ 300.00	6,000.00
Environmental Specialist	20 x \$ 300.00	6,000.00	20 x \$ 300.00	14,000.00
Project Coordinator	60 x \$ 350.00	21,000.00 (15 x \$350.00)	5,250.00 40 x \$ 350.00	5,000.00
Logistic Clerk	60 x \$ 125.00	9,000.00 (15 x \$125.00)	1,875.00 40 x \$ 125.00	
Employers Contribution 12 percent		14,340.00	3,765.00	12,360.00
Insurance		3,000.00	1,000.00	3,000.00
Accommodation and Lodging	50 days x 10 x \$ 30.00	15,000.00 (7 x 20 x \$30.00)	4200 40 days x 10 x \$ 30.00	12,000.00
Food		1,000.00	500	1,000.00
Kitchen Materials		1,000.00		
Stove		3,000.00		
Mattresses and Bedding				1,000.00
Travel Expenses		1,000.00		

PORT BURWELL/KILLINIQ

Administration					
Preparation of Report	5,000.00		1,000.00		5,000.00
Consultation Meeting	1,200.00				1,200.00
Administration Costs 10 percent of project costs	25,484.00		6,814.00		22,216.00
Total Per Phase	280,324.00		74,954.00		244,376.00
Project Total					\$99,654.00

F. Inventory of Transformers and Results of Analysis

Westinghouse transformers:

Serial #	641190	255 lbs.
Serial #	641185	255 lbs.
Serial #	46242	670 lbs.

General Electric transformers:

ONS. #	559595	405 lbs.
ONS. #	559592	405 lbs.
ONS. #	585090	310 lbs.
ONS. #	560131	275 lbs.
ONS. #	559594	405 lbs.
ONS. #	581030	275 lbs.
ONS. #	585092	310 lbs.
ONS. #	585091	310 lbs.
ONS. #	559591	405 lbs.
ONS. #	560132	275 lbs.

Approximately 65 gallons of transformer oil

Laboratoires
Eco•CNFS Inc.

CERTIFICAT D'ANALYSE

CLIENT SOCIÉTÉ MAKIVIK CORP.
RESPONSABLE Milce Barrett
ADRESSE 650 32ième Ave. 6ième étage
Lachine, Qc
H8T 3K5

NO. DE PROJET 407731
DATE DE RÉCEPTION 23/09/94
DATE DE PRÉLÈVEMENT ---
NO. DE COMMANDE ---

REMARQUES

NUMÉRO DE LABORATOIRE	ÉCHANTILLON(S) D'HUILE (mg/kg)
	23
IDENTIFICATION	#23
Biphenyles polychlorés	
Aroclor 1242	---
Aroclor 1248	---
Aroclor 1254	---
Aroclor 1260	1.8
Total	1.8
CONTROLE DE LA QUALITÉ	Récupération
STANDARD DE RÉCUPÉRATION	%
Nonachlorobiphényle	125



Superviseur

Milce Barrett

Chimiste

Martin Dea

Date

29 Septembre 1994

Laboratoires
ECO•CNFS Inc.

121 Boul. Hymus, Pointe Claire, Québec H9R 1E6
Téléphone: 514.697.3400 Fax: 514.697.2090

Certificat d'analyse

CLIENT	Société Makivik Corporation	NO. DE PROJET	507691
RESPONSABLE	Michael Barrett	DATE DE RÉCEPTION	07/09/95
ADRESSE	650 32iem Avenue, 6iem étage	DATE DE PRÉLÈVEMENT	-----
	Lachine, Québec	NO. DE COMMANDE	001699
	H8T 3K5		

REMARQUES

NUMÉRO DE LABORATOIRE	ÉCHANTILLON(S) D'HUILE, (mg/kg)	
	#1	#2
IDENTIFICATION	#1	#2
Biphényles polychlorés		
Aroclor 1242	< 0.5	< 1.0
Aroclor 1243	< 0.5	< 1.0
Aroclor 1254	< 1.0	< 3.0
Aroclor 1260	1.6	3.5
Total	1.6	3.5
CONTROLE DE LA QUALITÉ	Récupération	Récupération
STANDARD DE RÉCUPÉRATION	%	%
Nonachlorobiphénylie	92	93

337-53411

Vérfifié

Sylvia Laporte

Approuvé

Martin Desjardins



Date

12 septembre 1995

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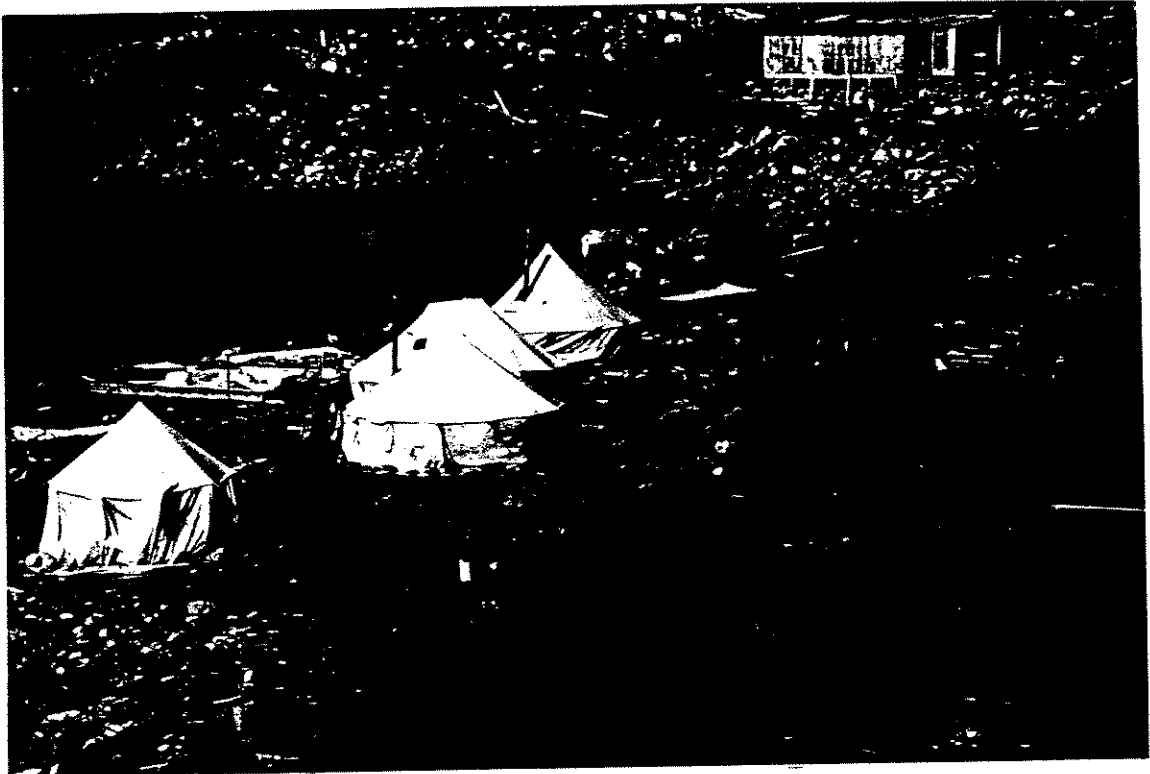
G. Photographs



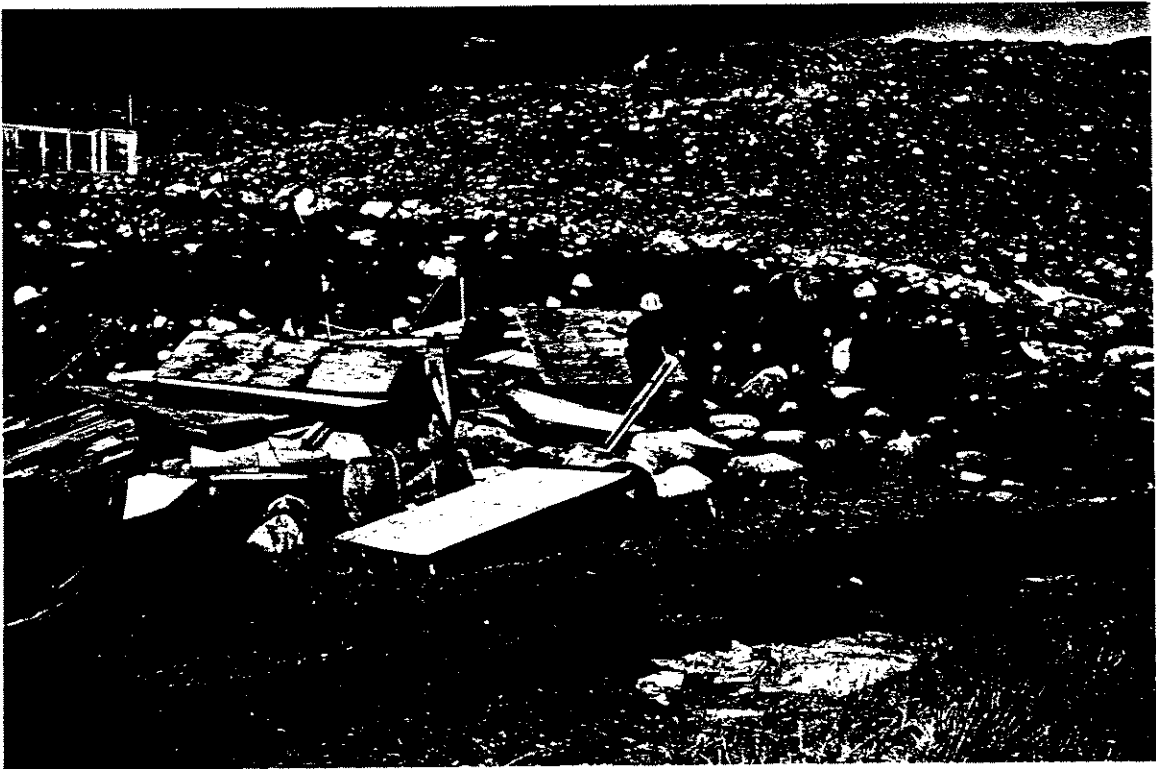
D-5 Bulldozer and Tracked Trailer



Removing Floor of Shell Building



Landing Area near Nursing Station



Removing a Building



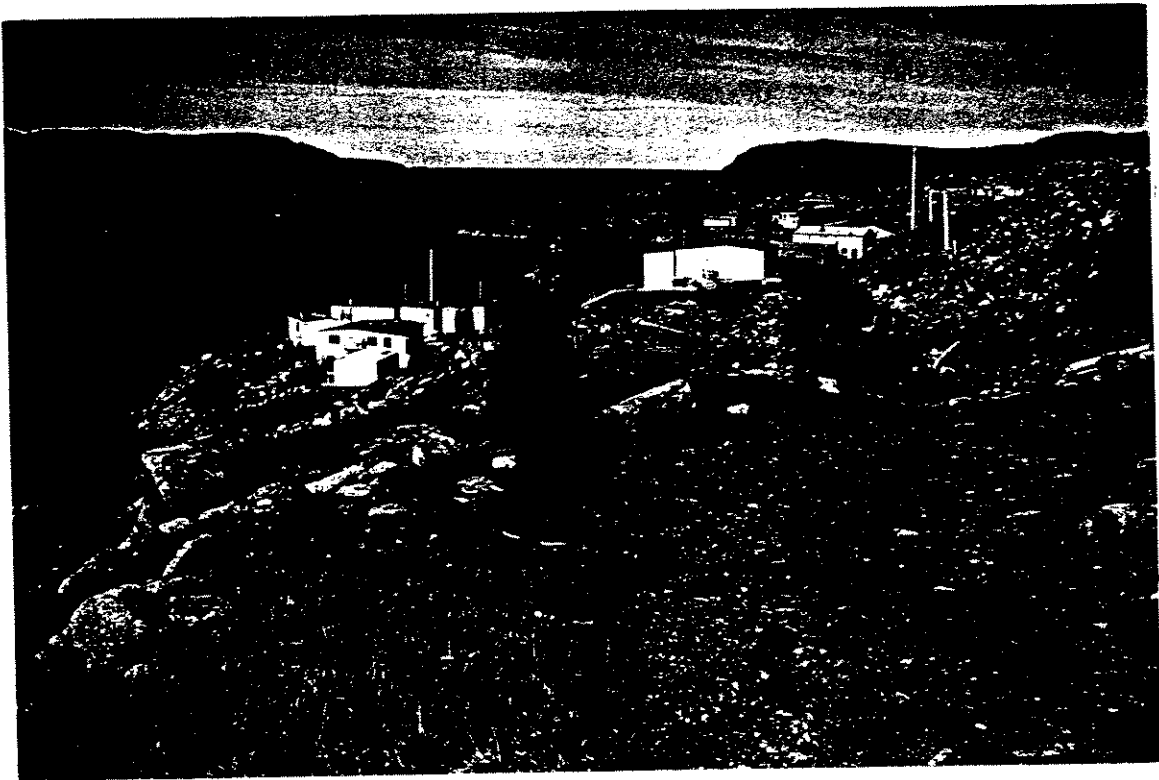
ATV and Trailer on Barrel Collection



Cutting Wires



New Barrel Storage Site



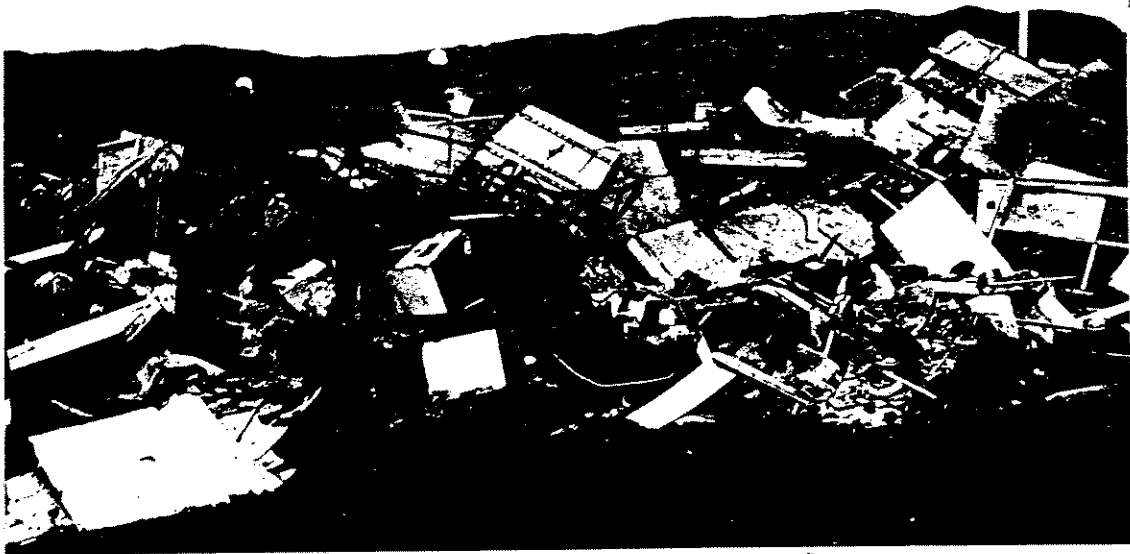
Overview of Site



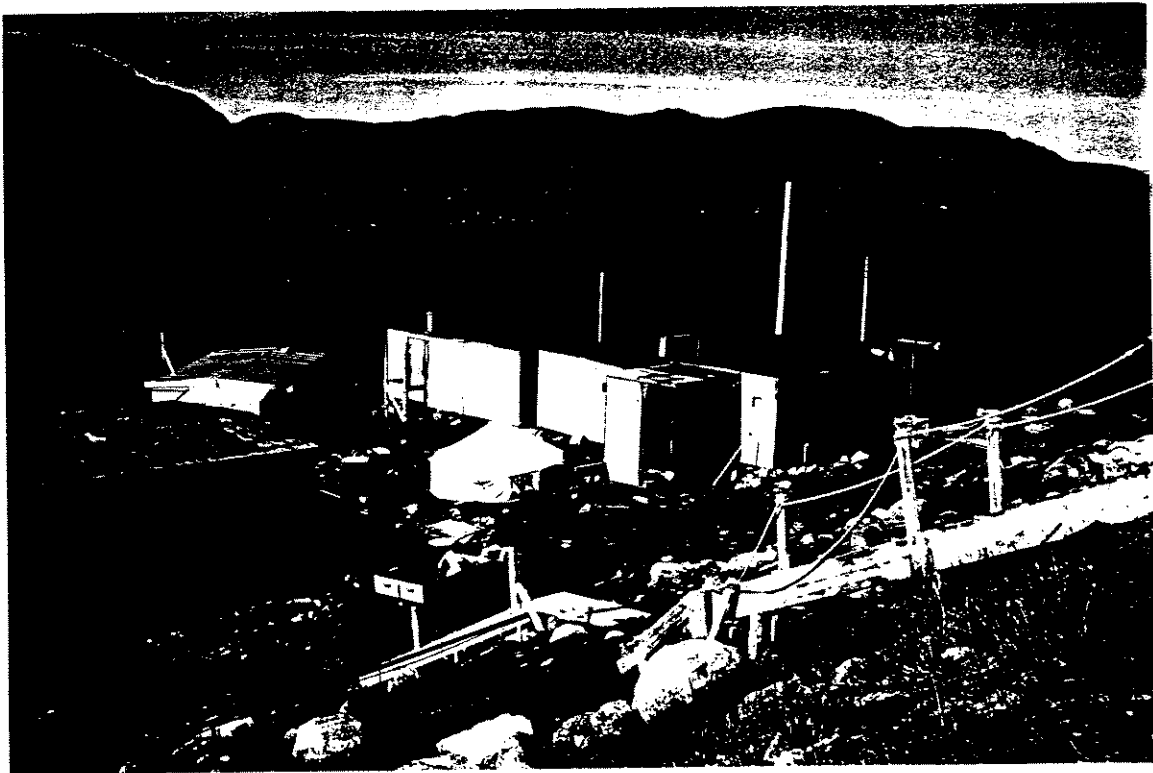
Large Fuel Tanks



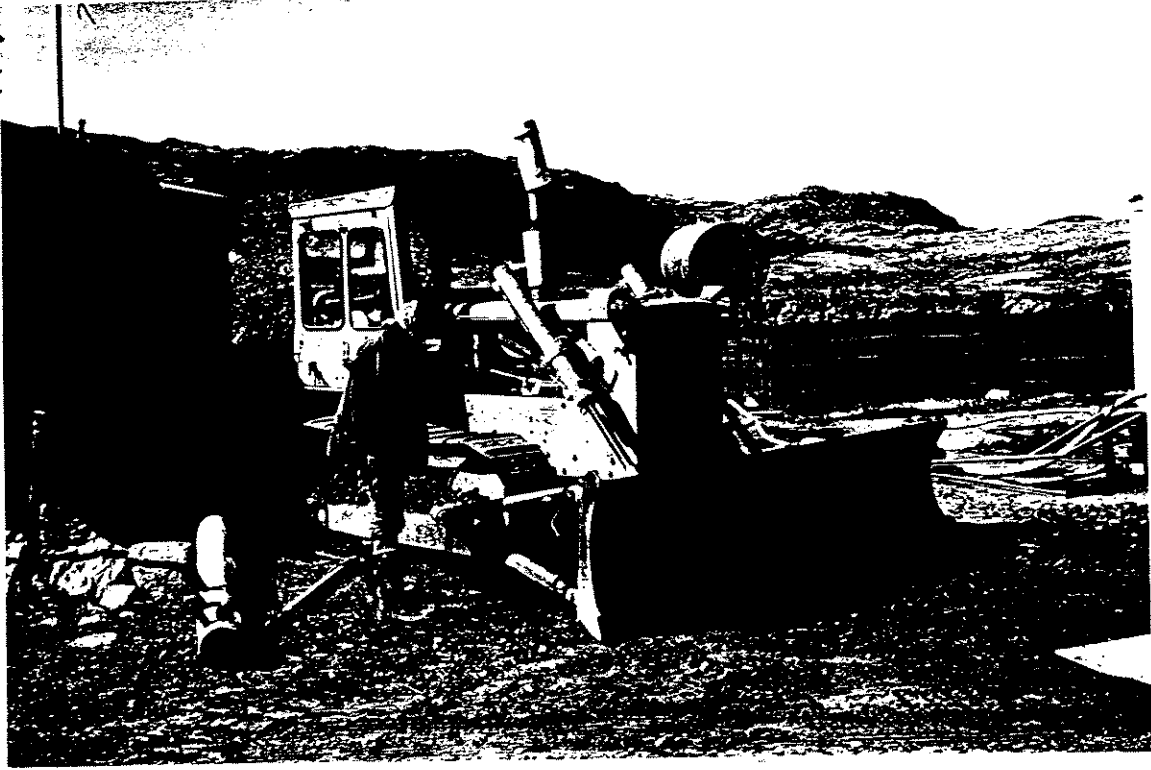
Aiviq at Anchor near Fish Plant



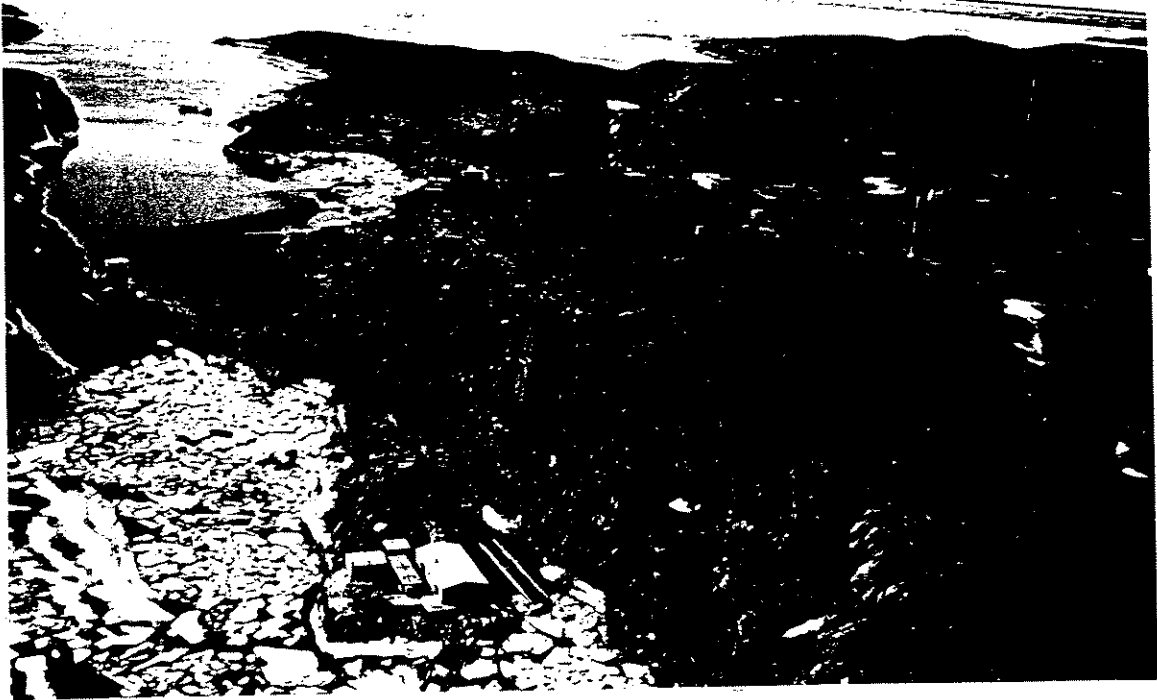
New Solid Waste Disposal Site



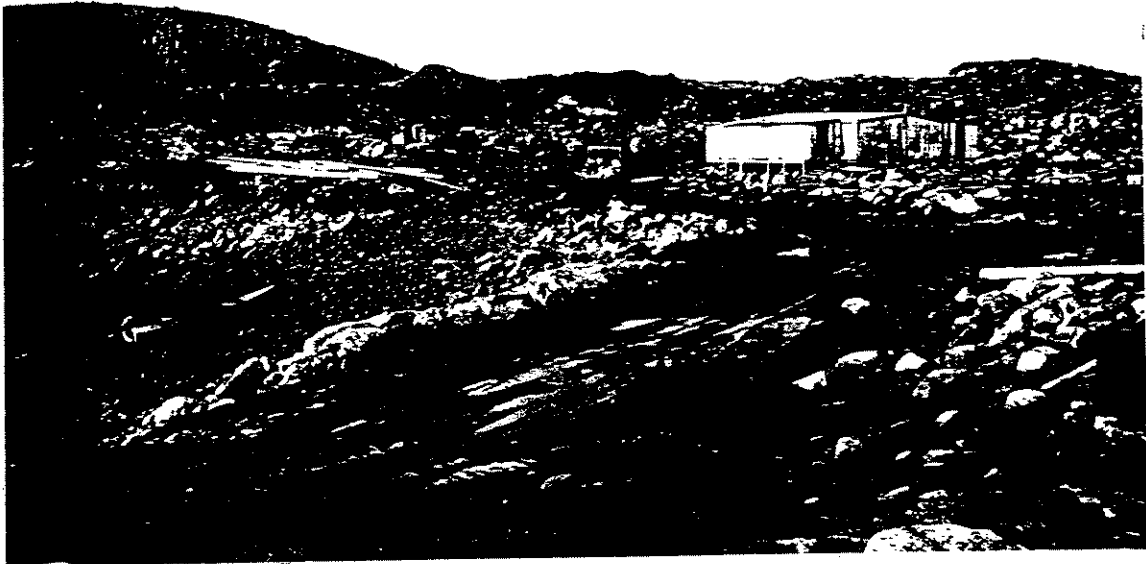
Houses in Lower Sector Stabilized for Workers



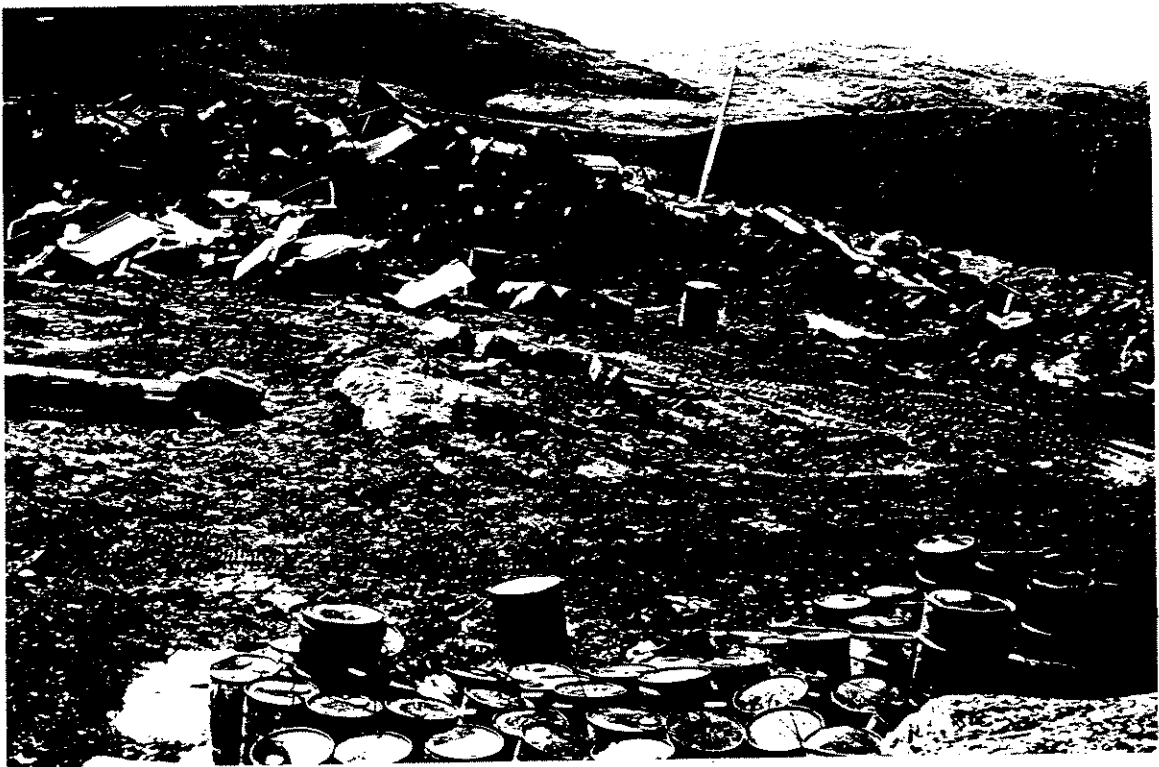
D-5 Near Power House



Aerial View from Helicopter



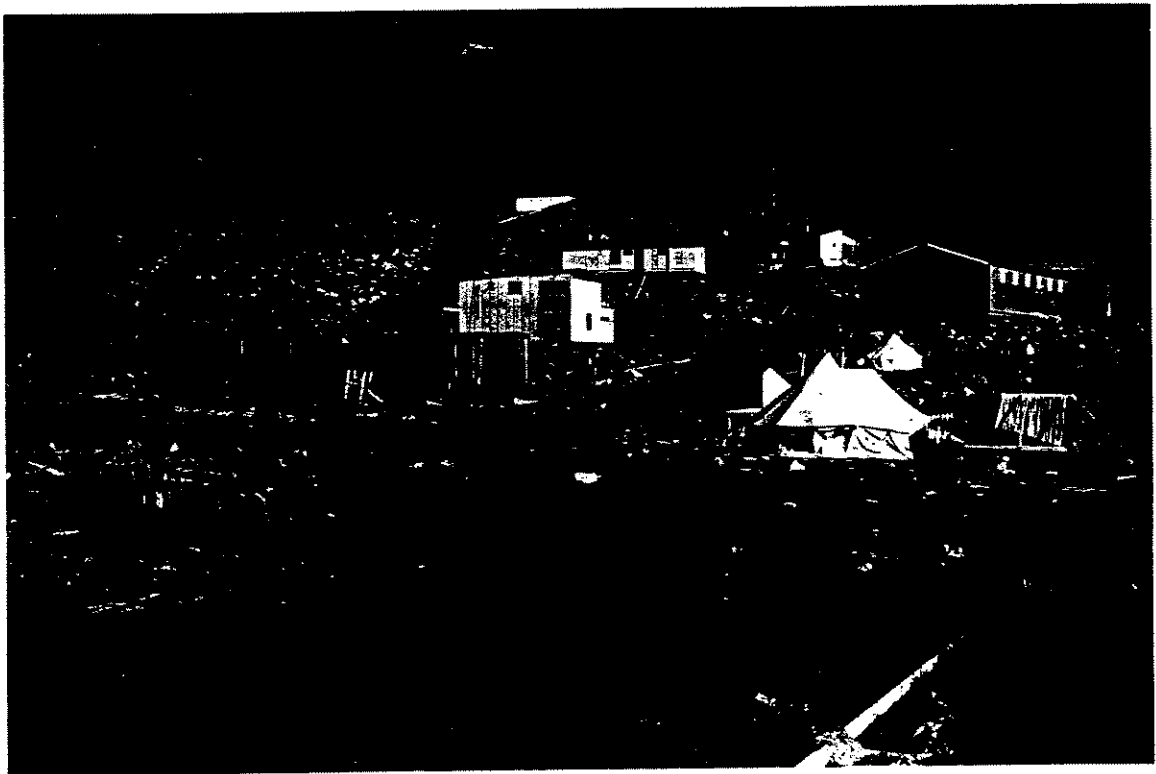
CCG Muskeg and Trailer enRoute to Dump Site



Material on Solid Waste Disposal Site Prior to Incineration



Bundles of Electrical Wire



Warehouse Garage and Stabilized Houses



Site of School



Old Solid Waste Disposal Site

H. Text of Signs and Notice to Visitors

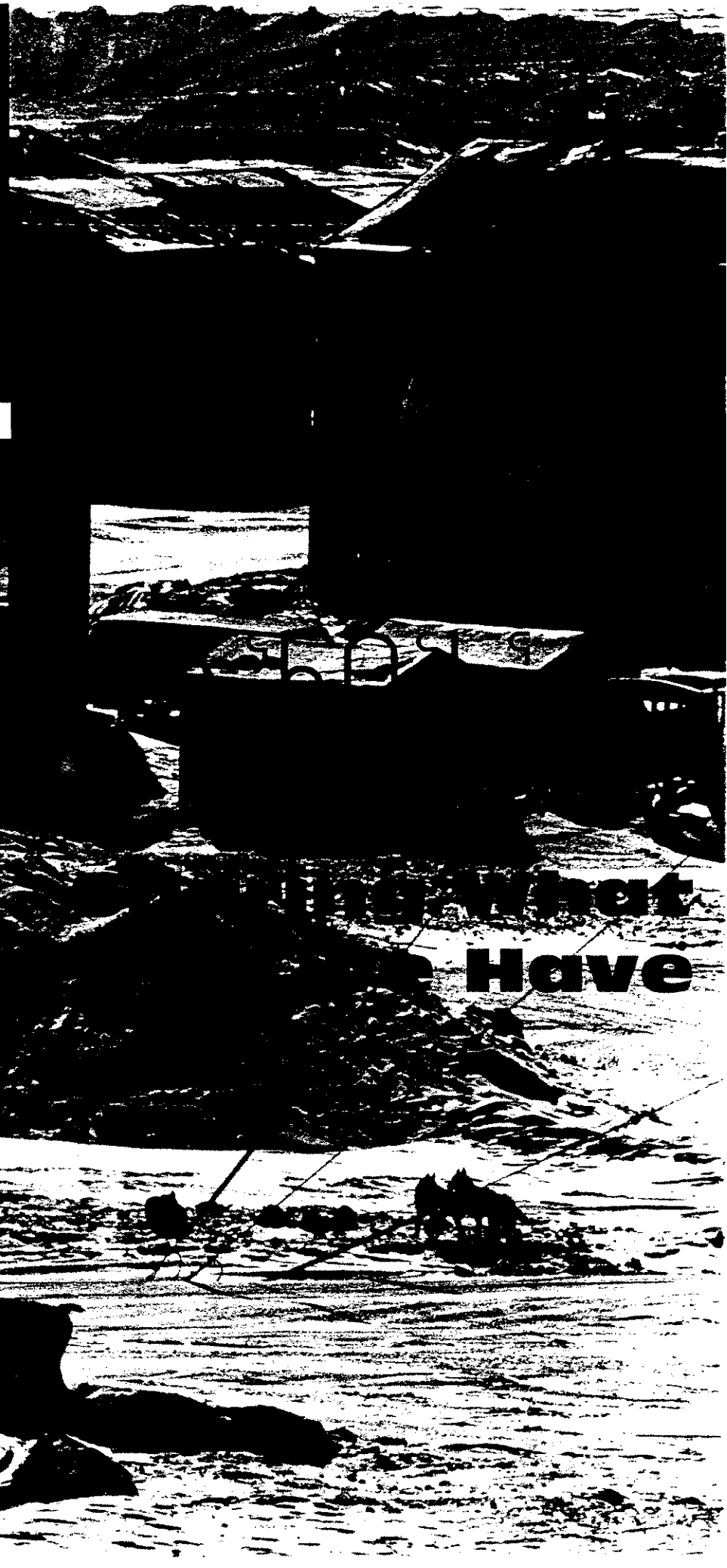
I. Articles from Makivik News

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MAKIVIK NEWS

ᐱᐱᐱᐱ WINTER 1995/96 ISSUE ᐱᐱᐱᐱᐱᐱ 37



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J. Site Map and Index

Index to Killiniq Map Location of Building and Sites

- 1 lot 64 Fish Plant Installations
- 2 lot 60 Fuel Tank Farm
- 3 lot 56 House and Trailor Fisheries
- 4 lot 53 Houses Lower Section
- 5 lot 31 Power House Generators
- 6 lot 30 Garage Municipal
- 7 lot 24 Warehouse Municipal
- 8 lot 29 House Sammy
- 9 lot 28 House Kenny
- 10 lot 26 House Johnny
- 11 lot 25 Sandy Mike
- 12 no lot Nursing Pauloosie
- 13 lot 23 Church
- 14 lot 66 New dumpsite
- 15 lot 19 Bath House
- 16 lot 11 School site
- 17 lot 8 Recreation Hall
- 18 lot 9 Munick
- 19 lot 6 site Co-op Warehouse
- 20 lot 5 site Co-op
- 21 lot 4 site second Co-op Warehouse
- 22 no lot site old Garbage Dump
- 23 lot 27 House Pauloosie
- 24 lot 45 Coast Guard Installations
- 25 lot 33 Coast Guard Garage
- 26 lot 59 Ski-doo shop
- 27 lot 15 House
- 28 lot 14 Shell
- 29 lot 10 House
- 30 lot 20 Kakkinerk

See map in document entitled : Killiniq,
An Environmental Survey, September 1994.

Appendix F