US Army Corps
of Engineers
Alaska District

Public Notice

Date: December 16, 1985

Identification No.: ER-86-01

In reply refer to above Identification Number

DEFENSE ENVIRONMENTAL RESTORATION ACCOUNT
Port Heiden, Alaska

The U.S. Army Engineer District, Alaska, proposes to clean up debris at Port Heiden, Alaska, including an abandoned World War II Army base and a "White Alice" communications site. The proposed action is to remove and dispose of unsafe and unsightly structures and associated debris.

Possible methods of cleanup and disposal are discussed in the enclosed environmental assessment (EA). The EA and unsigned Finding of No Significant Impact (FNSI) are transmitted for your review and comment in compliance with the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act.

Interested parties are invited to submit in writing any comments or objections they may have concerning the proposed work. There is no public hearing scheduled for the proposed action. However, any person may request, in writing, within the comment period specified below, a public hearing to consider the described action. Request for public hearing shall state, with particularity, the reasons for holding a public hearing.

State and Federal agencies that have regulatory responsibilities over the outlined action, are requested to submit stipulations typical of their permits, as related to the proposed activity. This effort would provide for early consideration of permit stipulations and facilitate the preparation of documents to be prepared for use by potential bidders on cleanup contracts. The FNSI would be signed upon review of comments received and resolution of significant objections, if any.

Replies to this notice should be mailed to reach the U.S. Army Engineer District, Alaska, ATTN: NPAEN-PM-C, P.O. Box 898, Anchorage, Alaska 99506-0898 not later than January 17, 1986 to ensure consideration. Additional information can be obtained from Mr. Wayne Eberhardt of my Environmental Resources Section by calling (907) 753-2638.

Wilbur T. Gregory, Jr.
Colonel, Corps of Engineers
District Engineer

Enclosures

ATCH

FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act of 1969, as amended, the U.S. Army Engineer District, Alaska, has assessed the environmental impacts of the following action:

Defense Environmental Restoration Account
Port Heiden, Alaska

The project consists of removal and disposal of:

1. approximately 280 Quonset/Pacific huts
2. collapsed wood frame buildings (150 +/-)
3. 2 large fuel tanks (250,000 gallon)
4. 3 radio towers (two- 100 ft. and one- 50 ft. tall)
5. (8,000+) 55 gallon metal barrels
6. a "White Alice" site - four (60 ft.) parabolic troposcatter antennas and feedhorns, a (30,000 sq. ft.) reinforced 2-story concrete building with a central (45 x 45 ft.) five-story tower, interconnecting electrical conduits, a 24,000 gallon fresh water storage tank, two buried (20,000 gallon) fuel tanks, two small (150 sq. ft.) concrete buildings, and a septic system.
7. miscellaneous materials including: metal scraps and debris, equipment, vehicles, steel pipe, wire, etc.
8. Asbestos material (approx. 80 cubic yards).

These debris and structures are located on the flat tundra plain adjacent to Port Heiden on the site of Fort Morrow, a World War II Army air base. Structures and debris are found in several distinct areas within a five mile radius of the Fort Morrow runway. Cleanup plans involve collapsing the quonsets and transport of the debris to burial sites. Other metal debris, including barrels, sheet metal, equipment, vehicles, towers, pipe, and other miscellaneous materials will be collected and transported to disposal pits and also buried. Wooden material will be collected and moved to specified sites for burning. Equipment and vehicular use will be limited to sites on or near the existing road system. Machinery useage in areas away from any roads will be restricted to soft, rubber tired vehicles or prohibited. Removal of the "White Alice" site will involve demolishing the concrete buildings by drilling and blasting, using heavy equipment, or use of a wrecking ball. Metal towers will be dismantled for salvage or burial. Large tanks will remain intact for use by local residents, salvaged, or drained, dismantled and buried if no use is found. Any petroleum products will be drained or pumped from tanks or fuel lines for reuse or disposal. All disturbed sites will be revegetated following cleanup activities.

Disposal methods and specifications will follow State, Federal, and local regulations and procedures. Short-term impacts due to vegetation and ground surface disturbance will occur from equipment useage and debris removal. Wildlife within the site may be affected from cover alteration and removal, nest disturbance, and equipment noise, all unavoidable but short-term impacts. Burning wood materials and equipment operation will produce smoke which will quickly dissipate in the strong, steady winds. Cleanup will

promote the long-term positive effects on visual aesthetics, removing dangerous debris and structures, and by removing the potential for petroleum products to leach from rusting tanks fuel lines and barrels. Environmental restoration will occur through natural processes once structures and debris are removed.

The environmental assessment (EA) identifies that no significant environmental impact will occur from cleanup of Department of Defense strucures and debris at Port Heiden. The appropriate resource agencies have been contacted and informed of the proposed action and none have indicated objections to the Finding of No Significant Impact.

The accompanying EA and document review support the conclusion that the proposed project does not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not necessary for the proposed cleanup of DOD debris at Port Heiden.

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Wilbur T. Gregory, Jr. Date
Colonel, Corps of Engineers
District Engineer

ENVIRONMENTAL ASSESSMENT

DEPARTMENT OF DEFENSE
DEFENSE ENVIRONMENTAL RESTORATION ACCOUNT

PORT HEIDEN, ALASKA

1985

Prepared by

U.S. Army Engineer District, Alaska
P.O. Box 898
Anchorage, Alaska 99506-0898

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PORT HEIDEN
Environmental Assessment

SUMMARY

The U.S. Army Engineer District, Alaska, will remove and dispose of abandoned Department of Defense (DOD) facilities, structures, and debris at Port Heiden, Alaska. Cleanup includes Fort Morrow, a World War II army base, and an abandoned "White Alice" communications station. No significant long-term negative environmental impacts will occur as a result of the proposed action. Some short-term negative impacts will occur from soil and vegetation disturbance during demolition and debris removal. The overall cleanup will improve the quality of life, provide temporary employment and an increased demand for services, create an influx of supplies and services into the area, improve health and safety through removal of dangerous and potentially hazardous debris, and produce a dramatic improvement in aesthetic quality by removal of unsightly and scattered materials, disintegrating buildings, and highly visible structures.

1.0 PURPOSE AND NEED FOR PROPOSED ACTION

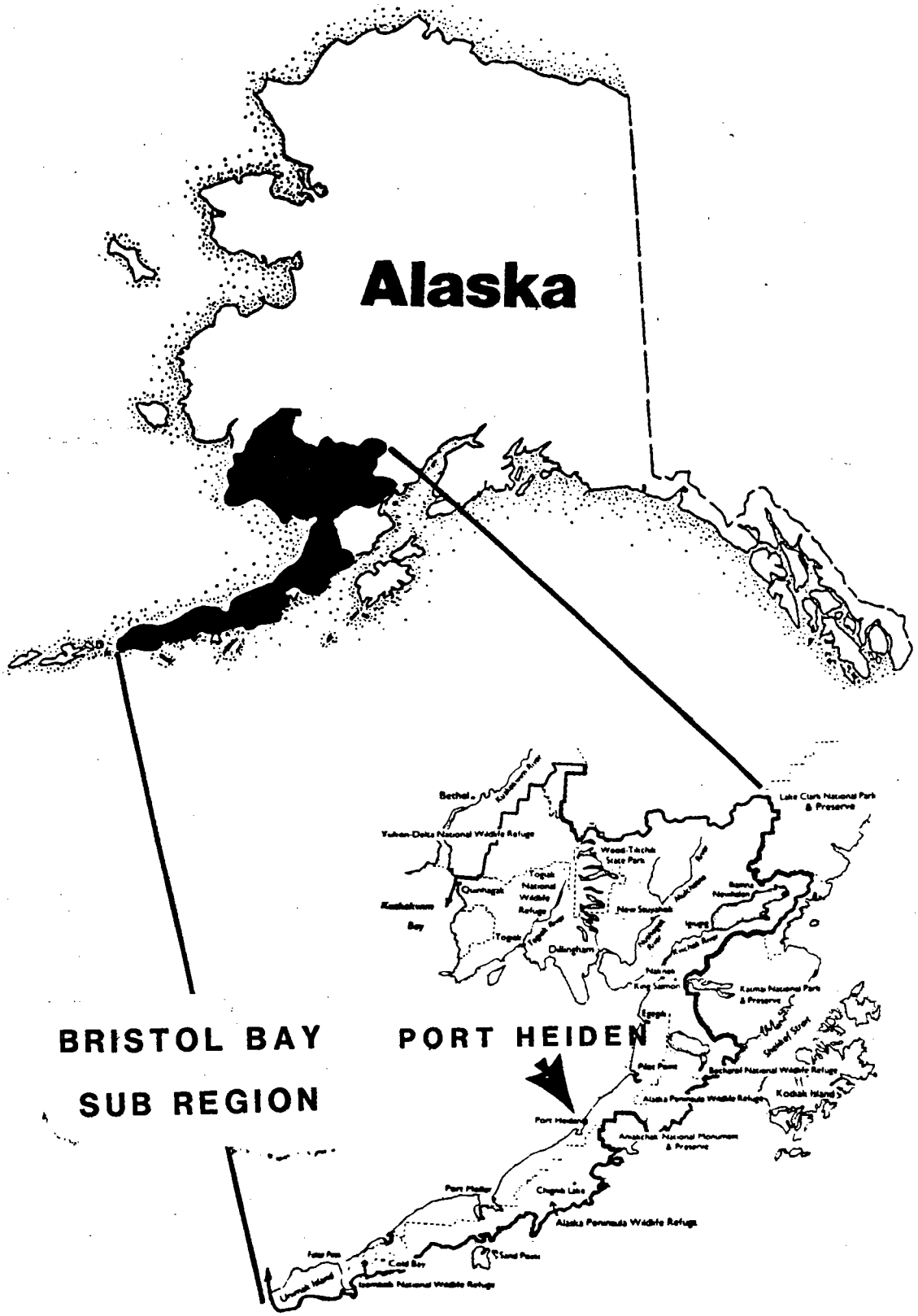
The Alaska District is authorized, (Public Law 98-212), to implement the DOD Defense Environmental Restoration Account (DERA). The DERA program allows removal and disposal of debris left on DOD sites throughout Alaska. Materials include World War II and newer buildings, associated military equipment, "White Alice" (WA) communication sites, Defense Early Warning Stations (DEW), towers, antennas, docks, fuel containers, and other debris. Amounts and type of debris vary with the site and function of the installation.

Port Heiden is located on the low elevation flat coastal plain of Bristol Bay about halfway down the northern side of the Alaska Peninsula (figure 1). Port Heiden is inclusive of the area surrounding Port Heiden Bay, the village of Meshik, and the delta of the Meshik River. The nearest large settlement is King Salmon approximately 140 miles to the northeast.

Fort Morrow was authorized for construction in December 1941 as an airfield and necessary protective garrison for air defense of Alaska and the naval base at Dutch Harbor. Construction began in July 1942 and included cantonment buildings, docking facilities, and storage of aviation gasoline in drums. Buildings included housing, hospital facilities, 46,880 square feet of warehouses, 36,000 cubic feet of cold storage, a Kodiak "T" hanger with technical facilities, an east/west and a north/south runway, and a barge dock. Due to a reduction in the authorized garrison strength, a curtailment program was initiated in the summer of 1943. Various authorized features were eliminated and the project completed in December 1943. Following the war the site was abandoned.

Fort Morrow, abandoned for 40 years (figure 2), consists of 286 quonset huts (fallen or standing), several standing wood frame buildings, wooden debris from approximately 150 fallen buildings and sheds, three (one- 50 ft., two- 100 ft.) toppled radio towers, (8,000+) 55 gallon drums, several

FIGURE 1. Project Location.



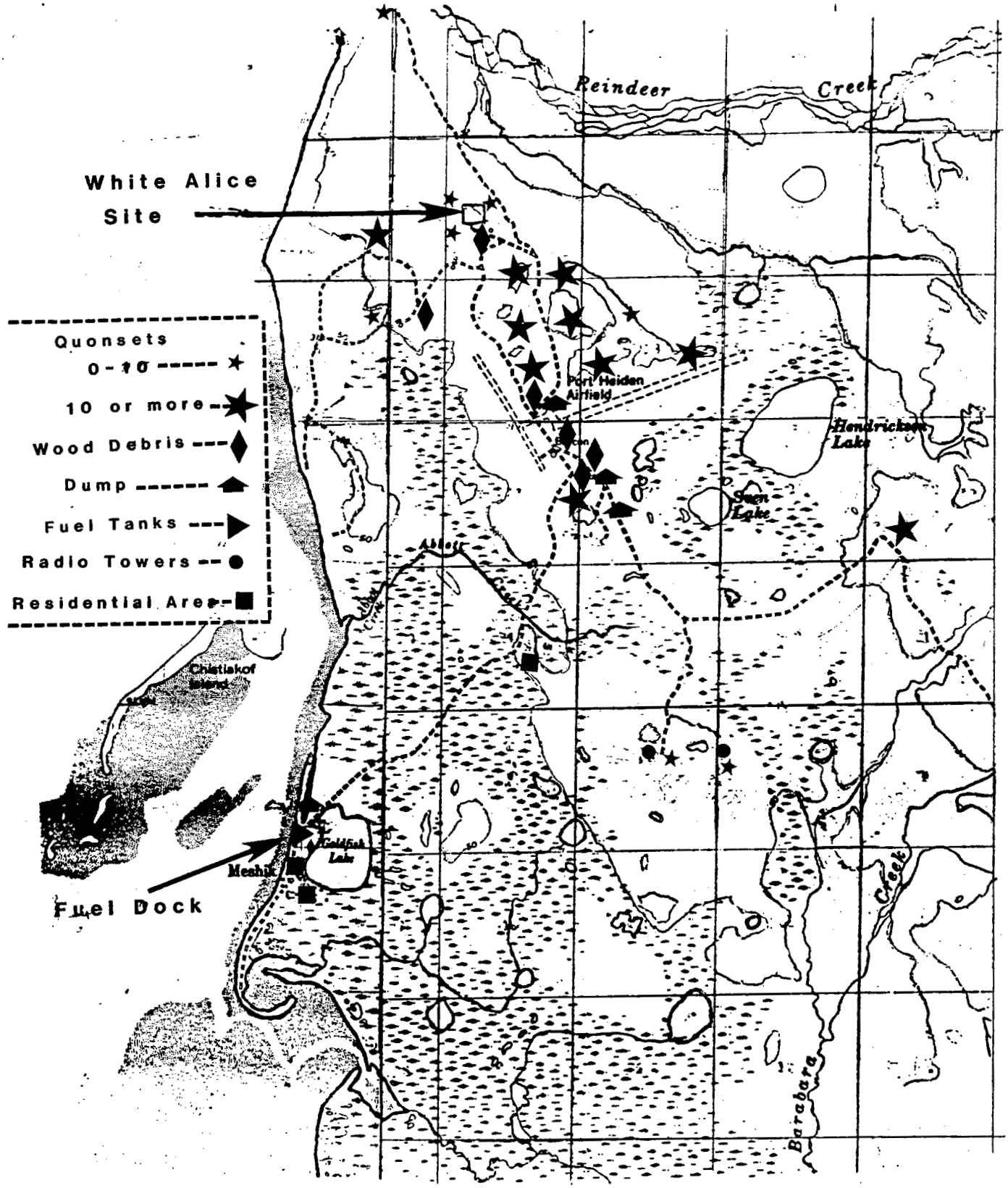


Figure 2. The location of debris at Port Heiden.

garbage dumps, various types of machinery and equipment, and miscellaneous metal debris. The buildings, machinery, barrels, and other materials are in various conditions of disintegration, rusting, and aging, creating an unsightly, littered environment. Cleanup will insure removal of safety and health hazards, any residual chemical or petroleum products, improve the visual aesthetics of the area, and promote the long-term improvement of surface and ground water quality. The project will include demolition of all unused standing wood and metal structures. Metal materials including towers, quonsets, equipment, barrels and machinery, will be transported to disposal pits for burial. Wooden debris will be burned and the residue collected and transported to these pits for burial. Any residual POL's (petroleum, oils, lubricants) located before or during cleanup will be reused or disposed in a State approved site. If hazardous or toxic wastes (HTW's) are located during cleanup, they will be identified, removed, disposed in approved sites or containerized and transported to U.S. Environmental Protection Agency (USEPA) approved disposal sites. The existing road system and runways are to remain intact.

The project will also include demolition and removal of the Port Heiden WA site. Constructed in the late 1950's during expansion of the Defense Early Warning System (DEW line), the stations formed an interconnected communications network to help guard against a Soviet military invasion, and provided voice communications for both the military and civilian populations. With the advent of remote satellite communications and satellite earth stations in the 1970's, the WA sites became obsolete and were abandoned.

The Port Heiden site is typical of WA sites and includes; a large (30,000 sq. ft.), two story reinforced concrete building with a central 45 x 45 foot, 5-story tower. The self-contained building held equipment, 4 diesel generators, living quarters, shop areas, a kitchen, and related facilities. Surrounding the building are four 60 foot tall parabolic troposcatter antennas, a 24,000 gallon water storage tank, two buried 20,000 gallon fuel tanks, separate 150 sq. ft. concrete pump and generator buildings, and two 250,000 gallon fuel storage tanks located in a separate area connected to the site by a pipeline. Removal will involve demolition of the concrete building by using equipment, explosives or wrecking ball and transport of debris to approved disposal sites or onsite burial. The antennas are to be dismantled and either removed for salvage or buried. The large water and fuel tanks will be dug up or cleaned for reuse or collapsed and buried after any residual POL's or waste material is removed by draining or pumping. The unused fuel pipelines will remain if buried, after crimping the exposed ends, or removed by cutting out the exposed sections, and disposed of if unburied. Asbestos materials found in the main building will be collected and buried in an approved disposal site following regulations and procedures designed to protect the health and safety of workers and to limit the dispersal of fibers into the environment. Asbestos was used in the manufacture of acoustic tile, floor tiles and insulating material. An estimated 80 cubic yards of these products occur in this site.

Air Force crews have recently (1-2 years ago) returned to the WA site to test for and remove any hazardous or toxic wastes (HTW's). These materials were identified, isolated, and removed from the site and flown out of the area. If any additional HTW's are discovered by sampling or during demolition, work in the affected area will cease until they can be isolated, containerized, and removed by authorized personnel following procedures outlined by the proper regulatory agency.

Removal of the WA site will improve the visual aesthetics, remove a safety hazard, and promote the long-term improvement of the environment.

2.0 ALTERNATIVES CONSIDERED

2.1 No Action

This alternative would leave the area in its present condition. Through continued protection habitat and biota would remain undisturbed, no short-term deterioration of soil or water quality would occur, and any archeological or historical sites would remain intact. However, debris would continue to pose a safety hazard. Water and soil pollution would continue as barrels further disintegrate allowing petroleum products to escape into the environment from drums, tanks, or fuel lines that may contain residues. Visually there would remain a debris-strewn landscape of old rusting quonsets, barrels, and a highly visible assemblage of buildings and microwave towers. Though this option has occurred for the last 40 years, the hazards and degraded visual aesthetics will continue to exist with "no action."

2.2 Total Cleanup

This alternative involves cleanup of all debris generated by the DOD including; buildings, tanks, towers, roads, and earthworks in an attempt to return the area to its pre-World War II condition. The action would provide for removal of dangerous and collapsing structures, loose debris, rusting fuel containers that may contain POL's and provide a great improvement of the visual aesthetics. Cleanup will allow maintenance and improvment of surface and groundwater quality by natural processes once the debris is removed and buried. Work would produce short-term problems from disruption of biota by cleanup actions, vegetation disturbance, and possible short-term effects on water quality. Cleanup could also cause possible damage to historical or archeological sites, and short-term impacts on air quality from burning and equipment exhausts. The purpose of environmental restoration would be fulfilled with total cleanup, however, this option would not reflect current human use of the area. Though total cleanup would produce jobs, put money into the local economy, and create an influx of equipment and supplies into the area, the removal of usable buildings, and all visible evidence of Fort Morrow would be counter productive to the human quality of life. Thus, a complete, total cleanup is not a viable alternative.

2.3 Partial Cleanup (Alternative A)

The partial cleanup option involves cleanup of existing debris, unused buildings, fuel tanks, towers, and would exclude removal of roads and

earthworks. This alternative would produce similar impacts to total cleanup, however, the human use of Fort Morrow would be maintained. In addition, earthworks around quonsets and building sites would remain, allowing visitors to identify these banks and pits as building sites, and to visualize the original fort layout. Erosion from roads would occur, and additional problems could be caused by continued vehicle access. However, this option best accomodates the human population and use of the area while allowing cleanup and eliminating problems and impacts of DOD debris and is, therefore, the preferred alternative.

3.0 EXISTING ENVIRONMENTAL SETTING

Site Description: The project site is located adjacent to Bristol Bay on the flat coastal plain typical of the northern side of the Alaska Peninsula. Fort Morrow is located on an area of low alluvial hills, and vegetated dunes adjacent to Bristol Bay and Port Heiden. The terrain is generally flat with local relief to about 180 feet. The small hills are interspersed with larger low marsh areas, lakes, and small streams and gullies. Next to the ocean are wide beaches and dunes with old beach lines cut into the higher hills and alluvial terraces. To the south the terrain slopes gently upwards to the higher volcanic mountains and ridges. Fort Morrow and the WA site are located on small hills which provide relief from the lower, wet tundra areas, and are connected by a series of gravel roads. A dock area is located on dunes adjacent to the beach and the village of Meshik.

3.1 Climate

Port Heiden is located in a transitional climatic zone where the weather is influenced by both the mainland, continental climate (warm summers, cold winters), and the North Pacific climate (wet, moderate temperatures). The area is dry, 13 inches of precipitation per year (29 inches as snow), with moderate temperatures, summer average 40-59°, winter 14-33°. There is an almost constant wind, predominately blowing from the SSE off the mountains. Frequent storm fronts pass through the area producing winds that can reach velocities of over 70 miles per hour.

3.2 Soils

Soils are primarily of volcanic origin consisting of shallow, silty ash overlying volcanic cinders. They are easily disturbed and subject to erosion from wind and water action. Soil depths vary with vegetation type and exposure to wind, the deepest found in the most protected sites and bare ground on exposed ridges. Soils are rich with nutrients and free of permafrost. Low lying wet marsh soils are peatlike and rich in organic nutrients. Soil on dunes is sparse or lacking depending on exposure to wind and water action. Protected leeward sides of older dunes retain some soil and are vegetated.

3.3 Geology

The Alaska Peninsula is an area of recent volcanic and tectonic activity. Two volcanoes occur in the Port Heiden area, Aniakchak Crater and Mt. Veniaminof, thus being the major geologic features. Port Heiden is

located on a gentle, sloping alluvial plain below Aniakchak crater. Rocks in the area are primarily volcanic, however, some sedimentary material does occur. The area also exhibits glacial features including moraines and paternoster lakes in addition to fluvial surface processes which have produced outwash, flood plains, alluvial fans, beaches, spits, and deltas. The resulting topography is varied and continually changing.

3.4 Terrestrial Ecology

The terrestrial environment of the northern side of the Alaska Peninsula is very diverse. Habitats within the project area include open low shrub/ericacious tundra found on the tops and windward sides of the small hills, ridges and exposed sites. This type is dominated by heaths and includes crowberry, bearberry, lichens, dwarf willows, and mosses. Additional species include low bush cranberry, yarrow, fireweed, grasses, sedges, and other species. The leeward sides of the hills and protected areas support the same species, however, growth form is taller and lusher with some additional species including sedges, alder, willows, cow parsnip, grasses, dewberry, monkshood, dwarf birch, Devil's club and others. On some protected leeward slopes alder and willow shrubs form a continuous canopy and reach heights of approximately 6 feet. Along streams and floodplains are found willow and alder shrubs interspersed with bare gravel bars, marshes, ponds, and grassy areas supporting primary successional species of herbs, grasses, and forbs. Dunes and beach areas support beachgrass and other grasses and a variety of forbs. Lower wet/bog habitat is found throughout the Port Heiden area. These areas of saturated soils support plant communities dominated by sedges (cottongrass), mosses, and water-tolerant shrub species. The affected habitat for this project is located primarily in the open low shrub/ericacious tundra type with a limited portion in beach dune habitat.

3.4.1 Wildlife. The northern portion of the Alaska Peninsula supports a large and diverse number of terrestrial wildlife, marine mammals, birds, and fish. The major land mammals include caribou, moose, and brown bears. Caribou are the principal species that could be affected by the proposed project. A portion of the Alaska Peninsula caribou herd passes through the Port Heiden area in spring and fall migrations. During February and March caribou begin moving down the Peninsula from winter range between the Ugashik and Naknek Rivers to calving grounds primarily south of Port Heiden on a plain between Bear River and Port Heiden Bay. However, calving has occassionally occured northeast of Port Heiden between Port Heiden and the Cinder River. During migration, most cows follow a straight line paralleling the coast between the mouths of the Ugashik and Meshik Rivers reaching calving grounds by mid-May. They return by the same route in late September and in October. As a result of these movements caribou are generally in the Port Heiden area in April and May, and in late September and October.

Moose are found generally inland on the higher elevation foothills and along stream courses. Bears utilize the area as a function of available food sources. Predators including red fox, wolves, wolverine, river otter, mink, least weasel, ermine, and occassionally lynx and arctic fox inhabit the area in addition to herbivors including muskrat, beaver,

lemmings, porcupines, arctic ground squirrels, and others. Red foxes are found denning under old quonset huts and hunting in the thick vegetation around them.

3.4.2 Bird Species. Port Heiden is an important migratory stop for large flocks of geese, ducks, passerine species, and shorebirds. They feed and rest in the shallow bay during spring and fall migrations. During the summer the area supports low density populations of waterfowl and habitat for nesting passerine species. The bay is also used as range by pelagic bird species, and provides year round habitat for nertic (shallow water) seabirds and raptors.

Bird species most affected within the project area include rock and willow ptarmigan, ravens, gulls, swallows and raptors. Swallows use the rafters in old quonset huts for nest sites. The tall dense patches of willows grasses and plants around quonsets are used for escape and nesting cover. Raptors including peregrine falcons use the microwave towers as perching and nesting sites. Bird nesting is primarily on the ground, water, or in the available short willows and alders. Any work will directly affect some ground and shrub nesting species through nest destruction or disturbance.

3.5 Aquatic Ecology

3.5.1 Marine. Port Heiden supports a diverse and abundant number of marine species, waterfowl, sea birds and mammals, and species using marine waters for feeding or resting. The Port Heiden Bay and estuary, is designated as an Alaska State Critical Habitat Area, and the Meshik River and drainages flowing into it as critical salmon habitat. Bristol Bay supports an abundance of marine life including 22 species of marine mammals, shellfish, salmon, bottomfish, and marine birds. Port Heiden provides important habitat for harbor seals, sea otter, sea lions and whales which concentrate there in response to the large influx of salmon into the Meshik River system. The system also supports a local commercial fishery important to the residents of Meshik. The abundance of larger animals in the shallow water marine environment indicates the rich availability of dissolved nutrients in the off-shore water. These nutrients support rich seasonal crops of phytoplankton providing the primary forage food for the larger species. The shallow bay and ocean provide food for waterfowl, terrestrial birds, sea birds, marine mammals, and land mammals. Dense beds of kelp and eelgrass are found a short distance offshore providing essential habitat to numerous marine species.

3.5.2 Freshwater. Several small, shallow ponds, small lakes and creeks are found in the immediate area of Fort Morrow. Interspresed areas of wet bog and tundra also occur throughout the site. All are very shallow, and support a variety of aquatic plant species. The streams and interconnected ponds and lakes provide habitat for pink, chum and coho salmon, and Dolly Varden trout. Vegetation in lakes and ponds includes an abundance of pondweeds, sedges, and rushes around the fringes and in the shallow portions which provide essential habitat for salmon and trout fry and other aquatic species. The nutrient content of the bottom material is

rich and enables growth of plants and other aquatic species in very limited areas and in abundance. Waterfowl and shorebirds use these ponds and lakes for feeding and resting on their yearly migrations.

3.6 Endangered Species

No endangered species are known to occur in the project area. The Aleutian Canada goose is known to fly over the southern tip of the Alaska Peninsula probably well southwest of Port Heiden. Peregrine falcons use the area for feeding and nesting. The falcons found on the Alaska Peninsula are identified as "Peales" subspecies which is not endangered in contrast to the "American" subspecies which is endangered. Based on location and subspecies distinction the falcons occurring there are not considered endangered.

3.7 Land Use

The Port Heiden area, outlined in the Bristol Bay Regional Managment Plan (1985), is to be managed primarily for fish and wildlife habitat and harvest, recreation and future oil and gas exploration and development. Future land use as identified, includes a community expansion settlement, oil and gas exploration, and development on National Wildlife Refuge lands (Alaska Peninsula National Wildlife Refuge), a trans-peninsula transportation corridor (roadway, pipeline), and mineral exploration and development. Land in the Fort Morrow site was selected for conveyance to the Meshik Village Council and Bristol Bay Native Corporations and includes the village of Meshik and the WA station. The State of Alaska is interested in acquiring ownership of the Port Heiden State Critical Habitat area located on the northwest edge of Port Heiden. Two national conservation system units are also located adjacent to Port Heiden, Aniakchak National Monument and Preserve, and the Alaska Peninsula National Wildlife Refuge. Portions of these lands are under review for inclusion into the National Wilderness Preservation System. The Meshik River may be studied for possible designation as a wild and scenic river.

Current land use of Fort Morrow and the WA site is determined by the road system and location of useable structures. The road system provides transportation routes for hunting and fishing, berry picking and other subsistence and recreational activities. The airport is important both to the economy and as the only transportation link outside of the community. Possible community expansion or camp construction may occur in response to oil and gas development in the area. Borrow sites are located throughout the site associated with existing roads and the airport. Future upgrading of the existing runways will utilize additional gravel sites. More recently borrow pits and selected sites were used by the Air Force for disposal of wastes and material from the WA site. Adjacent to the old military dock, a site was used for garbage disposal by the military and more recently by the village of Meshik creating a mixture of metal debris and garbage. Use of old wooden buildings on the Fort by local residents is occurring primarily in the airport and dock sites. Buildings are used for storage or shop space.

3.8 Cultural Resources

No unique or historic buildings or sites were found or identified wthin the project area. The fuselage and wings of a P-38 World War II aircraft were located and remain in an existing disposal site adjacent to the airport. No archeological sites were identified within Fort Morrow or at the beach area. The village of Meshik is located on a centuries old site adjacent to the World War II dock and WA fuel storage tanks. The immediate dock area was searched for possible sites but due to the great deal of disturbance of the ground by development and wave action, any traces of sites were removed long before now.

3.9 Socioeconomic Conditions

The population of Meshik is currently less than 100 permanent residents of which a majority is Native Eskimo. There are few permanent jobs with most work seasonal combined with a subsistence lifestyle. Most income is from outside sources, primarily commercial fishing, commercial guiding (fish, waterfowl, big game), schools and government, and commerce generated by the airport. The local native village corporation provides services within the village and represents the residents on a regional and statewide basis. A local school system provides education for children from grades 1-12. Regular daily air service is available except during spring breakup, in addition to seasonal barge service from Seattle. New, modern housing is present in addition to electricity, phone, mail, fire, and EMT service. Houses have private water and sewer systems and a fenced garbage disposal site is located east of town. The road system is maintained in useable condition and there are numerous vehicles and ATV's.

Shipping costs, both air and barge, are very high which limits the types and quantity of materials brought into the community. Services are expensive and the residents are dependent on outside support and subsidy. Most goods are shipped by mail or barge or obtained by subsistence hunting and fishing. Future oil and gas development may dramatically change the socioeconomic conditions of the area.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Terrestrial Environment

Debris removal will have varying effects on the natural environment. Removal of quonsets and associated debris will produce disruption of vegetation around each site. Removal and demolition requires equipment entry into quonset pits and building sites which are generally surrounded by berms. Loading material into transport vehicles and driving to and from each site will produce further degredation of vegetation and soil. The existence of roads to most sites will alleviate some problems, as would equipment fitted with large, soft tires or a large backhoe capable of working outside the berm. Though disruption will be visible initially, the areas should revegetate and recover with no significant long-term impact. Existing borrow pits along the road system or holes dug on site will provide debris disposal sites. Use of existing borrow pits will depend on their location, size, and the depth of the water table. Disposal areas will be covered with material from the immediate area and revegetated.

Structures, barrels, wood, and other debris will be picked up and transported to disposal or burning sites using equipment and procedures to minimize soil and vegetation disturbance. Outlying debris, away from a road system, may remain since removal equipment would produce more damage than the long-term effects of leaving the structure or material. However, debris may be removed using soft, rubber-tired equipment or by hand. Whatever means is used will follow procedures designed to minimize vegetation disturbance.

Hazardous wastes, chemicals, spills, and POL's will be identified before and during the project as located. If HTW's are located, work will stop in the immediate area and the appropriate regulatory agency contacted. By using recommended procedures or personnel, the material will be containerized and removed from the site before work continues. Sampling of suspected materials will occur before demolition begins and any HTW's will be removed or identified prior to demolition work. Solid and liquid hazardous wastes will be isolated, buried at approproved sites, or placed in appropriate containers and shipped to USEPA approved disposal sites. Unusable POL's will also be containerized and disposed at appropriate sites or onsite as approved by the Alaska Department of Environmental Conservation (ADEC).

Demolition of the WA site will impact the immediate area around the site. Cleanup will involve using heavy equipment, drilling and blasting, or using a wrecking ball to demolish the large reinforced concrete building, dismantling microwave antennas, removal or collapsing and in-place burial of the water and fuel storage tanks and the disposal of debris. A hole dug on site would alleviate transport and locating a disposal site. Material at the dock area includes WA fuel tanks, buildings (in use) and a large garbage dump. The origin, use and responsibility for cleanup of this dump will be determined before initiation of this project. Cleanup would be beneficial to both the environment and the human population. Any dismantled tanks or other debris will be disposed at an ADEC approved solid waste disposal site. The garbage dump may be buried or the material hauled to an approved site for disposal and burying. The mixture of World War II and more recent debris may produce problems with disposal.

The ground surface would be damaged if work occurs during the breakup period (May to mid-June). Work at this time would be difficult as the soil becomes very soft and travel nearly impossible. In addition, the gravel airstrip at Port Heiden is closed to large commercial airplanes during this period, restricting access to the community for up to six weeks (May to mid-June).

Wildlife will be minimally affected with proper timing and care to limit disturbance. Caribou migration and subsistence hunting could be disrupted within the immediate project area if activities occur during the spring or fall periods. Work will produce the short-term effects of causing some wildlife to avoid the noise and activity at the project site, disrupting ground and shrub nesting birds at removal sites, and by removing structures that have provided protective cover for birds, small mammals and red foxes. A peregrine falcon nest located on the southwest troposcatter tower at the WA site would be destroyed and raptor perching sites removed

without replacement. The use of structures is an adaptation from the existing natural environment and their removal should not be viewed as loss of nest or perch sites but returning conditions to natural. All effects are short-term and overall the environmental quality will improve over time.

Wetlands within the project area will not be affected as most sites are on higher, dry land. Gravel roads connect many sites and timing construction to periods when the ground is dry or frozen and by minimizing vegetation disruption, little siltation or disturbance of wetlands is anticipated. Any removal of debris and structures at the beach fuel dock site would have little negative impact compared to benefits. Dismantling and removing the tanks and other debris would both improve the visual quality and any problems from fuel or garbage within the beach area. Removal or disposal through burying of the garbage dump will greatly improve the quality of this wetlands site. Any amount of wastes leaching from this garbage would decrease with burial but remain in the soil. Removal of the garbage from the site and burial at an upland site would reduce the amount of waste materials in the soil and the potential for any health or water quality problems in Meshik. The environmental quality of this wetlands site will improve regardless of disposal method. The effects of cleanup activity at this site will depend on whether the tanks will remain for use, and the cleanup method used for the garbage dump.

4.2 Endangered Species

Peregrine falcons inhabit the site; however, they are identified as the Peales subspecies which is not endangered. Aleutian Canada geese migrate up the Alaska Peninsula a distance to the south and west of Port Heiden. No other endangered species of plants or animals are known to occur at Port Heiden.

4.3 Aquatic Environment

The aquatic environment and water quality should improve as a result of the proposed cleanup. Any possible short-term effects which may be produced by debris removal will be mitigated by the long-term improvement of water quality. Construction impacts due to soil and vegetation disturbance may occur from increasing siltation and runoff into streams, ponds and lakes though unlikely due to few water bodies near cleanup sites. The long-term result will include: disposing of POL's and cleaning up spills to help keep petroleum products from leaching into the soil and water, and burial of metal and wooden debris. This action will reduce the probability of debris in lakes and streams and the continued leaching of materials into the soil and water. The marine enivronment should be little affected by the proposed project, as no marine work will occur. Cleanup of the port area dump will reduce the possibility of leachates from entering the marine system, and also garbage spreading into the Bering Sea.

4.4 Air Quality

Burning of collected wood debris will produce clouds of smoke during the duration of the burns. Due to the constant, frequently strong winds in the area an accumulation of smoke should not be a problem. The age and dry

condition of the wood should produce a hot fire with little smoke. Any smoke problems would be of short duration, and all burning will be regulated by an ADEC permit.

Release of smoke and hydrocarbons from equipment exhausts will occur with any work and are of little or no significance. Air quality in the area is pristine and changing rapidly from the constant wind. Burning or construction equipment operation should not produce a significant impact on air quality.

4.5 Aesthetics

The visual aesthetics of Meshik and Fort Morrow will improve dramatically with cleanup. Soil disturbance and solid waste disposal sites will remain distinguishable until they are planted and revegetate. Leaving earthworks around quonsets and building sites will allow retention of the historic quality of the area as building sites can be identified. Removal of quonsets, barrels, fallen and standing wooden buildings, machinery and garbage will improve the aesthetics of the area, while removing safety and environmental hazards. Demolition of the WA site will allow an unbroken view of the terrain free of any man-made structures. The site is now visible from many miles in all directions. A visual cleanup will promote tourism to the area for both its wilderness and historic potential. A total cleanup would involve removal, obliterating and revegetating all roadways, earthworks, gravel pits, and building sites. This alternative would allow no retention of historic value, or current use to continue, though restoring the area to pre-World War II conditions. A partial cleanup of debris only, is preferred (Alternative A).

4.6 Noise

Noise will increase at the project site during cleanup. Demolition of the WA site may produce extreme noise levels for a short duration. If drilling is necessary it will produce loud noises for a period of several days. Construction noise from removal of the WA site and structures will take several days to weeks, affecting raptor and other avian use of this site. Temporary equipment noise will accompany any work throughout the area. Caribou movements through Port Heiden will be affected if noise and activity occurs during the migration periods (April & May, late September and October). Animals would avoid the project site, returning after the activity ceases. Timing of construction to periods when large numbers of caribou are not in the area will be important. The impacts of noise during the project are only temporary, having no significant affects on the environment or wildlife.

4.7 Socioeconomics

Debris removal will benefit the local community in several ways; by creation of temporary jobs and generated income in the local community, increased services during construction, generating an influx of construction equipment and supplies, removal of unsightly and potentially hazardous debris, returning the area to a more natural condition, removal of garbage and POL's, and improving visual aesthetics attracting visitors to the area.

The project should occur at a time to not interfere with subsistence activities by the Meshik villagers, especially the caribou migration. The road system should remain as it is used extensively by the local residents for various activities. Notification of when cleanup will occur is necessary to allow villagers to obtain useable materials from the site before disposal. Local hire is an important topic to village residents and it should be encouraged. Removal of solid waste will improve the areas' attractiveness while eliminating the possiblity of accidents due to flying debris during high winds. Removal or disposal of POL's will help prevent contamination of water wells and public drinking water. The project will have no significant negative impact on the local population, most impacts will be positive, improving the quality of life in Meshik.

5.0 CONCLUSIONS

The conclusion, derived from this environmental assessment, is that cleanup can be accomplished with very little negative effect on the human or natural environment of Port Heiden. Any impacts will be minor and of short duration. The accompanying EA and document review support the conclusion that the proposed project does not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not necessary for the proposed cleanup of DOD debris at Port Heiden.

6.0 REFERENCES

McCartney, Allen P.
1979 Working Draft Environmental Impact Statement for World War II Debris Removal and Cleanup, Aleutian Islands and Lower Alaska Peninsula, Alaska. Prep for; U.S. Army Engineer District, Alaska. Prep by; Tetra Tech, Pasadena CA. Appendix J, Archeology and History. 197p.

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1975 Alaska Regional Profiles, Southwest Region. University of Alaska, Arctic Environmental Information and Data Center. Prep for; State of Alaska and Joint Federal/State Land Use Planning Commission for Alaska. 200+p.

U.S. Army Engineer District, Alaska
1979 Aleutian Islands and Lower Alaska Peninsula Debris Removal and Cleanup, Draft Environmental Impact Statement. Prep by Tetra Tech, Pasadena, CA. Appendices. 300+p.

U.S. Department of the Interior
1985 The Bristol Bay Regional Management Plan and Final Environmental Impact Statement. Prep by U.S. Fish and Wildlife Service, Region 7, Anchorage, Alaska. Vol I. 430pp.

U.S. Fish and Wildlife Service
1985 Alaska Peninsula National Wildlife Refuge Final Comprehensive Conservation Plan, Environmental Impact Statement and Wilderness Review. Prep. by U.S. Fish and Wildlife Serivce, Region 7. Anchorage, Alaska 426pp.

7.0 AGENCIES AND PERSONS CONSULTED

Contact was made with representatives of the following resource agencies and businesses concerning the DERA program and sites under investigation for cleanup. Contacts concerning Port Heiden were made to:

U.S. Fish and Wildlife Service
U.S. Environmental Protection Agency
U.S. Air Force
U.S. Department of Interior, Bureau of Land Management
State of Alaska Department of Environmental Conservation
State of Alaska Department of Transportation and Public Facilities
State of Alaska Department of Natural Resources, State Historic Preservation Office
Meshik Village Council
Reeves Aleutian Airways

Initial contacts and inquiries were made by letter, during the permit process, or by the contracted consultant during field investigations.

7.1 COASTAL ZONE MANAGMENT AND LAND USE

The proposed action will occur in a manner consistent and compatible with the Alaska Coastal Management Program. This determination is based on the description of the proposed cleanup activity and assessment of its effects, and review of the Bristol Bay Regional Management Plan (1985). A copy of the assessment has been provided to the State of Alaska, Division of Governmental Coordination for concurrence.