



Bureau of Land Management
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Environmental Assessment
Demolition and removal of hazardous materials and contaminants from
Juneau Island, Alaska

The United States Department of the Interior
Bureau of Land Management
Anchorage Field Office
AK-040-07-EA-034



Location
United States Survey 3844
Township 41 South, Range 67 East, Section 36 Copper River Meridian
Juneau Island, Alaska

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Archaeologist
17 July 2007

I. INTRODUCTION.

On January 19, 1996, the Bureau of Land Management acquired control of the former Bureau of Mines experimental station on Juneau Island in Southeast Alaska. The station complex includes a number of wood frame buildings from the World War II era that have out-lived their usefulness and contain hazardous construction materials and contaminants from work performed within the buildings. In addition, solid waste from 25 years of assay work was disposed of on the island. The hazardous construction materials, the contaminants within the buildings and the solid waste disposed of on the island may be dangerous to public health and safety. The Bureau of Land Management is proposing to render the property harmless by demolishing the buildings and properly disposing of the demolition debris, the hazardous construction material and the solid waste on the island.

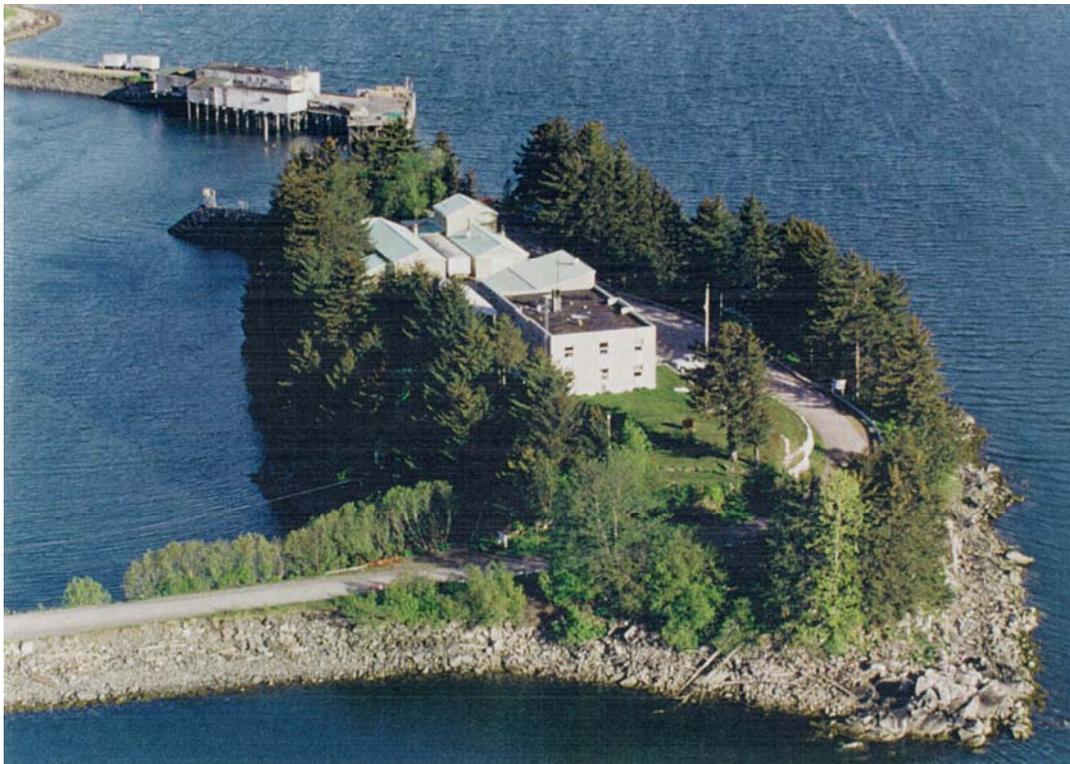


Figure 1 Juneau Island, Alaska.

A. Land Status:

Juneau Island, United States Survey 3844, was “withdrawn from all forms of appropriation under the public-land laws, including the mining and mineral-leasing laws, and reserved for the use of the Bureau of Mines, Department of the Interior, as an experiment station,” See Public Land Order 534, dated November 24, 1948.

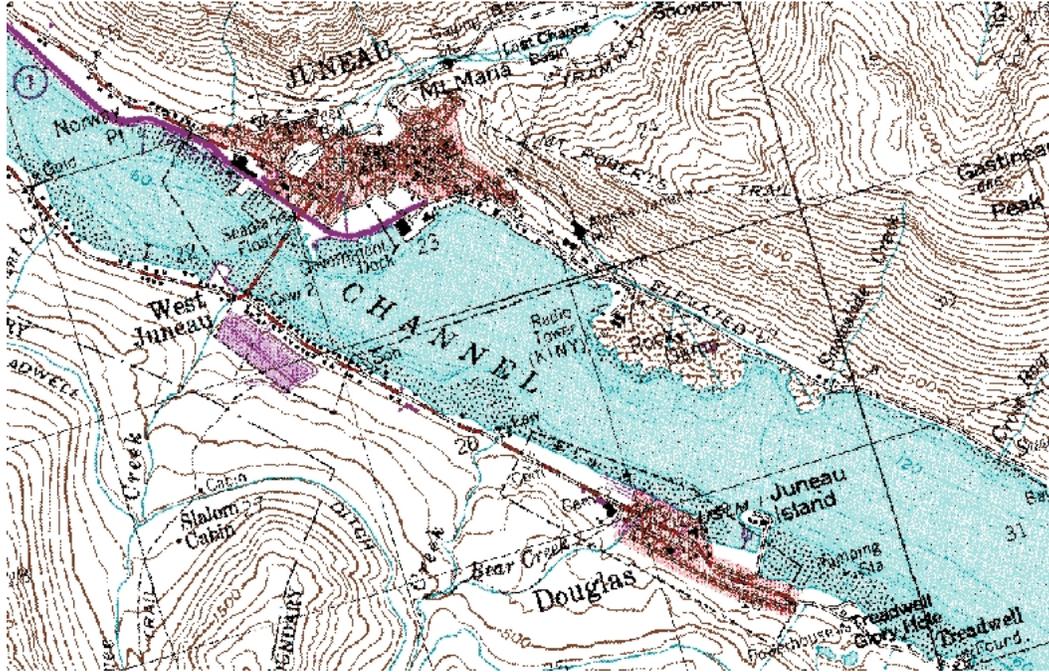


Figure 2 Juneau Island, Alaska.

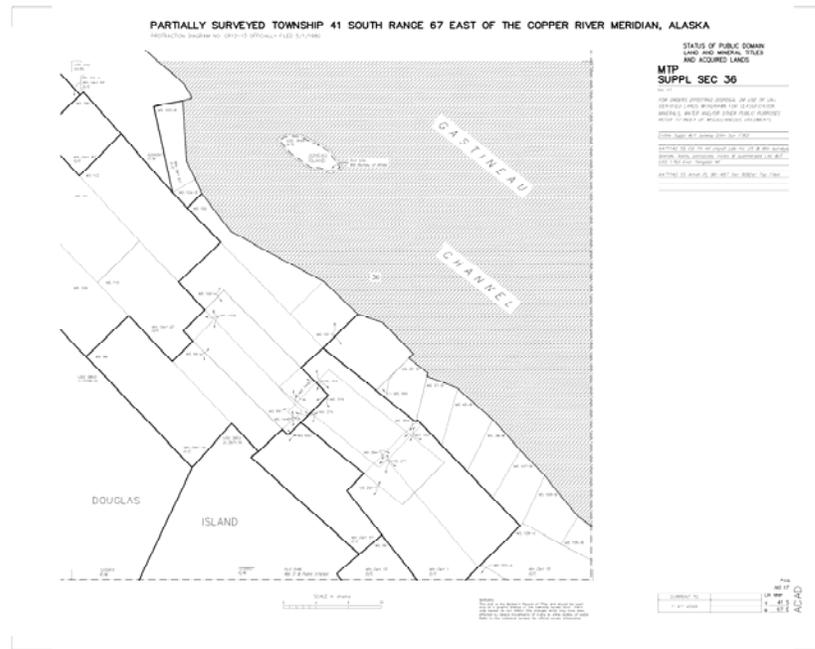


Figure 3 BLM Master Title Plat, Sec. 36, T. 41 S., R. 67 E., Copper River Meridian, Alaska
USS 3844

The 104th Congress (January 3, 1995 – January 3, 1997) failed to provide funding for the United States Bureau of Mines in the Federal Government's 1996 fiscal year budget. On January 29, 1996, the Secretary of Interior transferred the United States Bureau of Mines', Juneau Island facilities, property and liabilities to the Bureau of Land Management, Alaska, *see* Secretarial Order 3196. From 1996 until 2007, the station provided accommodations for personnel engaged in the continued assessment of mineral potential on the public lands in Alaska. However, funding for that program was not included in the Bureau of Land Management's budget for 2008 and the station was closed on July 20, 2007. The island and its facilities are now excess and surplus real property.

- B. Relationship to Statutes, Regulations, Policies, Plans or Other Environmental Analyses:
A September 28, 2006 hazardous materials report by USKH, Inc. of Anchorage, Alaska, WO# 769315, documented the presence of asbestos containing material, lead based paint, polychlorinated biphenyls and mercury in the buildings. It is also suspected that dust from assay work contaminates the interior of the buildings.

A November 11, 1997, Site Characterization and Waste Disposal Plan by HLA/Wilder JV of Anchorage, Alaska also identified a solid waste disposal area on the island. The solid waste disposal area contains residual materials left over from ore assay and processing work.

The solid waste debris field is identified on the following diagram as item 1.

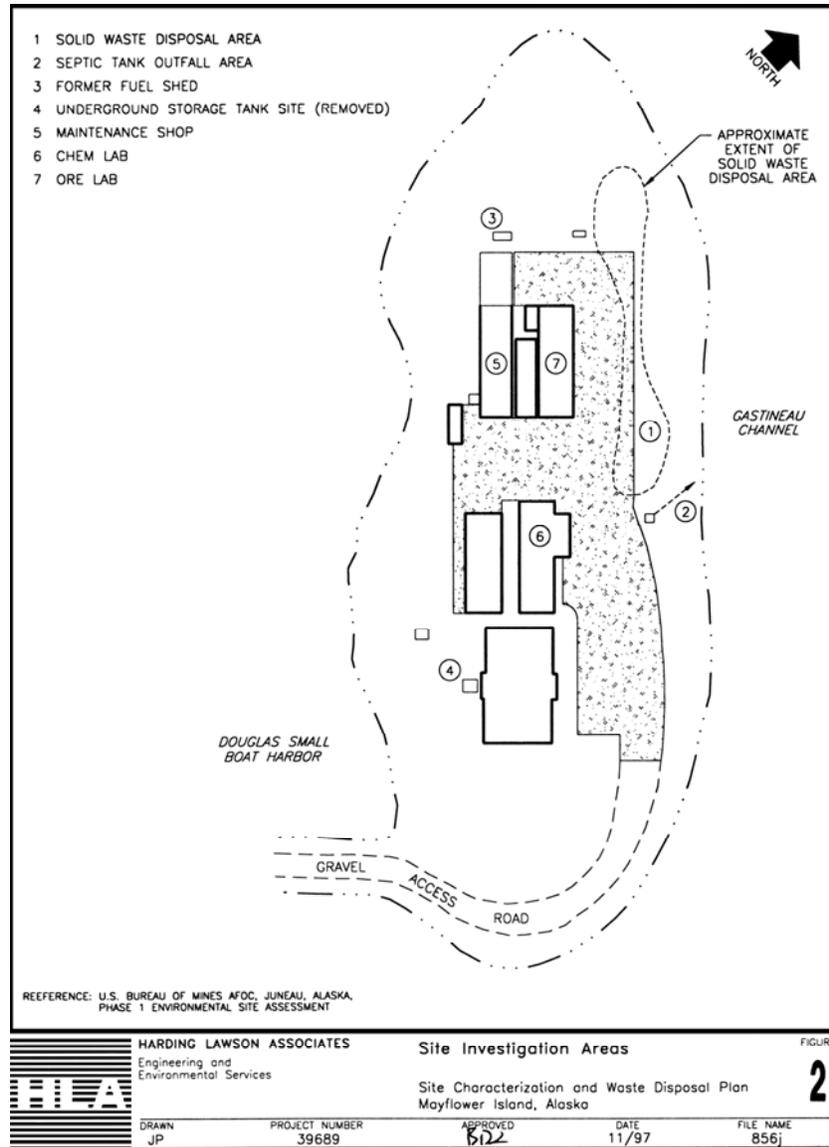


Figure 4 Site plot of station depicting area of solid waste, item 1 in diagram.

The removal and remediation of the solid waste debris field falls under the Comprehensive Environmental Response, Compensation, and Liability Act's National Contingency Plan, 40 CFR §300, which provides for an environmental analysis comparable to that required under the National Environmental Policy Act. Therefore, while removal and remediation of the solid waste debris field is mentioned throughout this document, the environmental consequences of that action are not within the scope of this environmental analysis.

With regard to hazardous materials and contaminants found within the buildings, the Bureau of Land Management has been delegated authority to conduct hazardous waste cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act.

C. Conformance With Land Use Plan:

Juneau Island, USS 3844, is not within a Bureau of Land Management, resource management plan area. However, "... where public lands are not covered by a ... resource management plan, an environmental assessment ... plus any other data and analysis necessary to make an informed decision, shall be used to assess the impacts of the proposal and to provide a basis for a decision on the proposal." 43 CFR 1610.8 (b) (1). The following is an environmental assessment of the proposed action.

II. PURPOSE AND NEED

The Bureau of Land Management, as the landholding agency of the station is responsible for all expenses to the Government and for the supervision of the decontamination of excess and surplus real property that has been contaminated with hazardous materials of any sort. 41 CFR §102-75.955. As the landholding agency the Bureau of Land Management is responsible for rendering property that is dangerous to public health or safety harmless 41 CFR §102-75.995.

Demolition and disposal of the four World War II era wood-frame buildings, a modern wood-frame shed, the associated parking areas, the hazardous construction materials and clean up of the solid waste material will abate the danger to public health and safety.

Further, the characterization of the materials aside, it remains that the cost of maintaining the facilities exceeds their value. 41 CFR §102-75.990.

III. PROPOSED ACTION AND ALTERNATIVE

A. Proposed Action:

The BLM proposes to remove all hazardous construction materials, demolish and dispose of four wood-frame World War II era buildings, a modern wood-frame shed and associated pavement from adjacent parking areas and dispose of the material in an environmentally responsible manner.

The facility is composed of six buildings. The main office building is concrete and has been rehabilitated.

The other five buildings have been contaminated by exterior covering containing asbestos, asbestos covered pipes, and, in the case of the labs, by contamination from hazardous dusts released when mineral assay work was done inside the buildings. Buildings proposed for demolition are the Chem Lab, the Warehouse,

the Ore lab, the Maintenance Shop, and the Shed; buildings 2, 3, 4, 6, 7 & 9 on the following diagram.

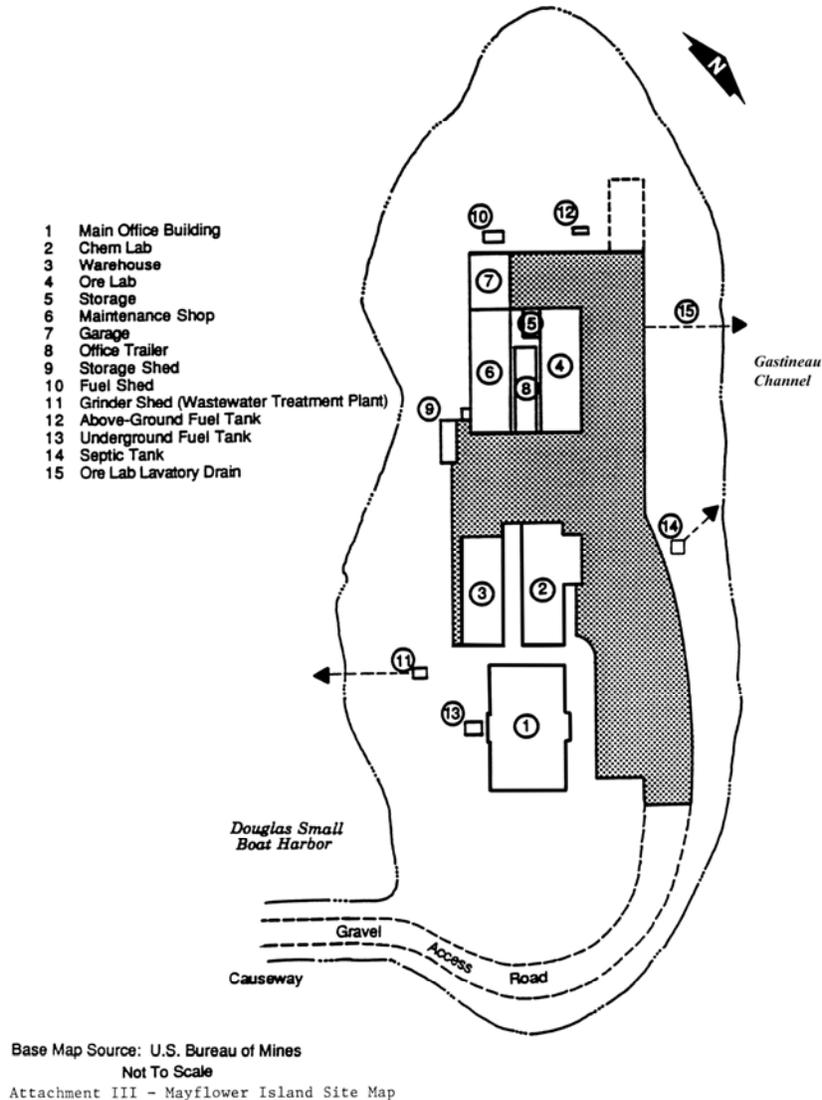


Figure 5 Diagram of Station.

In September 2007, a contractor retained by the Bureau of Land Management will demolish the buildings and associated paved parking surfaces and dispose of the debris in an Alaska Department of Environmental Conservation permitted landfill. Asbestos debris left over from a previous asbestos abatement project will also be removed from the crawl space of the main office building. All hazardous materials will be containerized and sealed on site for transport off the island. After demolition of the buildings and removal of all material, including the solid waste material, the surface area of the removed buildings, the asphalt and the

solid waste debris field will be graded and 12 inches of crushed rock will be placed over it to facilitate parking for the remaining office building.

In addition all underground piping will be capped or plugged below ground surface. Electrical utilities will be removed to the nearest service panel. Water, sewer and associated piping will be cut off at the building exterior and plugged or capped. Water lines will be capped in the basement of the main office building and sewer lift station pumps and controls removed.

Upon completion of the demolition work and other contracted environmental activities on the island, MACTEC Engineering and Consulting, Inc. will conduct an Environmental site Assessment/due diligence audit of the property in conformance with ASTM 1527-05 standards. The report will summarize all cleanup activities conducted at the property as well as the status of the property for purposes of establishing an environmental baseline.

B. No Action Alternative:

Under the no action alternative, the buildings would not be demolished and the hazardous materials and contaminants would not be removed from the island. The danger to public health and safety would remain.

III. AFFECTED ENVIRONMENT

A. Critical Elements of the human environment:

1. The following critical elements of the human environment have been analyzed and are either not present or will not be affected by the Proposed Action or the No Action Alternative:

- Air Quality
- Areas of Critical Environmental Concern
- Environmental Justice
- Farmlands (Prime or Unique)
- Flood Plains
- Native American Religious Concerns
- Water Quality (Surface/Ground)
- Wetlands/Riparian Zones
- Wild and Scenic Rivers
- Wilderness

Threatened & Endangered Species:

There is no reason to believe that:

1. an endangered or a threatened species is present in the area affected by the proposed action;

2. implementation of the proposed action will jeopardize the continued existence of an endangered or threatened species;
3. implementation of the proposed action will result in the destruction or adverse modification of critical habitat of such species;
4. implementation of the proposed action will jeopardize the continued existence of any species proposed to be listed as endangered or threatened;
5. implementation of the proposed action will result in destruction or adverse modification of critical habitat proposed to be designated for such species;

therefore, no consultation with the U.S. Fish and Wildlife Service is considered necessary pursuant to Section 7 of the Endangered Species Act of 1973, 16 U.S.C. §1536.

Subsistence:

The Proposed Action occurs on Federal public lands as defined in ANILCA § 102(3) and falls under the regulatory authority of the Federal Subsistence Board. Juneau is in the State of Alaska Game Management Unit 1C. Juneau is closed to the subsistence taking of wildlife in accordance with the Subsistence Management Regulations for the harvest of Wildlife on Public Lands in Alaska. Subsistence use of fisheries is unaffected by the Proposed Action.

The Proposed Action will not significantly restrict Federal subsistence uses, decrease the abundance of Federal subsistence resources, alter the distribution or movement of Federal subsistence resources, or limit qualified Federal subsistence users access from currently existing conditions. No further analysis is necessary at this time

2. The following critical elements of the human environment have been analyzed and may be affected by the Proposed Action or the No Action Alternative:

Cultural Resources:

Juneau Island a/k/a Mayflower Island is a small 3.18-acre island connected to Douglas Island by an 800-foot long causeway. The island is in the Gastineau Channel near Juneau in southeastern Alaska.

In November of 1889, District of Alaska Governor, Lyman E. Knapp, advised Secretary of the Interior, John W. Noble, that it was time to reserve lands that might be needed for coaling stations, government wharves, public buildings, etc. He cited the possibility that Congress would extend the land laws of the United States to Alaska during its next session and reported that some

individuals in Alaska had begun to stake pre-emptive claims in anticipation of Congressional action. The Secretary of the Interior advised President Benjamin Harrison to reserve Juneau Island as a coaling station and government wharf and on June 21, 1890, the president issued an executive order doing so. Coaling stations and government wharfs were needed at the time to support the United States Navy. There is no record of Juneau Island's actual use as a coaling station or government wharf. Mindful of the governor's prediction of pre-emptive claims, there is some speculation that an individual named N. B. Lazard staked a mining claim on the island in 1881 and latter sold it to the Alaska Treadwell Gold Mining Company. There is no Federal record of Mr. Lazard's purported claim.

The Alaska Treadwell Gold Mining Company did use the island and erected a modest dance pavilion and a few small zoo exhibits for the enjoyment of its employees from its nearby Douglas Island mines. The Treadwell complex which included four major mines consisting of the Treadwell, 700-Foot, Mexican, and Ready Bullion, was a mining and milling operation that spanned 36 years until 1917 when a disastrous cave-in flooded all but the Ready Bullion mine which ran until 1922.



Alaska State Library-Historical Collections

Figure 6 Dance Pavilion.

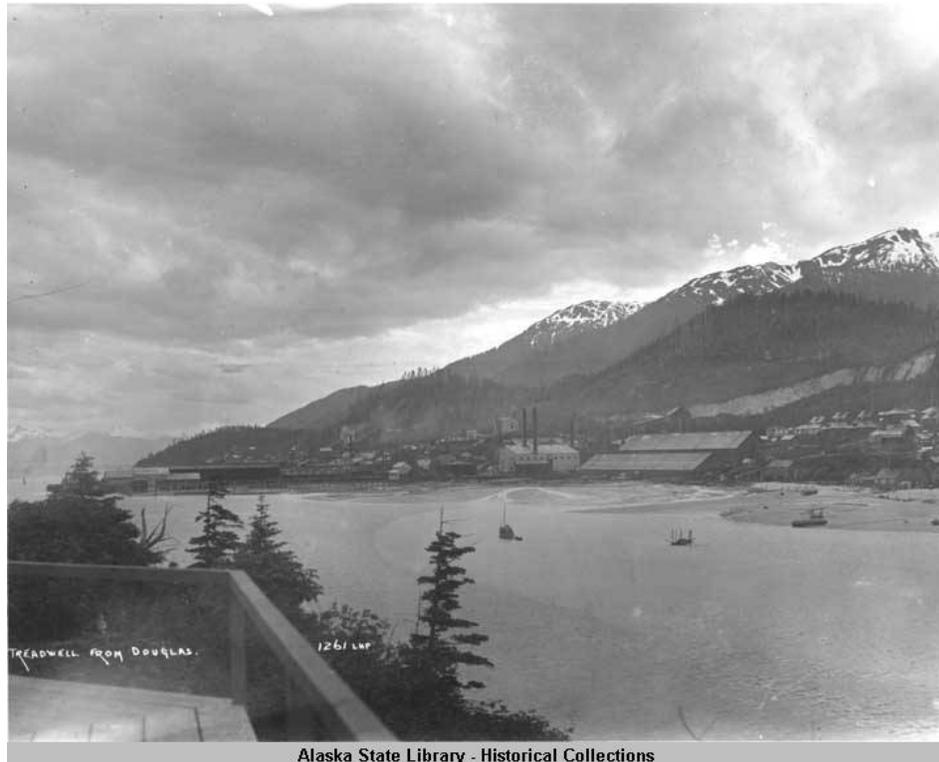


Figure 7 Treadwell mining operation as seen from Juneau Island.

Public Land Order 534 dated November 24, 1948, revoked the president's June 21, 1890 reservation of the island as a coaling station and government wharf and reserved it for use by the Department of the Interior, U. S. Bureau of Mines for an Experiment Station. Congress appropriated \$250,000 and the U.S. Army Corps of Engineers began construction of a causeway to the island and site preparation. At this point, the summit of the small island was leveled. The affected buildings were salvaged from an abandoned WWII camp in Skagway in 1948 and assembled on site as soon as the leveling of the island was completed. The Juneau architectural firm of Foss and Malcolm designed the main office building. It was built during 1949-50 at a cost of \$181,794.58.

Research and intermittent laboratory work, including processing ore samples and testing the processed ore for mineral content, was conducted from 1950 until 1974. In 1974 laboratory work at the site ceased and laboratory areas were converted to office, storage and maintenance areas.



Figure 8 U.S. Bureau of Mines Experiment Station

The facility was known as the U.S. Bureau of Mines Experiment Station and later as the Alaska Field Operations Center. With the dissolution of the Bureau of Mines in 1996, management and possession of the complex passed to the BLM, also an agency of the US Department of the Interior. In 2003, BLM renamed the center for John Rishel, a Congressional aide and lobbyist who was a strong advocate for the mining industry in Alaska.

The facilities, with the exception of the storage shed that was installed in 1976, have been determined eligible to the National Register of Historic Places as a historic district under Criterion A at the state level of significance. Its period of significance is 1950-1957. The historic district (JUN-1065) is composed of the Main Office Building (JUN-1066), the Chem Laboratory (JUN-1067), Warehouse (JUN-1068), Ore Laboratory (JUN-1069) and shop (JUN-1070). The Main Office Building is also eligible to the National Register of Historic Places under Criterion C at the local level as a good example of the Art Deco style. The Alaska State Historic Preservation Officer concurred with this determination on June 14, 2007.

The Main Office Building was constructed in 1949-50. The four other historic buildings were originally considered temporary buildings. These “temporary,” “K.D.” (“knock-down”) standard World War II-era buildings were dismantled

at an abandoned military installation in Skagway, Alaska, and taken to the island where they were re-assembled in 1948-49 after the building site was leveled. Since funding for more permanent buildings never materialized, the “temporary” buildings have been maintained and variously altered over the ensuing years.



**Figure 9 Recent photograph of Juneau Island
Two Story flat roofed building has been refurbished and will remain.**

Waste, Hazardous/Solid:

The Site has hazardous materials (hazmat) present. Most of the hazmats are typical of those present in older buildings in Alaska: aboveground fuel storage tanks (ASTs), asbestos containing building materials (ACM), lead based paint (LBP), Polychlorinated Biphenyl's (PCBs) containing lighting fixtures. There are also small amounts of various chemical products associated with operation and maintenance of the station, such as Assay reagents, cleaning supplies, etc.

B. Non-critical elements of the human environment:

The following non-critical elements of the human environment have been analyzed and may be affected by the Proposed Action or the No Action Alternative:

Wildlife:

Although the Bald Eagle has recently been taken off of the Endangered Species list, it remains protected under the Bald Eagle Protection Act, 16 U.S.C. §668-668d. During a recent site visit at least three Bald Eagles were observed on Juneau Island and an Eagle nest with eaglets was observed on the south end of the island, southwest of the main office building.

Vegetation:

The site will not be re-vegetated; rather the areas on the island affected by the proposed action will be covered in gravel to facilitate parking for the remaining office building.

IV. ENVIRONMENTAL CONSEQUENCES

A. Impacts of the Proposed Action:

1. Critical Elements of the Human Environment:

Cultural Resources:

The Proposed Action will affect five of the six buildings on the island. The Main Office building will not be affected by the proposed Action. The shed is not historically significant and will not be discussed further. However, the other four buildings, the Chem Laboratory (JUN-1067), Warehouse (JUN-1068), the Ore Laboratory (JUN-1069) and the shop building (JUN-1070) are part of the historic district and will be adversely affected by this action. These four buildings are considered contributing properties to the historic district. None of them are considered significant by themselves.

Waste, Hazardous/Solid:

The hazmats known to be present at the Site can cause significant health risks to humans and the environment if not properly managed. Airborne dust from demolition of the buildings can cause spread of lead and asbestos. Spills from the ASTs or stored chemicals could reach nearby surface water. Residues of PCBs, LBP, ACM, Oil, or chemicals released during building demolition can cause human and environmental health damage for many years after the release has occurred.

2. Non Critical Elements of the Human Environment:

Wildlife:

The Eagle nest was observed on the south end of the island, southwest of the main office building. It is believed that the eaglets will have ceased use of the nest at the time demolition and removal of material will take place. The nest is outside the immediate area of demolition and excavation and will not be disturbed.

Vegetation:

The site will not be re-vegetated; rather the areas on the island affected by the proposed action will be covered in gravel to facilitate parking for the remaining office building.

B. Impacts of the No Action Alternative:

1. Critical Elements of the Human Environment:

Cultural Resources:

The historic district (JUN-1065) would remain intact, although the four buildings discussed above would continue to be unusable for health safety reasons.

Waste, Hazardous/Solid:

Hazmats present at the Island are currently contained as building components, in suitable ASTs, or in chemical storage areas. Threat of release and subsequent negative impact to human and environmental health will remain indefinitely. Over time as the buildings continue to age and deteriorate the threat of release will increase.

2. Non Critical Elements of the Human Environment:

Wildlife:

Although demolition of the buildings and the removal of the hazardous material does not pose a realistic risk to the Eagle nest, all risk would be eliminated under the no action alternative.

C. Cumulative Impacts:

Removal of the buildings and asphalt parking areas will substantially reduce the amount of man-made impermeable surfaces on the island and improve the quality of surface water discharged off the island. Proper removal and disposal of the hazmats will enhance human and environmental health. The transport of hazardous material off the island to State approved facilities will increase the amount of contaminants at those facilities.

D. Mitigation Measures:

Cultural Resources:

A Memorandum of Agreement with the Alaska State Historic Preservation Office has been written outlining the mitigation of this adverse effect. Mitigation consists of HABS level III recordation of the four affected buildings and significant interior details and equipment. The buildings were recorded under the terms of this agreement on July 9-10, 2007. Photographic logs of color and black and white photographs have been made. Architectural forms and drawings for each building will be completed. An expanded history of the Bureau of Mines facility on Juneau Island and its accomplishments will be written and a list of significant equipment and what entities curating it will also be developed.

Waste, Hazardous/Solid:

The contractor selected to conduct the demolition of the structures will be required to prepare and follow a work plan that addresses how they will properly abate the ACM, LBP, and PCBs. Any fuel in the ASTs should be transferred to other tanks prior to movement of the ASTs/start of demolition. Chemical products stored on-site should be properly characterized and then disposed as required prior to demolition. Non-hazardous demolition debris should be disposed in a permitted solid waste landfill. All hazardous material should be containerized and sealed prior to transport off the island.

Upon completion of the demolition work and other contracted environmental activities at this site, MACTEC Engineering and Consulting, Inc. will conduct an Environmental site Assessment/due diligence audit of the property in conformance with ASTM 1527-05 standards. The report will summarize all cleanup activities conducted at the property as well as the status of the property for purposes of establishing an environmental baseline.

V. CONSULTATION AND COORDINATION

A. Persons and Agencies Consulted:

United States Coast Guard
Douglas Indian Association
Juneau Historic Resources Advisory Committee
Alaska State Historic Preservation Office

B. List of Preparers:

James F. Moore, AFO Planning and NEPA Coordinator
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Larry Beck, AFO Environmental Protection Specialist