

**Wards Cove Packing Company
Landfill Closure Plan
Alitak, Alaska**

1994

Submitted To:

**Wards Cove Packing Company
Seattle, Washington**

Submitted By:

**AGRA Earth & Environmental
Anchorage, Alaska**

September 1994

31-01515



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Landfill Closure Plan
Alitak, Alaska**

This landfill closure plan (Plan) was prepared by AGRA Earth and Environmental (AGRA) on behalf of Wards Cove Packing Company (Wards Cove). AGRA developed this Plan in accordance with the State of Alaska Solid Waste Management Regulations 18 AAC 60.410 "Closure" and the Environmental Protection Agency's (EPA) Federal Regulations 40 CFR 258.1 (d) "Purpose, Scope and Applicability" and 40 CFR 258.60 Subpart F(a) "Closure and Post Closure Care".

This landfill is located at the Wards Cove cannery facility at Alitak, Alaska. This facility is along the eastern shore of Lazy Bay near the southern tip (Cape Alitak) of Kodiak Island. The landfill is relatively small (approximately ¼-acre) and is positioned just north of the cannery at the end of a gravel spit (Figure 1). Access to the site will be blocked by a 4-foot high gravel berm to be placed across the gravel access road.

As part of this landfill closure program, AGRA conducted a review of this landfill's permit, waste disposal history, and interviews with facility personnel. The site was in use prior to statehood. It contains household wastes, refuse, and debris from Wards Cove's commercial fish processing facilities and employee housing which generally has been incinerated. Aerial photography was also reviewed during the research phase of this project.

Wards Cove will clear the landfill's surface of all metal debris and refuse by consolidating the items and covering them with common soils and rock material during August 1994. Any existing surface water will be drained away from the landfill through excavated drainage ditches. The landfill's surface and sides will then be contoured and shaped to provide for drainage away from the landfill. This site is currently not being utilized for waste disposal and Wards Cove does not intend to use this facility as part of future waste disposal operations. All waste disposal practices were suspended prior to October 9, 1993 as part of an internal operations decision implemented by Wards Cove.

This project has been divided into six specific tasks which will be completed during the landfill closure program. These tasks and their associated operations are outlined in this Plan as follows.

Task 1 - Final Consolidation and Surface Cover

Wards Cove will remove all protruding metal and debris and reconsolidate it within the landfill. The landfill will then be covered with a 6-inch thick layer of common soil and gravel fill material. This material will be mostly 2-inch minus in size and will be devoid of all living plant matter. This surface covering will serve as a bedding material layer and will be contoured and graded to provide a relatively even sloping configuration. This will allow for any surface water to flow off of the landfill. The water can then be transported away from the site via ditches and berms installed along the landfill's sides.

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Task 2 - Geotextile Liner

A 20-mil thick, reinforced polyethylene geotextile liner (RPE 25) will be utilized as the impermeable barrier to prevent the infiltration and absorption of surface water and/or precipitation. This liner material does achieve the federal hydraulic conductivity standard of 1×10^{-5} cm/sec. The liner will be installed pursuant to manufacturer's installation specifications which will be provided to Wards Cove by their material supplier. The RPE 25 liner will then be anchored around the periphery of the landfill using a trench and backfill design as shown in Figures 2 and 3.

Task 3 - Liner Soil Covering

Construction equipment will not be permitted to operate on the liner until a minimum of 18-inches of common soil material that is devoid of all living plant matter is placed atop the impermeable barrier in the working area. This should reduce the potential for puncturing or tearing the RPE 25 liner during installation. After this soil cover is installed, the landfill will be contoured to provide a relatively even sloping configuration.

Task 4 - Final Soil Covering

The uppermost soil layer will consist of a 6-inch thick layer of common soil material suitable for vegetation establishment but devoid of all living plant matter. This soil layer will be contoured and shaped as previously discussed. Drainage ditches will then be installed along the sides of the landfill to facilitate surface water movement away from the landfill.

Task 5 - Seeding and Fertilizing

The following spring after completion of soil placement activities, Wards Cove will seed and fertilize the site to vegetate the area with grasses to enhance soil stability and help prevent erosion and subsequent exposure of the liner. Vegetation will serve to minimize the development of channels and gullies along with providing an increased aesthetic value. The spring seeding will ensure adequate growth and hardiness before the next winter season.

Task 6 - Monitoring

Wards Cove will conduct periodic visual inspections (approximately monthly) of the closed landfill site to ensure the integrity of the final cover, slopes, and drainage structures. Any concerns or problems identified during these inspections will be documented and corrected as quickly as possible. This landfill will be closed prior to October 9, 1994 in accordance with 40 CFR 258.1 and 18 ACC 60.410. No additional monitoring will be performed unless specified by ADEC. This facility should not pose any risk to public health, safety, or impact to the surrounding environment.

Ultimate land uses for the rehabilitated facility will include activities that will not damage the liner integrity or promote dumping of refuse. These uses could include equipment storage or recreational activities.





SOURCE

Aerial photograph provided
 by AeroMap U.S., Inc.
 Photo date: November 1991



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 ENGINEERING & ENVIRONMENTAL SERVICES

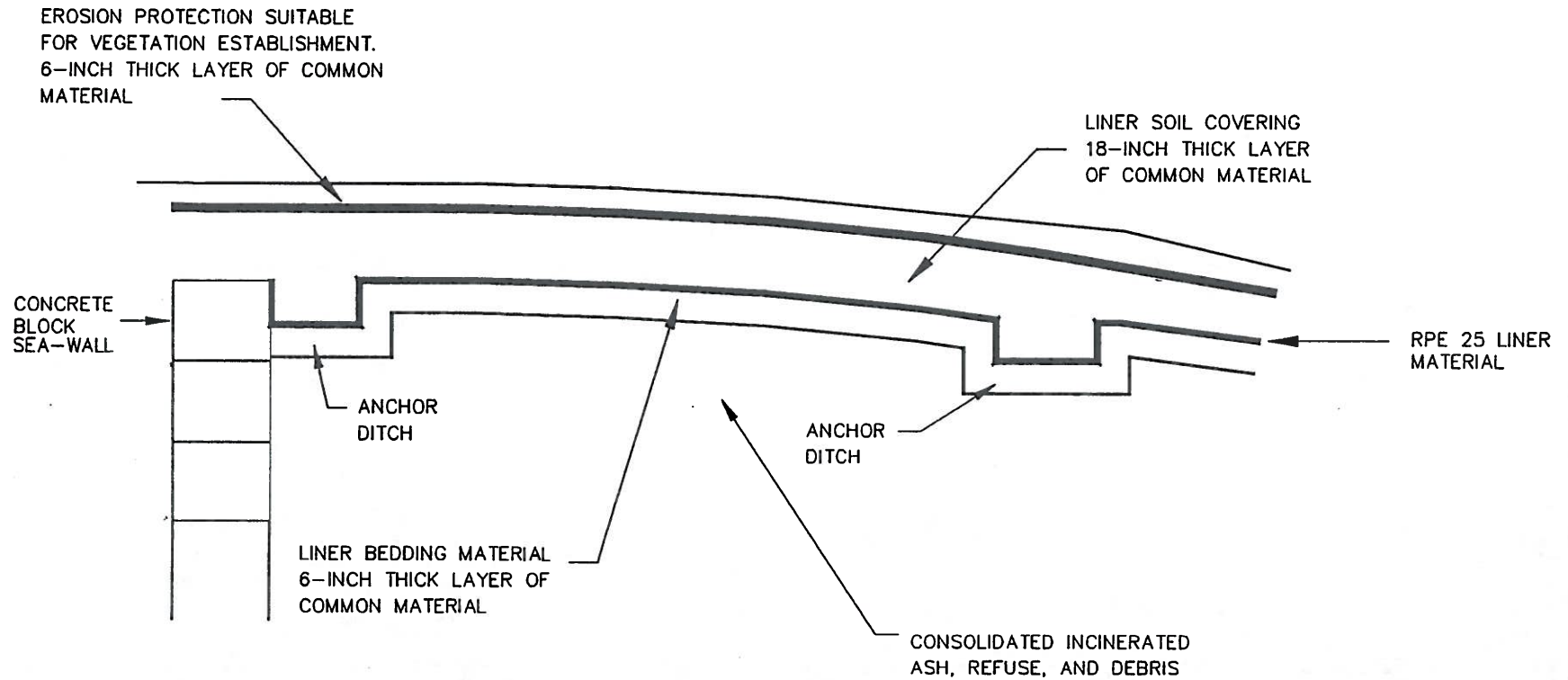
711 H STREET
SUITE 450
ANCHORAGE, ALASKA 99501-3442

W.O.	31-1515-02-01
DESIGN	---
DRAWN	---
DATE	8-22-94
SCALE	NONE
F.N.	(ALAP)

WARDS COVE PACKING COMPANY
LANDFILL CLOSURE PROGRAM
ALITAK, ALASKA

SITE VICINITY DIAGRAM

FIGURE 1



AGRA EARTH & ENVIRONMENTAL, INC.
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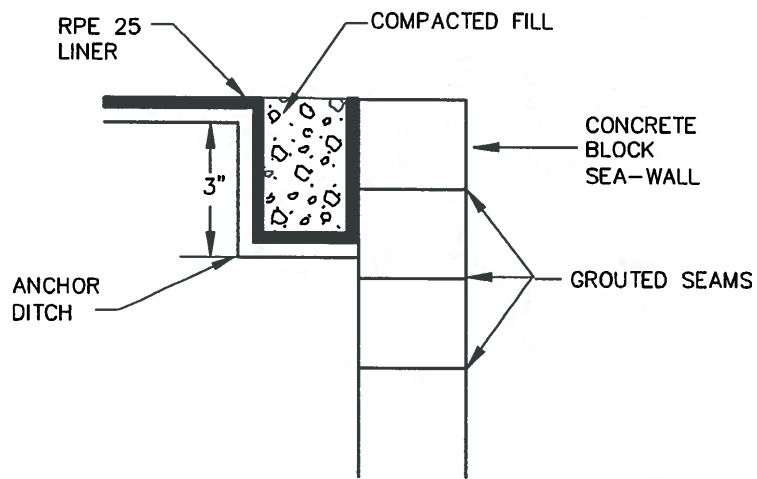
711 H STREET
SUITE 450
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W.O.	31-1515-02-01
DESIGN	MDT
DRAWN	PSH
DATE	8-22-94
SCALE	NTS
F.N.	1515.DWG

WARDS COVE PACKING COMPANY
LANDFILL CLOSURE PROGRAM
ALITAK, ALASKA

LANDFILL PROFILE SCHEMATIC

FIGURE 2



ANCHOR
DITCH DETAIL

AGRA EARTH & ENVIRONMENTAL, INC.
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SUITE 450

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LANDFILL DETAILS

FIGURE 3