



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 155
Seattle, Washington 98101

**Environmental Assessment
of
Dillingham Landfill Improvements**

**May 27, 2025
EPA No. N2025193**

The U.S. Environmental Protection Agency (EPA) prepared the following Environmental Assessment (EA) for the Dillingham Landfill Improvements (the Proposed Action). EPA prepared this EA in compliance with the National Environmental Policy Act (NEPA) and EPA's procedures for implementing NEPA (40 CFR Part 6). This EA discloses the reasonably foreseeable environmental impacts that may result from the Proposed Action and the alternatives considered. The EA is organized into the following nine sections that document EPA's findings:

- 1) **General Information.** This section includes the name of the Proposed Action, grant identification number, and point of contact information for the grant applicant and responsible EPA official.
- 2) **Proposed Action Description.** This section describes the Proposed Action, implementation timeline, and current environmental conditions within the project area.
- 3) **Environmental Impacts of the Proposed Action.** This section describes the Proposed Action's potential reasonably foreseeable impacts to resources within the project area.
- 4) **Alternatives Considered.** This section describes the alternatives to the Proposed Action, the potential environmental impacts of each, and why each alternative was not identified by EPA as the Proposed Action.
- 5) **Review of Applicable Environmental Laws or Executive Orders.** This section identifies the environmental laws and executive orders applicable to the Proposed Action.
- 6) **Required Mitigation.** This section presents the mitigation measures that are essential to render the impacts of the Proposed Action not significant and/or to avoid non-compliance with applicable environmental laws or executive orders.
- 7) **Individuals and Agencies Consulted.** This section presents a list of the individuals and agencies consulted during the development of the EA.
- 8) **List of Supporting Documents.** This section provides a list and brief description of the supporting documents attached to the EA.

I. General Information		
Proposed Action Name	Program / Funding Authority	Grant ID Number (if known)
Dillingham Landfill Improvements	Congressionally Directed Spending (CDS) FY2024 Consolidated Appropriations Act	EPA-CEP-01
Grant Applicant Organization		
City Of Dillingham		
Grant Applicant Contact Information		
Name/Title	Email	Phone Number
Christopher Maines, Planning Department Director	City Planner planner@dillinghamak.us	907-843-0466
Direct Comments to:		
Name/Title	Email	Phone Number
Domenic Calabro, Project Officer	calabro.domenic@epa.gov	206-553-6640

II. Proposed Action Description
<p>Proposed Action Location and Site Description</p> <p><i>Provide the address or general location of the Proposed Action (include state, county, and locality) and a brief description of the site characteristics. Examples of site characteristics include land use and zoning, population served by the existing water system, current infrastructure, and formally classified lands within the Proposed Action area.</i></p>
<p><i>Project Location:</i> The City of Dillingham Landfill in Dillingham, Alaska, is located approximately 10 miles northwest of City center on Waskey Road within Sections 32 and 35 of Township 12 South, Range 55 West, Seward Meridian. See Figure 1, City of Dillingham Landfill.</p>



Figure 1. City of Dillingham Landfill.



Figure 2. Transfer Station and Incinerator Building Area.

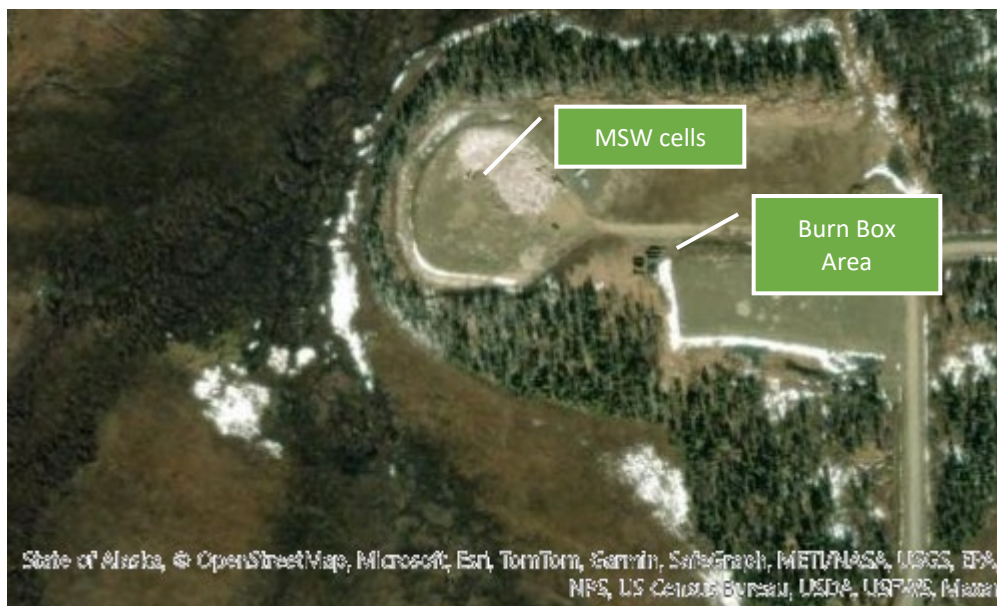


Figure 3. MSW cells and Burn Box Area.

Facility Area: 100 acres, up to 69 acres of which is designated to receive wastes (includes inert and municipal solid waste).

Site Description: The City of Dillingham is located at the extreme northern end of Nushagak Bay in northern Bristol Bay, at the confluence of the Wood and Nushagak rivers. The City of Dillingham lies 327 miles southwest of Anchorage.

The Dillingham solid waste municipal (MSW) landfill is currently operated by the City of Dillingham and has a Class II ADEC Landfill Permit (Permit No. SW2A015-29), which was renewed on January 29, 2025 (see Attachment B). The permit authorizes operation of a MSW incinerator, and disposal cells for MSW, ash, construction and demolition debris, metals, and sewage solids. The requirements for a Class II landfill are that it 1) accepts less than 20 tons of MSW per day, 2) there is no evidence of groundwater pollution, 3) road connections to a Class I MSW landfill are greater than 50 miles, or do

not exist, 4) there are seasonal interruptions to surface transport, and 5) annual precipitation is less than 25 inches.

In addition, the Dillingham landfill operates a transfer station for public disposal (see Figure 2). The landfill also includes two burn boxes for clean wood, paper, and cardboard (see Figure 3). The access road to the landfill is gated and is locked when the facility is closed. Chain-link and solar-powered electric fencing surrounds the MSW cells, the burn box area, and the transfer station. The electric fencing was installed to reduce a former bear scavenging problem at the landfill. See Figure 4 for Dillingham landfill layout.

Project Description: The Dillingham Landfill Improvements Project seeks to modernize and enhance the operational capacity of the region's primary waste management facility through targeted infrastructure upgrades and equipment acquisitions.

This comprehensive project includes:

- repair of the existing incinerator,
- installation of a waste oil burner, and
- procurement of essential waste processing equipment, including a shredder/baler for scrap metal and a glass crusher. Heavy equipment acquisitions, including a D7 Waste Handler, 352 Excavator, Wheeled Loader, and Skid steer loader, will improve daily operations and waste handling efficiency.

The project also encompasses critical infrastructure improvements, as follows:

- construction of a weather port/equipment hangar,
- construction of a dry storage facility,
- replacement of three ground monitoring wells, and
- installation of six methane monitoring wells.

The equipment hangar and dry storage facility will be built from a prefabricated kit. The equipment hangar will be a prefabricated kit of insulated panels and steel frame. The dry storage facility is an engineered fabric building. These facilities will be co-located within the existing Transfer Station site (see Figure 2). The installation of the waste oil burner will be within the existing incinerator building (see Figure 2). The installation areas for the methane monitoring wells is shown in Figure 4.

Overall, the above listed improvements will extend the facility's operational lifespan, ensure environmental compliance, and provide the community with sustainable waste management services for years to come. Total project cost is targeted to enhance operational efficiency while maintaining regulatory compliance and environmental protection standards.

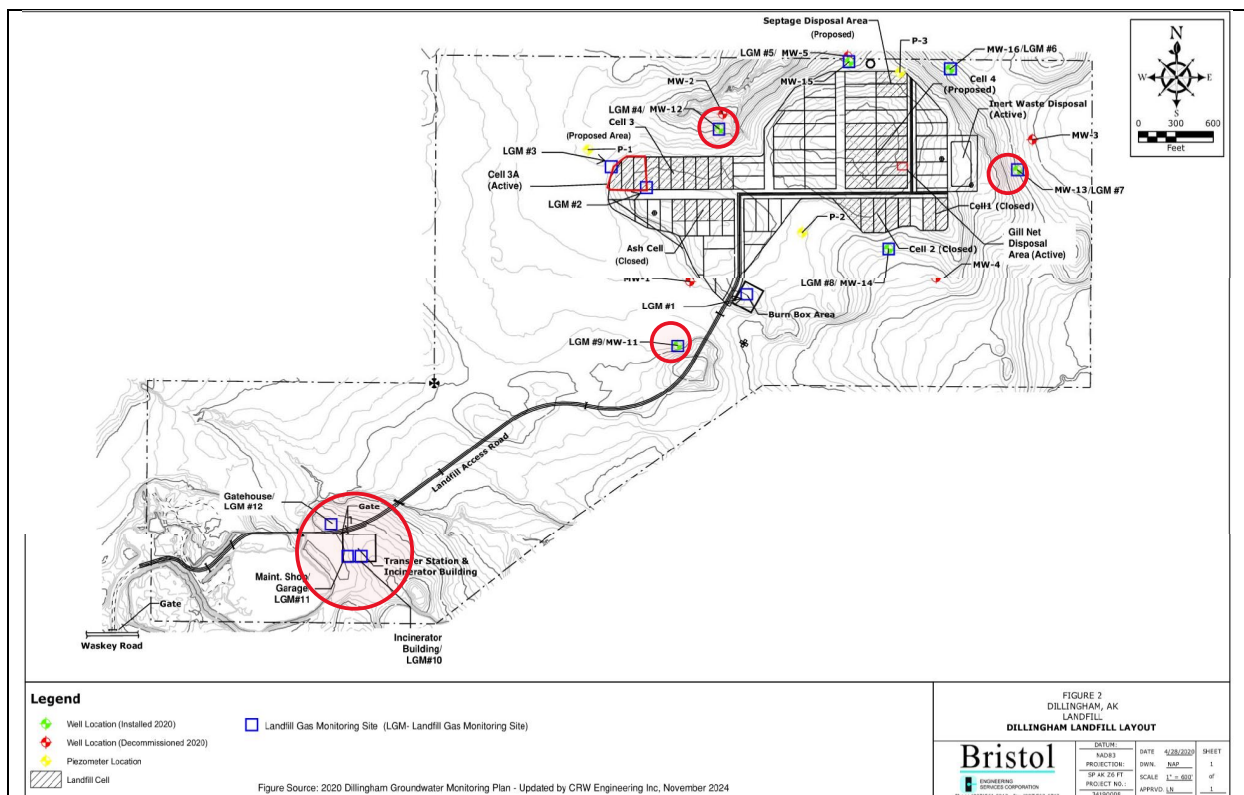


Figure 4. Dillingham Landfill Layout with location of the gas monitoring wells to be installed shown with red circles.

Check all land uses that occur within or adjacent to the Proposed Action area:

- | | | | |
|--|--|--------------------------------------|---|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Military | <input type="checkbox"/> Private | <input type="checkbox"/> Other (specify): _____ |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Mixed Use | <input type="checkbox"/> Residential | |
| <input checked="" type="checkbox"/> Forest | <input checked="" type="checkbox"/> Open Space | <input type="checkbox"/> Water | |
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Park/Recreation | | |

Brief Description of Proposed Action

The Dillingham Landfill Improvements Project is a comprehensive infrastructure upgrade initiative designed to modernize the region's primary waste management facility. The Proposed Action encompasses the repair of critical processing equipment, including the facility's incinerator and the installation of a new waste oil burner system. Essential heavy equipment acquisitions include a D7 Waste Handler, 352 Excavator, Wheeled Loader, and Skid steer loader with attachments to enhance operational efficiency. Waste processing capabilities will be improved through the addition of a Shear Type Shredder, Shredder/Baler for scrap metal, and Glass Crusher. The Proposed Action also includes the construction of a weather port/equipment hangar for equipment protection, development of a dry storage facility, and the replacement of ground monitoring wells and the installation of methane monitoring wells to maintain environmental compliance. These improvements will significantly enhance the facility's waste management capabilities while ensuring environmental protection and regulatory compliance.

Purpose of and Need for Proposed Action

The current landfill has become overburdened with materials that need to be properly destroyed or stored for removal. Additionally, the aged equipment at the landfill has led to lengthy periods of equipment downtime and has led to a reduction of processing capacity when waste is received, especially during peak operations in the summer season when fishing operations are in service.

The primary benefit to the community of Dillingham from the Proposed Action will be the safe disposal of waste oil from private and commercial enterprises and for the proper sorting of various waste items to streamline the operations of the landfill and ensure the City of Dillingham remains in compliance with the EPA and Alaska Department of Environmental Conservation (ADEC).

Anticipated Construction Start Date and Duration of Proposed Action

Proposed construction dates are from Spring 2025 to Winter 2026. Proposed milestones for tasks under this project are as follows:

Task #	Task or Milestone Description	Completion Date
1	Purchase Heavy Equipment for Landfill	6/30/25
2	Repair Incinerator	12/31/25
3	Install Waste Oil Burner	12/31/25
4	Purchase Bins Waste Transport	6/30/25
5	Purchase Shredder/Baler for Scrap Metal	6/30/25
6	Design Dry Storage Building	7/31/25
7	Design Equipment Hangar	7/31/25
8	Replace Groundwater Monitoring Wells	12/31/25
9	Install Methane Monitoring Wells	12/31/25
10	Build Dry Storage Building	6/30/26
11	Build Equipment Hangar	6/30/26

Affected Environment in the Proposed Action Area

Provide a brief description of the current environmental conditions within the Proposed Action area. Topics discussed may include, but are not limited to, the following: topography, geology, and soils; water resources (surface waters, groundwater, wetlands, floodplains); natural resources (vegetation, wildlife, habitats); cultural resources (historic properties, archeological/tribal resources); air quality; socioeconomics; transportation; energy and utilities; solid/hazardous wastes.

Climate: Dillingham's climate is primarily maritime, but the arctic climate of the Interior also affects the Bristol Bay coast. Average summer temperatures range from 37 degrees Fahrenheit (°F) to 66°F. Average winter temperatures range from 4°F to 30°F. The annual average precipitation is 25 inches, with July through October being the wettest months (2.2 to 3.9 inches per month). Approximately 65 inches of snowfall occurs during the winter months, with December through March receiving the heaviest snowfalls (12 to 19 inches per month). Heavy fog is common in July and August. Winds up to 60 to 70 miles per hour may occur between December and March.

Topography: Dillingham is in an area of rolling topography, consisting of irregularly shaped glacial moraine knolls and ridges separated by muskeg. Elevations range from about 20 to 170 feet above sea level.

Geology: The geology of the area consists primarily of sands and gravels overlain in the uplands by windblown silt derived from unvegetated floodplains and volcanic ash. Swamp deposits of thick organics ranging in thickness from less than 2 to more than 20 feet, typically mantle the silts in the lowlands. Fine-grained soils beneath north-facing slopes have been found to be perennially frozen.

Soils: Dillingham lies on a moraine and outwash-mantled lowland with hills 50 to 100 feet high, and wide expanses of wetlands and lakes. The area is underlain by a complex sequence of primarily fine-grained glacial, fluvial, and marine sediments that are several hundred feet thick. The upland moraine hills generally consist of a thick layer of silty loess, underlain by coarse-grained sands and gravel. The lower wetland areas generally consist of an organic mat of peat or muskeg with depths ranging from several inches to several feet in thickness and underlain by wet, stiff clays. Spring breakup usually occurs from mid-April to late May. Heavy surface runoff usually occurs throughout May. The ground begins to freeze around mid-October.

Seismic Activity: Dillingham has not experienced any recent structural damage from earthquakes. Dillingham is in Seismic Zone 2, which is classified as having moderate seismic activity. There are no known volcanoes or other active geothermal features near the City.

Surface Water: The Dillingham area is bounded on three sides by rivers: the Wood River to the east, the Snake River to the west, and the Nushagak River to the south. The Nushagak is the largest river in the area, with a drainage area of 12,400 square miles. Smaller drainage systems in the area include Scandinavian Creek and Squaw Creek. Wetlands are prevalent throughout the area.

Flooding in Dillingham is generally coastal in nature and is caused by storm surges. The City is classified as being in a low flood hazard area. Minor flooding has been reported at the mouths of Scandinavian Creek and Squaw Creek, and at the intersections of Scandinavian Creek and Wood River Road.

Groundwater: Groundwater is recharged from infiltration of rainfall, snowmelt, and stream flow. Natural seasonal fluctuations of water levels are typically less than 6 feet. Water levels are lowest during June and July, when water demand is greatest (fish processing is most intensive), and at certain times during winter because of low recharge.

Air Quality: Dillingham is not located in a non-attainment or maintenance area. There are no known air quality problems in Dillingham.

Population: Traditionally a Native area with Russian and Scandinavian influences, Dillingham is now a highly mixed population of non-Natives, Eskimos, Aleuts, and Indians. Approximately 61 percent of the population is of Native heritage. Population growth has fluctuated over the years, with the highest population growth occurring in the 1930s and 1960s. In 2020, the population was approximately 2,249 individuals. This population can more than double in the summer months due to commercial fishing and tourism.

Economy: Dillingham is the economic, transportation, and public service center for western Bristol Bay. Commercial fishing, fish processing, support of the fishing industry, and tourism are the primary economic activities. The summer fishing season begins with the herring run in May. Salmon fishing occurs during June and July. Tourism accounts for a significant percentage of the local economy, with sportfishing and hunting accounting for the majority of the tourism sector. Most visitor activity occurs during summer and early fall. During spring and summer, the population typically doubles, primarily due to fishing. Many residents depend on subsistence activities.

Transportation: Dillingham can be reached by air and sea. Air transportation provides the primary means of access for freight, mail, and people. The state-owned airport, located approximately four miles west of downtown, provides a 6,404-foot paved runway and a flight service station. Regular jet service is available to and from Anchorage. The City-operated small boat harbor provides slips for boats, a dock, barge landing, boat launch, and boat haulout facilities. It is a tidal harbor and is used only during the fishing season. Barges provide cargo service from Anchorage and Seattle. Road access is limited to a 25-mile paved road to Aleknagik. This road is maintained by the State of Alaska Department of Transportation and Public Facilities.

Access to Dillingham is exclusively by sea or air, as the Alaska Highway System extends no roads to this destination. A paved road spanning twenty-five miles links Dillingham to the neighboring community of Aleknagik, which rests adjacent to the largest state park in the United States: Wood Tikchik State Park. The City-operated small boat harbor provides slips for boats, a dock, barge landing, boat launch, and boat haul-out facilities. It is a tidal harbor and is used only during the fishing season. Barges provide cargo service from Anchorage and Seattle. Road access is limited to a 23- mile paved road to Aleknagik. This road is maintained by the State of Alaska Department of Transportation and Public Facilities.

Land Use: The majority of the developed land in the Dillingham area is classified as being used for either commercial or residential purposes. There are a limited number of industrial facilities within the City, the most notable being the Peter Pan Seafoods, Inc., cannery and Nushagak Electric. The land area for Dillingham is comprised of 33.34 square miles and water is comprised of 2.73 square miles.

Community Services: The Dillingham Volunteer Fire Department & Rescue Squad is made up a group of dedicated volunteers, including a volunteer fire chief, and is supported by two full-time employees. The Department has a total of 35 members both permanent and probationary. There are three categories of members, 23 are both fire and rescue, 6 are firefighters and 6 rescuers. The Department maintains three ambulances, four pumpers, two tank trucks, and a utility truck.

The Public Safety Department provides animal control, department of motor vehicles, a corrections facility, traffic enforcement, patrol, investigations, and other functions to increase safety within the community.

The Public Works is responsible for the maintenance of streets and sidewalks, storm drainage systems, landfill, buildings and grounds, vehicle and heavy equipment maintenance, and water and wastewater treatment.

The Sam Fox Museum contains a large collection of Central Yup'ik objects, part of Sam Fox (Yup'ik carver) collection, Truman Emberg papers, original Constitution of State of Alaska (with Emberg's signature), large basket collection, skin sewing and fur exhibit.

The City of Dillingham also has a senior center, library, elementary and middle/high schools, and a hospital and other medical/health care services.

III. Environmental Impact of the Proposed Action

In the tables below, use the following impact categories to document the Proposed Action's impact on the environmental resource:


- **No Impact** (e.g., resource not present)
- **Beneficial Impact Only** (no adverse impact)
- **Adverse Impact, Mitigation Not Required** (e.g., minor and/or temporary impact)
- **Adverse Impact, Mitigation Required** (e.g., to avoid potentially significant impact)

Under each heading, provide a brief description of the impacts on the environmental resource and cite any supporting analyses. Impacts or effects are defined as changes to the human environment from the Proposed Action or alternatives that are reasonably foreseeable. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic (such as the effects on employment), social, or health effects. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.†

III.A. Natural and Cultural Resources

Impact Category	Environmental Resource
Minor Adverse Impact, Mitigation Not Required	<p>Groundwater Resources. <i>Effects on groundwater resources located within the Proposed Action area or adjacent properties. Examples include changes in depth or character of the water table, rate of groundwater recharge, and groundwater quality.</i></p> <p><u>Summary of Impacts:</u> A goal of the solid waste program is to minimize the landfill's impact to groundwater. The landfill currently operates under a Quality Assurance Project Plan (QAPP) for groundwater monitoring, approved by ADEC in February 2021. Groundwater monitoring is conducted in the spring and the fall. Groundwater monitoring reports are submitted to ADEC within 60 days of receiving the monitoring results. Surface water monitoring is not required. On a recent inspection by ADEC, all groundwater monitoring wells were reported to be in good condition except for MW-12. See ADEC June 12, 2024 Inspection Report. The inspection found that MW-12 has enough significant damage that water levels cannot be measured, and the pump depth cannot be determined. The damage may also be contributing to very high levels of turbidity which negatively impacts results. The Community Grants Program funds will be used to replace MW-12. In addition, MW-11 has been identified as needing replacement and MS-13 is being considered for replacement due to frost jacking. A plan for ADEC approval on the replacement of well locations, installation, and development procedures, as well as decommissioning for the wells has been submitted to ADEC. The replacement of the groundwater monitoring wells would involve earthwork disturbance activities which would have a minor potential to impact water resources in the project area. With appropriate best management practices to control erosion and stormwater runoff, there would be minimal adverse impacts to the current surface water and groundwater system due to the Proposed Action.</p> <p>Additional measures in place to protect groundwater at the landfill include daily cover requirements for the MSW cell, which reduces the production of leachate. If waste is left uncovered, leachate production increases, which can impact groundwater, requiring additional monitoring.</p>

<p>Minor Adverse Impact, Mitigation Not Required</p>	<p>Surface Water Resources. <i>Effects on surface waters located within the Proposed Action area or adjacent properties. Examples include changes in water quality (e.g., due to erosion, new/modified discharges, increased runoff, or contaminant leaks), hydrology, physical characteristics (e.g., depth), and riparian buffers.</i></p> <p><u>Summary of Impacts:</u></p> <p>The project location for the Transfer Station is surrounding by wetlands, including Freshwater Pond (shown in blue), Freshwater Forested/shrub Wetlands (shown in dark green), and Freshwater Emergent Wetlands (shown in light green). These wetlands are typically characterized by woody vegetation, dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens. See Figure 3 below. The project location for the MSW cell and burn area is surrounded by Freshwater Forested/shrub Wetlands (shown in dark green), and Freshwater Emergent Wetlands (shown in light green). See Figure 4 below. Buffers and stormwater management measures are in place to protect surrounding wetland areas. To manage on-site water, the facility incorporates perimeter ditches and berms to divert any run-on from entering any waste area. These perimeter ditches provide effective run-on and run-off control for the active area. The landfill operates in accordance with the Surface Water Pollution Prevention Plan (SWPPP), ADEC Permit, and QAPP for groundwater monitoring, approved February 2021.</p> <p>The project locations are not within a regulatory floodplain. There are no streams, waterbodies, sole source aquifers, or wild and scenic rivers within the project locations. No impacts will occur to these resources.</p> <div data-bbox="394 1045 1390 1644"> </div> <p><i>Figure 3. Wetlands near the Transfer Station.</i></p>
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	 <p>Figure 4. Wetlands near the MSW cells and burn box area of the landfill.</p>				
No Impact	<p>Unique Natural Features. <i>Effects on natural features (e.g., caves, cliffs, vistas, canyons, waterfalls, dunes, tree stands, etc.) within the Proposed Action area or adjacent properties. Examples include alteration, destruction, or restriction of access to the natural feature.</i></p> <p><u>Summary of Impacts:</u></p> <p>There are no unique natural features present on the landfill site. The Proposed Action will not result in the alteration, destruction, or restriction of access to these features.</p>				
Minor Adverse Impact, Mitigation Not Required	<p>Vegetation and Wildlife. <i>Effects on plant communities, wildlife, and habitats within the Proposed Action area or adjacent properties.</i></p> <p><u>Summary of Impacts:</u></p> <p>The EPA generated a threatened and endangered species report from the U.S. Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation (IPaC) tool for the project site. The IPaC report listed one species: Stellar’s Eider (threatened). No critical habitat was identified for the project location. Given the scope of work, EPA has made a no effect determination for this listed species. The below table provides additional information to support this determination.</p> <table border="1" data-bbox="394 1507 1421 1988"> <thead> <tr> <th data-bbox="394 1507 1084 1539">Stellar’s Eider Habitat</th><th data-bbox="1084 1507 1421 1539">Species Determination</th></tr> </thead> <tbody> <tr> <td data-bbox="394 1539 1084 1988"> <p>Eiders are sea ducks, a group of diving ducks that breed inland but generally spend the rest of the year in coastal marine waters, often in shallow, near-shore marine waters. Molting and wintering flocks gather in lagoons and bays, as well as along rocky headlands and islets. Nesting occurs on tundra adjacent to small ponds, often near the coast but sometimes ranging 50 miles inland.</p> <p>The breeding range of Steller’s eiders is the arctic coastal plain of northern Alaska and Russia. There are three recognized breeding populations of Steller’s eiders worldwide. Two populations breed in Russia. The Russian-Atlantic population breeds in Russia and winters in the Barents and Baltic Seas of northern Europe, never</p> </td><td data-bbox="1084 1539 1421 1988"> <p>No effect to species. The Proposed Action does not impact coastal marine waters for this species. Species is also unlikely to be nesting within the project location.</p> </td></tr> </tbody> </table>	Stellar’s Eider Habitat	Species Determination	<p>Eiders are sea ducks, a group of diving ducks that breed inland but generally spend the rest of the year in coastal marine waters, often in shallow, near-shore marine waters. Molting and wintering flocks gather in lagoons and bays, as well as along rocky headlands and islets. Nesting occurs on tundra adjacent to small ponds, often near the coast but sometimes ranging 50 miles inland.</p> <p>The breeding range of Steller’s eiders is the arctic coastal plain of northern Alaska and Russia. There are three recognized breeding populations of Steller’s eiders worldwide. Two populations breed in Russia. The Russian-Atlantic population breeds in Russia and winters in the Barents and Baltic Seas of northern Europe, never</p>	<p>No effect to species. The Proposed Action does not impact coastal marine waters for this species. Species is also unlikely to be nesting within the project location.</p>
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	<p>associating with Alaska. The Russian-Pacific population breeds in Russia and winters in the Bering Sea and northern Gulf of Alaska and mixes with the Russian-Pacific population in the Bering Sea and northern Gulf of Alaska during the molt and winter. Alaska's breeding population occurs in two disjunct regions, the Yukon-Kuskokwim Delta in western Alaska, where only a few birds may nest, and the Arctic Coastal Plain, primarily near Barrow.</p> <p>Almost all Steller's eiders nest in northeastern Siberia, with less than 1% of the population breeding in North America. In the winter, most of the world's Steller's eiders are found in the Alaska Peninsula and the Aleutian Islands. Others winter as far west as the Commander and Kuril Islands of Russia and as far east as Kodiak Island and Kachemak Bay in Cook Inlet, Alaska.</p> <p>There is no essential fish habitat present at the project site. The Proposed Action will not affect marine mammals. There will be no impact to eagles. Bald eagles are likely present in the area. However, bald eagle nests are unlikely to be within the project area since the site is not within 1 mile of a large water body. The nearest river (Wood River) is located approximately 3.4 miles east of the site. Nushagak rivers is located approximately 8 miles southeast of the project site. No construction will occur within 660 feet of any bald eagle nests.</p> <p>The landfill is bordered by open tundra and forest land. The area around the Transfer Station for the construction of the Dry Storage Building and Equipment Hangar is previously disturbed and cleared area. Some vegetation clearing, grubbing, and ground leveling will be required. There would be a minor impact to vegetation and soils during construction activities. Soil excavated during construction would be stockpiled for future use for cover for the landfill.</p> <p>Bears have been damaging the fence and entering the landfill for several years. This can be dangerous not only for the landfill staff and residents that use the landfill but for the bears as well. ADEC recommended burning and covering waste more often and reaching out to the Alaska Department of Fish and Game for bear deterrent ideas.</p>
No Impact	<p>Cultural Resources. <i>Effects on historic, cultural, and archeological resources within the Proposed Action area or adjacent properties.</i></p> <p><u>Summary of Impacts:</u> The Dillingham landfill is currently an active and operational facility. No cultural resources have been discovered that would be impacted by the Proposed Action. As a condition of its ADEC permit, should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately.</p>
III.B. Land Use Planning and Development	
Impact Code	Environmental Resource
No Impact	Land Use Change and Consistency. <i>Effects on existing pattern and type of land use, including changes within the Proposed Action area or adjacent properties as well as</i>

	<p><i>promotion of future development and population growth (e.g., due to new or expanded infrastructure). Consistency with local or regional comprehensive plans, community policies, and land use goals.</i></p> <p><u>Summary of Impacts:</u> The Dillingham landfill is located 10 miles northwest from the City center of Dillingham in a rural area, away from residential and developed areas. The project area is within the current landfill area and will not alter land use patterns or preclude other land uses within the project footprint and land uses adjacent to the project site. Therefore, there will be no anticipated impacts to land uses and the Proposed Action will be compatible with the current land uses of the project area. The project site is not located in or near any Wilderness areas or within other specially designated areas.</p>
No Impact	<p>Open/Recreational Space and Cultural Facilities. <i>Effects on the quality of and access to open space, recreational space, and cultural facilities (e.g., theaters, museums, and libraries) within the community.</i></p> <p><u>Summary of Impacts:</u> Dillingham offers the local populace many recreational outdoors activities, such as boating, canoeing, rafting, tubing, hiking, biking, fishing, snowmachining, skiing, mushing, and hunting. Wood Tikchik State Park, the largest state park in the United States, is located approximately twenty-five miles from Dillingham next to the neighboring community of Aleknagik. Dillingham also holds the distinction of serving as the headquarters for the nearby Togiak National Wildlife Refuge, a sanctuary for walruses, seals, migratory birds, and an extensive wild herring fishery. The Proposed Action within the Dillingham landfill will not have effects on the quality of and access to these open and recreational spaces or cultural facilities within the community.</p>
Minor Adverse Impact, Mitigation Not Required	<p>Topography, Geology, and Soils. <i>Effects on site topography, underlying geology (e.g., bedrock), and soils, as well as the potential for these characteristics to affect the Proposed Action (e.g., unsuitable soil conditions). Examples include changes in grading and fill; site stability, runoff patterns, and erosion potential; bedrock modifications; existing or potential soil contamination; and conversion of soils suitable for agricultural activities.</i></p> <p><u>Summary of Impacts:</u> Insignificant impacts to geology are anticipated for the landfill area due to the Proposed Action. The geology of the area remains essentially unaltered or unaffected by construction activities that disturb soils from the landfill activities.</p> <p>Under the Proposed Action, soil would be disturbed during construction. The area is previously disturbed and is an active landfill. Construction activities would result in a minor impact to surface and subsurface soils. Best management practices will be in place to control any erosion and stormwater runoff. Soil excavated during construction would be stockpiled for future use for either reclamation, cover, or closure of future phases of the landfill.</p>
Minor Adverse Impact, Mitigation Not Required	<p>Public Safety and Nuisances. <i>Potential to cause or contribute to hazards and nuisances (e.g., noise, vibration, hazardous materials) within the Proposed Action area or adjacent properties, as well as the potential for these hazards and nuisances to affect the Proposed Action.</i></p> <p><u>Summary of Impacts:</u></p>

	Working near vehicles, haul trucks, and heavy machinery will always present a level of danger to site workers. Appropriate fencing and signage are in place for public awareness of the landfill operations. Minor impacts to human health and safety are anticipated because of the Proposed Action. The City of Dillingham has a safety program within its landfill operational and monitoring plan. The City of Dillingham would implement their safety program and fire protection program, as required. Their safety program outlines fire protection, lifting requirements, reporting requirements, necessary first aid/AED trainings, and available numbers for local authorities. In addition, landfill staff receives regular training on solid waste management to be effective at their work.
No Impact	<p>Environmental Design. <i>Effects on the visual coherence, scale, and character of the surrounding natural or manmade environment within the Proposed Action area or adjacent properties.</i></p> <p><u>Summary of Impacts:</u> The Proposed Action will have no impacts on the visual coherence, scale, and character of the surrounding natural environmental within the Proposed Action area or adjacent properties. The project area is within an active landfill, which is located a rural area, away from residential and developed areas. The landfill and Transfer Station are fenced and access to the site is controlled. Exposed waste in the MSW cells is covered daily to prevent windblown litter, animal attraction, leachate production, and other issues. In additon. a visual monitoring of the landfill is performed monthly to ensure that access is controlled, litter is collected, areas are well maintained, and that there are no water impacts.</p>
III.C. Community Services and Infrastructure	
Impact Code	Environmental Resource
No Impact	<p>Essential Community Services. <i>Effects on the quality of and access to community services including schools, health care, social services, and emergency services (police, fire, and emergency medical). Examples include changes in demand for services (e.g., student population growth) and changes in accessibility due to road closures and modifications.</i></p> <p><u>Summary of Impacts:</u> The project area is within an active landfill, which is located in a rural area, away from residential and developed areas (approximately 10 miles northwest of the City center). The Proposed Action will not have impacts to the quality of or access to community services, including schools, health care, social services, and emergency services.</p>
Beneficial Impact	<p>Solid and Hazardous Waste Management. <i>Effects on the capacity of and access to solid waste disposal facilities in the community, as well as generation, handling, and disposal of hazardous waste.</i></p> <p><u>Summary of Impacts:</u> The Dillingham landfill is a Class II landfill operating under ADEC Solid Waste Disposal Permit Number SW2A015-29, which expires on November 05, 2029. The landfill operates area fill cells for MSW, metals, and construction/demolition waste. In addition, the facility includes a transfer station for public disposal, an MSW incinerator, and two burn boxes for clean wood, paper, and cardboard. Access to the landfill is controlled. The-hours of operation and fees for disposal are posted by the gatehouse. No salvaging is allowed at the landfill. All loads to the landfill must be covered and secured. Customers are responsible for sorting trash/recyclables. Aluminum can recycling is available at the Senior Center. The City of Dillingham Solid Waste Management Plan (2006), provides a summary of the</p>

	<p>comprehensive waste management system that includes characterization, transport, storage, treatment, and disposal for the City.</p> <p>The Proposed Action will expand the capacity of solid waste disposal for the community, the safe disposal of waste oil from private and commercial enterprises, and for the proper sorting of various waste items to streamline the operations of the landfill and ensure the City of Dillingham remains in compliance with the EPA and Alaska Department of Environmental Conservation (ADEC).</p>
No Impact	<p>Wastewater Infrastructure. <i>Effects on the capacity and effectiveness of the sewer or septic system that serves the Proposed Action area.</i></p> <p><u>Summary of Impacts:</u> The waste collection, sorting, or separation, including the management of liquids (e.g., leachate and stormwater) is managed onsite as part of the landfill's stormwater plan. The Proposed Action will not affect the sewer or septic system that serves the community within the City of Dillingham.</p>
Minor Adverse Impact, Mitigation Not Required	<p>Storm Water Infrastructure. <i>Effects on the capacity and effectiveness of storm water collection, conveyance, and treatment systems within the Proposed Action area.</i></p> <p><u>Summary of Impacts:</u> Stormwater is water that originates during precipitation events and snow or ice melt. Stormwater can soak into the ground, be held on the surface to evaporate, or run off towards downstream surface water bodies. Surface water flow may occur at the proposed site when water generated by rain, snowfall, or melting of accumulated snow, flows freely over the land surface into nearby drainages. Surface water flow may occur when the soil is saturated and its holding capacity is exceeded, when precipitation falls more quickly than the soil can absorb it, or more typically, when a combination of these conditions exists.</p> <p>To manage on-site water, the site contains buffers and stormwater management measures to protect surrounding areas. Access road drainage, drainage from undeveloped areas, and drainage from interim closed areas are not allowed to run into active cells. Drainage from active cells is not allowed to escape out of the cell operations boundary. The road frontage of each cell is protected with a berm or ditch, which prevents road drainage from entering the cell or vice versa.</p> <p>Overall, the existing on-site drainage controls are managed as part of the stormwater plan. Landfill staff is responsible for the maintenance of all on-site drainage structures and ditches. Maintenance includes erosion control measures for the ditches, as necessary. The landfill operates and maintain the ditches in accordance with the Surface Water Pollution Prevention Plan (SWPPP). All operational or generated liquid contaminants is controlled according to the SWPPP to prevent any mixing with the stormwater system. While appropriate stormwater measures are in place, there could be minimal adverse impacts to the current surface water and groundwater system due to the Proposed Action.</p>
Minor Adverse Impact, Mitigation Not Required	<p>Water Supply. <i>Effects on the capacity and effectiveness of drinking water systems within the Proposed Action area.</i></p> <p><u>Summary of Impacts:</u> The City of Dillingham public water system is a ground water system that gets water from two ground water wells. Well #2 is located in the Old Courthouse parking lot at</p>

	<p>715 Seward Street. Well #5 is located in the High School parking lot at 135 Main Street. The Proposed Action will not impact this public water system.</p> <p>The Dillingham landfill has a current groundwater monitoring program in place. The Proposed Action plans to replace three monitoring wells to maintain compliance with its ADEC permit. While the appropriate monitoring measures are in place, there could be minimal adverse impacts to the current surface water and groundwater system due to the Proposed Action.</p>
No Impact	<p>Energy Use and Infrastructure. <i>Effects on energy use and the capacity and effectiveness of energy infrastructure (e.g., electrical grid, natural gas distribution). Examples include long-term changes in electricity demand and changes in fossil fuel use due to modified commuting patterns.</i></p> <p><u>Summary of Impacts:</u> The Proposed Action will not impact the energy use or the capacity and effectiveness of the energy infrastructure. There will be no long-term changes in electricity demand or changes in fossil fuel use patterns.</p>
Minor Adverse Impact, Mitigation Not Required	<p>Transportation. <i>Effects on the adequacy of and access to public transportation services within the community.</i></p> <p><u>Summary of Impacts:</u> Traffic will temporarily increase due to construction equipment, vehicles, and construction workers traveling to the site. Public notice of activities, safety cones, and other traffic management practices will be deployed at the landfill site, as necessary. No closures or detours are anticipated. Traffic is anticipated to return to previous levels once construction is complete. No impacts to public transportation services are anticipated within the community.</p>
III.D. Socioeconomics	
Impact Code	Environmental Resource
No Impact	<p>Demographic/Character Changes. <i>Effects on the demographic characteristics of the community, such as population or projected population growth.</i></p> <p><u>Summary of Impacts:</u> The Proposed Action will not impact the demographic characteristics of the community.</p>
No Impact	<p>Displacement. <i>Effects on the relocation of individuals, families, existing jobs, community facilities, or business establishments.</i></p> <p><u>Summary of Impacts:</u> The Proposed Action takes place within an active and operational landfill that is located within a rural area, away from residential and developed areas. It will not result in the relocation of individuals, families, existing jobs, community facilities, or business establishments.</p>
No Impact	<p>Economic Opportunities and Growth. <i>Effects on employment opportunities and economic growth within the community.</i></p> <p><u>Summary of Impacts:</u> The Proposed Action may result in temporary increases in employment due to the hiring of construction workers, as well as potential increases in economic activity during construction due to purchasing of Proposed Action materials and worker meals.</p>

III.E. Air Quality and Climate	
Impact Code	Environmental Resource
Adverse Impact, Mitigation Not Required	<p>Air Quality and Odor. <i>Effects on community air quality. Examples include temporary construction-related emissions, installation of new emission sources, changes in transportation patterns, and introduction of sources of odor.</i></p>
	<p><u>Summary of Impacts:</u></p> <p><i>Air Quality:</i> The Proposed Action is not located within a nonattainment or maintenance area for any criteria pollutant.</p> <p>Emissions from construction primarily will be from construction equipment, such as wheel loader, bulldozer, excavator, compactor, and off road dump truck. The landfill facility takes reasonable precautions to control emissions of airborne particulate matter from the production, handling, and storage of any material. Fugitive dust is controlled at the facility by watering roads, as needed, for reducing fugitive dust emissions. During construction activities, appropriate best management practices will be in place to control fugitive dust emissions. All construction equipment will have appropriate emission controls.</p> <p>Overall, there will be no to minimal effect on air quality during construction activities or facility operations. Any emissions during construction are expected to be insignificant and temporary in nature. Potential negative impacts to air quality include small, temporary emissions that may result from vegetation and grub clearing and construction activities; however, the Proposed Action does not represent a significant impact to air quality.</p> <p><i>Odor:</i> Class II solid wastes do produce gases, primarily hydrogen sulfide and ammonia, from the bacterial breakdown of waste material, resulting in odors. The amount of gas produced depends on the type of waste present, the age of the waste, oxygen content, the amount of moisture, and temperature, and the amount of time and conditions under which the waste stockpiled or disposed. Gas formation increases as the temperature and moisture content increase. Furthermore, landfill odors occur from various stages of decomposition of refuse. This may start prior to the delivery of the waste and continue for some time after placement. Delivered wastes, particularly in hot weather, often will have objectionable odors. The daily cover of wastes ultimately provides the most effective control of such odors.</p> <p><i>Landfill Gas Emissions:</i> In accordance with 18 AAC 60.350, the City is required to monitor for methane gas within facility structures and at the boundaries of the landfill. The locations of proposed wells to be installed for gas monitoring are shown in Figure 4. Gas monitoring is performed quarterly by the City in accordance with ADEC requirements, with the approved “Dillingham Landfill Operations and Monitoring Plan” dated January 2025. The City of Dillingham is required to immediately notify ADEC if methane gas is detected at the lower explosive limit (LEL) (or 25 percent) for methane. The City of Dillingham is also working with the ADEC to develop an approved explosive gas monitoring program that includes the use of gas monitoring probes. This plan is required to be submitted to ADEC in January of 2027. The probes must be installed no later than fall of 2029.</p>
No Impact	<p>Climate. <i>Effects on greenhouse gas emissions and resiliency, as well as potential effects of extreme environmental events on the Proposed Action.</i></p>

	<u>Summary of Impacts:</u> The proposed action would result in a temporary increase in emissions of greenhouse gases during construction activities through fossil fuel-powered vehicles and equipment. The project would not contribute to the project area's ability to respond to extreme weather events.
III.F. Other Resource Areas	
Impact Code	Environmental Resource
N/A	Other Resource Areas. <i>Effects on resource areas not reflected in the above categories.</i>
	<u>Summary of Impacts:</u> N/A

V. Alternatives Considered

Briefly describe alternatives to the Proposed Action considered including other sites, design modifications, or no action. Summarize the beneficial and adverse impacts on the human environment for each and the reason the alternative was not identified by EPA as the Proposed Action.

Alternative 1: No Action

Under the No Action Alternative, the Dillingham Landfill Improvements Project would not occur. The No Action Alternative would not address the City of Dillingham's purpose and need to modernize and enhance the operational capacity of the landfill facility through targeted infrastructure upgrades and equipment acquisitions. The repair of critical processing equipment, including the facility's incinerator and the installation of a new waste oil burner system, would not occur. Waste processing capabilities would not be improved. The replacement of ground monitoring wells and the installation of methane monitoring wells to maintain environmental and regulatory compliance would not occur. Therefore, EPA did not identify the No Action Alternative as the Proposed Action.

VI. Review of Applicable Environmental Laws and Executive Orders

In the list below, provide the compliance determination for each environmental law or executive order identified as applicable to the Proposed Action.

ID	Environmental Law/Executive Order	Compliance Determination
1	Endangered Species Act [16 U.S.C. §§ 1531–1599]	The EPA generated a threatened and endangered species report from the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) tool for the project site. The IPaC report listed one species: Stellar's Eider (threatened). No critical habitat was identified for the project location. Given the scope of work, the EPA has made a no effect determination for this listed species. Consultation with USFWS is not required for no effect determinations.
2	Bald And Golden Eagle Protection Act [16 U.S.C. §§ 668-668C]	There will be no impact to eagles. Bald eagles are likely present in the area. However, bald eagle nests are unlikely to be within the project area since the site is not within 1 mile of a large water body. The nearest river (Wood River) is located approximately 3.4 miles east of the site. Nushagak rivers is located approximately 8 miles southeast of the project site. No construction will occur within 660 feet of any bald eagle nests. Therefore, the regulations and requirements of this Act do not apply.
3	Fish and Wildlife Coordination Act [16 U.S.C. §§ 661 et seq.]	The Proposed Action will not control or modify surface waters; therefore, the requirements and regulations of this Act do not apply.

4	Marine Mammal Protection Act [16 U.S.C. §§ 1361-1407]	The Proposed Action will not affect marine mammals; therefore, the regulations and requirements of this Act do not apply.
5	National Historic Preservation Act (NHPA) as amended [54 U.S.C. §§ 300101 et seq.] and Archeological and Historic Preservation Act, as amended [54 U.S.C. §§ 312501-312508]	The Dillingham landfill is currently an active and operational facility. As a condition of its ADEC landfill permit (SW2A015-29), should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately.
6	Archaeological Resources Protection Act [16 U.S.C. §§ 470AA-MM]	The Dillingham landfill is owned by the City of Dillingham. Because the Proposed Action is not within Federal or Indian lands, the regulations and requirements of this Act do not apply. However, should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately.
7	Native American Graves Protection and Repatriation Act [25 U.S.C. §§ 3001 et seq.]	The Dillingham landfill is owned by the City of Dillingham. Because the Proposed Action is not within Federal or Indian lands, the regulations and requirements of this Act do not apply. However, should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately.
8	Clean Water Act [Section 404] and Protection of Wetlands [Executive Order No. 11990 (1977), as amended by Executive Order No. 12608 (1997)]	The Proposed Action does not involve discharging of dredge or fill materials into waters of the United States. The Proposed Action will not impact wetlands and no permit is required.
9	Rivers and Harbors Act [Section 10]	The Proposed Action will not involve the construction of structures in or over navigable waters, and no permit is required.
10	Flood Plain Management [Executive Order No. 11988 (1977), as amended by Executive Order No. 12148 (1979)]	The Proposed Action is not located within the regulatory floodplain; therefore, this executive order does not apply.
11	Safe Drinking Water Act [42 U.S.C. §§ 300F-300J-26]	No sole source aquifers exist at or near the project location.
12	Farmland Protection Policy Act [7 U.S.C. §§ 4201-4209]	Alaska currently has no designated prime or unique farmlands, or farmlands of statewide importance; therefore, the regulations and requirements of this Act do not apply.
13	Coastal Zone Management Act [16 U.S.C. §§ 1451-1466]	The Proposed Action is not located within a coastal zone area. As of July 1, 2011, there is no longer a CZMA program in Alaska.
14	Coastal Barriers Resources Act [16 U.S.C. §§ 3501-3510]	Applies only to areas located in the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. The Proposed Action is not located within any coastal barriers; therefore, the Proposed Action would not conflict with this Act.
15	Wild and Scenic Rivers Act [16 U.S.C. §§ 1271-1287]	There are no Wild and Scenic Rivers within the project area; therefore, the regulations and requirements of this Act do not apply.

16	Essential Fish Habitat Consultation Process Under the Magnuson-Stevens Fishery Conservation and Management Act [16 U.S.C. §§ 1801-1891]	This Proposed Action is not located within essential fish habitat; therefore, the regulations and requirements of this act do not apply.
17	Migratory Bird Treaty Act [16 U.S.C. §§ 703-712]	The Proposed Action does not involve the taking, killing, possession, transportation, or importation of migratory birds, their eggs, parts, or nests. Beneficial practices to avoid and minimize the incidental take of migratory birds, such as best management practices and conservation measures , will be implemented when necessary; therefore, this project would not conflict with this act.
18	Clean Air Act Conformity [42 U.S.C. § 7506(C)]	The Proposed Action is not located within a maintenance or non-attainment area for any criteria pollutants; therefore, the Proposed Action is not subject to a conformity determination.
19	Wilderness Act [16 U.S.C. §§ 1131 et seq.]	The project is not located in or near any wilderness areas; therefore, the regulations and requirements of this Act do not apply.

VII. Required Mitigation Measures

Describe any mitigation measures that are essential to render the impacts of the Proposed Action not significant and/or to avoid non-compliance with applicable environmental laws or executive orders. Use the environmental resource areas listed in Section III to identify the resource area of concern. If no mitigation measures are required, type "N/A".

Environmental Resource Area	Mitigation
N/A	No mitigation is required.

VIII. Agencies and Persons Consulted

Provide a list of individuals, tribes, Federal, State, and local agencies consulted during the development of this EA. Provide the name, title, and agency of the individuals consulted.

N/A

IX. List of Supporting Documents

Provide a list and brief description of the supporting documents attached to this EA.

Attachment A: Site Map
Attachment B: Class II ADEC Landfill Permit (Permit No. SW2A015-29), renewed on January 29, 2025.
Attachment C: USFWS IPaC Report
Attachment D: NEPAAssist Report