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Wrangell Monofill Project
Mitigation Plan

Prepared for: City & Borough of Wrangell
Prepared by: Tydi Creek Environmental

Introduction:

The City & Borough of Wrangell (CBW; applicant) has proposed the construction of a new monofill site to dispose of unclassified waste excavation from public and private construction projects. Construction of this site would involve the mechanical clearing of approximately 5.75 acres of undeveloped land. Excavated materials would be deposited at the site over time. The proposed site was investigated for the presence of wetlands and found to be situated entirely within wetlands or other Waters of the U.S. (WOTUS). Construction of the proposed project would require authorization from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.

Section 230.94(c) of the Clean Water Act Section 404(b)(1) guidelines require applicants to submit a mitigation plan for each project requiring an individual permit. This document fulfills that requirement and includes details regarding avoidance, minimization, and mitigation measures incorporated into the project to offset adverse impacts to WOTUS.

Avoidance Measures:

A wetland investigation conducted at the project site found evidence that the entirety of the site is likely within wetlands or other WOTUS. Because of the prevalence of wetlands throughout Southeast Alaska, it is not practicable to select an upland site of suitable size that would accommodate the proposed project. Although the project site is assumed to be entirely within WOTUS, measures have been incorporated into the project to avoid certain impacts to WOTUS within and surrounding the project site.

The applicant has selected the project site to be contiguous with an identical use of land adjacent to the proposed project. Developed facilities for the adjacent, existing monofill site – namely, road access and utilities – are present which will allow the applicant to avoid impacts associated with road construction and utility installation that may be required at other prospective sites. Although some road construction and utility installation may be required for the proposed project, it is assumed that selection of a different site would result in increased impacts from developing these facilities. In addition, selecting a site with an identical adjacent land use avoids land use impacts that would be sustained at other sites.

The original site boundaries identified by the applicant included approximately nine acres of wetland disturbance. The applicant has minimized this impact by designing the project to follow the natural contours of the land, thereby avoiding impacts to approximately 3.25 acres of wetlands.

The proposed project incorporates a physical buffer around the sole stream located within the project site. As such, impacts to these waters through direct construction and associated water quality impairment are avoided. Similar buffers are provided at project boundaries to reduce sediment laden runoff. As such, impacts to those waters are also avoided.

Minimization Measures:

Due to the nature of the proposed use, minimization of impacts to WOTUS is challenging. As is stated

above, the applicant has incorporated buffers at the boundaries of the project site to minimize impacts associated with sediment laden runoff from waste excavation deposited at the project site. The project is also designed to follow the natural contours of the land, which will minimize the disturbance that the project has to the existing hydrologic regime. In addition, the maintenance of 3:1 side slopes of finished surfaces will also minimize discharges of sediment.

The proposed project will be phased, as practicable, to construct the site using only one side of the stream at a time. This measure will minimize impacts to WOTUS by limiting the area of exposed soil during construction and operation of the site.

Culverts will be constructed along the proposed access roads to convey discrete drainages in addition to conveying stormwater. This measure will serve to maintain the hydrologic regime within the project area during construction and site operation.

The applicant is open to incorporating practicable minimization measures into the project that are identified during the permitting process.

Mitigation Measures:

Mitigation measures incorporated by the applicant into the project center around restoration of the permit area after operations have ceased. After the site is closed, the applicant will:

- Ensure that the permit area is graded to promote and maintain surface water runoff without causing ponding or erosion.
- Install one foot of final cover over all filled area and at least six inches of topsoil to promote adequate water retention for successful re-vegetation.
- Within the first growing season following site closure, re-vegetate the permit area using plant species recommended by the Alaska Plant Materials Center.

This on-site mitigation will eliminate the potential for impacts to WOTUS after the site is closed.

As is stated above, the applicant has sited the proposed project in a watershed that is previously disturbed and contains similar land uses. The surrounding area has been disturbed by residential, commercial, and institutional development as well as recreational development, timber harvest, road development, and material extraction. The project site is located within a watershed containing approximately 1050 acres of land. Approximately 160 acres – or approximately 15% – of the watershed has been previously disturbed by the aforementioned uses. The proposed project would disturb only 0.5% - of land within the watershed; this disturbance amounts to approximately 3.5 percent of the existing disturbance within the watershed.

Given the relatively small level of impact that the project will have on WOTUS within an already-disturbed watershed, the applicant is not proposing to conduct compensatory mitigation for the proposed project.