

# Community Coastal Impact Assistance Program

## New Stuyahok Landfill Improvement to Protect the Coastal Environment

### Award Amount

\$ 11,700

### Grantee

City of New Stuyahok

### Project Contact

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### Location

New Stuyahok is located on the west shore of the Nushagak River, between Ekwok and Koliganek. It lies 275 miles southwest of Anchorage, and 43 miles northeast of Dillingham. The community lies at approximately 59.452780° North Latitude and 157.311940° West Longitude. (Sec. 29, T008S, R047W, Seward Meridian.)

### Project Duration

**Project Start Date:** June 1, 2013

**Project End Date:** June 30, 2014

**Project Duration:** 1 year

### Project Description

This project will fund planning and construction of a small building at the landfill site, which will improve the community's recycling and hazardous waste program in order to protect coastal areas and wetlands.

The New Stuyahok landfill was constructed in 1993 on a hillside, one-third of a mile northwest of town and has a footprint of 2.4 acres. It is a trench-and-fill type landfill, with the trench dug into the hill using a bulldozer or backhoe. Waste is placed in one end at the bottom of the trench, compacted and covered with the soil that was excavated during the landfill construction. The landfill is operated by the City with assistance provided through the Indian General Assistance Program.

Two studies focused on improving conditions at the landfill were completed in 2008; the New Stuyahok Integrated Solid Waste Management Plan written by Bristol Environmental and Engineering Services Corporation and the Department of Environmental Health Solid Waste Disposal System Survey written by the Bristol Bay Area Health Corporation. These documents each recommend a series of improvements to local solid waste management practices, with both highlighting the importance of minimizing the hazardous wastes that are burned or buried in the landfill.

The City has two burn boxes that are used for burning materials such as paper, cardboard, inert construction debris and household food waste. In order to prevent the creation of toxic smoke, it is important that highly flammable or explosive wastes, hazardous wastes, plastics and rubber be separated out prior to burning. Currently, much of sorting of burnable and non-burnable items is done by residents who do not always have the expertise to sort thoroughly.

In order to ensure that hazardous or explosive items are not burned, a small building is required. Residents would then deposit waste in the building, where it would be protected from rain and wildlife before being sorted by staff. Staff will then remove all hazardous waste and non-burnable items before moving the burnable waste to the burn box. The building will also provide an area to store hazardous waste and recyclables before being transported out of the community for proper disposal.

Hazardous wastes that are burned can produce toxins that make their way into the land, air and waterways throughout the coastal environment.

Hazardous wastes that are buried in the landfill can form a toxic leachate that can move through the environment by surface or ground water flow. As the New Stuyahok landfill is located on a hillside, there is potential for this leachate to be carried through runoff into the Nushagak River and to spread to the area's coastal environments.

It is estimated that the New Stuyahok landfill has the capacity to be used for 5 more years. Increasing the amount of material that is recycled will prolong the life of the existing landfill and prevent additional coastal areas from becoming landfills. CIAP funding will be used to build a simple building at the landfill site and to ship electronics, other hazardous waste and recyclables outside for processing.

### Measurable Goals and Objectives

1. Construction of a small building at the landfill to provide covered space for staff to remove hazardous and non-burnable material before waste is moved to the burn box or landfill. Recyclable material and hazardous waste will also be stored in this building prior to being shipped for proper disposal.
2. Shipment of a 20-foot container van of electronic waste and appliances to Seattle for processing. The van will be shipped back to the community so it can be refilled.

### CIAP Authorized Use

The activities outlined for this project are consistent with CIAP Authorized Use 1: Projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands.

The construction of a new landfill building will allow staff to sort through all waste before it is burned or placed in the landfill. This thorough sorting by staff will minimize the amount of hazardous waste that is burned or buried and will reduce the contamination of local air and water, thus protecting the coastal environment, wetlands and fish habitat. Protecting hazardous waste from the rain during sorting and storage will minimize the potential that toxins will enter

surface water runoff and flow in to the Nushagak River. The building will also allow for increased recycling which will prolong the life of the landfill and prevent other coastal areas from being used as landfill sites.