

DETAILED ACTION PLAN

GOLOVIN FISH PROCESSING PLANT

WASTE EROSION ASSESSMENT & REVIEW (WEAR)

MAY 2015



The **Golovin Fish Processing Plant** is an abandoned fish processing plant located at latitude 64.545254 and longitude -163.038395. It was inspected for the Waste Erosion Assessment and Review (WEAR) project on September 12, 2012 and September 8, 2014. The site includes the former fish processing plant and associated bunkhouse. The landowner is Chinik Enterprises Inc. per Quit Claim Deed 1989-000511-0 recorded in the Nome recording district. There is no active business or corporation license for this entity in Alaska.



Imagery Dated 2004. WEAR Map at <http://dec.alaska.gov/eh/sw/wear.html>

Community* – GOLOVIN – Located on a point of land between Golovnin Bay and Golovnin Lagoon on the Seward Peninsula. It is 70 miles east of Nome. Marine climatic influences prevail during the summer when the sea is frozen from early November to mid-May. Golovin is an Inupiat Eskimo village with a fishing, herding and subsistence lifestyle.



CONTAMINANT RISK

The Golovin Fish Processing Plant was in operation from the 1960s to the 1980s. This site is located on the shore of Golovnin Lagoon, less than a quarter mile north of the community. Waves are currently reaching the site. The fish processing plant is considered a small site, measuring approximately 0.5 acres. The processing plant was observed to have stressed vegetation and was approximately 13 miles from a critical habitat area for spectacled eider.

Fish processing plants commonly used chemicals and produced large quantities of industrial waste, hazardous waste, mixed waste, and fuels. This site includes industrial waste, fuel contamination, construction and demolition (C&D) debris, and possible asbestos-containing materials as evidenced by wrapped pipes. Multiple generators, ammonia tanks, fuel tanks, heavy equipment, and used fuel filters were also observed. The various disinfectants, cleaning agents, refrigerants, acids, and other industrial chemicals used in fish processing are a potential source of contaminants at the site. Many of these contaminants are known to cause cancer and other chronic diseases. Therefore, the site may pose a significant contaminant risk if eroded and further released into the environment.



Processing Plant (ADEC 2014)



Industrial Equipment (ADEC 2014)



Processing Equipment (ADEC 2014)



North Side of Processing Plant (ADEC 2014)

EROSION RISK

This area of the shoreline is reported by locals to be eroding at three feet per year. Erosion is caused by wave action driven by wind, storm surges, and high tides. This site also periodically experiences flooding. There were major erosion events recorded in Golovin in 1992, 2003, 2004, 2005, and 2013. The storm event in 2013 resulted in a presidential disaster declaration for the community. The soil at this site is sand and gravel which is easily eroded during tides and storms.

During the 2012 site inspection, the processing plant and bunkhouse foundations were beginning to be undercut by erosion. By the 2014 inspection, there was considerably more erosion and loss of structural integrity. The processing plant's concrete floors had broken into large slabs and were outside the building on the shoreline. The foam insulated walls and equipment in the building were falling down and eroding into the lagoon. The north side of the blue bunkhouse was leaning so severely that the south side had raised off the ground. Debris from the plant was visible several feet into the lagoon, impacting subsistence use of Golovnin Lagoon and potentially causing a navigation hazard for boats using the adjacent small boat harbor.

This site is actively eroding into Golovnin Lagoon.



MITIGATION

There were no erosion mitigation efforts for this site as of 2014. However, in 2015 the community is applying for a grant to remove the buildings and related debris.

Mitigation Options

- A. **No Action** – If no action is taken to control erosion or remove the structures, erosion of the fish processing plant and bunkhouse, and the associated release of contaminants and debris into the lagoon will continue. This has potential to impact human health and the environment, including the use of Golovnin Lagoon as a subsistence area, and may cause navigation hazards.
- B. **Remove Site** – Removing the processing plant and bunkhouse will mitigate the known contaminant risk for the site. This will involve identifying any possible hazardous materials for shipment out of state, demolishing the buildings, and disposing of the wastes in appropriate, permitted landfills. This action will require planning and a significant amount of funding. The community is already seeking grant funding for this mitigation option.
- C. **Erosion Mitigation** – Wave action driven by storm surges, wind, and tides is the primary cause of erosion on this shoreline. However, since the site is actively eroding and the processing plant will never operate again due to the condition of the buildings, there is little benefit in seeking to protect the site.

SUMMARY

The fish processing plant and bunkhouse are located less than a quarter of a mile north of the community along the shore of Golovnin Lagoon. There are no erosion mitigation controls for this site. There is significant shoreline degradation at this location and, if left unaddressed, erosion will continue and the fish processing plant and bunkhouse will fall into Golovnin Lagoon. This site is located adjacent to the small boat harbor that is being developed in Golovin, and debris in the water could pose a navigational hazard for boats accessing this new facility. The small boat harbor represents a significant capital investment that could be jeopardized by erosion of the fish processing plant into the lagoon.

In addition to impacting the new harbor, erosion of the site could also impact Golovnin Lagoon and Golovnin Bay, which are essential subsistence areas for the local residents. Erosion of this site will release contaminants that may impact human health and the environment.

RECOMMENDATIONS

Due to the already significant degradation of the buildings, installing erosion mitigation for this site is not recommended. Instead, full removal of the fish processing plant and bunkhouse are recommended.

The community is currently in the process of applying for a grant to remove the buildings and related debris. If this grant application is unsuccessful, the community should continue to seek other funding sources for removing the site.



Imagery Dated 2004. WEAR Map at <http://dec.alaska.gov/eh/sw/wear.html>

*Community Database Online, Division of Community and Regional Affairs, Department of Commerce, Community and Economic Development

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