

CIAP WEAR Trip Report
Napakiak (population 354)
June 21, 2013



Alaska Department of Environmental Conservation (ADEC) Solid Waste Program (Doug Huntman, Trisha Bower and Jacob Timmons) conducted a Coastal Impact Assistance Program (CIAP), Waste Erosion Assessment and Review (WEAR) site visit for Napakiak on June 21st, 2013. Harold Ilmar, Landfill Operator, participated in the site visit. The following narrative is a brief description of our findings during the June inspection.

WEAR Sites

- **School Tank Farm, 60.694347/-161.969874 (Active)** – The school tank farm consists of 10 yellow single-walled vertical tanks. They are owned and operated by the Lower Kuskokwim School District (LKSD). The site serves as the fuel source for the school. The tanks were installed sometime during the 1970's are resting on a sturdy timber foundation, bolt on tops. The tanks are in a fenced area within a lined timber dike impoundment for secondary containment. The total capacity of the tank farm is approximately 140,000 gallons of diesel. The site also contains two disconnected vertical tanks that are owned by the Corporation. These two tanks have not been in use since a new Corporation Tank Farm was constructed in 2009. The tanks are located on school grounds near the northeast corner of the school. The site is approximately 420 feet from the banks of the Kuskokwim River. Erosion rates were reported by locals as over 5 feet a year; however, the Army Corps of Engineers 2009 *Baseline Erosion Assessment* (BEA) reports an average erosion rate of 35 feet a year.



- **Landfill, 60.690734/-161.997748 (Active)** – This landfill was constructed in 2010 and is engineered as an above grade fill landfill that is completely fenced. It is roughly 3 acres in size and approximately ½ mile from the village. A waste collection program is available for residents; however self-hauling waste to the site is also allowed. A part-time landfill operator is employed for day-to-day landfill operations. There are two homemade burn units designed to minimize the volume of waste disposed of at the landfill. Both units were functioning and emptied of ash on a regular basis by the landfill operator. Waste and ash are disposed of in several locations throughout the landfill. Although a stockpile of cover material was available, it had not been applied to either the active or inactive areas of the landfill. There is a separate metals area outside the entrance to the landfill which had large ponds of water mixed with metals in it. The metals area of the landfill does not have a perimeter fence or signs indicating where to dump and what items are prohibited from the site. It is located 4,900 feet from the Kuskokwim River, which is eroding at 35 feet per year according to the BEA study.



- **Corporation Tank Farm, 60.693014/-161.976297 (Active)** – This tank farm is the new community tank farm that is owned and operated by the Napakiak Corporation. It was completed in 2010 and is fully fenced with a locking gate. The site has secondary containment with a liner and dike and is built above the surrounding area by several feet. The total capacity for the site is 103,000 gallons of fuel oil, diesel and gasoline. The facility is on the east side of the runway apron and 1500 feet from the Kuskokwim River, which is eroding at 35 feet a year per the BEA study.



- **AKARNG Armory, 60.694642/-161.969280 (Active)** – This site is the Alaska Army National Guard (AKARNG) armory. It is an active Contaminated Site (File ID 2431.38.002) due to petroleum contamination, which was documented in 1996. It is located across the street from the school's tank farm. Contaminated soil has been removed as part of cleanup actions for this site in the past. A day tank is next to the building and is connected. There was no sign of stressed vegetation. The site is located 250 feet from the Kuskokwim River, which is eroding at 35 feet a year per the BEA study.



Erosion

Napakiak is experiencing active erosion along its entire eastern shoreline of the Kuskokwim River. The **Blue Line** in the imagery below indicates the shoreline during our site visit in 2013. Roughly 200 feet have eroded in six years. The Xs are the School Tank Farm and the Armory.

