

CIAP WEAR Trip Report
Chefnak (population 434)
September 18, 2012



Alaska Department of Environmental Conservation (ADEC) Solid Waste Program and Contaminated Sites Program (Doug Huntman and Grant Lidren) conducted a Coastal Impact Assessment Program (CIAP), Waste Erosion Assessment and Review (WEAR) site visit for the Village of Chefnak, September 18th, 2012. Tom Tom, Waste Technician and Richard Matthew, trash hauler working with the Native Village of Chefnak participated on the site visits. The following narrative is a brief description of our findings during the September inspection.

WEAR Sites

- **Landfill, 60.153534/-164.288125 (Active)** – This permitted, landfill has been in operation since the mid 1990's and has waste spread though the 5 acre site. It is located southwest of the village and is managed by the City of Chefnak. It contains municipal waste and construction and demolition debris. The top concerns at the site include: uncovered waste spread thought the site, uncontrolled burning of waste on the ground, disposal of prohibited and hazardous waste, and uncontrolled access to the landfill. It is 2,400 feet from the Kinia River.



- **Consolidated Tank Farm, 60.160121/-164.286799 (Active)** – This tank farm stores fuel for the City of Chefnak, Lower Kuskokwim School District, Naterkaq Light Plant, and Chefnarmute Corporation. It was completed around 2002. There are approximately 20 tanks that range in size from 15,000 gallons to 40,000 gallon tanks. The tanks appeared to be in good condition with secondary containment in place. It is approximately 400 feet from the Kinia River. Locals reported the bank is eroding at 2 to 6 feet per year. It was reported that site stayed dry during the major flood event of October 2012.



- **Chefnarmute Corp. Former Tank Farm, 60.160115/-164.286085 (Active)** – This former tank farm is an active Contaminated Site (File ID 2408.38.005). It was owned and operated by Chefnarmute Corporation. It consisted of gasoline and diesel, vertical and horizontal, aboveground tanks with a total fuel capacity of approximately 84,300 gallons. There were no documented spills at this site; however active leaks were noted during an Alaska Division of Community and Regional Affairs (DCRA) bulk fuel inventory conducted in 1998. During a site evaluation in 2001, dead and stressed vegetation was noted at the area of the site. As of the 2012 site visit, the tanks were removed, but stressed vegetation remained. There were also several piles of used sorbent pads left from a previous clean-up. Soil samples collected by a DEC contractor in 2012 contained DRO above ADEC maximum allowable concentrations. The site is currently being evaluated by the Contaminated Sites Program. The site is located approximately 140 feet from the consolidated tank farm and 370 feet from the Kinia River.



- **Light Plant Former Tank Farm, 60.1598/-164.285853 (Active)** – This former light plant tank farm is an active Contaminated Site (File ID 2408.38.002). It consisted of four tanks, three vertical and one horizontal, with a total fuel storage capacity of approximately 44,900 gallons. In 2001, it was noted that the old piping and tanks had been removed and the area exhibited stressed vegetation. Soil samples collected by a DEC contractor in 2012 contained DRO above ADEC migration to groundwater cleanup levels. The site is currently being evaluated by the Contaminated Sites Program. It is located approximately 190 feet from the consolidated tank farm and 405 feet from the Kinia River.



- **Avugiak Store, 60.160980/-164.285135 (Active)** – This active Contaminated Site (File ID 2408.28.006) is the site of a store's old fuel tank that leaked approximately 100 gallons of heating oil (diesel #1) in 2000. Initial cleanup work consisted of excavating approximately 240 square feet of soil to depths ranging from 1 to 2 feet. The excavated soil was stockpiled on the site on plastic sheeting. During the 2012 inspection, the tank, piping, and stockpile remain on site. The stockpile is overgrown with vegetation with used absorbents and liner in the pile. The site is located around 20 feet from the Kinia River. Area is an active boat launching area and there are approximately 20 or more abandoned fuel storage tanks in the immediate area. It was reported that two large bulk fuel tanks were eroded away and washed upstream during a storm event in 2011. One tank had been located several miles from the village, the other was presumed sunk. This site is in marshy wetlands with silty soil and grass. Boats located several hundred feet inland indicate that the site floods regularly with the tides. It was reported the area is eroding at 2-6 feet per year.



- **Former BIA School Tanks, 60.159392/-164.270584 (Active)** – This active Contaminated Site (File ID 2408.38.008) is the site of a former tank farm used by the BIA school. It was reported in 2001 that the area surrounding the tank farm and the day tanks were heavily impacted with fuel contaminations. Neither tank areas had visible liners at that time. During the 2012 inspection, the tank farm and day tanks had been removed from the site, but the tank farm's piping remained. Heavily impacted soil and stressed vegetation was observed in both locations. The school associated with the site is used as the Head Start program for the village. The area was very silty with grass in the surrounding area. There was a lot of ponding observed at the site, indicating that the site floods regularly. Erosion was reported by local residents to be consuming the shoreline at 5 feet per year. There have been some attempts to mitigate erosion with large rocks placed along the shoreline, but it was reported that these too are washing away. Distances to the Kinia River bank are: 10 feet to the tank farm contamination, 20 feet to the school building, and 30 feet to the day tank contamination. Characterization of the site is ongoing by the Contaminated Sites Program.

