

Drift River Oil Terminal

Cook Inlet, Alaska

“In addition to providing competitive pricing, Nucor Skyline has the depth to provide value added design solutions and materials when others can’t.”

– David Myers, Director of Business Development, STG Incorporated/Alaska Crane

HISTORY

The Drift River Oil Terminal is located in Alaska, along Cook Inlet, at the end of the Drift River. Owned by Hilcorp Alaska, the facility is an oil farm that holds seven, 10-million gallon bulk fuel tanks. The tanks hold crude oil before it is loaded onto oil tankers and transported to refineries. Oil is collected into the tanks via a buried and submerged Cook Inlet Pipeline, which connects the tank farm to the oil fields on the west side of the Cook Inlet. Oil tankers load crude oil from the tanks via a pump station located approximately one mile off shore.

PROBLEM

The tank farm is situated near the base of Mt. Redoubt, an active volcano. Several major eruptions in 1989/1990 and again in 2009 caused controversy and concern over the tanks and how to best protect them from the lahars (a moving fluid mass of volcanic debris and water) and flash floods that ensued after the eruptions. The 2009 eruption unleashed flooding five times greater than the flow of the Mississippi River, nearly washing away the tank farm. Consequently, the project garnered interest from multiple stakeholders, including state, local, and federal agencies, as well as the general public.



SOLUTION

In 2012, STG and Brice Incorporated constructed a hybrid earthen dike and sheet pile wall that stretched 3,000 linear feet at Drift River in the Cook Inlet. Brice performed the earthen works and STG installed the sheet pile wall. It was imperative that the project was designed to ensure the tank farm was safeguarded. The timeline for the project was a very tight five months. In addition to Brice Incorporated, STG worked closely with their other sister company, Brice Marine, along with their vendor Nucor Skyline. Skyline provided product performance value engineering, as well as geotechnical engineers and designers from around the world to create the design. Skyline’s ability to provide the needed product in a tight turnaround proved invaluable. STG’s experience in logistics and piling installation ensured a technically sound design that could be constructed efficiently in a remote location.

PROJECT PARTNERS

Owner

Hilcorp Alaska – Anchorage, AK

General Contractor

STG Incorporated – Anchorage, AK

Brice Incorporated – Fairbanks, AK

PRODUCTS

Sheet Pile:

Z-shaped Pairs (2,000 tons) 612x40’, 22x60’ and 20x45’

8 Z-shaped fabricated 60’ box piles

PROJECT TIME FRAME

May to November 2012