

Project Scope:

Great Northern Engineering provided design and construction engineering services for the New Delta Western Methanol Tank Farm at the Port of Anchorage. Initial construction will be for one 50,000-barrel methanol storage tank with containment and expansion capacity for five additional tanks.

Project Detail:

- Provided geotechnical investigation and report of the native soils needed for the structural design of the facility.
- Provided civil design for earthwork, containment membrane, and drainage system. Provide design that allows for initial construction and future tank farm expansion.
- Provided structural design for tanks, structures, walkways, pipe supports, and foundations.
- Provided design for the ring wall foundation, 50,000-barrel API-650 floating roof tank, tank appurtenances, sump drain, and tank bottom cathodic protection system and leak detection.
- Provided Truck Loading Rack, bottom loading arm, shelter, 600 gpm pump, spill collection system, connections to vapor recovery system.
- Provided Vapor Recovery Unit (VRU) foundation, skid and piping system design, and AFFF system if needed.
- Provided design of terminal management system, controls and shared office building, restroom, shared mechanical and electrical room.
- Provided pipelines to POA valve yard for tanker offloading and fuel transfer.
- Provided electrical design of site power, lighting, cathodic protection system, and instrumentation power.
- Provided control design for new instrumentation, ESD, and facility operation.
- **Expansion:**
- Provide design for two additional 50,000-barrel API-650 floating roof tanks, ring wall foundation, tank appurtenances, sump drain, tank cathodic protection, leak detection, and all of the above initial design.

