



PDC INC. ENGINEERS

Transforming Challenges into Solutions



Fairbanks Municipal Utilities System Coal Handling Facility

Coal is unloaded from railroad cars, sorted, crushed, and then transported by conveyors to the coal-fired electric plant. The project design was significantly driven by the desire to improve the delivery of coal by rail. In order to deliver the coal, it was necessary to stop traffic on Phillips Field Road. While this alone was undesirable, it was compounded by the angle between the tank centerline and the road. Safety dictated that we find an alternate track alignment. Several options were considered, utilizing either one or two tracks with hoppers. In addition, there was the need to locate a car shed to provide warm storage for the cars to keep the coal from freezing. The limitations to track alignment options were severe given the proximity of Phillips Field Road and existing track. PDC provided a design that met the system standards and addressed all of the Alaska Railroad's requests.

This project procured and installed a complete 70-ton per hour coal conveying system along with construction of the buildings necessary to house the entire system. The components included shakers, crushers, screens, conveyors, bucket elevators, gates, and a PCC controls system. Two buildings were constructed across the road from one another. The conveyor system carries the coal from one building to the other via an under-road utilidor and makes a subsequent river crossing to the power plant.

Client:

Fairbanks Municipal Utilities System
(now Aurora Energy, LLC)

Location:

Fairbanks, Alaska

Project Completion:

1999

PDC Involvement:

- Structural Engineering
- Civil/Site Design
- Railroad Track Design
- Land Surveying

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