



Seward Coal Loading Facility

Project Scope

In 2003, the Alaska Railroad (ARRC) acquired the Seward Coal Loading Facility (SCLF) located in Seward, Alaska, and recently completed various improvements to the facility. The goal of the purchase and improvements was to increase facility efficiency, driving down the cost of operation, thus making Alaska's coal more competitive in the global coal market.

The facility was previously owned by Hyundai Merchant Marine and the Alaska Industrial Development and Export Authority (AIDEA). Seward Terminals Inc., a subsidiary of Hyundai, remained the operator through a lease and operating agreement with ARRC through the end of 2006. On January 1, 2007, facility management and control reverted to ARRC. The railroad has an interim agreement with Aurora Energy, a subsidiary of Usibelli Coal Mine (UCM), to operate and maintain the facility until a long range operating contract can be negotiated.

The 25-year-old facility, located on ARRC land, unloads coal from railcars, conveys it to storage, reclaims material from storage, and loads it into bulk ships. The loading facility consists of the following major components (*see drawing page 2*):

- **Railcar dumper facility**, with a pit and unloaders to discharge coal from hopper cars;
- **Conveying systems** to move coal from the railcar dumper to ships or the stockpile; and to move coal from the stacker-reclaimer through a sampling station and onto the ship loader;
- **Stacker-reclaimer** distributes coal from the conveyor to the stockpile and, in turn, reclaims the coal from the stockpile for ship loading;
- **Stationary ship loader** with a conveyor system for discharging coal into the holds of oceangoing bulk carriers; and



A coal ship loads at the Seward Loading Facility's conveyor-fed dock.

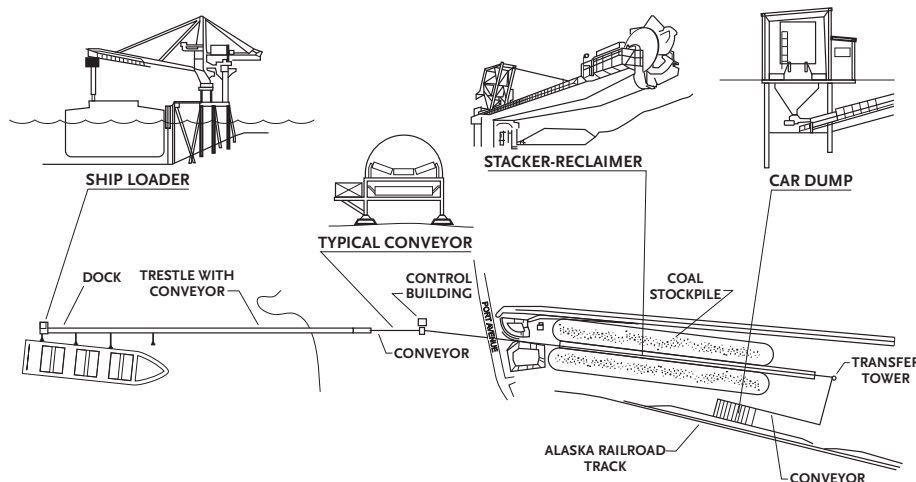
- **Two-story office/control building**, a **shop building**, and a **crew breakroom**.

Through purchase of this facility, ARRC became responsible for all components of coal transport between the source, Usibelli Coal Mine in Healy, and the ships. Using some funds from the federal grant, ARRC completed the first phase of mechanical, electrical, structural and dust control improvements. Other proposed improvements include several measures to alleviate difficulties associated with unloading frozen coal from railcars in winter months, additional dust control measures, and overall facility modernization.

Benefits

- The acquisition essentially revived the export of coal from Alaska. Depressed coal prices, led by cheap exports from Indonesia, made the cost of Alaska coal too high compared to competing exporters from Indonesia, Australia, China, South Africa and Canada.
- The major initial limitations of the facility were the ship loading circuit rate and the stock piling circuit rate, both resulting in a higher

Components of the Seward Loading Facility



cost of transporting the coal to the ships. Initial repairs enhanced operational efficiency.

- Coal-hauling revenues help ARRC recover some of the costs of maintaining the mainline track between Anchorage and Seward.

Status

- The ARRC hopes to keep Alaska coal competitive in the export arena by pursuing greater efficiencies in operations, plant facility and equipment; negotiating new contracts and marketing the facility.
- In 2005, ARRC proposed to expand the Seward Loading Facility by increasing its stockpile area to the north, and submitted permit applications to fill an approximately six-acre area, including a small man-made pond. The purpose is to provide additional space for storage, stockpiling and staging equipment and materials to improve rail yard operating efficiency and accommodate an increase in demand for Alaskan coal. Permits were issued for the project, and partial construction began in 2008.
- In February 2007, community concerns were raised about coal dust emissions, following unusually dry, windy weather that resulted in more coal dust from facility operations. ARRC immediately coordinated with the Alaska Department of Environmental Conservation (ADEC) and modified train unloading and ship loading parameters to mitigate dust. By March 2007,

ARRC formed a Community & Technical Task Force and hired industry experts to develop recommendations for future dust control improvements.

Cost and Funding

- In 2003, the Federal Railroad Administration awarded a \$9.54 million grant, of which \$8.3 million was used to acquire the facility, perform associated due diligence studies, evaluation and inspection.

The remainder was subsequently used for inspections, repairs and improvements.

- There are no federal or state grants currently in place for the facility. ARRC continues to fund ongoing capital improvements with limited internally-generated income.
- Specifically in response to the 2007 weather anomaly, ARRC spent \$150,000 during summer/fall 2007 to enhance existing dust suppression and safety systems, ensuring operation in sub-freezing temperatures, as well as to accomplish a number of other maintenance and safety enhancements.
- Capital improvements recommended by the experts to modernize facility technology are estimated to cost several million dollars. Funding may come in phases, as warranted by SCLF operations at a level that is profitable and thus can cover operational costs, as well as support capital investments.
- \$100,000 is budgeted for 2010 to modify a chute and pulleys. A record number of ships is expected to load in 2010. Negotiations with ADEC are currently ongoing regarding any additional expenditures to mitigate dust as part of the settlement of alleged air quality violations. Funding is 100% Alaska Railroad.