



Seward Coal Loading Facility

PROJECT FACTS

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 20-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**, which distributes the coal from the conveyor to the stockpile and, in turn, reclaims the coal from the stockpile for ship loading;



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

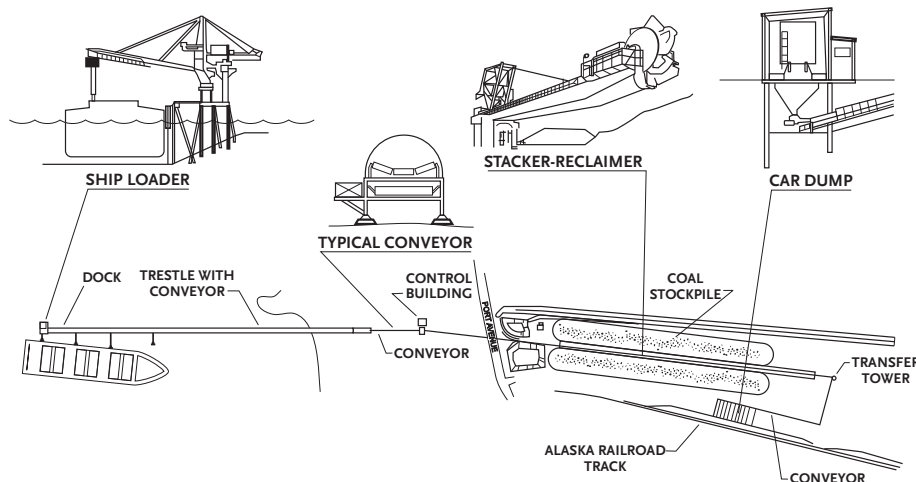
- **Stationary ship loader** with a conveyor system for discharging coal into the holds of oceangoing bulk carriers; and
- **Two-story office/control building**, a **shop building**, and a **crew breakroom** located in a portable building.

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 are 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.

Components of the Seward Loading Facility



- The major initial limitations of the facility were the ship loading circuit rate and the stock piling circuit rate, both resulting in a higher 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 storage space to improve operating efficiency, accommodate an increase in demand for Alaskan coal, and to ensure sufficient coal is available when ships are ready to be loaded. The necessary permits have been issued for the project, and 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 De-

partment of Environmental Conservation (ADEC) and modified train unloading and ship loading parameters to mitigate dust. By March, 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 grants currently in place for the facility. ARRC continues to fund ongoing minor 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.
- \$650,000 is budgeted for 2009 to pursue repairs to the ship loader, including cable replacement to extend the loader useful life and loading chute improvements that will enhance efficiency. Funding 100% Alaska Railroad.