Melvin Price - Locks & Dam 26

(Alton, Illinois)
Mississippi River

U.S. ARMY CORPS OF ENGINEERS **BUILDING STRONG®**

Construction: 1979-1990
General Contractors:
Lock: Joint venture of S.J. Groves & Sons, Minneapolis, Minn.; Guy F. Atkinson Company, South San Francisco, Calif.; and Dillingham Corporation, Pleasanton, Calif.
Dam: Joint venture of S.J. Groves & Sons, Minneapolis, Minn.; Guy F. Atkinson Company, South San Francisco, Calif.; Ball Construction Company; and Black & Veatch

Congressional District: MO-2; IL-12

Description

Melvin Price Locks and Dam, located at Mississippi River mile 200.5, is two miles below the site of the old Locks and Dam 26 which was razed in 1990. It is approximately 20 miles above St. Louis. Its 31,000-acre pool is 40.6 miles long.

The complex has twin locks. The main lock is 110 by 1,200 feet; the auxiliary lock is 100 feet by 600 feet. The locks are U-shaped and supported on steel H-piles. The maximum lift is 24 feet.

The movable dam has nine, open-frame, non-submersible Tainter gates, each 42 feet high by 110 feet long. Individual, electrically operated, cable hoists are housed in pier-top operating houses. The 1,160-foot-long movable dam is supported by steel H-piles driven into bedrock.

History/Significance

The lock was put into operation on October 10, 1989. The complex is also known as Locks and Dam 26R and constitutes the first replacement of an original installation of the 9-Foot Channel Project.

The basic components of the complex are similar to those built in the 1930s. The most striking difference is the immense size of the new structure, which dwarfs the older installations. But the significance of the new installation is not limited to its colossal size. Throughout its design and construction, the Corps and various contractors engaged in an extensive program of computer-assisted design, testing, and evaluation to create a structure that represents the present state-of-the-art in river navigation control works.

Co-located on the site is the Corps' National Great Rivers Museum.

Annual Tonnage (20-Year Historical)

Year	Tons	Year	Tons	Year	Tons	Year	Tons
1992	74,673,715	1997	70,871,839	2002	79,037,946	2007	65,248,495
1993	62,343,108	1998	73,721,633	2003	72,442,623	2008	56,295,661
1994	71,179,460	1999	77,580,836	2004	67,672,535	2009	56,403,848
1995	78,420,608	2000	77,120,885	2005	66,536,490	2010	53,502,569
1996	73,873,169	2001	75,870,386	2006	70,759,977	2011	51,587,941

Commodity Tonnage & Lockages (2011)

Coal	3,600,011
Petroleum	4,021,732
Chemicals	8,905,015
Crude Materials	6,941,528
Manufactured Goods	3,416,658
Farm Products	24,395,566
Manufactured Machinery	206,490
Waste Material	59,610
Containers & Pallets	3,200
Unknown	38,131

Subtotals:	Grain	21,351,312
	Steel	1,075,177
Lockages:	Commercial Boats:	4,885
	Recreation Boats:	894
	Light Boats:	241
	Other Boats:	133
	Total Boats:	6,153
	Total Cuts:	5,818

The 9-Foot Channel Project

Melvin Price - Locks and Dam 26 is one of 29 locks and dams on the Upper Mississippi River that provide a water stairway of travel for commercial and recreational traffic from Minneapolis to the Gulf of Mexico.

The existing 9-foot Channel Navigation Project was largely constructed in the 1930s and extends down the Upper Mississippi River from Minneapolis-St. Paul to its confluence with the Ohio River and up the Illinois Waterway to the Thomas J. O'Brien Lock in Chicago. It includes 37 Locks and approximately 1,200 miles of navigable waterway in Illinois, Iowa, Minnesota, Missouri and Wisconsin.

The maintenance needs of the aging infrastructure are increasing at a rate much greater than the operations and maintenance funding provided for the system which adversely affects reliability of the system. Long-established programs for preventive maintenance of major lock components have essentially given way to a fix-as-fail strategy, with repairs sometimes requiring weeks or months to complete. Depending on the malfunction, extended repairs can have major consequences for shippers, manufacturers, consumers, and commodities investors.

Additionally, the system's 600-foot locks do not accommodate today's modern tows without splitting and passing through the lock in two operations. This procedure requires uncoupling barges at midpoint which triples lockage times and exposes deckhands to increased accident rates.

There are more than 580 manufacturing facilities, terminals, grain elevators, and docks that ship and receive tonnage in the Upper Mississippi River basin. Grains (corn and soybeans) dominate traffic on the system. Other commodities, mainly cement and concrete products, comprise the second largest group. A modern 15-barge tow transports the equivalent of 1,050 large semi-trucks (26,250 cargo tons, 875,000 bushels, or 17,325,000 gallons). Annually, the 9-foot project generates an estimated $1 billion of transportation cost savings compared with the operation and maintenance costs of approximately $115 million.