

U.S. Army Corps of Engineers
Additional Liquid Cooling
at Dispersal Barrier 2A

Lockport, Illinois



The Hill Group was selected on an emergency basis to rent and install a water chilling plant to remove heat from electrical equipment used to provide an 800 KW electrical field created by a cable laying across the bottom of the Chicago Sanitary Ship Canal. Fish will not cross the electric field. It was used for a two-month period to stop the destructive Asian Carp from migrating upstream and into the Great Lakes.

The project included: renting all equipment, installing two 100-ton air cooled chillers, emergency generators for the equipment, pumps equipped with VFD's, chilled water storage tank, automatic glycol fill station and bladder-type expansion tank. All piping was braided stainless steel hose. The second chiller and generator provided 100% back-up capability. Plate and frame stainless steel heat exchangers were used to facilitate the electric pulsers de-ionized closed loop cooling circuit. The electric power suppliers were cooled directly by the 35% glycol solution. The Hill Group's Building Operations unit provided Stationary Engineers 24 hours a day, 7 days a week.