



**US Army Corps  
of Engineers**®  
Detroit District

## HARBOR INFRASTRUCTURE INVENTORIES Burns Waterway Harbor, Indiana



**Harbor Location:** Burns Waterway Harbor is located on the southwest shore of Lake Michigan in Portage, Lake County, Indiana; approximately eleven miles southeast of Chicago Harbor in Chicago, Illinois.

**Authority:** Rivers and Harbors Act of 1965

**Project Description:** Burns Waterway is a deep draft commercial harbor. The port handles international ships via the Great Lakes connection to the Atlantic Ocean and barges via inland river links to 38 states and the Gulf of Mexico. The port handles over 15% of all U.S. steel trade with Europe as well as other commodities such as limestone, grain, various chemicals, fertilizers, and coal. As a multi-modal facility, the port handles an average of 500,000 trucks, 10,000 railcars, 400 barges and 100 ships per year. Bulk commodities that pass through Burns Harbor generate nearly \$93.8 million annually in direct revenue which supports nearly 1,700 jobs. The harbor is protected by 5,830 linear feet of rubblemound breakwater structures. Longest fetch & direction: 320 miles, northerly. Maximum Recorded water height: 19.0' (1965), Typical Storm Wave (2-yr offshore wave): 14.8'.

**Traffic:** 8,269,200 tons (5-Year average, 2004-2008)

**Transportation Importance:** The harbor provides safe refuge for inland river barges traveling between Gary Harbor, Indiana Harbor, and Calumet Harbor. Commodities include iron ore, steel products, limestone, grain, chemicals, fertilizers, and coal. The jobs associated with the harbor's various industries generate over \$99M annually in personal income. ArcelorMittal's Burns Harbor facility is one of the largest steelmaking facilities in North America. It operates two blast furnaces, has a total raw steelmaking capability of 4.7M tons annually, and primarily serves the automotive industry. Principal products made are hot-rolled, cold-rolled and coated-sheet products. Other markets served include appliances, construction, office furniture and rail cars.

### **Congressional Interest:**

- Representative Peter J. Visclosky, D-IN-1
- Senator Richard Lugar, R-IN
- Senator Dan Coates, R-IN

**Current Condition Assessment:** **B**



**Date of Site Visit:** 23 August 2010

**Summary of Impact:** The immediate impact of a breach and/or overtopping of the breakwaters would be upon all barge traffic into and out of Burns Waterway Harbor. Significant wave activity within the harbor could damage any vessel moored at any one of the seventeen docking sites located inside the harbor. Additionally, any breach in the breakwater could potentially increase the rate of shoaling within the federal and private channels, resulting in added transportation costs due to light loading. The harbor will not exist without its protective structures. Without regular breakwater maintenance the rubblemound structure will degrade, and permit wave energy transmission through the structure. On March 9<sup>th</sup>, 1998, severe storm conditions and inadequate breakwater protection caused nine barges and a tugboat securely moored within the harbor arms at the dock walls to break loose and sink. The shore structures with the greatest exposure are the ArcelorMittal Burns Harbor Plant, Cargill Inc. and Federal Marine Terminals, Inc. All other shore structures located at Burns Waterway Harbor are subject to inundation if a break or overtopping occurs.

## Examples of Protected Infrastructure:



- 1. ArcelorMittal Burns Harbor Plant:** This integrated production facility makes hot-rolled and cold-rolled steel products for the automotive industry, as well as appliance, construction, office furniture, and rail car markets. The plant operates two blast furnaces which have a total raw steelmaking capacity of 4.7 million tons annually. The plant employs approximately 4,000 workers, and has a payroll in excess of \$190 million.



2. **Great Lakes Towing Co.:** Great Lakes Towing Company is charter tug boat service. Services include local harbor towing, docking and undocking, interport towing of vessels and barges, ice breaking, rescue, and assistance to grounded or damaged ships. The Great Lakes Towing Company has at least two harbor tugs stationed in Burns Harbor.



3. **Cargill, Inc.:** Cargill is an international producer and marketer of food, agricultural, financial and industrial products and services. The Cargill Burns Harbor facility is primarily used for grain handling and agricultural products and has nineteen employees.



4. **Lakes & Rivers Transfer:** Lakes and Rivers is a division of Jack Gray Transport which is a leader in transportation and material handling with facilities across the United States. The Burns Harbor facility is primarily used for stevedoring and trucking of bulk materials and has four employees.



5. **Carmeuse Lime and Stone:** Carmeuse Lime and Stone is a leading global producer of lime, high calcium limestone and dolomitic stone for flue gas treatment. The Burns Harbor facility is primarily used for limestone processing and employees 15 miners.



6. **Frick Services – Burns Harbor:** Frick Services – Burns Harbor is a dry/liquid bulk commodity storage and distribution facility. The Burns Harbor facility has nine employees and has 200,000 tons of dry storage and over 100,000 tons of liquid storage which service the industrial, agricultural and residential markets in Northern Indiana, Northern Illinois, Southern Michigan and Southern Wisconsin.



7. **Federal Marine Terminals, Inc.:** Federal Marine Terminals, Inc is an industry leader servicing breakbulk, bulk, specialized, and general cargo needs. Commodities handled range from steel and machinery to forest products and containers. The Burns Harbor facility has eight employees which operate and maintain four berths, 217,000 square feet of warehouse space, and 27 acres of open storage.



8. **Tanco Terminals, Inc.:** Tanco Terminals, Inc is part of the Wolf Lake Industrial Center which is a provider of bulk liquid storage services. The Burns Harbor facility is a marine bulk liquid storage facility, operating eight above ground storage tanks with a combined capacity of over 274,000 barrels. This facility stores and transfers multiply grades of liquid asphalt, bunkering fuel and heating oil and has four employees.



**Potential Impact Area:** The following graphic displays property parcels that could be impacted within various zones defined by different setbacks from the shoreline behind existing Federal coastal structures. Values are based on real property tax assessments from these parcels, and don't reflect any detailed coastal zone damage assessments. Figures simply reflect property values at various setbacks.

