

LMC prepares to install ash conveyor on SS Badger in preparation for 2015 sailing season.

Like a Christmas gift that arrives with “some assembly required,” Senior Chief Engineer Chuck Cart and the crew at Lake Michigan Carferry have on hand the new conveyor system to transport ash from the SS Badger’s boiler to retention units that will be built on the cardeck of the 410-foot Badger, but the system needs to be assembled.

The good news, according to Cart, who has been chief engineer of the Badger for 19 years, is that the conveyor will be in place in time for the start of sailing May 15 and it will allow the Badger to operate in compliance with the EPA’s mandate to stop discharging coal ash before sailing this year. The mandate is part of the terms of a U.S. Department of Justice-approved consent decree between LMC and the Environmental Protection Agency concerning what is the last coal-fired steamship operating in the U.S.

This week, installation begins in earnest on the conveyor system designed for the Badger and built by Hapman Conveyors out of Kalamazoo. On Monday, pallets of blue, 7-inch pipe and components for the chain and disc system were arranged along the perimeter of the port side and the bow on the car deck awaiting installation.

Once in operation, the conveyor system will move ash from the boiler room to the car deck 180 feet away. There, ash will be stored in four containment bins.

Installation of the three-part system is expected to take six weeks. It involves separate collection loop conveyors for the bow and aft boiler systems. They will feed into a collection conveyor, moving the ash from the boiler room up to the car deck and to the containment bins.

The dry ash system, Cart said, will be enclosed, controlled for dust, and it will meet national fire safety standards.

Previously, ash was transported from the boiler to an onboard retention area, mixed with Lake Michigan water and discharged in a slurry into the lake, according to Environmental Protection Agency guidelines. That practice is now history and the ash will be retained on board and removed while in dock in Ludington. LMC estimates a day’s sailing may fill one and a portion of another ash containment unit.

LMC plans to market the ash for use in cement-making, Chuck Leonard, vice president in charge of navigation, said. Any storage at the dock would be of ash in the enclosed bins. None is to be piled on the ground, Leonard and Cart said.

“Mr. Manglitz made it clear, only our feet are to be on the ground,” Cart said, not ash or anything else, of a directive from LMC President and CEO Bob Manglitz.

Together with the improved combustion system added last winter, the projects represent about a \$2.2 million to \$2.4 million investment by LMC in the Badger over the past two years, Leonard said.

The combustion system met required reductions in coal used and coal ash discharged into Lake Michigan during the 2014 season, Leonard said.

According to Leonard, the Badger used 15 percent less coal during the 2014 sailing season than in the 2013 season.

It produced 18 percent less ash in 2014 than in 2013. Over the 2013 and 2014 season, the Badger's ash was reduced by 40 percent from 2012.

"We're very pleased by that," Leonard said.

A change in the type of coal used and changes in how the Badger operates also factored into those reductions, Leonard said.

The new combustion controls system operation was fine-tuned throughout the 2014 sailing season. Steady adjustments depending on conditions and other variable factors likely, the parameters for how the new combustion system operates were worked out during the 2014 season, he said.

Cart is philosophical about the change to store and remove ash, calling it the latest evolution among many that the more than 60-year-old carferry has gone through since it was first launched in Sturgeon Bay, Wisconsin, in 1953.

The Badger, he said, was built to the standards of its day — standards that once allowed trash and sewage of all lake vessels to be jettisoned overboard. As those standards have changed, the Badger has been modified to meet the new standards. The latest change required the coal ash discharge to end.

As the legislation has changed, the ship has been modified to meet the standards of the day. "We weren't doing anything wrong," Cart said, "just meeting the standards."

"We will operate the vessel in compliance in 2015," Leonard added.

RESERVATIONS/PRE-SEASON PRICING

Terri Brown, LMC director of marketing and media, said LMC began taking reservations for the 2015 season Monday — the earliest ever for LMC — and has put in place special pre-season pricing of \$59 a passenger and \$59 a car per crossing.

She noted that aforementioned \$2.2 million or more investment comes at a time when "we strive to make this service more affordable."

She called the pre-season pricing “a rollback,” saying it used to be \$74.

For the past two years, LMC has seen increases in passengers aboard the Badger.

The 2014 season started slowly, but LMC enjoyed a busy summer. She said the carferry has seen increased use by those 50 and older, an important demographic for LMC.

International travelers also are on the increase and now represent a significant number of passengers, something Brown attributes to successful marketing outside of the U.S. by the state’s Pure Michigan campaign.

“Over-dimensional loads” — oversized truck-trailer rigs, large components such as wind turbine parts common in 2013 and the like — also increased in 2014, even as the wind turbine component transfers hoped for didn’t materialize last summer, Brown said.

WORKING WITH EPA

Leonard called the current relationship with the EPA “as good as you can hope for.

“It’s not warm and fuzzy, but it is professional.”

More Information

2015 SS Badger sailing season

First Day of Sailing May 15

Manitowoc Shoreline Cruise May 30

Ludington Caribbean Shoreline Cruise- June 6

“Doubles” (two daily round trips) - June 12

4th of July Shoreline Cruise- July 4

Manitowoc Shoreline Cruise- September 5

Ludington Shoreline Cruise- September 6

Last Day of Sailing- October 11

By STEVE BEGNOCHE
Managing Editor
sbegnoche@ludingtondailynews.com