



For Immediate Release:

There's more than meets the Eye at Kodiak's New Boatyard

Kodiak, Alaska, August 25, 2009. "When the new City of Kodiak boatyard opens this September," said Kenton Braun, Vice President of Anchorage-based PND Engineers Inc., "many of our most interesting design features will be invisible."

Marty Owen, Kodiak's Harbormaster, said, "We asked PND to design a boatyard for large commercial boats as well as private yachts. Boatyard work is messy and the wash water is frequently rife with pollutants. We're all fishermen here and we love our Alaskan environment, so we insisted on a system that would keep pollutants out of the harbor."

To protect the waters around Kodiak, comply with all state and federal ecological requirements-and create a boatyard that can operate year-round in Alaskan weather-PND Engineers created a set of specialized systems integrated into the structure. But don't expect to see much when you visit the yard. The state-of-the-art systems are almost completely in and under the structural concrete.

PND's solution incorporates leading-edge eco-technologies that recycle wash water and separate out pollutants. Before washing operations begin, the boatyard manager closes a manually-operated cover to seal off the storm drain. Wash water flows into a 1,500-gallon capacity underground containment area for treatment and recycling. The water is treated by an electro-coagulation system designed and built by Oiltrap Environmental, Inc., of Tumwater, Washington. The Oiltrap system separates out emulsified oil, suspended solids, and heavy metals (such as copper, zinc, lead and nickel) commonly present in marine haulout operations.

Oiltrap's system can handle 20 gallons per minute, allowing multiple power washers to be used at the same time. The majority of the wash water is treated and recycled. Any excess water is safely sent into the sewer system, where it is further processed and safely kept out of the ecosystem.

Unseen but highly effective at this latitude, an invisible anti-icing system is encased in

the structural concrete that provides snow removal on the wash slab during winter months. It consists of a network of glycol tubing that warms the concrete surface. Glycol is heated by a boiler in a nearby utilities enclosure and pumped through the system.

The heated slab system was designed by RSA Engineering, Inc. of Anchorage, Alaska. There are two zones, each of which operates independently. One zone is centered over the underground containment area and operates continuously during freezing temperatures to protect against frozen pipes. The second zone is to reduce snow and ice over the remainder of the wash slab to permit safe movement and cleaning of boats. The system allows year-round use of the city's new Model 600C (660-ton capacity) Marine Travelift, the largest mobile boat hoist north of San Diego.

Also unseen is the civil engineering work needed to handle the weight of the mammoth mobile boat hoist (675,000 lb. empty) and its load. The 16-tire machine is rated to lift and carry a 1,320,000 lb. boat, for a total weight of just under two million pounds. PND's civil engineers' design took advantage of the blasted out space in the former rock quarry in St. Herman Harbor. "We were lucky the quarry was in a perfect spot," said Braun. "Because of the quarry, we are building on solid bedrock. It's an optimal situation for stability and strength when designing a high-weight bearing structural concrete surface. However, it's been quite a chore to blast out the rock to shape and enlarge the yard."

Boats in the yard may be out of the water but are still living, operating machines. "We provide potable water and 200A, 277/480V three phase power to the dry moorage area for boats on blocks," said Owen. "We've tried to think of everything needed to give the new boatyard what the owners and crew might need for a successful, productive haulout."

The new Kodiak boatyard is opening in late September. Owen is taking reservations through his office as Harbormaster. For more information or reservations for the City of Kodiak Boatyard, call the Kodiak Harbormaster at 907-486-8080.

For a photo of the boatyard under construction: [Click Here](#).

For additional information, please contact Marty Owen at 907-486-8080 or email mowen@city.kodiak.ak.us.