

Boatyard Stormwater Project

by J. Patrick Kelley

Imagine settling a lawsuit without attorneys.

It may be hard to believe, but that's exactly what happened when Michael Campbell, President of the Northwest Marine Trade Association (NMTA), called Sue Joerger, Executive Director of Puget Soundkeeper Alliance (PSA), in March of last year.

Both parties had just appealed the Boatyard Stormwater General Permit for the second time.

"Instead of spending more time and money on lawsuits over this issue," Campbell said, "why don't we just sit down together and see if we can work something out?"

"Interesting idea," replied Joerger.

At issue is the high level of copper and other metals in boatyard stormwater runoff. High copper levels in particular are usually caused by sanding and reapplying the anti-fouling paint used on boat hulls. And recent studies have shown that salmon are negatively affected by even small amounts of copper in the water.

After an initial meeting, it became apparent that the copper discharge levels NMTA and PSA were discussing might be beside the point.

"We weren't sure whether current stormwater technologies could actually reduce copper significantly," said Joerger, "and this was when I suggested we conduct a pilot project to test different stormwater treatment technologies."

The result of these conversations was an unprecedented cooperative effort. In June 2007, representatives from PSA, NMTA, and the Washington State Department of Ecology (DOE) signed a formal settlement agreement. The goal is to address everyone's concerns about copper discharge levels by running a small pilot project to test stormwater treatment technologies.

For the pilot project, RFPs were solicited, and three boatyards and three stormwater treatment companies were selected to participate. The participants also agreed to share part of the cost of equipment installation and maintenance.

The spirit of cooperation is not the only extraordinary thing about the Boatyard Stormwater Project. The aggressive results-oriented schedule is also quite unusual.

Three months after the agreement was signed, participants had raised \$100,000 to fund the project, hired former Port of Everett Marine Operations Manager Dean Shaughnessy as the project manager, and reached agreement on the technical installation and sampling details.

One month after that, the boatyards and stormwater treatment companies were on board. And to measure the effectiveness of each technology, the highly respected firm of Taylor and Associates was hired to install water monitoring equipment at each location.

According to Gary Bailey of the Department of Ecology, “This [project] is important not only to the parties involved but to the advancement of stormwater pollution control. The results from the boatyard study are going to be valuable in a broad sense, and applicable to many other classes of stormwater dischargers.”

Scott Anderson of CSR Marine, one of the boatyard companies involved, explained why he chose to participate in the project. “We have to do something, we have to start somewhere” Anderson said. “And a clean boatyard that doesn’t pollute is good for business. But the main thing is, I want my kids to have the earth when I’m done with it.”

Campbell of NMTA remains enthusiastic about the program despite the challenges and costs. “[PSA] is a great partner,” Campbell said, “and I hope that after of all our hard work we end up with some information that we can pass on to the boatyards so they can truly bring down [the amount of copper in the water].”

According to Joerger of PSA, “We have accomplished in a few short months what could have taken years to do – if it got done at all. Boatyards are leading the charge in finding ways to clean up stormwater from industrial sites.”

“I hope,” Joerger adds, “that other industries and local governments are inspired by their ‘let’s get it done’ attitude.”

Study Participants

Boatyard	Company/Technology	Treatment Method
CSR Marine	Water Tectonics/ Wave Ionics™	Filtration for oils and suspended solids, and electrocoagulation for metals
Canal Boatyard	Siemens Water Technologies	Filtration for oils and suspended solids, and an ion exchange system for metals
Port of Edmonds	StormwaterRx/ Aquip™	A pretreatment chamber and an enhanced sand filtration chamber for all pollutants

