



Port of Olympia Olympia

## Special Joint Port Commission & City of Olympia Meeting

April 8, 2014

*Olympia City Hall*

601 4<sup>th</sup> Ave, Olympia

### *Port Stormwater Upgrades*

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**EST. TIME Sans Discussion:** 10 minutes

#### **Advisory Only**

#### **BACKGROUND/DESCRIPTION:**

Stormwater runoff from the Port's Marine Terminal is covered by the Industrial General Stormwater Permit (ISGP). The permit requires sampling of stormwater for specific parameters (zinc, metals, turbidity, total suspended solids (TSS), and chemical oxygen demand (COD)) prior to discharge into the receiving water (here Budd Inlet) every quarter. If the Port exceeds one of the parameters in three quarters of a given calendar year, the ISGP requires the Port to implement treatment. The Port exceeded the parameters for COD, TSS, turbidity and zinc for more three or more quarters in 2011 and 2012, which requires the Port to implement stormwater treatment. The stormwater treatment must be designed with the goal of achieving the ISGP benchmarks. The Port has until September 30, 2014 to install its stormwater treatment system on the Marine Terminal.

In early 2012, the Port retained Herrera Environmental to assist with: (a) developing a treatment system that has the goal of attaining benchmarks, (b) designing the treatment system, and (c) designing how to reconfigure and upgrade the Marine Terminal stormwater infrastructure to best work with the treatment system. Herrera recently submitted their 90% design package for both the stormwater infrastructure upgrades and the treatment system.

The treatment system is designed to address the hardest parameter to treat: COD. Although the benchmark is 120 milligrams per liter (mg/L), stormwater runoff from the Port logyard has been as much as ten times that amount. Because we know of no other business, company or industry that has found a way to treat COD to the ISGP benchmark levels, Herrera conducted a number of experiments with a wide variety of forms of treatment. The treatment option ultimately selected was, at the end of the day, the only one that has consistently taken Port stormwater to below the 120 COD benchmark. The system that will be implemented is one that involves chemical oxidation – which means adding hydrogen peroxide to the stormwater, and running it through a series of filters that take solid material and metals out of the stormwater prior to discharging the stormwater back into Budd Inlet.

The system will also require some re-working and refurbishing of stormwater pipes on the Marine Terminal, and the installation of a pump station that will pump the stormwater to the treatment facility.

The Port will receive bids on April 8, 2014. Construction will take place from late April through the end of September, 2014.

**FUNDING SOURCE/COST EST.:**

General Obligation Bonds. Total Project Cost Estimate: \$9,000,000

**ATTACHMENTS:**

**EXECUTIVE DIRECTOR APPROVAL:** 