



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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August 17, 2004

Leslie Sacha
Port of Seattle
P.O. Box 1209
Seattle, WA 98111

Dear Ms. Sacha

Re: Request for Review: Final Report, Pier 64/65 Thin Layer Cap March 2004 Sampling,
Seattle, Washington

Ecology has completed its review for the Pier 66 (Pier64/65) thin-layer sediment cap supplemental report (dated July 23, 2004) submitted by Polaris. Monitoring data collected from the cap materials in 2002 indicated that some chemicals (PAHs, PCBs and mercury) exceeded the Ecology's Sediment Management Standards (SMSs) criteria at few sampling locations. As a result of these exceedances, the Port implemented a supplemental sediment investigation in March 2004. The purposes of the investigation were to evaluate the stability of the thin-cap materials, determinate the source of the contaminations, and provide cleanup alternatives. Based on the report, the investigation results are summarized as following:

1. Cap Thickness Measurement

The measurements were obtained at the 14 sampling stations. Overall mean cap thickness for all stations was 1.6 feet without Station BH-12, where no cap material was present. Therefore, the current cap thickness meets the design standard (± 1 foot).

2. Chemical Analysis

Except for CS-1 and BH-12, no exceedances of the SMS criteria for any chemicals were present in the surface and core samples collected at 15 stations. Exceedances of PAHs, PCBs, dibenzofuran, and mercury were found in the core samples at Station CS-1, and exceedances of PCBs, and mercury were found in the surface sample (pre-cap sediments) at Station BH-12.

3. Contaminants Source Determination

The difference and concentration levels of the contaminants in the core samples at CS-1 indicated that there was no vertical migration of contamination from underlying sediments up into the cap. The high concentration levels of contaminations were limited to CS-1 and were associated with the black silt/clay inclusion layers, which were dredged from the Duwamish River Turning Basin as the cap materials. Therefore, contamination in the cap materials at CS-1 most likely came from the Turning Basin.



Pier 66, Port of Seattle

August 17, 2004

Page 2

Surface samples collected at off-cap Station BH-13 and SS5-B (south and west adjacent to BH-12, respectively) also contained elevated concentrations of mercury and PCBs exceeding SMS criteria, which was similar to the contamination found in the pre-cap sediments at BH-12. The sampling results reflected that contaminations by mercury and PCBs originally occurred in the pre-cap sediment.

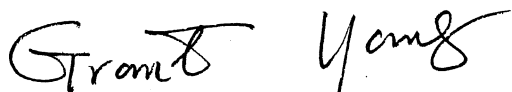
CS-1 and BH-12 are the only two stations where contaminant concentrations exceed the SMS criteria in surface or sub-surface sediments. Station CS-1 located at the northwestern corner of the cap is outside the Bell Harbor Marina wave board. The location is subject to an unstable environment due to direct exposure to prevailing southwest winds, wave and vessel traffic. Therefore, it may not be practical to dredge the contaminated cap and re-cap the area.

Developed laminaria beds were found at Station BH-12 and vicinity in the macroalgae surveys in 2002. The macroalgae beds are now serving as fish and invertebrate habitat on the surface of the cap. These habitat features were constructed in 1994 as part of the total habitat mitigation of the capping project. Apparently, placement of a sediment cap at BH-12 will destroy the existing macroalgae beds.

Therefore, Ecology concurs with the Port's recommendation: no further action is required at this time. However, Ecology will not issue a no-further-action (NFA) letter for this site (Pier 66) because contaminant exceedances still exist at two locations at the cap. Conversely, Ecology will require further cleanup at the locations when an area-wide (the central water-front area of Seattle) sediment remediation is implemented in the future.

Thank you for your continuing cooperation in this matter. Please call me at (425) 649-7126, if you have any questions regarding this letter.

Sincerely,



Grant Yang
Toxics Cleanup Program

Cc: Tom Gries – Washington Department of Ecology
Joanne Snarks – Washington Department of Natural Resources