## ECOLOGY RESPONSES TO PUBLIC COMMENTS ON

## GRAYMONT WESTERN US INC. SITE DRAFT PERIODIC REVIEW REPORT

We will replace "Port of Tacoma" in place of "Jesse Engineering" and change "northwest" to "west" in Section 2.1 of the report. Our responses to your other comments are included below.

<u>Comment:</u> Inclusion of the data collected since the EC was filed in the report, as well as addressing the potential for remnant contamination from the Graymont Western facility to migrate onto the adjacent Port of Tacoma property.

**Response:** As per the requirements of the Long Term Groundwater Monitoring Plan approved by Ecology in 2008, the groundwater is being monitored on an annual basis. However, Ecology was not receiving the monitoring reports. Ecology coordinated with Graymont Western and has received all the groundwater monitoring reports and will continue to receive the reports in the future. The periodic review report will be updated to include all the groundwater monitoring information.

Since the VCP Site is located right next to Blair Waterway, the groundwater flow direction is influenced by the tidal effects. However, the groundwater elevation contour maps show that, groundwater flows in the south, southwesterly and southeasterly direction towards the Blair Waterway.

The results of Site investigations conducted in 1993 and 1995 and long term groundwater monitoring (LTGM, 2008 through 2011) showed the TPH-G exceedence in only one monitoring well (MW-4A) that is located within the upland source area. However, the LTGM monitoring results show a decreasing trend (1.8 mg/Kg-1.1 mg/L). In addition, the result of TPH-G concentration (0.553 mg/L) was below the MTCA Method A cleanup level during the 2012 sampling round.

Based on all the available groundwater data, sampling locations and flow direction, we believe that it is highly unlikely there is any impact from this contamination on the adjacent Port of Tacoma property at this time.

<u>Comment:</u> Attachment of the amended Long Term Monitoring Plan which defined the chemicals of concern to be monitored, the dedicated sampling points, and frequency of the sampling interval and deliverables to be supplied, etc.

**Response:** Typically the periodic review report consists of comprehensive summaries of investigations and cleanups conducted at a site including the requirements of Restrictive Covenant. The Long Term Groundwater Monitoring Plan (LTGMP) for the Graymont Western Site is a 40-page document; hence we believe that it may not be appropriate to include the whole document as an attachment to the periodic review report. Instead, we will include the following paragraph in the report presenting more details regarding the requested information.

• The LTGMP requires the annual monitoring of a total of five monitoring wells (three downgradient compliance wells, one within the source area and one north of the Site) and water level measurements of all accessible monitoring wells at the Site. Water samples collected from five wells will be analyzed for TPH-G, VOCs and monitored natural attenuation parameters (ferrous iron, sulfate, methane, ethane and ethane) including field parameters (pH, dissolved oxygen, conductivity, temperature, turbidity and oxidation reduction potential).

**Comment:** Updated information about on-site remediation system modifications and/or site additions/improvements that may have altered groundwater flow direction patterns.

**Response:** Based on my telephone conversation with Leslie Ann Rose of the Citizens for the Health Bay, I understand that the Graymont Western is in the process of constructing a 300 foot long barrier wall along the Blair Waterway to stop the migration of high pH groundwater into the Waterway. In addition three pumping wells will be installed behind the barrier wall to maintain the inward gradient.

Based on the Construction Permit Application, we understand that the barrier wall and pumping wells are located within the proximity of the VCP Site along the Blair Waterway. Operation of pumping wells may change the current groundwater flow system below and in the vicinity of the Site. We will request and coordinate with Graymont Western for the measurement of groundwater elevations more frequently in all the existing accessible monitoring wells for determining the groundwater flow system below and in the vicinity of the Site. This is to assure that any changes to the groundwater flow system as a result of pumping will not adversely impact the TPH soils contamination left on the Site. In addition, I am also coordinating with John Diamont (NPDES Permit Manager for Graymont Western Facility) of Water Quality Program regarding this matter.

**Comment:** Copies of monitoring data that may have been obtained since 2009, as well as future monitoring reports.

**Response:** We will e-mail you a figure showing the locations of monitoring wells/sampling locations with potentiometric contours indicating the approximate groundwater flow direction and table of results. If you need complete monitoring reports, please call the Southwest Region Resource contact at (360) 407-6365 to request for copies of the reports.

**Comment:** An explanation for the source(s), cause(s) of the release(s) that originally resulted in the contamination of soil and/or groundwater at the Graymont Western Facility and if any new releases have occurred.

**Response:** Based on the available information, the exact cause(s) and source(s) of soil and groundwater contamination are unknown. The available information indicates that the Graymont Western property was a part of undeveloped Tacoma Tide-flats which was filled in early part of 1940s. This property reportedly was used by a nearby shipbuilding firm and the U.S. Navy as a lay down/storage yard during and after World War II. The lime plant was constructed in early 1960s and since then it is being operated under different ownerships. Unfortunately, there is lack of information to link this contamination to any previously known and/or current activity.

Available records in our files indicate no new releases of any hazardous substances as a result of Graymont Western Facility's operations.