



RESPONSIVENESS SUMMARY

Carborundum Company Cleanup Site

FSID # 1012

December 15, 2011 – January 17, 2012 Public Comment Period

Periodic Review Report

**Prepared by
Washington State Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
Lacey, Washington**

February 2012

Site Manager: Panjini Balaraju
Public Involvement Coordinator: Diana Smith

Comment #1

Comments were received in an e-mail dated January 2, 2012

Panjini,

In reference to the Carborundum site cleanup comment period referenced at <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=3552>, I had a couple of quick questions.

First, is there an ongoing monitoring protocol in place to ensure the caps are effective? The last testing mentioned on the website that I can see dates from 1996-1997.

Secondly, the groundwater movement as I understand it is somewhat complex in nature. How is the contaminated groundwater being contained?

Finally, what is the plan for remediating the soil and groundwater?

Respectfully Submitted,

Eric LaBrant
President, Fruit Valley Neighborhood Association

Ecology Response

Comment 1: First, is there an ongoing monitoring protocol in place to ensure the caps are effective? The last testing mentioned on the website that I can see dates from 1996-1997.

Ecology Response

We understand that the Port of Vancouver (Port) did not conduct the periodic cap inspections after a Restrictive Covenant (RC) was recorded for the Site on February 20, 1998, because, this requirement was not included either in the No Further Action (NFA) letter or in the RC. However, Nustar (Ash Creek Associates- consultant) did examine the cap and underlying soils in 1997. We recognize your concerns regarding this matter. Ecology also believes that conducting a periodic cap inspection is appropriate to assure the integrity of the cap. Based on my Site visit on October 24, 2011, the asphalt and engineered caps are in good condition.

Ecology has already discussed this issue with the Port. The Port is willing to conduct periodic cap inspections in the future and has already conducted the cap inspection on February 17, 2012. The subsequent cap inspection will be combined along with the Fort Vancouver Plywood Site cap inspection which is being conducted on an 18-months frequency.

Comment 2: Secondly, the groundwater movement as I understand it is somewhat complex in nature. How is the contaminated groundwater being contained?

Ecology Response

Based on the operational history of former Carborundum Site, polycyclic aromatic hydrocarbons (PAHs) and metals were identified as primary and secondary contaminants of concern (COCs) respectively. The groundwater monitoring results showed that the Site groundwater was not impacted by PAHs and there were slight exceedences of arsenic and chromium in the groundwater. Therefore, there was no groundwater remedy/containment system implemented at the former Carborundum Site, except continued groundwater monitoring.

Since this Site is surrounded by the Port of Vancouver and Nustar Sites with widespread chlorinated solvents groundwater contamination, the Carborundum Site groundwater have been impacted by chlorinated solvents. However, the Port's pump and treat system installed in June, 2009 appears to be effectively containing groundwater from flowing northward into the Fruit Valley Neighborhood.

Comment 3: Finally, what is the plan for remediating the soil and groundwater?

Ecology Response

Groundwater: As discussed above, the Site groundwater was not impacted by PAHs and there were slight exceedences of arsenic and chromium. However, these concentrations were reduced to either below MTCA cleanup levels or non-detects by 1997. As a result no active groundwater cleanup was implemented at the Site. Nonetheless, based on the proximity of this Site to the Port of Vancouver Site, the Carborundum Site groundwater seems to be impacted by the Port's pump and treat system and appears to be effectively containing the groundwater from flowing northward into the Fruit Valley Neighborhood.

Soils: Since this area is within the industrial zoning, the soil cleanup levels were established based on MTCA Method C (industrial) cleanup levels. A remedial action alternatives assessment report was developed for selecting an appropriate remedy for the Plant Area and Pond Area (CH2M HILL, March 1995). The report recommended the excavation of contaminated soils within the Plant Area and capping of marginally exceeded contaminated soils with an engineered cap on the Pond Area.

During the cleanup action conducted at the Plant Area, all the PAHs contaminated soils exceeding the industrial soil cleanup levels (approximately 7000 cubic yards) were excavated and disposed of off-Site. The soils with marginal exceedences on the Pond Area were capped under an engineered cap. Based on the current zoning and implemented remedy, no additional cleanup is required at the Site (if the zoning changes to Residential, additional cleanup will be required at that time to meet the residential cleanup levels). However, when industrial cleanup levels are used, institutional controls, RC and five year reviews are required to assure the protection of human health and the environment, WAC 173-340-440(4)(c) and WAC 173-340-420.