



## Duwamish River Cleanup Coalition/TAG

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### Technical Advisory Group

Piper Peterson-Lee

Environmental Protection Agency

1200 6th Ave., Suite 900

Seattle, WA. 98101

July 7, 2010

Dear Ms. Peterson-Lee,

Duwamish River Cleanup Coalition Technical Advisory Group (DRCC/TAG) is an IRS designated 501 (C) 3 organization. We receive the Technical Assistance Grant from EPA to provide independent technical review of cleanup documents for the Duwamish River Superfund Site. The DRCC/TAG provides technical review and information to the community as well as community and conservation groups engaged in the cleanup. In addition, it is the role of the DRCC/TAG to incorporate the community concerns and the community vision into the technical review submitted to the EPA. DRCC/TAG also holds the State of Washington Public Participation Grant for the Duwamish River Superfund Cleanup. We appreciate the opportunity provide these additional comments on the EE/CA for T-117.

#### **Our comments follow:**

- **Alternative 2.** DRCC/TAG agrees with EPA's support of Alternative #2 as the preferred alternative for the T-117 cleanup as being the most protective of human and wildlife health.
- **Habitat.** DRCC/TAG supports seamless habitat restoration and public access with walking trails at T-117 to be constructed immediately following toxic sediment removal. We hope and expect that extensive backfilling will not be required so that the installation of habitat features can smoothly occur as soon as the area is cleaned up. This will both minimize the impact on the neighborhood of truck traffic and will save costs for the Port and the City.

- **Dioxin Testing in the Neighborhood.** DRCC/TAG supports the agencies for moving ahead on a comprehensive dioxin/furan sampling and analysis in South Park and for the commitment to make sure that existing archived samples are analyzed for dioxin/furan contamination. In concert with the EPA Environmental Justice priority and to continue the excellent collaboration between the community, DRCC/TAG and the EPA, DRCC/TAG requests the Enhanced Public Participation protocol be followed for the dioxin/furan sampling design analysis and public outreach. DRCC/TAG would like to be included as participants in decision making process for the sampling plan and analysis including: development and review of the soil sampling plan to ensure that all areas are appropriately sampled and all chemicals of concern are sampled for and there is community agreement on how the results will be interpreted. In addition, DRCC/TAG would like to be part of the development of education and outreach plans that are specific to the residents.
- **Cumulative Impacts and South Park as an Environmental Justice Community.** EPA already recognizes South Park as an Environmental Justice community. As such residents have been and continue to be disproportionately exposed to unfair environmental regulations, policies, and practices. The EE/CA should recognize and account for exposure to multiple chemicals in South Park’s historical legacy of industrial contamination (i.e., air pollution), and multiple social and economic stressors such as stress, unemployment, and crime that increases susceptibility to chemical exposure. Therefore, a risk assessment that does not address these cumulative exposures does not meet the community concerns.
- **Cleanup contracts.** EPA should utilize its own “SuperJTI job readiness program that provides training and employment opportunities for underserved citizens living in communities affected by Superfund sites”<sup>1</sup> to provide information, services and employment education and jobs to the residents of South Park. As noted above, EPA recognizes that “many of these areas are environmental justice communities – historically under-represented minority and low-income neighborhoods and areas burdened with significant environmental challenges,”<sup>1</sup> therefore the program should be engaged for the T-117 cleanup. EPA should emphasize to the City of Seattle and the Port of Seattle that jobs and contracts should be given to local residents as priority and training provided for residents so that they can actually get those jobs. In addition, the EPA should survey local businesses to find out what kind of services are available locally and utilize them when appropriate.

- **Section 4.4.2 T 2217 Upland Study Area.** The EE/CA uses both sampling results and computer estimated interpolations to approximate the removal boundaries for the upland areas. The EE/CA should state explicitly that the actual removals will be determined on the basis of confirmation sampling. If this confirmation sampling is to be conducted prior to the start of excavation, then the EE/CA should indicate that pre-confirmation sampling will be used as the basis for determining final depth and lateral extent of removals.
- **Section 4.4.3 Adjacent streets and Residential Yards Study Area.** This section states that dioxins and furans will be used as COCs, but only PCBs will be used as driver chemicals and only PCBs will be used to determine soil removals in the residential areas. Thus, according to the EE/CA and EPA directive in appendix M, dioxin/furan contaminated soil will not be removed unless co-located with PCBs. This approach is based on several assumptions that have not been generally accepted and are likely false, in our estimation. The two assumptions are 1) that the source of dioxins/furans is PCB oil or contaminated oil that has dioxins/furans as incidental co-contaminants; and 2) that the levels of dioxins alone, in the absence of PCBs > 1ppm do not pose a health threat sufficient in nature and magnitude to warrant removal at this time.

Dioxins/furans in the residential area may have come from several Malarkey sources or pathways:

- As co-contaminants in PCB oil spilled at the Malarkey facility;
- As tracked-out waste, in waste, oil, soil, etc. that was on trucks or other vehicles/machinery driven through the neighborhood;
- On dust or other particulates from the Malarkey facility and blown around the area;
- In stack emissions from the Malarkey facility, especially under the scenario of PCB oil being used as a fuel in the asphalt plant.

The EE/CA needs to account for the scenario in which the Malarkey facility is a source of dioxins/furans independently of PCB oil. Dioxins/furans are known to be released in the burning of PCBs, as well as in various incinerator/industrial combustion processes (EPA Dioxin Reassessment, Exposures and Sources). On the basis of the EPA evaluation of dioxin/furan sources, the EE/CA needs to make the reasonable and conservative assumption that dioxins/furans were released from the Malarkey stack and deposited in the

neighborhood. Indeed, this scenario is the basis for an upcoming investigation of the Malarkey facility as a source of dioxins/furans for the greater South Park neighborhood.

The dioxins/furans already measured in the residential neighborhood present risks to the residents at current levels, not including the possibility that unsampled/unmeasured portions of the neighborhood may have even higher dioxin/furan concentrations. Some areas were not sampled, other samples not measured and the existing data indicate dioxin/furan TEQs greater than the MTCA cleanup level of 11ppt. Furthermore, earlier this year, EPA proposed Preliminary Remediation Goals (PRGs) for dioxin TEQs of 3.6 ppt in soil for cancer. EPA also recently released the latest and final revisions to the Dioxin Reassessment (EPA's Reanalysis of Key Issues Related to Dioxin Toxicity and Response to NAS Comments (External Review Draft, May 21, 2010) <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=222203>) that estimates a new (and higher) cancer potency and an RfD that is lower than any similar value used to date. In essence, EPA estimates more than 6-fold greater cancer potency and a 30% increase in non-cancer toxicity (EPA's Reanalysis of Key Issues Related to Dioxin Toxicity and Response to NAS Comments (External Review Draft), May 21, 2010). The State MTCA dioxin PRG of 11 ppt was determined prior to the latest EPA toxicity estimates and does not account for the greater toxicities. Dioxin TEQs exceeding the current MTCA PRG of 11 ppt cannot be considered as "low risk."

Finally, the dioxin/furan exposures are evaluated as incremental risks to the residents in the T 117 area, with the assumption that the community is "average" with regard to health status and risk. In fact, the entire South Park community and the T117 area residents in particular, have faced a combination of environmental conditions and exposures that increase basic risk status and increase their vulnerability. The residents face cumulative risks from past exposures, industrial chemical releases, proximity to a PCB contaminate site and the psycho-social stress of living in a contaminated area.

Yards and unpaved streets in the Adjacent Residential Neighborhood should be sampled and analyzed for PCBs and dioxin/furan. Archived samples should be analyzed for PCBs and dioxin/furan and all Dioxin/furan soil contamination should be remediated to state MTCA levels in this cleanup action even when not co-located with PCBs.

- **Discussion of other potential chemicals of concern.** Currently the document does not address other potential asphalt plant chemical emissions including PAHs, arsenic, lead, mercury, total petroleum

hydrocarbons, and volatile chemicals. Given that this pathway has not been ruled out, these chemicals should be considered.

- **Recontamination.** Finally, as we have noted before, we are concerned that the stormwater system in the T 117 area presents a problem for the current remediation effort and future re-contamination.

Thea Levkovitz

Coordinator, DRCC/TAG

<sup>1</sup> <http://www.epa.gov/superfund/community/sfjt/index.htm>