

Well 12A Case Study: Use of Green Remediation Contract Requirements and Reporting Practices during Excavation Activities

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Green remediation (GR) contract requirements and reporting practices were developed and used to reduce the environmental footprint of soil excavation activities at Well 12A Superfund Site in Tacoma, WA. Remediation contract requirements and reporting practices aligned with the EPA Region 10 Clean and Green Policy and included GR best management practices (e.g. cleaner fuel, minimizing idling, and recycling waste materials), a GR Plan, discussion of GR objectives during progress meetings, monthly GR progress updates, and a Final GR Report. To summarize and report project level GR efforts to EPA, USACE developed a template based on the Clean and Green Policy to track each GR action with its associated measure, cost impacts, environmental benefit, basis for consideration, and the justification for the decision not to implement some actions. Results included improved coordination among project team members, accountability for GR objectives, implementation of contractor-proposed GR actions, and documentation of implemented and considered actions which can be referenced for future use on the site.

Site Background: Chlorinated VOCs and other contaminants discovered in the groundwater at the Well 12A site were linked to filter cake that was historically generated during oil recycling practices and used as fill material. A 2009 ROD Amendment called for continuation of the existing groundwater extraction and treatment system and added excavation of filter cake and contaminated soil, in situ thermal remediation, and enhanced anaerobic bioremediation to reduce the contaminant mass flux leaving the site. Based on the results of an Environmental Footprint Analysis conducted for the selected remedial actions, the team concluded that the excavation activities provided the best opportunity for environmental footprint reduction and should therefore be the focus of GR efforts for the site.