

Interim Dioxin Guidelines

The DMMP Interim Approach to Evaluating Dioxins in Dredged Material

Why Have This Interim Approach?

Pending development of programmatic guidelines, reviews of dioxin data will be done on a project-specific basis using interim guidelines. These interim guidelines were adopted by the DMMP Agency directors in March 2007 to serve as a clear and consistent process for making suitability determinations until programmatic revisions are completed.

Which Dredging Projects Need to Test for Dioxins?

The need for sediment testing of dioxins is determined on a case-by-case basis where there is reason to suspect presence of these chemicals (e.g., based on proximity to current or historical point sources and/or as documented by existing data from the area). Point sources include chlor-oxide bleach process pulp mills, chlor-alkali or chlorinated solvent manufacturing plants, phenoxy herbicide use and handling areas, and former wood treatment sites. Areas with high PCB concentrations are also likely to have dioxins present.

How are Suitability Determinations Made for Disposal of Dredged Material Containing Dioxins?

For non-dispersive sites in Puget Sound:

- Based on a comparison of dioxin in test sediments to disposal-site background.
- "Background" is defined using disposal-site

Sediment dioxin data generated as part of DMRP site monitoring.

- Dioxin concentrations in any given dredged material management unit may not exceed site maximum (see table below).
- Average dioxin concentrations (weighted to the volume of each dredged material management unit) cannot exceed mean site concentration.

Non-Dispersive Disposal Site Sediment Dioxin Toxic Equivalence (ng/kg-dry wt)		
Disposal Site	Mean	Maximum
Port Gardner	4.1	5.2
Anderson Ketron	3.6	6.8
Bellingham Bay	6.9	10.5
Elliott Bay	8.7	12.2
Commencement Bay	2.4	5.2

For dispersive sites in Puget Sound:

- Based on a comparison of dioxin in test sediments to reference background.
- "Background" is defined using sediment dioxin data from nearest reference site.
- The available reference site dioxin data are limited to Carr Inlet and Sequim Bay. It is the dredger's responsibility to sample nearest reference site if data are not available.
- Bioaccumulation testing for dioxin is currently not used to determine suitability for either dispersive or non-dispersive sites in Puget Sound.

For dispersive sites in Grays Harbor, the 5 ng/kg 2,3,7,8-TCDD concentration or 15 ng/kg TEQ will be used as a trigger for the requirement to perform

bioaccumulation testing.

For more information please contact the
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