

DMMP CLARIFICATION PAPER

REGENCY GUIDELINE EXCEEDANCES: GUIDELINES FOR RETESTING IN HIGH RANKED AREAS

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INTRODUCTION

This paper builds on the 2002 clarification paper entitled Recency Guidelines: Program Considerations. Dredging/construction projects in high ranked areas are having difficulty completing their dredging within a 2-year time frame and are faced with the potential requirement to retest all or portions of the suitable material before they can initiate or complete their dredging. The 2002 clarification paper stipulated that when reviewing projects with recency exceedances, the DMMP agencies will review 1) previous characterization data, 2) new data from the dredge site or vicinity, and 3) site use and character, on a project specific basis, to evaluate whether recency periods can be extended or additional testing will be required. The purpose of this paper is to clarify retesting guidelines, when the DMMP agencies concur that retesting is required to recharacterize sediment compared to the initial DMMP characterization.

BACKGROUND

During the first 10 years of the Puget Sound Dredged Disposal Analysis (PSDDA) program implementation, most dredging projects were initiated in areas with relatively “better” sediment quality, and recency exceedances were generally not a problem. However, during the last five years more complex dredging projects have been initiated in high concern areas, including some within or adjacent to CERCLA or MTCA cleanup areas. Projects conducted within high concern areas must be completed within 2 years to adhere to DMMP recency guidelines. Also adding to the permit process timelines and permitted project construction delays is the required consultation with the National Oceanic and Atmospheric Administration (NOAA) and U. S. Fish and Wildlife Service (USFWS) under the Endangered Species Act, for protected species such as Chinook salmon (*Oncorhynchus tshawytscha*) and bull trout (*Salvelinus confluentus*). The necessary coordination coupled with conservation measures to protect these species have reduced dredging work windows and extended the time required to plan and complete dredging projects.

PROBLEM IDENTIFICATION

The current DMMP guidance does not articulate how retesting of previously characterized surface¹ suitable DMMUs² under Recency Guidelines should be conducted. For the most part recency exceedances are generally more of a concern for surface dredged material management units, than subsurface DMMUs. DMMP guidance stipulates that high concern areas normally require one analysis for each 4,000 cubic yards of surface material (0-4 feet). There currently is no guidance to describe how retesting under recency would be conducted, except through the initial testing guidelines process, and a judicious use of best-professional-judgment (BPJ). Recent experience from three projects summarized below documents that alterations in the normal DMMP testing process were considered when recency retesting plans were finalized.

To date, three projects have required retesting before dredging due to recency guideline exceedances. All three projects were located in the high concern East Waterway within a CERCLA footprint. The first is the Port of Seattle's Terminal 18 Stage 1A dredging area, the second is the Port of Seattle's East Waterway Stage II Project, and the third is the U.S. Coast Guard Pier 36 Slip Dredging Project.

The initial testing of all three projects involved uncomposited analyses of surface DMMUs, as stipulated in the DMMP users manual for high ranked areas. In evaluating retesting options, the DMMP agencies used BPJ, and allowed compositing among similar surface DMMUs³ resulting in subsequently larger DMMU volumes and tiering of testing to re-evaluate material within the Port of Seattle Stage 1A footprint. In this case, subsamples of all the samples comprising the composite were archived pending the testing results. Location of samples and tiering of adjacent DMMUs was allowed based on a review of known containment sources, recent activities in the waterway, and pending testing actions. For the U.S. Coast Guard Pier 36 slip dredging project compositing within the same DMMU initially tested was required to give a better spatial representation of the surface DMMUs retested, which were also surrounded by contaminated DMMUs.

DMMP agencies review of retesting of suitable East Waterway, Stage II material, also resulted in compositing among initially tested DMMUs with

¹ DMMP identifies surface for testing purposes as the sediment water-interface down to 4 feet below the mudline.

² DMMU = dredged material management unit. A given volume of material can only be considered a DMMU if it is capable of being dredged and managed separately from all other management units.

³ Similar in terms of comparative chemistry and sediment conventional characteristics.

similar chemistry. Subsamples of each subsample station comprising the composite were archived pending the testing results. This testing is ongoing and has not been completed at this time.

The overall testing outcomes validated the need to retest as 36.6 % of the material from the Port of Seattle's Terminal 18 Stage 1A dredging project and 66.5% of the material from the U.S. Coast Guard Pier 36 slip dredging project were found to be unsuitable for unconfined-open water disposal.

PROPOSED CLARIFICATION

The DMMP agencies propose the following clarification to recency retesting sampling and analysis guidance. The DMMP acknowledges that some projects in high concern areas are exceeding recency guidelines. Project proponents must be aware of recency considerations and contact the Dredged Material Management Office if this issue arises for their project. If the DMMP agencies determine that recency extension is not feasible and retesting is required, the following general guidance will be implemented.

1. The DMMP will use BPJ on a project specific basis to evaluate recency retesting sampling and analysis requirements including sampling designs and approvals.
2. The DMMP agencies will consider allowing compositing to re-evaluate surface sediment quality of previously suitable DMMUs after first conducting a careful review of the project specific data collected during the initial characterization and any additional data the project applicant may provide, including DMMU proximity to adjacent sources and activities. The DMMP agencies may allow compositing among generally adjacent DMMUs with comparative levels of chemistry and sediment conventional characteristics. The DMMP agencies are concerned that compositing not be used as a means of diluting samples for analysis. Subsamples of material collected at each station comprising the composited DMMU will be archived pending analysis results from the composited sample.
3. Using BPJ, the DMMP agencies will determine whether the results from composited analyses are sufficient to characterize the original or newly combined surface DMMU, or if analyses of the archived subsamples samples will be required to render a determination of suitability.
4. Archiving and tiering of analyses of adjacent DMMUs may be considered on a project specific basis by the DMMP agencies. Analysis of archived samples

may be required if analysis results for adjacent samples indicate that the material is no longer suitable for unconfined-open-water disposal.

REFERENCES

EPTA, 1988. Evaluation Procedures Technical Appendix. Prepared by the Corps of Engineers in cooperation with the Environmental Protection Agency, Region 10, and the Washington State Departments of Ecology and Natural Resources.

GHWBUM⁴, 1995. Dredged Material Evaluation Procedures and Disposal Site Management Manual: Grays Harbor and Willapa Bay, Washington. Prepared by the Corps of Engineers in cooperation with the Environmental Protection Agency, Region 10, and the Washington State Departments of Ecology and Natural Resources.

MPR, 1988. Puget Sound Dredged Disposal Analysis (PSDDA) Management Plan Report, Unconfined Open-Water Disposal of Dredged Material, Phase I (Central Puget Sound). Prepared by the Corps of Engineers in cooperation with the Environmental Protection Agency, Region 10, and the Washington State Departments of Ecology and Natural Resources.

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⁴ GHWBUM = Grays Harbor, Willapa Bay Dredged Material Users Manual.