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June 27, 2014

Electronic Mail to: [industrialstormwatercomments@ecy.wa.gov](mailto:industrialstormwatercomments@ecy.wa.gov)

Jeff Killelea  
Water Quality Program  
Washington Dept of Ecology

Subject: Industrial Stormwater General NPDES Permit – Proposed May 7, 2014

Presented below are the Weyerhaeuser Company comments on the draft Industrial Stormwater General NPDES Permit. Thank you for extending the public review and comment period on this permit.

S3.A.3.c. – The specific version of Appendix 10 of the “Phase 1 Municipal Stormwater Permit” should be identified. It is the version dated August 1, 2013.

Discussion – S3.A.3. establishes a mandatory requirement that BMPs selected by ISWG permittees located within certain jurisdictions “be consistent with” the “documents listed in Appendix 10.” Appendix 10 apparently compiles various documents from local and state governments which are declared to be functionally equivalent to Appendix 1 of the Phase 1 Municipal Stormwater Permit (2007) and Ecology’s Stormwater Management Manual for Western Washington (2005). This collection of local/state government documents could change through time. To avoid confusion, the version/date of Appendix 10 which Ecology intends to incorporate into the ISWGP should be identified.

S3.A.3. – The incorporation-by-reference of guidance documents and other local/state regulatory documents has the potential to create a fair warning issue for ISWG permittees.

Discussion – The references in the permit to non-permit guidance documents/manuals/ordinances has good intentions; i.e., a customized roadmap on where “acceptable BMPs” can be located. But the structure of this permit section says that BMPs “shall be consistent” with these documents. It would take a very dedicated and knowledgeable regulatory professional to first locate and then examine the many, many hundreds of pages in the Stormwater Management Manuals for Western Washington and Eastern Washington, and then the relevant Appendix 10 documents referenced in the Phase 1 Municipal Stormwater Permit, and perhaps more, to ensure consistency with each. This should not be expected of the 1000+ ISWG permittees.

Some ambiguity could be avoided if Ecology would add an “or” after S3.A.3.a., S3.A.3.b., and S3.A.3.c., to narrow the required examination of manuals.

S5.B. Table 3 – The proposed new requirement for the sampling/analysis for Petroleum Hydrocarbons for “Transportation (40xx-44xx, except 4221-25), Petroleum Bulk Stations and Terminals (5171)” should be trimmed to at least exclude Transportation facilities.

Discussion – The Fact Sheet (at page 43) for this permit offers that this proposed monitoring requirement is justified by “Ecology’s best professional judgment that these transportation-related pollutants are reasonably likely to be exposed to stormwater.” That may be true, but the current ISWGP includes a visual “oil sheen” benchmark parameter and this proposed permit intends to retain that obligation for all permittees. Does the five year performance history from these two industry categories, and the Transportation category in particular, reveal an elevated incidence of “oil sheen” observations that then warrants a largely duplicative measure of petroleum? Absent some compelling indication of a performance problem, Ecology should not add new monitoring requirements.<sup>1</sup>

An alternative approach would be a staged requirement where the sampling and petroleum hydrocarbon analysis is only triggered when a visual “oil sheen” is detected.

S6.B.3.b. – Some clarification on the use of term “compliance schedule” would be useful.

Discussion - There are few (if any) NPDES permittees that have had TMDL-derived wasteload allocations incorporated into their permits, and with reliance on a compliance schedule. Yet the permit language in S6.B.3.b. demands that a condition for a new discharger seeking NPDES discharge authority into a waterbody subject to a TMDL, is that all existing dischargers “are subject to compliance schedules.” Despite the 40 CFR 130 and Pinto Creek language, Ecology surely cannot mean this as a literal requirement.<sup>2</sup> How does the agency deal with this? Does Ecology consider that the terms and conditions in the approved TMDL is, effectively, a “compliance schedule”?

S6.C. – New proposed requirements specific to “Puget Sound Sediment Cleanup Sites” represent a significant expansion of permit requirements for hundreds of permittees that should have been shared with stakeholders before appearing in a proposed ISWGP. A public

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<sup>1</sup> On page 42 of the Fact Sheet, there is a reminder that an earlier Washington ISWGP did include an “oil and grease” sampling/analysis obligation. Based on a low incidence of exceedences of the Benchmark value, the agency’s consultant recommended the requirement be dropped. The agency accepted this recommendation in the 2010 (?) permit renewal.

<sup>2</sup> The issuance of a Compliance Schedule per WAC 173-201A-510(4) is a case-by-case action with lots of administrative process.

vetting and opportunity for discussion on Ecology's ideas would have led to a more understandable and focused set of requirements.

Discussion – The Fact Sheet should be supplemented to provide answers to these questions.

- 1) What is the agency reasoning that allows a common numeric effluent limit to be imposed on (apparently) all ISWG permittees discharging into Puget Sound Sediment Cleanup Sites given the pollutant-specific and/or site-specific determinations that RCW 90.48.555(4)(c) requires?
- 2) The Sediment Management Standards regulation (WAC 173-204) is cross-linked to the Model Toxics Control Act such that the procedures for conducting an investigation, determining necessary cleanup actions, preparing a cleanup action plan, and then codifying that cleanup action plan in a legally binding document, are defined. Now comes the Water Quality Program proposing to impose a TSS effluent limit and other performance demands, and apparently separate from SMS. The Water Quality and Toxics Cleanup Programs should collaborate to offer a full explanation on how these regulatory activities will be coordinated. The topic areas should include: stormwater, diffuse sources and the “regional background” concept; Puget Sound Sediment Cleanup Site vs. Sediment management areas (or units); relationship of a TSS effluent limit, AKART and “recontamination;” and on and on.
- 3) The imposition of a TSS effluent limit on hundreds of ISWG permittees is a big jump. Why not a TSS benchmark value which if exceeded triggers the permit corrective action process?

S6.C. – Clarification of the term “Puget Sound Sediment Cleanup Site” is needed.

Discussion –

- 1) Does Ecology really intend that this term encompasses the entire spatial area of the 16 listed Puget Sound waterbodies (footnote 6 in S6.C.), or only the spatial areas matched with the gridded Category 5 303(d) sediment listings?
- 2) Similarly, the Sediment Management Standards at WAC 173-204-520 serve to define Cleanup Sites not achieving SMS quality standards. Why wouldn't the proposed TSS effluent limit (and other requirements) be limited to the subset of ISWG permittees which have been identified as PLPs or contributors to these SMS Cleanup Sites?

S6.C. – The Port of Olympia permit #WAR001168 should be removed from Appendix 4. Ecology has been unable to provide information which links the Ports' stormwater discharge to any 303(d) Category 5 Sediment Bioassay problem.

Discussion - The "Listing Association Comment" for this permit in Appendix 4 reads "Associated with Washington State's 2012 EPA-approved 303(d)/305(b) Listing #603100 with a category 4B for Sediment Bioassay in Sediment." Information was requested from Ecology relating to Listing #603100 (copy of email request and the information provided by the agency is enclosed). The sole document provided by Ecology is titled "LOTT Outfall – Dredge Sediment Characterization," Parametrix Project No. 21-1577-08, March 19, 1991.

Section 7.2 and the Conclusion section of the LOTT report addresses the biological analysis of sediment. The report concludes there was no significant amphipod mortality statistically different from the reference sediment. In short, the data report Ecology has apparently relied on to support the Appendix 4 determination does not indicate sediment toxicity.

S6.C.1.a. – What does the phrase "..., but may not be limited to,..." mean?

Discussion – The facilities listed in Appendix 4 are those ISWG permittees identified as existing discharges to impaired water bodies. What would be an example(s) of other ISWG permittees subject to the "limits" but that are not listed in Appendix 4? How will those permittees learn of this applicability?

S8.D – The clarification and downsizing of procedural requirements supporting Level 3 Corrective Actions is appreciated.

WDOE Economic Impact Analysis – ISWGP, May 2014, Publication no. 14-10-029

General – In a number of important ways this EIA is mis-matched with the actual proposed permit requirements. Here are some of those topic areas:

- 1) In the "Changes to Permit" section (Page 2) there is no acknowledgement that (apparently) all ISWG permittees into Puget Sound Sediment Cleanup Sites will receive a TSS effluent limit and requirement for storm drain system cleanup and sampling/analysis. This will impact more than 200 permittees and add significant cost to their compliance-achievement activities. An unknown cohort of these permittees will likely report non-compliance with the TSS limit and this will subject these permittees to civil and criminal enforcement. Some portion of these permittees will undoubtedly request issuance of a compliance schedule to allow time for evaluation, purchase, and construction of TSS treatment technologies. Ecology's response to the 10s of these

requests for individual permit compliance schedules implies significant transaction costs.

- 2) The proposed requirement that "Transportation (40xx-44xx, except 4221-25), Petroleum Bulk Stations and Terminals (5171)" must now sample/analyze for petroleum hydrocarbons, is not recognized. This appears to impact about 370 ISWG permittees.
- 3) The Changes to Permit section incorrectly states that the exclusion from sampling "substantially identical" discharge points and the "continuous attainment" provision are new with this proposed permit. That is not the case.

The EIA conclusion that small businesses will experience annualized compliance costs of \$500-1,300, and large business of \$1,000-2,500, to comply with this new permit, just seems wrong.

Thank you for the opportunity to comment on this draft permit.

Sincerely,



Ken Johnson  
Corporate Environmental Manager

## Johnson, Ken

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**From:** Froyland, Hugo (ECY) [hfro461@ECY.WA.GOV]  
**Sent:** Tuesday, June 17, 2014 10:31 AM  
**To:** Johnson, Ken  
**Subject:** RE: Contact EIM (EIMGeneral) Comment from ken.johnson@weyerhaeuser.com  
**Attachments:** LOTTDY89.zip

Hello Ken,

Attached is the complete dataset in EIM, including bioassay, chem, location, and study information.

For future reference, you can access WQA information here: <http://apps.ecy.wa.gov/wats/>, by searching under the listing number to obtain relevant EIM Study IDs.

Hugo

-----Original Message-----

**From:** Johnson, Ken [<mailto:ken.johnson@weyerhaeuser.com>]  
**Sent:** Monday, June 16, 2014 4:49 PM  
**To:** Froyland, Hugo (ECY)  
**Subject:** Re: Contact EIM (EIMGeneral) Comment from [ken.johnson@weyerhaeuser.com](mailto:ken.johnson@weyerhaeuser.com)

The full report please

Sent from my iPhone

On Jun 16, 2014, at 2:48 PM, "Froyland, Hugo (ECY)"  
<[hfro461@ECY.WA.GOV](mailto:hfro461@ECY.WA.GOV)<<mailto:hfro461@ECY.WA.GOV>>> wrote:

Hello Ken,

When you say "original data" are you looking for the physical lab sheets? If so, I may be able to track those down. If not, please let me know what you're interested in.

Thanks,

Hugo Froyland  
Sediment Data Coordinator and Analyst | Department of Ecology  
[Hugo.Froyland@ecy.wa.gov](mailto:Hugo.Froyland@ecy.wa.gov)<<mailto:Hugo.Froyland@ecy.wa.gov>> | 360.407.6929

**From:** [EIMSystem@ecy.wa.gov](mailto:EIMSystem@ecy.wa.gov)<<mailto:EIMSystem@ecy.wa.gov>> [<mailto:EIMSystem@ecy.wa.gov>]  
**Sent:** Monday, June 16, 2014 11:59 AM  
**To:** Neumiller, Chris (ECY); Carmack, Kristin (ECY); Erickson, Rachael (ECY)  
**Subject:** Contact EIM (EIMGeneral) Comment from  
[ken.johnson@weyerhaeuser.com](mailto:ken.johnson@weyerhaeuser.com)<<mailto:ken.johnson@weyerhaeuser.com>>

Request for more information on EIMGeneral.

Email Address : [ken.johnson@weyerhaeuser.com](mailto:ken.johnson@weyerhaeuser.com)<<mailto:ken.johnson@weyerhaeuser.com>>  
User Name : ken johnson

Category : EIMGeneral

Comment(s) : I am interested in looking at original Sediment Bioassay data for Water Quality Assessment Listing 603100, Budd Inlet (Inner). Area referred to as Cascade Pole Inc McFarland. Collection date 10/31/89.

LOTT0041

Report

## **LOTT Outfall Dredge Sediment Characterization**

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Prepared for  
Puget Sound Dredge Disposal Analysis

LOTT 0041  
sampling date  
10/31/88, 10/4/88  
10/5/88

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Parametrix Project No. 21-1577-08

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March 19, 1991

## 1. INTRODUCTION

The purpose of this document is to review and distill all the information available concerning dredge sediment analysis conducted along the alignment proposed LOTT Wastewater Treatment Plant outfall in Budd Inlet. All of the information presented herein was taken from the Environmental Impact Statement (EIS) entitled *LOTT Urban Area Wastewater Management Plan. Nitrogen Removal and Outfall Alternatives. Draft Supplemental Environmental Impact Statement. Appendix F*, December, 1989. To facilitate this review, a copy of Appendix F from the EIS is attached. Additional information that was requested by the PSDDA agencies in a memo from David Fox, of the U.S. Army Corps of Engineers, dated December 6, 1990, is included.

### 1.1 PROJECT DESCRIPTION

The LOTT Wastewater Treatment Plant in Olympia, Washington, currently discharges secondary-treated effluent through two outfalls into Budd Inlet. The Washington State Department of Ecology has requested that one of the outfalls (the Fiddlehead Marina outfall) be eliminated except during emergency or CSO conditions. The remaining outfall has insufficient capacity to accommodate all flows. A new outfall needs to be constructed with the capacity to handle all the flows currently discharged through the two pipes. Since the condition of the existing pipeline is of concern, it has been determined that it is most cost effective to replace the existing pipeline with a single new conduit, with enough capacity to handle 55 million gallons per day (2.5 times the maximum monthly average flow of 22 mgd).

Construction of a new outfall requires dredging and disposal of marine sediment. Sediment quality was investigated at the site in October 1989 to determine the available options for disposal of the dredged sediment. At that time, three separate options were considered for new outfall alignment. LOTT has now determined that the most suitable location for a new outfall is along the same line as the current outfall, off the North Port Peninsula (see Appendix F, Figure F-2).

The sediment characterizations, and the Environmental Impact Statement (EIS) associated with the entire project was forwarded to the Puget Sound Dredge Disposal Analysis (PSDDA) agencies in December, 1990. At that time, a request was made to PSDDA to review the EIS, and determine if the sediment was suitable for open water disposal. PSDDA responded with a memo to Parametrix dated December 6, 1991, that requested additional information about the sampling plan, and dredge footprint.

Since that time, the LOTT agencies chose to re-configure the original outfall alignment, to accommodate a smaller diameter pipe than was originally intended. In the current proposed alignment, the total total dredge volume is 7,975 yd<sup>3</sup>.

## 1.2 PERMITTING

LOTT applied to the US Army Corps of Engineers for permits related to the proposal (Application number OYB-2-013568) in March 1990. Permitting action required include Corps Section 10/404, and State of Washington Hydraulic Project Approval and Section 401 Water Quality Certification. A Shorelines Substantial Development permit was granted in June 1990.

A SEPA non-project EIS that analyzed the environmental impacts associated with removing nitrogen from the treated effluent and location of the new outfall was prepared. The Final EIS was released in February 1990. Once a preferred location of the new outfall was identified, a SEPA checklist was prepared to support the application for the Shoreline Substantial Development permit.

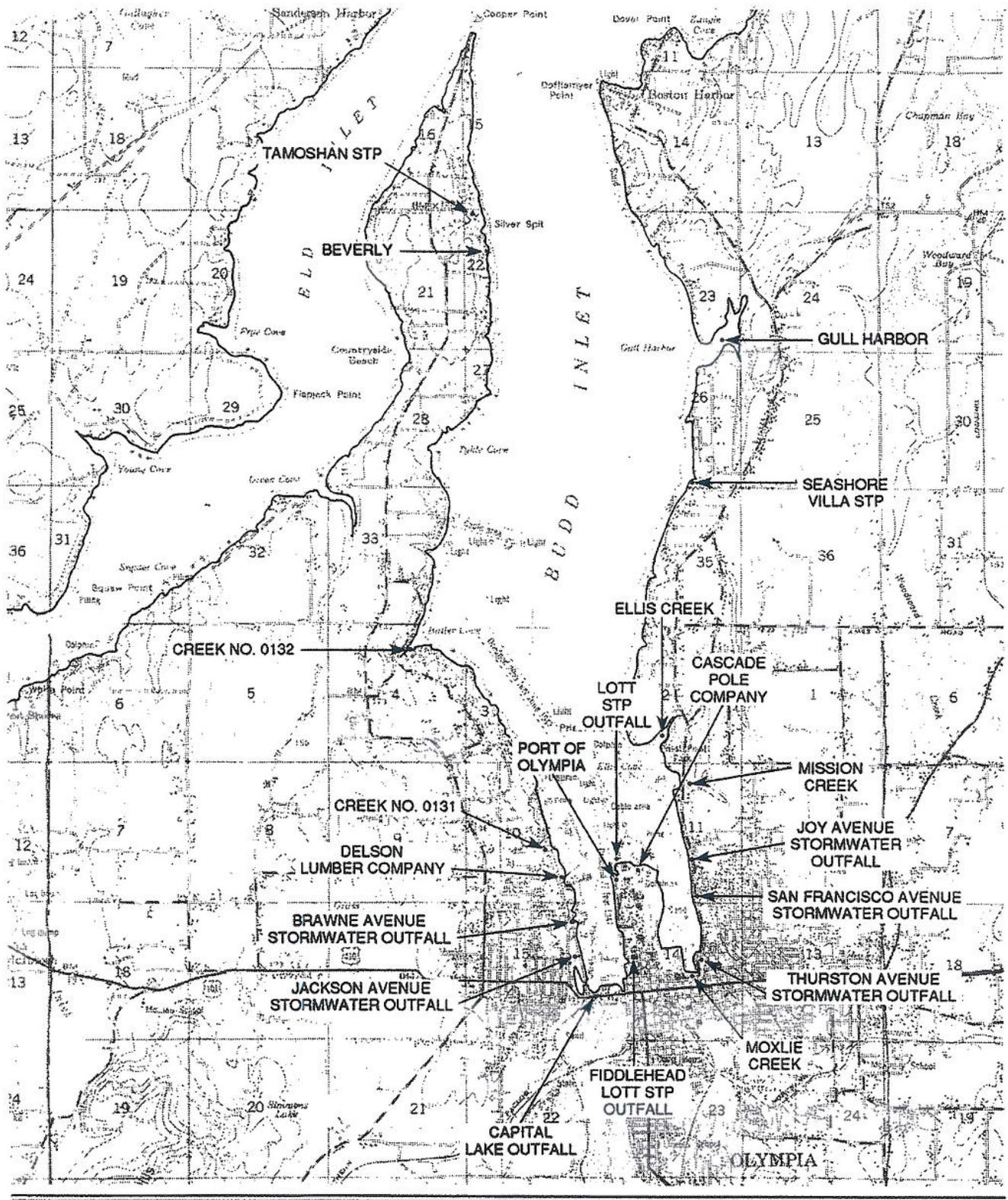
## 2. SITE RANKING, SELECTION AND SAMPLE COLLECTION

### 2.1 SITE RANKING

The PSDDA Management Plan Report (1989) ranks Olympia Harbor and Budd Inlet as a high risk of encountering contaminated sediments. As the proposed outfall alignment is just north of Olympia Harbor, and is along side of the existing outfall for LOTT, the sediment characterization was conducted using the PSDDA high rank dredge management test schedule.

Cadmium contamination is the only significant sediment quality problem in Budd Inlet (Tetra Tech 1989). Cadmium concentrations in all areas of Budd Inlet are elevated over the Puget Sound average and approach the lowest apparent effect threshold. The primary source of cadmium in Budd Inlet is believed to be from activities associated with the Cascade Pole Company in Olympia (Tetra Tech 1989).

Figure 1 shows other potential sources of contaminants into Budd Inlet. These are principally from storm water outfalls. The Cascade Pole Company is a known site for creosote contamination, but is believed to be sufficiently far away from the site to not influence site sediment chemistry.



**Figure 1.**  
Sources of Pollutants  
into Budd Inlet

## 2.2 NUMBER OF SAMPLES AND ANALYSES REQUIRED

PSSDA ranks Budd Inlet as an area of high concern for sediment contamination. In accordance with PSSDA requirements, dredge management units (DMU) and full sediment characterization requirements for a dredging area ranked high concern are as follows:

### Surface Sediments (0 to 4 feet)

One core section and one laboratory analysis for each 4,000 cubic yards.

### Subsurface Sediments (> 4 feet)

One core section for each 4,000 cubic yards and one laboratory analysis for each 12,000 cubic yards.

The estimated total volume to be dredged is 7,975 cubic yards. The quantity and related sampling requirements are distributed as follows:

Depth Interval	Volume (cubic yards)	Minimum Number of Core Sections	Minimum Number of Analyses
0 to 4 feet	5,355	2	2
> 4 feet	2,620	1	1

Of the dredge material, 3,450 yd<sup>3</sup> are to be used as backfill at the site, while 4,525 yd<sup>3</sup> are being proposed to be placed at the Commencement Bay PSSDA dredge disposal site. The full suite of PSSDA chemicals of concern were conducted on each of the DMU. At the time of sampling, the proposed alignment was to have involved less than 4000 yd<sup>3</sup> for dredge disposal. At that time, PSSDA allowed for the use of only the *Rhepoxinius abronius* test for disposal volumes less than 4,000 yd<sup>3</sup> (PSSDA, 1989, page A-14). As such, only amphipod bioassays were conducted on all three composites.

## 2.3 SAMPLING

Based on the DMU, two stations (Stations 10 and 11 in the EIS) were sampled at the site on October 31, 1989. Station 10 was located 100 feet from the shoreline along the proposed outfall alignment. Station 11 was located 50 feet west of the existing outfall at the mid-point of the diffuser. These positions were determined by measuring the distance of the station from nearby landmarks with a tape measure. The exact location of those sampling locations, with appropriate latitude and longitude coordinates, is shown in Figures 2 and 3. Figure 4 is attached to show a typical cross section through the dredge prism, as requested by the Corps.

The sampling design was based upon a maximum depth of dredge to 12 ft. at Station 10, and only to 4 ft. at Station 11. Two samples were collected from Station 10 and one sample was collected from Station 11. Surface sediment samples were collected from the sediment surface to 4 feet below the sediment surface at Stations 10 and 11 (Sample 10-04 and 11-04). A subsurface sediment sample was collected from 4 to 12 feet below the sediment surface at Station 10 (Sample 10-412).

Sample collection techniques, materials handling, tests conducted, etc., are documented in Appendix F, and are not repeated here.

## 7. RESULTS

### 7.1 CHEMICAL ANALYSES

The results of the chemical analyses are presented in Table 1. For the three composites, the only exceedance of the PSDDA screening levels occurred for cadmium at station 11. However, in the QA/QC check, it was noted that the analytical lab recovered 146.7% of the matrix spike sample (Table 2). Using the matrix recovery as a correction factor, the corrected value for cadmium at station 11 is 0.818 mg/kg dry weight. The corrected value is below the PSDDA screening level.

Using, then, the corrected cadmium values for station 11, there are no exceedances of PSDDA chemicals of concern along the proposed outfall dredge footprint, and it is concluded that all the material is suitable for open water disposal.

### 7.2 BIOLOGICAL ANALYSES

The results of the amphipod bioassay indicate that there was no PSDDA "fatal hit" for any of the three samples. For station 11, the amphipod mortality exceeded the 20% control. However, the mortality was not statistically different from the reference sediment.

At the time of sampling, the biological analysis was based on the then-current rules of only requiring the amphipod bioassay for dredge volumes less than 4,000 yd<sub>3</sub>. Under the current PSDDA rules, a Microtox test must also be conducted concomitant with the *Rhepoxinius* test. In addition, since the time of initial analysis, the volume of material to be disposed increased to over the 4,000 yd<sub>3</sub> limit, which would require the full suite of PSDDA bioassays for dredge disposal. However, after blank correction for Station 11, no PSDDA chemical-of-concern exceeded screening levels, and thus no biological testing is needed.

## 8.0 CONCLUSIONS

The sampling plan for the dredge sediment samples were done in accordance with the PSSDA protocols for appropriate DMU. Chemical analysis indicates that the proposed dredge material from station 10 is suitable for open water disposal, but that one exceedence for the cadmium SL occurred at station 11. When corrected for an unusually high background spike, the corrected level was below the SL. Corroboration for the suitability for the material being suitable for open water disposal is that there was no amphipod mortality statistically different from the reference sediment.