CENWS-OD-TS-DMMO

MEMORANDUM FOR: RECORD August 13, 2008

SUBJECT: DETERMINATION REGARDING THE SUITABILITY OF PROPOSED DREDGED MATERIAL FROM THE PORT OF GRAYS HARBOR TERMINAL 3, HOQUIAM, GRAYS HARBOR COUNTY, FOR OPEN-WATER DISPOSAL AT THE SOUTH JETTY OR POINT CHEHALIS DISPERSIVE SITES, OR FOR BENEFICIAL USE.

1. Introduction. This memorandum reflects the consensus determination of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Environmental Protection Agency, and Washington Departments of Ecology and Natural Resources) regarding the suitability of up to 40,000 cubic yards (cy) of dredged material from the Port of Grays Harbor Terminal 3 for beneficial use or for disposal at one of the Grays Harbor dispersive open-water sites.

2. Background. The design depth at Terminal 3 is -40 ft MLLW. It was last dredged in 2001, but has not been used in recent years. Terminal 3 is currently available for sale or lease and sediment characterization was conducted by the Port of Grays Harbor in anticipation of future needs. See Figure 1 for a vicinity map.

   The Port of Grays Harbor terminals are located in an area where sediment can accumulate rapidly and is therefore considered to be relatively homogeneous. In areas subject to rapid shoaling, not all sediment to be dredged will be in place at the time of sampling. Therefore, the volume estimated for Terminal 3 was based on historical dredging records and best professional judgment, as required in the DMMP Users Manual (DMMP, 2007).

3. Project Summary. Table 1 includes project summary and tracking information.

Table 1. Project Summary

| | |
|---|---|
| Project ranking | Low-moderate |
| Characterized volume | 40,000 cubic yards |
| Maintenance depth | -40 feet MLLW<br>(plus 1 ft. overdepth) |
| Draft SAP received | August 3, 2007 |
| Draft SAP returned for revisions | August 22, 2007 |
| SAP addendum received | August 27, 2007 |
| Revised SAP approved | August 27, 2007 |
| Sampling date | September 7, 2007 |
| Final data report received | July 29, 2008 |
| DAIS Tracking number | POGHT-1-A-F-256 |
| USACE Permit Application Number | NWS-2008-997-SO |
| Recency Determination<br>(low-moderate rank = 6 years) | September 2013 |

4. Project Ranking and Sampling Requirements. Terminal 3 is ranked "low-moderate" (DMMP, 2008). In low-moderate-ranked areas with homogeneous sediment, the number of field samples and dredged material management units (DMMUs) are calculated using the following guidelines:
    - Maximum volume of sediment represented by each field sample = 8,000 cubic yards
    - Maximum volume of sediment represented by each DMMU in a low-moderate-ranked area = 40,000 cubic yards.

Based on these guidelines, 5 field samples and 1 DMMU were required for this project.

5. Sampling. Sampling took place on September 7, 2007 using a power grab sampler (in areas with homogeneous sediment, surface grab samples are deemed adequate to represent the sediment – DMMP, 2008). Sampling was accomplished without incident and according to the sampling and analysis plan (Integral, 2007a). See Figure 2 for sampling locations.

6. Chemical Analysis. The approved sampling and analysis plan was followed and quality control guidelines specified by the PSEP and DMMP programs were met, with only minor quality control deviations (Integral, 2007b). The data were considered sufficient and acceptable for regulatory decision-making under the DMMP program.

    Sediment conventional results (Table 2) show that the proposed dredged material is predominantly sandy silt. The total organic carbon content was 2.01 percent. The chemical results indicated that there were no exceedances of DMMP screening levels (Table 3). Consequently, bioassay testing was not required for this material. The single DMMU met suitability guidelines, based on chemistry alone, for open-water disposal at either of the Grays Harbor dispersive sites.

    In addition to routine DMMP chemicals of concern, analysis of dioxins/furans was required for this project. These chemicals are widespread in Grays Harbor due to the historical presence of bleach process pulp mills. Dioxins/furans had not been analyzed in Port of Grays Harbor sediments since the early to mid 1990s and the agencies required confirmation testing for this round of sediment characterization.

    Results (Table 4) showed detected levels of dioxins/furans. The toxic equivalence (TEQ) (with non-detects calculated as ½ reporting limit) was 7.1 ng/kg dry wt., below the 15 ng/kg TEQ suitability level set for Grays Harbor.

7. Beneficial-Use Analysis. The proposed dredged material had no exceedances of the State of Washington numerical Sediment Quality Standards (see Table 5). However, based on agency best professional judgment regarding acceptable dioxin concentrations in beneficial use material, sediment from this project may be used for beneficial use only after comparison of dioxin concentrations in the source and receiving areas. Specifically, if the TEQ of sediment proposed for beneficial use is equal to or less than that in a representative sampling of the sediments from the receiving area(s), the dredged material will be acceptable for beneficial use at that approved location.

    To assess the suitability for upland beneficial use, the chemical results were compared to the Model Toxics Control Act (MTCA) guidelines (Ecology, 2005). Table 6 indicates that, while undetected, the

reporting limit for arsenic exceeds the Method B guideline for carcinogens. Therefore, it is possible that the dredged material may be unsuitable for some types of upland use. Ecology, DNR and the local health department should be consulted if upland beneficial use is contemplated. Also, while there is no MTCA Method A guideline for total chromium, the total chromium value does exceed the guideline for chromium VI. Additional analysis may be required for upland beneficial use in order to determine the chromium VI content of the sediment.

8. Suitability Determination. This memorandum documents the evaluation of the suitability of sediment proposed for dredging from the Port of Grays Harbor Terminal 3 for open-water disposal or beneficial use. The approved sampling and analysis plan was followed and the data gathered were deemed sufficient and acceptable for regulatory decision-making under the DMMP program.

   Based on the results of the previously described testing, the DMMP agencies conclude that **all 40,000 cubic yards are suitable** for open-water disposal at either the South Jetty or Point Chehalis dispersive site. If in-water beneficial use is to be considered, dioxin testing will be required of the receiving area.

   This suitability determination does ***not*** constitute final agency approval of the project. During the public comment period that follows a public notice, the resource agencies will provide input on the overall project. A final decision will be made after full consideration of agency input, and after an alternatives analysis is done under section 404(b)(1) of the Clean Water Act.

   *A pre-dredge conference call with DNR, Ecology and the Corps of Engineers will be required. A dredging quality control plan must be developed and submitted to the Enforcement Section of the Regulatory Branch of the Seattle District Corps of Engineers at least 7 days prior to the pre-dredge conference call. A DNR site use authorization must also be acquired.*

9. References.

DMMP, 2008. *Dredged Material Evaluation and Disposal Procedures (Users Manual)*. Dredged Material Management Program, July 2008.

Ecology, 1995. *Sediment Management Standards – Chapter 173-204 WAC*. Washington State Department of Ecology, December 1995.

Ecology, 2005. *Model Toxics Control Act – Chapter 70.105D RCW and Cleanup Regulation - Chapter 173-340 WAC*. Washington State Department of Ecology, October 2005.

Integral, 2007a. *Sampling and Analysis Plan, Sediment Characterization for Terminal 3, Port of Grays Harbor, Grays Harbor, Washington.* Prepared by Integral Consulting Inc. for HDR Engineering. July 2007.

Integral, 2007b. *Sampling and Analysis Plan Addendum, Sediment Characterization for Terminal 3, Port of Grays Harbor, Grays Harbor, Washington.* Prepared by Integral Consulting Inc. for HDR Engineering. August 2007.

Integral, 2008. *Data Report, Sediment Characterization for Terminal 3, Port of Grays Harbor, Grays Harbor, Washington.* Prepared by Integral Consulting Inc. for HDR Engineering. April 2008.

**10. Agency Signatures.**

Concur:

8/13/08 David F. Fox
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8/14/08 Erika Hoffman
Date Erika Hoffman - Environmental Protection Agency

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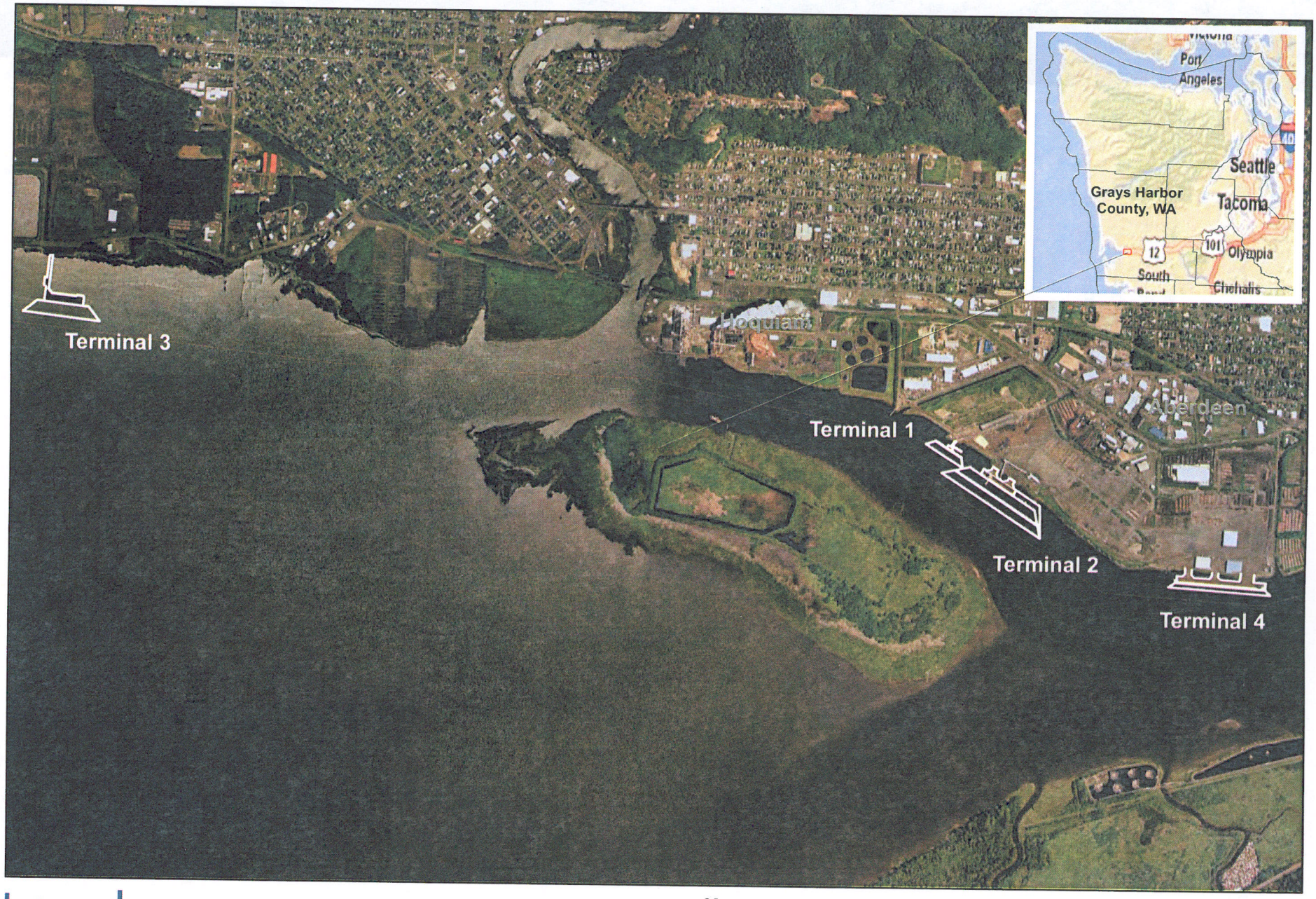


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Figure 1
Grays Harbor, WA
Site Vicinity Map

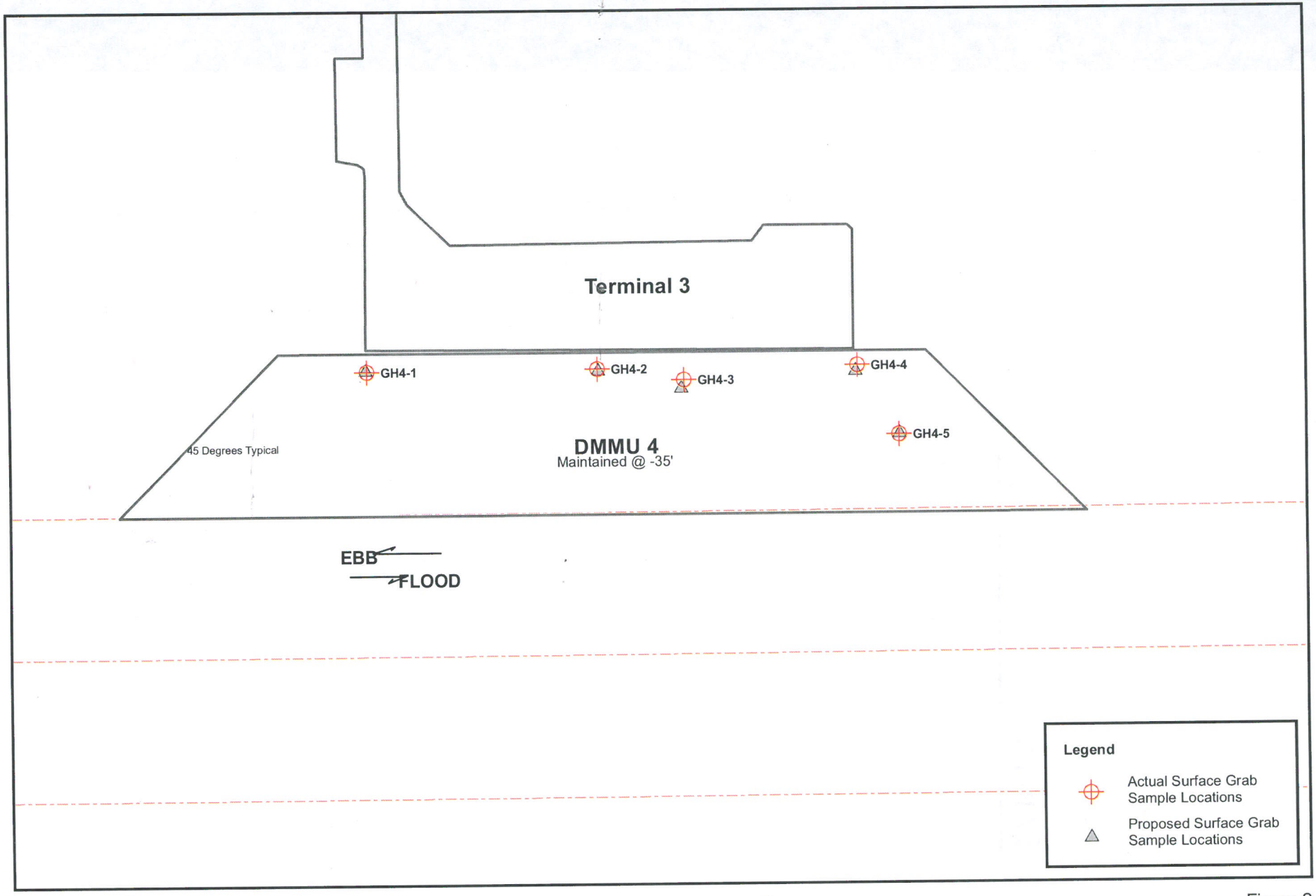


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Figure 2
Grays Harbor, WA
Terminal 3 (DMMU 4) Sample Locations

Table 2. Sediment Conventional Data.

| | | Terminal 3 |
|---|---|---|
| | Lab ID: | GH4 |
| | DAIS ID: | C1 |
| | **DMMU #:** | DMMU 4 |
| GRAIN SIZE | % Gravel: | 0.1 |
| | % Sand: | 31.4 |
| | % Silt: | 50.0 |
| | % Clay: | 18.4 |
| | % Fines (clay+silt): | 58.4 |
| | Total Solids (%): | 46.6 |
| | Volatile Solids (%): | 6.6 |
| | Total Organic Carbon (%): | 2.01 |
| | Total Sulfides (mg/kg): | 361 |
| | Total Ammonia (mg N/kg): | 50.7 |

Table 3. Chemical results compared to DMMP regulatory guidelines.

| | | | | Terminal 3 | |
|---|---|---|---|---|---|
| | | | Lab ID: | GH4 | |
| | | | DAIS ID: | C1 | |
| CHEMICAL | SL | BT | ML | DMMU 4 | |
| METALS (mg/kg dry) | | | | conc | QL |
| Antimony | 150 | --- | 200 | 10 | UJ |
| Arsenic | 57 | 507 | 700 | 10 | U |
| Cadmium | 5.1 | 11.3 | 14 | 0.4 | U |
| Chromium | --- | 267 | --- | 34 | |
| Copper | 390 | 1,027 | 1,300 | 48.1 | |
| Lead | 450 | 975 | 1,200 | 5 | |
| Mercury | 0.41 | 1.5 | 2.3 | 0.09 | U |
| Nickel | 140 | 370 | 370 | 24 | |
| Selenium | --- | 3.0 | --- | 0.4 | U |
| Silver | 6.1 | 6.1 | 8.4 | 0.6 | U |
| Zinc | 410 | 2,783 | 3,800 | 72 | |
| LPAH (ug/kg dry) | | | | | |
| 2-Methylnaphthalene | 670 | --- | 1,900 | 61 | U |
| Acenaphthene | 500 | --- | 2,000 | 61 | U |
| Acenaphthylene | 560 | --- | 1,300 | 61 | U |
| Anthracene | 960 | --- | 13,000 | 61 | U |
| Fluorene | 540 | --- | 3,600 | 61 | U |
| Naphthalene | 2,100 | --- | 2,400 | 61 | U |
| Phenanthrene | 1,500 | --- | 21,000 | 61 | U |
| Total LPAH | 5,200 | --- | 29,000 | 61 | U |
| HPAH (ug/kg dry) | | | | | |
| Benzo(a)anthracene | 1,300 | --- | 5,100 | 61 | U |
| Benzo(a)pyrene | 1,600 | --- | 3,600 | 61 | U |
| Benzo(g,h,i)perylene | 670 | --- | 3,200 | 61 | U |
| Benzofluoranthenes | 3,200 | --- | 9,900 | 61 | U |
| Chrysene | 1,400 | --- | 21,000 | 61 | U |
| Dibenzo(a,h)anthracene | 230 | --- | 1,900 | 61 | U |
| Fluoranthene | 1,700 | 4,600 | 30,000 | 61 | U |
| Indeno(1,2,3-c,d)pyrene | 600 | --- | 4,400 | 61 | U |
| Pyrene | 2,600 | 11,980 | 16,000 | 61 | U |
| Total HPAH | 12,000 | --- | 69,000 | 61 | U |
| CHLORINATED HYDROCARBONS (ug/kg dry) | | | | | |
| 1,2,4-Trichlorobenzene | 31 | --- | 64 | 6.1 | U |
| 1,2-Dichlorobenzene | 35 | --- | 110 | 6.1 | U |
| 1,3-Dichlorobenzene | 170 | --- | --- | 6.1 | U |
| 1,4-Dichlorobenzene | 110 | --- | 120 | 6.1 | U |
| Hexachlorobenzene | 22 | 168 | 230 | 0.99 | U |

| CHEMICAL | SL | BT | ML | DMMU 4 | |
|---|---|---|---|---|---|
| PHTHALATES (ug/kg dry) | | | | | |
| Bis(2-ethylhexyl)phthalate | 1,300 | --- | 8,300 | 61 | U |
| Butyl benzyl phthalate | 63 | --- | 970 | 6.1 | U |
| Di-n-butyl phthalate | 1,400 | --- | 5,100 | 61 | U |
| Di-n-octyl phthalate | 6,200 | --- | 6,200 | 61 | U |
| Diethyl phthalate | 200 | --- | 1,200 | 61 | U |
| Dimethyl phthalate | 71 | --- | 1,400 | 6.1 | U |
| PHENOLS (ug/kg dry) | | | | | |
| 2 Methylphenol | 63 | --- | 77 | 6.1 | U |
| 2,4-Dimethylphenol | 29 | --- | 210 | 6.1 | U |
| 4 Methylphenol | 670 | --- | 3,600 | 61 | U |
| Pentachlorophenol | 400 | 504 | 690 | 30 | U |
| Phenol | 420 | --- | 1,200 | 61 | U |
| MISCELLANEOUS EXTRACTABLES (ug/kg dry) | | | | | |
| Benzoic acid | 650 | --- | 760 | 610 | U |
| Benzyl alcohol | 57 | --- | 870 | 30 | U |
| Dibenzofuran | 540 | --- | 1,700 | 61 | U |
| Hexachlorobutadiene | 29 | --- | 270 | 0.99 | U |
| Hexachloroethane | 1,400 | --- | 14,000 | 61 | U |
| N-Nitrosodiphenylamine | 28 | --- | 130 | 6.1 | U |
| PESTICIDES AND PCBs (ug/kg dry) | | | | | |
| Aldrin | 10 | --- | --- | 0.99 | U |
| Chlordane | 10 | 37 | --- | 2 | U |
| Dieldrin | 10 | --- | --- | 2 | U |
| Heptachlor | 10 | --- | --- | 0.99 | U |
| Lindane | 10 | --- | --- | 0.99 | U |
| Total DDT | 6.9 | 50 | 69 | 2 | U |
| Total PCBs | 130 | --- | 3,100 | 14 | U |
| Total PCBs (mg/kg OC) | --- | 38 | --- | 0.7 | U |

J = estimated concentration
U = undetected
QL = laboratory qualifier
OC = organic carbon
SL = screening level
BT = bioaccumulation trigger
ML = maximum level

Table 4. Dioxin/Furan data.

| | | Terminal 3 | | | |
|---|---|---|---|---|---|
| | Lab ID: | GH4 | | | |
| | DAIS ID: | C1 | | | |
| CHEMICAL | TEF | DMMU 4 | | | |
| DIOXINS (ng/kg dry) | | conc | QL | TEQ (U=½ DL) | TEQ (U=0) |
| 2,3,7,8-TCDD | 1 | 2.3 | | 2.3 | 2.3 |
| 1,2,3,7,8-PeCDD | 1 | 2.9 | J | 2.9 | 2.9 |
| 1,2,3,4,7,8-HxCDD | 0.1 | 0.78 | J | 0.078 | 0.078 |
| 1,2,3,6,7,8-HxCDD | 0.1 | 2.4 | J | 0.24 | 0.24 |
| 1,2,3,7,8,9-HxCDD | 0.1 | 7.1 | | 0.71 | 0.71 |
| 1,2,3,4,6,7,8-HpCDD | 0.01 | 31 | | 0.31 | 0.31 |
| OCDD | 0.0003 | 200 | | 0.06 | 0.06 |
| FURANS (ng/kg dry) | | | | | |
| 2,3,7,8-TCDF | 0.1 | 0.91 | J | 0.091 | 0.091 |
| 1,2,3,7,8-PeCDF | 0.03 | 0.25 | J | 0.0075 | 0.0075 |
| 2,3,4,7,8-PeCDF | 0.3 | 0.44 | J | 0.132 | 0.132 |
| 1,2,3,4,7,8-HxCDF | 0.1 | 0.48 | J | 0.048 | 0.048 |
| 1,2,3,6,7,8-HxCDF | 0.1 | 0.24 | J | 0.024 | 0.024 |
| 1,2,3,7,8,9-HxCDF | 0.1 | 0.13 | EMI | 0.013 | 0.013 |
| 2,3,4,6,7,8-HxCDF | 0.1 | 0.42 | J | 0.042 | 0.042 |
| 1,2,3,4,6,7,8-HpCDF | 0.01 | 8.1 | | 0.081 | 0.081 |
| 1,2,3,4,7,8,9-HpCDF | 0.01 | 0.44 | J | 0.0044 | 0.0044 |
| OCDF | 0.0003 | 16 | | 0.0048 | 0.0048 |
| **TOTAL TEQ:** | | | | 7.05 | 7.05 |

J = estimated concentration
EM = estimated maximum possible concentration
I = interference present
QL = laboratory qualifier
TEF = toxic equivalency factor (WHO 2005 mammalian)
TEQ = toxic equivalency

Table 5. Chemical results compared to SMS regulatory guidelines.

| | | | Terminal 3 | |
|---|---|---|---|---|
| | | Lab ID: | GH4 | |
| | | DAIS ID: | C1 | |
| CHEMICAL | SQS | CSL | DMMU 4 | |
| METALS (mg/kg dry) | | | conc | QL |
| Arsenic | 57 | 93 | 10 | U |
| Cadmium | 5.1 | 6.7 | 0.4 | U |
| Chromium | 260 | 270 | 34 | |
| Copper | 390 | 390 | 48.1 | |
| Lead | 450 | 530 | 5 | |
| Mercury | 0.41 | 0.59 | 0.09 | U |
| Silver | 6.1 | 6.1 | 0.6 | U |
| Zinc | 410 | 960 | 72 | |
| LPAH (mg/kg OC) | | | | |
| 2-Methylnaphthalene | 38 | 64 | 3.0 | U |
| Acenaphthene | 16 | 57 | 3.0 | U |
| Acenaphthylene | 66 | 66 | 3.0 | U |
| Anthracene | 220 | 1200 | 3.0 | U |
| Fluorene | 23 | 79 | 3.0 | U |
| Naphthalene | 99 | 170 | 3.0 | U |
| Phenanthrene | 100 | 480 | 3.0 | U |
| Total LPAH | 370 | 780 | 3.0 | U |
| HPAH (mg/kg OC) | | | | |
| Benzo(a)anthracene | 110 | 270 | 3.0 | U |
| Benzo(a)pyrene | 99 | 210 | 3.0 | U |
| Benzo(g,h,i)perylene | 34 | 88 | 3.0 | U |
| Benzofluoranthenes | 230 | 450 | 3.0 | U |
| Chrysene | 110 | 460 | 3.0 | U |
| Dibenzo(a,h)anthracene | 12 | 33 | 3.0 | U |
| Fluoranthene | 160 | 1200 | 3.0 | U |
| Indeno(1,2,3-c,d)pyrene | 34 | 88 | 3.0 | U |
| Pyrene | 1000 | 1400 | 3.0 | U |
| Total HPAH | 960 | 5300 | 3.0 | U |
| CHLORINATED HYDROCARBONS (mg/kg OC) | | | | |
| 1,2,4-Trichlorobenzene | 0.81 | 1.8 | 0.30 | U |
| 1,2-Dichlorobenzene | 2.3 | 2.3 | 0.30 | U |
| 1,4-Dichlorobenzene | 3.1 | 9 | 0.30 | U |
| Hexachlorobenzene | 0.38 | 2.3 | 0.05 | U |
| PHTHALATES (mg/kg OC) | | | | |
| Bis(2-ethylhexyl)phthalate | 47 | 78 | 3.0 | U |
| Butyl benzyl phthalate | 4.9 | 64 | 0.3 | U |
| Di-n-butyl phthalate | 220 | 1700 | 3.0 | U |
| Di-n-octyl phthalate | 58 | 4500 | 3.0 | U |
| Diethyl phthalate | 61 | 110 | 3.0 | U |
| Dimethyl phthalate | 53 | 53 | 0.3 | U |

| CHEMICAL | SQS | CSL | DMMU 4 | |
|---|---|---|---|---|
| PHENOLS (ug/kg dry) | | | | |
| 2 Methylphenol | 63 | 63 | 6.1 | U |
| 2,4-Dimethylphenol | 29 | 29 | 6.1 | U |
| 4 Methylphenol | 670 | 670 | 61 | U |
| Pentachlorophenol | 360 | 690 | 30 | U |
| Phenol | 420 | 1200 | 61 | U |
| MISCELLANEOUS EXTRACTABLES (ug/kg dry) | | | | |
| Benzoic acid | 650 | 650 | 610 | U |
| Benzyl alcohol | 57 | 73 | 30 | U |
| MISCELLANEOUS EXTRACTABLES (mg/kg OC) | | | | |
| Dibenzofuran | 15 | 58 | 3.0 | U |
| Hexachlorobutadiene | 3.9 | 6.2 | 0.05 | U |
| N-Nitrosodiphenylamine | 11 | 11 | 0.3 | U |
| PCBs (mg/kg OC) | | | | |
| Total PCBs (mg/kg carbon) | 12 | 65 | 0.7 | U |

U = undetected
QL = laboratory qualifier
OC = organic carbon
SMS = Sediment Management Standards
SQS = sediment quality standard
CSL = cleanup screening level

Table 6. Chemical results compared to MTCA regulatory guidelines.

| | | | Terminal 3 | |
|---|---|---|---|---|
| | | Lab ID: | GH4 | |
| | | DAIS ID: | C1 | |
| CHEMICAL | Method A[1] | Method B[2] | DMMU 4 | |
| METALS (mg/kg dry) | | | conc | QL |
| Arsenic, inorganic | 20 | 0.67 | 10 | U |
| Cadmium | 2 | --- | 0.4 | U |
| Chromium (total) | --- | --- | 34 | |
| Chromium VI | 19 | --- | --- | |
| Copper | --- | --- | 48.1 | |
| Lead | 250 | --- | 5 | |
| Mercury | 2 | --- | 0.09 | U |
| Silver | --- | --- | 0.6 | U |
| Zinc | --- | --- | 72 | |
| LPAH (ug/kg dry) | | | | |
| Acenaphthene | --- | --- | 61 | U |
| Anthracene | --- | --- | 61 | U |
| Fluorene | --- | --- | 61 | U |
| Naphthalene | 5,000 | --- | 61 | U |
| HPAH (ug/kg dry) | | | | |
| Benzo(a)anthracene | --- | 140 | 61 | U |
| Benzo(a)pyrene | 100 | 140 | 61 | U |
| Benzo(b,k)fluoranthenes | --- | --- | 61 | U |
| Benzo(b)fluoranthene | --- | 140 | 61 | U |
| Benzo(k)fluoranthenes | --- | 140 | 61 | U |
| Chrysene | --- | 140 | 61 | U |
| Dibenzo(a,h)anthracene | --- | 140 | 61 | U |
| Fluoranthene | --- | --- | 61 | U |
| Indeno(1,2,3-c,d)pyrene | --- | 140 | 61 | U |
| Pyrene | --- | --- | 61 | U |
| CHLORINATED HYDROCARBONS (ug/kg dry) | | | | |
| 1,2,4-Trichlorobenzene | --- | --- | 6.1 | U |
| 1,2-Dichlorobenzene | --- | --- | 6.1 | U |
| 1,4-Dichlorobenzene | --- | 42,000 | 6.1 | U |
| Hexachlorobenzene | --- | 630 | 0.99 | U |
| PHTHALATES (ug/kg dry) | | | | |
| Bis(2-ethylhexyl)phthalate | --- | 71,000 | 61 | U |
| Butyl benzyl phthalate | --- | --- | 6.1 | U |
| Di-n-butyl phthalate | --- | --- | 61 | U |
| Di-n-octyl phthalate | --- | --- | 61 | U |
| Diethyl phthalate | --- | --- | 61 | U |
| Dimethyl phthalate | --- | --- | 6.1 | U |

| CHEMICAL | Method A[1] | Method B[2] | DMMU 4 | |
|---|---|---|---|---|
| PHENOLS (ug/kg dry) | | | | |
| 2,4-Dimethylphenol | --- | --- | 6.1 | U |
| Pentachlorophenol | --- | 8,300 | 30 | U |
| Phenol | --- | --- | 61 | U |
| MISCELLANEOUS EXTRACTABLES (ug/kg dry) | | | | |
| Benzoic acid | --- | --- | 610 | U |
| Benzyl alcohol | --- | --- | 30 | U |
| Dibenzofuran | --- | --- | 61 | U |
| Hexachlorobutadiene | --- | 13,000 | 0.99 | U |
| N-Nitrosodiphenylamine | --- | 200,000 | 6.1 | U |
| PESTICIDES AND PCBs (ug/kg dry) | | | | |
| Aldrin | --- | 59 | 0.99 | U |
| Chlordane | --- | 2,900 | 2 | U |
| Dieldrin | --- | 63 | 2 | U |
| Heptachlor | --- | 220 | 0.99 | U |
| Heptachlor epoxide | --- | 110 | 0.99 | U |
| Lindane | 10 | 770 | 0.99 | U |
| Total DDT | --- | --- | 2 | U |
| DDT | 3,000 | 2,900 | 2 | U |
| DDE | --- | 2,900 | 2 | U |
| Total PCBs | 1,000 | 500 | 14 | U |

[1]Soil, Method A, Unrestricted Land Use, Table Value

[2]Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), u

Y = estimated concentration

U = undetected

QL = laboratory qualifier