

Prepared by:
Dredged Material Management Office
Seattle District, U.S. Army Corps of Engineers

MEMORANDUM FOR: RECORD

August 8, 2019

SUBJECT: DMMP RECENCY EXTENSION FOR DREDGING AT THE WESTROCK LONGVIEW FACILITY (FORMERLY KNOWN AS LONGVIEW FIBRE DBA KAPSTONE KRAFT PAPER CORPORATION), LONGVIEW, WASHINGTON (USACE PERMIT NWS-2014-451).

1. **Introduction.** This memorandum supplements the 13 February 2014 Suitability Determination Memorandum (DMMP, 2014) and the 23 July 2018 Re-Ranking Memorandum (DMMP, 2018) and reflects the consensus determination of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Washington Departments of Ecology and Natural Resources, and the Environmental Protection Agency) regarding the application of the DMMP recency guidelines to proposed dredging at Westrock¹'s facility on the old mouth of the Cowlitz River ("Westrock") in Longview, Cowlitz County, Washington. All dredged material is proposed for flow-lane disposal in the Columbia River.
2. **Background.** The 13 February 2014 Suitability Determination determined that dredged material from Westrock was suitable for flow-lane disposal in the Columbia River; the recency period was valid through January 2019 (DMMP, 2014). Subsequently, the 23 July 2018 DMMP Re-Ranking Memorandum downgraded the project rank from low-moderate to low, thus extending the recency by one year. In addition, the 2018 DMMP Memorandum extended the recency by one month to coincide with disposal windows. The effective recency expiration set forth by DMMP (2018) was thus February 15, 2020.

In April 2019, the U.S. Army Corps of Engineers (USACE) Portland District conducted sediment characterization activities of the Old Mouth Cowlitz River Federal Navigation Side Channel (CWM FNC) to support navigation operation and maintenance (O&M) dredging in July-August 2019 (PSET, 2019). A significant portion of Westrock's 2013 characterized dredged material footprint (DMMP, 2014) includes the CWM FNC, but the 2014 DMMP Suitability Determination also included some areas outside of the CWM FNC as well.

In July 2019, Westrock alerted the DMMP that they are planning to conduct maintenance dredging during the fall 2020 thru February 2021 work window. Given their existing recency expiration of February 2020 and the availability of new (2019) sediment data from Portland District, Westrock requested DMMP consideration for a recency extension.

3. **Evaluation.** The DMMP considered multiple lines of evidence to determine the appropriateness of a recency extension:

2014 DMMP Suitability Determination. The sediment data collected in 2013 were originally

¹ Westrock was formerly known as Longview Fibre Paper and Packaging doing business as Kapstone Kraft Paper Corporation.

compared against 2006 interim freshwater screening levels. A re-analysis of the 2013 data against current DMMP (2018) freshwater screening level criteria revealed a few missing analytes (nickel, carbazole, endrin ketone, 2 and 4 DDx isomers), but otherwise, all detected and non-detected results are below current DMMP SL1 criteria.

2019 Portland District sediment sampling. In April 2019, the USACE Portland District collected three (3) grab samples from within the CWM FNC and composited them into a single Dredged Material Management Unit (DMMU) composite sample (Figure 1). All sediment chemical data met the 2018 Sediment Evaluation Framework (SEF) guidance, and the Portland Sediment Evaluation Team (PSET) determined that the dredged material in the CWM FNC is suitable for unconfined, aquatic disposal.

The DMMP freshwater screening criteria are identical to most of the SEF freshwater guidance, with the only difference being adoption of a background-based nickel value by DMMP. Table 2 compares the single April 2019 Portland District sediment composite sample (CWM-COMP) results to both the SEF and DMMP freshwater Screening Level 1 (SL1). All detected and non-detected concentrations are also below the DMMP SL1 criteria.

Ecology Spills and Cleanup databases. A review of Ecology's online spills database on July 18, 2019 showed no spills within a half-mile of the proposed dredging area. A review of Ecology's publicly available cleanup database ("What's in My Neighborhood") revealed two existing cleanups in the project area that were either action complete/performance monitoring or No Further Action.

- 4. Summary.** On the basis of the existing information, the DMMP agencies are in agreement that a one-year recency extension for the Westrock Longview project is acceptable as long as no significant changed conditions occur which may affect the suitability of the material. **The recency period for Westrock Longview is extended to February 15, 2021.** Table 1 summarizes the project details and tracking information.

Table 1. Project Summary

Project rank	Low
USACE Permit Application Number	NWS-2014-451
Previous Recency Expiration	February 15, 2020
Updated Recency Expiration	February 15, 2021

Dredging and disposal after February 15, 2021 will require the development of a sampling and analysis plan for additional sampling and testing which must be approved in advance by the DMMP agencies. The project may not continue to rely on Corps testing, since the navigational channel testing does not include Westrock's nearshore berth areas.

The DMMP agencies do not make decisions regarding Columbia River flow-lane placement location. Disposal at the selected Columbia River flow-lane site must be coordinated with USACE Portland District.

5. References.

DMMP, 2014. Determination Regarding the Suitability of Proposed Dredged Material from Longview Fibre Paper and Packaging Doing Business as Kapstone Kraft Paper Corporation, Cowlitz County, WA Evaluated under Section 404 of the Clean Water Act for Flow-Lane Disposal in the Columbia River or for Beneficial Use. Prepared for the DMMP agencies by the Dredged Material Management Office, February 13, 2014.

DMMP, 2018. Re-Ranking of the Kaptstone Paper and Packaging Project, Longview, Washington in Accordance with Dredged Material Management Program Policy.

PSET, 2019. Portland Sediment Evaluation Team (PSET) Level 21 dredged material suitability determination for the U.S. Army Corps of Engineers – Portland District' (Corps) operations and maintenance (O&M) dredging for the Old Mouth Cowlitz River Federal Navigation Side Channel (CWM FNC) near the Columbia River at river mile (RM) 67.7. Prepared by EPA-Region 10 Water Division, Wetlands and Ocean Section for the PSET agencies, July 22, 2019.

USACE Portland District, 2019. Old Mouth Cowlitz River Federal Navigation Side Channel, Cowlitz County, Washington, Sediment Quality Evaluation Report. Prepared by the USACE Portland District Sediment Quality Team, July 8, 2019.

6. **Agency Signatures.**

signed copy on file in DMMO - Seattle District office

Date Heather Whitney Fourie – U.S. Army Corps of Engineers, Seattle District

Date Justine Barton – U.S. Environmental Protection Agency

Date Laura Inouye, PhD. – Washington State Department of Ecology

Date Shannon Soto – Washington State Department of Natural Resources

Copies Furnished:

DMMP agencies

Danette Guy, USACE Regulatory Project Manager

DMMO File

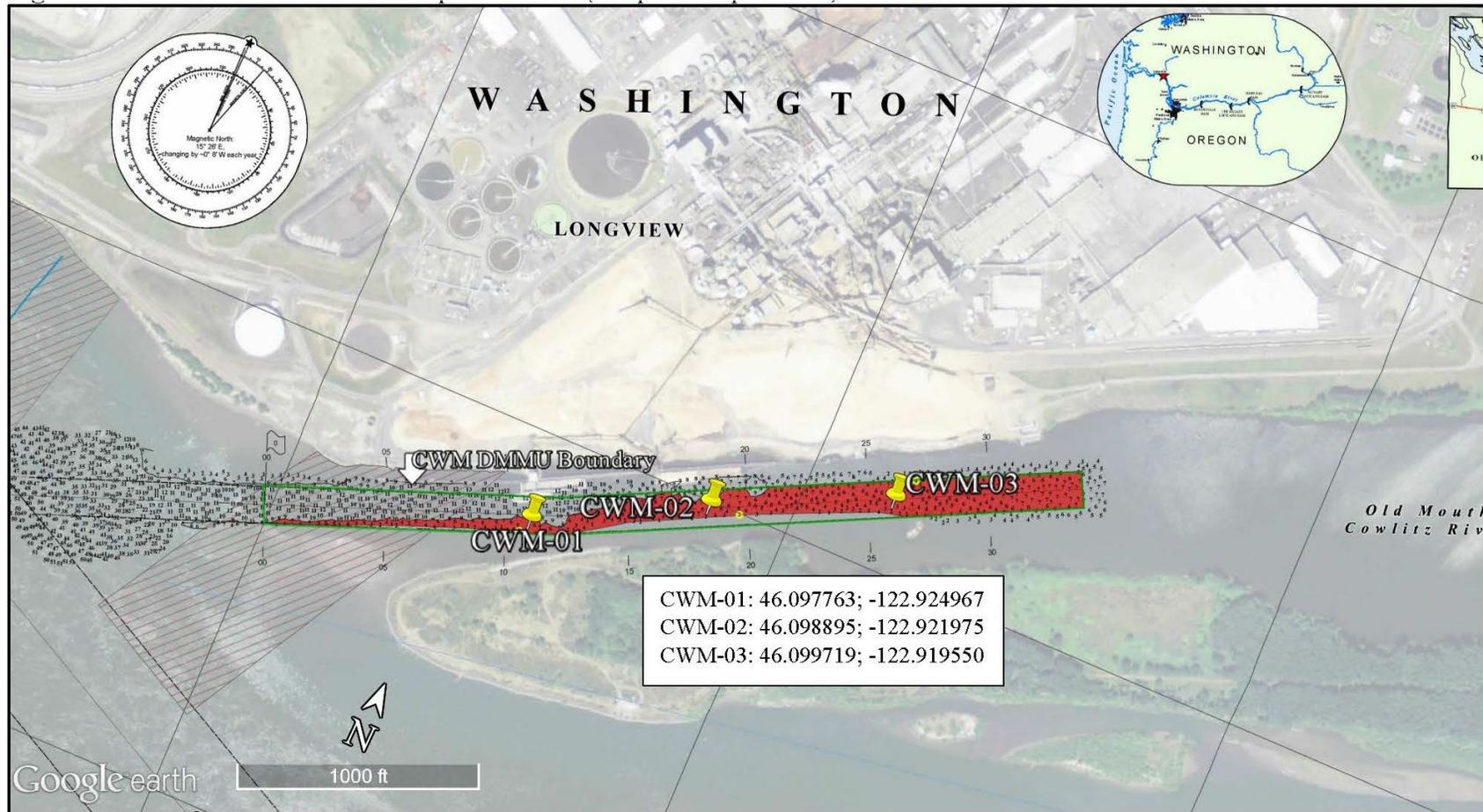
Table 2. Chemical Results from the April 2019 Portland District Sediment Characterization of the Federal Navigation Channel at the Old Mouth of the Cowlitz River.

Parameter	Units	CWM-COMP (4/4/2019)	SEF SL1	DMMP SL1
Conventionals				
Grain size (%)				
gravel (>2.00 mm)	%	0.3	--	--
sand (0.063 to 2.00 mm)	%	37.7	--	--
silt (<0.063 mm)	%	62.0	--	--
clay (<0.0032 mm)	%	0.0	--	--
finest (silt + clay)	%	62.0	--	--
Total organic carbon (%)	%	0.58	--	--
Total solids (%)	%	62.8	--	--
Total volatile solids (TVS)	%	not measured	--	--
Total Sulfides	%	not measured	--	--
Ammonia	%	not measured	--	--
Metals				
Arsenic	mg/kg	1.51	14	14
Cadmium	mg/kg	0.06	2.1	2.1
Chromium	mg/kg	6.34	72	72
Copper	mg/kg	23.5	400	400
Lead	mg/kg	1.65	360	360
Mercury	mg/kg	0.0345	0.66	0.66
Nickel	mg/kg	7.98	26	38
Selenium	mg/kg	0.75 U	11	11
Silver	mg/kg	0.05	0.57	0.57
Zinc	mg/kg	26.3	3,200	3,200
Organometallic Compounds (site-specific)				
Monobutyltin ion (bulk)	ug/kg	not measured	540	540
Dibutyltin ion (bulk)	ug/kg	not measured	910	910
Tetrabutyltin ion (bulk)	ug/kg	not measured	97	97
PAHs				
Naphthalene	ug/kg	5.6 J	--	--
Acenaphthylene	ug/kg	19.9 U	--	--
Acenaphthene	ug/kg	19.9 U	--	--
Fluorene	ug/kg	8.0 J	--	--
Phenanthrene	ug/kg	38.2	--	--
Anthracene	ug/kg	10.3 J	--	--
2-Methylnaphthalene	ug/kg	19.9 U	--	--
Total low molecular weight PAHs	ug/kg	62.1 J	--	--
1-Methylnaphthalene	ug/kg	19.9 U	--	--
Fluoranthene	ug/kg	100	--	--
Pyrene	ug/kg	78.4	--	--
Benzo(a)anthracene	ug/kg	30.1	--	--
Chrysene	ug/kg	41	--	--

Parameter	Units	CWM-COMP (4/4/2019)	SEF SL1	DMMP SL1
Benzo(b,j,k)fluoranthene	ug/kg	69.1	--	--
Benzo(a)pyrene	ug/kg	20.1	--	--
Indeno(1,2,3-cd)pyrene	ug/kg	19.9 U	--	--
Dibenzo(a,h)anthracene	ug/kg	19.9 U	--	--
Benzo (g,h,i) perylene	ug/kg	19.9 U	--	--
Total high molecular weight PAHs	ug/kg	338.7	--	--
Total PAH's	ug/kg	400.8 J	17,000	17,000
Phthalates				
Di-n-butyl phthalate	ug/kg	19.9 U	380	380
Bis(2-ethylhexyl)phthalate	ug/kg	49.7 U	500	500
Di-n-octylphthalate	ug/kg	19.9 U	39	39
Phenols				
Phenol	ug/kg	25.3	120	120
4-Methylphenol (p-cresol)	ug/kg	19.9 U	260	260
Pentachlorophenol	ug/kg	99.5 U	1,200	1,200
Miscellaneous Extractable Compounds				
Benzoic acid	ug/kg	139	2,900	2,900
Carbazole	ug/kg	19.9 U	900	900
Dibenzofuran	ug/kg	5.9	200	200
Pesticides				
DDD's (2 plus 4 isomers)	ug/kg	1.0 U	310	310
DDE's (2 plus 4 isomers)	ug/kg	1.0 U	21	21
DDT's (2 plus 4 isomers)	ug/kg	1.0 U	100	100
Dieldrin	ug/kg	1.0 U	4.9	4.9
beta-Hexachlorocyclohexane	ug/kg	0.5 U	7.2	7.2
Endrin ketone	ug/kg	1.0 U	8.5	8.5
Polychlorinated Biphenyls - Aroclors				
PCB-Aroclor 1016	ug/kg	4 U	--	--
PCB-Aroclor 1221	ug/kg	4 U	--	--
PCB-Aroclor 1232	ug/kg	4 U	--	--
PCB-Aroclor 1242	ug/kg	4 U	--	--
PCB-Aroclor 1248	ug/kg	4 U	--	--
PCB-Aroclor 1254	ug/kg	4 U	--	--
PCB-Aroclor 1260	ug/kg	4 U	--	--
PCB-Aroclor 1262	ug/kg	4 U	--	--
PCB-Aroclor 1268	ug/kg	4 U	--	--
Total PCBs (except 1262 and 1268)	ug/kg	4 U	110 (22†)	110
Total Petroleum Hydrocarbons				
Diesel range	mg/kg	9.38	340	340
Residual range	mg/kg	49.5	3,600	3,600

U = Non-detection at the method reporting limit (MRL) or method detection limit (MDL),
MRL reported; J = Estimated value between MDL and MRL;
† = ODEQ (2007) freshwater fish-based bioaccumulation screening level value (SLV)

Figure 1. April 2019 grab sample locations from the CWM FNC.



Source: Figure 1 of Old Mouth Cowlitz River Federal Navigation Side Channel, Cowlitz County, Washington, Sediment Quality Evaluation Report (USACE Portland District, 2019).