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**MEMORANDUM**

From: Andrew MacKay, Envirochem                      Date: February 15, 2019  
To: Anika Calder, VFPA                                      Cc: Andre Olivier, PCT  
Tiffany Paul, ECCC    Colin Reddin, PCT  
Mark Adams, Envirowest  
RE: **SUMMARY PACIFIC COAST TERMINAL DREDGE WEEKLY MONITORING REPORT #9  
JANUARY 28 – FEBRUARY 3, 2019**

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This report summarizes capital dredging conducted in Port Moody Arm, BC for the week of January 28 to February 3, 2019. All work continued under relevant permits issued by VFPA, ECCC, DFO and Transport Canada.

**OPERATIONS SUMMARY**

Cutter suction works continued for the week with two shifts per day (e.g., 6 am to 10 pm) in the navigation channel to January 31, 2019. On February 1, 2019, the FRPD 309 trailing suction hopper dredge arrived at PCT for a trial period (under VFPA permit) however, the test dredge was not successful. The FRPD Columbia cutter suction operations resumed the next day on February 2, 2019. No work occurred February 3, 2019.



The surveyed volume dredged for the reporting period was 16,592m<sup>3</sup> and the cumulative total through February 2, 2019 was 184,255m<sup>3</sup>.

Sediment continued to be discharged with turbidity controlling silt curtains in the new containment basin. The added harbour boom continued to effectively contain the majority of foam to the sediment discharge area.

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## **TURBIDITY MONITORING**

### Open Water Monitoring – Cutter Suction Dredging

As per the predictive model, no exceedances of induced turbidity of 8 NTU over 24 hours at 300m from the disposal area were measured during operations. Similar to previous weeks, turbidity levels are remaining close to background and at depth (reference 5m) relative to the surface to 3m interval.

TSS sample results at each 300m transect from the containment structure and Reed Point were collected on January 31, 2019. Results for this reporting period indicate Total Suspended Solids (TSS) were very low, near non-detect (2.0 mg/L) levels at these sampling locations.

### Shoreline Monitoring Results - Turbidity

Shoreline turbidity was measured on January 29 and February 2, 2019. Results indicate very low levels predominantly at or below the new background collected on January 7, 2019 with noted exception of at Reed Point. The modestly elevated level (20.28 mg/L) may have been attributed to discharges from two nearby storm drains or natural induced turbidity from tidal drainage during low tide or waves.

### Shoreline Monitoring Results - Total Suspended Solids

On January 29, 2019, shoreline Total Suspended Solids samples were collected and subsequently analyzed. Values were at or very close to non-detect and will be assessed with other shoreline data during the post-dredge monitoring and reporting period.

## **FISH, MARINE MAMMAL AND CRAB SALVAGE OBSERVATIONS**

No dead or distressed fish or marine mammals were observed in the dredging or disposal area. Six (6) pot traps were set along the gangway(s) of Berths 1 and 2 between 9:12 am and 9:45 am January 28, 2019 and retrieved between 9:00 am and 9:25 am January 29, 2019. Crabs were released into Port Moody Arm west of the pier at Barnet Marine Park at 9:55 am, January 29, 2019. In total:

- 15 adult male Dungeness crabs were salvaged; carapace width ranged from 11.0 to 14.0cm;
- 5 adult female Dungeness crabs were salvaged; carapace width ranged from 11.5 to 13.0cm.

## **ARCHAEOLOGICAL**

No cultural (archaeological) artifacts were observed in the dredge or disposal works areas.