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MEMORANDUM

From: Andrew MacKay, Envirochem **Date:** March 5, 2019
To: Anika Calder, VFPA **Cc:** Andre Olivier, PCT
Tiffany Paul, ECCC Colin Reddin, PCT
Mark Adams, Envirowest
RE: PACIFIC COAST TERMINAL DREDGE
SUMMARY WEEKLY MONITORING REPORT #12 FEBRUARY 18-24, 2019

This report summarizes capital dredging conducted in Port Moody Arm, BC for the week of February 18-24, 2019. All work continued under relevant permits issued by VFPA, ECCC, DFO and Transport Canada.

OPERATIONS SUMMARY

Cutter suction works continued for the week initially with three shifts per day (24 hours) on February 19 and 20, 2019 then two shifts per day (e.g., 6 am to 10 pm) for the remainder of the week for works in the navigation channel in front of Reed Point Marina. The surveyed volume dredged for the reporting period was 56,475m³ and the cumulative total through February 24, 2019 was 356,249m³. Sediment continued to be discharged with turbidity controlling silt curtains in the containment basin. The added harbour boom continued to effectively contain the majority of foam to the sediment discharge area.

TURBIDITY MONITORING

Open Water Monitoring

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, measurements indicate that 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 February 21, 2019. Results for this reporting period indicate Total Suspended Solids (TSS) declined to more common lower readings compared to the previous week. Causation of the previous week elevated TSS readings at these locations was most likely unrelated to operations.

Shoreline Monitoring Results - Turbidity

Shoreline turbidity was measured on February 19, 21, 22, and 23, 2019. Results indicate very low levels predominantly at or below the new background collected on January 7, 2019.

Shoreline Monitoring Results - Total Suspended Solids (TSS)

Shoreline TSS samples were collected once on February 21 and 22, 2019, once during routine water monitoring and once during sedimentation plate monitoring. Within approximately 12 hours of each monitoring episode, TSS readings increased likely due to natural induced suspension from a strong ebb tide (3.3m).

FISH, MARINE MAMMAL AND CRAB SALVAGE OBSERVATIONS

No dead or distressed fish or marine mammals were observed in the dredging or disposal area. Eight (8) traps were set adjacent to the shipping channel, fronting Reed Point Marina, on February 19, 2019 between 9:04am and 9:13am. The traps were retrieved between 8:51am and 9:16am on February 20, 2019. Crabs were released west of the pier at Barnet Marine Park between 9:22am and 9:35am. Overall, fifteen (15) male Dungeness crabs were salvaged - carapace width ranged from 10.5 to 16.0 cm. One (1) female Dungeness crab was salvaged with 12.0 cm carapace width.

ARCHAEOLOGICAL

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