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# **MEMORANDUM**

From: Andrew MacKay, Envirochem Date: January 15, 2019

To: Anika Calder, VFPA Cc: Andre Olivier, PCT
Tiffany Paul, ECCC Colin Reddin, PCT

Mark Adams, Envirowest

RE: PACIFIC COAST TERMINAL DREDGE WEEKLY MONITORING REPORT #5

**JANUARY 2-6, 2019** 

This report summarizes capital dredging conducted in Port Moody Arm, BC for the week of January 2-6, 2019. All work continued under relevant permits issued by VFPA, ECCC, DFO and Transport Canada.

### **OPERATIONS SUMMARY**

Cutter suction works recommenced January 2, 2019. The majority of time (single shift) was spent re-mobilizing. There were no operations on Sunday, January 6, 2019. Sediment continued to be discharged with turbidity controlling silt curtain in the southeast portion of the existing containment basin. Foam emerging from the discharge area was observed for a second week, limited to within approximately 200m of the diffuser discharge before dissipating on the surface.

### **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. 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 were collected on January 2 and 4, 2019. Lab results for this reporting period were significantly lower (e.g., over 90% than the previous reporting period. This may be attributed to a significant reduction in solids discharged from adjacent creeks during previous periods of heavy rain, with TSS (4.0 mg/L) and turbidity (1.26 NTU) values low on January 5, 2019 (Schoolhouse Creek).

# **Shoreline Monitoring Results**

Shoreline turbidity was measured on January 2, 2019 and January 4, 2019. Results predominantly indicate levels at or below background (July 2018) with isolated exceptions possibly due to elevated turbidity in nearby creeks due to heavy rain noted above. Low turbidity on January 5, 2019 was consistent with low turbidity measured at Schoolhouse Creek on that same date.

# FISH, MARINE MAMMAL AND CRAB SALVAGE OBSERVATIONS

No dead or distressed fish or marine mammals were observed in the dredging or disposal areas. Dungeness crabs were salvaged along the southern margin of the navigation channel, from about Reed Shoals to Reed Point, on January 02-January 03, 2019. Six (6) pot traps were set from 9:25am to 9:46 am January 2, 2019 and retrieved from 8:56am to 9:05am on January 3, 2019.

Crabs were released into Port Moody Arm west of the pier at Barnet Marine Park from 9:15am to 9:22am, January 03, 2019. Results were as follows:

- 10 subadult-adult male crabs were salvaged; carapace width ranged from 11.5 to 15.5 cm.
- 2 subadult-adult female crabs were salvaged; carapace width ranged from 11.5 to 12.0 cm.



#### **ARCHAEOLOGICAL**

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

