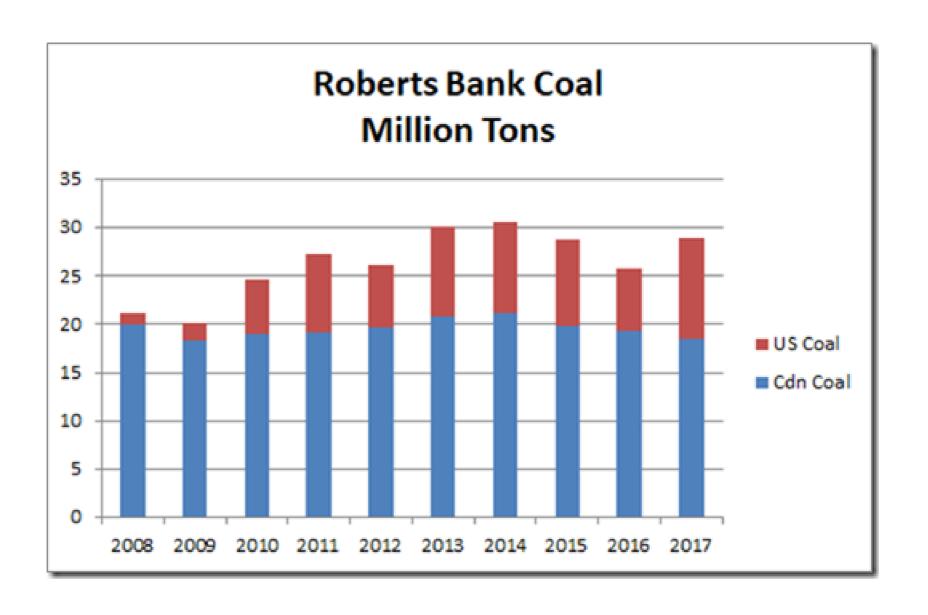


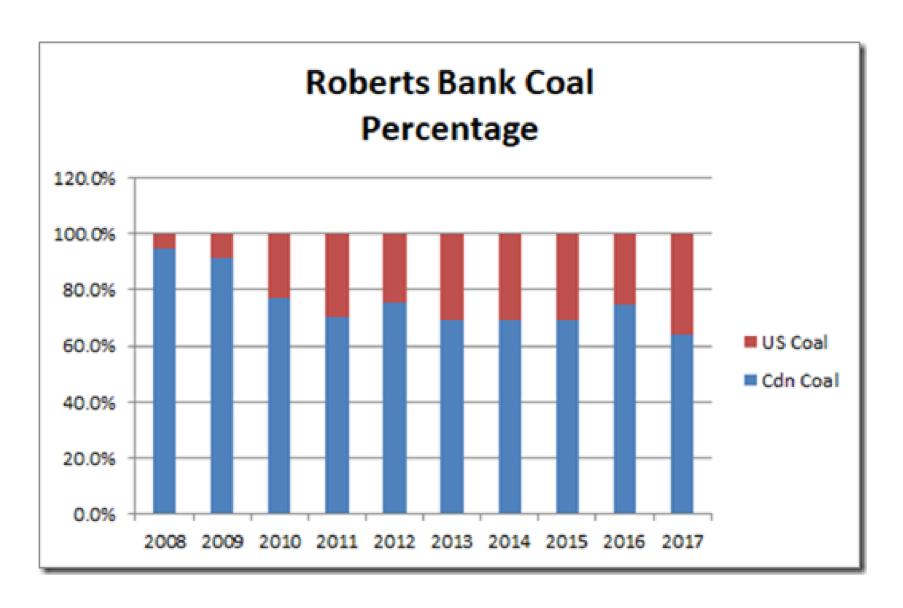
REGIONAL ANCHORAGES MEETING JANUARY 25, 2019

# ROBERTS BANK (Westshore Terminals)

- Vancouver is largest coal port in North America
- Vancouver ships ~3 times total coal shipped from west coast of US
- Roberts Bank ships ~80% of Vancouver coal
- 61% of coal through Roberts Bank (2017) was Canadian metallurgical (steel making) coal;
   36% dirty American thermal (power generating) coal
- No American thermal coal is shipped from west coast of US

- From 1.05 MT (5% RB total coal) in 2008 to 10.45 MT (36% RB total coal) in 2017
- From ~7.4 MT (~34% RB total) Q1-Q3 2017
   to ~9.2 MT (~40% RB total) Q1-Q3 2018
- Possible 4 MT/yr to be shipped from approved new Surrey Fraser Docks facility

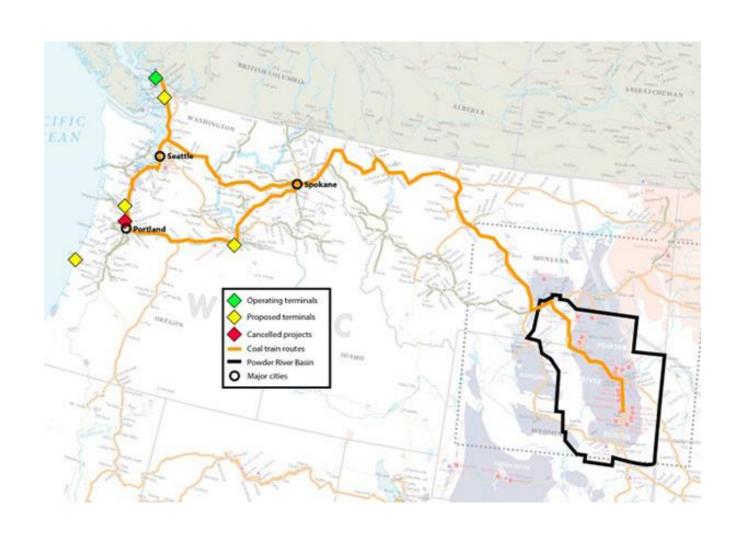






New coal shipping terminal proposed at Surrey Fraser Docks

# SHIPPING ROUTE TO ROBERTS BANK



# WHY ROBERTS BANK INSTEAD OF WESTERN US??

- Shipping of thermal coal rejected by California, Oregon & Washington by tough environmental and health regulations
- Strong public resistance in US
- Canada's environmental regulations severely weakened in 2012
- No Canadian import tariffs, carbon tax, or other levies

## STRONG PUBLIC RESISTANCE IN US



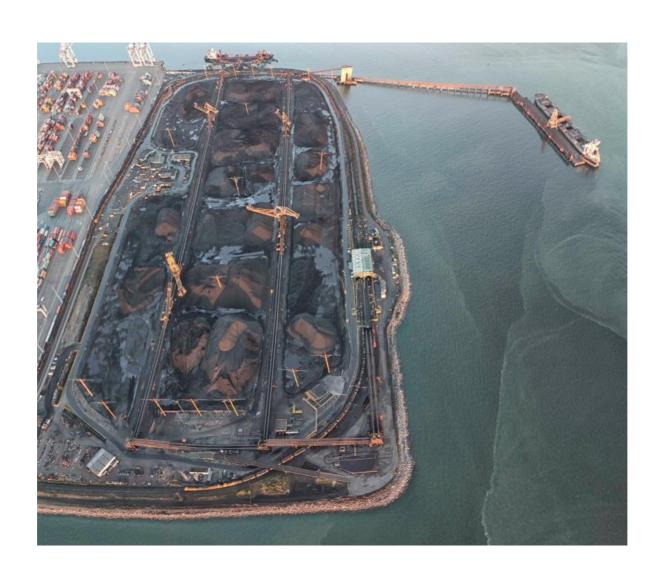
#### WHAT ARE THE CONCERNS?

- Coal contains toxic impurities: mercury, sulphur, arsenic, lead, cadmium & other heavy metals (coal also contains several rare earth elements)
- Airborne coal dust from uncovered trains cars and uncovered mounds of stockpiled coal
- Runoff water percolating through coal mounds
- Fire
- Accidents

# AIRBORNE COAL DUST



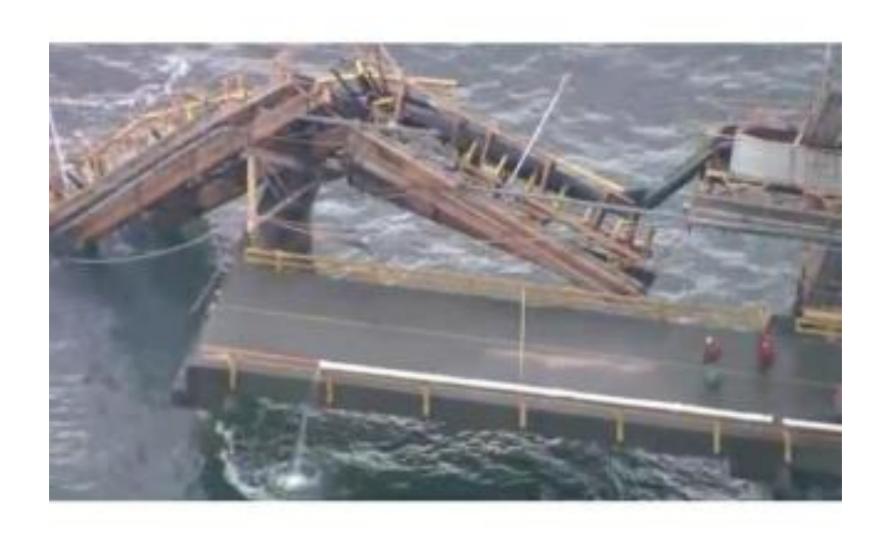
# WATER RUNOFF



## FIRE AT ROBERTS BANK 2013



## ACCIDENT AT ROBERTS BANK 2012



#### CANADA'S POLICY REGARDING COAL?

- In November, 2017 Canada and UK co-founded the Powering Past Coal Alliance (PPCA)
- PPCA's mission is "to advance the transition away from unabated coal power generation"
- Canada has committed to phase-out traditional coal-fired electricity by 2030
- In December, 2018 Canada pledged up to \$275 million to assist developing countries in Asia to phase-out coal-fired electricity

#### CANADA'S POLICY REGARDING COAL?

- Favours approval of coal shipping facilities due to weak environmental regulations
- Welcomes unlimited flow through shipping of US thermal coal without taxes or levies
- Allows foreign owned shippers of US coal to trespass on Canadian waters
- Allows all ships to park free of charge for weeks while waiting for port date

# SUMMARY (CANADIAN DOORMATS)

- Disparity between Canada/BC environmental protection and that of west coast US states
- Disparity between Canada/BC shipping operations and those of west coast US states
- Disparity between coal policies of Canadian government and coal policies of Canadian government
- More public awareness needed soon