Coal companies have dangerous plans to transport dirty, climate-disrupting coal through the Northwest for export to Asia. Every day, around the clock, as many as 20 trains carrying coal would pass through Washington communities, releasing toxic coal dust into the air.

Coal would load onto barges and ships at terminals in Longview and Cherry Point, near Bellingham, creating even more dust. Coal dust harms human health and the environment, increases the risk of train derailments, and hurts farms and small businesses along rail routes.

**COAL TRAINS AND TERMINALS BRING COAL DUST WITH THEM**

Coal companies ship their dirty product in open-top rail cars, allowing large amounts of coal dust to escape along train routes. The BNSF’s own study found that each car on a coal train loses between 500 and 2000 pounds of coal dust on its journey.1 This means that a typical 125-car coal train could release as much as 250,000 pounds of coal per trip.

Once airborne, coal dust blows through farms and neighborhoods, polluting crops, waterways and the air we breathe. The problem travels with the trains: a recent study found evidence consistent with coal dust escaping from trains passing through a residential neighborhood in Seattle next to Puget Sound.2

Chemical sprays called surfactants can be used to reduce coal dust, but they are not always used, don’t provide full protection and may cause soil, air and water contamination that can harm people and wildlife.3, 4

High levels of toxic coal dust have also been found near coal terminals. Soil samples taken more than half a mile away from a coal terminal in Norfolk, VA, contained up to 20 percent coal dust.5 And sediment samples from the sea floor near a coal terminal in Richmond, B.C., contained up to 10 percent coal dust.6

**COAL DUST HARMs OUR HEALTH**

Coal dust contains mercury, arsenic, lead and other toxic heavy metals that are harmful to human health.7 The health risks from exposure to “particulate matter,” including coal dust, include increased rates of childhood bronchitis, asthma, pneumonia, emphysema, heart disease and reduced lung capacity.8

From coalmine to rail line and shipping terminal, coal exports also expose communities to hazardous dust. Among people whose jobs expose them to coal dust, the illnesses have their own name: black lung disease.9, 10 Once mined, coal dust is picked up by the wind and pollutes the air as it travels long distances before settling onto soil and waterways. In Newport, VA, asthma rates for residents near a large coal terminal were two times higher than the city and state average.11

**COAL DUST HURTS OUR LOCAL WATERS**

All along the path of coal exports, dust and debris harm aquatic plants and animals.12 Where coal is stockpiled for shipping, stormwater and wastewater is typically acidic, with runoff that contains high concentrations of copper, iron, aluminum, and nickel.13 This runoff flows into local waterways where it can devastate the delicate chemical balance of aquatic environments.

In the Northwest, many aquatic animals rely on clean water, including our iconic salmon species. But mine wastes containing coal particles can kill young steelhead and cutthroat trout, and coal dust exposure even changes gene activity in juvenile Chinook.14,15 Even though Northwest communities have worked for years to restore...
salmon and steelhead populations, coal companies and BNSF want to transport dirty coal along rail lines next to Puget Sound and the Columbia River, putting critical habitat for these fish at risk.

**COAL DUST THREATENS SAFETY**

Wet coal dust clogs gaps in rail lines, becoming a slick, plastic-like substance that can cause deadly train derailments and fires. BNSF’s Vice President of Transportation testified that coal dust was “absolutely a contributing factor” for back-to-back train derailments in 2005. From 2013 to mid 2014, 120 coal trains derailed, and coal dust can also cause trains carrying hazardous chemicals and explosive oil to derail. Powder River Basin coal—the kind proposed for exports—is highly flammable. Trains carrying this type of coal have been known to arrive at their destinations with rail cars on fire. Coal piles at terminals and ports have been known to spontaneously combust.

**ENDNOTES**

2 Jaffe, Daniel A., Justin Putz, Jeffrey Thayer, Juliane L. Fry, Benjamin Ayres, and Jeffrey R. Pierce, Diesel particulate matter emission factors and air quality implications from in-service rail in Washington State, USA, Atmospheric Pollution Research 5 (2014) 344-351.
9 Landen, Deborah, Wassell, James, McWilliams, Linda, and Ami Patel, “Coal Dust Exposure and Mortality from Ischemic Heart Disease Among a Cohort of U.S. Coal Miners,” American Journal of Industrial Medicine, 54:727-33, (2011).
17 Ibid.
20 Ibid, p. 14

Coal dust is one part of a long list of health, safety, economic, and environmental impacts of dirty and destructive coal exports. A coalition of grassroots volunteers and community leaders are working to keep coal in the ground where it belongs. Get involved at [www.coalfreenorthwest.org](http://www.coalfreenorthwest.org) or [www.powerpastcoal.org](http://www.powerpastcoal.org).