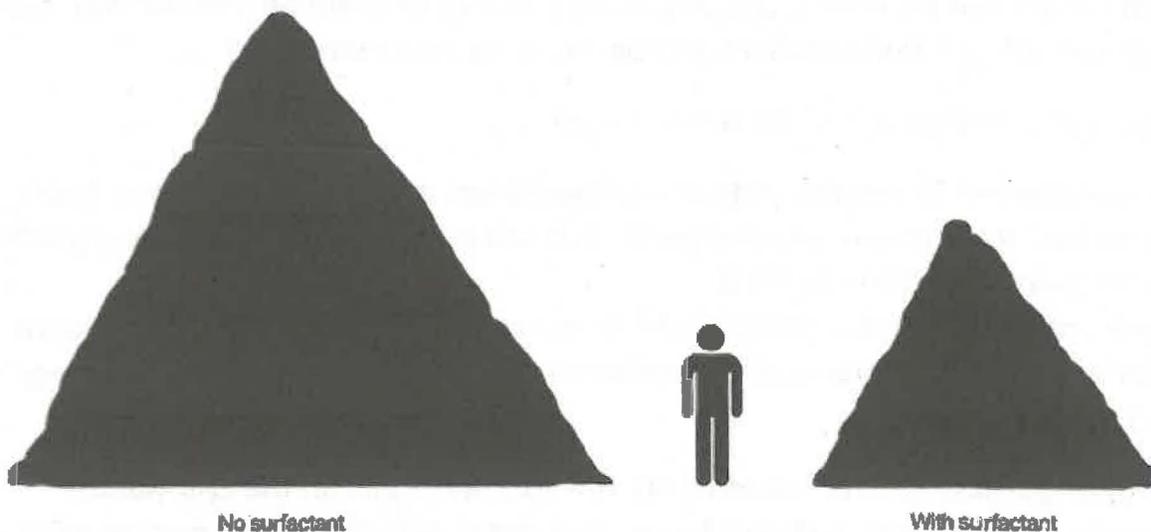




# Sizing Up Coal Dust



BNSF Railway estimates 645 pounds of coal dust can escape from each car in a loaded coal train over a 400-mile journey. The company says chemical surfactants sprayed on top of coal cars can reduce dust escape by 85 percent.

This graphic, drawn to scale, shows how much coal could escape from a 125-car coal train with and without surfactant applied.

NOTE: The human figure represents a 5-foot-10 tall adult; the coal dust piles represent 80,625 pounds of coal (left) and 12,094 pounds of coal dust (right).

(credit: Courtney Flatt)

(Note, I have included the graphic above with credits, to illustrate the point that surfactant will not totally mitigate the issue of escaping coal dust)

Testimony of Alice Shapiro, 7426 SE 21<sup>st</sup> Ave., Portland, OR 97202, 971.279.5819  
alice.shapiro2@gmail.com September 17<sup>th</sup>, 2013

Coal exports are dirty and dangerous for my children, grandchildren, great grandchildren, and for every living creature on this planet. Due to time limitations, I will address just one part of this issue, coal dust and the fact that even when surfactant is applied, the impacts will not be adequately mitigated.

- This dust has impacts on health, including chronic bronchitis, decreased lung function, cancer, and other diseases
- Children's lungs are the most vulnerable
- Burlington Northern Santa Fe (BNSF) Railroad spokesperson reported that
  - in a 400 mile trip, about the distance from the source of the coal to export terminals, each car emits about 645 pounds of coal dust (the weight of a female polar bear, Siberian tiger, or alligator)
  - surfactant prevents 85% of dust emissions
  - there are about 125 cars per train

- The numbers above mean that even with surfactant, 100 pounds of dust per car (nearly my weight), can still escape which means that with only four coals trains per day (and there will be more), 50,000 pounds of coal dust will be spewed into our atmosphere (about the weight of 3 large male African elephants)

Also, train cars have "weep holes" for water to exit.

- The Environmental Protection Agency has reported that rain on coal can flush out heavy metals, such as arsenic and lead. The last study done by the EPA regarding these concerns was done in 1978!
- Polycyclic aromatic hydrocarbons, which are known to greatly damage marine life, are also pollutants in water contaminated by coal dust. This topic has not been well studied either.

I am not willing to gamble on the future of our environment and on the dire health consequences for my children, grandchildren, and great grandchildren, and all other living creatures with whom we share this planet. Further studies are needed before we allow these terminals to be built. There are numerous impacts and I demand that the Department of Ecology not allow these projects to proceed until and only if all of the adverse effects can be 100% mitigated.