

Questions for the proposed Newport silicon smelter:

- Diabetes is a chronic illness that significantly affects the lives of millions of Americans each year. Diabetic patients have significant increases in the risk of neurological, renal, cardiovascular, & psychiatric medical problems as well as a decrease in life expectancy. Their daily routines of self care can be difficult to manage and are vital to their survival. Medications and supplies are costly. In a recent study performed at Washington University in St. Louis, a link was found between even low levels of air pollutants (levels deemed safe levels by regulatory agencies) and the risk of developing diabetes. [Link to article](#) **Please compare the current baseline risk of developing diabetes for the residents in the Newport, WA & Sandpoint, ID area with the predicted baseline risk of developing diabetes that will be present after the smelter is built, assuming that projected emissions for the project are kept at their currently calculated levels. Please advise our communities of the financial burden associated with this presumed increase in prevalence of diabetes. Please explain who will bear this financial cost and what that financial cost is estimated to be.** (*June 29, 2018; The Lancet Planetary Health*)
- The chemical reaction process that the silicon smelter is expected to utilize in an attempt to isolate silicon from silica is very complex. It is summarized in a relatively clean appearing chemical equation but the reality is anything but simple. It is a very complex reaction and there are many separate chemical side reactions that occur within the “chamber” as the entire process is underway. Many of the products of these separate side reactions are quite dangerous. Please elaborate with a **list of what EXACTLY all of the possible chemicals are that COULD come out of the process, and help us to understand how many of these and which of these can be measured as they exit the facility in the smokestack.** Which ones cannot be measured? How dangerous are these chemicals to human health? How many are unregulated?

- **Please evaluate how this project's life cycle emissions will contribute to Washington States' greenhouse gas reduction goals.** This is a hard task because the company proposing this smelter states that the silicon will be used to make solar panels and therefore is a "green" industry. In reviewing: 1. the life cycle/span of solar panels 2. the ability to sell silicon for the production of solar panels, 3. overseas markets and tariffs, and 4. the recent closures/layoffs at the RecSilicon plant in Moses Lake, it seems unlikely that any significant portion of silicon coming from this proposed smelter would actually make its way into any solar panel. Please comment on how "green" this company really would be with close focus on today's markets, and taking into account the total environmental "cost" of the project in terms of fossil fuels burned and diesel fueled railcars/trains/trucks used to ship the coal across the country/world to be used right here in Newport.
- **Please assess the % Black Carbon (BC) component of particulate matter** emitted from the transportation of materials to and from the smelter by train and truck and from the direct smelting facility itself. Correlate with normal ranges and let us know if this is a higher BC content than usual. ?Does it matter? Is it usually measured? Black Carbon has been linked in some studies to an exponentially higher risk of health effects compared with the already significantly dangerous baseline health risks of PM 2.5 in general. **Please review the article attached and tell us why there are still so many cases of black lung in the US despite tighter regulations and safety precautions. How will people living near transportation lines/the Newport smelter with NO personal protective gear like the miners use have their lung health impacted?** We realize that this is not a coal mine BUT there will be a great deal of coal and dust from that coal around and therefore the question is an honest one.
(smithsonian.com; February 8,2018)

