

May 4, 2010

Dear DEQ professionals:

Thank you for the opportunity to provide testimony to the rules to be applied to the PGE Boardman Coal Plant. I am writing as a physician and educator on the impact of pollutants and climate change on human health and on behalf of Oregon Physicians for Social Responsibility.

Boardman had been running since 1987 without adequate mercury controls. We have numerous fish advisories regarding mercury in our state but unfortunately inadequate resources to truly ascribe the mercury found in our fish with Boardman but we do know that Boardman is the greatest current source of mercury pollution in our state and applaud both the DEQ for requiring technology to reduce the mercury that will poison our fish, our children's brains and neurologic function as well as adult cardiac function before 2012.

However, the most costly pollution controls over \$500 million worth will protect humans from sulfur dioxides and nitrogen oxides and are due to be added to the plant in 2014 and 2017 even though they still allow significant persistent pollution.

Sulfur oxides are one of 6 criteria air pollutants that are airway irritants, causing bronchitis, and lower birth weight babies among other medical problems. These compounds also combine in the atmosphere to create small particle pollution. This pollutant is a significant part of the loss of visibility in 11 wilderness areas but more importantly creates small particle pollution that is very harmful to inhale. It allows other pollutants such as heavy metals, dioxins and allergens to be inhaled deep into the lung to do damage and even cross over into the bloodstream. Many of these small particles are wafted high into the atmosphere and pollute areas far from the plant.

The other large class of air pollutants from Boardman is nitrogen oxides. These can combine with ammonia to also create particulate pollution with the same exacerbation of lung and heart disease as the sulfur dioxides. Nitrogen oxides also combine with volatile organic compounds to create ground level ozone which causes asthma, exacerbation of respiratory and cardiac disease and can result in negative outcomes for the unborn child.

Lastly and perhaps more importantly is the impact of this plant on climate change. While controls based on this issue have not yet been promulgated it is worth noting. Nitrogen oxides can reduce upper level ozone which protects us from harmful ultraviolet A and B radiation and reduces this as an atmospheric coolant. One type of NOx is Nitrous oxide a potent greenhouse gas which along with the 5 million tons of carbon dioxide yearly provides our state with the highest point source for greenhouse gas emissions. The health impact of global warming is huge with increasing sea level, increasing heat related deaths, increase ozone pollution and grave loss of our clean

water as snow pack. The economic impact from global warming will far surpass our current economic crisis with its impact on our health.

Oregon PSR feels that the current recommended limits are minimal and should be higher. However it is important to move forward even with this limited permit as it will begin to control the emissions that have slid under regulations since it's inception.

90% of the deaths attributable to NO<sub>x</sub>, SO<sub>2</sub>, and PM pollution from power plants could be avoided with the installation of today's best available emissions controls. Why would we settle for less? Federal rules call for best available technology so there should be no reason for delay.

However, given the large cost of these pollution devices it only makes sense for PGE to choose to close the plant in 2014. To allow a rule or permit to avoid even these basic limits on NO<sub>x</sub> and SO<sub>2</sub> is untenable. These lesser levels will still provide some protections for our lungs, our hearts and our children and hopefully PGE will close the plant and then spare Oregonians from the remaining criteria pollutants, the remaining 10% of mercury emissions and the tons of greenhouse gas emissions that would be emitted for another 6 or 26 years and instead hopefully move us closer to cleaner technology. Closing this plant would encourage and stimulate plans for improved energy efficiency so we can get by without the electricity produced by this dirty plant. PGE's own analysis cites a 2014 closure as a cost-effective strategy so we strongly caution DEQ not to be swayed by other economic arguments in enforcing this rule.

Thank you for your consideration.

Catherine Thomasson, MD