

Submitted via email.  
June 15, 2015

Re: Text Amendment – Commercial Wind Energy Conversion Systems

Dear Steve:

Today Lancaster County has an unique opportunity to dramatically reduce the air pollution from the Sheldon power plant. At this moment in time the Sheldon coal fired plant emits into the atmosphere 140 pounds of **mercury** (can cause brain damage, heart problems and birth defects), 1.9 million tons of **carbon dioxide** (linked to heart attacks, asthma and global warming), 5,300 tons of **sulfur dioxide** (cause lung damage, breathing problems, acid rain), and 7,600 tons of **nitrogen oxides** (breathing problems, more susceptible to chronic lung disease).

At the April 30 Working Group meeting a Health Department staff member pointed out the Sheldon power plant complies with federal EPA standards. That is true but the statement is troubling on 2 points :

1. We do not want our health environment to be on the edge of failing. We should want it to as safe as possible.

2. EPA standards are compromises reached between EPA lawyers and the affected big business lawyers which may not be the best for some peoples' health. Example : in 2013 the EPA proposed standard for carbon dioxide was 1,000 pounds/megawatt-hour. In 2014 the finalized standard is 1,100 pounds/megawatt-hr.

The Sheldon plant output is rated at 225 megawatts. The Hallam Wind Project is rated at 125 megawatts (which is the rate that **taxes** are paid on) but the expected actual yearly generated electricity from wind is expected to be 50 megawatts or 20% of the coal burning plant. It seems reasonable to expect air pollution to decrease 20% with the Hallam Wind project.

In April 2015 it was announced that Monolith Materials Inc is proposing to convert 50% of Sheldon's energy needs to hydrogen. That means coal would only be producing 125 megawatts of electricity and, therefore, the Hallam Wind Project 50 megawatts would decrease air pollution by 40% if the Monolith project is completed.

According to EPA children and the elderly are very susceptible to air pollution. According U.S. Census data Lancaster County has approximately 20,000 children under 5 years of age and 33,000 elderly over 65. Their health must be considered in any calculation of permitting the Hallam Wind Project.

It appears that the feasibility of the Hallam Wind Project will depend upon the permitted night time noise levels. The World Health Organization ( WHO) identifies an annual outdoor night time average of 40 dBA as the level below which no health effects associated with sleep disturbance are expected to occur even among the most vulnerable people (WHO (2009) *Night Noise Guidelines for Europe*).

Because of the **53,000 persons** that will benefit from the reduce air pollution, because other Nebraska Counties noise limits are 50 dBA **and because these turbines will be located AG Districts I urged** the "DRAFT of June 8, 2015 Commercial Wind Energy" page 3 item (i) (2) **be changed from "37 dBA" to 45 dBA.**

Thank you,  
Russell Miller