## Written Testimony of Pamela Miller, Executive Director, Alaska Community Action on Toxics

## SCR 16—A resolution to request the governor to investigate development of large coal power plants

March 18, 2014

Dear Co-Chairs Kelly and Meyer and Members of the Finance Committee:

My name is Pamela Miller, Executive Director of Alaska Community Action on Toxics, a statewide environmental health organization of scientists, public health professionals, and community advocates that conducts research and provides educational programs, technical assistance, and training. We thank you for this opportunity to provide written testimony, as I was unable to attend the hearing this morning. I notice that consideration of SCR 16 is currently tabled, so I provide these comments for your consideration in future discussions. Although we understand that you are trying to solve complex energy and economic problems, we respectfully urge you not to support this measure because of the serious public health implications associated with the development of coal and coal-fired power plants. Coal is not the solution or a suitable "bridging fuel" because it is too costly to the health of Alaskans—instead, please pursue opportunities to increase energy efficiency and safe, clean renewable energy options that protect public health.

The evidence linking coal and disease is strong, with new research adding to this evidence appearing frequently in the peer-reviewed scientific and medical literature. Recent articles in major medical journals provide disturbing estimates of the morbidity and mortality associated with burning coal. Mining, transporting, burning, and disposal of the hazardous wastes of coal combustion, all have major adverse effects on our health. Among the health conditions that are associated with and/ or exacerbated by exposure to hazardous emissions from coal-fired power plants include asthma, stunted lung development, infant mortality, cardiopulmonary diseases (such as cardiac arrhythmias, acute myocardial infarctions, and congestive heart failure), and ischemic strokes. Our study of coal combustion wastes in Fairbanks showed the presence of elevated levels of arsenic and vanadium at concentrations of concern to health. Exposure to these contaminants is associated with harmful health effects such as cancer, neurological and developmental defects. Additional studies completed in the last year show the presence of highly toxic dioxins and heavy metals in the coal ash in Fairbanks.

Coal combustion is also a major source of mercury emissions. Mercury is converted by bacteria to methylmercury upon deposition in aquatic environments where this persistent toxin bioaccumulates and biomagnifies in the food web, thus contaminating fish that are so important in Alaska for subsistence and commercial uses. Mercury exposures, even at extremely low levels, are particularly devastating to young children, causing damage to the developing brain, birth defects, developmental delays, reduced IQ and permanent loss of intelligence, as well as impaired memory, motor ability, and language function. When a mother is exposed to mercury

through consumption of contaminated fish, her developing child is exposed because it crosses the placenta and is concentrated further in the baby.

We count on you to make wise decisions for the benefit of all Alaskans. Please consider the serious public health consequences that would result from further coal development and combustion in our state and look to safer and available alternatives. Thank you for your consideration of these comments.