HB1042 / SB892 are Important Public Health Bills

HB1042 & SB892 will codify a recently blocked regulation to reduce dangerous nitrogen oxide (NOx) emissions from coal-fired power plants. The Maryland Department of the Environment developed this regulation to bring the state’s air quality into compliance with the Environmental Protection Agency’s health-based ozone standards. Maryland is currently the only eastern state in violation of these rules, and as a result, 86% of Marylanders, about 5 million people, live in areas with air classified by the EPA as harmful to breathe because of unacceptably high levels of ozone pollution.

This regulation represents a hard-won consensus. After 15 months of review and stakeholder meetings, this regulation was supported by Raven Power (one of the two affected power companies), accepted by health professionals and environmental groups and unanimously approved by the state’s independent Air Quality Control Advisory Council. Despite this overwhelming consensus, Governor Hogan blocked implementation of this clean-air regulation on his first day in office.

HB 1042 requires that by summer 2016, coal plants must operate their existing pollution controls to optimize NOx reductions. By 2020, the power companies must choose one of three options for the highest-emitting coal-fired power plants: a) install and operate Selective Catalytic Reduction (SCR) emissions controls, b) repower to natural gas, or c) retire the unit.

Maryland lags behind other East Coast states in protecting its citizens from NOx, a dangerous pollutant. SCR technology reduces NOx pollution by 90 – 95% and is widely used in other states. In Delaware, Massachusetts, New Hampshire, New Jersey, South Carolina and Tennessee, 100% of coal-fired units have SCR or will install it by 2016. In West Virginia, Alabama, Ohio, Georgia, Pennsylvania, and Florida, between 70% and 88% of the units have SCR technology. However, only six of Maryland’s fourteen coal-fired units (43%) have SCR emissions control technology.

NOx emissions increase the incidence of cardiovascular and respiratory disease and lead to high rates of premature mortality. These avoidable health impacts cause immeasurable personal suffering, many missed work and school days, and place a heavy burden on our healthcare systems.

- NO₂ (nitrogen dioxide, a NOx compound) reduces pulmonary function, increases respiratory infections, and increases sensitivity to compounds that constrict air passages, worsening asthma.
- NOx is a primary cause of ground-level ozone, and Maryland’s ozone levels far exceed concentrations known to be damaging to human health. Long-term ozone exposure is associated with significant increases in cardiovascular and respiratory disease, hospital admissions, and premature death. Controlling NOx emissions from coal-fired power plants will slash ozone production, particularly on the most hazardous high-ozone days when non-SCR units are Maryland’s largest individual NOx emitters.
• NOx reacts with other pollutants in the atmosphere to cause fine particulate matter (PM2.5), the leading cause of death from air pollution\(^7\). PM2.5 is particularly dangerous because toxins from coal combustion adhere to these tiny particles, including arsenic, mercury, lead, radioactive particles, various carcinogens and an array of other poisons\(^7\). Once inhaled, these minute poisonous particles travel deeply into the respiratory tract, affecting lung function and worsening medical conditions such as asthma, heart disease, chronic obstructive pulmonary disease and bronchitis\(^8\). Installing emissions controls can reverse these trends\(^9\).

• Childhood asthma has increased alarmingly in Maryland; almost 1 in 8 children now suffer from asthma. Children active in outdoor sports in high-ozone regions have a 3x greater chance of developing asthma than do less active children in the same neighborhoods. This adverse effect of outdoor exercise is not seen in low-ozone communities\(^11\).

**NOx is bad for the Bay and for Maryland’s Agriculture and Forestry Industries.** Nitrogen deposition from the atmosphere adds more to the nitrogen load in Chesapeake Bay than either fertilizer or manure runoff, compromising the Bay’s well-being\(^12\). In addition, high levels of ozone reduce plant growth and make plants more susceptible to pests and disease\(^13\), causing adverse economic impacts on agriculture and forestry, two key industries in Maryland.

**Supporting HB1042 will be a vote for Maryland’s public health.**

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2. EPA: [http://www.epa.gov/goundlevelozone/actions.html](http://www.epa.gov/goundlevelozone/actions.html) [http://www.epa.gov/goundlevelozone/actions.html]
12. Final Report Chesapeake Bay Maximum Total Daily Load (MTDL), Appendix L. [http://www.epa.gov/reg3wqdp/tmdl/ChesapeakeBay/tmindex.html](http://www.epa.gov/reg3wqdp/tmdl/ChesapeakeBay/tmindex.html)

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