January 15, 2009

EPA Docket Center
Environmental Protection Agency
Mailcode 6102T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Attention: Docket ID No. EPA-HQ-OAR-2006-0534
Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Hospital/Medical/Infectious Waste Incinerators

To The EPA:

My name is Susan Dayton and I am the Statewide Coordinator for NC Healthy Communities for the Blue Ridge Environmental Defense League. The League is a regional, community-based, non-profit environmental organization with more than 2,500 members and 40 chapters in North Carolina and the Southeast. Our founding principles are earth stewardship, environmental democracy, social justice, and community empowerment (www.bredl.org).

We are appreciative of the EPA’s efforts in scheduling this hearing to hear public comments on the EPA’s newly proposed rules concerning emissions from medical waste incinerators.

Let me say first, that this dangerous method of “getting rid of waste” must be stopped. As such, the EPA should initiate a ban on incineration of medical waste, and in the interim give incentives to industries to start using safer, cleaner methods of incineration.

There are viable alternatives to incineration that are safer, cleaner, do not produce dioxin, and are just as effective at disinfecting medical waste. These include thermal, chemical, irradiative and biological technologies, which can also be used on all types of medical waste, including pathological and chemotherapy waste. BREDL endorses autoclaving and microwaving, which are currently used today as alternatives to incineration. http://www.hcwh.org/us/medicalwaste/alternatives

While the EPA’s newly proposed rules are more stringent in setting lower limits for specific air pollutants, there remain other areas requiring enforcement and in need of further regulation. These include requirements for:

- Bonafide waste minimization plans for both generators and medical waste incinerators to reduce the medical waste stream before it undergoes incineration.
- Substantially reducing or eliminating the wasteful practice of incinerating paper products as an aid in increasing combustion.
- Reducing the amounts of emissions from by-pass events.
- Limiting or reducing greenhouse gases that contribute to global warming.
- Burning pharmaceutical drugs classified as hazardous waste.

The U.S. EPA identifies medical waste incineration as the third largest known source to the environment of highly toxic dioxin, a known carcinogen that has been linked to birth defects, immune system disorders and other harmful health effects. We must protect our health and environment from unhealthy and life threatening emissions from medical waste incinerators that poison our bodies, endanger our children, contaminate our rivers and streams, the food we eat, and the water that we drink.

Today I offer the following comments which focus specifically on the need for more regulations that require a further reduction in toxic air emissions through the requirement of waste minimization plans.

All medical waste incinerators should have waste management plans to segregate and eliminate waste that contribute to mercury, dioxin, furans and other harmful air emissions. Incineration is responsible for about 10 percent of mercury emissions to the environment from human activities. Mercury in the medical waste stream is derived primarily from dentist offices, thermometers, blood pressure gauges, batteries, and fluorescent lamps. Mercury is a potent neurotoxin that can cause developmental defects and harm the brain, kidneys and lungs. Mercury or mercury compounds are known to be toxic to the nervous system, kidney, and immune function. Fish and shellfish can contain higher levels of mercury that may harm an unborn baby or a young child’s developing nervous system. [http://womenshealth.gov/faq/mercury-womens-health.pdf](http://womenshealth.gov/faq/mercury-womens-health.pdf)

In 2006, because of citizen concerns interspersed with repeated violations of mercury emissions that exceeded standard limits, the Stericycle medical waste incinerator in Haw River was required to segregate dental waste from other medical waste. The plan successfully reduced mercury below permit limits. In addition to requiring stricter standards for mercury, requiring the segregation of dental waste would likely result in lowered mercury emissions to meet the proposed new air quality limits and go a step further to provide further reduction in the release of mercury to the environment. See: [http://www.bredl.org/pdf/StericycleDentalWasteManagementPlan.pdf](http://www.bredl.org/pdf/StericycleDentalWasteManagementPlan.pdf)

Chlorinated plastics, principally PVC (i.e., polyvinyl chloride), are a major source of chlorine which is necessary for dioxin and furan emissions from incinerators. Dioxins have been extensively studied in toxicological studies. The most toxic member of the family of compounds called dioxins is 2,3,7,8-TCDD. Human health effects stem primarily from occupational studies of workers. TCDD has been associated with chloracne, metabolism alterations, soft tissue sarcoma, and altered reproductive hormone levels. EPA lists TCDD as a probable human carcinogen. In particular, furans have been associated with dermal, ocular, neurological effects in humans. [http://www.hcwh.org/us/medicalwaste/alternatives](http://www.hcwh.org/us/medicalwaste/alternatives)
EPA has recently released its DRAFT assessment of the human health risks of dioxin and has recommended more studies. This is unfortunate what we currently know about changes in people’s hormone levels in people exposed to dioxins and furans. Animal studies have shown the same effects, in addition to changes in the developing fetus, and reproductive and immune system dysfunctions. 

Presently most hospital waste contains more than twice the amount of chlorinated plastic than regular municipal waste. Hospitals and other healthcare providers can greatly reduce pollution by using alternatives to PVC and mercury-containing medical devices by minimizing the generation of waste and separating reusable and recyclable materials, and by substituting safer non-incineration technologies to treat waste. 
http://www.greenaction.org/pueblo/pr081100.shtml

Even the “best” incinerators produce toxic air emissions, which in turn produce toxic ash with higher concentrations of dioxin and mercury. In essence, cleaner emissions mean more toxic end-products created in the form of ash residuals. Ash from medical waste incinerators must still be disposed of, typically in “state-of-the-art” landfills with “state of the art” liners that will eventually leak resulting in contamination of soil and ground water.

Medical waste incinerators, no matter how compliant, continue to plague our society, posing a threat to human health and the environment. In lieu of the EPA initiating a national ban on medical waste incineration, our recommendations will at least serve to minimize the amounts of waste being burned at medical waste incinerators that continue to poison people, many people perhaps to their deaths.

Thank you for your consideration.

Sincerely,

Susan Dayton
Statewide Coordinator
NC Healthy Communities