

# BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE

[www.BREDL.org](http://www.BREDL.org) PO BOX 44 Saxapahaw, North Carolina 27340 (336) 525-2003 office

February 17, 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:

On behalf of the Blue Ridge Environmental Defense League NC Healthy Communities, I submit to you the following comments to supplement my testimony at the EPA public hearing held at Research Triangle Park, NC, on January 15, 2009.

Based on the recent December, 2008, ruling by the Federal Appeals Court which vacated the "Start-Up, Shutdown, Malfunction" (SSM) exemption for industries covered under section 112 under the Clean Air Act, we submit the following recommendations to the EPA regarding emissions from SSM events:

- EPA should include the ruling by the Federal Appeals Court regarding the inclusion of the regulation of air pollutants from SSM events in the newly proposed regulations for emissions from medical waste incinerators.
- Any loopholes for allowing unlimited emissions from SSM events should be eliminated considering the potential amounts of toxic air pollutants released during a by-pass event.
- Emissions should be included in the calculations of a facility's potential to emit, which in turn determines the applicability of federal requirements.
- Emissions from SSM events should be included in modeling to ensure that new or expanded sources do not cause ambient air quality to exceed health-based levels.
- There should be actual monitoring of SSM events in lieu of modeling to accurately determine the individual types of toxic air pollutants and amounts of toxic air pollutant releases.
- There should be mandatory penalties for SSM events based on the amounts and toxicity of the emissions.
- There should be government-sponsored incentives for commercial companies to employ cleaner alternatives for medical waste such as autoclaving and microwaving. Currently, medical waste incinerators have little incentive to reduce emissions from by-pass events because it is cheaper to do nothing than to do something.

I am also including a short section on the BMWNC medical waste incinerator located in Matthews, NC, in order to paint a clearer picture of these so-called "safe, regulated medical waste incinerators."

## **SSM (by-pass, upsets) events**

Emissions from SSM events have, for decades, allowed industries to freely release pollutants, by-passing all pollution control devices by venting directly into the air. The rules regarding by-pass events are vague and unclear. Some states allow by-pass events to exceed a facility's permit; some do not. Some states include emissions from by-pass events in their emissions inventory while others do not. While some states charge additional fees for emission releases from by-pass events, most do not. The reporting of a by-pass event runs the gamut, ranging from recording a SSM event "within 3 hours, if reasonable," (UT) to "within 1 hour under emergency conditions" (LA) to "within 30 days if requested" (NY).

The pollutants emitted during these SSM events can cause significant adverse health and environmental effects. They contribute to ozone pollution, cause cancers, aggravate respiratory conditions, and cause neurological and reproductive problems. Neighboring communities are subject to cumulative emissions from SSM events. This is seen in the health survey of reports from residents living near the BMWNC in Matthews, NC.

Industry data show that upsets are causing pollution in amounts far above legal limits, and in some cases far exceed annual reporting emissions. Many states fail to track emissions from SSM events or include it in state inventories used to develop pollution control plans.

Excess emissions from by-pass events fall into 3 distinct categories: 1) Emissions due to non-technological failures; 2) Emissions due to foreseeable and preventable causes; and 3) Maintenance emissions. Both the EPA and states have failed to take adequate enforcement action for emissions from SSM events. Many of these events do not include enough data to explain the root causes of such events. In fact, EPA's guidance states that, to qualify for a defense, malfunctions must have been caused by "sudden, unavoidable breakdowns of technology, beyond the control of the owner or operator." However, most emissions from by-pass events are the result of operator error.

[http://www.environmentalintegrity.org/pubs/EIP\\_upsets\\_report\\_FULL.pdf](http://www.environmentalintegrity.org/pubs/EIP_upsets_report_FULL.pdf)

### **Case in point: BMWNC, Matthews, NC**

This site was originally permitted in the 1980s with one incinerator. Since then, both the ownership and number of incinerators has changed several times. Currently, BMWNC holds a valid Title V air quality operating permit. Despite the fact that BMWNC possesses a valid permit, it was recently issued a Notice of Violation (NOV) because it did not submit a complete Title V permit renewal application. The NOV was recently issued by the Mecklenburg County Air Quality (MCAQ) (Meeting with MCAQ, January 26, 2009).

According to logs obtained from the MCAQ, in 2005 the BMWNC in Matthews, NC, had 263 by-pass events totaling 10,397 minutes or 173 hours (see attached logs). The state division responsible for issuing the permit is presented with a log showing the dates and times for each by-pass event, the estimated duration of each event, the duration of the event considered a violation, and the reason for the event.

Although the logs list a reason for the SSM event, it is unclear as to whether it was operator error or a plant malfunction. There is no record of the actual air pollutants or amounts of emissions released into the air from these SSM events. Also, it is unclear how many people were poisoned from toxic air pollutants in emissions from these by-pass events.

## **A history of complaints**

During the 1990s, there were dozens of complaints from residents living near the BMW NC medical waste incinerator who complained of “bad chemical odors, visible emissions, smoke, plumes, dust, odors, ash, soot, haze and the smell of burning plastics” as well as “visible flames emanating from the stacks of BMWNC.” Scary. Some residents found ash on their cars, houses and clothes hung on clotheslines. Others reported finding a white, chalky material on their cars and houses.

Families in Matthews complained of eye, nose and skin irritations, breathing problems, headaches, nausea, nose bleeds, and heart conditions made worse by what they felt was the incinerator (see complaint sheet attached and hard copy of OEEB, NC, health report, April 11, 1991, sent in mail). Residents who lived in the area near the incinerator formed a group that called itself, “Prisoners of Our Homes” (POOH). The group picketed BMWNC frequently, and wrote numerous letters to Mecklenburg County Air Quality concerning the impacts of air pollution from BMWNC on their health and well-being.

Throughout its history of operation, the BMWNC medical waste incinerator has received a number of penalties and violations that have included a lack of pollution control devices (1994); emissions of dioxins, furans, mercury, hexavalent chromium, and hydrochloric acid that exceeded the federal air standards (1999); NOV for failure to report on time, accuracy of reporting and inadequate sorbet flow in the scrubber (2003); and another NOV followed by a civil penalty for failing to demonstrate compliance with the dioxins and furans, and mercury emission standards (2004). (See BMCNC permit renewal, December, 2004, and letter from Denise Lee, BREDL, to John Barry, MCAQ, February 7, 1999).

The Occupational and Environmental Epidemiology Branch (OEEB) of the NC Department of Health and Human Services, NC, conducted a Toxic Air Pollutant survey that found metals above the minimum detection limit (arsenic, beryllium, cadmium, chromium, manganese, nickel, and lead) at three sites within a 1-5 mile radius from BMWNC.

The OEEB survey also found benzene, carbon tetrachloride, and toluene in 50% of samples. Formaldehyde was found in two out of six measurements, and not at levels of concern. However, the levels of arsenic, cadmium, chromium, and benzene indicated an increased lifetime cancer risk for residents greater than the 1 x 10,000,000 risk considered acceptable by the OEEB. We found it odd that the MCAQ did not include this piece of information in its fact sheet on the OEEB’s report on BMWNC (See OEEB letter to John Barry, MCAQ, July 21, 200).

A Cease Operations Order that was sent to BMWNC from the MCAQ, dated October 10, 2000, stated the following:

*Automatic auxiliary burners intended to maintain the 1800-degree temperature not working on units 2 and 3; chamber temperature measurements operating below minimum temperature; continuous monitoring devices not working for units 2 and 3; primary chamber thermocouple not operating for unit 2; opacity in excess of 10-percent for period greater than 10-minutes; ash quench water and hydraulic oil overflowing into gravel parking lot; wash water overflowing into gravel parking lot; quench water being discharged into gravel parking lot and adjacent tributary to Four Mile Creek; gasses generated by units 2 and 3 not being subjected to an 1800-degree minimum temperature in units 2 and 3; and finally, waste being loaded into the primary chamber without having achieved operating temperature in the secondary chamber. (see attached letter to David Schoonmaker, President of BMWNC from MCDAQ, Oct. 10, 2000).*

## **Regulating SSMs: smarter regulations, cleaner air**

On December 19, 2008, a Federal Appeals Court vacated the SSM exemption for industries covered under Section 112 of the Clean Air Act. The opinion for the court by Circuit Judge Rogers is as follows:

ROGERS, *Circuit Judge*: Petitioners challenge the final rules promulgated by the Environmental Protection Agency exempting major sources of air pollution from normal emission standards during periods of startups, shutdowns, and malfunctions ("SSM") and imposing alternative, and arguably less onerous requirements in their place. Because the general duty that applies during SSM events is inconsistent with the plain text of section 112 of the Clean Air Act ("CAA"), even accepting that "continuous" for purposes of the definition of "emission standards" under CAA section 302(k) does not mean unchanging, the SSM exemption violates the CAA's requirement that some section 112 standard apply continuously. Accordingly, we grant the petitions and vacate the SSM exemption.  
[http://www.earthjustice.org/library/legal\\_docs/decision.pdf](http://www.earthjustice.org/library/legal_docs/decision.pdf)

Hospital/medical/infectious waste incinerators (HMIWIs) are covered under Section 129 of the Clean Air Act. The HMIWI proposed rules were issued on December 1, 2008, shortly before Judge Rogers made the decision to vacate the SSM exemption. This leaves a window of time for the EPA to include this decision in the newly proposed rules for medical waste incinerators.

We urge the EPA to include this new ruling in its proposed regulations for medical waste incinerators that will provide further protections for those living in the neighborhood next to the BMWNC medical waste incinerator, as well as those from other communities who live next to medical waste incinerators in Texas, Louisiana, Florida, New York, Massachusetts, Maryland, Indiana ... and the some 6,000 medical waste incinerators around the nation that are continuing to operate in posing a risk to our health and environment.

Thank you for your consideration.

Sincerely,

Susan Dayton  
Statewide Coordinator  
NC Healthy Communities