Medical Waste Incineration

Stericycle medical waste incinerator
Haw River, NC

Overview

Treatment of medical waste is a huge and growing industry. With hospitals generating 25-30 pounds of waste per hospital bed per day, getting rid of this waste is costly and places a burden on our environment. How hospitals choose to eliminate their waste can pose unnecessary risks to public health and the environment.

How is incineration of medical waste harmful?

Incineration technology poses a serious risk to public health and the environment. Although medical waste incinerators are granted state-permits, even with pollution controls incinerators release toxic particulate matter (soot), dioxins, mercury, heavy metals (lead, cadmium, beryllium), nitrogen oxide, hydrogen chloride, volatile organic compounds, plus acid and greenhouse gases.

Ash from the process becomes concentrated with dioxins and heavy metals, and poses a risk to ground water from landfill leaching. Water used to cool the ash goes back into our rivers and streams.

Who is affected?

Everyone is affected by medical waste incineration, and it is especially true for those who live within 5 miles of the smoke stacks. Vulnerable populations like children, pregnant women, the elderly, plus those with respiratory, cardiovascular and immune-compromised health problems are at special risk. Incineration is an old technology. It kills the germs, but leaves us sick from its by-products. Incineration is not necessary, and newer technologies exist that are considerably more compatible with a healthy approach to waste management.

Who burns medical waste in NC for generators located on the East Coast?

North Carolina earns the title, “Medical Waste Incinerator Capital of the US” by being home to 3 of the 14 commercial medical waste incinerators in the country. Commercial incinerators take very large volumes of medical waste. Stericycle, Haw River, operates two incinerators, and the BMWNC medical waste incinerator, located in Matthews, NC, is the third.

In 2008-09 Stericycle burned 26.3 million pounds of medical waste from 22 states, including Washington, DC and Puerto Rico. North Carolina healthcare facilities sent 13.5 million pounds to be burned at Stericycle. Through its commercial incinerators, North
Carolina burns medical waste for most of the east coast states. Many of these states have banned such incineration within their own state borders for the health of their citizens.

**Stericycle**

Stericycle is the largest medical waste disposal company in the US and owns 57% of the nation’s commercial medical waste incinerators. Its business track record is admirable. In 2009 revenues topped $1.1 billion dollars while its operating profit exceeded $300 million. Stericycle produced 10 year annualized returns of 28% and earnings/share compounded at 32% annually. Stericycle’s President, Chairman and CEO, Mark Miller, was named ‘2009 Morningstar CEO of the Year.’ Stericycle knows how to make money. Mr. Miller and his family do not reside in Alamance County. In 2006, Stericycle paid $5,201.87 in county property taxes to Alamance County. In 2009, their taxes were reduced to $2,399.03

Stericycle’s two Haw River incinerators play a big role in polluting Alamance County’s air and water, and that of the surrounding counties (Orange, Chatham & Durham). In 2008-09 Stericycle incinerators burned a near record of 26.3 million pounds of medical waste. Person County’s landfill received 9.2 million pounds of the toxic ash from Stericycle.

**Why Does Stericycle Continue to Incinerate…and then claim it is reducing the need for incineration?**

Incineration is a part of Stericycle’s profitability. Incineration makes money. Once built, an incinerator is a big investment. Because an incinerator makes profits by burning waste, it becomes a huge beast which must be fed continuously. Opportunities to recycle or use safer alternative disposal methods often fall by the wayside in order to “feed the beast.” This helps to explain why Stericycle burns paper (confidential hospital documents) rather than promoting recycling. Stericycle uses paper as fuel to generate high temperatures needed for burning. For a company like Stericycle, keeping Haw River’s incinerators burning is good for business, and good for the bottom line. Unfortunately, it isn’t good for public health and the environment.

Stericycle’s website claims, “We are helping more and more customers properly segregate their waste streams, which reduces the need for incineration.” Some good questions for them are, “Why are the volumes of waste increasing at your Haw River incinerators?” “Why is your Concord, NC autoclave operating under capacity?”

One of the peculiar ways that medical waste disposal happens in our country is that the disposal company is obligated to advise the health care facilities about waste segregation and disposal options. You can judge for yourself. How aggressively do you think any company would go against its profitability in this situation to promote non-incineration?

**Stericycle’s website claims to promote non-incineration technologies**

“Green washing” is a common public relations approach these days as more companies want to claim that they are doing the right thing for the public’s health and the environment. Stericycle’s website claims, “From our beginning, we have championed the
use of non-incineration treatment technologies.” You be the judge…is Stericycle really green washing?

Stericycle owns non-incineration treatment facilities in other parts of the country. As the dominant medical waste disposal company in the US, it is no stranger to the newer technologies that eliminate the need for incineration. It operates its own autoclaves (a state-approved sterilization process that can handle the majority of medical waste) and a patented disposal alternative that operates on radio waves (ETD). Stericycle has already replaced two incinerators (shut down due to citizen actions) with autoclaves. Right now it owns and operates a huge autoclave in Concord, NC, that operates below capacity. By Stericycle’s own admission, an autoclave could handle the medical waste currently burned in Haw River. (1) But that isn’t what’s happening.

Stericycle’s Haw River incinerators burn volumes that are near a ten-year record high - 26.3 million pounds burned in 2008-09. That same year saw 22 states, including Puerto Rico and Washington DC sending their waste to Haw River. NC health care facilities sent a considerable amount too, contributing over 60% in an average year. If Stericycle champions non-incineration technologies, it must be somewhere else. They have forgotten all about it in North Carolina.

(1) http://www.chwmeg.org/asp/search/detail.asp?ID=193

What are the Non-incineration Alternatives?

There are a number of alternatives now available. Stericycle itself says that its “Regular medical waste could be treated in an autoclave, but generators who prefer treatment by incineration send the waste to the Haw River facility.” (1) Modern autoclaves often include a shredder so that any patient identifying information is destroyed and the volume is reduced for landfill. There are two technologies now approved in NC for most pathological waste (Ozonator and the PIWS-3000). (2) North Carolina’s list of alternative technologies provides a number of possibilities for handling various components of healthcare facility waste. (3) Other alternative technologies exist and are being used in other states.

(1) http://www.chwmeg.org/asp/search/detail.asp?ID=193
(2)(3) http://www.wastenotnc.org/swhome/medlst.htm#List%20of%20Technologies

Public Hearing – Stericycle permit renewal.

Thanks to many letters sent from concerned members of the public requesting a public hearing, the NC DENR Division of Air Quality (DENR/DAQ) has agreed to host a public hearing on the permit renewal for Stericycle. The public hearing will take place on Tuesday, May 25, at 6 p.m. at the Alamance Community College auditorium, located at 1247 Jimmie Kerr Rd. in Graham, NC 27253. Directions: I-85/I-40, Exit 150.

The DENR/DAQ will issue its decision to renew Stericycle’s permit based on comments from the public, and from residents at most risk from emissions from the incinerator. If you would like to comment please come at least 15 minutes early, and sign in on the sign-up sheet to speak.
Each person will be given 3-minutes to speak at the public hearing. Written comments of any length can be submitted until June 1, sent via email to: Gautam.patniak@ncdenr.gov or by mail to: NC DENR/DAQ, 1641 Mail Service Center, Raleigh, NC 27699-1641.

**Mecklenburg County’s resolution to protect citizens.** The third, commercial medical waste incinerator, the BMWNC, located in Matthews, NC, is about half the size of Stericycle and takes medical waste from 12 states. Like the Stericycle medical waste incinerator, the BMWNC is also located in a rural area of Matthews, among homes and schools, about a block away from the Central Piedmont Community College (CPCC).

Realizing that incineration poses a health risk to the residents of Matthews, the Mecklenburg County Board of Commissioners, this past April unanimously passed a resolution that they will submit to the state requesting that the state require ALL medical waste incinerators in NC to comply with the EPA’s new and more protective standards for air emissions from medical waste incinerators by 2012 instead of 2014. The EPA rules, promulgated in October, 2009, set stricter standards for mercury, lead, cadmium, chromium, dioxins, furans, hydrogen chloride, nitrogen oxide, and particulate matter, among others.

The new EPA rules also require more efficient recycling and segregation of medical waste, increased monitoring and testing, and regulation of uncontrolled emissions from by-pass events. Emissions from by-pass events occur when air pollution equipment fails, due to equipment malfunction or operator error, resulting in a release of concentrated pollutants into the air.

Please consider adopting a similar resolution for Alamance County, home to one of the nation’s largest medical waste incinerators in the country, for the health of Alamance County residents, and for our beautiful environment here in Alamance County.