After repeated violations for mercury emissions at its Haw River, NC, incinerator, Stericycle, Inc. accepted a North Carolina Division of Air Quality (DAQ) approved waste management plan to identify dental waste generators and segregate dental waste at the source. Dental waste picked up by the company will be routed to a non-incineration facility. The new plan will be fully implemented in 2006.

Large medical waste incinerators, like the one in Haw River, are required by the Clean Air Act to have a Title V Operating Permit. In North Carolina, this permit is issued by the Division of Air Quality and must be approved by the Environmental Protection Agency (EPA). The permit sets the conditions under which the company operates the incinerator and the permit conditions are federally enforceable. Failure to comply can result in loss of the permit and force the incinerator to close down. BREDL’s Clean Air Act Fact Sheet has more information at http://www.bredl.org/air/Title_V.htm

Stericycle Title V Permit Language:
Section 2.1: Specific Limitations and Conditions
A.1.e. NSPS Monitoring/Recordkeeping/Reporting Requirements [40CFR 60.58c]

“(4) The Permittee shall submit annually a waste management plan including provisions for the segregation of dental waste for DAQ approval by no later than January 30 of each calendar year. The waste management plan shall comply with the requirements of 40 CFR 60.55c. The Permittee shall implement the DAQ approved waste management plan in its entirety. The Permittee shall not incinerate dental waste at the facility, which is defined in the DAQ approved waste management plan.

If the Permittee does not implement the DAQ approved waste management plan in its entirety or any dental waste is incinerated at the facility, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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Dental Waste Management Plan Components

The plan uses customer type to exclude any potential mercury waste from disposal at Haw River. Customers with any reference to the word “dental” are identified as dental waste generators and all of their waste will be diverted. Special labeling, documentation, bar coding, and computer tracking will be used to route the dental waste stream to an alternate facility. There are seven plan components.
1. **Identification**
Waste from any customer that includes any of the following words in the customer’s name: “dentist”, “dental”, “dental laboratory”, “D.D.S.”, “D.M.D.”, and “dentistry”, and any medical waste from municipal, county, state, federal, military, privately owned health care facilities, and third party medical and dental waste handlers from which dental waste is not segregated and tracked separately under this dental waste management plan is assumed to be dental waste and is excluded from incineration. A survey of customers will identify other potential generators of dental waste and such customers will be designated in the computer as dental customers. Their waste will not be incinerated.

2. **Bar Coding and Tagging**
Bar codes and special tags will note dental waste customers in Stericycle’s computer tracking system.

3. **Shipping Documents**
Dental waste generators will be identified on shipping documents and drivers will segregate dental waste with external documents before waste is processed.

4. **Color-coded Identification**
Dental waste will have a special color bar code or label to identify dental waste containers. Workers will be trained to use the color-code system.

5. **Driver Education**
Stericycle drivers will be trained to identify dental waste containers, assure proper documentation and labels, and that dental waste is segregated when picked up.

6. **Screening at the Scale**
Stericycle’s “Bio Track” data collection system will not accept dental waste bar codes and incinerator operators will be alerted to divert the container to another facility.

7. **Recordkeeping**
A comparison of waste processed at the facility to the list of dental waste generators will be electronically maintained and available for DAQ inspection.

The incineration of dental waste containing dental amalgam causes emissions of methyl mercury, a neurotoxin that bioaccumulates in organisms and can reach dangerous levels in fish. The state of North Carolina has issued fish consumption advisories warning people of the potential risk from eating fish caught in some of the state’s waters.

State rules prohibit the disposal of hazardous waste, like dental amalgam, in landfills and incinerators. Generators should verify specific disposal requirements. The North Carolina Division of Pollution Prevention ([www.p2pays.org](http://www.p2pays.org)) provides guidance on proper mercury disposal options.