

Report to the  
Environmental Review Commission  
North Carolina General Assembly

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**Hazardous Waste Management Plan**

JULY 1, 2006



Hazardous Waste Section  
Division of Waste Management  
[www.wastenotnc.org](http://www.wastenotnc.org)

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## Executive Summary

The State of North Carolina's Solid Waste Management law requires the Department of Environment and Natural Resources (DENR) to develop a hazardous waste management plan for the state and revise it on or before July 1 of even-numbered years. (N.C.G.S. 130A 294(i)). The first plan was published in July 1990 and has been revised at two-year intervals. The 2006 plan summarizes the activities of the North Carolina Hazardous Waste Section to ensure safe management of hazardous waste and to encourage waste minimization, reuse and recycling. Major activities include implementing and enforcing the hazardous waste regulatory program, conducting workshops and providing technical assistance in waste reduction and recycling, soliciting participants in the Environmental Protection Agency's National Partnership Program for Environmental Priorities (NPEP) in order to reduce the use and release of priority toxic chemicals, and continuing efforts to improve compliance and foster waste reduction by small businesses.

## **1.0 INTRODUCTION**

The State of North Carolina's Solid Waste Management law requires the Department of Environment and Natural Resources (DENR) to develop a hazardous waste management plan for the state. The plan is revised on or before July 1 of even-numbered years. (N.C.G.S. 130A 294(i)). The first plan was published in July 1990. This 2006 plan summarizes the North Carolina Hazardous Waste Section's activities to ensure the safe management of hazardous waste and to encourage waste minimization, reuse and recycling.

## **2.0 NORTH CAROLINA HAZARDOUS WASTE SECTION**

The Hazardous Waste Section (HWS) was authorized by the U.S. Environmental Protection Agency (EPA) in 1980 to implement the federal hazardous waste regulatory program under the Resource Conservation and Recovery Act. The HWS has a staff of approximately 50 people working in three branches: Facility Management, Compliance and Programs. Collectively, the three branches undertake the following activities:

- Regulate the management of hazardous waste by generators, transporters, treaters, storers, recyclers and disposers;
- Educate the hazardous waste community by providing technical assistance through individual consultations and seminars that encourage waste reduction, sound recycling, safe management practices and proper disposal (as a last resort);
- Issue permits specifying requirements that each hazardous waste treatment, storage, recycling or disposal facility must meet;
- Provide a continuing compliance presence at commercial hazardous waste management facilities through the HWS Resident Inspector Program;
- Conduct compliance inspections and, in coordination with the North Carolina Office of the Attorney General, take enforcement actions against violators;
- Require groundwater assessments, facility investigations and corrective measures at facilities where hazardous wastes have been released into the environment and
- Ensure section staff receives necessary training and professional development opportunities to continually improve their job performance.

Information on most of the activities above is captured in the national hazardous waste database, Resource Conservation and Recovery Act Information (RCRAInfo). The database is managed by the EPA, and most of the data is entered by authorized state programs. RCRAInfo contains comprehensive information on all facilities that generate or manage hazardous waste within a state, as well as all the HWS's activities affecting these facilities. Data from RCRAInfo will be used to provide information to the

Department's Facility Identification Template for States database (FITS) and the Departmental Decision Support System.

To view RCRAInfo and regulatory information for specific hazardous waste sites, visit <http://www.epa.gov/enviro/>. For details about the Division of Waste Management and the Hazardous Waste Section, visit <http://www.wastenotnc.org/>.

### **3.0 HAZARDOUS WASTE GENERATION AND MANAGEMENT**

Hazardous waste is categorized as either "characteristic," "listed," or both. Both waste categories and their attendant subcategories are specifically described in the federal regulations at 40 CFR 261, incorporated by reference in 15A NCAC 13A .0106.

Characteristic waste refers to any solid waste that exhibits a characteristic of ignitability, corrosivity, reactivity and/or toxicity. Waste is considered to have the characteristic of toxicity if it contains any of 40 specified hazardous constituents in excess of federal standards. The term "listed waste" refers to specific wastestreams that EPA has identified as hazardous based on its investigations of particular industries, as well as certain listed commercial chemical products that are disposed.

The tables on the following page show summary information about North Carolina's top 10 hazardous waste generators and its top 10 treatment, storage and disposal facilities (TSDFs) in 2003. The source for this data is EPA's 2003 "Biennial Report of Hazardous Waste Generation." This is the most recent information available. The 2003 Biennial Report (BR) was published in June 2005 and can be viewed at <http://www.epa.gov/epaoswer/hazwaste/data/brs01/index.htm>.

In 2003, 439 North Carolina large quantity generators (LQGs)<sup>1</sup> reported generating 78,817 tons of hazardous waste. Of the 439 LQGs, the top 10 facilities generated 43,610 tons, or 55 percent, of the total quantity of hazardous waste generated by North Carolina's large quantity generators. In 2001, 501 LQGs generated 94,534 tons of hazardous waste and the top 10 facilities generated 32,515 tons.

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<sup>1</sup> Large Quantity Generators are defined as facilities that generate 1,000 kg (2,200 lbs.) or more of hazardous waste in a calendar month.

**Table 3.1 - Ten largest hazardous waste generators and quantity generated**

<b>EPA ID NO.</b>	<b>FACILTY NAME</b>	<b>CITY</b>	<b>TONS</b>
NCR000011197	Nucor Steel	Cofield	17,209
NCD047373766	DSM Pharmaceuticals, Inc.	Greenville	6,892
NCD000648451	Clean Harbors	Reidsville	5,192
NCD093340487	Gerdau Ameristeel US Inc.	Charlotte	4,647
NCD042091975	Mallinckrodt Inc.	Raleigh	2,288
NCD986229227	Kurz Transfer Products	Charlotte	1,753
NCD050409150	General Electric Company	Wilmington	1,706
NCD121700777	Heritage Environmental Services	Charlotte	1,425
NCD047368642	E.I. DuPont & Co. - Fayetteville Works	Duart Towns	1,313
NCD018652339	Freightliner Trucks	Cleveland	1,185
<b>Total</b>			<b>43,610</b>

In 2003, 43 North Carolina treatment, storage or disposal facilities (TSDFs) reported managing 20,031 tons of hazardous waste through treatment, storage or disposal. Of the 43 TSDFs, the top 10 facilities managed 17,299 tons, or 86.4 percent, of the total. In 2001, 66 TSDFs reporting managing 39,274 tons, the top 10 managed 27,441 tons of hazardous waste. Common management methods include solvent recovery, incineration, fuel blending, energy recovery, sludge treatment, stabilization and metals recovery.

**Table 3.2 - Ten largest hazardous waste managers or TSDFs**

<b>EPA ID NO.</b>	<b>FACILTY NAME</b>	<b>CITY</b>	<b>TONS</b>
NCD980842132	Ecoflo Inc	Greensboro	4,920
NCD003195161	AVX Corporation	Raleigh	2,720
NCD047373766	DSM Pharmaceuticals, Inc.	Greenville	2,690
NCD042091975	Mallinckrodt Inc.	Raleigh	2,194
NCD986166338	Onyx Environmental Services	Creedmoor	1,164
NCD049773245	Detrex Corp	Charlotte	1,133
NCD003173358	Durable Wood Preservers, Inc.	Charlotte	739
NCD001810365	Clariant Corporation - Mount Holly East	Charlotte	708
NCD121700777	Heritage Environmental Services	Charlotte	648
NCD980843866	DuPont Electronics	Durham	383
<b>Total</b>			<b>17,299</b>

Although only LQGs and TSDFs are required to report their hazardous waste generation and management amounts, it is important to note that North Carolina also has 1,769 small quantity generators and 4,355 conditionally exempt small quantity generators.<sup>2</sup> These facilities are not required to report the amount of hazardous waste they generate because they are typically small businesses for whom periodic reporting could be overly burdensome. However, these facilities collectively generate a significant amount of hazardous waste that must be managed properly and in compliance with all applicable rules. Significant resources are devoted to compliance and enforcement activities, technical assistance and outreach at these facilities.

#### **4.0 HAZARDOUS WASTE REDUCTION INITIATIVES**

##### **A. Commitment to Hazardous Waste Minimization**

The HWS continues to work with EPA Region 4 to solicit participants in the National Partnership for Environmental Priorities. This voluntary program fosters partnerships between government and industry to reduce hazardous waste -- especially waste containing any of the 30 chemicals known to be highly toxic. Partners who make significant progress in waste reduction receive national recognition for their achievements.

The North Carolina Hazardous Waste Section has also committed to the following:

- Incorporate pollution prevention training ( based on targeted priority chemical waste streams) into annual generator workshops, industry meetings and enforcement settlement negotiations;
- Review facility requests for alternative management practices for hazardous waste (use/reuse, substitution, reclassification and delisting), and
- Support intervention projects to reduce/eliminate the presence of priority chemicals via partnerships with other agencies.

##### **B. Environmental Stewardship Initiative**

DENR's Environmental Stewardship Initiative promotes and encourages superior environmental performance by North Carolina's regulated community. This voluntary program stimulates the development and implementation of programs that use pollution prevention and innovative approaches to meet and exceed regulatory requirements. There are three levels of participation. "Environmental Partners" is for organizations interested in developing a systematic approach to improving their environmental performance. The "Rising Steward" level was added this year and is designed for those organizations that have a mature environmental management program. The "Environmental Steward" level

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<sup>2</sup> Small Quantity Generators are defined as facilities that generate between 100 kg and 1,000 kg (220 lbs. to 2,200 lbs.) per calendar month. Conditional Exempt Small Quantity Generators generate less than 100 kg (220 lbs.) per calendar month.

is for organizations that already display a commitment to exemplary environmental performance beyond what is required by law. All participants must set environmental performance goals that include pollution prevention and are required to report annually on progress towards these goals and net pollution reductions.

This important program not only recognizes outstanding environmental performance at the "Steward" level, but provides encouragement and assistance to foster improved environmental performance by North Carolina organizations. Coaches (technical staff) are assigned to each participant to provide technical assistance on pollution prevention and develop an environmental management system. Networking opportunities allow participants to learn from each other and share success stories. This program seeks to reduce the impact on the environment beyond measures required by any permit or rule, producing a better environment, conserving natural resources and resulting in long-term economic benefits.

For more information about the program, visit <http://www.p2pays.org/esi/>.

### **C. Mercury Switch Removal**

The HWS will soon begin implementing a program to encourage removal and recycling of mercury-containing convenience light switches from automobiles. Enacted by the General Assembly in 2005, this program requires auto recyclers and scrap metal dealers to remove the switches before the vehicles are crushed, shredded, and recycled into new steel. The vehicle recyclers and scrap metal dealers will receive \$5.00 for each switch that is removed, collected, and sent for recycling. Removal of the switches prior to recycling will greatly reduce mercury emissions during the steel-making process.

### **D. Other Activities**

The HWS will continue to support safe hazardous waste management in North Carolina by:

- Supporting opportunities for waste minimization and recycling and supporting annual generator workshops that help educate the largest generators on hazardous waste regulations and the expectations of hazardous waste inspectors;
- Continuing the HWS initiative to improve compliance in the vast SQG universe through a SQG self-certification survey;
- Seeking to establish a hazardous waste generator security deposit to fund the cleanup of abandoned generator sites that do not meet acceptable environmental standards;
- Continuing to seek EPA authorization to maintain HWS' authority to implement newly promulgated regulations and standards;
- Improving the quality of hazardous waste data for hazardous waste trend analysis and sound decision-making; and
- Participating in EPA rulemakings that affect regulatory status and management standards for recycling used industrial rags and wipes, spent materials that are reclaimed for reuse, and other regulatory proposals.