



October 10, 2019

*Department of Environmental Quality*



# *Lead Disposal Issues*



*Department of Environmental Quality*

Rose Pruitt  
Environmental Specialist II

Division of Waste Management  
Hazardous Waste Section  
Compliance Branch

919-270-3476





**North Carolina Department of Environmental Quality  
Division of Waste Management  
Hazardous Waste Section - Compliance Branch**

**REGIONAL INSPECTOR MAP**

**Brent Burch** - Branch Head / 828.321.9585 / [Brent.Burch@ncdenr.gov](mailto:Brent.Burch@ncdenr.gov)  
**Lisa Valdmets** - Branch Secretary / 919.707.8231 / [Lisa.Valdmets@ncdenr.gov](mailto:Lisa.Valdmets@ncdenr.gov)



**Western Unit**

**Sean Morris** - Western Unit Supervisor / 704.464.1357 / [Sean.Morris@ncdenr.gov](mailto:Sean.Morris@ncdenr.gov)  
**Richard Concepcion** - Environmental Chemist / 828.578.6927 / [Richard.Concepcion@ncdenr.gov](mailto:Richard.Concepcion@ncdenr.gov)

<b>Jeff Menzel</b> 828.419.5034 <a href="mailto:Jeff.Menzel@ncdenr.gov">Jeff.Menzel@ncdenr.gov</a>	<b>Nick Guglielmi</b> 919.935.2010 <a href="mailto:Nick.Guglielmi@ncdenr.gov">Nick.Guglielmi@ncdenr.gov</a>
<b>Ernie Lawrence</b> 336.352.5742 <a href="mailto:Ernest.Lawrence@ncdenr.gov">Ernest.Lawrence@ncdenr.gov</a>	<b>Rose Pruitt</b> 919.270.3476 <a href="mailto:Rose.Pruitt@ncdenr.gov">Rose.Pruitt@ncdenr.gov</a>
<b>Andrew Martin</b> 919.270.3507 <a href="mailto:Andrew.Martin@ncdenr.gov">Andrew.Martin@ncdenr.gov</a>	

**Eastern Unit**

**Heather Goldman** - Eastern Unit Supervisor / 980.224.9858 / [Heather.Goldman@ncdenr.gov](mailto:Heather.Goldman@ncdenr.gov)  
**Autumn Romanski** - Environmental Chemist / 919.280.1510 / [Autumn.Romanski@ncdenr.gov](mailto:Autumn.Romanski@ncdenr.gov)

<b>Jack Kitchen</b> 919.219.0402 <a href="mailto:Jack.Kitchen@ncdenr.gov">Jack.Kitchen@ncdenr.gov</a>	<b>Phil Orozco</b> 919.212.2501 <a href="mailto:Phil.Orozco@ncdenr.gov">Phil.Orozco@ncdenr.gov</a>	<b>Don Burke</b> 252.689.1159 <a href="mailto:Don.Burke@ncdenr.gov">Don.Burke@ncdenr.gov</a>
<b>Jenne Walker</b> 919.707.8224 <a href="mailto:Jenne.Walker@ncdenr.gov">Jenne.Walker@ncdenr.gov</a>	<b>Vacant</b>	

Updated 10/01/18

# *Resource Conservation & Recovery Act*

The Resource Conservation and Recovery Act (RCRA), passed in 1976, was established to set up a framework for the proper management of hazardous waste.





# What is Hazardous Waste?



*Department of Environmental Quality*



# What is Hazardous Waste?

- A hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment.
- A hazardous material that no longer has an intended value.
- Has not been excluded or delisted.



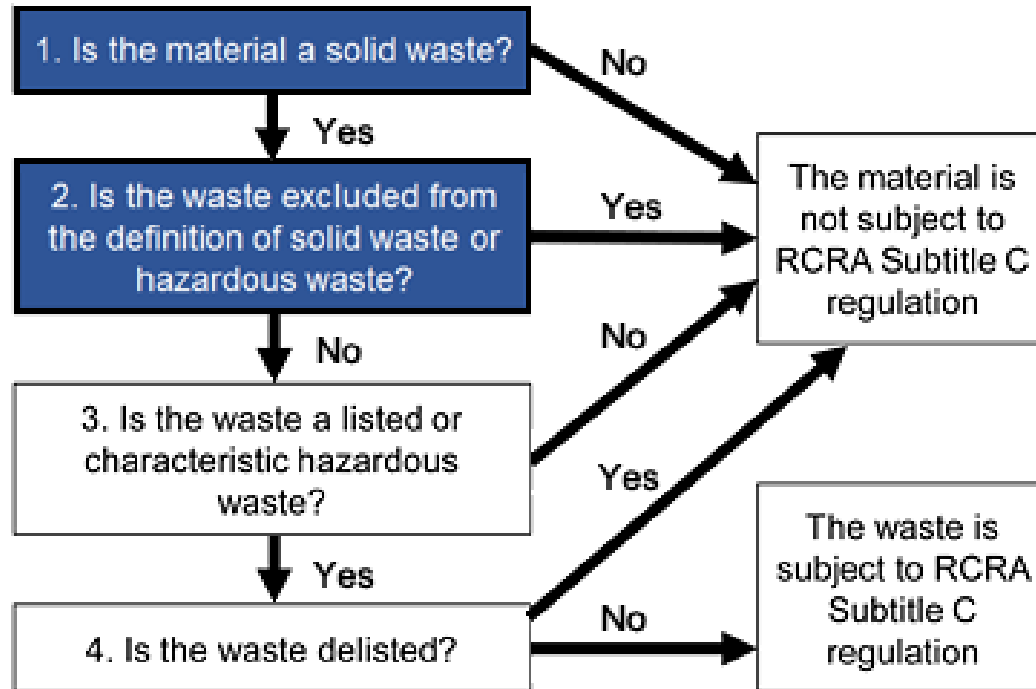
# What is Hazardous Waste?

## Must Be A Solid Waste

- Discarded
  - Abandoned
    - Disposed of
    - Burned or Incinerated
    - Accumulated, stored or treated before or in lieu of being abandoned
  - Recycled
    - Used in a manner constituting disposal
    - Burned for energy recovery
    - Accumulated speculatively

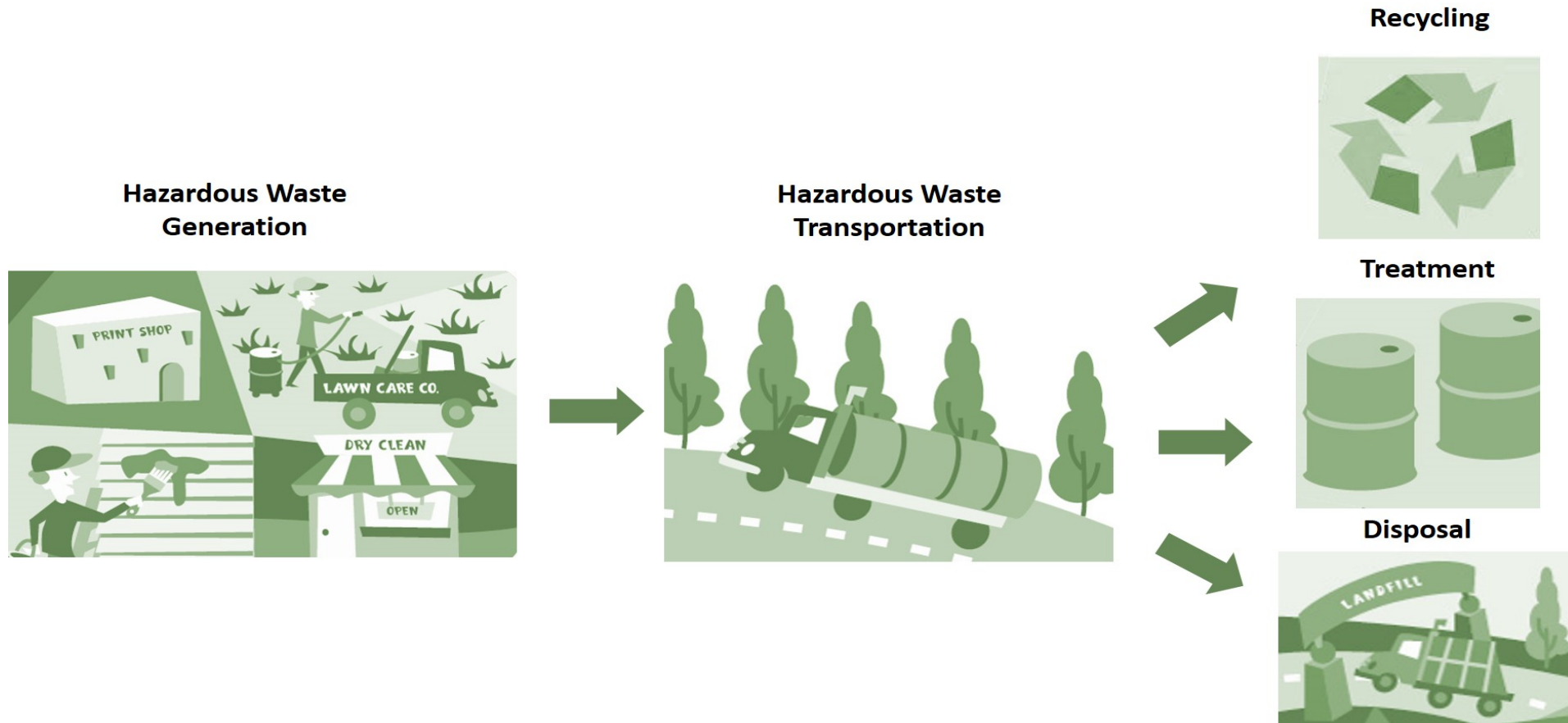
# Hazardous Waste ID Process

## The Hazardous Waste Identification Process





# Hazardous Waste Cradle to the Grave Management System



# What is Hazardous Waste?

Hazardous Waste may be either:

- A Listed Hazardous Waste as described in Subpart D of 40 CFR 261
- A Characteristic Hazardous Waste that exhibits any of the four characteristics identified in Subpart C of 40 CFR 261

## Four RCRA listed Wastes

- F listed
- K listed
- P listed
- U listed





## *F Listed Wastes*

Are from nonspecific sources and range from general solvent use to metal finishing industry wastes. Include 39 wastes in 7 sub-groups.

1. Spent solvent wastes (F001-F005)
2. Electroplating/metal finishing (F006-F012 and F019)
3. Dioxin bearing wastes
4. Production of chlorinated aliphatic hydrocarbons (F024 and F025)
5. Wastes from wood preserving (F032, F034 and F035)
6. Petroleum refinery waste sludges (F037 and F038)
7. Multisource leachate (F039)



## *K Listed Wastes*

- Are source specific and include 148 wastes divided into 13 subgroups.

Wood Preservation

Inorganic Pigment Mfg

Organic Chemical Mfg

Inorganic Chemicals Mfg

Pesticides Mfg

Explosives Mfg

Petroleum Refining

Iron & Steel Production

Primary Aluminum Production

Secondary Lead Processing

Veterinary Pharmaceuticals Mfg

Ink Formulation

Coking (coal processing)

## *P & U Listed Wastes*

- Both lists govern unused pharmaceuticals, chemicals and pesticides. Neither involve waste generated from manufacturing processes. Must be discarded as unused in its pure form.
- P List contains 239 acutely toxic substances with 135 waste codes (some waste codes span several substances). Ex. Arsenic, epinephrine, cyanide salts, nicotine.
- U List wastes are all toxic. Over 400 substances. Ex. Acetone, aniline, DDT, Warfarin.



## *Characteristic Wastes*

RCRA characteristic hazardous waste is a solid waste that exhibits at least one of four characteristics defined in 40 CFR Part 261 Subpart C.



1. Ignitability (D001)
2. Corrosivity (D002)
3. Reactivity (D003)
4. Toxicity (D004-D043)

# *Ignitability Characteristic D001*

Ignitable wastes can create fires under certain conditions, are spontaneously combustible or have a flashpoint less than 140 °F. May be liquid, solid, an ignitable compressed gas or an oxidizer.



Examples include  
paint, solvents,  
aqueous solutions with greater  
than 24% alcohol.

## *Corrosivity Characteristic D002*

Corrosives are aqueous acids and bases with a  $\text{pH} \leq 2$  or  $\geq 12.5$ , or liquids that corrode steel at a rate greater than 0.25 inch per year at 130° F.



Examples include

Hydrochloric acid, Sulfuric acid,  
Sodium Hydroxide





## *Reactivity Characteristic D003*

Reactive wastes are unstable under normal conditions, react violently with water or air, unstable to shock or heat, generate a toxic gas (cyanides or sulfides) or explode during routine management.



**Explosion risk**

Examples include  
Waste gunpowder, sodium metal,  
Potassium Cyanide

# Toxicity Characteristic D004-D0043

Toxic wastes are harmful or fatal when ingested or absorbed. The characteristic of toxicity is determined by using the Toxicity Characteristic Leaching Procedure (TCLP) test on a waste sample. In 40 CFR 261.24, Table 1 lists Maximum Concentrations of Contaminants for the toxicity characteristic in 39 contaminants.



Examples include

The RCRA 8 metals (mercury, **lead**, silver, chromium, cadmium, selenium, barium, arsenic),  
Chloroform, Benzene, Vinyl Chloride



# Toxicity Characteristic Leaching Procedure

## TCLP

- TCLP helps identify wastes likely to leach concentrations of contaminants that may be harmful to human health or the environment.



- It is a soil sample extraction method for chemical analysis employed as an analytical method to simulate leaching through a landfill.
- Used to determine if a waste is characteristically hazardous and classified as one of the “D” listed wastes.



# Toxicity Characteristic Leaching Procedure

## TCLP

- If TCLP analytical results are below the TCLP D-List maximum contamination levels the waste can be accepted by a typical municipal landfill.



- If TCLP analytical results are above these levels the waste must be taken to a hazardous waste disposal facility at an increased cost to the generator.

# Toxicity Characteristic Leaching Procedure

## TCLP



Table 1- Maximum Concentration of Contaminants for the Toxicity Characteristic

EPA HW #	Contaminant	Level mg/l
D004	Arsenic	5.0
D009	Mercury	0.2
D006	Cadmium	1.0
D016	2,4 D	10.0
D018	Benzene	0.5
<b>D008</b>	<b>Lead</b>	<b>5.0</b>



## *Generator Standards*



*Department of Environmental Quality*



# Generator Standards

## 40 CFR 262

- **Identify Waste**
  - Quantities Generated
  - Type of waste: D008, D002, F003 ...
- **Manage Waste on-site**
  - Close containers, Label, date, inspect ...
- **Training**
  - Handle HW, initial & annual training
- **Contingency Plan**
  - Emergency Coordinator
  - Evacuation Routes
  - Notify Emergency Responders ...

**HAZARDOUS WASTE**

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL.  
IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY  
AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

GENERATOR INFORMATION:  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
EPA ID NO. / MANIFEST DOCUMENT NO. \_\_\_\_\_ / \_\_\_\_\_  
ACCUMULATION START DATE \_\_\_\_\_ EPA WASTE NO. \_\_\_\_\_

[ ]


DO NOT PROCEED SHIPPING NAME AND/OR UN OR HW NO. WITH PREP.

**HANDLE WITH CARE!**



# Notification of Hazardous Waste Activities

## EPA Form 8700-12

<b>SEND COMPLETED FORM TO:</b> The Appropriate State or EPA Regional Office.	United States Environmental Protection Agency <b>RCRA SUBTITLE C SITE IDENTIFICATION FORM</b>	
<b>1. Reason for Submittal</b> (See instructions on page 13.)  MARK ALL BOX(ES) THAT APPLY	<b>Reason for Submittal:</b>  <input type="checkbox"/> To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities)  <input type="checkbox"/> To provide Subsequent Notification of Regulated Waste Activity (to update site identification information)  <input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application  <input type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # <input type="text"/> )  <input type="checkbox"/> As a component of the Hazardous Waste Report	
<b>2. Site EPA ID Number</b> (page 14)	<b>EPA ID Number</b> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
<b>3. Site Name</b> (page 14)	<b>Name:</b> <input type="text"/>	



# *Notification of Hazardous Waste Activities*

## *EPA Form 8700-12*

All facility notifications (8700-12 forms revised Part A) previously submitted on paper and mailed to the Hazardous Waste Section in Raleigh, are now submitted electronically directly through EPA's RCRAInfo database.

<https://rcrainfo.epa.gov/rcrainfoprod/action/secured/login>



Welcome to RCRAInfo

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The system enables cradle-to-grave waste tracking of many types of information regarding the regulated universe of RCRA hazardous waste handlers. RCRAInfo characterizes facility status, regulated activities, and compliance histories in addition to capturing detailed data on the generation of hazardous waste from large quantity generators and on waste management practices from treatment, storage, and disposal facilities.

RCRAInfo Sign In

User Id

Password


Sign in

[Register](#)

[Forgot password?](#)

# One time Operation on a Site with No Existing Number

New Submission

**North Carolina Application for Provisional Identification Number**  
Please refer to the instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Page 1 Page 2

This form is provided by the NC Hazardous Waste Section. For questions regarding this form, please call Christine Twining (919-707-6214) or Hazardous Waste Section, 1646 Mail Service Center Raleigh, NC 27699-1646

**Generator**  
Name of Company or Site

Generator Name  
NAICS Code Number [More Information on NAICS codes](#)

**Site Location**  
Physical Address (Not PO Box)

Street Name  
City  
County  
State Zip Code

**Site Mailing Address**

Same as Site Location Yes  
PO Box or Street  
City  
State Zip Code

**Site Contact Information**

First and Last Name  
Title  
Email Address

[https://edocs.deq.nc.gov/Forms/wm\\_hwepaid](https://edocs.deq.nc.gov/Forms/wm_hwepaid)[10/5/2018 10:03:46 AM]

- A provisional generator is a short term generator that produces hazardous waste from a particular activity for a limited time and then ceases. Conducting that activity.
- Subject to the same regulations as permanent generators.

# Generator Standards

- **Accumulation Time**
  - On Containers
- **Manifest**
  - EPA Form 8700-22
  - Signed copy back from TSD
- **Record-keeping and Reporting**
  - Keep Manifests, Annual Reporting, ...etc.







# Transporters

## 40 CFR 263

- **EPA Identification Number**

- (NCD123456789 ...etc.)

- **Insurance**

- Division of Motor Vehicle

- **Placards**

- Department of Transportation



# *Treaters, Storers and Disposers*

## *40 CFR 264, 265 & 270*

### Must have:

- **EPA Identification Number**
  - (NCD123456789, SCD123456789, ...etc.)
- **Permit**
  - Private: GlaxoSmithKline, Merck, ...
  - Commercial: Safety-Kleen, Ecoflo ...



# Household Waste Exclusion



*Department of Environmental Quality*



# *Household Waste Exclusion*

*40 CFR 261.4(b)(1)*

EPA considers some leftover household products that can catch fire, react or explode under certain circumstances, or that are corrosive or toxic as household hazardous waste.

Examples include products such as:



Paints  
Cleaners  
Oils  
Batteries  
Pesticides



# *Household Waste Exclusion*

*40 CFR 261.4(b)(1)*

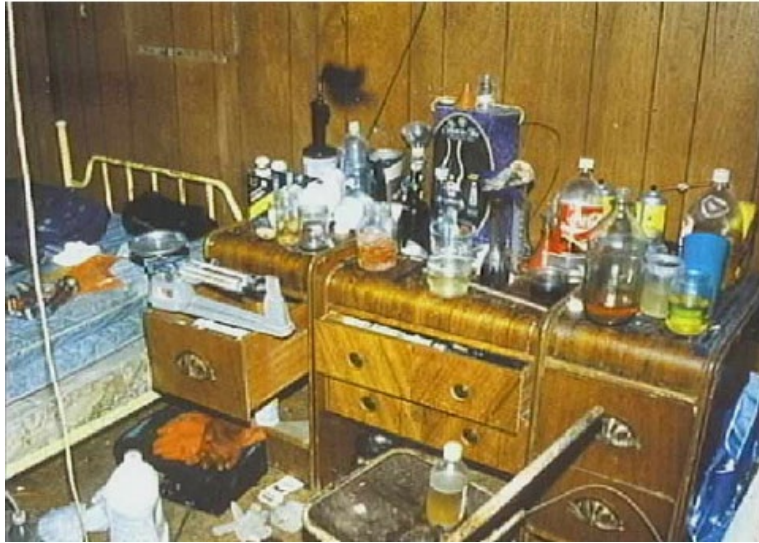
Household Waste is generated by normal household routines.  
It may be collected, transported, stored, treated, disposed, or recovered.

## **"Household Waste"**

- Any Waste derived from Households (garbage, trash, septic tanks)
- Derived from single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas.

# Household Waste Exclusion

40 CFR 261.4(b)(1)



Must meet 2 criteria:

1. Waste must be generated by individuals on the premises of a temporary or permanent residence.
2. The waste must be composed primarily of materials found in waste generated by consumers in their homes.

# *Household Waste Exclusion*

*40 CFR 261.4(b)(1)*

## Residential Contractors ?



# *Household Waste Exclusion*

*40 CFR 261.4(b)(1)*

EPA Policy of August 2000

## **Residential Contractors**

### **Contractors Manage**

- Residential Lead-Based Paint (LBP) Debris as HOUSEHOLD

### **LBP Waste**

- building parts, painted woodwork,
- paint chips ...etc.

### **Allows contractors to Manage Lead Paint Waste as household waste**

- Federal Register 10/23/2001
- Volume 66, Number 205, Pg. 53567
- EPA Policy Management
- Elizabeth Cotsworth (EPA - OSW) Memo 7/2000
  - [www.epa.gov/projctxl/lb/hhwmemo-july00fnl.pdf](http://www.epa.gov/projctxl/lb/hhwmemo-july00fnl.pdf)



# *Household Waste Exclusion*

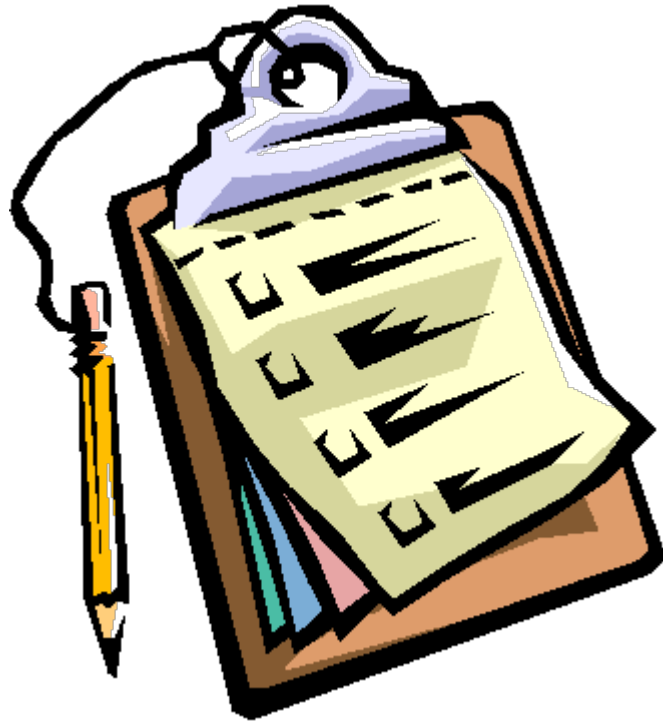
*40 CFR 261.4(b)(1)*

## Who is Regulated?

- Household waste generators:
  - Individuals
  - Contractors who renovate, remodel, demolish, abate or delead residences.
- Transporters
- Treaters
- Storsers
- Disposers



# *Hazardous Waste Inspections*



*Department of Environmental Quality*



# Site Visits

## ■ Technical Assistance

- **Compliance Assistance Visit (CAV)**
  - Recommendations
  - Waste Minimization
  - Recordkeeping
  - Container Management

## ■ Inspections

- **Compliance Evaluation Inspection (CEI)**
  - Unannounced
  - Routine inspections,
  - Review of records, and
  - Evaluate Compliance with RCRA



# Notice of Violation

- **Ticket Notice of Violations**
  - Developed by Inspector
  - few violations (6 or less)
  - Comply within 30 days
- **Standard NOV**
  - Developed by Inspector, Signed by Chief
  - More than 6 violations
  - Comply within 30 days of NOV's issuance
- **Immediate Action NOV**
  - Developed by Inspector, Signed by Chief
  - Violations pose potential immediate threat
  - Compliance Schedule will specify



# *Compliance Order with Administrative Penalty*

- Developed by Compliance Branch
- Reviewed by Attorney General's Staff
- Signed by Section Chief
- Types of Orders
  - **Short Form**
    - Max. Penalty \$6,500 per violation
    - imminent threat
    - e.g. Repeat Violations
  - **Standard Order**
    - Max. Penalty \$32,500 per violation
    - immediate threat: Spill, Storage ...
    - e.g. Operating as a TSDF ...
  - **Administrative Order on Consent**
    - Entered by both Division and Facility
    - Resolution to order
    - Self Confessor
    - Stipulated Penalty to recover economic benefits





<https://deq.nc.gov/about/divisions/waste-management>

[Home](#) » [About](#) » [Divisions](#) » Waste Management

# Waste Management

## Superfund: Protecting public health and the environment

Staff in the division's Superfund Section work to protect public health and the environment by investigating and cleaning up sites where waste or hazardous substances have been released.

Donate to Hurricane Recovery



# Hazardous Waste Services & Recycling Markets

[www.p2pays.org/DWRM/](http://www.p2pays.org/DWRM/)



**Search Directory:** Use this as a tool to find an outlet for your recyclable materials. If you're not sure under which category to find your material, see our complete [LIST](#) of materials.  
**By material.** Select the *general* type of material you want to recycle from the drop-down list below, then click "Go."

**STEP 1**

**By name.** If you know the name of the recycling company you seek, please select the first letter of the company's name:

[1](#), [2](#), [3](#), [5](#), [A](#), [B](#), [C](#), [D](#), [E](#), [F](#), [G](#), [H](#), [I](#), [J](#), [K](#), [L](#), [M](#), [N](#), [O](#), [P](#), [Q](#), [R](#), [S](#), [T](#), [U](#), [V](#), [W](#), [X](#), [Y](#), [Z](#)

**Get Listed:** If your company is not currently listed, you can do so electronically or by contacting RBAC staff.

# *Questions???*

## Hazardous Waste Section Technical Assistance, Education & Guidance



**Ann Preston**

919-707-8229

[ann.preston@ncdenr.gov](mailto:ann.preston@ncdenr.gov)

**Mark Wilkins**

919-707-8207

[mark.wilkins@ncdenr.gov](mailto:mark.wilkins@ncdenr.gov)





# *Lead Disposal Issues*



*Department of Environmental Quality*

