

US EPA ARCHIVE DOCUMENT

# Environmental Initiatives and Solid Waste Issues at Georgia's Prisons





# What is “Solid Waste”?

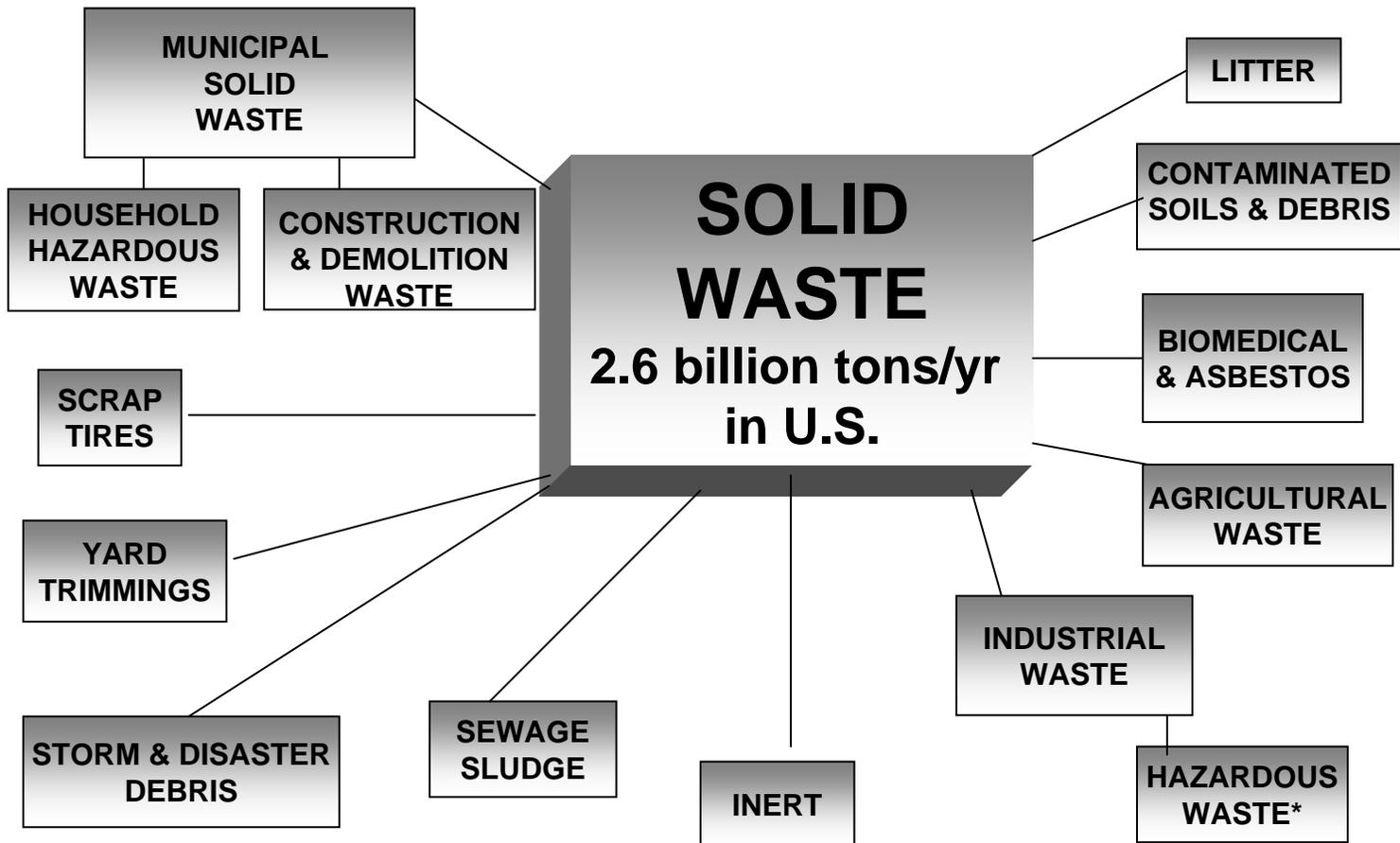
- Any garbage or refuse
- Discarded material from industrial, commercial, mining, agricultural and community activities (includes liquids, semi-solids and gases)
- Sludge from wastewater treatment plants, drinking water supply plants and air pollution control equipment
- Exclusions – recovered materials, domestic sewage, permitted wastewater and air discharges, irrigation return flows, radioactive waste

# How is Solid Waste Regulated?



- **Laws**
  - **Federal Resource Conservation Recovery Act of 1976**
  - **Georgia Comprehensive Solid Waste Management Act**
- **Rules**
  - **USEPA “Subtitle D” national minimum standards for municipal solid waste landfills**
  - **GA Rules for Solid Waste Management**

# What Is Solid Waste?



\*Regulated by the Georgia Hazardous Waste Management Act

# Biomedical Waste (391-3-4-.15)



- Shall include the following:
  - Pathological waste
  - Biological waste
  - Cultures and stock of infectious agents
  - Contaminated animal carcasses
  - Sharps
  - Chemotherapy waste
  - Discarded medical equipment and parts that were in contact with infectious agents



# Biomedical Waste

- **Total Exemption**
  - Biomedical waste generated from a single-family residence
- **Partial Exemption**
  - Facilities which generate <100 pounds/month of biomedical waste
    - Must be properly containerized
- **Non-exemption**
  - Facilities which generate >100 pounds/month of biomedical waste
    - Must be properly containerized
    - Must be treated before disposal



# Underground Storage Tanks (USTs)



## Georgia UST Act

- Operating standards for USTS to prevent leaks
- Voluntary financial assurance mechanism to clean up leaks
- Cleanup requirements for leaking USTs

## Federal UST Regulations

- Incorporated by reference into Georgia Rules

**Require operators to conduct monthly leak detection inspection**

**Report leaks**

# Underground Storage Tanks (USTs)

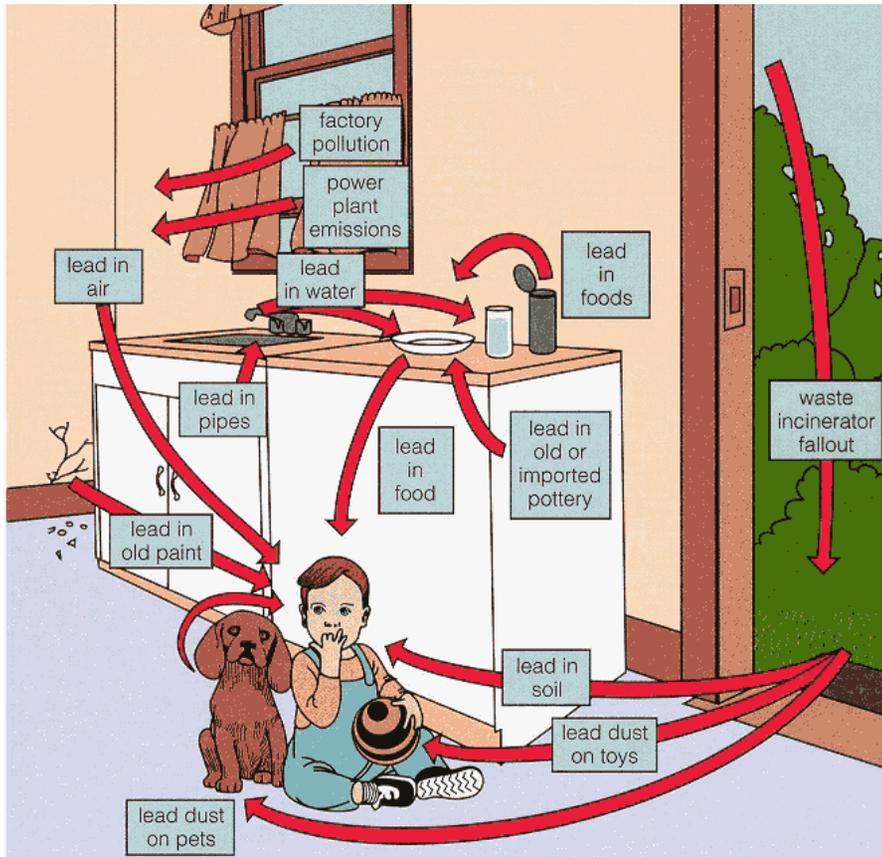


## Energy Act of 2005

- Effective August 8, 2005, all sites are required to be inspected every three years
- Requires operator training and certification
- Non-complaint sites are prohibited from product delivery
- Requires secondary containment for tanks, piping and under dispensers for **ALL** new installations



# Lead: Potential Sources



# Employee Housing

Commonly  
Residences  
Occupied by  
Employees and their  
Families are located  
within the Prison  
Grounds.

These residences  
may have been built  
before 1978.



# Lead-based paint is a possible hazard if it is



CHIPPING

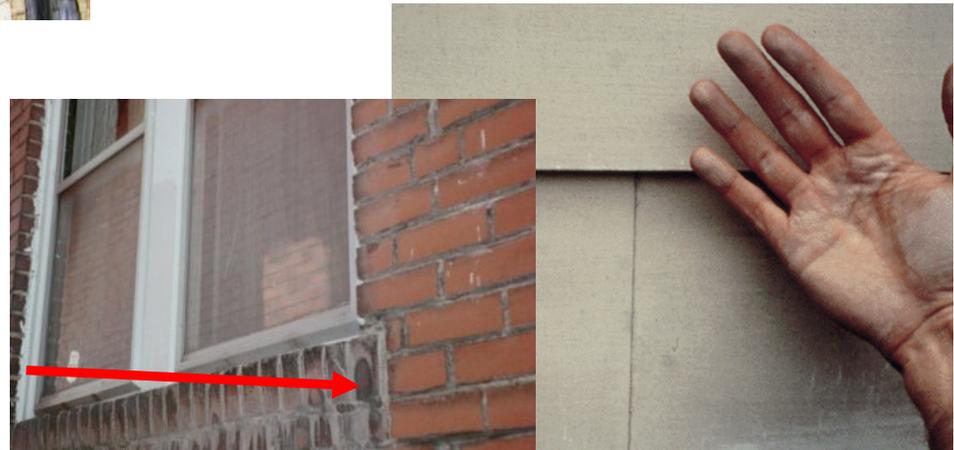


CRACKING



PEELING

CHALKING



# Examples of Target Housing from a Prison



Lead-Based Paint removed,  
Lead Dust Contaminated Air  
Conditioning Unit.



Work Practices that did NOT protect the occupants and their belongings from lead dust during painting. All belongings should be covered completely or removed.



# Lead-Based Paint Regulations

## State Abatement Rule

- **Permanent Elimination of Lead by**
  - Replacement
  - Enclosure
  - Encapsulation
  - Paint Removal

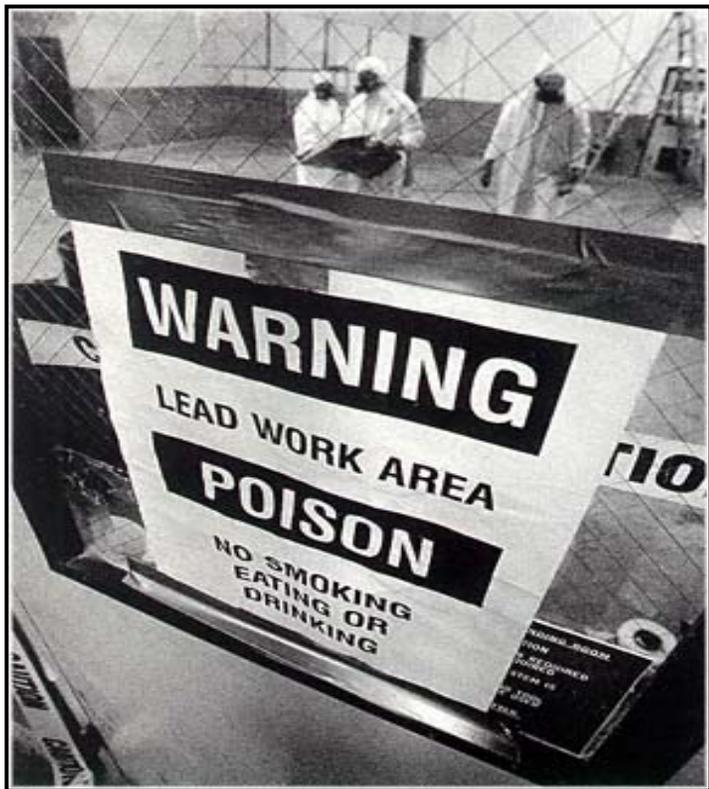
## New Renovation, Repair, and Painting Federal Rule

- Renovation
  - Remodeling
  - Removal & Replacement
- **Applies when 6 Ft or more interior or 20 Ft or more exterior is disturbed**
- Surfaces containing Lead-Based Paint**



# Lead Safe Work Practices

- **Prevent lead dust from migrating beyond the work area by:**
  - Using disposable plastic covering as specified
  - Wrapping components prior to removal from work area
  - Sealing all openings and penetrations - such as HVAC vents - with plastic sheeting
  - Removing or completely enclosing all furnishings or belongings
- **Type of containment depends on complexity of task being performed**



**The Abatement Work Area Must:**

- Be posted with warning signs
- Be restricted to Certified Project Personnel ONLY!



**Interim controls to immediately restrict children and pets from exposure to lead dust concentrated in soil.**



# Certified Personnel

- **Persons performing lead-based paint abatement activities must:**
  - Be certified
  - Work for a Certified Lead Firm
- After April 22, 2010, persons performing renovation work must
  - Be a certified Renovator
  - Work for a Certified Renovation Firm

# Disposal of Lead-Based Paint Building Components from Residential Projects



- Building components from residential projects may be disposed of in a C & D landfill
- All removed components must be stored properly during abatement
- Building components should be wrapped, labeled, and transported properly
- Paint chips, dust, soil, and/or stripper sludge must be disposed of in a municipal solid waste landfill with a liner and leachate collection system



# Disposal of Components from Non-Residential Projects

- **TCLP (Toxicity Characteristic Leachate Procedure)**  
Sample waste stream from building components for lead
- If TCLP results from waste stream of paint chips, dust, soil, and/or stripper sludge are less than 5 milligrams per liter (5 parts per million), may go to MSW or C&D landfill – check with landfill operator
- If greater than 5 milligrams per liter (5 parts per million) must comply with Georgia Rules for Hazardous Waste Management

# Following lead-based paint abatement:



- Final cleaning is conducted
- Certified inspector or risk assessor collects dust wipe samples
- Samples sent to a laboratory for analysis
- Samples must come back below clearance levels

# Lead-Based Paint Program Recommendations



- **Have a Georgia Certified Lead Inspector on Staff**
- **Have a Certified Renovator on Staff**
- **Follow Lead Safe Work Practices**

# Georgia Asbestos Rule Requirements



•For asbestos removal projects involving > 10 SF or 10 LF of friable asbestos containing materials (ACM's), your facility must:

- Submit 10 Working Days Prior to Start Date
- A Project Notification is required for Asbestos Renovation, Encapsulation, or Demolition
- Must maintain records of Georgia Asbestos Waste Shipment

•Asbestos containing waste is to be disposed of only in a landfill permitted by EPD for acceptance of asbestos containing waste

•Asbestos containing waste shall be sealed in leak-proof containers labeled with

- **“Caution: Contains Asbestos Fibers – Avoid Opening or Breaking Container – Breathing Asbestos is Hazardous to Your Health”**

•Contractor licensing – shall obtain prior to starting and make available

# Composting



- GDC operate 10 composting operations that process organics from 21 state prisons.
- In FY 2008, GDC composted:
  - 5,500 tons of food waste
  - 20,300 tons of organic material



**Avoided disposal cost = \$1,032,000**

# Composting



- In-Vessel composting machine installed at Coastal State Prison near Savannah.
- Operating capacity of 29.5 cubic yards; processing 8 cubic yards daily with a retention time of 4-5 days.



# Recycling Program



- GDC operates 21 recycling operations that process recyclables from 30 state prisons and local communities.
- In FY08, GDC recycled
  - 2,492 pallets
  - 780 tons of cardboard
  - 185 tons of steel
  - 2 tons of aluminum
- Avoided disposal cost = \$38,680





# Points of Contact

- **Lead-based Paint and Asbestos**
  - 404-363-7026
- **Underground Storage Tanks**
  - 404-362-2687
- **Solid Waste Management**
  - 404-362-2692
- **Asbestos Inspection and Enforcement**
  - 404-582-9221
- **Solid Waste Rules**
  - [www.gaepd.org](http://www.gaepd.org)