

## **POST 2: Current Topic 2021-2022**

# **Landfills, Incinerators and Hazardous/Universal Waste**

### **Connecticut**

1. How many active landfill sites are left in Connecticut?
2. What types of materials are disposed of in Connecticut landfill sites?
3. Why did so many landfills close in Connecticut?
4. Does Connecticut waste end up in landfills in other states?
  - a. If so, what types of waste is transported to out of state landfills?
  - b. How much of Connecticut's waste is sent to out of state landfills?
5. What is hazardous waste?
6. What is universal waste in Connecticut?
7. What is Environmental Justice? How does Connecticut's current law support Environmental Justice? Could more be done?
8. What's RCRA? What's the significance of RCRA?

### **Where is Away Anyway?**

Perhaps you have asked yourself this question after flushing the toilet or watching the garbage truck collect your refuse and recyclables. Where does all this stuff go? It is important to know the answer to this question if we are going to fix the current system in place. Leaving our bins out on the curb to be picked up by the garbage truck is not the end of the process. It is only the beginning of a long journey that our materials take.

Native Americans had little waste for most of their discards decomposed naturally in the soil. Mostly shells and broken tools remain and are often found in the form of a *midden*, or an old refuse heap.

Colonials also did this. Food scraps were given to animals, but broken plates and cups that could not find another useful life were usually put in a hole or "behind the barn."

Eventually our households in the U.S. created more and more waste, which became too difficult for us to manage on our own property. We began carting or hauling our trash to 'waste lands' (i.e. wetlands and swamps) until the 1970s. After environmental laws were formed (see 1970's below) these waste lands (aka dumps; landfills) were polluting less, but we were still sending our waste to be buried.

In Connecticut our old 'dumps' became transfer stations – no longer burying waste, but rather putting in containers and moving to the final disposal destination.

In the 1970's through 1990's our waste was collected and dumped locally at each town dump or landfill. As municipalities began the process of closing landfills, regional facilities were created to replace them. These new facilities were required to obtain permits to ensure they were adhering to environmental regulations and protections of the time. These regional facilities were for both combustion and recycling. In the 1990's

state-of-the-art combustion facilities were built to reduce air pollution and capture energy and convert that energy into electricity which is why they are called waste-to-energy (WTE) facilities.

While Connecticut reduced the number of dumps it began aggregating all our waste into regional facilities that were often sited in communities where large numbers of low-income and people of color reside. While no consideration was taken for those communities at that time, now as new facilities are planned and constructed, Connecticut is required to inform communities of these facilities interested in citing in their neighborhoods due to [Connecticut's Environmental Justice Program](#).

But where does your waste go? Consider following the truck that comes to your curb. A recent project launched by MIT sought to answer this question about where our refuse ends up by following it with tracking devices. Check out the project here <http://senseable.mit.edu/trashtrack/>.

### **Resource Conservation and Recovery Act**

The Resource Conservation and Recovery Act (RCRA) is the principal federal law concerning solid and hazardous waste disposal. The act was passed in 1976 in response to the increasing amounts of municipal and industrial waste in the United States. All open dumping of waste was banned due to the establishment of RCRA. (SOURCE: <http://epa.gov/osw/laws-regs/rcrahistory.htm>)

In the 1970's, "away" for most Nutmeggers was the town dump. Our trash was picked up or we drove our trash to the dump ourselves. The dumps were the wastelands or wetlands and swamps of another era and became the places we starting dumping our trash. After the passing of RCRA, Connecticut banned all open dumping, requiring sand or other debris cover the pile of waste. The act and the material used is referred to as "daily cover." At this time there was a movement to close all dumps and site and build 'sanitary landfills'. Sanitary landfills took advantage of the best technology of the day providing landfill liners to avoid water pollution from leachate and covered our trash daily to reduce vermin and other vector problems.

While Connecticut did build a couple of regional landfills, it's relied more on waste-to-energy facilities to dispose of its trash.

While Connecticut reduced the number of pollution dumps and built better facilities to burn or bury our waste, we continued to increase the amount of trash we generated as trends for single-use items over durable goods increased.

### **What Kinds of Wastes are "Hazardous?"**

Hazardous wastes include many kinds of discarded chemicals and other wastes generated from commercial, industrial, and institutional activities. Types of waste that are commonly hazardous include cleaning solvents, spent acids and bases, metal

finishing wastes, painting wastes, sludges from air and water pollution control units, and many other discarded materials. Hazardous wastes may also include many items that you would not normally think of as being hazardous, such as:

- Batteries (can contain acids and bases, as well as metals like lead and cadmium)
- CRT-based computer monitors (contain lead)
- Thermostats and fluorescent lamps (contain mercury)
- Renovation and demolition waste (can contain lead-based paint)

### Universal Wastes

This is a special subset of hazardous wastes that are regulated under a streamlined set of regulations called *The Universal Waste Rule*. These wastes include:

- **Batteries.** Covered batteries include lead-acid batteries, nickel-cadmium batteries, silver cells and mercury-containing batteries.
- **Cancelled and recalled pesticides.**
- **Mercury thermostats and other mercury-containing equipment (e.g., mercury switches, barometers, sphygmomanometers, etc.).**
- **Mercury-containing lamps.** This includes fluorescent lamps (including compact fluorescent lamps), mercury vapor lamps, and other lamps that contain mercury.
- **Used electronics.** This includes desktop and laptop computers, computer peripherals, monitors, copying machines, scanners, printers, radios, televisions, camcorders, video cassette recorders (“VCRs”), compact disc players, digital video disc players, MP3 players, telephones, including cellular and portable telephones, and stereos.

### **Household Hazardous Wastes.**

These are wastes that are similar to hazardous wastes listed above, but that are generated by residents in their homes while doing routine household activities. Examples of household hazardous waste include paints, stains, solvents, pesticides, old gasoline and other fuels, etc. These wastes are just as hazardous as their commercially-generated counterparts, but are not subject to hazardous waste requirements. However, DEEP encourages household residents to properly dispose of their household hazardous wastes by taking them to a DEEP-authorized household hazardous waste collection center or event. To find out more about household hazardous waste, see the DEEP’s [Household Hazardous Waste Web Page](#).

### **CT Essential**

- Active Landfill Sites in Connecticut <https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/Solid-Waste/Active-Landfill-Sites>
- [DEEP: 'It's Time For Connecticut to Reduce, Reuse And Recycle' | Across Connecticut, CT Patch](#)
- What is Hazardous Waste (Connecticut) <https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/Hazardous-Waste/What-is-Hazardous-Waste>

- Waste incineration is an Environmental Justice Issue  
<https://www.clf.org/blog/incineration-is-an-environmental-justice-issue/>
- Environmental Justice in Connecticut <https://www.ctlcv.org/environmental-justice5975.html>
- [CCSMM-Deck-Kickoff-Mtg\\_GF.pdf \(ct.gov\)](#) – esp. pages 13-15 for current data on waste disposal; landfill vs. incineration, in-state vs. out-of-state.

### **CT Good Resources**

- What are Household Hazardous Wastes (HHW)?  
<https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/Household-Hazardous-Waste/HHW-Home>
- Environmental Justice (U.S. EPA) [Environmental Justice | US EPA](#)

### **CT Resources if you want to know more/dig deeper**

- New Jersey's Office of Environmental Justice <https://www.nj.gov/dep/ej/ej-state.html>
- Day 2 of NERC's Fall Conference Talks New Jersey's Environmental Justice Law, Communities and Solar Panel Recycling  
<https://wasteadvantagemag.com/day-2-of-nercs-fall-conference-talks-new-jerseys-environmental-justice-law-communities-and-solar-panel-recycling/>