



CT DEEP - Solid Waste Facility Operator Certification - Module 2

"Waste/Materials Types & Management, SWF
Infrastructure & DEEP Permits and
Authorizations"



SOLID WASTE HAS ONLY BEEN REGULATED SINCE 1971 in CT



1970



1971



Late 1960's – Early 1970's



POLLUTION HURTS ALL OF US. GET INVOLVED NOW.

In the fight against pollution, we still have far to go. You can help by becoming a community volunteer. Write: Keep America Beautiful, Inc. 99 Park Avenue, New York, N.Y. 10018

People start pollution. People can stop it.



FROM GARBAGE TO GARDEN BECAUSE ENOUGH PEOPLE CARED.

THE 1960s and 70s saw a dramatic increase in pollution. In 1962, the Cuyahoga River in Cleveland, Ohio, caught fire. In 1969, the Santa Barbara oil spill in California. In 1970, the Love Canal in Niagara Falls, New York. In 1976, the Bhopal gas tragedy in India. In 1984, the Union Carbide gas leak in Bhopal, India. In 1986, the Chernobyl nuclear power plant disaster in the Soviet Union. In 1989, the Exxon Valdez oil tanker spill in Alaska. In 1991, the Gulf War oil fires in Kuwait. In 1992, the Erika oil tanker spill in France. In 1993, the Sea Empress oil tanker spill in the United Kingdom. In 1994, the Agulhas Star oil tanker spill in South Africa. In 1995, the Braer oil tanker spill in Norway. In 1996, the Erika II oil tanker spill in France. In 1997, the Sea Empress II oil tanker spill in the United Kingdom. In 1998, the Braer II oil tanker spill in Norway. In 1999, the Erika III oil tanker spill in France. In 2000, the Sea Empress III oil tanker spill in the United Kingdom. In 2001, the Braer III oil tanker spill in Norway. In 2002, the Erika IV oil tanker spill in France. In 2003, the Sea Empress IV oil tanker spill in the United Kingdom. In 2004, the Braer IV oil tanker spill in Norway. In 2005, the Erika V oil tanker spill in France. In 2006, the Sea Empress V oil tanker spill in the United Kingdom. In 2007, the Braer V oil tanker spill in Norway. In 2008, the Erika VI oil tanker spill in France. In 2009, the Sea Empress VI oil tanker spill in the United Kingdom. In 2010, the Braer VI oil tanker spill in Norway. In 2011, the Erika VII oil tanker spill in France. In 2012, the Sea Empress VII oil tanker spill in the United Kingdom. In 2013, the Braer VII oil tanker spill in Norway. In 2014, the Erika VIII oil tanker spill in France. In 2015, the Sea Empress VIII oil tanker spill in the United Kingdom. In 2016, the Braer VIII oil tanker spill in Norway. In 2017, the Erika IX oil tanker spill in France. In 2018, the Sea Empress IX oil tanker spill in the United Kingdom. In 2019, the Braer IX oil tanker spill in Norway. In 2020, the Erika X oil tanker spill in France. In 2021, the Sea Empress X oil tanker spill in the United Kingdom. In 2022, the Braer X oil tanker spill in Norway. In 2023, the Erika XI oil tanker spill in France. In 2024, the Sea Empress XI oil tanker spill in the United Kingdom. In 2025, the Braer XI oil tanker spill in Norway.

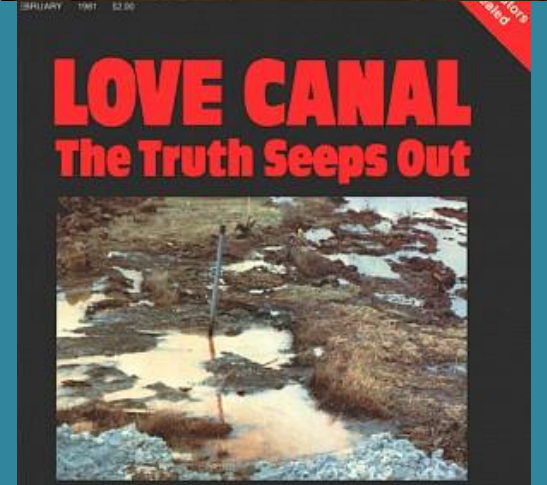


People start pollution. People can stop it.



Love Canal - Niagara, NY

Over 800
Homes



DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION (DEEP)



TYPES OF SOLID WASTE/MATERIALS

Approx. Percentages



60% MSW

**20% BULKY
WASTE**

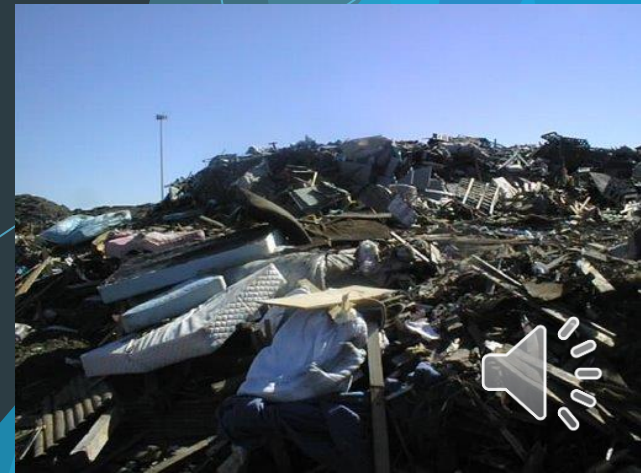
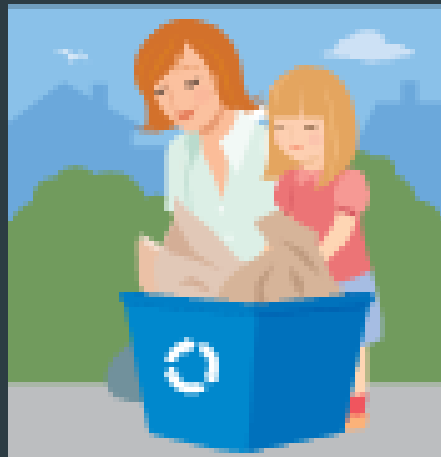
**10% SPECIAL
WASTE**

**10% HAZARDOUS
WASTE**



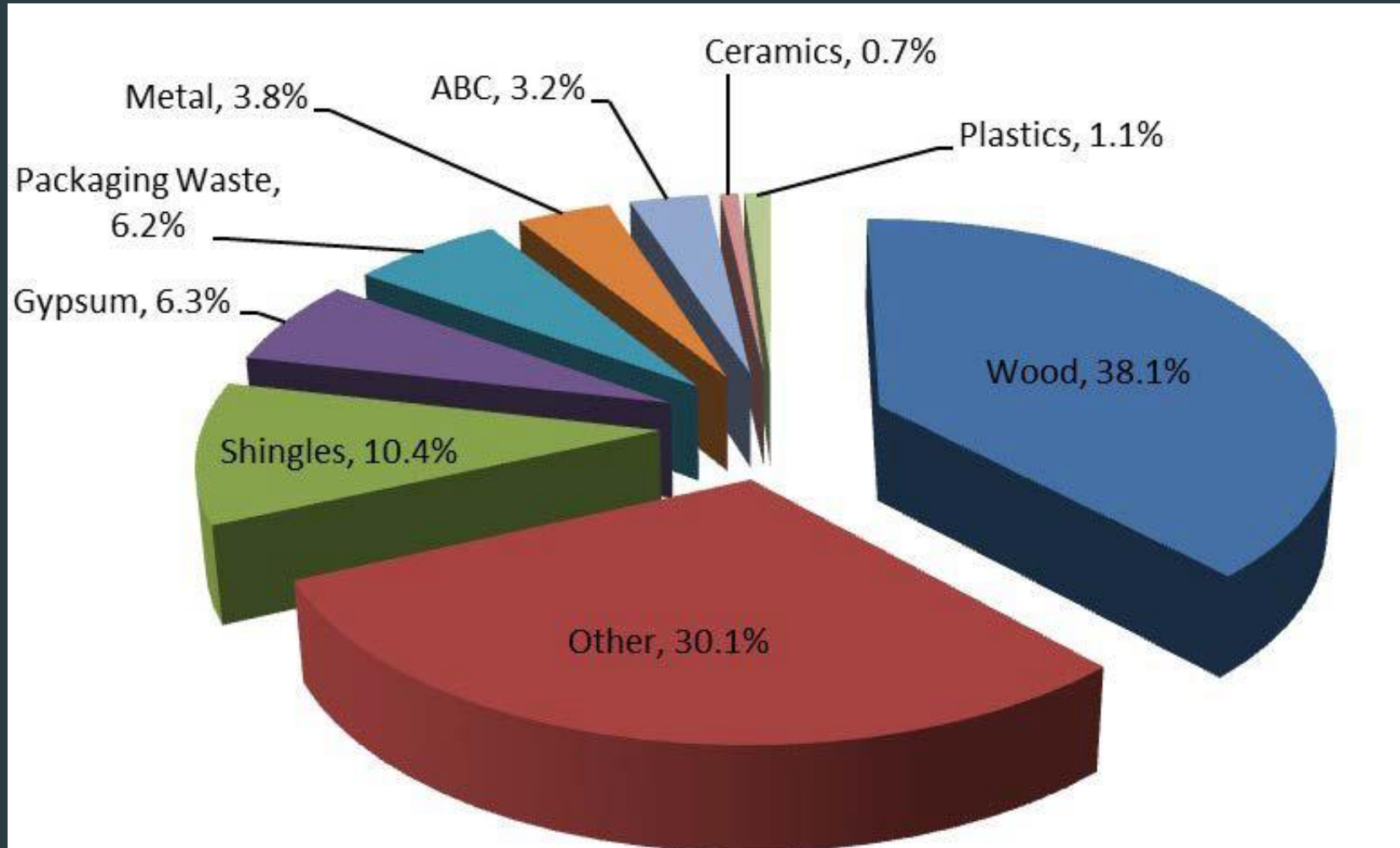
Types of Solid Waste/Materials

- ▶ Municipal Solid Waste (MSW)
- ▶ Up to 40% of MSW is Food Scraps, Leaves, Grass, Clean Wood = Organic Materials
 - Includes Designated Recyclables
 - Oversized MSW = Furniture, Rugs, Mattresses and other Large Items - Historically, referred to as Bulky Waste -



Types of Solid Waste/Materials

► Construction & Demolition Debris (C&D)



Types of Solid Waste/Materials

► Special Wastes



Types of Solid Waste/Materials

▶ Hazardous Waste



Solid Waste/Materials Management

- ▶ **Historical Solid Waste Management:
Open Burning**



OPEN DUMP



Solid Waste/Materials Management

▶ Historical Solid Waste Management: Open Burning





BURNING GARBAGE IS ILLEGAL!

BREATHING POLLUTED SMOKE from the burning of household garbage (like plastics, treated wood, tires or coated paper) can cause respiratory problems for your family or neighbors.

YOU CAN BURN YARD WASTE, like dry branches and vegetation. However, burning may be prohibited during forest fire season... March 1 through May 31 and Oct. 1 through Dec 31.

KNOW THE LAW!

NEVER LEAVE FIRES UNATTENDED! When burning yard waste, keep a shovel and some water nearby. The majority of wildfires are caused by people and their carelessness!

OPEN BURNING of your household garbage can allow toxic ash to settle on farm crops, grazing areas, streams and gardens, getting chemicals into the food we consume.



AS AN ALTERNATIVE to burning, try recycling or taking advantage of the free landfill day in your area.

TO LEARN MORE before you open burn or to report illegal burning, call the West Virginia Department of Environmental Protection, Division of Air Quality (866-568-6649, ext. 122) or go to www.dep.wv.gov and click on Air - Open Burning Regulation.



Solid Waste/Materials Management

▶ Historical Solid Waste Management: Open Burning



Solid Waste/Materials Management

▶ Historical Solid Waste Management: Open Burning



Solid Waste/Materials Management

▶ Historical Solid Waste Management: Open Burning





Solid Waste/Materials Management

▶ Historical Solid Waste Management: Ocean Dumping



Solid Waste/Materials Management

▶ Historical Solid Waste Management: Ocean Dumping



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Solid Waste/Materials Management

- ▶ Sanitary Landfills (1976 - Present)
 - ▶ All Sanitary Landfills were required to **compact** the waste and then **cover** the waste with soil in accordance with Subtitle D of the RCRA (Resource Conservation & Recovery Act of 1976) and State Regulations
 - ▶ 1976 - Connecticut had over 250 Sanitary Landfills
 - ▶ Most were used for the disposal of MSW
 - ▶ Some were used for the disposal of "bulky waste" and "special waste" items (asbestos, sewage sludge, ash etc)



Solid Waste/Materials Management

▶ Sanitary Landfills (1976 - Present)



Solid Waste/Materials Management

- ▶ Sanitary Landfills (1976 - Present) "Compaction"



Solid Waste/Materials Management

- ▶ Sanitary Landfills (1976 - Present) "Cover Material"



Solid Waste/Materials Management

- ▶ An Open Dump - In Violation of Federal/State Regulations



Solid Waste/Materials Management

- ▶ Sanitary Landfills (1976 - Present)
 - ▶ False Assumptions -
 - ▶ Waste will biodegrade quickly once buried
 - ▶ Environment would not be polluted
 - ▶ Local Public Health would not be affected



Solid Waste/Materials Management

- ▶ Sanitary Landfills (1976 - Present)
 - ▶ Present (2021) Connecticut ~ 17 Sanitary Landfills
 - ▶ Most have been Closed - for several reasons:
 - ▶ Waste is not biodegrading as expected
 - ▶ Public Opposition
 - ▶ Environmental/Public Health Issues/Property Values +
 - ▶ Landfill Capacity has been reached - Full
 - ▶ New Federal Regulations (RCRA) closed many MSW Landfills in the early 1990's



Solid Waste/Materials Management

▶ Sanitary Landfills - Closure



Solid Waste/Materials Management

▶ Sanitary Landfills - Closure



Solid Waste/Materials Management

▶ Sanitary Landfills - Closure



Solid Waste/Materials Management

▶ Sanitary Landfills - Closure



Time for a Quiz!

True or False?

- 1) Sanitary Landfill management has been practiced for hundreds of years
- 2) An Open Dump is any active landfill that does not compact and cover its waste in accordance with State Regulations
- 3) Most Sanitary Landfills closed in the early 1990's
- 4) Biodegradation within a Sanitary Landfill is not as quick as we once believed
- 5) Pollution was reduced when Open Burning of solid waste was prohibited by law



Answers:

- 1) False - Sanitary Landfill management began in 1976 - only 45 years ago
- 2) True - Failure to compact and cover is a violation and can be considered an open dump
- 3) True - Federal RCRA Regulations caused most MSW Landfills to close and establish Transfer Stations in the early 1990's
- 4) True - Biodegradation is very slow due to lack of moisture, sunlight, air & movement
- 5) False - The pollution was only transferred from our air into our soil and ground/surface waters



Solid Waste/Materials Management

- ▶ Transfer Stations Replaced Most Sanitary Landfills



Solid Waste/Materials Management

- ▶ Transfer Stations Replaced Most Sanitary Landfills









04.23.2014 11:36







HOUSEHOLD WASTE

RECYCLING

1

RECYCLING

RECYCLING

2

DO NOT USE

DRIVER ALERT

DO NOT USE

CAUTION

DO NOT USE

05.12.2014 10:53





CARDBOARD
ONLY

CARDBOARD
ONLY

NO TRASH
RECYCLING ONLY

02.02.2012 15:02







-12

05.12.2014 08:44





10.23.2012 13:14







Solid Waste/Materials Management

- ▶ Transfer Stations - Consolidate/Compact Waste
- ▶ Very Limited Processing is Authorized
- ▶ Must Transport Waste/Materials to an Authorized Processing, Disposal or Recycling Facility
 - ▶ Volume Reduction Facilities (VRFs)
 - ▶ Resources Recovery Facilities (RRFs)
 - ▶ Landfill; or
 - ▶ Recycling Facilities (Scrap yards, Material Recovery Facilities - MRFs)



Solid Waste/Materials Management

- ▶ Volume Reduction Facilities (VRFs) ~ 30
 - ▶ C&D, OMSW, Scrap Tires, Recyclables
 - ▶ Some may also accept MSW, Universal Wastes & Street sweepings, grit & catch basin cleanout debris





02.02.2012 15:05



Solid Waste/Materials Management

- ▶ Volume Reduction Facilities
 - ▶ Manually and mechanically sort through C&D and OMSW for reusable and recyclable materials
 - ▶ Clean Wood
 - ▶ Scrap Metals
 - ▶ Cardboard
 - ▶ Scrap Tires
 - ▶ Mattresses
 - ▶ Plastics
 - ▶ Asphalt Roofing Shingles
 - ▶ Gypsum Wallboard
 - ▶ Clean Fill



CT EXPORTS over 90% of our C&D/OMSW TO OUT-OF-STATE LANDFILLS and ABANDONED MINE SHAFTS !



Solid Waste/Materials Management

▶ Out-Of-State Sanitary Landfills



10,000 TPD



Solid Waste/Materials Management

- ▶ Exporting Waste/Materials to Other Countries



Solid Waste/Materials Management

- ▶ Resources Recovery Facilities (RRFs)
 - ▶ Connecticut leads the Nation in the amount of solid waste combusted into energy at RRFs since the late 1980's
 - ▶ Approximately 90% of our MSW is managed at RRFs
 - ▶ Two RRFs have recently closed (Exeter Energy and Covanta Wallingford) and others may close in the future




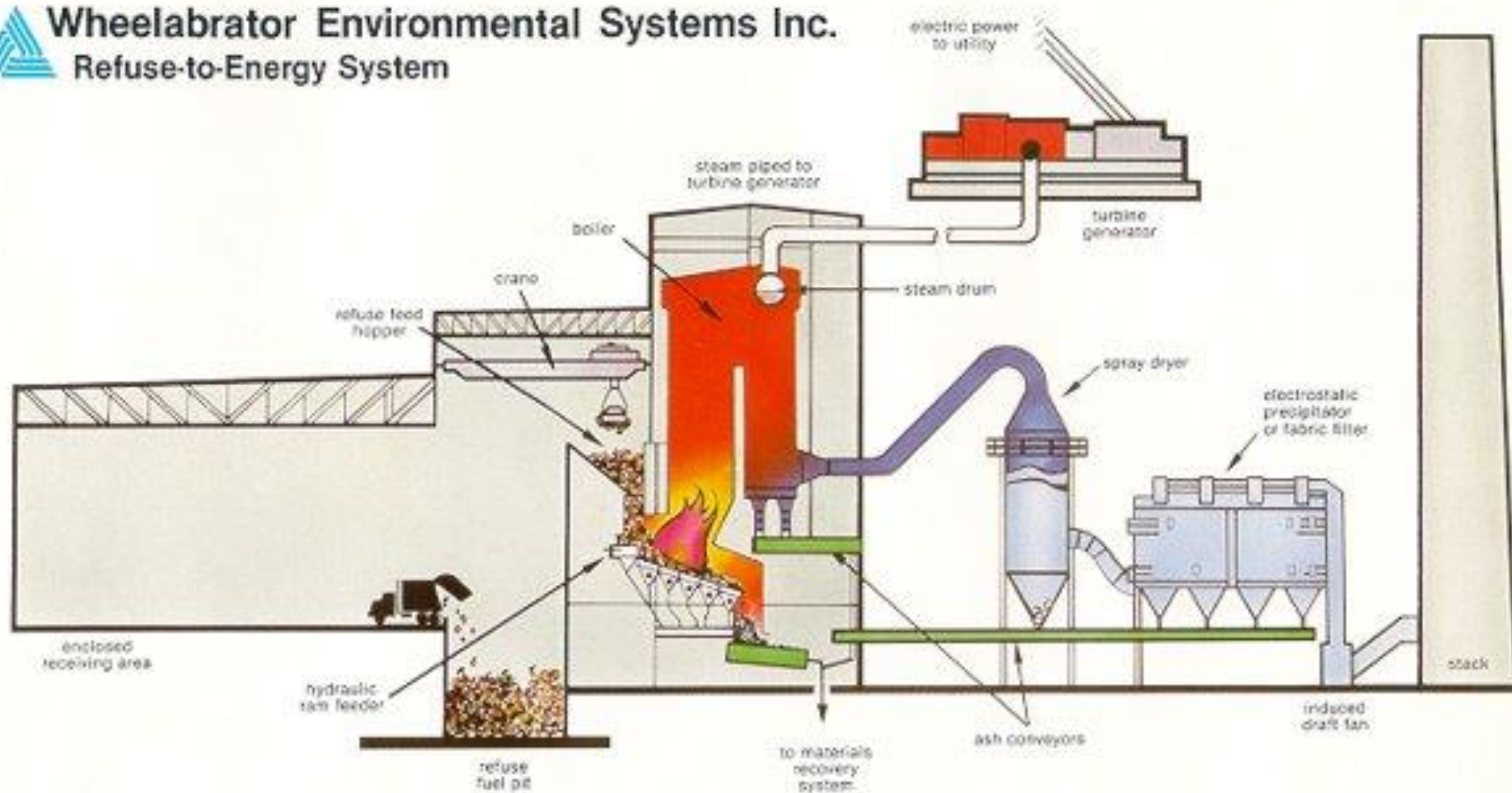
Solid Waste/Materials Management

- ▶ Resources Recovery Facilities (RRFs)



Solid Waste/Materials Management

 **Wheelabrator Environmental Systems Inc.**
Refuse-to-Energy System



Solid Waste/Materials Management

- ▶ Resources Recovery Facilities (RRFs)



Solid Waste/Materials Management

- ▶ Material Recovery Facilities (MRFs)

- ▶ Connecticut has 4 MRFs:

- ▶ Berlin
 - ▶ Danbury
 - ▶ Hartford
 - ▶ Willimantic



- ▶ Many Individual Permitted VRFs may also process source-separated designated recyclables in addition to other Waste/Materials

- ▶ City Recycling/Tunnel Hill Partners Company
 - ▶ USA Hauling & Recycling/Murphy Road, LLC
 - ▶ CWPM, LLC and others



Solid Waste/Materials Management

- ▶ Material Recovery Facilities (MRFs)
 - ▶ Dual Stream Recycling - Paper/Fiber are separated from the Containers (glass, metal, plastics)



Solid Waste/Materials Management

- ▶ Material Recovery Facilities (MRFs)
 - ▶ Single Stream Recycling
 - ▶ All Paper/Fiber and Containers are collected together in one bin



Solid Waste/Materials Management

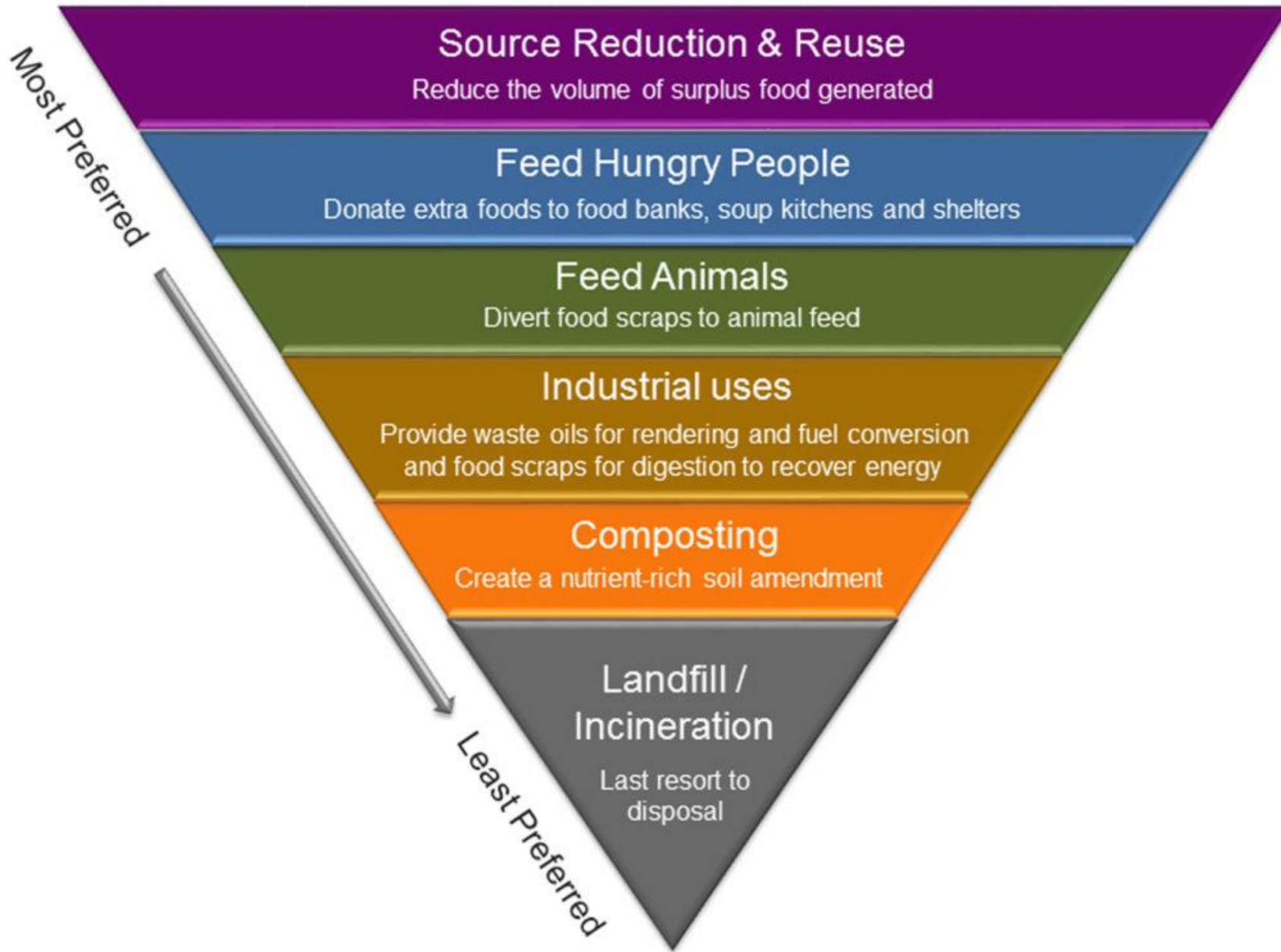
- ▶ Composting Sites
 - ▶ Over 100 Leaf Compost Sites
 - ▶ Most are Municipal
 - ▶ Some are Private Farms

- ▶ In the Future, allow food scraps?





Food Recovery Hierarchy



Solid Waste/Materials Management

- ▶ Food Scraps Composting & Anaerobic Digestion
 - ▶ New Milford Farms - New Milford
 - ▶ 151,865 TPY
 - ▶ WeCare Denali - Ellington
 - ▶ 43,500 TPY
 - ▶ New England Compost - Danbury
 - ▶ 5,000 cy (1,000 cy - food scraps)

 - ▶ Fort Hill Farm - Thompson (AD)
 - ▶ 31,300 TPY & 17,500 TPY (manure)



Solid Waste/Materials Management

- ▶ Quantum Biopower Anaerobic Digester - 360 TPD

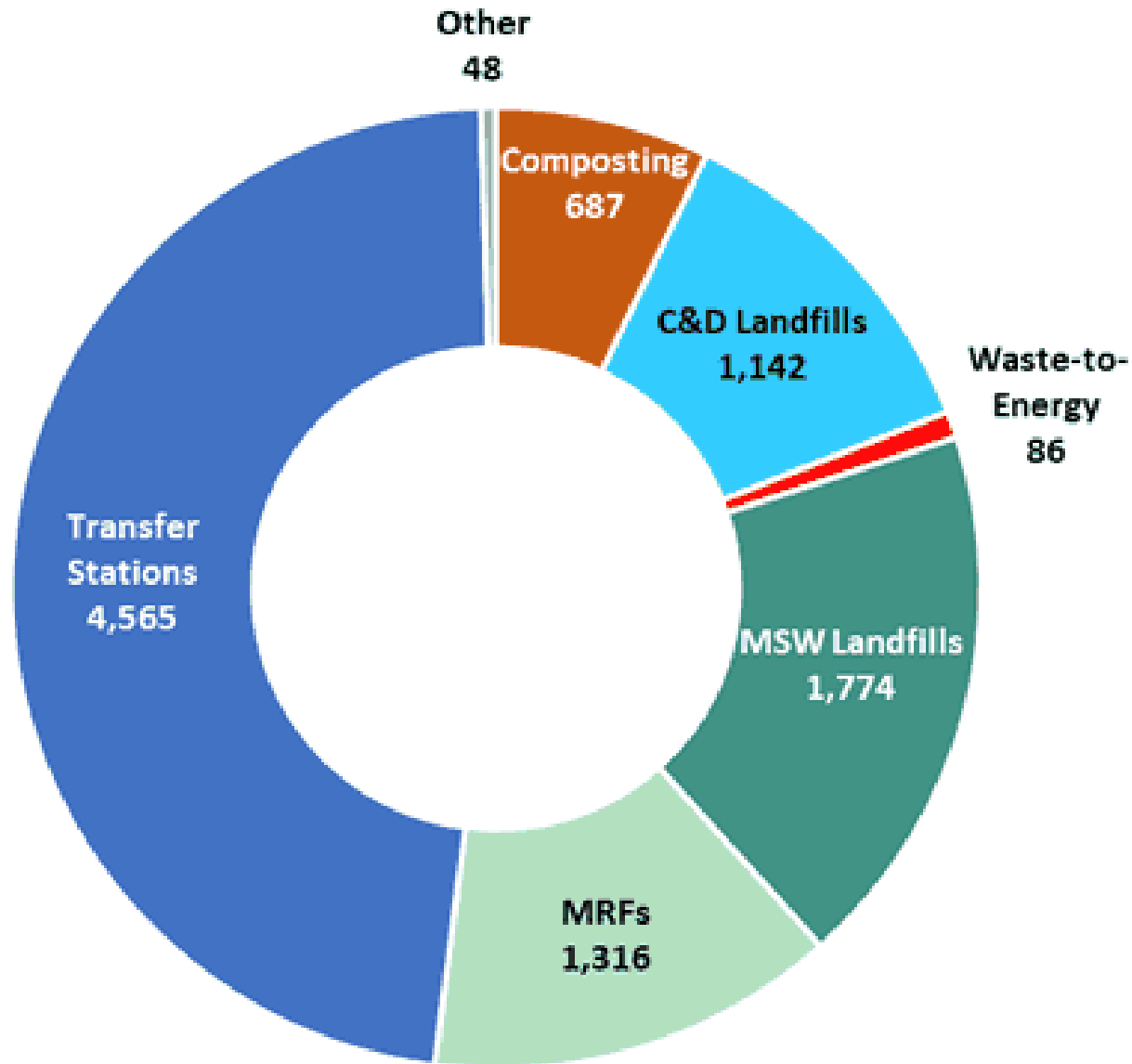


Solid Waste/Materials Management

- ▶ Composting at Home
- ▶ Composting at Schools
- ▶ Composting at Work
- ▶ Community Composting

- ▶ Collection of Food Scraps at A Municipal Transfer Station



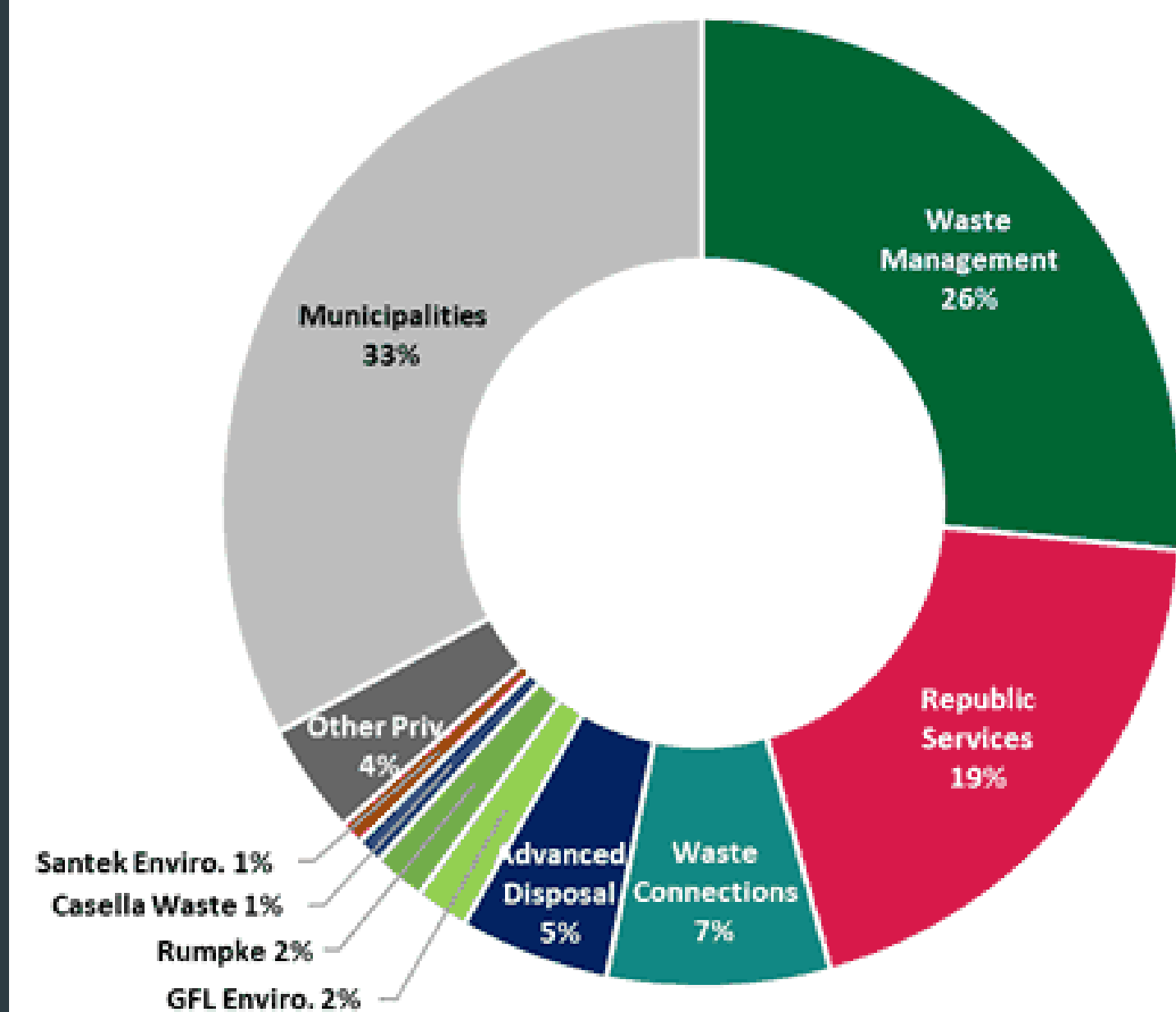


SWFs in the USA

- ▶ ~ 86 RRFs (5)
- ▶ ~ 1,774 MSW LFs (0)
- ▶ ~ 1,142 C&D LFs (10)
- ▶ ~ 1,316 MRFs (4)
- ▶ ~ 4,565 TS/VRFs (280)
- ▶ ~ 687 Composting (100)
- ▶ ~ 48 Other - ADs (2)



Solid Waste Management in the USA



Time for a Quiz!

True or False?

- 1) Municipalities own and operate all Transfer Stations in Connecticut
- 2) Resources Recovery Facilities combust the
▶ largest percentage of our MSW
- 3) Volume Reduction Facilities only process and manage Construction & Demolition debris
- 4) Materials Recovery Facilities process and manage all types of Connecticut's designated recyclables
- 5) Some Resources Recovery Facilities have closed and have become transfer stations



Answers:

- 1) False - There are Transfer Stations owned and operated by private, commercial companies
- 2) True - 87-90% of our MSW is received at RRFs for disposal/combustion
- 3) False - Some VRFs can accept and process MSW, OMSW, Organics, Electronics depending on their DEEP Permit/Authorization
- 4) False - MRFs generally accept only single stream or dual stream designated recyclables
- 5) True - Two RRFs have recently closed and/or have been converted to a TS. The MIRA - CSWS (Hartford RRF) is expected to stop combusting MSW by mid-2022



Comprehensive Materials Management Strategy (CMMS)



REDUCE DISPOSAL =
WASTE DIVERSION

REDUCE, REUSE,
REPAIR, REFURBISH

SOURCE REDUCTION

RECYCLING

COMPOSTING

ENERGY
RECOVERY

LANDFILL
INCINERATION

60% Waste Diversion,
Source Reduction,
Recycling & Composting
by 2024



Source Reduction



Reduce Buying - Simplify -
Consume Less!

Reduce Disposal/Waste:

- Reuse (donate, sell..)
- Repair or Refurbish
- Increase Recycling





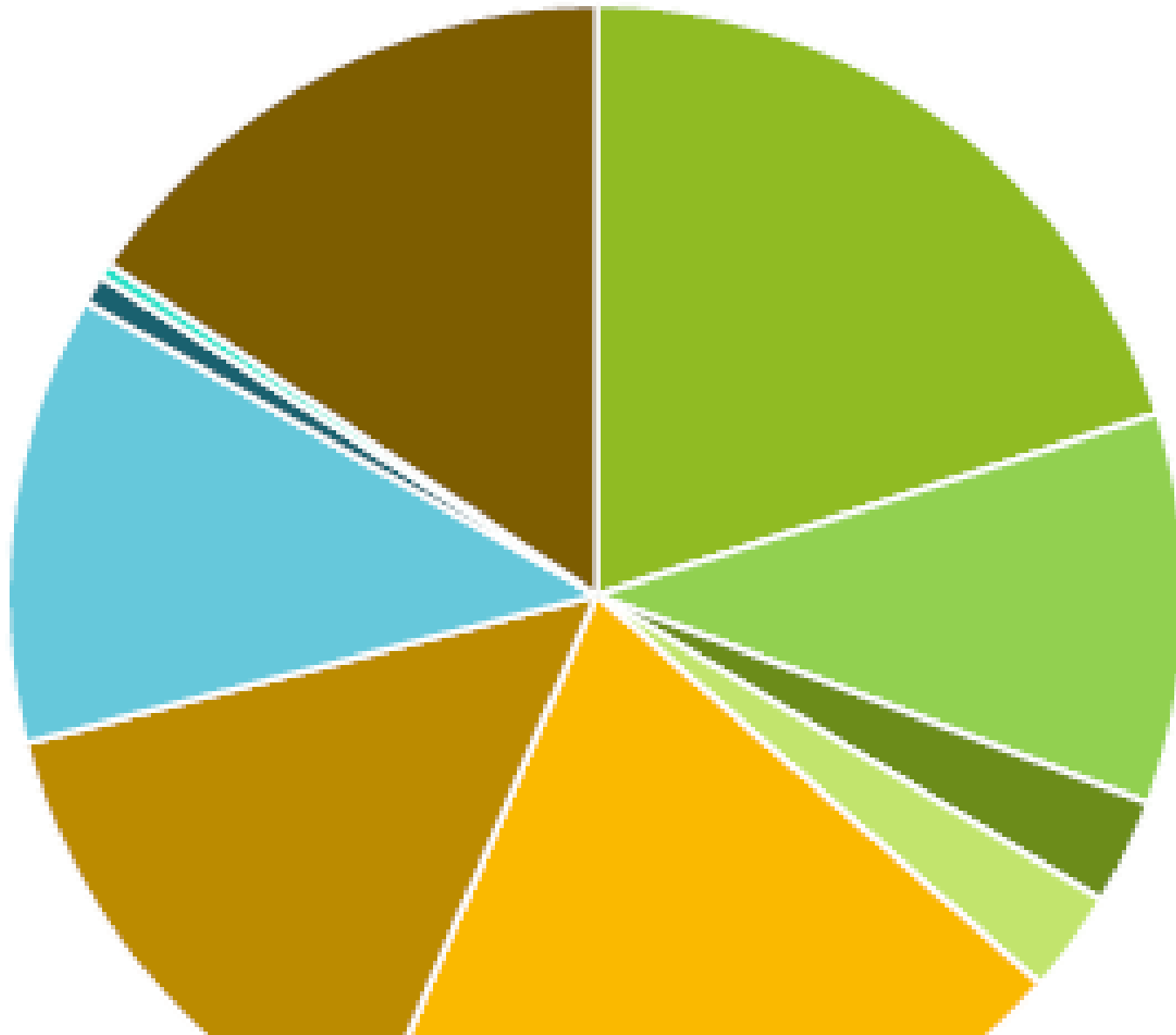
BORROW



Swap Shops/Material Exchanges







- Paper
- Plastic
- Metal
- Glass
- Food Scraps
- Other Organics
- C&D Debris
- HH Haz Waste
- Electronics
- Other Wastes



- ▶ Recycling Education
 - ▶ Schools
 - ▶ Municipal Transfer Stations
 - ▶ Handouts/Brochures/Posters
 - ▶ Public Service Announcements
 - ▶ Website Links - [RecycleCT](#)
 - ▶ Encouraging Composting



Extended Producer Responsibility (EPR)

Product Stewardship

- Electronics (2009)
- Mercury Thermostats, Thermometers and Switches (2013)
- Paint (2013)
- Mattresses (2015)
- Scrap Tires, Packaging, Gas Cylinders

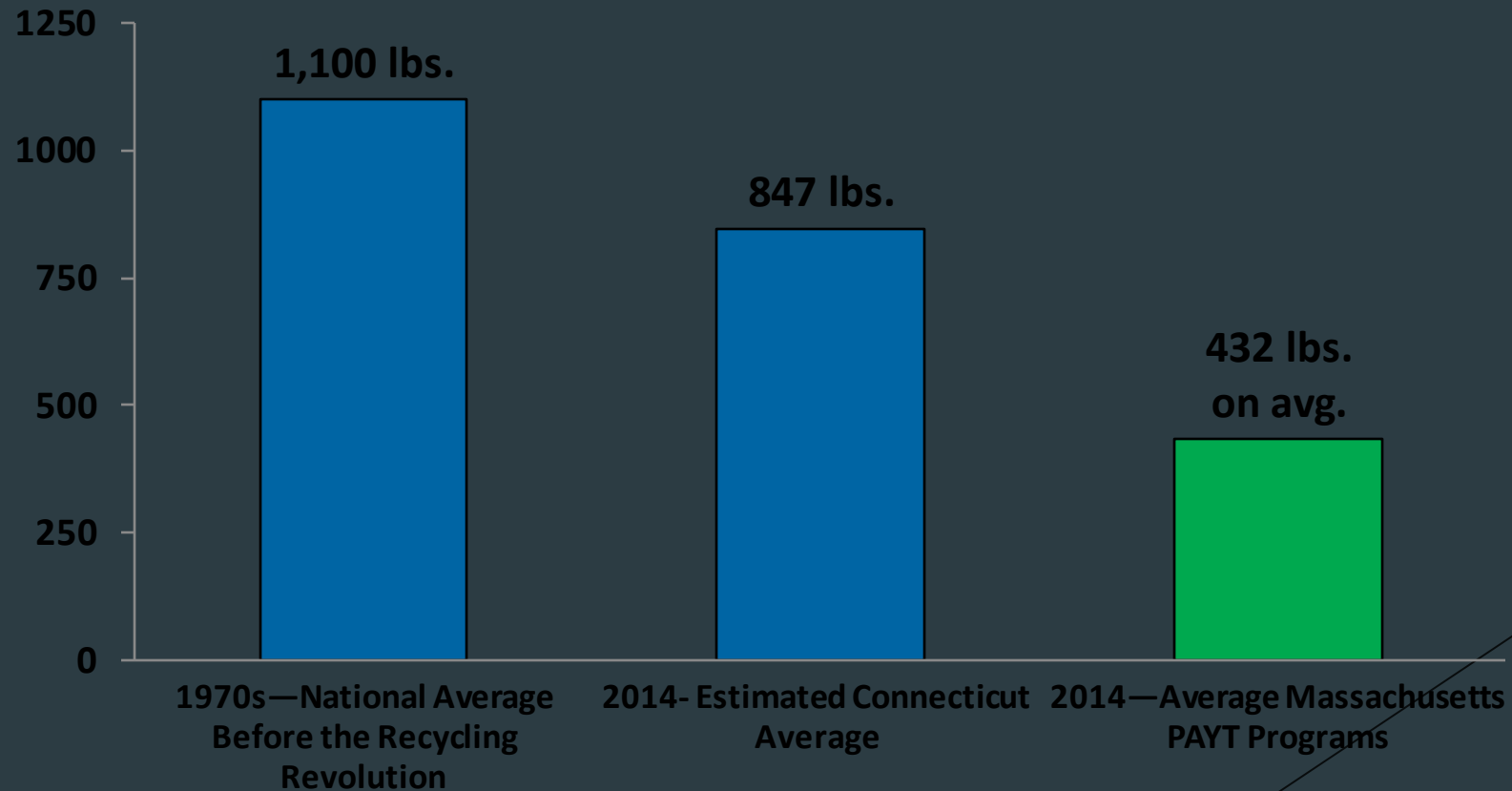


Unit Based Pricing



SMART - Unit Based Pricing

SMART = **S**ave **M**oney **A**nd
Reduce **T**rash



Unit Based Pricing

Mansfield, CT - Residents generate 500 pounds of trash per capita annually compared to average CT resident of 740 pounds

Stonington, CT - Town has saved \$7M on trash since 1992



Unit Based Pricing

Town of Redding, CT

- MSW: \$ 0.20 cents per pound = \$400/ton !
- OMSW/C&D Waste: \$ 0.10 per pound = \$200/ton !
- Tires: Passenger \$3.00 Truck \$6.00
Larger \$15.00 Rims Add +1.00 ... +2.00 +3.00
- Appliances Containing FREON:
\$20.00 each to cover having Freon removed



Current Materials Management

- ▶ Increased Diversion of Waste/Materials - Source Reduction, Reuse, Repair, Recycling, Composting, Energy Recovery (Anaerobic Digestion, RRFs, Gasification), Out-of-State Landfill Disposal
- ▶ Extended Producer Responsibility (EPR)
- ▶ SMART (Unit-Based Pricing)

Future Management Initiatives ?

- Landfill Mining ?
- Bio-Reactor Landfills ?
- Plasma Arch Technology ?



Landfill Mining

Landfill Mining and Reclamation

Landfill mining is the process of excavating waste from closed landfills to reduce their environmental impact. It includes removing any solid material from the ground after a predefined period and treating it to recover:

A combustible fraction (RRF)

Recyclable materials - scrap metals

Soil - Clean Fill (Reuse)

Remediation of property



Landfill Mining

The process involves a series of operations based on the principle— excavate, sieve and sort. The complexity of the process increases depending on the type of landfill. The machinery used includes:

Excavators

Conveyor belts

Trommel screen

Shredders

Magnets

Dust / Odor control sprayers

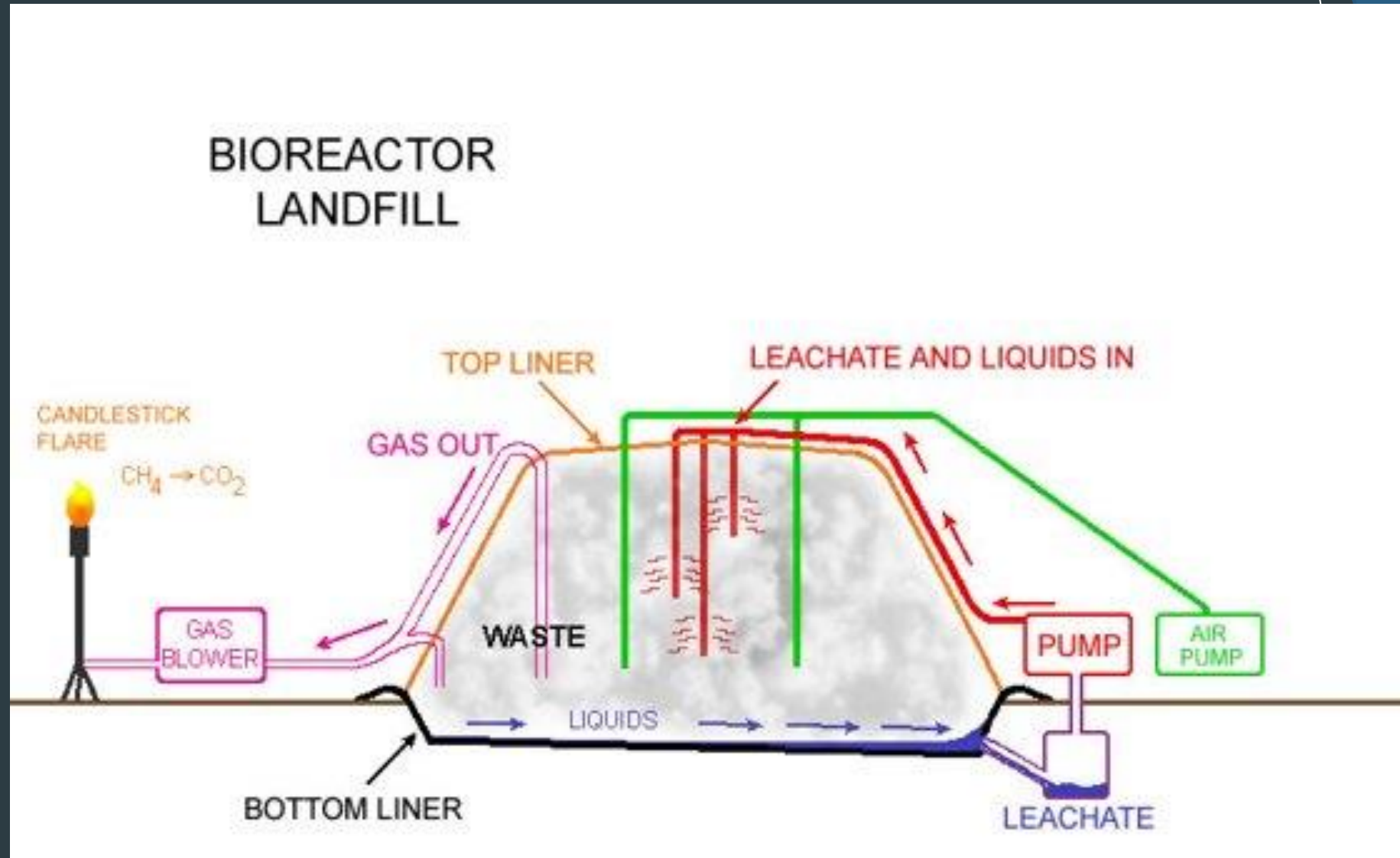


Bio-Reactor Landfills

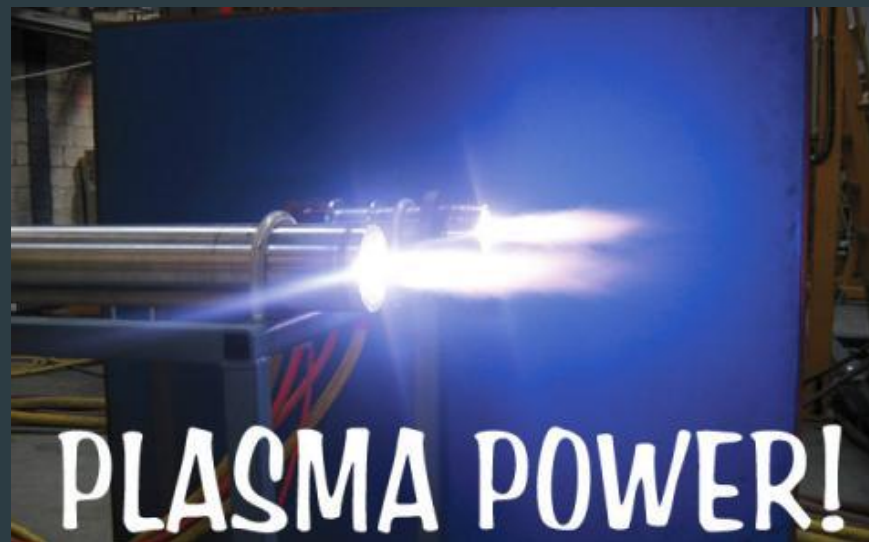
- California - Yolo County
- Florida - Polk County Landfill, Winter Haven
- Kentucky - Outer Loop Landfill
- Michigan - Clare county
- Mississippi - Plantation Oaks Bioreactor
- Missouri - Columbia
- New Jersey - ACUA's Haneman Environmental Park, Egg Harbor Township
- North Carolina - Buncombe County Landfill Project
- Virginia - Maplewood Landfill and King



Bio-Reactor Landfills



Plasma Arch Technology



Time for a Quiz!

True or False?

- 1) CMMS promotes increasing recycling rates as its number one priority.
- 2) Connecticut exports a large percentage of its solid waste out-of-State for disposal and will increase in the future.
- 3) If CT can divert food scraps to Anaerobic Digesters and composting sites we may reach our 2024 CMMS goal of 60% diversion.
- 4) Most municipalities will gladly adopt SMART - Unit Based Pricing in order to save money.
- 5) Connecticut is one of the leaders in the Nation promoting EPR/Product Stewardship.



Answers:

- 1) False - Source Reduction/Diversion is the number one priority of the CMMS.
- 2) True - 90% of our C&D is disposed out-of-state and a greater percentage of our MSW is expected to also be exported.
- 3) True - If CT can divert food scraps to AD and composting facilities we may reach our 2024 goal of 60% diversion.
- 4) False - SMART is a hard sell and it may require the State to mandate the program.
- 5) False - California and Vermont have the most EPR/Product Stewardship programs. CT only has four currently (2021)but more are expected in the future.



Connecticut DEEP Solid Waste Permitting



Connecticut DEEP Solid Waste Permitting

- ▶ Individual Permits - **Site Specific** Permit
- ▶ General Permits - **Statewide** Permit/Authorization

- ▶ DEEP provides permit assistance to all applicants upon request. Permit assistance for a project begins with the **pre-permit application process** and may continue with the [Client Concierge Service](#), reserved for highly-complex, multi-media permit projects requiring an added level of assistance
- ▶ Pre-Permit Application Guidance/Pre-Application Meeting
- ▶ For Pre-Application assistance, email DEEP.OPPD@ct.gov



Connecticut DEEP Solid Waste Permitting

- ▶ Individual and General Permit Fact Sheets, Applications/Instructions, Related Forms and Guidance Documents
 - ▶ Municipal Transfer Station General Permit Fact Sheet
 - ▶ Commercial VRF General Permit FactSheet
 - ▶ VRF Technical Guidance
 - ▶ Landfill Disruption & Post Closure Use Guidance
 - ▶ Connecticut Regulated Waste (Non-RCRA Hazardous Waste)



Connecticut DEEP Solid Waste Permitting

▶ Individual Permits - Who must apply:

- ▶ Any person proposing to construct, alter or operate a solid waste facility must obtain a permit. Regulated activities include, without limitation:
 - ▶ consolidating or transferring solid waste
 - ▶ consolidating or transferring waste suitable for recycling
 - ▶ incinerating waste for volume reduction and resources recovery purposes
 - ▶ processing waste for volume reduction purposes (greater than one ton per hour)
 - ▶ waste composting activities
 - ▶ storage/landfilling of solid waste including residue
 - ▶ biomedical waste processing, consolidation or transfer
 - ▶ consolidating or transferring household hazardous waste
 - ▶ intermediate processing of recyclable materials



Connecticut DEEP Solid Waste Permitting

- ▶ Individual Permits - Required Application Documents
- ▶ [Permit Application for Construction and Operation of a Solid Waste Facility](#) (DEP-SW-APP-100), including supporting documentation such as site plans, USGS topographic quadrangle map (8 ½" x 11" copy or original), applicant/owner/ operator information, ownership documents, and control and use agreements; [Permit Application Transmittal Form](#) (DEP-APP-001); [Applicant Compliance Information](#) (DEP-APP-002).



Connecticut DEEP Solid Waste Permitting

▶ Individual Permits - Fees

- ▶ Fees are specific to the permitted activity and are set forth in RCSA Section 22a-208a-1.

▶ Review and Processing

- ▶ Upon receipt of the application package, the application fee and the certified copy of the Notice of Application, a preliminary review of the application is conducted for sufficiency and general consistency with applicable standards and criteria.
- ▶ A detailed technical review is then conducted to determine compliance with the Solid Waste Management Regulations, consistency with the [Solid Waste Management Plan](#), the extent of any potential adverse impacts to the environment, and where required by statute, a determination of need.



Connecticut DEEP Solid Waste Permitting

▶ Review and Processing - cont.

- ▶ Upon completion of this technical review, a tentative determination to grant or deny the permit application will be made by the Commissioner. A Notice of Tentative Determination will be published in a newspaper having substantial circulation in the affected area and public comments will be solicited on the tentative determination.
- ▶ In some cases, a public hearing may be held. After completion of the technical review and consideration of any public comments, and subsequent to the close of any hearing, DEEP will issue a final decision on the permit application.



Connecticut DEEP Solid Waste Permitting

▶ Average Processing Time

- ▶ For Individual Permits, processing time for a typical application for a new facility or a modification to a facility, based upon recent experience is greater than 180 days.
- ▶ For renewal applications and minor amendments, processing time, based upon recent experience, is less than 180 days.
- ▶ Past performance is not a guarantee of future processing timeframes.
- ▶ Typical Delays are caused by the submission of incomplete applications, the applicant/consultant not responding to Request For Additional Information etc



Connecticut DEEP Solid Waste Permitting

- ▶ *Municipal Transfer Stations* (DEEP-SW-GP-002): This general permit authorizes **municipalities only** to construct and operate a municipal transfer station and recycling center. A complete registration must be submitted and approved in writing by the Department in order for the transfer station to be authorized under the terms and conditions of this general permit. Approval of Registrations are **non-transferrable**.



Connecticut DEEP Solid Waste Permitting

- ▶ **Activities Authorized Under This General Permit**
 - ▶ a maximum processing capacity of up to **one thousand (1,000) tons per day of solid waste including recyclables**; and
 - ▶ transfer with **limited opportunities to process**: municipal solid waste; construction and demolition waste; furniture, mattresses, rugs and carpets; metal including appliances containing chlorofluorocarbons (freon); propane tanks; used oil and waste anti-freeze; used oil filters; paper and cardboard; clean wood (brush, stumps, logs, pallets and woodchips); treated wood (painted, creosote etc.); tires; food, beverage and plastic containers; leaves and grass clippings; food scraps; covered electronic devices; lead-acid and mixed batteries; used electronics; mercury-containing lamps; mercury-containing equipment ; capacitors and fluorescent light ballasts; yellow grease; architectural paint; household items for reuse; textiles and shoes; and other recyclables if approved by DEEP.



Connecticut DEEP Solid Waste Permitting

- ▶ A municipality may operate the facility itself, may operate jointly with other municipalities, or may utilize a private contractor to oversee daily operations. In any case, the municipality(ies) remains the party(ies) responsible for the facility's operation.
- ▶ **Requirements For All Authorized Facilities:**
- ▶ All facilities authorized by this General Permit must comply with the conditions set forth in the General Permit, including its Appendix. These conditions include general and specific requirements regarding the maximum capacity of the facility and the acceptance, collection, handling, storage, processing and transferring of solid wastes including recyclables.
- ▶ **Appendix Part I Section (5)K. requires the performance of self-audits by either the certified operator of the facility or a qualified consultant acceptable to the Commissioner.**



Connecticut DEEP Solid Waste Permitting

- ▶ Appendix Part II Section (5)K.1.(d) requires the performance of unannounced inspections of any incoming "truck loads of MSW for designated recyclables" in order to increase recycling rates and reduce the disposal costs of the municipality.
- ▶ Appendix Part II Section (5)S. requires clean wood to be inspected for signs of pest infestations, including the presence of the Emerald Ash Borer and Asian Longhorn Beetle.



Connecticut DEEP Solid Waste Permitting

▶ Registration

- ▶ Any municipality, municipalities or regional authority seeking to construct and/or operate a municipal transfer station under the authority of this General Permit and that can comply with the General Permit requirements can file to register a facility.
- ▶ **Exceptions:** If revenue is generated by charging a private hauler to tip waste generated outside of the municipality or municipalities for regional transfer stations; or (2) if the TS is operated by a private contractor that accepts MSW generated at commercial or industrial locations outside of the boundaries of the municipality or municipalities for regional transfer stations.



Connecticut DEEP Solid Waste Permitting

- ▶ **Fees:** A payment of \$800.00 per year is required for any municipality registering under the General Permit, for a maximum registration fee of \$8,000.00 for the full ten-year term of the General Permit.
- ▶ Each facility location requires a separate registration and payment. The annual payment of \$800.00 per year is due on or before July 1st of each year.
- ▶ **Average Processing Time:** General Permits can usually be processed in less than 90 days.
- ▶ Only one Permit or Registration may authorize the solid waste activities at the municipal transfer station. The municipality must consent to the revocation of any other permits or registrations issued previously to authorize the subject transfer station and recycling activities.



Connecticut DEEP Solid Waste Permitting

- ▶ Construct and Operate a Commercial Facility for the Management of Recyclable Materials and Certain Solid Wastes (DEEP-MM-GP-001): This General Permit authorizes the aggregation of greater than **ten (10) cubic yards** of recyclables and certain solid wastes. Registrants must specify the SWF location and identify the wastes it plans to receive and process. This General Permit is a five year permit which is currently up for amendments and renewal in May, 2021.
- ▶ The General Permit also allows for limited processing of certain wastes at the aggregation locations. The recyclables and certain solid wastes authorized in the general permit are: Recyclables; Asbestos Containing Material; Ash Residue; Clean Wood; including leaves and grass clippings; Construction and Demolition waste; Non-RCRA hazardous waste and compatible solid wastes; and Universal waste and compatible solid wastes. **Registrations are transferrable.**



Connecticut DEEP Solid Waste Permitting

- ▶ There are seven (7) facility categories as follows:
 - ▶ A - Asbestos Containing Material (ACM)
 - ▶ B - Ash Residue
 - ▶ C - Clean wood (including leaves and grass clippings)
 - ▶ D - Construction and Demolition (C&D) Waste
 - ▶ E - Non-RCRA Hazardous Waste and Compatible Solid Wastes
 - ▶ F - Recyclables
 - ▶ G - Universal Waste and Compatible Solid Wastes

Applicants may select up to five (5) facility categories under which they wish to operate



Connecticut DEEP Solid Waste Permitting

▶ Fees:

- ▶ Asbestos Containing Materials: \$1250.00
- ▶ Ash Residue: \$1250.00
- ▶ Clean Wood: Tier II \$ 250.00; Tier III \$ 500.00
- ▶ Construction and Demolition Waste: Tier II \$ 500.00; Tier III \$1250.00
- ▶ Non-RCRA Hazardous Waste: \$1250.00
- ▶ Recyclables: \$ 500.00
- ▶ Universal Wastes: \$1250.00



Connecticut DEEP Solid Waste Permitting

- ▶ For this General Permit, processing time for a typical registration for each facility category is about 90 days. Processing times are based on aspects including the complexity of the activities proposed at the facility and the quality of the information submitted to DEEP.
- ▶ There are several [other types of General Permits](#) - For example, GP for the staging, transfer, and temporary storage of contaminated soil and/or sediment; the GP for the storage and processing of Asphalt Roofing Shingles Waste for beneficial use and recycling; and the GP for the addition of grass clippings at a leaf composting facility



Time for a Quiz!

True or False?

- 1) Before submitting any application for any DEEP Permit/Authorization, the Applicant must request a Pre-Application meeting with DEEP
- 2) General Permits can be processed by DEEP much quicker than Individual Permit applications
- 3) Applicants for the Commercial TS GP may request up to 5 waste categories out of seven categories available
- 4) The Municipal TS GP is a 10-year Permit that expires in November 2022
- 5) If a Public Hearing is requested regarding a SWF application, DEEP can deny the request



Answers:

- 1) False - it is highly recommended but not a requirement to schedule a Pre-Application meeting with DEEP
- 2) True - Most GPs can be issued within 90 days while Individual Permits can take 180 days or more to process
- 3) True - Up to five categories may be selected
- 4) True - At that time it will be revised and re-issued for another 10-year term (2022-2032)
- 5) False - Public Hearings must be conducted if requested



KEEP UP
THE
Good
Work

**You Have Completed
Module 2 !**

**"Waste/Materials
Types & Management,
SWF Infrastructure
& DEEP Permits and
Authorizations"**

