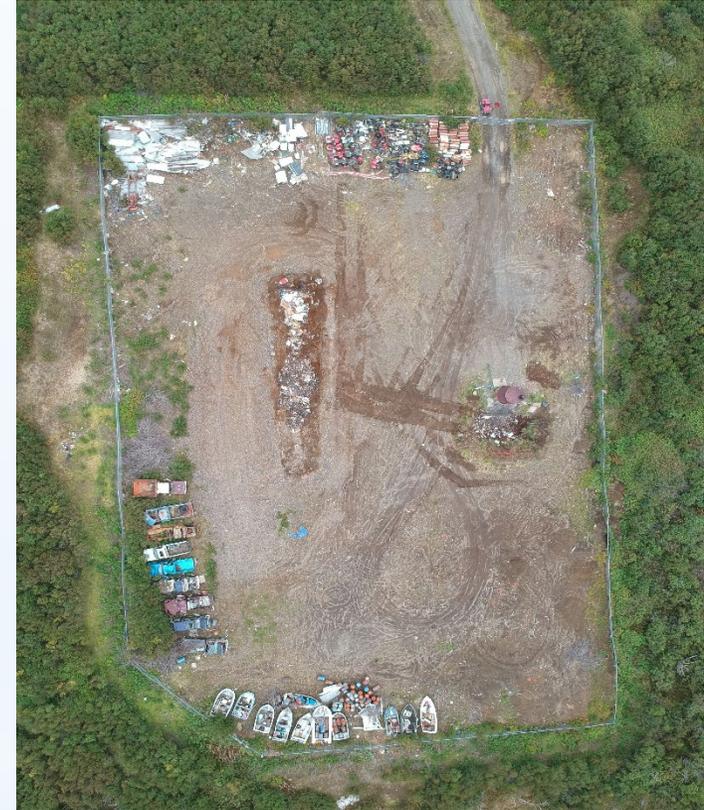




Solid Waste 101 An Introduction to the Basics

ADEC Solid Waste Program



ADEC Solid Waste Program Contacts

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Ground Rules

- ✓ Please turn off your cell phones
- ✓ Please limit side conversations
- ✓ Please mute your phone unless you want to ask a question
- ✓ Please be respectful and considerate

- ✓ Please ask questions as they come up!

Let's Get Started!

Solid Waste Technical Definition



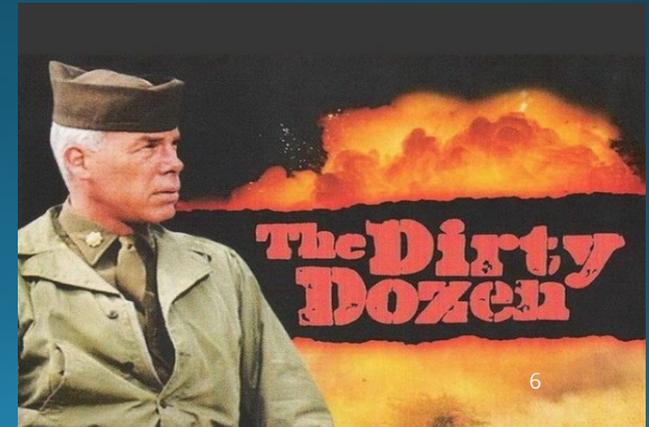
- AS 46.03.900
- "solid waste" means garbage, refuse, abandoned, or other discarded solid or semi-solid material, regardless of whether subject to decomposition, originating from any source;



- 3) a Class III MSWLF is a landfill that is not connected by road to a Class I MSWLF or, if connected by road, is located more than 50 miles from a Class I MSWLF, and that accepts, for disposal,
 - (A) ash from incinerated municipal waste in quantities less than one ton daily on an annual average, which ash must be free of food scraps that might attract animals; or
 - (B) less than five tons daily of municipal solid waste, based on an annual average, and is not located in a place
 - (i) where public access is restricted, including restrictions on the right to move to the place and reside there; or
 - (ii) that is provided by an employer and that is populated totally by persons who are required to reside there as a condition of employment and who do not consider the place to be their permanent residence.

Landfills: Dirty Dozen

- What Do We Look For:
 - Adequate Compaction & Cover
 - Leachate or Waste in Water
 - Distressed Vegetation
 - Structural Damage
 - Monitoring When Required- Appropriate Wells & Program
 - Electronic Waste
 - Animal Carcasses
 - Special Waste Challenges
 - C&D Debris
 - Polluted Soil
 - Biosolids
 - HHW & Liquid Waste



Compaction and Cover

- **Compaction**
 - More frequently = more effective compaction
 - Additional passes with equipment = more compaction

- **Cover**
 - Reduces infiltration of water
 - Reduces the attraction of wildlife and other vectors
 - Reduces windblown litter
 - More sanitary

- **Examples!**





Before



After



Same Corner



Before



After



Take note of the closed/covered area in the background.



This is the same treeline



All windblown litter caught by fence. 50ft separation.
Take note of the cover material under the working face.



AMERICAN INTERNATIONAL COMPANY

GPOC8336
1 of 5

C
ST
MACHINE

PERSONS UNDER THE
AGE OF 18 ARE NOT
ALLOWED TO OPERATE
THIS MACHINERY

DO NOT
OPEN & RECLOSE
LOWER DOOR
UNTIL STOPPED



Why Compact?

- Air Space = Wasted Space
- Less Wasted Space = Longer Landfill Life \$\$\$\$\$
- Smaller Surface Area = Smaller area to cover & Less infiltration of water
- Less Infiltration of Water = **Less Leachate**



Why Cover?

- Looks better
- Reduces odor
- Reduces windblown litter
- Reduces wildlife attraction
- Reduces disease vectoring
- Reduces contact with water
- Reduces leachate
- Helps compact waste
- Closes landfill area



Leachate

- Leachate is formed as when water comes into contact with solid waste. Think landfill coffee!
- Technical Definition: Liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from the wastes.

Can contain: acids, aldehydes, sulfate, chloride, iron, aluminum, zinc, ammonia, lead, nickel copper, mercury, dioxins, PCB's, bacteria, fungi.



Leachate

All trash well covered with compacted dirt



The compacted dirt acts as a barrier and sheds water away from the waste

Waste in contact with water makes leachate





The orange staining indicates leachate



They fixed the leachate issue by consolidating waste, filling in low areas with dirt, and sloping the landfill so water does not pond,



Stressed vegetation from
leachate seep onto tundra



Solid Waste Trivia Question

What creates leachate at the landfill?

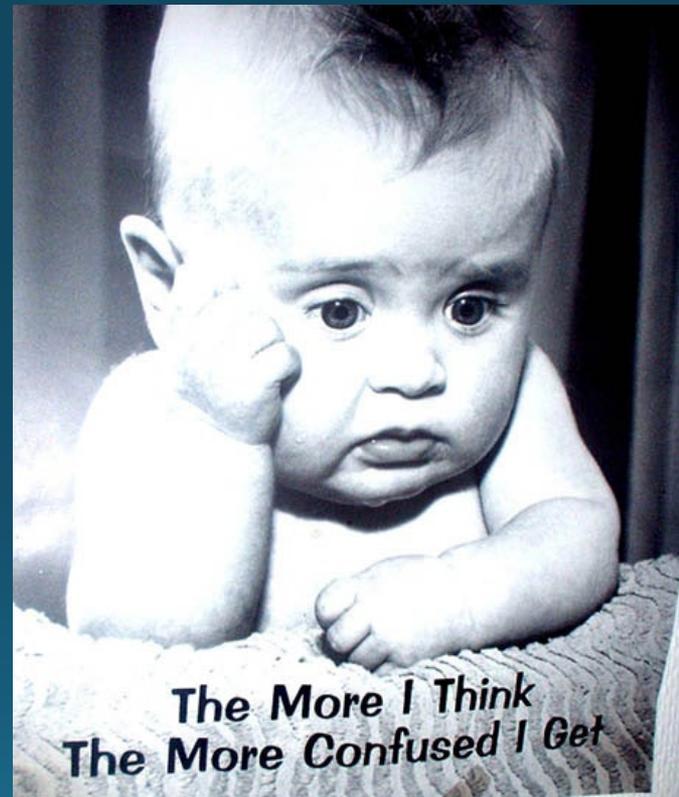
Solid Waste Trivia Question

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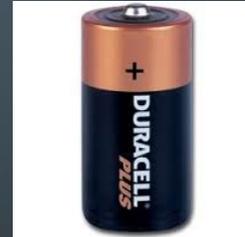
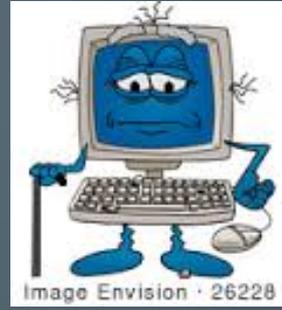
Answer: *Waste that sits in water.* This includes seasonal ponding, it just gets more potent with time!

What about.....

- Stuff that's hard to dispose of
- Strange kinds of trash



Electronic Waste



Animal Carcasses

Dead Pets and Subsistence Waste

- Needs to have separate disposal area
- Waste should be coated with hydrated lime and covered with 6 inches of soil at time of disposal.



Honey Bucket Waste



Junk Vehicles



No dumping PCBs, commonly found in old transformer oil or light ballasts



Contaminated wastes generated from spills or cleanup efforts need to be evaluated before being disposed of in the landfill.



No Untreated Medical Waste allowed in landfills

Different Wastes And Their Challenges

- Construction and Demolition Debris
- Polluted Soil
- Biosolids/Sewage Solids
- Household Hazardous Waste
- Asbestos



OR.....



C&D Debris

Acceptance is optional.
Do you have an ordinance?
Can the landfill handle the waste properly?





Household Hazardous Waste and Liquid Waste

Store it to prevent leaks and ship it out annually
Only accept what the landfill can properly handle



Solid Waste Trivia Question

True or False:

Your landfill is required to accept any and all waste streams from your community?

Solid Waste Trivia Question

True or False:

Your landfill is required to accept any and all waste streams from your community?

Answer: False!

A well operated landfill only accepts the types of waste that it can properly handle. Can't handle junk vehicles, C&D debris, white goods, polluted soil, or whatever else...it is your right as the a permit holder to prohibit wastes at your facility.

Questions?

