Goals

- Identify unacceptable waste
- Identify components of an Industrial Solid Waste Management Plan
- Identify hazards associated with unacceptable waste.
- Identify the signs/indications of an acceptable waste.
Why screen?

Reduce

Future liability

Bad publicity

Worker injury potential
Who Determines What’s Acceptable?

- State and federal rules
- Local regulations
- Your permit and Industrial Solid Waste Management Plan (ISWMP)
Federally Regulated Unacceptable Waste

- Hazardous Waste
- Liquid
- Infectious
- Sewage (untreated)
- Used oil
- Nuclear waste
- Asbestos-containing materials
- Superfund Clean-up Soils
State Regulated Unacceptable Waste

- Hazardous materials
- Liquid
- Infectious
- Sewage (untreated)
- Used oil

- Fluorescent, high-intensity discharge lamps
- Yard waste
- Mercury-containing materials
- Contaminated Soils
- Electronics
Unacceptable: Hazardous Waste

- Hazardous waste is:
  - ignitable
  - corrosive
  - reactive
  - “lethal”
  - TCLP toxic OR
  - contaminated with PCBs
Unacceptable: Hazardous Waste

- Ignitable
  - flash point below 140°F
  - some paint wastes
  - solvents
  - gasoline
  - petroleum products
  - resins & epoxys

- Corrosive
  - pH of 2 or less; 12.5 or more
  - lead-acid batteries
  - strong acids
  - drain cleaners
  - lye
Unacceptable: Hazardous Waste

- Reactive
  - unstable; reacts violently with water; can produce toxic gas
  - lithium batteries
  - explosives
  - some chemicals
  - aluminum dust

- Lethal
  - causes severe health effects when breathed, “eaten” or absorbed through the skin
  - pesticides
  - certain drugs
  - old rat poisons
Unacceptable: Hazardous Waste

- TCLP toxic
  - contains harmful materials that will contaminate leachate
  - paint wastes
  - auto glass wastes
  - foundry sands
  - sludges
  - burned-out structures

- Contains PCBs
  - 50 parts per million (ppm) or more polychlorinated biphenyls
  - old fluorescent lamp ballasts
  - old transformers/oils
Unacceptable: Liquid Waste

Liquid wastes is:

- waste that fail the paint filter test
- water, paints, oils, solvents, etc.
- Liquids may also be hazardous waste by ignitability
  (flash point < 140 F)
Unacceptable:

- Tires
Unacceptable:

- Tires / chemicals
Unacceptable:

- Chemicals
Unacceptable:

- Paint / chemicals
Unacceptable

- Lead-acid batteries
Unacceptable:

- Green Treated
Unacceptable:

- Appliances
Unacceptable

- Appliances
Unacceptable

- Burned materials
Industrial Solid Waste
Management Plan (ISWMP)

- Needed by all Landfills accepting Industrial solid waste
- ISWMP must be approved MPCA as part of your permit
- Only wastes included in your approved ISWMP may be accepted
ISWMP

List of acceptable waste

Evaluation and Analysis:
- Frequency and number of samples required will vary
- New facility -- complete testing of waste prior to completion of facility
- Existing facilities -- evaluated waste prior to acceptance and at regular intervals
- Evaluate waste at regular intervals but at least during each re-permitting event.
ISWMP

- Waste acceptance criteria
- How you will manage unacceptable waste
- Special waste management (e.g. asbestos)
Asbestos – What is It?

- Fibrous mineral – very strong, heat resistant, fire retardant
- Airborne hazard – asbestos can be inhaled and trapped in lung tissue
- Known carcinogen – no known safe exposure level
Asbestos Defined

- **ACM (asbestos-containing material):** includes filters, packaging contaminated with commercial asbestos, ACWM, and disposable equipment and clothing.

- **Friable:** any material containing more than 1% asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure.
Example of Friable Asbestos – Fireproofing
Example of Category II: Not Regulated Unless Broken

Transite board
(Johns Mansville)
Linoleum/Vinyl Sheet Flooring – Backing Generally Friable
Textured Ceiling Spray – Friable
Milboard (Black Paper Layer) – Friable
Heating-system Insulation – Friable
Medical Waste

- Infectious Waste?
Screening Procedures

- Pre-approve Waste
- Manifest industrial waste
- Inspect loads at the scale/gate
- Inspect loads at the working face
Screening How-to’s

- Screen...

Reject unacceptable loads!

*when the load arrives*

*when the load is dumped in waste screening area*

*when the load is dozed*
What if?

Develop a procedure

- Segregate the waste
- Contact the driver
- Look for identification
- Contact the source
- Check manifest/tracking form

- Review waste acceptance procedures w/employees
Preventing Unacceptable Waste Problems

- Know the regulations *(read your permit!)*
- Know your customers and the waste they send
- Train operators
- Have a procedure in place to deal with unacceptable waste