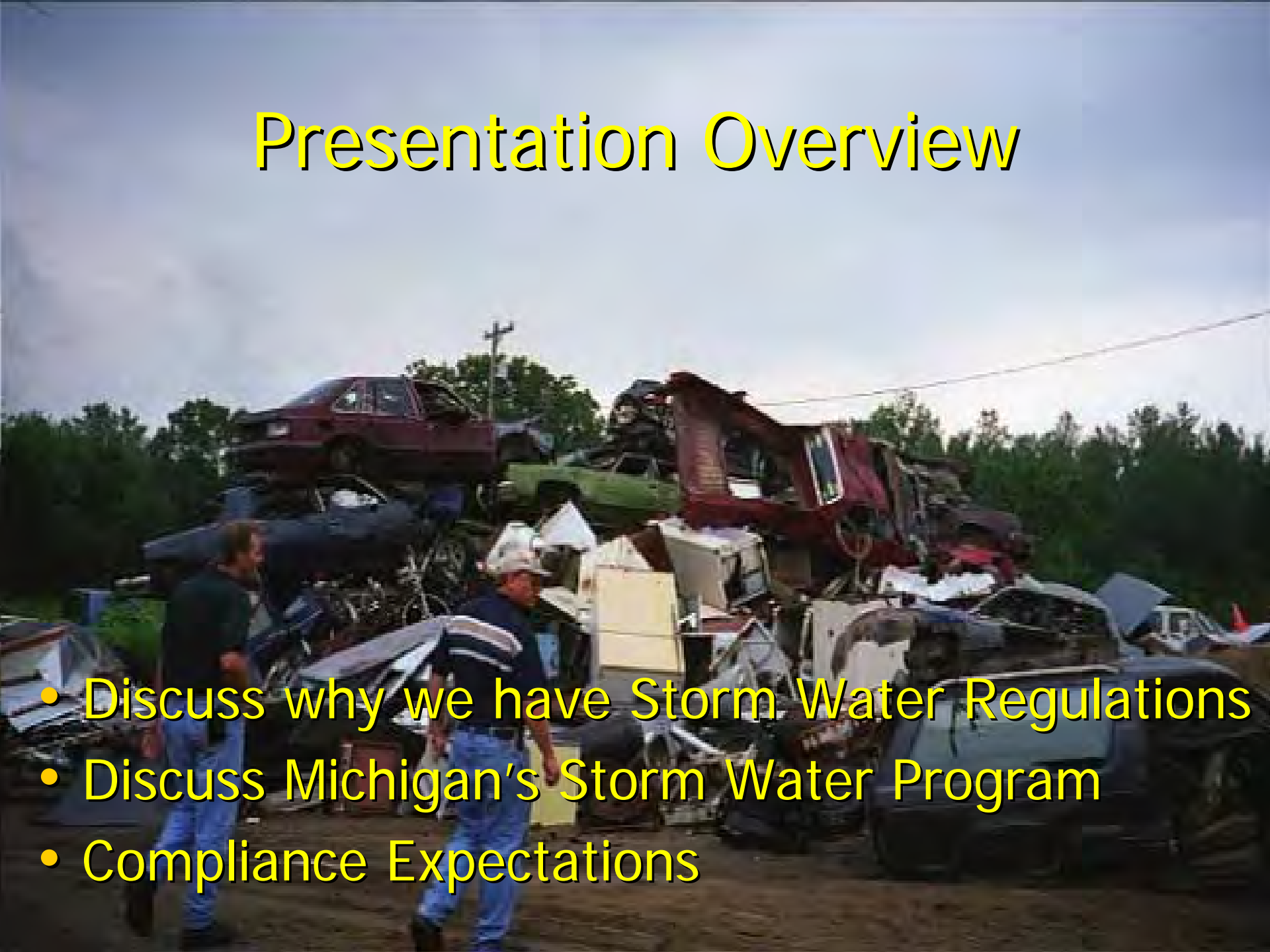


# Surface Water Concerns



# Presentation Overview

- Discuss why we have Storm Water Regulations
- Discuss Michigan's Storm Water Program
- Compliance Expectations



# Mercury In The Environment

- Waters of the State generally exceed the Water Quality Standards (WQS) of 1.3 ng/l
- WQS designed to protect human health, aquatic life and wildlife

## Great Lakes tributaries

- 38 of 41 tributaries exceed WQS (range 0-107 ng/l)

## Great Lakes connecting channels

- Detroit River
- St. Clair River
- St. Mary's River

## Great Lakes open water stations exceed WQS

- Saginaw Bay
- Grand Traverse Bay

# Federal Clean Water Act

## 1987 Amendments



**point source discharges**

# Who needs a Permit?

↪ Regulated by  
Standardized  
Industrial  
Classification &  
Narrative

🕒 Point Source  
Discharge to Waters  
of the State

🕒 "Exposure"

- ↑ Manufacturing (20-- to 39--)
- ↑ Public Warehousing (42--)
- ↑ Transportation (40-- to 45--)
- ↑ Mining (10-- to 14--)
- ↑ Open Landfills
- ↑ Power Plants
- ↑ Recycling Facilities
- ↑ Waste Water Treatment
- ↑ Hazardous Waste Storage &  
Treatment

# Storm Water Permits

- General Permit

- generic coverage
- minimum for protecting WQS
- must have certificate of coverage to be valid
- 229 salvage yards, scrap and waste materials

- Individual Permit

- site specific
- additional requirements
  - sampling
  - monitoring
  - treatment
  - Limits
  - 3 salvage yards, scrap and waste materials

# Storm Water Pollution Prevention Plan (SWPPP)

- The SWPPP is your facility's written procedure to minimize the amount of pollutants getting into the storm water runoff leaving your site.

# Objectives of SWPPP

- identify certified operator
- identify sources of significant materials
- implement non-structural controls
- install structural controls (as needed)
- ensure regular evaluation & update



# Industrial Storm Water General Permit

- Inventory Significant Materials
  - Mercury Switches
  - Fluids
    - Gas
    - Oils
    - Antifreeze
  - Parts
  - Tires
  - Batteries



# When Should Significant Materials Be Removed

- Salvage Yards
  - Recommend removing switches while draining other fluids and dismantling parts
  - Limit liability
  - If crushing on site **MUST** be removed





•Mercury switches or other significant items must be removed prior to crushing or shredding

# Material Handling

- Mercury switches, capsules, and lighting fixtures and should be collected in well-sealed, leak proof, heavy plastic containers
- other significant materials should be
  - Stored in an area where minimal risk of fire or breakage.

# Non-structural Controls

- **Preventative Maintenance**
  - **Involves**
    - Inspection of equipment
    - Cleaning of equipment
    - Includes operation of systems



# Good Housekeeping

- Most are common sense
- Regularly scheduled
- Employee participation is essential



# Preventative Maintenance

Fueling



Waste oils



## – Routine inspections

- Quick walk around inspection (Must be documented)
- Look at areas with a reasonable potential for a problem to occur

# Structural Controls

- Necessary to address storm water runoff contamination
  - Examples: oil water separators, places to store barrels out of the weather





# Review of inspections

- Comprehensive inspection
  - Once every 6 months
- Annual Plan review
  - State of facility
  - Adequacy of SWPPP - changes
  - Spills and cleanups

# Questions

- [fifem@michigan.gov](mailto:fifem@michigan.gov) or  
517-241-8993

Storm Water Program Web Site:

<http://www.michigan.gov/deq> then click on  
water, then surface water, then storm water