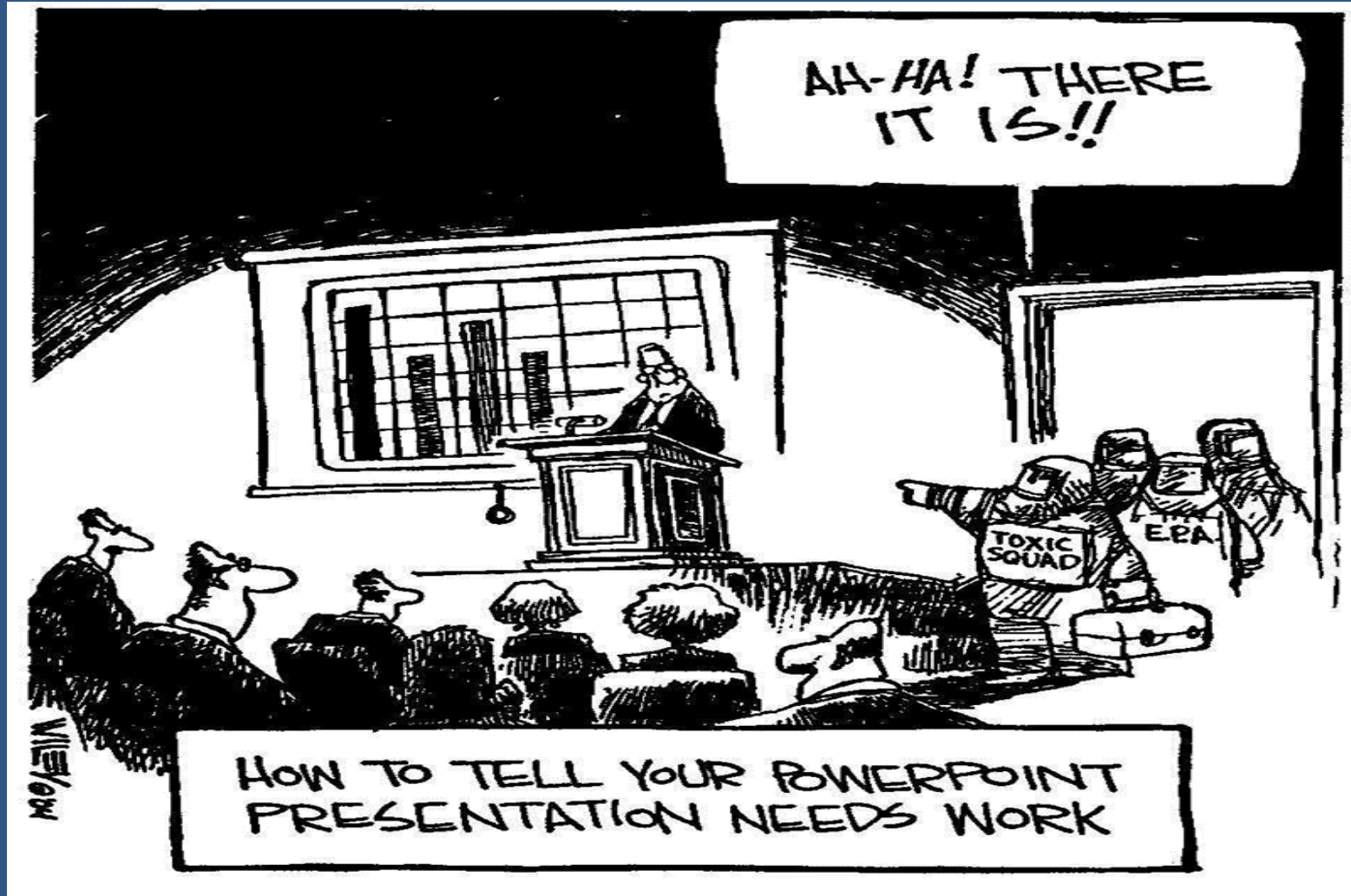




# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE FOR MAINEDOT STAFF

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# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE



# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## Overview

Hazardous materials - a broad category of hazardous wastes, hazardous substances, and toxic chemicals that can negatively impact human health or the environment.

- ❖ Presence or suspected presence of hazardous materials can pose a myriad of legal, regulatory, financial, and technical problems to a project.
- ❖ MaineDOT (and sponsors) may be exposed to substantial liability if it purchases a parcel of land contaminated with hazardous materials or if existing ROW is impacted (by the owner, third-party illegal disposal practices, or activities of tenants).
- ❖ Under federal and state statutes, claims can be made against MaineDOT for cleanup costs and personal or property damages.

MaineDOT conducts investigations for hazardous materials on projects so that these issues can be considered in design and the National Environmental Policy Act (NEPA) process.

# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## Overview

- I. MaineDOT Project Investigations for Contamination
- II. Beneficial Use
- III. Bridge Painting
- IV. Documentation



# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## *MaineDOT Project Investigations for Contamination*

### Why ?

Environmental and Liability Protections

Identify Potential Risks

Better Project Budgeting

OSHA Right to Know

Health and Safety

Federal Mandates



# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## *MaineDOT Project Investigations for Contamination*

### Protections & Defense (Due Diligence)

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

Superfund Amendment and Reauthorization Act (SARA)

Resource Conservation and Recovery Act (RCRA)

Maine Solid & Hazardous Waste Rules

Maine Voluntary Response Action Program (Brownfields)



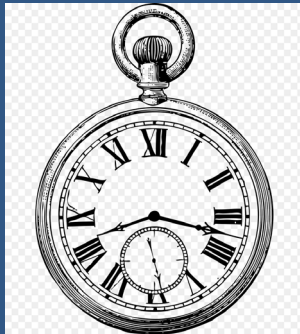
# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## *MaineDOT Project Investigations for Contamination*

### When ?

Hazardous material concerns may be encountered on any transportation project. Higher risk projects for encountering hazardous materials include but are not limited to:

- Structure demolition operations or structure modifications
- Excavations operations in urbanized / commercial areas
- Bridge/underpass construction, vertical alignment changes, trenching, or storm sewers
- Drainage and underground utility installations or adjustments
- Purchase of new ROW or easement
- Divesture of Property



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## *MaineDOT Project Investigations for Contamination*

### How ?

Review Site History & Existing Files/Interviews

Develop Site Characterization Plan

Perform Explorations

- Borings
- Test Pits
- Geoprobes
- Field Analysis
- Laboratory analysis
- Ground Penetrating Radar
- Pipe Locators





# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## *MaineDOT Project Investigations for Contamination*

What to look for....

Gasoline Stations



Auto Body Shops

# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## *MaineDOT Project Investigations for Contamination*

What to look for....

Dry Cleaners



Industrial Properties



# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## *MaineDOT Project Investigations for Contamination*

What to look for....

Landfills/Waste Areas



Tanks

# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## ***MaineDOT Project Investigations for Contamination***

### What Do We Do When We Find Contamination ?

- Write contamination assessment report

- Look for responsible parties or other cost recovery avenues

- Work with Project Manager and Designer to reduce impact of contaminants on the project

# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## *MaineDOT Project Investigations for Contamination*

### What Do We Do When We Find Contamination ?

Negotiate cleanup standard with MDEP

Memorandum of Understanding

Write Special Provisions

202 Removal of Structures

203 Special Excavation

Monitor Construction

Compliance with Special Provision



# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## ***Beneficial Use***

### What is Beneficial Use ?

#### Reuse of Secondary Materials (Waste)

Tire Chips

Dredge Material

#### Regulated by MDEP Chapter 418

Defined as Solid Waste

Typically Requires Permit

*Permit By Rule*

*Reduce Procedures*

*Full Permit*



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## *Beneficial Use*

### Tire Chips

#### Permit By Rule

Light Weight Fill / Drainage  
Size & Construction Specifications



# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## ***Beneficial Use***

### **Dredge Material**

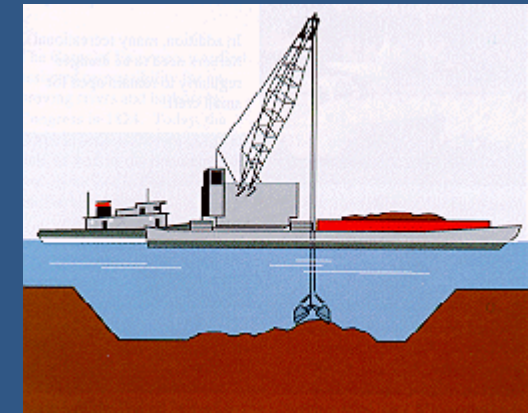
Positioned Below High-Water Mark

Disturb Greater Than 500 yds<sup>3</sup>

#### **Exemptions**

*Class A, AA or SA Water*

*Less Than 15 % Fines*





# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## ***Beneficial Use***

### Dredge Material: Use / Management Options

#### Testing

- Physical
- Chemical
- Dioxin or Other Anthropogenic Constituents

#### Permitting

- Beneficial Use: on & off-site
- Disposal
- Marine (large quantities)
- Upland Landfill Disposal (limited space)

#### Write Special Provision



# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## *Bridge Painting*

### Sample Soil and Sediment Below Bridges

Sampling Performed Prior to Painting or Rehabilitation

X-Ray Fluorescence (XRF)

Establishes Baseline – Litigation Support



### Hazardous & Special Waste Management

Lead-based paint and associated waste streams

Federal and State requirements

MaineDOT & Contractor responsible

Storage, paperwork and transport



# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## ***Documentation***

Assessment reports and special provisions are noted in ProjEx. Dates and notes are placed in ProjEx - PM Permits and Hazardous Materials Assessment Details.

Final baseline documentation is placed in CPD e-file.



# HAZARDOUS MATERIALS MANAGEMENT GUIDANCE

## *Groundwater & Hazardous Materials Division*

Customer Focused

Strive To Ensure Prompt Service

Responsive To Requests / Emergencies

