

# Iowa Strategic Goals Program Workshop

**RCRA Inspections and  
Waste Determinations  
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# Goals of RCRA

- Resource Conservation and Recovery Act goals
  - Protect human health and the environment from the hazards posed by waste disposal
  - Conserve energy and natural resources through waste recycling and recovery
  - Reduce or eliminate the amount of waste generated
  - Ensure wastes are managed in an environmentally safe manner

# Today's Topics

- Region 7's RCRA priorities for 2020
- How inspection candidates are developed
- What to expect during a RCRA inspection
- After the inspection
- Completing a hazardous waste determination
- Work through some examples of hazardous waste determination

# Priorities for FY2020

- National Initiatives from HQ
- RCRA Core Program Requirements
  - TSDs
  - LQGs
  - Financial Assurance Mechanisms
  - State Program Oversight
- Regional Priorities
  - Non-notifiers
  - Industry Sectors
  - Newly Implemented Regulations



# How inspection candidates are developed

- Federal Fiscal Year – October through September
- Inspection planning starts in early spring
- Consider HQ expectations, Regional needs, input from State partners, complaints from public
- Balance with resources available to conduct inspections



# How inspection candidates are developed

- **Information sources**
  - EPA program databases
  - Environmentally sensitive areas/populations
  - Past enforcement
  - Industry directories
  - Web searches
  - State partners
  - Complaints



# RCRA inspections

- Section 3007 of RCRA provides the Agency with the authority to conduct inspections.
- Inspections are unannounced
- Inspectors will provide official identification/credentials.
- Call the Regional Office if you want to verify.



# RCRA inspections

- Inspector will request to see person listed as facility contact
- 18 USC 1001/1002 to read concerning false statement, false documents
- Explain facility's right to claim CBI
- Explain the purpose, scope and order of the inspection.
- Provide compliance assistance docs



# RCRA inspections

- Conduct a visual inspection of the facility
  - Mfg operations, maintenance areas
  - Collect information on processes and materials used
  - waste generation, waste management areas
  - Talk to facility personnel
  - take photos



# RCRA inspections

- Review records, such as
  - Manifests, disposal records
  - Purchase records
  - Personnel training
  - Waste determination
  - Contingency plan
  - Inspection logs
  - Biennial report

# RCRA inspections

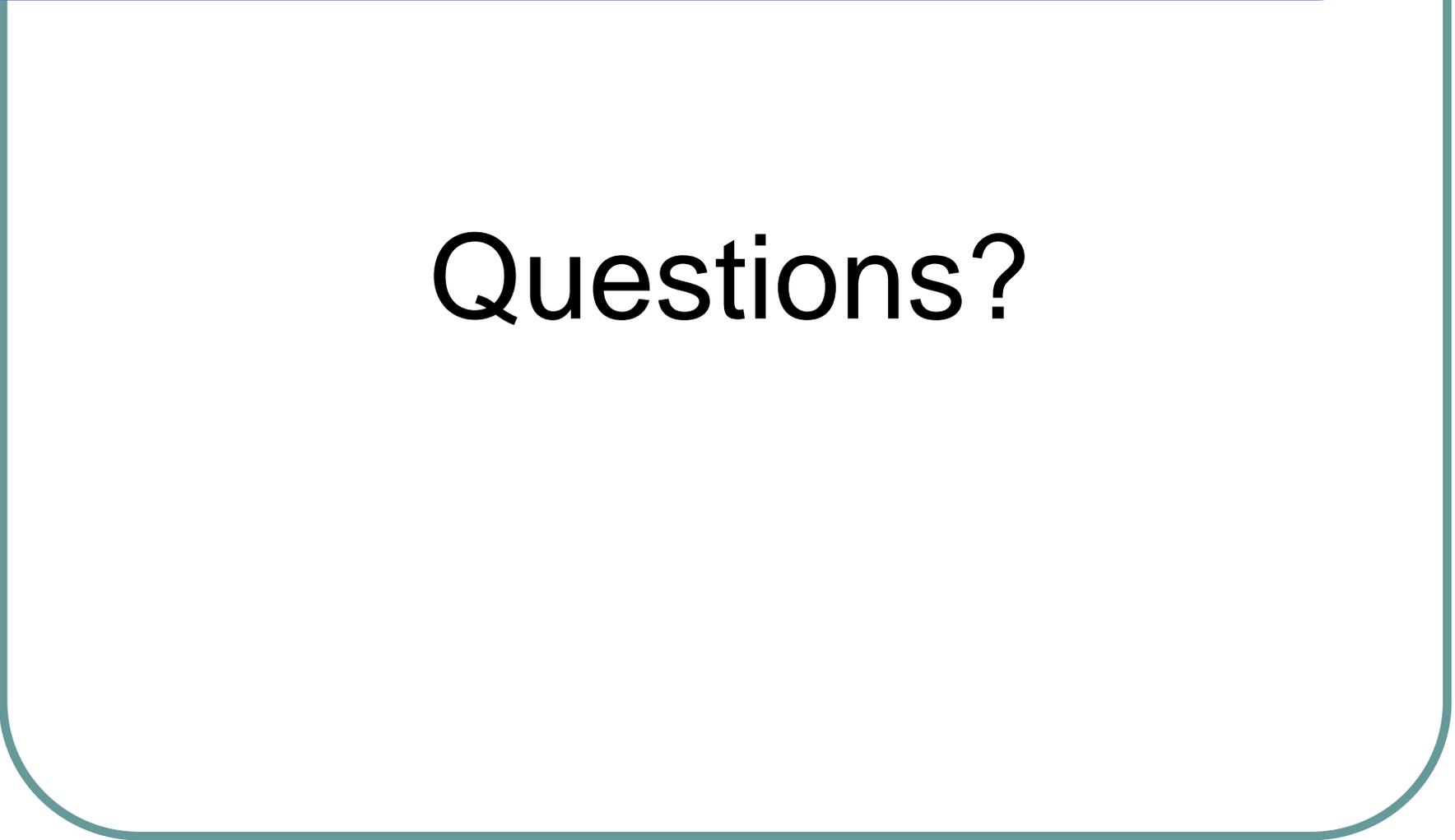
- Exit briefing
  - Review the data collected
  - Summarize findings and observations noted on NOPF, if any
  - Provide CBI form
  - Provide receipt for documents
  - Provide Agency contact information should questions arise.
  - List of additional info to submit later

# After the RCRA inspection

- Responding to the NOPF helps facility return to compliance in a timely manner.
- Evidence of timely return to compliance vs submission of schedule
- Call contact on NOPF re questions
- Inspector completes written report
- Report is provided to facility when it is available.



Questions?



# Hazardous waste determination

- Important key concepts
  - Required for every generator
  - It has to be accurate
  - Determines generator status and applicable regulations
  - It is made at the point of generation

# Hazardous waste determination

When is the determination made?

It is made at the point of generation

- Before mixing/dilution/alteration
- At any time properties may have changed
  - Change in process/"ingredients"
  - Environmental exposure

# Hazardous waste determination

Large and small quantity generators must maintain records supporting the hazardous waste determinations, including those that identify whether a solid waste is a hazardous waste

- Keep records for three years after last off-site shipment
- Records support generator knowledge

# Hazardous waste determination

Four questions to answer, in order:

Is this material

1. a solid waste?
2. exempt?
3. listed?
4. characteristic?

# Is it a solid waste?

A solid waste is any discarded solid, liquid, or contained gaseous material that is

- Not excluded under 261.4(a)
- Abandoned
- Recycled
- Inherently waste-like
- Military munition

261.2(a)(2)(i)

# Is it a solid waste?

- Abandoned
  - Disposed
  - Burned or incinerated
  - Accumulated, stored or treated in lieu of the above
  - Sham recycled

# Is it solid waste?

- Recycled
  - Used in a manner constituting disposal (placed on the ground)
  - Burned for energy recovery
  - Reclaimed
    - To recover a product
    - Regenerated
  - Speculatively accumulated
    - No viable market identified
    - Recycled <75% in the calendar year

# Is it a solid waste?

- Inherently waste-like
  - Dioxin wastes (F020-F023, F026 and F028)
  - Certain secondary materials fed to halogen-acid furnaces



# Ok, it's a solid waste. Now what?

- Determine if the solid waste is a hazardous waste
  - Is it excluded? (261.4(b))
  - Is it listed? (261 subpart D)
  - Is it characteristic? (261 subpart C)

# Is it excluded?

- Household waste
- Tanning industry
- Mining of ores/minerals
- Non-tern plated oil filters that have been punctured and hot-drained
- Etc.

# Is it listed?

- F-listed process wastes (non-specific)
- K-listed process wastes (specific)
- P-listed commercial chemical products
- U-listed commercial chemical products

# F- listed wastes include

- Spent solvents
- Electroplating sludges, baths, solutions
- Dioxin-containing wastes
- Wood preserving wastes

# K- listed wastes include

- Wastes from the production of
  - Inorganic pigments
  - Organic and inorganic chemicals
  - Pesticides
  - Explosives
  - Petroleum refining
  - Iron and steel production
  - Veterinary pharmaceuticals
  - Ink
  - Coking operations

# P and U listed wastes include

- Discarded commercial chemical products
  - Off-spec commercial chemical products
  - Container residues
  - Spill residues
- U listed wastes are acute haz waste

# Is it characteristic?

- Ignitable
  - Liquid with flashpoint  $<140^{\circ}$  F
  - Non-liquid capable of causing fire through friction, absorption of moisture, or spontaneous chemical change
  - Ignitable compressed gas
  - Strong oxidizer
- Corrosive
  - Aqueous with pH  $<2$  or  $>12.5$
  - Liquid corrodes steel  $>6.35$  mm per year

# Is it characteristic?

- Reactive (includes the following)
  - Reacts violently with water
  - Generates toxic gas/fumes/vapors when mixed with water
  - Capable of detonation if subjected to strong initiating source
- Toxic
  - D codes based on TCLP testing

# Waste determination examples