

# Subpart X Permitting Group Case Study

Shredder

# Shredder

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- Team
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# Permit Conditions

- RCRA Part A Permit Application
- RCRA Part B Permit Application
  - Facility description
  - Federal and state laws
  - Process information (design drawings, treatment, SOPS for treatment processing)
  - Groundwater information
  - Training plan
  - Closure plan
  - Contingency plan
  - Waste characteristics (waste analysis plan)
  - Health & safety plan

# Areas of Inspection

- O<sub>2</sub> meter
- Emergency shut-off (for safety and clogs)
- Reverse motor (for clogs)
- Cameras in all shredder chambers
- Door interlock (shredder does not operate if door open)
- Inspect systems for leaks
- Liquid handling system operating properly
- Conveyor operating properly
- Gas handling system
- No manual handling
- Drum feed rate – 5 drums/hr

# Areas of Inspection (cont'd)

- Metal separation
- Secondary containment (precipitation, leaks, cracks)
- Daily operating log
- Hydraulic system (doors)
- Blade replacement
- Maintenance schedule
- Air monitoring
- Inspect staging areas (evidence of release)
- Drum labels
- Hoppers closed
- Wash materials (solvents, H<sub>2</sub>O)
- Training

# Inspection Checklist

- Shredder/conveyor/maceration tank
  - Condition of unit (external and internal)
  - Doors and seals (leaks and tightness)
  - Conveyors (leaks and condition)
  - Condition of tank (leaks at seams, pipe couplings, etc.)
  - Condition of containment
    - Presence of liquids
    - Cracks and gaps in base
    - Sealant (intact)
    - Evidence of fugitive emissions or leaks and spills
    - Sumps (liquids, cracks)
    - Condition of roof
    - Condition of berms or curbs

# Inspection Checklist (cont'd)

- Security devices
  - Condition of gates, fencing, locks
- Staging areas/satellite accumulation areas
  - Conditions of containers
    - Labeling
    - Leaking containers
  - Containment (liquids, cracks)
  - Hoppers (labeling, open/closed, leaks)

# Inspection Checklist (cont'd)

- Safety and emergency equipment
  - Condition of communication systems
    - Method – telephone, hand-held, intercom, 2-way radios
    - Accessibility of communications
    - Method to communicate while shredder is operating due to noise
  - Condition and operation of shower and eye wash
    - Location
    - Accessibility
  - PPE inventory and condition
    - Workers are wearing proper PPE
  - Fire extinguishers/sprinklers for operating condition
    - Is it charged
    - Number and locations
    - ABC extinguisher for chemical fires



# Inspection Checklist (cont'd)

- Inspection & Maintenance Records
  - Planned and unplanned maintenance on shredder and ancillary equipment
  - Inspection conducted each operating shift
  - Remedial actions
  - Accumulation containers and tanks rate of change-out
- Environmental monitoring reports
  - Sampling results, waste analysis
  - Air monitoring data
  - Scrap metal decontamination analysis

# Inspection Checklist (cont'd)

- Training records
  - Specific training on unit
  - Operation and wastes
- Compatibility test records
  - Proper waste codes
  - Results of testing
- Waste Minimization
- Recycling solvents and contaminated water from metal wash
- Proper maintenance
- Evaluate waste characteristics
- Group by waste codes

# Inspection Checklist (cont'd)

- Decontamination facility – shower, clean and dirty room, employee procedures
- Air emission controls
  - Subpart CC
    - Control device – operation and condition of equipment
    - Piping and door tightness
    - Area around building (evidence of fugitive emissions)
- Record keeping
  - SOPS
    - Unit operation, routine maintenance schedule, monitoring protocol, method and criteria for updating SOPs
  - Operating logs (waste processed in unit)
    - Rate of treatment
    - Cross-reference to manifest numbers, waste codes