

Eight Ways to Treat Hazardous Waste Without a RCRA Permit

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Eight Ways to Treat Hazardous Waste Without a RCRA Permit

- Schedule
- Resource Conservation and Recovery Act (RCRA)

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Treatment Definition

- Definition has two parts
- "[First part:] [A]ny method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste [Second part:] so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous, or less hazardous; safer to transport, store, or dispose of; amenable for recovery, amenable for storage, or reduced in volume."

See §260.10

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Treatment Examples

- Neutralization of a corrosive waste
- Stabilization of a metal bearing sludge
- Incineration of an ignitable waste
- Recycling a spent solvent
- Fuel blending to meet a specification
- Evaporation of water from a hazardous waste
- Decanting an aqueous phase from an ignitable waste
- Mixing absorbents with hazardous wastes

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Treatment Usually Requires a Permit

- Generally speaking, treatment of a hazardous waste requires a RCRA permit
- EPA gives us eight ways to treat hazardous waste without having to get a RCRA permit
- Not all states recognize all eight permitting exemptions, so check with your state

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Exemptions From Treatment Permitting Requirement

- Elementary neutralization unit
- Totally enclosed treatment facility
- Adding absorbents to wastes
- Immediate response
- Wastewater treatment unit
- Treating wastes in 90-day accumulation tanks/containers/containment buildings
- Recycling processes
- Burning small quantities of waste in onsite units

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Elementary Neutralization Unit

- Waste code restrictions (D002 only)
- Unit must be a tank, tank system, container, transport vehicle, or vessel
- The ENU does not need to be directly connected
- The ENU does not need a CWA-discharge
- Don't forget to satisfy the LDR paperwork requirement of §268.7(a)(7) or §268.9(d)
 📖 See §§264.1(g)(6), 265.1(c)(10), 270.1(c)(2)(v)

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Totally Enclosed Treatment Facility

- Must be directly connected to an industrial production process
- There can be no release of hazardous waste or constituents during treatment
- No waste code restrictions
 📖 See §§264.1(g)(5), 265.1(c)(9), 270.1(c)(2)(iv)

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Adding Absorbents to Wastes

- For containers of hazardous waste (no tanks)
- Add absorbent "at time waste is placed in container"
- Order does not matter, but timing does
- No waste code restrictions
 📖 See §§264.1(g)(10), 265.1(c)(13), 270.1(c)(2)(vii)

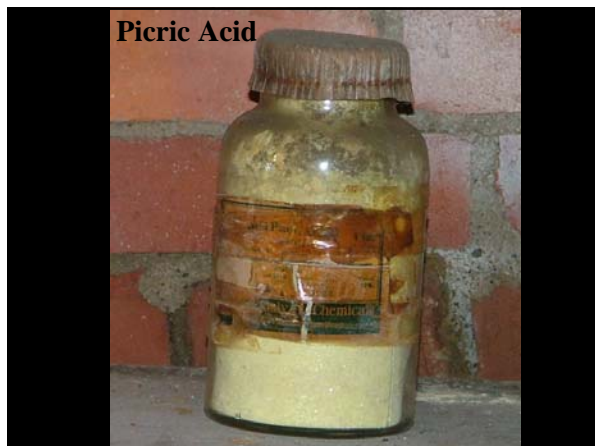
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Immediate Responses

- Actions taken in response to spills, discharges, and other situations that pose an immediate hazard are exempt from RCRA permitting and substantive management standards
- Can include transportation of wastes
- Time frame and extent of exemption are judged on an individual basis
- No waste code restrictions
 📖 See §§264.1(g)(8), 265.1(c)(11), 270.1(c)(3)

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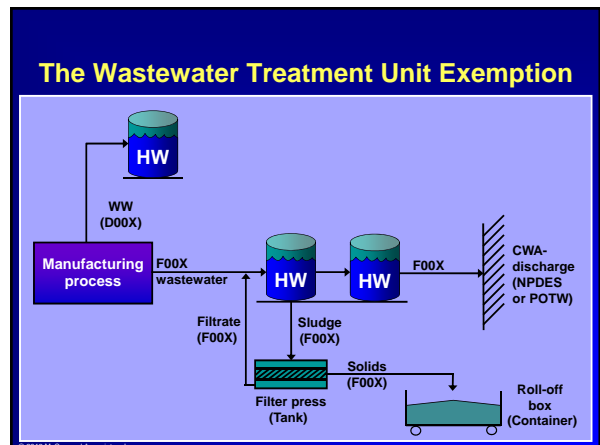




Wastewater Treatment Unit Exemption

- Three-part definition
 - ▶ Has a CWA-discharge,
 - ▶ Managing hazardous wastewater or wastewater treatment sludge, and
 - ▶ Is a tank
- Equipment, not wastes, exempt from RCRA standards
- No waste code restrictions
- Exemption not available for containers or surface impoundments

See §§264.1(g)(6), 265.1(c)(10), 270.1(c)(2)(v)



Treating Wastes in 90-Day Accumulation Tanks/Containers/Containment Buildings

- Exemption applies only to the treatment activity itself
- Tanks, containers, and containment buildings are fully regulated units
 - ▶ Accumulation time
 - ▶ Labeling
 - ▶ Inspections
 - ▶ Subparts AA, BB, and CC

Treating Wastes in 90-Day Accumulation Units (continued)

- No waste code restrictions
- No thermal treatment
- Not clearly spelled out in regulations, so some states do not recognize this exemption

See §268.7(a)(5)

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Examples of Treatment in 90-Day Accumulation Units

- Air or steam stripping contaminated ground water
- Blending hazardous waste fuels in tanks and/or containers
- Chemical flocculation of hazardous aircraft engine washwater
- Electrochemical oxidation of organic hazardous wastes
- Precipitation of heavy metals from solutions and oxidation/reduction reactions
- Ex situ treatment of hazardous soil

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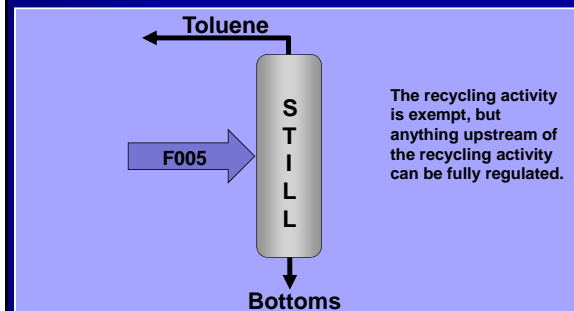
Recycling Processes

- Recycling process is exempt except for:
 - ▶ Emissions from process vents at TSD facilities
 - ▶ Emissions from equipment leaks at TSD facilities
- Permit-exempt recycling cannot involve:
 - ▶ Land disposal
 - ▶ Burning for energy/material recovery
 - ▶ Incineration
- Activities upstream of recycling can be fully regulated
- No waste code restrictions

See §261.6(c-d)

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Example of Exempt Recycling Activity



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Burning Small Quantities of Waste in Onsite Units

- Exemption from RCRA permitting and Part 266, Subpart H (BIF) standards
- Conditions to claim permit exemption:
 - ▶ Waste must be burned at the site of generation
 - ▶ Limits on quantity burned
 - ▶ Fuel specifications must be met
 - ▶ Accumulation before burning is subject to RCRA
 - ▶ Notification and recordkeeping requirements
 - ▶ Waste code restrictions (no dioxin wastes)

See §266.108

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