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Emergency Response
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EPA

New Rule for Wood Preserving Wastes

The U.S. Environmental Protection Agency (EPA) has added three categories of wastes generated by the wood preserving industry to the list of hazardous wastes regulated under the Resource Conservation and Recovery Act (RCRA). This rule finalizes portions of a December 1988 proposed rule. Included are management standards for existing and new drip pads used to collect treated wood drippage.

The new wood preserving rule affects large facilities as well as many small businesses which have not been subject to RCRA regulations. Many owners and operators of small wood preserving facilities may be unfamiliar with federal and state requirements for hazardous waste management. The RCRA/Superfund Hotline and EPA Regional Offices, listed at the end of this brochure, can provide assistance in understanding and complying with these requirements.

Introduction

The wood preserving industry treats wood to be used as railroad ties, utility poles, and dimensional outdoor lumber with chemical formulations to retard decay. These formulations commonly incorporate toxic materials such as pentachlorophenol, creosote, and inorganic (chromium or arsenical) preservatives.

When wastes generated in wood preserving processes are improperly managed, contamination of soil, ground water, and surface water often results. This contamination poses significant risks to human health and the environment. At least 54 wood preserving facilities have been designated as "Superfund" hazardous waste sites under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and 85 facilities are undergoing evaluation for corrective action for hazardous waste releases. To prevent harm to the environment, EPA has issued new regulations that ensure the safe management of these wastes without causing undue economic impact on the industry.

Wood Preserving Wastes Listed as Hazardous

EPA has added three categories of wastes from wood preserving processes to the list of hazardous wastes regulated under the Resource Conservation and Recovery Act (RCRA). All wastes listed under RCRA are presumed to be hazardous regardless of their concentration and must be handled according to EPA's hazardous waste regulations.

EPA considered a number of regulatory alternatives to listing under RCRA, most of which involved a multistatute approach. This approach would regulate process wastewaters and storm waters under the Clean Water Act (CWA); drippage under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); and process residuals and spent preservatives under RCRA. EPA believes, however, that listing the wastes under RCRA provides a level of protection and enforcement authority that would not be afforded by a multistatute approach. The CWA, for example, does not fully regulate ground water, and FIFRA penalties and types of enforcement actions are less stringent than those provided under RCRA.

The newly listed categories of RCRA hazardous waste are:

F032 - Wastewaters, process residuals, preservative drippage, and spent formulations from wood

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preserving processes generated at plants that currently use or have previously used chlorophenolic formulations.

F034 - Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations.

F035 - Wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium.

EPA is deferring action on wastes from wood surface treatment processes at facilities that use, or have previously used, chlorophenolic formulations—until additional data on these wastes can be collected and evaluated. EPA will conduct a program of site visits to collect additional information and better characterize the surface protection industry and the wastes generated by surface protection processes.

When the listings for F032, F034, and F035 become effective, they will be subject to the hazardous waste regulations found in the RCRA Subtitle C program. Generators of these wastes are subject to a number of hazardous waste requirements, such as notifying EPA of their activities, obtaining an EPA identification number, and using a manifest. People who transport, treat, store, or dispose of these wastes must also comply with RCRA Subtitle C requirements.

The newly listed wastes will also be designated as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Under CERCLA, if quantities of these wastes exceeding one pound (known as "Reportable Quantities" or RQs) are released into the environment, the release must be reported to the federal, state, and local emergency response centers.

Requirements for Drip Pads

The new rule requires that after treated wood from pressure and nonpressure processes is removed from the treatment vessel, it must be held on a drip pad until drippage has ceased. A drip pad is defined as "an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kickback or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants." In addition to the required drip pads immediately adjacent to the treatment tanks or cylinders, owners/operators may construct drip pads in long-term storage areas, in accordance with applicable standards, if they anticipate that treated wood drippage will be generated in the storage yard.

Past releases of drippage have caused considerable environmental contamination at some wood preserving facilities. For this reason, EPA urges generators to assess the extent of potential contamination at their plant sites and to work with EPA and/or state authorities to ensure proper cleanup before building new drip pads.

The rule also establishes management standards for existing and new drip pads. The standards include requirements for assessment of drip pad integrity, drip pad design and operation, inspections, and closure.

• **Assessment of Existing Drip Pad Integrity.** The new rule requires the owner/operator to assess the integrity of existing drip pads and determine what steps must be taken to bring the drip pads into compliance with the new technical standards for drip pads. Existing drip pads are defined as those that were constructed prior to December 6, 1990 (the date the rule was published in the *Federal Register*), or those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to the date of *Federal Register* publication. The assessment will ensure that pads that cannot contain the wastes (because of cracks, insufficient capacity, or other conditions) are removed from service and repaired or closed.

• **Design and Operation of Drip Pads.** EPA has issued technical requirements for drip pads to ensure that they can contain all drippage and related wastes and can prevent releases of hazardous waste to the soil and ground water under the pad. Depending on the age of the drip pad, existing drip pad facilities have up to 15 years to upgrade and may extend that deadline based on approval of the Regional Administrator. The design and operating requirements with which owners/operators must comply are described on the following pages.

• **Inspections.** Owners/operators must inspect all new and existing drip pads weekly during operation and after storms to detect evidence of any conditions that could lead to failure.

• **Closure.** When a wood preserving drip pad is closed, owners/operators must remove or decontaminate all drip pad materials, liners, equipment, wastes, and contaminated soils. If all contaminated materials cannot be decontaminated or removed, the facility must be closed as a hazardous waste landfill.

Ninety-Day Accumulator Exemption

Under the new rule, generators of wood preserving wastes are not required to obtain a RCRA permit to store hazardous waste as long as all wastes are removed from the drip pads and associated collection systems at least once every 90 days, and the drip pads meet all the technical design and operating standards under this rule.

Compliance Deadlines

Effective date for F032 wastes in all states and for F034 and F035 wastes in *unauthorized* states and territories* is June 6, 1991.

Effective date for F034 and F035 wastes in authorized states depends upon when the state adopts these regulations— contact your state for more information.

**Alaska, California, Hawaii, Iowa, Wyoming, Trust Territories of the Pacific, Puerto Rico, Virgin Islands, and American Samoa.*

Action	Deadline
3010 notification to Regional Administrator (RA) by generators and TSDs handling newly listed wastes	**F032**—March 6, 1991 **F034** and **F035** in *unauthorized* states—March 6, 1991 **F034** and **F035** in *authorized* states—contact your state for more information
Written assessment of drip pad completed	Effective date
Retrofitting plan submitted to RA	Two years before completion of upgrades and modifications
Certification of new drip pads by Professional Engineer	Upon completion of drip pad construction
Retrofitting of existing drip pads of known age	Two years after effective date, or when drip pad reaches 15 years of age (whichever is later)
Retrofitting of existing drip pads of unknown age at facilities less than seven years old	Eight years after effective date
Retrofitting of existing drip pads of unknown age at facilities more than seven years old	Two years after effective date, or when facility reaches 15 years of age (whichever is later)
RA notified of drip pad leak	Within 24 hours of leak detection
Plan and schedule for repair of leaking drip pad submitted to RA	Within 10 days of leak detection
Certification of repairs and cleanup submitted to RA	Upon completion of repairs and cleanup

Operating Requirements for Drip Pads

- Drip pads must be maintained free of cracks, corrosion, or deterioration that could lead to leakage.
- Drip pads and collection systems must be operated to collect drippage or precipitation that falls onto the pad.
- Drippage and precipitation must be removed from the collection system as necessary to prevent overflow onto the drip pad. Collection systems must be emptied immediately following storms.
- Drip pads must be operated and maintained to minimize tracking of hazardous waste from the pad that may result from the activities of personnel or equipment.
- Drip pad surfaces must be thoroughly cleaned at least once every seven days to remove any accumulated residues (but not permanent stains).
- Owners/operators must document operating and waste management practices in the facility operating log.
- Treated wood must be held on drip pads until drippage has ceased.
- Drip pads discovered to be leaking or in danger of leaking must be repaired or removed from service.

Compliance Deadlines for Treatment, Storage, and Disposal (TSD) Facilities

TSD facilities managing F032 wastes in all states and/or F034 or F035 wastes in unauthorized states.

Interim Status Facilities	Submit revised Part A by June 6, 1991.
Permitted Facilities	Submit Class 1 modifications by June 6, 1991.
	Submit Class 2 and Class 3 modifications by December 3, 1991.

TSD facilities managing F034 or F035 wastes in authorized states should contact their state for more information.

Design Requirements for Drip Pads

- Drip pads must consist of a base that is constructed of non-earthen materials, excluding wood and non-structurally supported asphalt.
- Drip pads must have a collection area or device/system designed to collect drippage, leakage, and storm water.
- Drip pads must have run-on and run-off control to prevent contamination of surface water (unless the pads are covered or enclosed in a structure).
- Drip pads must be sloped to free-drain treated wood drippage and any other waste that falls on the pad to the collection system, and must have a curb or berm around the perimeter.
- The drip pads must be strong and thick enough to prevent failure due to physical contact, climate conditions, the stress of installation, and the stress of daily operations.
- The surface of the drip pads must be sealed, coated, or covered with an impermeable material so that it can contain drippage and precipitation and prevent leakage to the underlying soil as the waste is conveyed to the collection system.
- New drip pads must be underlaid with leak detection systems, and the pad and leak detection system must be underlaid with a chemical-resistant liner.
- EPA will allow existing drip pads to continue operating without liners and leak detection systems for up to 15 years, depending on the age and condition of the drip pad, provided that owners/operators obtain from an independent, qualified registered professional engineer a certification of compliance with all other design standards.

Equipment Cleaning and Replacement

The rule establishes a process by which generators can reclassify chlorophenolic (F032) wastes as F034 or F035 wastes. The process involves documenting that equipment once used for chlorophenolic processes has been cleaned or replaced in such a manner that eliminates the potential for cross-contamination (e.g., solvent rinsing).

Generators of F032 wastes may choose one of the following three options for reclassification:

1. Prepare and sign a written plan that describes what equipment will be replaced and how the equipment will be replaced. Generators must conduct replacement in accordance with the plan by replacing the equipment and managing the discarded equipment as F032 waste.
2. Prepare and sign a written equipment cleaning plan that describes the equipment to be cleaned, how the equipment will be cleaned, and the appropriate solvent chosen for use in cleaning. Generators must conduct cleaning in accordance with the plan by removing all visible residues from process equipment and by rinsing process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse at or below the lower method calibration limit (MCL) in Table 1 of Method 8290 in EPA/530-SW-91-019. Call the RCRA/Superfund Hotline toll-free at (800) 424-9346 for a copy of this document.
3. Document that previous equipment cleaning or replacement was performed in accordance with these requirements.

CERCLA Designation and RQs

F032, F034, and F035 wastes will become hazardous substances under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, on the effective dates of this rule (see the compliance deadlines listing inthis booklet) by virtue of their listing under RCRA. The Reportable Quantity (RQ) of these wastes will be one pound. If a quantity of these wastes equal to or exceeding one pound is released, the National Response Center must be contacted at (800) 424-8802, or at (202) 426-2675.

For More Information...

To assist the regulated community with RCRA compliance, EPA provides informational assistance through its RCRA/Superfund Hotline. Hotline personnel can answer questions and provide written material about the new wood preserving rule, including the *Federal Register* notice in which the rulemaking appeared.

To contact the RCRA/Superfund Hotline call toll-free (800) 424-9346. For the hearing-impaired, the number is TDD (800) 553-7672. Hours of operation are Monday through Friday, 8:00 a.m. to 7:30 p.m., Eastern Standard Time.

Information can also be obtained from **EPA Regional Offices** (listed below).

Brian Olson
U.S. EPA/**Region 1**
Waste Regulation Support Section
(HRR-CAN3)
90 Canal Street
Boston, MA 02203
(617) 573-5747

Margaret Emile
U.S. EPA/**Region 2**
Hazardous Waste Compliance Branch
(2AWM - HWC)
26 Federal Plaza
New York, NY 10278
(212) 264-8356

David Friedman
U.S. EPA/**Region 3**
RCRA Programs Branch (3HW53)
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-2863

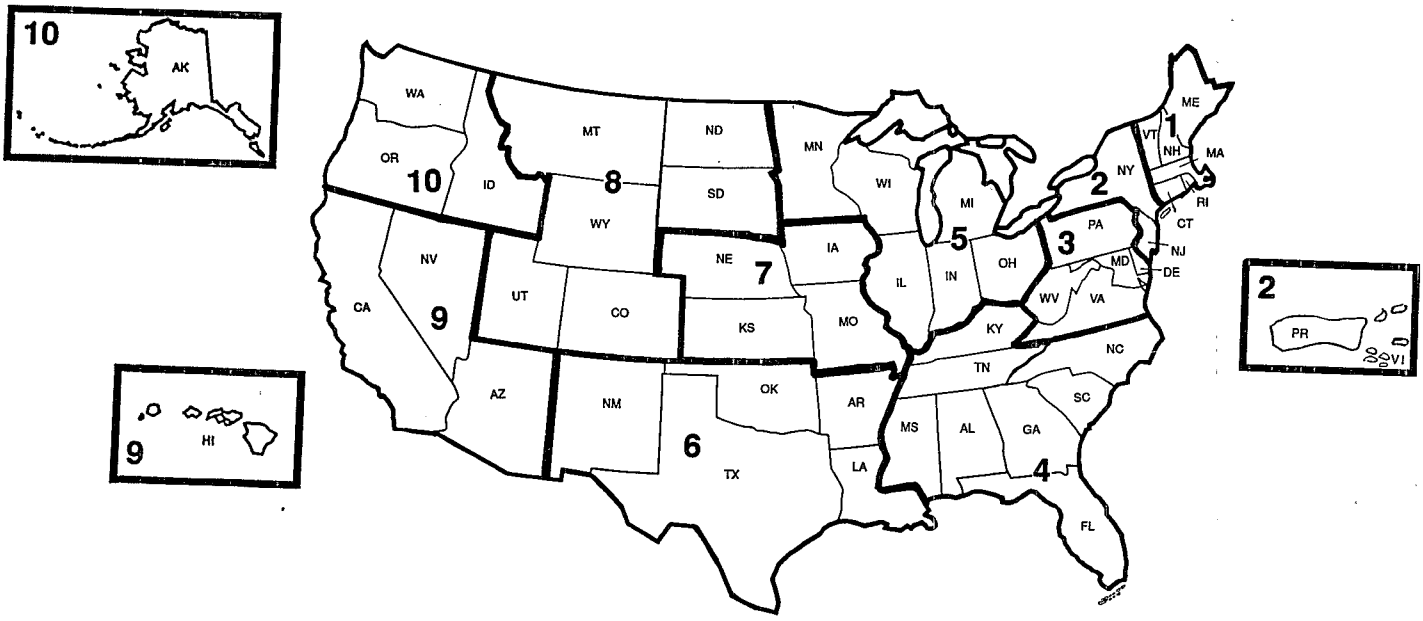
John Dickinson
U.S. EPA/**Region 4**
Waste Compliance Section
345 Courtland Street, NE.
Atlanta, GA 30365
(404) 347-7603

Dan Patulski
U.S. EPA/**Region 5**
RCRA Permitting Branch (5HR-13)
JCK Building
230 S. Dearborn Street
Chicago, IL 60604
(312) 886-0656

Sam Tate
U.S. EPA/**Region 6**
RCRA Enforcement Branch
(6H-CT)
1445 Ross Avenue
Dallas, TX 75202
(214) 655-6794

Gary Bertram
U.S. EPA/**Region 7**
RCRA/STPG
726 Minnesota Avenue
Kansas City, KS 66101
(913) 551-7533

Felix Flechas
U.S. EPA/**Region 8**
Waste Management Division
(8HWM-RI)
999 18th Street
One Denver Place
Denver, CO 80202-2405
(303) 293-1524

Amy Sokolov
U.S. EPA/**Region 9**
State Programs Branch (H-2-3)
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-2110

Marcia Bailey
U.S. EPA/**Region 10**
Waste Management Branch
(HW-112)
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0684