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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 261, 264, 265, and 302

[FRL-4155-5]

RIN 2050-AD35

Wood Preserving; Identification and Listing of Hazardous Waste; Standards and Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is amending the regulations for hazardous waste management under the Resource Conservation and Recovery Act (RCRA) by modifying the technical standards for drip pads used to collect preservative drippage from treated wood and modifying the listings of three categories of hazardous waste from the wood preserving industry. These listings include wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use or have used pentachlorophenol (F032), that currently use creosote (F034), or that currently use inorganic preservatives containing arsenic or chromium (F035). This action modifies portions of the regulations that were previously finalized by EPA on December 6, 1990 (50 FR 50450). Portions of that final rule were administratively stayed on June 13, 1991 (56 FR 27332), and again on February 6, 1992 (published in the **Federal Register** on February 18, 1992 [57 FR 5859]). Today's amendments constitute final action on the June 1991 Administrative Stay and result in termination of that stay. The February 6, 1992 stay is also terminated as a result of today's action. This notice also modifies the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) list of hazardous substances to reflect the modifications to the F032, F034, and F035 hazardous waste listings.

DATES: This final rule will become effective on December 24, 1992 except for the amendments to the following provisions which are effective on June 24, 1993: §§ 264.570(c)(1), 264.573(a)(4)(i), and (b)(3), 265.440(c)(1), 265.443(a)(4)(i) and (b)(3) and the revision of hazardous waste number F032 in § 261.31. See section VII of Supplementary Information for further details.

ADDRESSES: The official record of this rule-making is identified by Docket Number F92-WP2F-FFFFF and is located at the following address: EPA RCRA Docket Clerk, Room 2427 (OS-332), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

The docket is open from 9 a.m. to 4 p.m., Monday through Friday, excluding Federal holidays. The public must make an appointment to review docket materials by calling (202) 260-9327. The public may copy 100 pages from the docket at no charge; additional copies are $0.15 per page. Copies of materials relevant to the CERCLA portions of this rulemaking also are located in room 2427 at the above address.

FOR FURTHER INFORMATION CONTACT: The RCRA/Superfund Hotline, at (800) 424-9346 (toll-free) or (703) 920-9810, in the Washington, DC metropolitan area. The TDD Hotline number is (800) 553-7672 (toll-free) or (703) 486-3323, locally. For technical information on the modifications to the hazardous waste listings and drip pad standards, contact Mr. David J. Carver at (202) 260-6775, Office of Solid Waste (OS-333), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC, 20460.

For technical information on the CERCLA aspects of this rule, contact: Ms. Gerain H. Perry, Response Standards and Criteria Branch, Emergency Response Division (OS-210), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 260-5650.

SUPPLEMENTARY INFORMATION: The contents of the preamble are listed in the following outline:

I. Legal Authority

These regulations are being promulgated under the authority of sections 2002(a), 3001(b) and (e)(1), and 3004 of the Solid Waste Disposal Act, as amended, 42 U.S.C. 6912(a) and 6921(b) and (e)(1) (commonly referred to as RCRA), and section 102(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9602(a).

II. Background

A. General

Section 3001(e)(1) of RCRA requires EPA to determine whether to list as hazardous wastes containing chlorinated dioxins and chlorinated dibenzofurans. As part of this mandate, the Agency initiated a listing investigation of dioxin-containing wastes from pentachlorophenol wood preserving processes and pentachlorophenate surface protection processes. Two other similar wood preserving processes that use creosote and aqueous inorganic formulations containing chromium or arsenic were also included in this investigation.

On December 30, 1988, EPA proposed four listings pertaining to wastes from wood preserving and surface protection processes, as well as a set of standards for the management of these wastes (53 FR 53282). The Agency finalized three generic hazardous waste listings for wastes from wood preserving processes and promulgated standards for the management of these wastes on drip pads (40 CFR parts 264 and 265, subpart W) on December 6, 1990 (55 FR 50450).

The purpose of this final rule is to amend the F032, F034, and F035 listings and portions of the subpart W requirements for drip pads. As explained briefly above, the EPA proposed these amendments in a notice published in the **Federal Register** on December 5, 1991 (56 FR 163848). As with the original final rule, the scope of today's amendments does not include wastes that are included in the K001 listing (bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol).

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B. Administrative Stays

1. June 6, 1992 Administrative Stay

On December 31, 1990, the American Wood Preservers Institute (AWPI) formally requested a stay of the effective date for compliance with the final rule, and also filed a petition for judicial review of the rule. EPA issued an Administrative Stay on June 13, 1991 (see 56 FR 27332). Elements of the December 6, 1990 final rule subject to that stay are the following:

- The F032, F034, and F035 listings in the process area only (until February 6, 1992 for existing drip pads and until May 6, 1992 for new drip pads);
- The requirement for impermeably sealed or coated surfaces for new drip pads, until further administrative action is taken;
- The applicability of the F032 waste code to wastes generated by previous users of pentachlorophenol, provided that they are regulated as F034 or F035, until further administrative action is taken; and
- The applicability of the F032, F034, and F035 listings to wastewaters that do not contact listed process wastes, until further administrative action is taken.

This stay further required that a facility adhere to several conditions in order to be eligible for the stay. The Agency did this in an effort to limit the extension provided by the stay to those facilities making bona fide efforts to comply with the original final rule. The conditions of the stay are as follows.

(1) By August 6, 1991, a facility must have notified the proper authorities of its intent to either install or upgrade a drip pad, or cease operations by August 7, 1991;

(2) By November 6, 1991, a facility must have provided evidence of *bona fide* efforts to comply with its earlier stated intent;

(3) By February 6, 1992, a facility must have completed any upgrades to existing pads, including installation of an impermeable coating, sealer, or cover; and

(4) By May 6, 1992, a facility must have completed installation of new pads.

The staying of the F032, F034, and F035 listings in the process area does not require further administrative action to effect termination of the stay. The remaining elements of the June 1991 stay require specific administrative action to effect their termination. These elements of the December 1990 final rule were proposed for modification in the December 5, 1991 NPRM and are being finalized today. Accordingly, today's final rule constitutes the final administrative action that terminates the stay of these provisions.

2. February 6, 1992 Administrative Stay

Because the Agency had not promulgated today's final rule prior to the February 6, 1992 deadline set forth in the June 13, 1991 Administrative Stay, the Agency issued a subsequent Administrative Stay on February 6, 1992 (57 FR 5859). This action stayed the impermeability requirements for existing drip pad coatings, sealers, and covers until October 30, 1992. Because today's final rule amends the impermeability requirement, replacing it with a specific hydraulic conductivity standard, the February 6, 1992 stay is no longer applicable. The Agency is establishing today a new compliance date for the hydraulic conductivity standard (see section VII). Facilities with existing drip pads must meet the new hydraulic conductivity standard before the compliance date established in today's rule, and not the October 30, 1992 deadline set in the administrative stay.

III. Summary of the Regulation

A. Overview of the Proposed Rule

In the December 5, 1992 **Federal Register**, EPA proposed to revise several elements of the wood preserving hazardous waste regulations and requested comment on those issues. The Agency proposed the following actions: (1) Eliminate the F032 classification for certain wastes generated by past users of chlorophenolic formulations that any wastewaters, drippage, process residuals, or spent preservatives are regulated as F034 wastes, F035 wastes, or wastes exhibiting the Toxicity Characteristic (TC); (2) narrow the scope of the wastewater listings contained in the F032, F034, and F035 listings to include only those wastewaters that come in contact with process contaminants; (3) require contingency plans and cleanup of storage yard drippage in response to incidental drippage in storage yards; (4) remove the requirement that new drip pad coatings, sealers or covers be impermeable; (5) add a requirement that new drip pads have leak collection devices; (6) revise the requirement that all existing drip pad coatings, sealers, or covers be impermeable to reflect data on the permeabilities of available coatings, sealers, or covers; (7) require that drip pad surface materials be chemically resistant to the preservation being used and that these surface materials be maintained free of cracks, gaps, corrosion, or other deterioration that would increase their hydraulic conductivity above the 1×10^{-7}cms level and lead to a potential for releases to the environment; (8) revise the requirement that drip pads be cleaned weekly to a requirement that drip pads be cleaned in a manner and frequency such that the entire surface of drip pads can be inspected weekly; (9) revise the schedule for upgrading existing drip pads to allow 15 years for the incorporation of liners and leak detection systems; and (10) revise the CERCLA designation of hazardous substances to reflect the modifications in the listings.

The Agency also requested comment as to whether the standards for new drip pads should allow the choice of either a highly impermeable surface (e.g., sealers, coatings, or covers for concrete drip pads) or a liner with a leak detection and collection system.

B. Overview of the Final Rule

Today's rule finalizes modifications proposed on December 5, 1991 (56 FR 63848) to the wood preserving waste listings and drip pad regulations originally promulgated on December 6, 1990 (55 FR 50450). The modifications being finalized today are summarized below.

1. Provisional Elimination of the F032 Waste Code

The listing description for F032 promulgated in the December 6, 1990 final rule includes wastes generated at wood preserving plants that currently use or previously used chlorophenolic formulations. That final rule also contained a provision whereby a facility owner/operator could "delete" the F032 waste code from the wastes if the facility's process no longer uses chlorophenolic formulations and the facility meets other criteria outlined in § 261.35 (see 55 FR 50483). In the December 5, 1991 NPRM, EPA proposed to eliminate the applicability of the F032 listing to wastes generated by past users of chlorophenolic formulations that have ceased using such formulations, provided that any wastes generated exhibit the Toxicity Characteristic or meet the listing description of F034 or F035 (56 FR 63849).

In today's rule, the Agency is finalizing a portion of this provision. Today's action eliminates the applicability of the F032 waste code to wastes generated by wood preserving operations that previously used, but no longer use, chlorophenolic preservatives, provided that any wastewaters, process residuals, drippage, or spent preservatives generated by those operations are

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regulated as F034 or F035 wastes. EPA has made this elimination of the F032 waste code conditional in order to ensure continued protection of human health and the environment. Given this approach, the wastes generated by past users of chlorophenolic formulations will continue to be subject to appropriate management standards under Subtitle C. There is no additional environmental benefit to be gained from regulating wastes from past users of chlorophenolic formulations as F032 wastes, provided the wastes are regulated as F034 or F035 wastes. It is important to note, however, that although F034 and F035 do not include dioxin as a basis for listing, wastes generated by past users of chlorophenolic formulations that are reclassified as F034 or F035 may contain dioxin due to cross-contamination with wastes formerly classified as F032. As discussed in the December 1991 NPRM, this will be relevant in establishing treatment standards under the Land Disposal restrictions program of 40 CFR 268.

As discussed above, the December 1991 NPRM proposed to extend eligibility for the provisional elimination of the F032 waste code to wastes that exhibit that TC as well as wastes meeting the F034 or F035 listings. The Agency has decided not to finalize the TC portion of the proposed conditional elimination for wastes from past users of chlorophenolic preservatives. Therefore, TC wastes generated by past users of chlorophenolic formulations which do not meet the F034 or F035 listing descriptions are still considered F032 wastes, unless the generator satisfies the cleaning and replacement requirements of 40 CFR 261.35.

2. Narrowing of the Wastewater Listings

EPA is promulgating amendments to the listings of F032, F034 and F035, as proposed, to exclude wastewaters that have not come into contact with process contaminants. For purposes of today's rule (and as stated in the June 13, 1991 Administrative Stay), EPA intends "process contaminants" to include hazardous constituents from formulations of preservative and any F032, F034 of F035 wastes. Therefore, wastewaters that never conduct these process contaminants do not fall within the scope of the listings, as amended today. Rainwater, however, that is collected on drip pads and conveyed to a collection system would be considered a hazardous waste if it becomes mixed with hazardous wastes from wood preserving operations. This contaminated rainwater would then meet the definition of a wastewater generated from the facility and would have to be treated as a listed hazardous waste.

3. Drippage in Storage Yards and Contingency Plans

On December 5, 1991, the Agency proposed to require owners/operators of wood preserving plants to develop and implement a contingency plan for immediate response to incidental drippage in storage yards. Today, EPA is finalizing this requirement as proposed and is providing guidance through this preamble discussion of what EPA intends by "immediate response." With respect to the word "immediate," the Agency intends, absent extenuating circumstances, that owners/operators respond to storage yard drippage that occurs when a facility is in operation within one consecutive working day. A facility is considered in operation on any day in which it is treating wood. For facilities which are not in operation during a storage yard drippage event, the Agency expects the facility to clean up drippage within 72 hours of occurrence. EPA recognizes that the term "immediate" must take into account the nature of the incident as well as facility-specific factors. The above clarification of "immediate" recognizes that facilities have "down" times, and that a facility may not have adequate staff available during down times, weekends, or holidays.

It is important to note that the timing of response to drippage is based on when the drippage actually occurs, rather than when the drippage is detected in the storage year. The approach promulgated today places the responsibility for checking storage yards for drippage on the facility owner/operator. Regular checks of storage yards, particularly following the initial storage of newly treated wood, allow owners/operators to response to drippage as required by today's rule.

With respect to the word "response," EPA intends to include cleanup and removal of preservative drippage from the storage yard which is consistent with Federal Regulations. Because response must be "immediate," as discussed above, drippage would not remain in the storage yard long enough to cause significant contamination of the soil or other environmental media. Therefore, extensive remediation will not be necessary for periodic cleanup of drippage in accordance with the contingency plan. For purposes of today's rule, removal of visible drippage from storage yards will satisfy the requirements for immediate response. Today's rule does not require sampling and analysis for confirmation of contamination in storage yards. If historical contamination exists at a wood preserving plant, any remediation would proceed under an enforcement order and would be independent of any response to incidental storage yard drippage required by this rule.

Today's rule requires facility owners/operators to maintain a written plan that describes how the facility will respond to incidental drippage in the storage yard. As described in the NPRM, and as finalized in today's rule, this plan, at a minimum, must describe how the owner/operator will do the following:

(i) Clean up of the drippage
(ii) Document the clean-up of the drippage
(iii) Retain the documents regarding the clean up for three years; and
(iv) Manage the contaminated media in a manner which is consistent with Federal regulation.

The NPRM stated that the contingency plan meet the requirements of subpart D of 40 CFR part 264/265. By this, the Agency did not intend, and is not requiring in today's rule, that the contingency plan for responding to incidental storage yard drippage meet the detailed content requirements for subpart D. The Agency believes that those requirements exceed what is necessary for a written plan for responding to incidental storage yard drippage. Today's rule still requires that a written plan be developed and maintained at the facility, and that the plan be available for inspection by the Agency or its representatives.

With respect to the requirement that the cleanup of incidental drippage in the storage yard be documented, the Agency will consider an annual certification, signed and on company letterhead, that the owner/operator has cleaned up in accordance with today's final rule requirements, to be adequate documentation. Individual facilities, however, may elect to keep more detailed records, including records for each cleanup incident, to defend, for example, against potential claims of liability.

4. New Drip Pad Coating, Sealer or Cover Impermeability Requirement

As proposed in the December 5, 1991 NPRM, EPA is revising the 40 CFR subpart W regulations for drip pads by removing the requirement that new drip pads have an impermeable surface coating, sealer or cover. Furthermore, the Agency has decided to remove the requirement for new drip pads to have liners and leak detection with leak collection if coatings and sealers are chosen. As discussed in the proposal, the Agency requested comment on the

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relative merits of allowing industry a choice for new drip pads of having a surface protection system on the drip pad surface or a liner and leak detection system below pad with no surface protection. The Agency has decided to allow regulated community to choose between these two options.

In the NPRM, the Agency noted that the design criteria for coatings could be more complex than the design criteria for a liner and leak detection system. Specifically, EPA was concerned that coatings would not be an effective barrier unless operators applied coatings and sealers to the drip pad which are chemically resistant to the preservatives in use and which are maintained against corrosion and wear. Therefore, EPA is today promulgating requirements to ensure that new drip pads with coatings, including extensions to existing drip pads, are designed and maintained to be an effective barrier to migration of contaminates from the drip pad.

Today's requirements for existing drip pad surface protection will be applicable to new drip pads. A new drip pad without a liner and leak detection system will be in compliance with subpart W requirements if the owner/operator applies a surface protection system to the pad which meets the permeability requirements for existing drip pads and is chemically resistant to the preservative being used. Likewise, a new drip pad following these technical requirements must be inspected and certified annually by an independent qualified registered professional engineer.

It is the Agency's belief that a drip pad with a liner and leak detection system may require less maintenance than a drip pad with a surface coating only, potentially saving a facility a substantial amount of money over the lifetime of a new pad. However, commenters to the proposed rule pointed out specific situations where coatings may be more cost effective. New drip pads may be located in specific environmental locations (i.e. with a high seasonal water table) or a facility situation (i.e. an extension to the existing drip pad that does not have a liner) in which it is less expensive to use coatings than a liner and leak detection system. Further, if the cost of highly impermeable coatings declines in the future, allowing the two compliance options in today's rule could reduce overall compliance costs. Since the Agency finds that either requirement for new drip pads promulgated today provides for adequate protection of human health and the environment, the Agency has decided to allow the regulated community the flexibility to choose either compliance option. However, the Agency believes that either requirement for new drip pads promulgated today provide for adequate protection of human health and the environment.

5. Leak Collection Systems for New Drip Pads

The EPA is finalizing the proposal that new drip pads which are equipped with a liner and leak detection system also be equipped with a leak collection system below the pad and above the liner so that any leakage through the pad can be collected and removed. With a leak collection system in place, water and preservative formulations that leak through the pad can be removed before they even reach the liner. This collection system will also aid the facility in determining whether or not (and the extent to which) pad failure has occurred. The leak collection system required by today's rule is to be a collection device separate from than the sump system used to collect drip pad washdown water. The purpose of this separate collection device is to differentiate between washdown water and leachate collection which could occur due to drip pad permeation. Owners and operators must document, in the facility's operating record, the date, time, and quantity of leakage collection when it is removed from the collection device. This information will be useful to the Agency in enforcing the requirement that new drip pads be maintained in a structural sound manner. This leak collection requirement will apply to all new drip pads which are fitted with a liner and leak collection system constructed after the publication date of today's rule, except for those pads constructed after such time, for which the owner/operator has entered into binding financial or other agreements for construction prior to the publication date of today's rule. As stated in the NPRM, the requirement to install a leak collection system on new drip pads does not affect the responsibility of an owner/operator to remove some or all of a drip pad to clean up any release of hazardous waste to the environment in the event such a release occurs. This requirement, however, should minimize the frequency of these potentially costly cleanup activities.

6. Existing and New Drip Pad Coating, Sealer, and Cover Permeability Requirements

EPA is aware that the requirement for an absolutely impermeable surface cannot be practicably met. The Agency's intent in the December 6, 1990 rule was to require a surface coating, sealer, or cover for concrete drip pads (or similar porous or easily-fractured materials of construction) that would provide incremental protection against permeation of preservative through the drip pad and thus serve to ensure less permeability than would be achieved by the drip pad alone. This requirement would be applicable to concrete or other porous or easily fractured materials of construction but may not be applicable to other materials of construction such as steel.

Today's rule finalizes the proposed standard that existing drip pad coatings, sealers, or covers have a hydraulic conductivity of less than or equal to 1×10^{-7} cm/second. This requirement, which was proposed for existing drip pads, also applies to new drip pads for which the owner/operator has chosen surface protection over liners and leak detection, and collection, as described elsewhere in the preamble. The Agency recognizes that the most common material for drip pad construction has been concrete. Thus, the conductivity value of 1×10^{-7} cm/s has been derived from the theoretical conductivity of unfractured, well constructed concrete. Available data reflect that coatings, sealers and covers that meet this standard are currently on the market.

A common unit of measurement within the protective coating and sealer industry to express a coating, sealer, or liner's hydraulic conductivity is a mass flux number given in units of grains per ft^2. The hydraulic conductivity value of 1×10^{-7} cm/s can be expressed as a flux with an equivalent value of 1×10^{-7} grams/cm^2/s or in English units of 5.168 grains/ft^2/hr, assuming that values for water are used in the calculation. Additionally, to convert from grains per hour per ft^2 to units of cm/s, one has to multiply by 1.934964×10^{-8} $(ft^2)(hr)(cm)/(s)(grains)$. This flux number was obtained by assuming that a worst case scenario would exist if pure water was used to permeate through a pad, instead of preservative. The Agency has no data on the infiltration rates of preservatives but it is logical that water would permeate a drip pad somewhat more rapidly than a preservative formulation. The Agency believes that the adoption of a 1×10^{-7} cm/s hydraulic conductivity based on a worst case scenario is reasonable. Indeed, because wastes mixed with rainwater or other water may be present and may permeate the pad, the Agency stands by its calculation. Therefore, the density term in the calculation was chosen for water at room temperature and atmospheric pressure. The details of

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this calculation along with any assumptions can be found in the docket for this rule.

In the NPRM, EPA identified ASTM Method E–96 Procedure E as an accepted method for measuring the infiltration rate of water vapor into a drip pad surface. EPA continues to support this method as acceptable, although its use is not required and other appropriate methods may be used.

7. Selection of a Chemically Compatible Surface Material for Existing and New Drip Pads

Today's rule also promulgates a requirement that existing and (if applicable) new drip pads be constructed with coatings, sealers, or covers that are chemically compatible with the preservatives being used. Furthermore, these surface materials must be maintained free of cracks, gaps, corrosion, or other deterioration that would increase the hydraulic conductivity of drip pad coatings, sealers, and covers above the 1×10^{-7} cm/s level and lead to a potential for releases to the environment. There is no testing requirement associated with this provision; an owner/operator is not required to demonstrate through testing that a surface material is compatible with the preservatives being used.

8. Drip Pad Cleaning Requirements

The Agency is revising the drip pad cleaning requirements as proposed. Cleaning of drip pads is required in a manner and frequency to be determined on a facility-specific basis by the owner/operator to allow weekly inspections of the entire surface of the drip pad. The current requirements to document the date and time of each cleaning to which revisions were not proposed remain unchanged.

9. Timeframe for Existing Drip Pads To Comply With New Drip Pad Standards

The Agency is not finalizing the proposal to allow 15 years from the effective date of today's rule for owners/operators of existing drip pads to meet the new drip pad standards. The requirements at 40 CFR part 265, subpart W are amended today to reflect these changes. In addition to removing the 15 year upgrade requirement, the Agency is removing the requirement that owners/operators of existing drip pads document the age of their drip pad. Because this requirement was directly related to the 15 year upgrade requirement, there is no logical reason to maintain it in the absence of that upgrade provision. As discussed elsewhere in this preamble, the Agency has elected to allow facilities to comply with the standards for new drip pads by choosing between liner and leak detection and surface protection. Because the substantive requirements for existing pads (particularly the requirement of an annual, certified written assessment of the drip pads compliance with regulatory standards) are the same as those being promulgated today for new drip pads for which surface protection has been elected over liners, the proposed 15 year upgrade deadline has become unnecessary and irrelevant.

For example, at the end of the proposed 15 year period, an owner/operator could choose to continue meeting the surface protection requirement, or could retrofit an existing pad or build a new pad to include a liner and leak detection system. Since the surface protection option is consistent with the standards that owners/operators are already required to meet for existing drip pads, the owner/operator is able to meet the standards for new drip pads without adapting to different standards. Thus, at the end of the 15 year period, an owner/operator in compliance with the requirements for existing drip pads would be in compliance with the standards for new drip pads as well. As stated elsewhere in this preamble, Agency believes that a well constructed drip pad that complies with the surface protection requirement may provide sufficient protection for a period greater than 15 years. The annual certification requirement for drip pads with surface protection is intended to ensure that drip pads meet these requirements.

Of course, today's rule allows the owner/operator to install a drip pad with a liner or retrofit an existing pad with a liner to meet the standards for new drip pads. Under today's rule, there is no requirement that the owner/operator do so within 15 years. The decision to choose the liner option, as well as the decision of when to install or retrofit a drip pad to meet those requirements are left to the individual facility. It is important to note, however, that the Agency is maintaining the requirement that owners/operators develop a written plan for upgrading, repairing, and modifying the drip pad if the owner/operator chooses to meet the standards for new drip pads by installing a liner and leak detection system. Any such plan must still be submitted to the Regional Administrator no later than 2 years before the date that all repairs, upgrades, and modifications will be complete.

10. CERCLA Hazardous Substance Designation

All hazardous wastes listed pursuant to RCRA 3001 are hazardous substances as defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended. The designations for F032, F034, and F035 in Table 302.4 (40 CFR 302.4) are revised today to reflect the modifications to their listing descriptions under RCRA (40 CFR 261.31). Reportable quantities (RQ's) for these revised CERCLA designations are set at one pound, consistent with the RQ's established in the December 6, 1990 final rule, for the initial CERCLA listings for F032, F034, and F035.

IV. Summary of Public Comments and Responses

The Agency received several comments on the NPRM, covering a range of issues. These major issues presented in these comments and the Agency's responses are addressed separately below for clarity and ease of understanding. A complete summary of comments received and the Agency's responses thereto are contained in the separate document entitled "Response to Public Comment" which is located in the docket associated with today's rulemaking. The major issues from public comments, however, are summarized and responded to in this section.

A. Provisional Elimination of F032 Waste Code

Several comments were received on the conditions for elimination of the F032 waste code from wastes generated at plants that previously used, but no longer use, chlorophenolic formulations. As proposed in December 1991, these conditions required that any wastes generated by past users of chlorophenolic formulations either exhibit the TC or be regulated as F034 or F035 wastes to qualify for elimination of the code. Industry commenters generally supported the provisional elimination of the waste code. Two commenters, however, requested that EPA remove the reference to TC wastes. The commenters stated that listed wastes are subject to a different regulatory regime than are characteristic wastes. Thus, while the Agency could be sure that F034 and F035 wastes generated by past users of chlorophenolic preservatives would be subject to the identical scheme of regulation as F032 wastes, the same cannot be said of TC wastes generated by past users.

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The Agency agrees with the commenters' rationale and has decided not to include TC wastes within the conditional elimination for wastes from past users of chlorophenolic formulations. TC wastes were originally added to the conditional elimination proposal to regulate wastes in States that are authorized for the base RCRA program but have not adopted the F034 or F035 listings. The Agency notes that its regulations require all States authorized for the base program to pick up the F034 and F035 listings by the end of December 1992 (See 40 CFR 271.21). As the commenter stated, the regulatory standards that apply to F032, F034 and F035 wastes are identical; therefore, the Agency can be assured that wastes generated by past users of chlorophenolic formulations that are reclassified as F034 or F035 will be managed consistently. In addition, it is programmatically more difficult to establish and implement land ban treatment standards for cross-contaminated wood preserving wastes under the TC than under the F034/F035 listings. The F034/F035 listings involve a clearly defined industry and a significantly smaller universe of wastes than that which is potentially captured by the TC.

One commenter urged the Agency to expand the provision for deletion of the F032 code to include wastes generated by past users of chlorophenolics that are not regulated as hazardous wastes. Such an approach would undermine the central premise of the F032 waste code deletion concept. As discussed above, EPA wants to ensure that wastes from which the F032 code is deleted continue to be managed properly under the Subtitle C regime. In this way, the deletion provision has not established a regulatory loophole of any kind but continues to provide protection of human health and the environment.

Finally, one commenter stated that the F032 waste code appeared to overlap with the existing F027 listing, in that spent formulations would be regulated as F027. The Agency clarifies here that the F027 listing applies only to discarded unused formulations containing tri-, tetra-, or pentachlorophenol. Therefore, spent formulations are not covered by the F027 listing. On the other hand, the listing descriptions for F032, F034 and F035 explicitly include spent formulations from wood preserving processes. The same commenter suggested that EPA clarify that the F032, F034 and F035 listings do not include wastes from the wood surface protection industry. EPA believes that the listing descriptions for F032, F034 and F035 are clear as to which wastes they encompass. On December 30, 1988, the Agency proposed to list wastes from wood surface protection processes as F033 (53 FR 53330). This listing was not finalized along with the rest of the wood preserving rule on December 6, 1990; a possible F033 listing will be pursued in the future as a separate Agency action. Today's rule, as with the December 6, 1990 rule, does not apply to wastes from the wood surface protection industry.

B. February 6, 1992 Deadline

One commenter (a wood preserving industry trade group) requested a six month extension of the February 6, 1992 deadline for existing pads to comply with the numerical standard for coating, sealer and cover permeability. The Agency has already recognized that February 6 presented an impractical deadline for compliance with standards for existing drip pads that the Agency proposed to modify but had yet to amend by that date. In order to remedy this situation, EPA issued an Administrative Stay on February 6, 1992 (57 FR 5859; February 18, 1992), staying the impermeability requirement for drip pad surfaces until October 30, 1992. However, as explained elsewhere in this notice, today's final rule modifies the permeability standard for existing drip pads, and establishes a new compliance date for meeting the new standard (see section VII). The effective date established in the February 1992 stay is no longer applicable; rather, facilities must now meet the later compliance deadline associated with the permeability standard promulgated today.

C. Mixture Rule and Contained-In Policy

Several commenters were concerned with the management of media contaminated with wood preserving wastes, particularly in light of the court remand of the mixture and derived-from rules (*Shell Oil Co.* v. *EPA*, 950 F. 2d 741, D.C. Cir. 1991). At the outset, neither the mixture rule nor the derived-from rule (which the Agency reinstated on March 3, 1992, 57 FR 7628), applies to environmental media. These rules concern the regulatory status of solid wastes. Two commenters urged EPA to develop risk-based *de minimis* levels for listed hazardous wastes that are "contained in" environmental media.

One commenter argued that EPA should not include environmental media within the listings themselves. EPA emphasizes that the listings for F032, F034, and F035 as promulgated on December 6, 1990, and as modified today, do not specifically include environmental media in the listing criteria. Environmental media can be classified as listed hazardous wastes, however, through application of the "contained-in" policy, whereby soils, rainwater, and other media that come into contact with listed hazardous wastes are themselves hazardous wastes (*i.e.*, they "contain" hazardous wastes). For example, soil that comes into contact with spent creosote formulations at a wood preserving plant and is subsequently excavated or otherwise actively managed, will carry the F034 listing.

Another commenter suggested that environmental media should be considered hazardous wastes only if they exhibit a characteristic of hazardous waste. Consideration of such an approach is far broader than the specific issues in this rulemaking and is outside the scope of the December 1991 NPRM.

Several commenters requested that EPA clarify that stormwater run-off is not a hazardous waste under 40 CFR 261.3(c)(2)(i). This regulatory citation refers to the "derived-from" rule, which states generally that any solid waste generated from the treatment, storage, or disposal of a hazardous waste, is itself a hazardous waste. This provision specifically exempts precipitation run-off from the derived-from rule (i.e., precipitation run-off is not considered to be "derived from" the treatment, storage or disposal of a hazardous waste and, therefore, is not itself a hazardous waste).

The nature of the Subpart W standards for drip pads, however, distinguishes them from the regulations governing other more conventional hazardous waste management units. The definition of drip pad in 40 CFR 260.10 states that a drip pad is "designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants" (55 FR 50482). In the July 1, 1991 technical correction notice, EPA amended the applicability sections of Subpart W in parts 264 and 265 to reflect that drip pads were intended to convey precipitation and surface water run-on as well as treated wood drippage (56 FR 30193). Additional language in the preamble to the December 1991 NPRM indicates the Agency's position on precipitation at wood preserving plants. In the discussion of wastewater listings, EPA states that rainwater (precipitation run-off) collected in a fashion that keeps it segregated from preservative formulations or listed wastes would not be considered a hazardous waste (56 FR 63850). On the other hand (and as

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discussed above), rainwater that falls on a drip pad and contacts preservative formulations or listed wastes and is then collected is itself a hazardous waste by virtue of the contained-in policy (*i.e.*, the rainwater, which is an environmental medium, "contains" the hazardous waste). Because drip pads are hazardous waste management units designed and maintained to convey treated wood drippage, precipitation and surface water run-on to an associated collection system, the exemption for precipitation run-off in 40 CFR 261.3(c)(2)(i) does not apply to drip pads.

D. Narrowing of Wastewater Listings

The majority of commenters supported the Agency's proposal to narrow the wastewater listings to exclude wood preserving wastewaters that do not come into contact with process contaminants. One commenter believed that EPA should not regulate wastewaters that simply come into contact with process contaminants. The Agency disagrees and is not expanding this revision beyond what was proposed. Wastewaters that come into contact with process contaminants at wood preserving plants have the potential to solubilize and mobilize hazardous constituents and, therefore, warrant regulation as a hazardous waste under RCRA.

E. Storage Yard Drippage

The majority of commenters on the issue of incidental drippage in storage yards requested that EPA clarify what is meant by "immediate response" to such drippage. EPA appreciates the commenters' concerns and is providing guidance on the Agency's use of the term "immediate response" in today's rule. This guidance can be found in section III.B.3. of this preamble.

One commenter objected to the Agency requiring response to drippage in storage yards on the grounds that EPA has not shown any environmental benefit to be gained from such a requirement. The commenter went on to say that contamination in storage yards is limited to the first few feet of soil. EPA believes that this last statement about storage yard contamination justifies the requirement for responding to drippage in treated wood storage yards. There are several cases of historical contamination resulting from incidental drippage from treated wood stored outside on the ground. Since facility owners/operators are required to implement a contingency plan for responding to visible drippage from treated wood, the likelihood of incidental drippage causing long term contamination is greatly minimized, if not eliminated. As a result, EPA believes that the requirement to respond to preservative drippage in storage yards is consistent with the RCRA mandate to protect human health and the environment.

F. Revisions to Drip Pad Cleaning Requirements

All commenters supported the proposed changes to the drip pad cleaning requirements. One commenter stated that the recordkeeping requirement associated with the pad cleaning provisions is unnecessary and should be dropped. The Agency disagrees; the records maintained by facilities showing how often drip pads are cleaned and what cleaning procedure is used can provide valuable information for Agency and State officials conducting inspections of the site. For example, these records could show inspectors that aqueous preservatives do not obscure the drip pad and that weekly inspections can be conducted without frequent water washings of the pad. EPA notes that the recordkeeping requirement was promulgated as part of the original final rule on December 6, 1990. The December 1991 NPRM dealt only with the frequency of pad cleaning.

G. Policy to Allow Installation of Either a Surface Coating, Sealer, or Cover or a Liner and Leak Detection System

Two commenters favored the concept of allowing facility owners/operators the choice of installing either a surface coating, sealer, or cover or a liner and leak detection system on a new drip pad. One State agency commented that surface coatings alone do not provide adequate protection in cases of pad failure. The Agency disagrees. As discussed in the NPRM, the Agency believes that surface coatings, sealers, and covers provide a primary barrier against continuous chemical attack and limit permeation of preservatives through the pad. Liners, on the other hand, provide backup protection against unpredictable chemical exposure that could occur due to concrete micro-cracking without the use of coatings or sealers. EPA believes both options adequately protect human health and the environment. As discussed earlier, EPA is providing a choice to facilities to use either surface protection which meets the permeability and chemical resistance requirements of this rule or a liner and leak detection system to protect against releases into subsurface soils, ground water, and surface waters.

However, as discussed in the NPRM, the EPA believes that additional benefits could accrue with both the use of a liner and leak detection, and leak collection system and the use of sealers and coatings. Section VIII of this rule provides additional discussion of the costs of each option. Although not required, the EPA recommends the use of coatings and sealers and a liner and leak detection and leak collection system. EPA notes that the use of a surface coating, sealer, or cover can eliminate or minimize the amount of leakage to the liner and leak collection system.

One commenter suggested a change in the regulatory language to clarify which drip pads are required to meet the hydraulic conductivity standard of today's rule. EPA notes that the regulatory language promulgated today clearly specifies which drip pads are required to be equipped with a sealer, coating, or cover that meets the hydraulic conductivity standard. The Agency has not made the change suggested by the commenter. In addition to requiring a coating/sealer system on existing drip pads, today's rule allows an owner/operator to satisfy the standards for new drip pads by choosing to use either a coating/sealer system *or* a liner and leak detection and leak collection system.

One manufacturer of protective coatings commented that owners/operators should not be given the option of using either a sealer or a coating since most would not choose coatings due to cost. The Agency appreciates the commenter's interest in this matter but believes that sealers are also acceptable as a primary barrier against chemical attack of drip pads. In particular, the commenter objected to the use of penetrating sealers, stating that the breakdown of the sealer will allow absorption of CCA into the pad. The Agency disagrees with the commenter. Performance data provided by manufacturers indicate that penetrating sealers are capable of providing adequate protection from permeation of preservatives through drip pads, particularly given the pad cleaning requirements included in today's rule. In order for a facility owner/operator to inspect drip pads in accordance with Subpart W standards, water washings of the pad must occur at a frequency sufficient to allow visual inspection of the entire pad surface on a weekly basis.

H. Drip Pad Coating, Sealer, and Cover Permeability

The comments received on the numerical standard for drip pad coating, sealer, and cover permeability were generally favorable. One commenter, however, strongly disagreed with the

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Agency's reliance on the calculation indicating 4 gallons per day of leakage from 2000 square feet of wetted concrete, indicating that very few wood preserving plants have four gallons per day of drippage in any event. The commenter went on to say that if concrete leaked that badly, most of the regulated community would believe that the primary liner had failed. As discussed in section III.B.6 of this preamble, the Agency stands by this calculation and its assumptions, which represent a worst case scenario. In addition to the discussion of the permeability standard in the NPRM (56 FR 63851), supporting documentation for the numerical standard can be found in the docket for this rulemaking. The reader is referred to these sources for background information. Today, the Agency is finalizing the performance standard as proposed, requiring that drip pad coatings, sealers or covers have a hydraulic conductivity of less than or equal to 1×10^{-7} cm/s.

One commenter suggested that EPA adopt ASTM Method E–96 Procedure BW for determining hydraulic conductivity. As discussed above, EPA has recommended ASTM Method E–96 Procedure E as an accepted method for measuring the rate of infiltration of water vapor into a drip pad surface. The Agency continues to recommend this method but does not preclude the use of other acceptable methods, such as the one referred to by the commenter. More information concerning water vapor transmission testing can be found in the docket of the December 5, 1991 NPRM (56 FR 63848).

I. Other Issues

EPA requested comment on several other issues that are not specifically addressed above. These are: (1) The addition of a requirement that new drip pads have leak collection systems, (2) a requirement that drip pad surface protection materials be chemically compatible with the preservatives being used, and (3) the revision of the schedule for upgrading existing drip pads to allow 15 years from publication of today's rule for owners/operators to meet the standard for new drip pads. EPA is finalizing the first two issues, but EPA is not finalizing the proposal to allow 15 years for owners/operators of existing drip pads to meet the new drip pad standards. As discussed elsewhere in this preamble, the Agency has elected to allow facilities to comply with the standards for new drip pads by choosing between liner and leak detection and surface protection.

With respect to the issue of the 15 year upgrade period, one commenter interpreted the NPRM to require owners/operators to demonstrate that no releases have occurred before the Regional Administrator will grant an extension of the 15 year deadline. EPA clarifies here that the regulations in subpart W do not require an owner/operator to make such a showing. Paragraph (b)(2) of §§ 264.571 and 265.441 states that the RA will grant a petition for extension of the 15 year period based on a finding that the drip pad meets all the requirements of §§ 264.573 and 265.443, other than those for liners and leak detection and collection systems, and that the pad will continue to be protective of human health and the environment.

One commenter asserted that plants using more than one type of preservative should be able to label their wastes with one waste code most appropriate for the nature of the waste, rather than ascribing two or three waste codes to the same waste. The Agency disagrees. It is not uncommon for wastes generated at one facility to carry multiple RCRA waste codes. Some overlap does occur among different hazardous waste listing descriptions. However, it is important to note that the listing of each hazardous waste under RCRA is based on a unique set of hazardous constituents contained in the waste (see part 261, appendix VII). For example, F032 is listed, in part, due to the presence of dioxins in the waste, whereas F034 is listed because it contains naphthalene and other hydrocarbons, but no dioxin. It is important that hazardous waste generators classify their wastes correctly when shipping them for subsequent management so that the owner/operator of the treatment, storage, and disposal facility (TSDF) has full knowledge of the composition of the waste. In this way, the TSDF can make an informed decision concerning proper treatment or disposal of the waste and ensure that protection of human health and the environment is not compromised.

V. State Authority

A. Applicability of Final Rule in Authorized States

Under section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3007, 3008, 3013, and 7003 of RCRA, although authorized States have primary enforcement responsibility.

Before the Hazardous and Solid Waste Amendments of 1984 (HSWA) amended RCRA, a State with final authorization administered its hazardous waste program entirely in lieu of the Federal program in that State. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities located in the State with permitting authorization. When new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

By contrast, under section 3006(g) of RCRA, 42 U.S.C. 6926(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to implement those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as State law to retain final authorization, the Federal HSWA requirements apply in authorized States in the interim.

Pursuant to section 3001(e) of RCRA, a provision added by HSWA, EPA added F032 to the list of hazardous wastes from nonspecific sources (40 CFR 261.31) in the December 6, 1990 rule. Thus, the changes finalized in today's rule in connection with F032, including modifications to the drip pad standards, will take effect in all States (authorized and unauthorized) on the effective date.

The elements of today's final rule as they apply to F034 and F035 wastes are not immediately effective in authorized States since the requirements are not imposed pursuant to HSWA. These regulations will apply in authorized States when F034 and F035 become hazardous wastes in that State, and when the State is authorized for the drip pad standards. However, should F034 or F035 wastes exhibit the Toxicity Characteristic, which was promulgated under HSWA authority and is effective in authorized States, such wastes managed on drip pads must meet the modified Subpart W standards. Today's amendments include a technical correction to footnote 2 of Table 1 in 40 CFR 271.1(j). To clarify this point, Table 1 identifies the Federal program requirements that are promulgated pursuant to HSWA, and that take effect in all States, regardless of their authorization status.

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B. Effect on State Authorizations

1. HSWA Provisions

Because portions of the final rule are promulgated pursuant to HSWA, a State submitting a program modification is able to apply to receive either interim or final authorization under section 3006(g)(2) or 3006(b), respectively, on the basis of requirements that are substantially equivalent or equivalent to EPA's requirements. The procedures and schedule for State program modifications under section 3006(b) are described in 40 CFR 271.21. It should be noted that all HSWA interim authorizations are currently scheduled to expire on January 1, 1993 (see 40 CFR 271.24(c)).

2. Non-HSWA Provisions

As described above, other portions of today's notice will not be effective in authorized States since the requirements are not being imposed pursuant to HSWA. In authorized States, these requirements will not be applicable until the States revise their programs to adopt equivalent requirements under State law.

3. Modification Deadlines

Section 271.21(e)(2) of EPA's state authorization regulations (40 CFR part 271) requires that States with final authorization must modify their programs to reflect Federal program changes and submit the modifications to EPA for approval. The deadline by which the States must modify their programs to adopt this regulation will be determined by the date of promulgation of the final rule in accordance with section 271.21(e)(2). Once EPA approves the modification, the State requirements become Subtitle C RCRA requirements.

States with authorized RCRA programs already may have regulations similar to those in today's final rule. These State regulations have not been assessed against the Federal regulations being promulgated today to determine whether they meet the tests for authorization. Thus, a State would not be authorized to implement these regulations as RCRA requirements until State program modifications are submitted to EPA and approved. Of course, States with existing regulations may continue to administer and enforce their regulations as a matter of State law.

States that submit their official application for final authorization less than 12 months after the effective date of these standards are not required to include standards equivalent to these standards in their application. However, States must modify their programs by the deadlines set forth in 40 CFR 271.21(e). States that submit official applications for final authorization 12 months or more after the effective date of these standards must include standards equivalent to these standards in their applications. 40 CFR 271.3 sets forth the requirements that States must meet when submitting final authorization applications.

It should be noted that authorized States are required to modify their programs only when EPA promulgates Federal standards that are more stringent or broader in scope than existing Federal standards. Section 3009 of RCRA allows States to impose standards more stringent than those in the Federal program. For those Federal program changes that are less stringent or reduce the scope of the Federal program, States are not required to modify their programs. (See 40 CFR 271.1(i).) For example, the modification to the F032 listing is less stringent than the Federal program because it exempts wastes generated by past users of chlorophenolic formulations from the F032 listing under certain conditions. As a result, authorized States are not required to modify their programs to pick up this provision. On the other hand, the requirement that owners/operators develop and implement a contingency plan for response to incidental drippage in storage yards increases the stringency of the Federal program. Consequently, this provision must be adopted by authorized States.

VI. CERCLA Designation and Reportable Quantities

All hazardous wastes listed pursuant to 40 CFR 261.31 through 261.33, as well as any solid waste that exhibits one or more of the characteristics of a RCRA hazardous waste (as defined at 40 CFR 261.21 through 261.24), are hazardous substances as defined at section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended. The CERCLA hazardous substances are listed in Table 302.4 at 40 CFR 302.4 along with their reportable quantities (RQs). CERCLA Section 103(a) requires that persons in charge of vessels or facilities from which a hazardous substance has been released in a quantity that is equal to or greater than its RQ shall immediately notify the National Response Center of the releases at 1-800-424-8802 or (202) 426-2675. In addition, Section 304 of the Superfund Amendments and Reauthorization Act of 1986 (SARA) requires the owner or operator of a facility to report the release of a CERCLA hazardous substance or an extremely hazardous substance of the appropriate State Emergency Response Commission (SERC) and to the Local Emergency Planning Committee (LEPC) when the amount released equals or exceeds the RQ for the substance or one pound where no RQ has been set. It is important to note that the RQ is measured by the volume of the hazardous substance released into the environment, not the volume of any resulting contaminated media.

The release of a hazardous waste to the environment must be reported when the amount released equals or exceeds the RQ for the waste, unless the concentrations of the constituents of the waste are known (48 FR 23566, May 25, 1983). If the concentrations of the constituents of the waste are known, then the Clean Water Act mixture rule may be applied. According to this rule, developed in connection with the Clean Water Act section 311 regulations and also used in notification under CERCLA and SARA (50 FR 13463; April 4, 1985), the release of mixtures and solutions containing hazardous wastes would need to be reported to the NRC, and to the appropriate LEPC and SERC, when the RQ of any of its component hazardous substances is equalled or exceeded. This mixture rule provides that "[d]ischarges of mixtures and solutions are subject to these regulations only where a component hazardous substance of the mixture or solution is discharged in a quantity equal to or greater than its RQ (44 FR 50767; August 29, 1979). RQs of different hazardous substances are not additive under the Clean Water Act mixture rule, such that spilling a mixture containing half an RQ of one hazardous substance and half an RQ of another hazardous substance does not require a report.

Under section 102(b) of CERCLA, all hazardous waste streams newly designated under RCRA will have a statutorily imposed RQ of one pound unless and until adjusted by regulation under CERCLA. In order to coordinate the RCRA and CERCLA rulemakings with respect to the amended waste stream listings, the Agency today is amending the descriptions of waste streams F032, F034, and F035 at 40 CFR 302.4, the codified list of CERCLA hazardous substances. In the December 1991 NPRM, EPA proposed an RQ of one pound for F032, F034 and F035. Because the basis for listing these three wastes has not changed from the original final rule in December 1990, the final RQs remain at one pound, as originally promulgated.

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VII. Compliance Deadlines

Section 3010(b) of RCRA (42 U.S.C. 6930(b)) specifies that a regulation within subtitle C will take effect on the date six months after the date of promulgation. At the time a regulation is promulgated, the Administrator may provide for a shorter period prior to an effective date, or an immediate effective date for "a regulation with which the Administrator finds the regulated community does not need six months to come into compliance."

All elements of this final rule, with the exception of the four listed below, become effective on December 24, 1992, since each of these modifications has the effect of minimizing or relieving existing regulatory requirements. (See also section 553(d)(1) of the Administrative Procedures Act, 5 U.S.C. 553.)

Other Effective Dates

[1]. With respect to meeting the drip pad permeability requirements of this final rule (264.573(a)(4)(i), 265.443(a)(4)(i)), the Agency is establishing a new effective date of June 24, 1993, by which time owners and operators of drip pads must comply with the standard. The Agency is establishing this new date to provide facilities adequate time to comply with this new permeability requirement. The Agency recognizes that the upcoming cold weather and rainy seasons in parts of the country may hinder the proper curing of coatings or sealers and that this compliance period should address any such concerns.

(2). With respect to the requirement that new drip pads for which owners/operators have chosen liners and leak detection also have a leak collection system (264.573(b)(3), 265.443(b)(3)), the Agency is establishing an effective date of June 24, 1993.

(3). With respect to the provisional elimination of the F032 waste code (Today's revision to the listing of hazardous waste No. F032 in § 261.31 with respect to the potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes), the Agency is establishing an effective date of June 24, 1993.

(4). With respect to the requirements for contingency plans for incidental drippage in storage yards (264.570(c)(1), 265.440(c)(1)), the Agency is establishing an effective date of June 24, 1993.

VIII. Regulatory Requirements

A. Executive Order 12291

Under Executive Order 12291, a Federal agency must determine whether a regulation is "major" and thus subject to the requirement to prepare a Regulatory Impact Analysis. Today's final rule is not major because it will not result in an effect on the economy of $100 million or more, will not result in significantly increased costs or prices (indeed, it will likely result in decreased costs), will not have a significant adverse effects on competition, employment, investment, productivity, and innovation, and will not significantly disrupt domestic or export markets. Therefore, the Agency has not prepared a Regulatory Impact Analysis under the Executive Order for these modifications. This regulation was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291.

Although the Agency is not required to prepare a Regulatory Impact Analysis for this rule, for the benefit of the regulated community, the economic impacts of modifications presented in this rule are discussed below. Where the Agency has insufficient data to quantify the impact, economic effects are qualitatively discussed.

The exclusion from the listing descriptions for wastewaters that have not come into contact with process contaminants will result in a decrease in costs to the extent that segregation of wastewater results in a decreased hazardous waste generation rate. For example, collection of rainwater in a vessel rather than on a drip pad could result in decreased hazardous waste generation. Because generated hazardous waste is taxed in some locations, there may be additional cost savings in the form of a decrease in tax liability. Increases in cost may be incurred in the form of expenditures for collection equipment that may be required to segregate such wastewaters. The Agency has insufficient information to quantify such cost savings or additional costs attributable to the wastewater exclusion.

The removal of the applicability of the F032 listing to past users of chlorophenolic formulations who currently generate F034 or F035 wastes will have a negligible impact on costs. The regulatory requirements associated with a waste that is listed as F032 are not substantially different from those associated with wastes listed as F034 or F035 wastes.

The requirement to clean up incidental and infrequent drippage in storage yards will have cost effects that are highly site, weather, and situation dependent. There will also be costs associated with documenting the cleanup of storage yard drippage and the collection of leachate from new drip pads with liners. Costs associated with this requirement are also dependent on the efforts undertaken by individual plants to eliminate or minimize such drippage to incidental amounts. These efforts would include the use of vacuum cycles and holding treated wood on drip pads for an appropriate amount of time.

The removal of the requirement that new drip pads have an impermeable coating, sealer, or cover will decrease costs by the amount attributable to the application of coatings, sealers or covers. The installation cost of low cost sealers and coatings ranges between $2 to $5 per square foot of drip pad, the savings to a plant with a 10,000 square foot drip pad would range from $20,000 to $50,000.

The change in the drip pad cleaning requirements from a weekly basis to as needed to conduct weekly drip pad inspections will also reduce costs. Cost reductions will mostly benefit users of inorganic preservatives that are dissolved in water. Such aqueous solutions will tend not to obscure drip pad surfaces and will result in a greatly decreased frequency of cleaning. Facilities using oil-based preservatives, particularly creosote, will not benefit to the same degree because such formulations tend to obscure the drip pad surface. The cost savings may result primarily from reduced taxes on hazardous waste generation. The Agency has insufficient data to quantify these cost effects.

The change in drip pad coating, sealer, and cover permeability requirements (from "impermeable" to $\leq 1\times10^{-7}$ centimeters per second) should have no cost effects. The regulations promulgated today give an actual value for hydraulic conductivity and, therefore, provide the owner/operator with useful information in making purchasing decisions regarding drip pad coatings, sealers, or covers.

B. Regulatory Flexibility Analysis

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601–612, whenever an agency is required to publish a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a Regulatory Flexibility Analysis (RFA) that describes the impact of the rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). However, if the head of the agency certifies that the rule will not have a significant impact on a substantial number of small entities, no RFA is required.

The Agency examined the potential effects on small entities for the December 6, 1990 final rule. In that rule,

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EPA concluded that the rule did not have a significant effect on a substantial number of small entities. Therefore, EPA did not prepare a formal Regulatory Flexibility Analysis (RFA) in support of the rule. Details on small business impacts are available in the Regulatory Impact Analysis for the rule. Today's final rule reduces the potential effects identified for the December 6, 1990 rule, particularly by removing the applicability of the F032 listing to past users of chlorophenolic formulations who generate F034 or F035 wastes. As a result, a formal RFA was not prepared in support of today's rule.

IX. Paperwork Reduction Act

The information collection requirements in this rule have been approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* and have been assigned control number 2050–0115.

Public reporting burden for this collection of information is estimated to average about 338 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM–223Y, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked "Attention: Jonathan Gledhill."

List of Subjects

40 CFR Part 261

Hazardous materials, Waste treatment and disposal, Recycling.

40 CFR Part 264

Hazardous materials, Packaging and containers, Reporting requirements, Security measures, Surety bonds, Waste treatment and disposal.

40 CFR Part 265

Air pollution control, Hazardous materials, Packaging and containers, Reporting requirements, Security measures, Surety bonds, Waste treatment and disposal, Water supply.

40 CFR Part 271

Administrative practice and procedures, Air pollution control, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

40 CFR Part 302

Air pollution control, Chemicals, Hazardous materials transportation, Hazardous substances, Intergovernmental relations, Natural resources, Nuclear materials, Pesticides and pests, Radioactive materials, Reporting and recordkeeping requirements, Superfund, Waste treatment and disposal, Water pollution control.

Dated: October 30, 1992.

William K. Reilly,

Administrator.

For the reasons set out in the preamble, title 40 of the Code of Federal Regulations is amended as follows:

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, 6934, and 6938.

2. In § 261.31 the table is amended by revising the F032, F034, and F035 listings.

§ 261.31 Hazardous wastes from non-specific sources.

* * * * *

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with § 261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	(T)

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

3. The authority citation for part 264 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, and 6925.

4. Section 264.570 is amended by revising paragraph (a) and adding paragraph (c) to read as follows:

§ 264.570 Applicability.

(a) The requirements of this subpart apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water run-off to an associated collection system. Existing drip pads are those constructed before December 6, 1990 and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads. The requirement at § 264.573(b)(3) to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992

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except for those constructed after December 24, 1992 for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 24, 1992.

* * * * *

(c) The requirements of this subpart are not applicable to the management of infrequent and incidental drippage in storage yards provided that:

(1) The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage. At a minimum, the contingency plan must describe how the owner or operator will do the following:

(i) Clean up the drippage;

(ii) Document the cleanup of the drippage;

(iii) Retain documents regarding cleanup for three years; and

(iv) Manage the contaminated media in a manner consistent with Federal regulations.

5. Section 264.571 is amended by revising the last sentence of paragraph (a), and revising paragraph (b) to read as follows:

§ 264.571 Assessment of existing drip pad integrity.

(a) * * * The evaluation must document the extent to which the drip pad meets each of the design and operating standards of § 264.573 of this subpart, except the standards for liners and leak detection systems, specified in § 264.573(b) of this subpart.

(b) The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of § 264.573(b) of this subpart, and submit the plan to the Regional Administrator no later than 2 years before the date that all repairs, upgrades, and modifications are complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of § 264.573 of this subpart. The plan must be reviewed and certified by an independent qualified registered professional engineer.

* * * * *

6. Section 264.572 is revised to read as follows:

§ 264.572 Design and installation of new drip pads.

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with one of the following:

(a) all of the requirements of §§ 264.573 (except 264.573(a)(4)), 264.574 and 264.575 of this subpart, or

(b) all of the requirements of §§ 264.573 (except § 264.573(b)), 264.574 and 264.575 of this subpart.

7. Section 264.573 is amended by revising paragraphs (a)(4) and (b) introductory text and paragraph (i) and adding paragraph (b)(3) to read as follows:

§ 264.573 Design and operating requirements.

(a) * * *

(4)(i) Have a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with § 264.572(a) instead of § 264.572(b).

(ii) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this section, except for paragraph (b) of this Section.

* * * * *

(b) If an owner/operator elects to comply with § 264.572(b) instead of § 264.572(a), the drip pad must have:

* * * * *

(3) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.

* * * * *

(i) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log. The owner/operator must determine if the residues are hazardous as per 40 CFR 262.11 and, if so, must manage them under parts 261–268, 270, and section 3010 of RCRA.

* * * * *

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

8. The authority citation for part 265 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a) 6924, 6925, and 6935.

9. Section 265.440 is amended by revising paragraph (a) and adding paragraph (c) to read as follows:

§ 265.440 Applicability.

(a) The requirements of this subpart apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water run-off to an associated collection system. Existing drip pads are those constructed before December 6, 1990 and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads. The requirement at § 265.443(b)(3) to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992 except for those constructed after December 24, 1992 for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 24, 1992.

* * * * *

(c) The requirements of this subpart are not applicable to the management of infrequent and incidental drippage in storage yards provided that:

(1) The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such

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infrequent and incidental drippage. At a minimum, the contingency plan must describe how the facility will do the following:

(i) Clean up the drippage;

(ii) Document the cleanup of the drippage;

(iii) Retain documents regarding cleanup for three years; and

(iv) Manage the contaminated media in a manner consistent with Federal regulations.

10. Section 265.441 is amended by revising the last sentence of paragraph (a), and revising paragraph (b) to read as follows:

§ 265.441 Assessment of existing drip pad integrity.

(a) * * * The evaluation must document the extent to which the drip pad meets each of the design and operating standards of § 265.443 of this subpart, except the standards for liners and leak detection systems, specified in § 265.443(b) of this subpart.

(b) The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of § 265.443(b) of this subpart, and submit the plan to the Regional Administrator no later than 2 years before the date that all repairs, upgrades, and modifications are complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of § 265.443 of this subpart. The plan must be reviewed and certified by an independent qualified registered professional engineer.

* * * * *

11. Section 265.442 is revised to read as follows:

§ 265.442 Design and installation of new drip pads.

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with one of the following:

(a) All of the applicable requirements of §§ 265.443 (except § 265.443(a)(4)), 265.444 and 265.445 of this subpart, or

(b) All of the applicable requirements of §§ 265.443 (except § 265.443(b)), 265.444 and 265.445 of this subpart.

12. Section 265.443 is amended by revising paragraphs (a)(4) and (b) introductory text, and paragraph (i) and adding paragraph (b)(3) to read as follows:

§ 265.443 Design and operating requirements.

(a) * * *

(4)(i) Have a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with § 265.442(a) instead of § 265.442(b).

(ii) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this section, except for subsection (b).

* * * * *

(b) If an owner/operator elects to comply with § 265.442(b) instead of § 265.442(a), the drip pad must have:

* * * * *

(3) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.

* * * * *

(i) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log.

* * * * *

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

13. The authority citation for part 271 is revised to read as follows:

Authority: 42 U.S.C. 9602; 33 U.S.C. 1321 and 1361.

14. In Table 1 of 271.1(j), footnote 2 is revised to read as follows:

§ 271.1 Purpose and scope.

* * * * *

(j) * * *

* * * * *

[2] These regulations, including test methods for benzo(k)fluoranthene and technical standards for drip pads, implement HSWA only to the extent that they apply to the listing of Hazardous Waste No. F032, and wastes that are hazardous because they exhibit the Toxicity Characteristic. These regulations, including test methods for benzo(k)fluoranthene and technical standards for drip pads, do not implement HSWA to the extent that they apply to the listings of Hazardous Waste Nos. F034 and F035.

* * * * *

PART 302—DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION

15. The authority citation for part 302 continues to read as follows:

Authority: 42 U.S.C. 9602, 9603, and 9604; 33 U.S.C. 1321 and 1361.

16. In 302.4 the table is amended by revising the listings for waste streams F032, F034, and F035. The appropriate footnotes to Table 302.4 are republished without change.

§ 302.4 Designation of hazardous substances.

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TABLE 302.4—LIST OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

[Note: All Comments/Notes Are Located at the End of This Table]

Hazardous substance	CASRN	Regulatory synonyms	Statutory			Final RQ	
			RQ	Code †	RCRA waste No.	Category	Pounds (Kg)
• • •	•	•		•		•	
F032 ..... Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with §261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	.....	.....	1*	4	F032	X	1(0.454)
• • •	•	•		•		•	
F034 ..... Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use cresote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	.....	.....	1*	4	F034	X	1(0.454)
F035 ..... Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	.....	.....	1*	4	F035	X	1(0.454)
• • •	•	•		•		•	

† Indicates the statutory source as defined by 1, 2, 3, 4, or 5 below.

1* Indicates that the 1-pound RQ is a CERCLA statutory RQ.

4 Indicates that the statutory source for designation of this hazardous substance under CERCLA is RCRA Section 3001.

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