Interim status facilities are subject to the testing requirement for restricted wastes. Interim status waste analysis plans are developed by the facility and maintained on-site, in accordance with self-implementing procedures of § 265.13. Therefore, interim status facility owners or operators should ensure that their plan conforms with today's new requirement. For example, if the facility's plan specifies total reliance on generator or treater-provided information, then the plan will likely need to change to require appropriate testing (See discussion below regarding general Agency waste testing considerations). Also, interim status facilities should update their pending permit applications promptly to ensure that the applications reflect the most current information and today's revised regulatory requirements.

If a permitted facility wants to amend its WAP to better address restricted waste testing requirements, then it would follow the permit modification procedures in § 270.42. Under those modification procedures, a change to indicate a different testing frequency would most likely be a Class 2 modification (see appendix I to § 270.42, item B(1)).

EPA believes that there will be sufficient time to incorporate appropriate waste analysis requirements into the development of permits for the approximately 1000 interim status treatment and storage facilities expected to receive RCRA permits in the next several years. WAPs for permitted storage and treatment facilities (including incinerators) will be examined no later than at permit reissuance. Reevaluation of land disposal facility permits will occur no later than the five year permit review required by § 270.50(d), so WAP changes can be accomplished at that time. It should also be noted that for permitted facilities, EPA may address selected WAPs earlier than the above timeframes by using its general authority to reopen permits when new standards or regulations have been promulgated (§ 270.41(a)(3)).

For both permitted and interim status facilities, the Agency retains its authority (particularly where a revised WAP has not been Agency-approved) to determine that, based on an inspection or other information, the testing frequencies and/or protocols are inadequate at a particular facility. In such cases, EPA (or an authorized State) may take a number of actions, including, but not limited to, terminating or modifiying a facility's permit or pursuing an enforcement action.

In order to aid permit writers and the regulated community in determining the appropriate testing frequencies at both stages in time, the Agency expects to issue guidance soon which will further address these issues.

K. Testing of Wastes Treated in 90-Day Tanks or Containers

As noted in the November 22, 1989 proposal, treatment of prohibited wastes conducted in so-called 90-day tanks (or containers) regulated under § 262.34 is not presently subject to a waste analysis plan requirement. 54 FR 48497. Thus, there is no regulatory vehicle for determining testing frequency in such circumstances. In contrast, under § 268.7(b), treatment facilities treating prohibited hazardous wastes must test the treatment residues that they generate at a frequency determined by their waste analysis plan in order to ascertain compliance with the applicable treatment standards. All treatment facilities operating pursuant to interim status or a full permit must have a waste analysis plan.

Therefore, in order to close this regulatory gap, EPA proposed that generators treating prohibited wastes in § 262.34 tanks and containers must prepare a plan justifying the frequency of testing they choose to adopt (54 FR 48497). EPA disagrees with several commenters who contended that sufficient regulatory mechanisms are already in place for these units. Most importantly, there is no regulation at all addressing testing frequency. Since a substantial volume of hazardous waste is treated in these units, the issue of testing frequency is viewed by the Agency as important for ensuring the integrity of the section 3004(m) treatment standards. Furthermore, today's imposition of a waste analysis plan requirement—addressing, among other issues, testing frequency—on persons treating in 90-day tanks is consistent with the Agency's determination in the Solvents and Dioxins final rule that generators who also treat must assume the same responsibilities as off-site treaters. See 51 FR 40597). Put another way, EPA believes that persons treating prohibited wastes should ordinarily have the same recordkeeping and documentation responsibilities whether the treatment occurs off-site or in 90-day tanks.

Therefore, in today's final rule, the Agency is promulgating the proposed action with several modifications in § 268.7(a)(4). In addition to the modifications (and in accordance with majority of comments), the Agency is clarifying that only generators treating wastes to comply with the applicable BDAT treatment standards (as opposed to wastes treated partially but receiving further off-site treatment before meeting the treatment standard) are subject to the new requirement to prepare a waste analysis plan. Specifically, generators treating prohibited wastes in § 262.34 tanks and containers to meet the applicable BDAT treatment standard must prepare a plan detailing the frequency of testing that is to be conducted. The plan is to be justified on detailed chemical and physical analysis of a representative sample of the prohibited waste(s) being treated, and must contain all information necessary to treat the waste(s) in accordance with requirements of part 268 (see §§ 264.13 and 265.13, from which these substantive requirements are drawn), including the selected testing frequency. Examples of factors EPA would expect to be included in the plan are: discussion of the number of prohibited wastes treated, their variability, and the variability of the treatment process. See section III.J of today's preamble for more detailed information on factors to include in the plan.

EPA does not believe however, that it needs to require waste analysis plans from 90-day generators who treat partially, but do not treat to achieve the treatment standard. Such a requirement would duplicate waste analysis plans of the ultimate treatment facility. The requirement that EPA is adopting today is meant to close an outright regulatory gap which exists only when the 90-day generator is the sole treater.

The plan will be self-implementing in the sense that there is no requirement of prior approval from any regulatory entity. There is, however, a requirement that the plan be retained as a facility record, where it serves as the means of justifying to enforcement officials why the frequency of testing selected by the facility is reasonable. Furthermore, as suggested by several commenters, this plan should be filed with the EPA Regional office or State within 30 days prior to the activity by some mechanism that can verify delivery (*e.g.*, return receipt requested, Federal Express, or messenger). This provision will allow the Agency or State an opportunity to review the testing plan established. EPA notes, however, that it reserves the right at any subsequent time to disapprove of the testing plan. This review mechanism should ease one commenter's concerns about these plans being self-implementing *and* not subject to regulatory review.

L. Clarification of "P" and "U" Solid Wastes

1. Residues Remaining in Containers or Inner Liners

In the November 22, 1989 proposal, EPA proposed several amendments to clarify the existing language of 40 CFR 261.33. The first amendment involved 40 CFR 261.33(c), a provision that lists residues remaining in containers or in an inner liner that have held commercial chemical products listed in 40 CFR 261.33(e). EPA believes that this language was partially in error as it does not include residues remaining in containers or in an inner liner contaminated with the 40 CFR 261.33(f) materials. All of the other provisions in 40 CFR 261.33 refer to both 40 CFR 261.33 (e) and (f) wastes, and there is no reason that 40 CFR 261.33(c) should not as well. The omission results in fact from an oversight, and is not based on any choice by the Agency.

Many commenters misunderstood the Agency's intent by this clarification. It was not our intent to subject "U" wastes (*i.e.*, non-acute hazardous wastes) to the triple-rinsing requirements of 40 CFR 261.7(b)(3) as this section applies solely to acute hazardous wastes. In 40 CFR 261.33(c), there is not a corresponding reference, however, that residues remaining in containers or in an inner liner contaminated with "U" wastes are subject to regulation, unless empty as defined in 40 CFR 261.7(b)(1). This omission could be read as allowing the disposal of full containers of "U" listed wastes. While this would clearly be an incorrect reading, today's final action corrects this omission.

2. Spill Residues

In addition, EPA proposed a clarifying amendment to 40 CFR 261.33(d) to be codified in 40 CFR 261.2 (b) and (c) to state that residues of spills of commercial chemical products listed in 40 CFR 261.33 (e) and (f) will be considered solid wastes if they are not recycled within 90 days of the spill. 54 FR 48493–94. The Agency's rationale was that although such spilled materials may be considered to be "abandoned" under the existing regulatory language, it might be more appropriate to establish a specific time period after which such spills became solid wastes. The Agency noted further that it ordinarily views spilled commercial chemicals as solid wastes because the nature of a spill constitutes disposal, and because of the difficulty of recycling spill residues in such matrices as soil or groundwater. *Id.* In these instances, not only are spill residues of commercial chemical products unlike other 40 CFR 261.33 material (e.g., off-specification products), but the Agency believes that marginal claims of recyclability could be asserted to avoid proper cleanup of spills. *Id.*

While comments on this issue were mixed, a number of commenters made the point that this issue was inappropriate for determination in the Third Third rulemaking because it is not directly related to the Land Disposal Restrictions program. Given that these comments have merit and considering the number of issues that must be decided under the pressing timetable imposed by the statute, the Agency will not go forward with the quantified standard that it proposed.

Furthermore, the Agency believes that this issue can be addressed by interpretation of existing regulations. Under 40 CFR 261.33, mere assertion of intent to recycle a spill residue of a commercial chemical product does not automatically immunize the spill area from RCRA subtitle C jurisdiction. The generator has the burden of proving that the spilled material is not a solid waste, and a generalized assertion does not satisfy the burden. See 40 CFR 261.2(f). Objective considerations that could be pointed to to satisfy this burden include whether the generator has begun to recycle the spill residue, the length of time the spill residue has existed, the value of the spilled material, whether it is technically feasible or technically practical to recycle the spill residue, and whether there is any past history of the company recycling this type of residue. EPA repeats that assertion of intent to recycle does not satisfy the generator's burden of proof. Rather, there must be objective indicators of intent, and the indicators must be strong given that a spill of hazardous material to soil or groundwater is normally a simple act of disposal.

3. *De Minimis* Exception to the Mixture Rule

In the context of the Third Third proposal, several commenters requested clarification of the scope of the mixture rule exemption to the definition of hazardous waste under 40 CFR 261.3(a)(2)(iv). This provision exempts mixtures which contain small amounts of listed spent solvents ("F-listed solvents") or other *de minimis* losses of commercial chemical wastes ("P and U wastes") from manufacturing operations when these listed wastes are mixed with other wastewater "the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act (including wastewater at facilities that have eliminated the discharge of wastewater)." [20] Commenters raised the issue of whether disposal of such mixtures via Class I UIC wells allows the facility to claim this exemption. In particular, commenters expressed concern that recent EPA statements regarding the scope of this exemption imply that large volumes of wastewater will require treatment of the P and U wastes within the wastewater stream before injection of a Class I well, and that capacity for treatment of such wastestreams is not currently available.

Before responding to these comments, some background information is in order. RCRA subtitle C generally regulates as hazardous all mixtures of listed hazardous wastes and other solid wastes. One exception from this rule is for mixtures that "consist[] of wastewater the discharge of which is subject to regulation under either section 402 or 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) and: [contain specific amounts of listed solvents or *de minimis* losses of discarded chemical products]." 40 CFR 261.3(a)(2)(iv). This exception to the mixture rule was established by regulation on November 17, 1981. *See* 46 FR 56582. A specific level for spent solvents is established by the regulation (either 1 ppm or 25 ppm). The regulation sets a worst-case maximum concentration of solvent within the wastewater stream; the actual concentration will almost certainly be less. Conversely, there is no set regulatory concentration for *de minimis* loss levels of P and U wastes that are listed in 40 CFR 261.33(e) and (f).

In the 1981 interim final rule, EPA did not exempt all *de minimis* mixtures generated at all facilities. Rather, EPA limited the exemption as follows: "[The exemption] applies only to wastewater mixtures managed in wastewater treatment systems whose discharge is subject to regulation under * * * the [CWA]. This requirement will help to prevent indiscriminate discharge of wastes into wastewater treatment systems because to do so would jeopardize the generator's ability to comply with its [CWA] discharge requirements. * * * [T]he Agency

[20] The exemption also covers mixtures of small amounts of listed hazardous wastes in wastewaters resulting from laboratory operations. 40 CFR 261.3(a)(2)(iv)(E). Also, there is similar, but not identical, language contained in a final rule that provided interpretations of certain terms and provisions of standards for hazardous waste tank systems (53 FR 34079, September 2, 1988). Today's notice is not changing the applicability of the September 2, 1988 final rule with respect to hazardous waste tank systems.

means to include all facilities which generate wastewater which is discharged into surface water or into a POTW(.) The Agency also means to include those facilities (known as 'zero dischargers') that have eliminated the discharge of wastewater as a result of, or by exceeding (*i.e.*, doing better than), NPDES or pretreatment program requirements.' 46 FR 56584 (Nov. 17, 1981).

Furthermore, the applicability of the mixture rule exemption for P and U wastes was limited to the introduction of these wastes into wastewaters "in the normal handling of these materials, ther as raw products used in the anufacturing process or as termediate or chemical products *used or produced by the manufacturing ocess."* [emphasis added] 46 FR 56586. Certain commenters assert that the ixture rule exemption currently applies wastewater disposed of in a UIC well. ecifically, these commenters argue st that all injection wells dispose of astewater "the discharge of which is bject to regulation [under the CWA]." cond, commenters argue that UIC ells *per se* constitute a method for cilities to "eliminate * * * the scharge of wastewater." Commenters rther suggest that wastewater disposal a UIC wells should be exempted as nsistent with the purposes for the emption expressed by EPA, *i.e.*, that ch wastewater mixed with *de minimis* vels of listed wastes are adequately gulated by another statute. These mmenters express their belief that sposal of such mixtures down UIC ells would be adequately controlled der the UIC regulations, and that jection was the environmentally sound ethod of disposal for these astewaters.

EPA does not agree completely with e commenters' analysis of the scope of e mixture rule exemption. First, jection of a fluid in a UIC well is not a ischarge" within the meaning of the WA. Injection wells can, in opropriate instances, constitute a actice which has "eliminated the scharge of wastewater," but these stances must be evaluated on a case-y-case basis. As the regulation states, e issue is whether the "discharge" is bject to section 402 or 307(b) of the WA, not whether the facility is ubject to regulation" under section 2. A UIC well, whether or not the state lopts its regulations under 402(d) ddressing such a well, is not a CWA scharge point. Thus, facilities with ells for injection of wastewater do not ll within the mixture rule exemption simply because they have an injection well on site.

UIC wells may, however, be "zero discharge" facilities, i.e., those which have eliminated their discharge. To qualify as such a facility, it must satisfy the definition of a "zero discharge" facility outlined in the November 17, 1981 regulation. To repeat the language from the 1981 preamble discussing that provision, "(t)he Agency * * * means to include those facilities (known as 'zero dischargers') that have eliminated the discharge of wastewater *as a result of, or by exceeding, NPDES or pretreatment program requirements."* 46 FR 56584 (Nov. 17, 1981) [emphasis added]. Thus, a UIC well will certainly qualify as a zero discharge facility *if* the facility injects the wastewater to comply with NPDES permit conditions or an applicable CWA effluent guideline. A well at a facility which is not "subject to (CWA) regulation" under an NPDES permit or an effluent guideline is not within the scope of the language of the mixture rule exemption. EPA notes that this interpretation is fully consistent with its 1981 preamble, and thus does not constitute a "change" in interpretation, as suggested by certain commenters.

EPA notes, that, as a practical matter, the facilities concerned about the scope of the mixture rule exemption are likely unaffected by today's clarification. Most of these facilities are, in fact, in an industry category (organic chemicals) whose facilities are "subject to regulation" under section 402 by virture of the effluent guideline for that category. *See* 40 CFR part 414 (1989). Thus, EPA does not believe that there will be a problem with treatment capacity for P and U wastes, because most wastewaters containing *de minimis* amounts of P and U wastes now being injected are not hazardous waste now being injected are not hazardous waste and will be unaffected by today's rule. Nonetheless, EPA wishes to caution such facilities that the mixture rule exemption does not constitute a license to mix collected volumes of E, P, or U wastes into a treated wastewater stream and then inject such a stream. As EPA clearly stated in 1981, the exemption is designed to cover situations where "various spills or incidental losses" of solvents or commercial chemicals are "reasonably and efficiently managed by being discharged into a plant's wastewater treatment system." 46 FR 56584. EPA clearly did not assume that facilities would attempt to avoid treatment of such wastes.

M. Storage Prohibition

In the proposed rule, EPA recognized that there are concerns with its existing interpretation of the statutory storage prohibition set out in section 3004(j) of RCRA. Section 3004(j) provides that storage of prohibited hazardous waste is itself prohibited "unless such storage is solely for the purpose of the accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal." Principal concerns are that some storage may be prohibited even where it is not being used with the intent to circumvent the land disposal prohibitions, and whether the storage prohibition should only apply if storage is used as surrogate disposal.

To fully evaluate these concerns, the Agency requested comment on an alternative interpretation of 40 CFR 268.50. Under the alternative approach, storage of prohibited wastes in tanks or containers pending the utilization of proper treatment, recovery or disposal capacity would not be prohibited. EPA provided two examples of allowable storage under this alternative approach:

(1) Where a generator is storing wastes in tanks for six weeks because of a backup at an incinerator which the generator has a contract to use; and

(2) Where a treatment facility treats a prohibited waste to a level that does not meet the treatment standard and then stores the waste before treating it again to meet the standard.

EPA recognized in the proposal that under the alternative approach, the phrase "utilization of *proper* treatment, recovery or disposal capacity" needed to be further defined. The Agency also sought further comment on how a temporal element might be added to the phrase "pending the utilization * * *" in order to define the limits of the proposed approach. Commenters were also asked to address other potential situations where they believed that an overly literal reading of 3004(j) may have consequences they believe Congress did not intend.

Many of the commenters supported the proposed broadening of the allowable bases for storing prohibited wastes. However, the commenters did not offer specific workable suggestions for defining terms such as "pending" and "proper", as EPA noted was necessary. Without objective criteria for defining the limits of allowable storage, EPA believes that the proposed reinterpretation will be very difficult to implement and enforce. For example, does it matter how far in the future—five years, two years, six months—

proper treatment might be utilized? Must there be a contract with a treatment company? What if it is contingent, or contains option provisions? Thus, the Agency is instead retaining its longstanding interpretation of the storage prohibition and is not finalizing the proposed alternative approach.

Under the existing approach, both RCRA 3004(j) and 40 CFR 268.50 provide that storage of prohibited hazardous wastes is itself prohibited "unless such storage is solely for the purpose of the accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal." Storage of prohibited wastes is only allowed in non-land based storage units (*i.e.*, tanks and containers), since land-based storage is a type of land disposal.

Two major principles underlie the storage prohibition: (1) the need to reduce the risks created by long-term storage; and (2) the goal of the Land Disposal Restrictions, and HSWA generally, to encourage the expeditious use of alternative treatment technologies. Cf. *Hazardous Waste Treatment Council* v. *EPA*, 886 F.2d. 355 (D.C. Cir. Sept. 15, 1989) ("*HWTC III*") where the court said:

> Congress believed that permitting storage of large quantities of waste as a means of forestalling treatment would involve health threats equally serious to those posed by land disposal, and therefore opted in large part for a "treat as you go" regulatory regime.

886 F.2d. at 357.

Mechanisms such as national capacity variances and case-by-case extensions are intended to address situations where there is a lack of treatment capacity.

No firm time limit is established pursuant to § 268.50. Generators and owners or operators can store as long as necessary. The legislative history makes it clear that the intent of RCRA 3004(j) and § 268.50 is to prohibit use of long-term storage to circumvent treatment requirements imposed by the Land Disposal Restrictions. 129 Cong. Rec. H8139 (daily ed. October 6, 1983). However, if prohibited wastes are stored beyond one year, the owner/operator has the burden of proving (in the event of an enforcement action) that such storage is for the allowable reason; prior to one year, EPA maintains the burden of proving that storage has occurred for the wrong reason.

Finally, EPA reemphasizes that intent is not a critical factor in determining liability. In order to successfully enforce this provision, the Agency need not demonstrate that those storing prohibited wastes have a particular state of mind. Rather, objective factors such as the type and amount of waste in storage and the time in storage still may be relied upon as the key factors in interpreting this provision. In determining whether storage is lawful, the Agency will continue to evaluate these factors in light of its "treat as you go" approach noted in *HWTC III*. EPA notes, however, that the intent of those storing prohibited wastes may be relevant in the Agency's determination regarding what type of relief, if any, to seek in a civil or criminal enforcement action.

1. Storage of Radioactive Mixed Waste

Several commenters urged the Agency to modify its existing interpretation of the section 3004(j) storage prohibition as it relates to radioactive mixed waste. Mixed waste contains both a hazardous waste component subject to RCRA hazardous waste management standards and a radioactive waste component regulated under the Atomic Energy Act (AEA). The commenters asserted that there is little or no available permitted treatment or disposal capacity for commercially generated mixed waste, and that many of these mixed wastes contain spent solvents or California list wastes that are not eligible for the national capacity variance which EPA is granting for mixed waste containing first, second, and third-third wastes. The commenters emphasized that generators have no practical option but to store their prohibited mixed waste on-site, pending the availability of treatment and disposal capacity. The commenters stated that the Agency should not interpret such storage as "surrogate disposal" that violates section 3004(j), since this interpretation would result in a requirement allowing no possibility of compliance by generators. The commenters further asserted that interpreting section 3004(j) in this manner could give rise to an inconsistency with the AEA, within the meaning of RCRA section 1006(a).

EPA is aware of the difficulties posed by the applicability of the section 3004(j) storage prohibition to mixed wastes under circumstances where there is no treatment or disposal capacity. These issues and their effects on certain low-level waste generators (e.g., hospitals, research institutions, universities), were also discussed at length in a recent report developed by the Office of Technology Assessment (OTA). (See "Partnerships Under Pressure, Managing Commercial Low-level Radioactive Waste," OTA, November 1989).

EPA acknowledges that the current shortage of treatment or disposal capacity, and the requirements and deadlines under other statutory programs, are factors which are affecting the management of mixed waste. EPA will further evaluate the legal, policy, and factual issues relevant to this matter. Since this issue is not material to the requirements which EPA must promulgate in order to meet the May 8, 1990 Third Third rule statutory deadline, EPA will resolve this matter separately from this rulemaking. The Agency expects to issue its policy on the mixed waste storage issue during the next 90 days.

N. Case-by-Case Extensions

Under RCRA Section 3004(h)(3), EPA can grant case-by-case extensions of the prohibition effective dates for up to one year beyond the applicable deadlines; extensions are renewable once for up to one additional year. On November 7, 1986, EPA published a final rule (51 FR 40572) establishing the regulatory framework to implement the land disposal restrictions program, including the procedures for submitting case-by-case petitions.

To obtain a case-by-case extension, the statute requires that the applicant make the following demonstrations:

(1) A binding contractual commitment has been made to construct or otherwise provide alternative treatment, recovery, or disposal capacity that protects human health and the environment.[21]

(2) Due to circumstances beyond his or her control, such alternative capacity cannot reasonably be made available by the applicable effective date.

(3) If a surface impoundment or landfill is used by the applicant to manage the waste during the extension period, the unit must meet the requirements of section 3004(o). EPA has interpreted these statutory provisions to also require the following (see 40 CFR 268.5(a)):

(1) A good-faith effort must be made to locate and contract with treatment, recovery, or disposal facilities nationwide to manage the waste in accordance with restrictions by the applicable effective date.

(2) The capacity being constructed or otherwise provided will be sufficient to manage the entire quantity of waste that is the subject of the petition.

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[21] Section 3004(h)(3) refers to "such alternative capacity," referring back to Section 3004(h)(2), which speaks of "alternative treatment, recovery, or disposal capacity which protects human health and the environment." For disposal capacity, EPA interprets this language to mean a no-migration unit. See Sections 3004 (d)(1), (e)(1), and (g)(5). For treatment and recovery capacity, the reference refers to capacity that satisfies the Section 3004(m) standard.

(3) A detailed schedule for obtaining required operating and constructing permits, or an outline of how and when alternative capacity will be available.

(4) Adequate capacity is available to manage the waste during the extension period, documenting in the petition the location of all sites at which the waste will be managed.

After an applicant has been granted a case-by-case extension, the applicant must notify the Administrator as soon as he or she has knowledge of any change in the demonstrations made in the petition. In addition, the applicant must submit progress reports, at specified intervals, that describe the progress being made towards obtaining adequate alternative capacity, identify any delay or possible delay in developing the capacity, and describe the mitigating actions being taken in response to the event. See 40 CFR 268.5 (f) and (g).

The Agency has received a number of inquiries on whether a proposed no-migration petition or proposed treatability variance would satisfy the first statutory requirement. That is, would a proposed no-migration variance or a proposed treatability variance constitute the "alternative treatment, recovery, or disposal capacity." If so, and if the Agency were to grant a case-by-case extension, this could provide petitioners with additional time while their no-migration petition or treatability variance is being considered for final approval.

First, it should be noted that the amount of time required to process no-migration and treatability variances (for other than injected wastes) is expected to be 12–18 months due to the complexity of the technical demonstrations that must be made, and their subsequent evaluation. On the other hand, the case-by-case petitions generally can be processed in about 6–8 months because the required demonstrations are more straightforward. This could give the petitioner about 6 months of relief. Some petitioners believe that there are a number of legitimate circumstances where the few extra months gained would make the difference between closing a facility which ultimately will be granted a valid variance request, and keeping it in operation.

In response to these inquiries, EPA is taking this opportunity to clarify that the statutory requirement to obtain a binding contractual commitment to construct or otherwise provide alternative treatment, recovery, or disposal capacity" may be satisfied by a Federal Register notice wherein the Agency *proposes* to grant either a no-migration extension or a treatability variance. The Agency believes that EPA's proposing to grant either a treatability variance petition or a no-migration petition is sufficient demonstration that the petitioner has made a good faith effort to commit to obtaining alternative protective disposal capacity; any further commitment is solely contingent on EPA's action at this point. In addition, the Agency's action in proposing to grant the variance petition serves as a partial imprimatur that the alternative capacity under consideration will prove to be protective. However, the mere filing of a variance petition provides no such guarantee (most of the no-migration petitions for surface units filed to date, for example, have proven technically deficient), and thus cannot be deemed to satisfy the statutory requirement.

Of course, should EPA then grant a case-by-case extension, that grant would be conditional: if EPA denies the no-migration petition or the treatability variance, then the basis for the case-by-case extension may no longer exist, and the variance will be terminated unless there is additional basis for the variance. In addition, when the no-migration or treatability variance is granted, the case-by-case extension automatically expires (since it is no longer needed).

Because significant time and resources would have been expended on the case-by-case petition review unnecessarily if the no-migration petition or treatability variance is ultimately denied, EPA will begin review of a case-by-case extension petition *only* after receiving a clear indication that the Agency has the intention of proposing to grant the no-migration petition or treatability variance (and will not propose to grant a case-by-case extension unless the Agency has actually proposed to grant the variance). Conversely, when the clear indication is that the no-migration petition or treatability variance will be denied, EPA will not review the case-by-case petition, and the petitioner will be notified at the same time he or she is notified of the status of the other petition.

O. Applicability of California List Prohibitions after May 8, 1990

In the November 22, 1989 proposal, EPA discussed two issues relating to California list wastes. 54 FR 48498. The first issue is the question of continued applicability of California list prohibitions to wastes which are granted a national capacity variance in today's rulemaking. The second issue is whether California list prohibitions apply to wastes that are first identified and listed after the date of the HSWA amendments. 54 FR 48498–99.

EPA discussed the relationship of California list prohibitions to scheduled wastes subject to a capacity variance (either national or case-by-case) in the preamble to the First Third rule. 53 FR 31188. The Agency established in the First Third rule that although specific prohibitions and treatment standards take precedence over California list prohibitions, during the period of a capacity variance the California list prohibitions continue to apply. EPA included this discussion in the Third Third proposal not to reopen the issue but to put persons on notice that the same reading applies to Third Third wastes, including characteristic wastes. In fact, the few commenters on the issue indicated that they agreed with and were aware of the Agency's position.

The Agency did solicit comment, however, on whether it would be permissible to reevaluate whether the California list prohibitions for acid corrosive wastes would apply during the period of a national capacity variance for Third Third acid corrosive wastes (which are identical substances). Several commenters suggested that the prohibition for California list corrosives should not apply to Third Third corrosives that are granted national capacity variances in today's rulemaking. The Agency disagrees with this assertion and believes that not applying the more generally applicable California list prohibitions as an interim prohibition is contrary to the literal statutory language and enunciations of Congressional intent in the legislative history. See S. Rep. No. 284, 98th Cong. 1st Sess. 17. Also, given the fact that these wastes have been restricted since July 8, 1987, it is illogical that the Agency would grant these wastes a capacity extension in today's rulemaking. Therefore, a corrosive waste that is injected underground is at a minimum subject to the California list prohibitions on August 8, 1990.

The other issue on which EPA solicited comment is whether newly identified or listed wastes could be covered by California list prohibitions. Most of the comments supported the Agency's tentative conclusion that the statutory language does not compel a reading that California list prohibitions apply, and further supported the view that California list prohibitions should not apply. EPA is adopting that reading in today's rule. As the Agency noted at proposal, there would be massive dislocations in the regulated community if California list prohibitions were to apply to newly identified and listed

wastes. For example, if wastes identified by the new Toxicity Characteristic were HOCs, thus triggering immediate California list prohibitions, there would be immediate prohibitions of these wastes rather than the more phased schedule specified in section 3004(g)(4). EPA does not believe this result is desirable. In addition, the Agency believes that the better reading of the statute is that the California list prohibitions were not meant to apply to wastes that are newly identified or listed. Consequently, EPA is determining today that wastes that are newly identified and listed [22] are prohibited only when the Agency takes specific action with regard to them pursuant to section 3004(g)(4).

Since the California list prohibitions are superseded by more specific treatment standards (with the *caveat* that the prohibitions continue to apply during capacity variance periods as discussed above) with the promulgation of the Third Third final rule, almost all of the California list prohibitions will be superseded by more specific prohibitions and treatment standards.[23] The California list prohibitions remain applicable for (1) liquid hazardous wastes that contain over 50 ppm PCBs; (2) HOC-containing wastes identified as hazardous by a characteristic property that does not involve HOCs, as, for example, an ignitable waste that also contains greater than 1000 ppm HOCs (but not an EP toxic waste that exhibits the characteristic because it contains one of the six chlorinated organic pesticides covered by the EP toxicity characteristic); and (3) liquid hazardous wastes that exhibit a characteristic and also contain over 134 mg/l of nickel and/or 130 mg/l of thallium.

Finally, EPA proposed that it would delete the provision specifying burning in boilers and furnaces as a specified method of treatment for California list HOCs (existing § 268.42(a)(2)) because there are virtually no situations to which the provision could apply. 54 FR 48499. There was virtually no comment on this point, and EPA is finalizing this action as proposed for the reasons stated at proposal.

[22] Newly identified means either newly subject to an existing characteristic (*e.g.*, such as those wastes removed from the Bevill exclusion) or subject to a new characteristic. Newly listed wastes may still be subject to any preexisting applicable characteristic standards or California list prohibitions stemming from the characteristic.

[23] See 52 *FR* 29993 (August 12, 1987) and 52 FR 25773 (July 8, 1987); see also 40 CFR 268.32(h) (HOC prohibition superseded by treatment standard and effective date for a particular HOC).

IV. State Authority

A. Applicability of Rules in Authorized States

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

Prior to HSWA, a State with final authorization administered its hazardous waste program in lieu of EPA administering 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 that the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obliged 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.

In contrast, under RCRA section 3006(g) (42 U.S.C. 6926(g)), new requirements and prohibitions imposed by HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to carry out these 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, HSWA applies in authorized States in the interim.

With one exception, today's final rule is promulgated pursuant to sections 3004 (d) through (k), and (m), of RCRA (42 U.S.C. 6924 (d) through (k), and (m)). Therefore, it will be added to Table 1 in 40 CFR 271.1(j), which identifies the Federal program requirements that are promulgated pursuant to HSWA and take effect in all States, regardless of their authorization status. States may apply for either interim or final authorization for the HSWA provisions in Table 1, as discussed in the following section. Table 2 in 40 CFR 271.1(j) will also be modified to indicate that this rule is a self-implementing provision of HSWA.

The exception is the clarifying amendment to § 261.33(c). This clarification is not effective in authorized States since the requirements are not imposed pursuant to HSWA. Thus, these requirements will be applicable only in those States that do not have interim or final authorization. In authorized States, the requirements will not be applicable until the State revises its program to adopt equivalent requirements under State law.

B. Effect on State Authorizations

As noted above, EPA will implement today's final rule in authorized States until their programs are modified to adopt these rules and the modification is approved by EPA. Because the rule is promulgated pursuant to HSWA, a State submitting a program modification may apply to receive either interim or final authorization under RCRA section 3006(g)(2) or 3006(b), respectively, on the basis of requirements that are substantially equivalent or equivalent to EPA's. The procedures and schedule for State program modifications for either interim or final authorization are described in 40 CFR 271.21. It should be noted that HSWA interim authorization will expire on January 1, 1993 (see 40 CFR 271.24(c)).

Section 271.21(e)(2) requires that States that have final authorization must modify their programs to reflect Federal program changes and must subsequently submit the modification to EPA for approval. The deadline by which the State must modify its program to adopt these regulations is July 1, 1991, in accordance with section 271.21(e). These deadlines can be extended in certain cases (see section 271.21(e)(3)). Once EPA approves the modification, the State requirements become subtitle C RCRA requirements.

States with authorized RCRA programs may already have requirements similar to those in today's 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 is not authorized to implement these requirements in lieu of EPA until the State program modification is approved. Of course, States with existing standards may continue to administer and enforce their standards as a matter of State law. In implementing the Federal program, EPA will work with States under agreements to minimize duplication of efforts. In many cases, EPA will be able to defer to the States in their efforts to implement their programs rather than take separate actions under Federal authority.

States that submit official applications for final authorization less than 12 months after the effective date of these regulations are not required to include

standards equivalent to these regulations in their application. However, the State must modify its program by the deadline set forth in § 271.21(e). States that submit official applications for final authorization 12 months after the effective date of these regulations must include standards equivalent to these regulations in their application. The requirements a state must meet when submitting its final authorization application are set forth in 40 CFR 271.3.

The regulations being promulgated today need not affect the State's Underground Injection Control (UIC) primacy status. A State currently authorized to administer the UIC program under the Safe Drinking Water Act (SDWA) could continue to do so without seeking authority to administer these amendments. However, a State which wished to implement Part 148 and receive authorization to grant exemptions from the land disposal restrictions would have to demonstrate that it had the requisite authority to administer sections 3004(f) and (g) of RCRA. The conditions under which such an authorization may take place are summarized below and are discussed in the July 15, 1985 final rule (50 FR 28728).

C. State Implementation

The following four aspects of the framework established in the November 7, 1986, rule (51 FR 40572) affect State implementation of today's rule and impact State actions on the regulated community:

1. Under part 268, subpart C, EPA is promulgating land disposal restrictions for all generators, treaters, storers, and disposers of certain types of hazardous waste. In order to retain authorization, States must adopt the regulations under this Subpart since State requirements can be no less stringent than Federal requirements.

2. Also under part 268, EPA is granting two-year national variances from the effective dates of the land disposal restrictions based on an analysis of available alternative treatment, recovery, or disposal capacity. Under § 268.5, case-by-case extensions of up to one year (renewable for one additional year) may be granted for specific applicants lacking adequate capacity.

The Administrator of EPA is solely responsible for granting variances to the effective dates because these determinations must be made on a national basis. In addition, it is clear that RCRA section 3004(h)(3) intends for the Administrator to grant case-by-case extensions after consulting the affected States, on the basis of national concerns which only the Administrator can evaluate. Therefore, States cannot be authorized for this aspect of the program.

3. Under § 268.44, the Agency may grant waste-specific variances from treatment standards in cases where it can be demonstrated tht the physical and/or chemical properties of the wastes differ significantly from wastes analyzed in developing the treatment standards, and the wastes cannot be treated to specified levels or treated by specified methods.

The Agency is solely responsible for granting such variances since the result of such an action may be the establishment of a new waste treatability group. All wastes meeting the criteria of these new waste treatability groups may also be subject to the treatment standard established by the variance. Granting such variances may have national impacts; therefore, this aspect of the program is not delegated to the States at this time.

4. Under § 268.6, EPA may grant petitions of specific duration to allow land disposal of certain hazardous wastes where it can be demonstrated that there will be no migration of hazardous constituents for as long as the waste remains hazardous. States which have the authority to impose restrictions may be authorized under RCRA section 3006 to grant petitions for exemptions from the restrictions. Decisions on site-specific petitions do not require the national perspective required to restrict wastes or grant extensions. EPA will be handling "no migration" petitions for surface disposal facilities at Headquarters, though the States may be authorized to grant these petitions in the future. The Agency expects to gain valuable experience and information from review of "no migration" petitions which may affect future land disposal restrictions rulemakings. In accordance with RCRA section 3004(i), EPA will publish notice of the Agency's final decision on petitions in the **Federal Register**.

V. Effect Of the Land Disposal Restrictions Program on Other Environmental Programs

A. Discharges Regulated Under the Clean Water Act

As a result of the land disposal restrictions program, some generators might switch from land disposal of restricted Third Third wastes to discharge to publicly-owned treatment works (POTWs) in order to avoid incurring the costs of alternative treatment. In shifting from land disposal to discharge to POTWs, an increase in human and environmental risks could occur. Also as a result of the land disposal restrictions, hazardous waste generators might illegally discharge their wastes to surface waters without treatment, which could cause damage to the local ecosystem and potentially pose health risks from direct exposure or bioaccumulation.

Some generators might treat their wastes prior to discharging to a POTW, but the treatment step itself could increase risks to the environment. For example, if incineration were the pretreatment step, metals and other hazardous constituents present in air scrubber waters could be discharged to surface waters. However, the amount of Third Third waste shifted to POTWs would be limited by such factors as the physical form of the waste, the degree of pretreatment required prior to discharge, and State and local regulations.

B. Discharges Regulated Under the Marine Protection, Research, and Sanctuaries Act

There could be a potential demand for some of the hazardous wastes included in today's rulemaking to be shifted from land disposal to ocean dumping and ocean-based incineration. If the cost of ocean-based disposal plus transportation were lower than the cost of land-based treatment, disposal, and transportation, this option could seem to be an attractive alternative. In addition, ocean-based disposal could seem attractive to the regulated community if land-based treatment were not available.

However, the Ocean Dumping Ban Act of 1988 has restricted ocean dumping of sewage sludge and industrial wastes to existing, authorized dumpers until December 31, 1991, after which ". . . it shall be unlawful for any person to dump (sewage sludge or industrial wastes) into ocean waters. . .". Therefore, the Ocean Dumping Ban Act has made moot any economic or other incentive to ocean dump industrial hazardous wastes, including the wastes subject to this regulation.

C. Wellhead Protection Regulated under the Safe Drinking Water Act (SDWA)

Section 1428 of the SDWA contains requirements for the development and implementation of state Wellhead Protection (WHP) Programs to protect wells and wellfields which are used, or may be used to provide drinking water to public water systems. Under section 1428, each state must adopt and submit to EPA for approval a WHP program that, at a minimum:

(1) Specifies the duties of state agencies, local governments, and public water systems

in the development and implementation of the WHP program;

(2) For each wellhead, determines the wellhead protection area (WHPA), as defined in section 1428(e) of SDWA, based on all reasonably available hydrogeologic information on ground-water flow, recharge, and discharge and other information the state deems necessary to adequately determine the WHPA;

(3) Identifies within each WHPA all potential human sources of contaminants which may have any adverse health effects;

(4) Describes provisions for technical assistance, financial assistance, implementation of control measures, and education, training, and demonstration projects to protect the water supply within WHPAs from such contaminants;

(5) Includes contingency plans for the location and provision of alternate drinking water supplies for each public water system in the event of well or wellfield contamination by such contaminants;

(6) Requires that state and local governments and public water systems consider all potential sources of human contamination within the expected wellhead area of a new water well which serves a public water system; and

(7) Requires public participation in developing the WHP program.

SDWA required all states to submit a WHP program to EPA by June 19, 1989, for EPA review and approval. EPA has received 29 state submittals for review. SDWA requires that all Federal agencies having jurisdiction over any potential source of contaminants identified by a state program under this section shall comply with all the requirements of the state program.

Any private or public entity subject to the land disposal restrictions regulations must also be in compliance with the appropriate state's wellhead protection program. The Agency reiterates that the land disposal of hazardous wastes must comply not only with the land disposal restrictions and other RCRA regulations, but with other environmental programs, such as the Wellhead Protection Program under the Safe Drinking Water Act.

D. Air Emissions Regulated Under the Clean Air Act (CAA)

There are two air emission concerns with respect to the land disposal restrictions. The first is a cross-media concern about air emissions that occur as a result of waste treatment such as incineration of metal-bearing wastes causing metal emissions to the atmosphere. Another concern is with air emissions from the land disposal of the treatment residue. Air emissions control programs are under development using both the CAA and RCRA to address these concerns as discussed below.

Specific cross-media air emission concerns have been identified for treatment technologies applicable to Third Third wastes, but EPA believes that existing Clean Air Act controls adequately address the potential problems. Retorting of mercury sulfide wastes can result in air emissions of both elemental mercury and sulfur dioxide (SO2). The Agency has promulgated a National Emission Standard for Hazardous Air Pollutants (NESHAP) for mercury emissions under section 112 of the CAA (40 CFR part 61, subpart E). There are no industry-specific national CAA control standards for SO2 emissions from retorting mercury sulfide wastes. There are, however, regulations for the prevention of significant deterioration (PSD) of air quality that would address not only these SO2 emissions but also any mercury emissions that are not regulated by the NESHAP.

The NESHAP limits mercury emissions to the atmosphere from mercury processing facilities, mercury cell chlor-alkali plants, and plants that incinerate and/or dry wastewater treatment plant sludges. In all these cases, the NESHAP limits mercury emissions across the entire processing facility to the extent necessary to protect human health. The NESHAP would not apply to a dedicated mercury sulfide waste retorting facility that is not located in an ore processing or a mercury cell chlor-alkali plant. EPA is addressing problems of potential mercury emissions by requiring that retorters either be subject to the NESHAP or operate with the PSDs on which the NESHAP was based.

Under section 165(a) of the CAA, all new major stationary sources and major modifications to existing sources of air pollution must obtain a PSD permit. If the mercury of SO2 emissions from the retorting process were to come from a major stationary source or a major modification subject to the PSD regulations and would be emitted in significant amounts (greater than 0.1 tons per year of mercury or 40 tons per year of SO2), then such emissions would be subject to best available control technology (BACT) requirements. An air quality analysis for mercury and SO2 would also be required under PSD. Moreover, an air quality analysis must be conducted to demonstrate that the SO2 emissions would neither cause nor contribute to violations of any national ambient air quality standard (NAAQS) or PSD increment for SO2. Facilities that are located in areas that have failed to meet any NAAQS for SO2 (i.e., designated nonattachment areas) and emit more than 100 tons per year of SO2, must not only apply emission controls that meet the lowest achievable emission rate but also offset their remaining SO2 emissions by acquiring federally enforceable emission reductions from other nearby SO2 emissions sources.

The Agency is also concerned whether incineration of wastes containing brominated organics or organo-nitrogen compounds may adversely affect air quality. The presence of bromine complicates the evaluation of incineration of these wastes. A detailed discussion of the Agency's approach for brominated organics is contained in section III.A.5.b of today's preamble. A discussion of potential nitrogen oxide emissions from organo-nitrogen wastes is contained in section III.A.5.c.

There are several general regulatory development programs under RCRA that address treatment technology air emissions. The Agency has initiated a three-phased program under § 3004(n) of RCRA to address air emissions from hazardous waste management units other than incinerators. The first phase addresses organic air emissions as a class from two types of emission sources. The first source category is process equipment (pumps, valves, etc.) that contact hazardous waste that contain greater than 10 percent organic compounds, including such as distillation units and incinerators. The second source category is certain vents on various treatment technologies, such as air or steam strippers. These standards were proposed in the **Federal Register** on February 5, 1987 (52 FR 3748) and are expected to be promulgated this spring.

The second phase of standards development under section 3004(n) of RCRA addresses organic air emissions as a class from tanks, containers, and surface impoundments. Treatment technologies that occur in tanks or containers that are not controlled by the Phase I standards would be controlled by these standards. Wastes that would be prohibited from land disposal may continue to be managed in a surface impoundment as long as the treatment residuals that do not meet the applicable treatment standards are removed from the impoundment within one year of entry into the impoundment. These standards will control air emissions from the management of wastes in the surface impoundment. These standards are expected to be proposed in the **Federal Register** this spring.

In the third phase of the section 3004(n) standards development, the Agency will develop additional standards for the sources addressed in

the first two phases as necessary to address residual risks.

In addition to the section 3004(n) standards, general standards to control both organic and metal emissions from the combustion of hazardous waste in incinerators and other types of combustion devices are under various stages of development.

In certain cases, waste treatment may occur in treatment technologies that are not required to obtain RCRA permits. Guidance for the control of air emissions from these sources, such as exempt biological treatment tanks and recycling units, is being developed under the CAA.

one of the regulatory efforts cussed above address air emissions n the land disposal of treatment due in landfills, land treatment units, vaste piles because the Agency sently presumes that these units will receive wastes that have been ted to meet the BDAT requirements. Agency is considering whether to pose regulations in a separate making to limit air emissions from l disposal units seeking to land pose of wastes under a no migration ance.

lean Up Actions Under the nprehensive Environmental ponse, Compensation, and Liability

he land disposal restrictions may e significant effects on the selection implementation of response actions are taken under the Comprehensive ironmental Response, npensation, and Liability Act RCLA). There are three primary s in which these effects may occur. ne area that may be affected by the l disposal restrictions is in the ction of treatment standards at the edial action site. The cleanup dards set at CERCLA sites are risk- ed, while treatment standards eloped under the land disposal rictions program are technology- ed. Therefore, the technology-based tment standards may be more gent than the risk-based cleanup dards developed based on the RCLA selection of remedy criteria, vice versa. Another matter that may ffected is the treatment of soil and ris contaminated with wastes ricted from land disposal. taminated soil and debris are a nary type of waste that must be ediated at most CERCLA sites. In y cases, the soil matrix is different n that of the industrial wastes for ch treatment standards are set. RCLA site managers must either ply with the treatment standards or request and be granted a variance from the treatment standard (§ 268.44) or a "no-migration" variance (§ 268.6).

Finally, even though the hazardous substances at a CERCLA remediation site may have been disposed prior to the effective date of RCRA, if the action involves removal of restricted wastes after the prohibition effective date, the land disposal restrictions are legally applicable (51 FR 40577, November 7, 1986). See also *Chemical Waste Management* v. *EPA*, 869 F. 2d at 1535–37 (D.C. Cir. 1989). For example, if a waste is excavated from a unit, treated, and redisposed, EPA has indicated that "placement" (see RCRA section 3004(k)) of the waste in a land disposal unit has occurred, and the applicable treatment standards must be met (see 53 FR 51444 and 51445, December 21, 1988). However, if the waste is capped in place, removal or "placement" has not occurred, and the treatment standards are not legally applicable.

F. Applicability of Treatment Standards to Wastes from Pesticides Regulated Under the Federal Insecticide, Fungicide, and Rodenticide Act

A number of generators of pesticide waste that have heretofore been comparatively unaware of the land disposal restrictions may be regulated under today's rulemaking. This will require that the Agency develop guidance materials and provide training on how to comply with the requirements of the land disposal restrictions.

Generators of significant quantities of pesticide P and U wastes are farmers and commercial pesticide applicators. The provisions of 40 CFR 262.70 and 268.1 exempt farmers from regulation under the land disposal restrictions program; however, no such exemption exists for commercial applicators. Such generators of hazardous wastes have traditionally land disposed their pesticide wastes. With promulgation of today's final rule, these generators must comply with the requirements of the land disposal restrictions if they dispose a restricted hazardous waste.

G. Regulatory Overlap of Polychlorinated Biphenyls (PCBs) Under the Toxic Substance Control Act (TSCA) and RCRA.

Certain P and U listed wastes contain PCBs. The PCB component of such a waste mixture is regulated primarily under TSCA (although it may also be a California list waste, and subject to RCRA regulation (both substantive and administrative as well)), while the listed P or U component of the waste is regulated under RCRA. Such a mixture of listed/PCB waste must meet the applicable requirements under both statutes. Such a waste must go to an incinerator permitted under both TSCA and RCRA. Any ash residual from incineration must meet the treatment standard for the listed waste component prior to land disposal.

VI. Regulatory Requirements

A. Regulatory Impact Analysis—Surface Disposed Wastes

In accordance with Executive Order No. 12291, the Agency has reviewed the costs and benefits of today's final rule and has determined that today's final rule constitutes a "major regulation" because it results in an annual cost to the economy in excess of $100 million. As a result of this determination, the Agency has conducted a regulatory impact analysis (RIA) in support of today's final rule. The complete RIA document, Regulatory Impact Analysis of the Land Disposal Restrictions for Third Third Scheduled Wastes Final Rule (April 24, 1990), is available for review in the public docket for today's final rule. The complete document was also submitted to the Office of Management and Budget for review, as required by Executive Order No. 12291.

This section of the preamble summarizes the results of the regulatory impact analysis of the final rule, as detailed in the RIA document, as well as comments received on the regulatory impact analysis for the proposed rule. Section VI.A.1 below describes the universe of wastes and facilities affected by today's rule. Section VI.A.2 below summarizes the analysis of human health and environmental benefits attributable to today's rule. Section VI.A.3 summarizes the economic cost and impact analysis performed for today's rule.

The Agency analyzed benefits, costs, and economic impacts using the same approach and methodology that was used for the August 17, 1988, First Third final rule (53 FR 31138).[24] The effects of the final rule were estimated by comparing post-regulatory management practices and conditions with those occurring under baseline conditions. Two post-regulatory scenarios were examined. Under the first scenario, the "subtitle C" scenario, all treatment residuals would be disposed of in subtitle C units. For the second, "subtitle D," scenario, all characteristic waste treatment residuals would be disposed of in Subtitle D units. The baseline was

[24] For detailed information on the cost methodology, see *Regulatory Impact Analysis of the Land Disposal Restrictions on First Third Wastes: Final Report*, August 1988, ICF Incorporated.

defined as continued land disposal of wastes in units meeting minimum technological requirements.

The Agency adjusted reported waste management practices to reflect compliance with the land disposal restriction rules covering solvents and dioxins, California list wastes, and First and Second Third scheduled wastes. In making these adjustments, EPA assumed that facilities would comply with these other rules by the least costly methods allowable. However, though First Third soft hammer wastes were examined under the First Third rule Second Third soft hammer wastes are included in today's analysis. Thus, all First Third, Second Third, and Third Third wastes have been addressed in the land disposal restrictions rules collectively.

1. Overview of Affected Wastes, Facilities, and Management

The universe of waste and facilities examined for the RIA was developed from EPA's "National Survey of Hazardous Waste Treatment, Storage, Disposal, and Recycling Facilities" (hereafter, the TSDR survey) and EPA's 1984 "National Survey of Hazardous Waste Generators and Treatment, Storage, and Disposal Facilities Regulated under RCRA in 1981" (hereafter, the RIA Mail survey). Data from these surveys have been updated as part of the capacity analysis accompanying this rulemaking (see discussion in Section 3B). The data used for the final regulatory analysis reflect this updated data base and are consistent with the data used for the capacity analysis accompanying the proposed rule.

As with past land disposal restrictions RIAs, the TSDR and RIA Mail surveys provide an overview of the number of facilities treating, storing, and disposing of waste; the quantities and types of waste (by RCRA waste code) managed at each facility; and the current practice or method of treatment. The adjusted information contained in the two surveys is accepted as the baseline (i.e., pre-Third Third rule) practice for this RIA.

Several commenters noted that the quantities of waste estimated do not include non-hazardous waste that may have been affected by the Agency's proposed dilution prohibition. In today's rule, however, the Agency is allowing facilities that discharge their characteristic wastes under a NPDES permit or dispose of it in a UIC well to dilute. The Agency is also allowing facilities that generate non-toxic characteristic wastes (with the exception of high TOC ignitable nonwastewaters, reactive cyanide wastes, and reactive sulfide wastes) to dilute their wastes in order to achieve treatment standards. However, characteristic wastes discharged pursuant to an NPDES permit, with a specified method, cannot be rendered nonhazardous through dilution alone. The Agency believes, therefore, that it has accurately analyzed the impact of today's rule.

Quantity of Affected Waste. Today's rule affects approximately 277 million gallons of waste per year as shown in Table VI–1. An additional 44 million gallons (per year) of multisource leachate may also be affected by today's rule.

TABLE VI–1.—THIRD THIRD RULE QUANTITY BY WASTE TYPE

[in million gallons per year]

	Vol.	Percent
Ignitable (D001), corrosive (D002), and reactive wastes (D003)	42	15
EP toxic wastes (D004–D016) and mixtures	122	44
Listed wastes	2	1
Mixtures of wastes	32	12
CBI wastes	79	28
Total	277	100

Characteristic wastes constitute the largest volume of wastes covered by the final rule. In addition to the 59 percent identified as D001–D016, the waste mixtures category is dominated by characteristic wastes. Table VI–2 gives the volumes of the most affected characteristic wastes.

TABLE VI–2.—PREDOMINANT CHARACTERISTIC WASTES BY VOLUME

[in million gallons per year]

D008 (EP Toxic for lead)	53
D007 (EP Toxic for chromium)	41
D002 (Corrosive)	17
D001 (Ignitable)	17
Mixtures of D006 and D008	9
D006 (Cadmium)	8
D003 (Reactive)	7

Affected Facilities. A total of 110 waste management facilities and nearly 1,700 waste generators are affected by today's final rule. Table VI–3 provides a breakdown of affected facilities and their volumes managed.

TABLE VI–3.—THIRD THIRD RULE VOLUMES BY FACILITY TYPE

[in million gallons per year]

Facilities	Volume	Percent	No. of facilities
Commercial Facilities	212	77	37
Non-Commercial Facilities	65	23	73
Generators	NA	NA	1,686
Total	277	100	1,796

The affected facilities represent a wide variety of industries in 22 major industrial groups. A further examination of the TSDR survey data reveals the following information about the range of industries with large volumes of Third Third wastes.

The volume of commercial process waste, which accounts for 77 percent of the total waste volume, is distributed across the following SIC groups:

- Electric, Gas, & Sanitary Services (SIC 49)..... 43 percent
- Services Not Elsewhere Classified (SIC 89)..... 8 percent
- Chemicals & Allied Products (SIC 28)..... 7 percent
- CBI Facilities..... 32 percent

The volume of noncommercial process waste, which accounts for 23 percent of the total waste volume, is distributed across the following Standard Industrial Code (SIC) groups:

- Non-classifiable Establishments (SIC 99)..... 52 percent
- Primary Metals Industries (SIC 33)...13 percent
- Petroleum Refining & Related Industries (SIC 29)..... 10 percent
- Chemicals & Allied Products (SIC 28)..... 6 percent
- CBI Facilities..... 16 percent

Waste Management Practices. Based on the TSDR survey, the RIA examined five land disposal baseline management practices: disposal in landfills, disposal by land treatment, disposal in surface impoundments, treatment in waste piles, and storage in waste piles. Table VI–4 provides a breakdown of these baseline management practices by volume and number of facilities. As shown, approximately half of the waste volume covered by the final rule is currently managed in landfills. Landfills are also the most prevalent baseline practice, occurring at just over one half of the affected facilities.

TABLE VI-4.—THIRD THIRD RULE BASELINE MANAGEMENT PRACTICES

[in million gallons per year]

Baseline practice	Volume	Percent
Facilities:		
Landfill	212	77
Land treatment	6	2
Storage waste piles	28	10
Treatment waste piles	27	10
Disposal surface impoundments	3	1
Total *	277	100

* Excludes estimated 44 million gallons of multisource leachate.

The quantity of multisource leachate not well characterized at present. owever, the RIA estimates that over 0 million gallons of leachate are enerated (annually) creating up to 44 illion gallons of leachate residue bject to the land disposal restrictions. Treatment practices in compliance ith today's final rule significantly edistribute the quantities of waste mong managemnt practices. Most portant, while 277 million gallons of aste per year are land disposed under aseline management practices (of hich 212 million gallons are landfilled), 6 million gallons of waste per year ould be disposed of in landfills under e subtitle C scenario as a result of day's final rule and 208 million gallons waste per year under the subtitle D enario. Thus, the final rule results in a percent reduction in the volume of hird Third wastes being land disposed nder the Subtitle C scenario, and a 25 rcent reduction under the subtitle D enario. Many of the wastes covered the final rule are treated by chemical recipitation or stabilization.

Benefits of the Final Rule

The final rule would result in several enefits including reduced human health sks, imroved safety at facilities, and educed ecological effects. As with revious land disposal restrictions, the gency quantified the human health enefits and conducted a qualitative nalysis of the other benefits.

Human Health Benefits. The uantitative benefits analysis estimated at over a 70-year lifetime, the final rule educes cancer cases by 316 and educes the number of people exposed at least one noncarcinogen above ealth based criteria by about 5,400. hese results are the same for both enarios.

In general, the majority of cancer ases averted is due to reduced halation exposure to benzene, crylonitrile, phenanthrene, uroanthene, dichloromethane and other carcinogenic constituents in D001 ignitable wastes and mixtures of ignitable and reactive wastes. The majority noncarcinogenic benefits is due to reduced ingestion of cadmium (D006), chromium (D007), lead (D008), as well as mixtures with these metals or mercury and D001 ignitable waste containing pentaclorobenzene and methanol.

It is important to note that these human health benefits are highly sensitive to the facility (and population) and waste characterizations used for the analysis. In fact, the majority of human health benefits is due to a limited number of waste streams at a few facilities. For example, over 4,000 of the non-cancer "benefits" result from the reduction of a highly concentrated chromium waste that leaches to ground water used as a drinking water source for a populous Northeastern community. And nearly 1,000 non-cancer"benefits" are attributable to reducing high concentration air releases of pentachlorobenzene and methanol in a land application and a landfill unit. Similarly, over 200 of the cancer cases averted result from reducing air releases of phenanthrene and fluroanthene in land application units at two facilities.

What these examples reveal is the relationship between human health benefits and the attributes of a facility. Given any data base, the facilities with highly concentrated waste in densely populated areas will significantly drive the human health benefits results. Therefore, we believe that the data gives a true representation of reality by the inclusion of these few driving facilities.

The Agency has not estimated benefits attributable to treating multisource leachate residue because of a lack of characterization and facility data. However, the Agency, by way of a screening analysis, developed a hypothetical characterization of multisource leachate residue and simulated releases at several well-defined facilities. While the results are extremely sensitive to the assumptions and hypothetical characterization, they showed the possibility of roughly 200 cancer and 200 non-cancer cases avoided. Again, these results are highly uncertain because of the lack of sufficient data, but they do suggest that the benefits associated with the treatment of multisource leachate residues may be significant.

The Agency believes that the overall benefit estimates are uncertain and may overstate or underestimate the human-health benefits of the proposed rule The RCRA Risk-Cost Analysis model does not contain enough data to model all of the constituents found in the Third Third wastes. As a result, benefits of regulating wastes with one or more of these missing constituents may be underestimated. This underestimate is most likely to occur for wastes containing pesticides, the sole hazardous constituent of D012–D017, and about 16 "P" wastes.

Human health benefits may also be underestimated because the benefits model only includes exposure via drinking water or air. Not estimated are the deleterious effects from consuming of contaminated food, such as fish caught downstream of releases, recreation exposure, due to contact with polluted rivers, lakes, or streams, and the averting of public benefits due to the destruction of these recreational areas.

At the same time, benefits may be overestimated due to conservative exposure assumptions. Exposure scenarios are based on drinking 2 liters/day for seventy years of contaminated water or inhalation of 20 cubic meters/day of air for seventy years.

Safety Benefits. In addition to adverse human health effects, ignitable (D001) and reactive (D003) wastes may pose a general safety hazard. In the past, land disposal of these wastes has only been allowed if the waste either is deactivated or precautions are taken to prevent accidental ignition or reaction. Until the ignitable or reactive wastes are deactivated, there is some continuing risk that the precautions may fail, resulting in fires, explosions, or release of toxic gases. The final rule requires deactivation of the approximately 24 million gallons of D001 and D003 being land disposed, thereby eliminating the safety risk. However, this benefit is not significant due to the popular practice of deactivation currently employed by facilities.

Environmental Benefits. The final rule results in an overall reduction in toxic releases to the environment, thereby reducing adverse effects to ecosystems. The resulting improvement in ecological health is extremely difficult to quantify due to uncertainty in estimating exposure levels and species populations. However, the sensitivity of certain species to hazardous constituents of wastes covered by the final rule suggests a very high potential for ecological effects.

As an example, aquatic species are at least two orders of magnitude more sensitive than humans to arsenic (D004), mercury (D009), silver (D011), lindane (D013), methoxychlor (D014), and toxaphene (D015). Therefore, aquatic ecosystems may be at some risk even when there is no human health risk.

Another way to look at the potential for ecological effects is to consider the proximity of land disposal facilities to waterbodies. A recent Agency study on ecological risks showed that for a sample of 52 National Priorities List sites, almost 90 percent of the sites posed a threat to freshwater ecosystems due to their proximity to waterbodies.[25] Wastes removed from some of these sites may be subject to the treatment standards promulgated in this rule. Thus, the final rule reduces ecological risk associated with Third Third wastes managed at these sites.

3. Costs

The final rule results in an annual incremental cost of approximately $353 million under the Subtitle D scenario and $440 million under the Subtitle C scenario, and affects over 1,700 facilities in 22 industrial sectors. Table VI–5 summarizes the estimated incremental costs associated with today's final rule by waste type.

TABLE VI–5.—THIRD THIRD RULE VOLUMES AND INCREMENTAL COST

[Million gallons/yr and million $/yr]

Waste type	Volume	Cost (in dollars)	
		Subtitle D	Subtitle C
D001, D002, D003	42	$61	$67
D004–D016	122	123	166
Listed waste	2	15	15
Mixtures	32	93	102
CBI facilities	79	61	90
Total	277	$353	$440

As expected, based on volumes, the largest incremental cost is attributed to the management of D008 (lead) waste. Although the listed wastes are a small volume and have the lowest total cost, expensive treatment technologies such as incineration result in a much higher cost per volume treated. Conversely, the corrosive wastes and mixtures with corrosive wastes are relatively inexpensive to neutralize, resulting in a low cost per volume treated.

Five characteristic wastes contribute about 45 percent of the incremental cost of the rule as shown in table VI–6. EP toxic wastes for lead (D008) and ignitable wastes (D001) are the two single wastes that incur the most incremental cost.

[25] *Summary of Ecological Risks. Assessment Methods, and Risk Management Decision in Superfund and RCRA* (EPA–230–03–89–046) June 1989.

TABLE VI–6.—WASTES INCURRING THE MOST INCREMENTAL COST

[In million dollars/year]

Waste stream	Costs	
	Subtitle D	Subtitle C
D008	57	85
D001	46	47
D007	34	38
D009	16	17
D004/D006/D007/D008	16	16
D003	9	12
D007/D008	12	12
D001/D002/D007/D008	11	11
D002	6	9

The cost of treating D002 corrosive wastes attributed to the final rule may be overestimated by as much as $5 million because some of these wastes may be treated due to the California List Land Disposal Restrictions rule (52 FR 25760). That rule established a performance standard prohibiting land disposal of wastes with a pH less than 2, while the final rule establishes a technology-based standard of deactivation (i.e., neutralization). The Agency does not have data on how facilities are meeting the California List standard. Without specific data about the post-California List practices, the entire cost of neutralizing D002 acidic wastes were attributed to this final rule.

4. Economic Impacts

Tables VI–7 and VI–8 summarize the cost and economic impact of the final rule under subtitle D and subtitle C, respectively. Compliance costs are the tax-adjusted revenue requirements needed to fund the incremental costs discussed above. Significantly affected facilities are those that either need to increase costs by more than 5 percent or their compliance costs exceed 5 percent of their cash from operations.

TABLE VI–7.—SUMMARY OF ECONOMIC IMPACT BY TYPE OF FACILITY—SUBTITLE D

Economic impact	Noncommercial	Com	Generator	Total
Compliance cost ($Mil)	24	329	235	259
Affected facs.	73	37	1,686	1,796
Significantly affected	3	NA	429	432
Estimated closures	0	NA	14	14
Affected industry groups	12	9	16	22

TABLE VI–8.—SUMMARY OF ECONOMIC IMPACT BY TYPE OF FACILITY—SUBTITLE C

Economic impact	Noncommercial	Com	Generator	Total
Compliance cost ($Mil)	30	410	299	329
Affected facs.	73	37	1,686	1,796
Significantly affected	4	NA	552	556
Estimated closures	0	NA	14	14
Affected industry groups	12	9	16	22

The economic analysis estimates that the final rule does not have a significant effect on industry. The effects of the final rule are distributed over a wide range of industries in 22 major industrial groups rather than concentrated in a few industries.

Generators are the type of facilities that incur the largest economic impact. The analysis estimates that 91 percent of the compliance cost are borne by generators under both subtitle C and subtitle D scenarios. Also, 33 percent of the affected generators are significantly affected under subtitle C scenario, and 25 percent are significantly affected under subtitle D scenario.

The analysis estimates that 14 facilities would close as a result of the final rule. By comparison, the First Third rule was estimated to result in almost 200 closures. These 14 potential closures represent less than 4 percent of the 429 significantly affected generators under subtitle D scenario and less than 3 percent of the 552 significantly affected generators under subtitle C scenario.

The TSDR survey identified only 2 small businesses that currently land dispose Third Third waste. Neither is significantly affected under the final rule.

B. Regulatory Flexibility Analysis—Surface Disposed Waste

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, whenever an Agency is required to publish a notice of rulemaking, it must prepare and make available for public comment a Regulatory Flexibility Analysis (RFA) that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). This analysis is unnecessary, however, if the Agency's Administrator certifies that the rule will not have a significant economic effect on a substantial number of small entities.

EPA evaluated the economic effect of the final rule on small entities, here defined as firms employing fewer than 50 persons. Because of data limitations, the Agency was unable to include generators of large quantities of Third Third wastes. The small business population therefore included only two groups: all noncommercial TSDFs employing fewer than 50 persons and all small quantity generators (SQGs) that were also small businesses. As a result, the effect of the final rule on small businesses is underestimated. However, the Agency would not expect the conclusions of the small business analysis to change significantly if the generator data were available.

According to EPA's guidelines for conducting an RFA, if over 20 percent of the population of small businesses, small organizations, or small government jurisdictions is likely to experience financial distress based on the costs of the rule, then the Agency is required to consider that the rule will have a significant effect on a substantial number of small entities and to perform a formal RFA. EPA has examined the final rule's effects on small entities as required by the Regulatory Flexibility Act.

The economic analysis identified only 2 small businesses affected by the final rule. Neither of the 2 would be significantly affected. The Administrator therefore certifies that part 268 does not have significant economic effects on a substantial number of small entities. As a result of this finding, the Agency has not prepared a formal RFA.

C. Regulatory Impact Analysis—Underground Injected Wastes

The Agency has completed a separate regulatory impact analysis for underground injected wastes affected by today's final rule. The completed RIA document, Regulatory Impact Analysis of Proposed Hazardous Waste Disposal Restrictions For Class I Injection of Third Thirds List Wastes, is available in the public docket for the final rule.

There are 65 injection facilities, of the total number of Class I injection facilities, injecting approximately 6 billion gallons of Third Third wastes annually, including over 4.7 billion gallons of characteristic wastes. These Class I hazardous injection facilities are required to either treat wastes, or file "no migration" petitions as outlined in 40 CFR part 148 (See 53 FR 28118 preamble for a more thorough discussion of the no migration petition review process). The additional facilities affected by today's rulemaking substantially contribute to overall compliance costs already incurred by Class I injection well owners and operators managing hazardous wastes regulated by previous rulemaking.

The Agency analyzed costs and benefits for today's rule by using the same approach and methodology developed in the Regulatory Impact Analysis of the Underground Injection Control Program: Proposed Hazardous Waste Disposal Injection Restrictions used for the July 26, 1988 final rule (53 FR 28118) and subsequent rulemaking. An analysis was performed to assess the economic effect of associated compliance costs for the additional volumes of injected wastes attributable to today's final rule.

Total compliance costs for injected wastes are estimated at $54 million annually. Alternative treatment costs are estimated at $53.7 million annually, and no migration petition costs are annualized at $0.3 million. The RIA estimates that 17 facilities will eventually treat their wastes, and therefore be significantly affected economically by today's final rule. All of these costs will be incurred by Class I hazardous injection well owners and operators.

The benefits to human health and the environment in the RIA are generally defined as the reduced human health risk resulting from fewer instances of ground-water contamination. In general, potential health risks from Class I hazardous waste injection wells are extremely low. However, the RIA references a few isolated cases where risks to human health and the environment may be greater, but are still too low to quantify. These cases involve possible grout seal failure around the protective casing of an injection well, and the occurrence of unplugged bore holes around the injection well site. Of studies conducted to describe Class I well problems, only six wells, or less than two percent of all Class I wells, were reported to have experienced malfunctions that contributed to any contamination of the surface or an underground source of drinking water. No health-related problems attributed to Class I injection were reported.

D. Regulatory Flexibility Analysis—Underground Injection Wastes

Owners and operators of hazardous waste injection wells are generally major chemical, petrochemical, and other manufacturing companies. The Agency is not aware of any small entities of injection wells that would be affected by part 148 of today's final rule. The Administrator therefore certifies that part 148 and part 268 will not have significant economic effects on a substantial number of small entities. As a result of this finding, the Agency has not prepared a formal RFA.

E. Paperwork Reduction Act

All information collection requirements in this final rule were promulgated in previous land disposal restrictions rulemakings (including those for the Underground Injection Control Program) and approved by the Office of Management and Budget (OMB) at that time. Since there are no new information collection requirements being promulgated today, an Information Collection Request has not been prepared.

F. Review of Supporting Documents

The primary source of information on current land disposal practices and industries affected by this rule was EPA's 1986 "National Survey of Hazardous Waste Treatment, Storage, Disposal, and Recycling Facilities" (the TSDR Survey). The average quantity of waste contributed by generator facilities was obtained from EPA's "National Survey of Hazardous Waste Generators and Treatment, Storage, and Disposal Facilities Regulated under RCRA in 1981" (April 1984).

Waste stream characterization data and engineering costs of waste management were based on the following EPA documents:

- "Characterization of Waste Streams Listed in 40 CFR Section 261 Waste Profiles," Vols. I and II (August 1985);
- "Characterization of Constituents from Selected Waste Streams Listed in 40 CFR Section 261," Vols. I and II (August 1985);
- RCRA background and listing documents for 40 CFR Section 261;
- RCRA Section 3007 industry studies;
- "RCRA Risk-Cost Analysis Model, Appendix A: Waste Stream Data Base" (March 1984);
- Source assessment documents for various industries; and
- "1986–1987 Survey of Selected Firms in the Commercial Hazardous Waste Management Industry: Final Report" (March 1988).

Financial information for the economic impact analysis was obtained from the 1982 Census of Manufacturers and 1984 Annual Survey of Manufacturers. Producer price indices were used to restate 1984 dollars in 1990 terms.

List of Subjects in 40 CFR Parts 148, 261, 262, 264, 265, 268, 270, 271, and 302

Administrative practice and procedure, Confidential business information, Designated facility, Environmental protection, Hazardous

materials, Hazardous materials transportation, Hazardous waste, Intergovernmental relations, Labeling, Manifests, Packaging and containers, Penalties, Recycling, Reportable Quantities, Reporting and recordkeeping requirements, Waste treatment and disposal, Water pollution control, Water supply.

Dated: May 8, 1990.

F. Henry Habicht,

Acting Administrator.

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

PART 148—HAZARDOUS WASTE INJECTION RESTRICTIONS

1. The authority citation for part 148 continues to read as follows:

Authority: Section 3004, Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq.

2. Section 148.1 is amended by adding paragraph (d) to read as follows:

§ 148.1 Purpose, scope, and applicability.

* * * * *

(d) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under this part, are not prohibited if the wastes:

(1) Are disposed into a nonhazardous or hazardous injection well defined under 40 CFR 144.6(a); and

(2) Do not exhibit any prohibited characteristic of hazardous waste identified in subpart C of part 261 at the point of injection.

3. Section 148.14 is amended by redesignating paragraphs (d), (e), (f), and (g) as paragraphs (e), (g), (h), and (j); by revising the introductory text of newly redesignated paragraph (j); and by adding new paragraphs (d), (f), and (i) to read as follows:

§ 148.14 Waste specific prohibitions—first third wastes.

* * * * *

(d) Effective August 8, 1990, the wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Number F006 (wastewaters) and F019; the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste Numbers K004, K008, K015 (nonwastewaters), K017, K021 (wastewaters), K022 (wastewaters), K031, K035, K046 (reactive nonwastewaters and all wastewaters), K060 (wastewaters), K061 (wastewaters), K069 (calcium sulfate nonwastewaters and all wastewaters), K073, K083, K084, K085, K086 (all but solvent washes), K101 (high arsenic nonwastewaters), K102 (high arsenic nonwastewaters), and K106; and the wastes specified in 40 CFR part 261.33 as EPA Hazardous Waste Numbers P001, P004, P005, P010, P011, P012, P015, P016, P018, P020, P036, P037, P048, P050, P058, P059, P068, P069, P070, P081, P082, P084, P087, P092, P102, P105, P108, P110, P115, P120, P122, P123, U007, U009, U010, U012, U016, U018, U019, U022, U029, U031, U036, U037, U041, U043, U044, U046, U050, U051, U053, U061, U063, U064, U066, U067, U074, U077, U078, U086, U089, U103, U105, U108, U115, U122, U124, U129, U130, U133, U134, U137, U151, U154, U155, U157, U158, U159, U171, U177, U180, U185, U188, U192, U200, U209, U210, U211, U219, U220, U226, U227, U228, U237, U238, U248, and U249 are prohibited from underground injection at off-site injection facilities.

* * * * *

(f) Effective November 8, 1990, the wastes specified in paragraph (d) of this section are prohibited from underground injection at on-site injection facilities.

* * * * *

(i) Effective May 8, 1992, the wastes specified in 40 CFR 261.32 and 261.33 as EPA Hazardous Waste Numbers K011 (wastewaters), K013 (wastewaters), and K014 are prohibited from underground injection.

(j) The requirements of paragraphs (a) through (i) of this section do not apply:

* * * * *

4. Section 148.15 is amended by redesignating paragraphs (d) and (e) as paragraphs (e) and (g); by revising the introductory text of newly redesignated paragraph (g); and by adding new paragraphs (d) and (f) to read as follows:

§ 148.15 Waste specific prohibitions—second third wastes.

* * * * *

(d) Effective August 8, 1990, the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste Number K025 (wastewaters), K029 (wastewaters), K041, K042, K095 (wastewaters), K096 (wastewaters), K097, K098, and K105; and the wastes specified in 40 CFR part 261.33 as P002, P003, P007, P008, P014, P026, P027, P049, P054, P057, P060, P066, P067, P072, P107, P112, P113, P114, U002, U003, U005, U008, U011, U014, U015, U020, U021, U023, U025, U026, U032, U035, U047, U049, U057, U059, U060, U062, U070, U073, U080, U083, U092, U093, U094, U095, U097, U098, U099, U101, U106, U109, U110, U111, U114, U116, U119, U127, U128, U131, U135, U138, U140, U142, U143, U144, U146, U147, U149, U150, U161, U162, U163, U164, U165, U168, U169, U170, U172, U173, U174, U176, U178, U179, U189, U193, U196, U203, U205, U206, U208, U213, U214, U215, U216, U217, U218, U239, and U244 are prohibited from underground injection at off-site injection facilities.

* * * * *

(f) Effective November 8, 1990, the wastes specified in paragraph (d) of this section are prohibited from underground injection at on-site injection facilities.

(g) The requirements of paragraphs (a) through (f) of this section do not apply:

* * * * *

5. Section 148.16 is amended by redesignating paragraph (c) as paragraph (g); by revising the introductory text of newly redesignated paragraph (g); and by adding new paragraphs (c), (d), (e), and (f) to read as follows:

§ 148.16 Waste specific prohibitions—third third wastes.

* * * * *

(c) Effective August 8, 1990, the wastes identified in 40 CFR 261.31 as EPA Hazardous Waste Number F039 (multi-source leachate); the wastes specified in 40 CFR 261.32 EPA Hazardous Waste Numbers K002, K003, K005 (wastewaters), K006, K007 (wastewaters), K023, K026, K032, K033, K034, K093, K094 and K100 (wastewaters); the wates specified in 40 CFR 261.33 as P006, P009, P017, P022, P023, P024, P028, P031, P033, P034, P038, P042, P045, P046, P047, P051, P056, P064, P065, P073, P075, P076, P077, P078, P088, P093, P095, P096, P099, P101, P103, P109, P116, P118, P119, U001, U004, U006, U017, U024, U027, U030, U033, U038, U034, U038, U039, U042, U045, U048, U052, U055, U056, U068, U071, U072, U075, U076, U079, U081, U082, U084, U085, U087, U088, U090, U091, U096, U112, U113, U117, U118, U120, U121, U123, U125, U126, U132, U136, U139, U141, U145, U148, U152, U153, U156, U160, U166, U167, U181, U182, U183, U184, U186, U187, U191, U194, U197, U201, U202, U204, U207, U222, U225, U234, U236, U240, U243, and U247; and the wastes identified in 40 CFR 261.21, 261.23 or 261.24 as hazardous based on a characteristic alone, designated as D001, D004, D005, D006, D008, D009 (wastewaters), D010, D011, D012, D013, D014, D015, D016, D017 are prohibited from underground injection at off-site injection facilities.

(d) Effective August 8, 1990, mixed radioactive/hazardous waste in 40 CFR 268.10, 268.11, and 268.12, that are mixed radioactive and hazardous wastes, are prohibited from underground injection.

(e) Effective November 8, 1990, the wastes specified in paragraph (c) of this section are prohibited from underground

injection at on-site injection facilities. These effective dates do not apply to the wastes listed in 40 CFR 148.12(b) which are prohibited from underground injection on August 8, 1990.

(f) Effective May 8, 1992, the wastes identified in 40 CFR 261.22, 261.23 or 261.24 as hazardous based on a characteristic alone, designated as D002 (wastewaters and nonwastewaters), D003 (wastewaters and nonwastewaters), D007 (wastewaters and nonwastewaters), and D009 (nonwastewaters) are prohibited from underground injection. These effective dates do no apply to the wastes listed in 40 CFR 148.12(b) which are prohibited om underground injection on August 8, 990.

(g) The requirements of paragraphs (a) hrough (f) of this section do not apply:

ART 261—IDENTIFICATION AND ISTING OF HAZARDOUS WASTES

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

Authority: 42 U.S.C. 6905, 6912(a), 6921, 922, and 6938.

ubpart C—Characteristics of lazardous Waste

2. In § 261.20, paragraph (b) is revised o read as follows:

261.20 General.

* * * *

(b) A hazardous waste which is dentified by a characteristic in this ubpart is assigned every EPA lazardous Waste Number that is pplicable as set forth in this subpart. his number must be in complying with he notification requirements of section 010 of the Act and all applicable ecordkeeping and reporting equirements under parts 262 through 65, 268, and 270 of this chapter.

* * * *

3. In § 261.21, paragraph (b) is revised o read as follows:

261.21 Characteristic of ignitability.

* * * *

(b) A solid waste that exhibits the haracteristic of ignitability has the EPA lazardous Waste Number of D001.

4. In § 261.22, paragraph (b) is revised o read as follows:

261.22 Characteristic of corrosivity.

* * * *

(b) A solid waste that exhibits the haracteristic of corrosivity has the EPA lazardous Waste Number of D002.

5. In § 261.23, paragraph (b) is revised o read as follows:

§ 261.23 Characteristic of reactivity.

* * * * *

(b) A solid waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number of D003.

6. In § 261.24, paragraph (b) introductory text is revised to read as follows:

§ 261.24 Toxicity characteristic.

* * * * *

(b) A solid waste that exhibits the characteristic of toxicity has the EPA Hazardous Waste Number specified in Table I which corresponds to the toxic contaminant causing it to be hazardous.

* * * * *

Subpart D—Lists of Hazardous Wastes

7. Section 261.31 is amended by adding the following waste code in alphanumeric order.

§ 261.31 Hazardous wastes from non-specific sources.

* * * * *

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
*	*	*
F039	Leachate resulting from the treatment, storage, or disposal of wastes classified by more than one waste code under Subpart D, or from a mixture of wastes classified under Subparts C and D of this part. (Leachate resulting from the management of one or more of the following EPA Hazardous Wastes and no other hazardous wastes retains its hazardous waste code(s): F020, F021, F022, F023, F026, F027, and/or F028.)	(T).

8. Paragraph (c) of § 261.33 is revised to read as follows: (the comment paragraph remains):

§ 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

* * * * *

(c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraphs (e) or (f) of this section, unless the container is empty as defined in § 261.7(b) of this chapter.

* * * * *

9. Appendix VII is amended by adding the following waste stream in alphanumeric order to read as follows:

Appendix VII—Basis for Listing Hazardous Waste

EPA hazardous waste No.	Hazardous constituents for which listed
*	*
F039	All constituents for which treatment standards are specified for multi-source leachate (wastewaters and nonwastewaters) under 40 CFR 268.43(a), Table CCW.
*	*

PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

1. The authority citation for part 262 continues to read as follows:

Authority: 42 U.S.C. 6906, 6912, 6922, 6923, 6924, 6925, and 6937.

Subpart A—General

2. Paragraph (c) introductory text of § 262.11 is revised to read as follows:

§ 262.11 Hazardous waste determination.

* * * * *

(c) For purposes of compliance with 40 CFR part 268, or if the waste is not listed in subpart D of this part, the generator must then determine whether the waste is identified in subpart C of 40 CFR part 261 by either:

* * * * *

Subpart C—Pre-Transport Requirements

3. Paragraph (a)(4) of § 262.34 is revised to read as follows:

§ 262.34 Accumulation time.

(a) * * *

(4) The generator complies with the requirements for owners or operators in subparts C and D in 40 CFR part 265, with § 265.16, and with 40 CFR 268.7(a)(4).

* * * * *

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

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

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

Subpart B—General Facility Standards

2. In § 264.13, the comment following Paragraph (a)(2) is revised to read as follows:

§ 264.13 General waste analysis.

(a) * * *

(2) * * *

[Comment: For example, the facility's records of analyses performed on the waste before the effective date of these regulations, or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility, may be included in the data base required to comply with paragraph (a)(1) of this section. The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part of the information required by paragraph (a)(1) of this section, except as othewise specified in 40 CFR 268.7 (b) and (c). If the generator does not supply the information, and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this section.]

* * * * *

Subpart K—Surface Impoundments

3. The introductory text of § 264.229 is revised to read as follows:

§ 264.229 Special requirements for ignitable or reactive waste.

Ignitable or reactive waste must not be placed in a surfaee impoundment, unless the waste and impoundment satisfy all applicable requirements of 40 CFR part 268, and:

* * * * *

Subpart L—Waste Piles

4. The introductory text of § 264.256 is revised to read as follows:

§ 264.256 Special requirements for ignitable or reactive waste.

Ignitable or reactive waste must not be place in a waste pile unless the waste and waste pile satisfy all applicable requirements of 40 CFR part 268, and:

* * * * *

Subpart M—Land Treatment

5. The introductory text of § 264.281 is revised to read as follows:

§ 264.281 Special requirements for ignitable or reactive waste.

The owner or operator must not apply ignitable or reactive waste to the treatment zone unless the waste and the treatment zone meet all applicable requirements of 40 CFR part 268, and:

* * * * *

Subpart N—Landfills

6. In § 264.312, paragraphs (a) introductory text and (b) are revised to read as follows:

§ 264.312 Special requirements for ignitable or reactive waste.

(a) Except as provided in paragraph (b) of this section, and in § 264.316, ignitable or reactive waste must not be placed in a landfill, unless the waste and landfill meet all applicable requirements of part 268, and:

* * * * *

(b) Except for prohibited wastes which remain subject to treatment standards in subpart D of part 268, ignitable wastes in containers may be landfilled without meeting the requirements of paragraph (a) of this section, provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes must be disposed of in non-leaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; must be covered daily with soil or other non-combustible material to minimize the potential for ignition of the wastes; and must not be disposed of in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the waste.

7. In § 264.316, paragraph (f) is added to read as follows:

§ 264.316 Disposal of small containers of hazardous waste in overpacked drums (lab packs).

* * * * *

(f) Such disposal is in compliance with the requirements of Part 268. Persons who incinerate lab packs according to the requirements in 40 CFR 268.42(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums must meet the DOT specifications in 49 CFR 173.12 and be overpacked according to the requirements in paragraph (b) of this section.

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

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

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

Subpart A—General

2. Section 265.1(e) is revised to read as follows:

§ 265.1 Purpose, scope, and applicability.

* * * * *

(e) The requirements of this part apply to owners or operators of all facilities which treat, store or dispose of hazardous waste referred to in 40 CFR part 268, and the 40 CFR part 268 standards are considered material conditions or requirements of the part 265 interim status standards.

Subpart B—General Facility Standards

3. The comment at the end of paragraph (a) of § 265.13 is revised to read as follows:

§ 265.13 General waste analysis.

(a) * * *

(2) * * *

Comment: for example, the facility's records of analyses performed on the waste before the effective date of these regulations, or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility, may be included in the data base required to comply with paragraph (a)(1) of this section. The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part of the information required by paragraph (a)(1) of this section, except as otherwise specified in 40 CFR 268.7 (b) and (c). If the generator does not supply the information, and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this section.]

* * * * *

Subpart K—Surface Impoundments

4. The introductory text of § 265.229 is revised to read as follows:

§ 265.229 Special requirements for ignitable or reactive waste.

Ignitable or reactive waste must not be placed in a surface impoundment, unless the waste and impoundment satisfy all applicable requirements of 40 CFR part 268, and:

* * * * *

Subpart L—Waste Piles

5. Paragraph (a) introductory text of § 265.256 is revised to read as follows:

§ 265.256 Special requirements for ignitable or reactive waste.

(a) Ignitable or reactive waste must not be placed in a pile unless the waste and pile satisfy all applicable requirements of 40 CFR part 268, and:

* * * * *

Subpart M—Land Treatment

6. The introductory text of § 265.281 is revised to read as follows:

§ 265.281 Special requirements for ignitable or reactive waste.

The owner or operator must not apply ignitable or reactive waste to the treatment zone unless the waste and treatment zone meet all applicable requirements of 40 CFR part 268, and:

* * * * *

Subpart N—Landfills

7. Paragraphs (a) introductory text and (b) of § 265.312 are revised to read as follows:

§ 265.312 Special requirements for ignitable or reactive waste.

(a) Except as provided in paragraph) of this section, and in § 265.316, nitable or reactive waste must not be aced in a landfill, unless the waste d landfill meets all applicable quirements of 40 CFR part 268, and:

* * * * *

(b) Except for prohibited wastes hich remain subject to treatment andards in subpart D of part 268, nitable wastes in containers may be ndfilled without meeting the quirements of paragraph (a) of this ction, provided that the wastes are sposed of in such a way that they are otected from any material or nditions which may cause them to nite. At a minimum, ignitable wastes ust be disposed of in non-leaking ntainers which are carefully handled d placed so as to avoid heat, sparks, pture, or any other condition that ght cause ignition of the wastes; must covered daily with soil or other non-mbustible material to minimize the tential for ignition of the wastes; and ust not be disposed of in cells that ntain or will contain other wastes hich may generate heat sufficient to use ignition of the waste.

8. In § 265.316, paragraph (f) is added read as follows:

265.316 Disposal of small containers of zardous waste in overpacked drums (lab cks).

* * * * *

(f) Such disposal is in compliance with e requirements of 40 CFR part 268. rsons who incinerate lab packs cording to the requirements in 40 CFR 8.42(c)(1) may use fiber drums in place metal outer containers. Such fiber ums must meet the DOT specifications 49 CFR 173.12 and be overpacked cording to the requirements in ragraph (b) of this section.

ART 268—LAND DISPOSAL ESTRICTIONS

1. The authority citation for part 268 ntinues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, and 6924.

Subpart A—General

2. In § 268.1, paragraph (c)(3) is added, and paragraph (c)(5) is removed, to read as follows:

§ 268.1 Purpose, scope, and applicability.

(c) * * *

(3) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited from land disposal under this part, are not prohibited from land disposal if the wastes:

(i) Are disposed into a nonhazardous or hazardous injection well as defined in 40 CFR 144.6(a); and

(ii) Do not exhibit any prohibited characteristic of hazardous waste at the point of injection.

* * * * *

3. Section 268.2 is revised to read as follows:

§ 268.2 Definitions applicable in this part.

When used in this part the following terms have the meanings given below:

(a) *Halogenated organic compounds* or *HOCs* means those compounds having a carbon-halogen bond which are listed under appendix III to this part.

(b) *Hazardous constituent or constituents* means those constituents listed in appendix VIII to part 261 of this chapter.

(c) *Land disposal* means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault or bunker intended for disposal purposes.

(d) *Nonwastewaters* are wastes that do not meet the criteria for wastewaters in paragraph (g)(6) of this section.

(e) *Polychlorinated biphenyls* or *PCBs* are halogenated organic compounds defined in accordanoe with 40 CFR 761.3.

(f) *Wastewaters* are wastes that contain less than 1% by weight total organic carbon (TOC) *and* less than 1% by weight total suspended solids (TSS), with the following exoeptions:

(1) *F001, F002, F003, F004, F005 solvent-water mixtures* that contain less than 1% by weight TOC or less than 1% by weight total F001, F002, F003, F004, F005 solvent constituents listed in § 268.41, Table CCWE.

(2) *K011, K013, K014 wastewaters* (as generated) that contain less than 5% by weight TOC and less than 1% by weight TSS.

(3) *K103 and K104 wastewaters* contain less than 4% by weight TOC and less than 1% by weight TSS.

(g) *Inorganic Solid Debris* are nonfriable inorganic solids that are incapable of passing through a 9.5 mm standard sieve that require cutting, or crushing and grinding in mechanical sizing equipment prior to stabilization, limited to the following inorganic or metal materials:

(1) Metal slags (either dross or scoria).

(2) Glassified slag.

(3) Glass.

(4) Concrete (excluding cementitious or pozzolanic stabilized hazardous wastes).

(5) Masonry and refractory bricks.

(6) Metal cans, containers, drums, or tanks.

(7) Metal nuts, bolts, pipes, pumps, valves, appliances, or industrial equipment.

(8) Scrap metal as defined in 40 CFR 261.1(c)(6).

4. Section 268.3 is revised to read as follows:

§ 268.3 Dilution prohibited as a substitute for treatment.

(a) Except as provided in paragraph (b) of this section, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with subpart D of this part, to circumvent the effective date of a prohibition in subpart C of this part, to otherwise avoid a prohibition in subpart C of this part, or to circumvent a land disposal prohibition imposed by RCRA section 3004.

(b) Dilution of wastes that are hazardous only because they exhibit a characteristic in a treatment system which treats wastes subsequently discharged to a water of the United States pursuant to a permit issued under section 402 of the Clean Water Act (CWA) or which treats wastes for purposes of pretreatment requirements under section 307 of the CWA is not impermissible dilution for purposes of this section unless a method has been specified as the treatment standard in § 268.42.

5. In § 268.7, paragraphs (a)(1)(ii), (a)(2)(i)(B), (a)(3)(ii), and (a)(4) are revised; new paragraphs (a)(7), (a)(8), and (a)(9) are added; paragraph (b)(4)(ii) is revised; the certification in paragraph (b)(5)(i) is revised; new paragraph (b)(5)(iii) is added; paragraph (b)(7) is removed and paragraph (b)(8) is redesignated as paragraph (b)(7); the

introductory text to paragraph (c) is revised; and paragraphs (c)(3) and (c)(4) are removed, to read as follows:

§ 268.7 Waste analysis and recordkeeping.

(a) * * *

(1) * * *

(ii) The corresponding treatment standards for wastes F001–F005, F039, and wastes prohibited pursuant to § 268.32 or RCRA Section 3004(d). Treatment standards for all other restricted wastes may be referenced by including on the notification the subcategory of the waste, the treatability group(s) of the waste(s), and the CFR section(s) and paragraphs where the treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in § 268.42, the applicable five-letter treatment code found in Table 1 of § 268.42 (*e.g.*, INCIN, WETOX) also must be listed on the notification.

* * * * *

(2) * * *

(i) * * *

(B) The corresponding treatment standards for wastes F001–F005, F039, and wastes prohibited pursuant to § 268.32 or RCRA Section 3004(d). Treatment standards for all other restricted wastes may be referenced by including on the notification the subcategory of the waste, the treatability group(s) of the waste(s), and the CFR section(s) and paragraphs where the treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in § 268.42, the applicable five-letter treatment code found in Table 1 § 268.42 (*e.g.*, INCIN, WETOX) also must be listed on the notification.

* * * * *

(3) * * *

(ii) The corresponding treatment standards for wastes F001–F005, F039, and wastes prohibited pursuant to § 268.32 or RCRA section 3004(d). Treatment standards for all other restricted wastes may be referenced by including on the notification the subcategory of the waste, the treatability group(s) of the waste(s), and the CFR section(s) and paragraphs where the treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in § 268.42, the applicable five-letter treatment code found in Table 1 of § 268.42 (*e.g.*, INCIN, WETOX) also must be listed on the notification.

(4) If a generator is managing a prohibited waste in tanks or containers regulated under 40 CFR 262.34, and is treating such waste in such tanks or containers to meet applicable treatment standards under Subpart D of this part, the generator must develop and follow a written waste analysis plan which describes the procedures the generator will carry out to comply with the treatment standards. The plan must be kept on-site in the generator's records, and the following requirements must be met:

(i) The waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the prohibited waste(s) being treated, and contain all information necessary to treat the waste(s) in accordance with the requirements of this Part, including the selected testing frequency.

(ii) Such plan must be filed with the EPA Regional Administrator (or his designated representative) or State authorized to implement Part 268 requirements a minimum of 30 days prior to the treatment activity, with delivery verified.

(iii) Wastes shipped off-site pursuant to this paragraph must comply with the notification requirements of § 268.7(a)(2).

* * * * *

(7) If a generator is managing a lab pack that contains wastes identified in Appendix IV of this part and wishes to use the alternative treatment standard under § 268.42, with each shipment of waste the generator must submit a notice to the treatment facility in accordance with paragraph (a)(1) of this section. The generator must also comply with the requirements in paragraphs (a)(5) and (a)(6) of this section, and must submit the following certification, which must be signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only the wastes specified in appendix IV to part 268 or solid wastes not subject to regulation under 40 CFR part 261. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(8) If a generator is managing a lab pack that contains organic wastes specified in Appendix V of this Part and wishes to use the alternate treatment standards under § 268.42, with each shipment of waste the generator must submit a notice to the treatment facility in accordance with paragraph (a)(1) of this section. The generator also must comply with the requirements in paragraphs (a)(5) and (a)(6) of this section, and must submit the following certification which must be signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste and that the lab pack contains only organic waste specified in Appendix V to Part 268 or solid wastes not subject to regulation under 40 CFR Part 261. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

(9) Small quantity generators with tolling agreements pursuant to 40 CFR 262.20(e) must comply with the applicable notification and certification requirements of paragraph (a) of this section for the initial shipment of the waste subject to the agreement. Such generators must retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

(b) * * *

(4) * * *

(ii) The corresponding treatment standards for wastes F001–F005, F039, and wastes prohibited pursuant to § 268.32 or RCRA Section 3004(d). Treatment standards for all other restricted wastes may be referenced by including on the notification the subcategory of the waste, the treatability group(s) of the waste(s), and the CFR section(s) and paragraphs where the treatment standards appear. Where the applicable treatment standards are expressed as specified technologies in § 268.42, the applicable five-letter treatment code found in Table 1 of § 268.42 (*e.g.*, INCIN, WETOX) also must be listed on the notification.

(5) * * *

(i) * * *

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268, subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

* * * * *

(iii) For wastes with treatment standards expressed as concentrations in the waste pursuant to § 268.43, if compliance with the treatment standards in subpart D of this part is

based in part or in whole on the analytical detection limit alternative specified in § 268.43(c), the certification also must state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR part 264, subpart O) or 40 CFR part 265, subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

* * * * *

(c) Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to 40 CFR 266.20(b), the owner or operator of any land disposal facility disposing any waste subject to restrictions under this part must:

* * * * *

6. Paragraph (a) of § 268.8 is revised to read as follows:

§ 268.8 Landfill and surface impoundment disposal restrictions.

(a) Prior to May 8, 1990, wastes which are otherwise prohibited from land disposal under § 268.33(f) of this part may be disposed in a landfill or surface impoundment which is in compliance with the requirements of § 268.5(h)(2) provided that the requirements of this section are met. As of May 8, 1990, this section is no longer in effect.

* * * * *

7. Section 268.9 is added to subpart A to read as follows:

§ 268.9 Special rules regarding wastes that exhibit a characteristic.

(a) The initial generator of a solid waste must determine each waste code applicable to the waste in order to determine the applicable treatment standards under subpart D of this part. For purposes of part 268, the waste will carry a waste code designation for any applicable listing under 40 CFR part 261, subpart D, and also one or more waste code designations under 40 CFR part 261, subpart C where the waste exhibits the relevant characteristic.

(b) Where a prohibited waste is both listed under 40 CFR part 261, subpart D and exhibits a characteristic under 40 CFR part 261, subpart C, the treatment standard for the waste code listed in 40 CFR part 261, subpart D will operate in lieu of the standard for the waste code under 40 CFR part 261, subpart C, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.

(c) In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under 40 CFR part 261, subpart C may be land disposed unless the waste complies with the treatment standards under subpart D of this part.

(d) Wastes that exhibit a characteristic are also subject to § 268.7 requirements, except that once the waste is no longer hazardous, for each shipment of such wastes to a subtitle D facility the initial generator or the treatment facility need not send a § 268.7 notification to such facility. In such circumstances, a notification and certification must be sent to the appropriate EPA Regional Administrator (or his delegated representative) or State authorized to implement part 268 requirements.

(1) The notification must include the following information:

(i) The name and address of the subtitle D facility receiving the waste shipment;

(ii) A description of the waste as initially generated, including the applicable EPA Hazardous Waste Number(s) and treatability group(s);

(iii) The treatment standards applicable to the waste at the initial point of generation.

(2) The certification must be signed by an authorized representative and must state the language found in § 268.7(b)(5)(i).

Subpart C—Prohibitions on Land Disposal

8. Section 268.35 is added to read as follows:

§ 268.35 Waste specific prohibitions—Third Third wastes.

(a) Effective August 8, 1990, the following wastes specified in 40 CFR 261.31 as EPA Hazardous Waste Numbers F006 (wastewaters), F019, and F039 (wastewaters); the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste Numbers K002; K003; K004 (wastewaters); K005 (wastewaters); K006; K008 (wastewaters); K011 (wastewaters); K013 (wastewaters), K014 (wastewaters); K017; K021 (wastewaters); K022 (wastewaters); K025 (wastewaters); K026; K029 (wastewaters); K031 (wastewaters); K032; K033; K034; K035; K041; K042; K046 (wastewaters); K048 (wastewaters); K049 (wastewaters); K050 (wastewaters); K051 (wastewaters); K052 (wastewaters); K060 (wastewaters); K061 (wastewaters); K069 (wastewaters); K073; K083 (wastewaters); K084 (wastewaters); K085; K095 (wastewaters); K096 (wastewaters); K097; K098; K100 (wastewaters); K101 (wastewaters); K102 (wastewaters); K105; and K106 (wastewaters); the wastes specified in 40 CFR 261.33(e) as EPA Hazardous Waste Numbers P001; P002; P003; P004; P005; P006; P007; P008; P009; P010 (wastewaters); P011 (wastewaters); P012 (wastewaters); P014; P015; P016; P017; P018 (wastewaters); P020; P022; P023; P024; P027; P028; P031; P033; P034; P036 (wastewaters); P037; P038 (wastewaters); P042; P045; P046; P047; P048; P049; P050; P051; P054; P056; P057; P058; P059; P060; P064; P065 (wastewaters); P066; P067; P068; P069; P070; P072; P073; P075; P076; P077; P078; P081; P082; P084; P088; P092 (wastewaters); P093; P095; P096; P101; P102; P103; P105; P108; P109; P110; P112; P113; P114; P115; P116; P118; P119; P120; P122; and P123; and the wastes specified in 40 CFR 261.33(f) as EPA Hazardous Waste Numbers U001; U002; U003; U004; U005; U006; U007; U008; U009; U010; U011; U012; U014; U015; U016; U017; U018; U019; U020; U021; U022; U023; U024; U025; U026; U027; U029; U030; U031; U032; U033; U034; U035; U036; U037; U038; U039; U041; U042; U043; U044; U045; U046; U047; U048; U049; U050; U051; U052; U053; U055; U056; U057; U059; U060; U061; U062; U063; U064; U066; U067; U068; U070; U071; U072; U073; U074; U075; U076; U077; U078; U079; U080; U081; U082; U083; U084; U085; U086; U089; U090; U091; U092; U093; U094; U095; U096; U097; U098; U099; U101; U103; U105; U106; U108; U109; U110; U111; U112; U113; U114; U115; U116; U117; U118; U119; U120 (wastewaters); U121; U122; U123; U124; U125; U126; U127; U128; U129; U130; U131; U132; U133; U134; U135; U136 (wastewaters); U137; U138; U140; U141; U142; U143; U144; U145; U146; U147; U148; U149; U150; U151 (wastewaters); U152; U153; U154; U155; U156; U157; U158; U159; U160; U161; U162; U163; U164; U165; U166; U167; U168; U169; U170; U171; U172; U173; U174; U176; U177; U178; U179; U180; U181; U182; U183; U184; U185; U186; U187; U188; U189; U191; U192; U193;

U194; U196; U197; U200; U201; U202; U203; U204; U205; U206; U207; U208; U209; U210; U211; U213; U214; U215; U216; U217; U218; U219; U220; U222; U225; U226; U227; U228; U234; U236; U237; U238; U239; U240; U243; U244; U246; U247; U248; U249; and the following wastes identified as hazardous based on a characteristic alone: D001; D002, D003, D004 (wastewaters), D005, D006; D007; D008 (except for lead materials stored before secondary smelting), D009 (wastewaters), D010, D011, D012, D013, D014, D015, D016, and D017 are prohibited from land disposal.

(b) Effective November 8, 1990, the following wastes specified in 40 CFR 261.32 as EPA Hazardous Waste Numbers K048 (nonwastewaters), K049 (nonwastewaters), K050 (nonwastewaters), K051 (nonwastewaters), and K052 (nonwastewaters) are prohibited from land disposal.

(c) Effective May 8, 1992, the following waste specified in 40 CFR 261.31 as EPA Hazardous Waste Numbers F039 (nonwastewaters); the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste Numbers K031 (nonwastewaters); K084 (nonwastewaters); K101 (nonwastewaters); K102 (nonwastewaters); K106 (nonwastewaters); the wastes specified in 40 CFR 261.33(e) as EPA Hazardous Waste Numbers P010 (nonwastewaters); P011 (nonwastewaters); P012 (nonwastewaters); P036 (nonwastewaters); P038 (nonwastewaters); P065 (nonwastewaters); P087 (nonwastewaters); and P092 (nonwastewaters); the wastes specified in 40 CFR 261.33(f) as EPA Hazardous Waste Numbers U136 (nonwastewaters); and U151 (nonwastewaters); and the following wastes identified as hazardous based on a characteristic alone: D004 (nonwastewaters); D008 (lead materials stored before secondary smelting); and D009 (nonwastewaters); inorganic solids debris as defined in 40 CFR 268.2(a)(7) (which also applies to chromium refractory bricks carrying the EPA Hazardous Waste Numbers K048–K052); and RCRA hazardous wastes that contain naturally occurring radioactive materials are prohibited from land disposal.

(d) Effective May 8, 1992, hazardous wastes listed in 40 CFR 268.12 that are mixed radioactive/hazardous wastes are prohibited from land disposal.

(e) Effective May 8, 1992, the wastes specified in this section having a treatment standard in subpart D of this part based on incineration, mercury retorting, or vitrification, and which are contaminated soil or debris, are prohibited from land disposal.

(f) Between May 8, 1990 and August 8, 1990, the wastes included in paragraph (a) may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in § 268.5(h)(2).

(g) Between May 8, 1990 and November 8, 1990, wastes included in paragraph (b) of this section may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in § 268.5(h)(2).

(h) Between May 8, 1990, and May 8, 1992, wastes included in paragraphs (c), (d), and (e) of this section may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in § 268.5(h)(2).

(i) The requirements of paragraphs (a), (b), (c), (d), and (e) of this section do not apply if:

(1) The wastes meet the applicable standards specified in subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under § 268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate standards established pursuant to a petition granted under § 268.44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to § 268.5, with respect to these wastes covered by the extension.

(j) To determine whether a hazardous waste listed in § 268.10, 268.11, and 268.12 exceeds the applicable treatment standards specified in §§ 268.41 and 268.43, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable subpart D levels, the waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified.

9. Section 268.40 is amended by revising paragraphs (a) and (c) to read as follows:

§ 268.40 Applicability of treatment standards.

(a) A restricted waste identified in § 268.41 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using the test method in appendix I of this part does not exceed the value shown in Table CCWE of § 268.41 for any hazardous constituent listed in Table CCWE for that waste, with the following exceptions: D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136. Wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using either the test method in Appendix I of this part or the test method in appendix II of part 261 does not exceed the value shown in Table CCW of § 268.41 for any hazardous constituent listed in Table CCWE for that waste.

* * * * *

(c) Except as otherwise specified in § 268.43(c), a restricted waste identified in § 268.43 may be land disposed only if the constituent concentrations in the waste or treatment residue of the waste do not exceed the value shown in Table CCW of § 268.43 for any hazardous constituents listed in Table CCW for that waste.

10. Section 268.41 is amended by revising paragraph (a) and Table CCWE—Constituent Concentrations in Waste Extract, to read as follows:

§ 268.41 Treatment standards expressed as concentrations in waste extract.

(a) Table CCWE identifies the restricted wastes and the concentrations of their associated constituents which may not be exceeded by the extract of a waste or waste treatment residual developed using the test method in Appendix I of this part for the allowable land disposal of such wastes, with the exception of wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U138. Table CCWE identifies the restricted wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136 and the concentrations of their associated constituents which may not be exceeded by the extract of a waste or waste treatment residual developed using the test method in Appendix I of this part or appendix II of 40 CFR part 261 for the allowable land disposal of such wastes. (Appendix II of this part provides Agency guidance on treatment methods that have been shown to achieve the Table CCWE levels for the respective wastes. Appendix II of this part is not a regulatory requirement but is provided to assist generators and owners/operators in their selection of appropriate treatment methods.) Compliance with these concentrations is required based upon grab samples.

TABLE CCWE.—CONSTITUENT CONCENTRATIONS IN WASTE EXTRACT

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/l)
D004	Table CCW in 268.43	Arsenic	7440-38-2	NA	5.0#
D005	Table CCW in 268.43	Barium	7440-39-3	NA	100
D006	Table CCW in 268.43	Cadmium	7440-43-9	NA	1.0
D007	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	5.0
D008	Table CCW in 268.43	Lead	7439-92-1	NA	5.0
D009 (Low Mercury Subcategory—less than 260 mg/kg Mercury).	Table 2 in 268.42 and Table CCW in 268.43.	Mercury	7439-97-6	NA	0.20
D010	Table CCW in 268.43	Selenium	7782-49-2	NA	5.7
D011	Table CCW in 268.43	Silver	7440-22-4	NA	5.0
F001-F005 spent solvents	Table 2 in 268.42 and Table CCW in 268.43.	Acetone	67-64-1	0.05	0.59
		n-Butyl alcohol	71-36-3	5.0	5.0
		Carbon disulfide	75-15-0	1.05	4.81
		Carbon tetrachloride	56-23-5	0.05	0.96
		Chlorobenzene	108-90-7	0.15	0.05
		Cresols (and cresylic acid)		2.82	0.75
		Cyclohexanone	108-94-1	0.125	0.75
		1,2-Dichlorobenzene	95-50-1	0.65	0.125
		Ethyl acetate	141-78-6	0.05	0.75
		Ethylbenzene	100-41-4	0.05	0.053
		Ethyl ether	60-29-7	0.05	0.75
		Isobutanol	78-83-1	5.0	5.0
		Methanol	67-56-1	0.25	0.75
		Methylene chloride	75-9-2	0.20	0.96
		Methyl ethyl ketone	78-93-3	0.05	0.75
		Methyl isobutyl ketone	108-10-1	0.05	0.33
		Nitrobenzene	98-95-3	0.66	0.125
		Pyridine	110-86-1	1.12	0.33
		Tetrachloroethylene	127-18-4	0.079	0.05
		Toluene	108-88-3	1.12	0.33
		1,1,1-Trichloroethane	71-55-6	1.05	0.41
		1,1,2-Trichloro-1,2,2-Tetrifluorethane	76-13-1	1.05	0.96
		Trichloroethylene	79-01-6	0.062	0.091
		Trichlorofluoromethane	75-69-4	0.05	0.96
		Xylene		0.05	0.15
F006	Table CCW in 268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F007	Table CCW in 268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F008	Table CCW in 268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F009	Table CCW in 268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F011	Table CCW in 268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F012	Table CCW in 268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F019	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	5.2
F020-F023 and F026-F028 dioxin containing wastes.*.		HxCDD-All Hexachlorodibenzo-p-dioxins.		<1 ppb	<1 ppb
		HxCDF-All Hexachlorodibenzofurans		<1 ppb	<1 ppb
		PeCDD-All Pentachlorodibenzo-p-dioxins.		<1 ppb	<1 ppb
		PeCDF-All Pentachlorodibenzofurans		<1 ppb	<1 ppb
		TCDD-All Tetrachlorodibenzo-p-dioxins.		<1 ppb	<1 ppb
		TCDF-All Tetrachlorodibenzofurans		<1 ppb	<1 ppb
		2,4,5-Trichlorophenol	95-95-4	<0.05 ppm	<0.05 ppm
		2,4,6-Trichlorophenol	88-06-2	<0.05 ppm	<0.05 ppm

TABLE CCWE.—CONSTITUENT CONCENTRATIONS IN WASTE EXTRACT—Continued

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/l)
		2,3,4,6-Tetrachlorophenol	58-90-2	<0.05 ppm	<0.05 ppm
		Pentachlorophenol	87-86-5	<0.01 ppm	<0.01 ppm
F024	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.073
		Lead	7439-92-1	NA	0.021
		Nickel	7440-02-0	NA	0.088
F039	Table CCW in 268.43	Antimony	7440-36-0	NA	0.23
		Arsenic	7440-38-2	NA	5.0
		Barium	7440-39-3	NA	52
		Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Mercury	7439-97-6	NA	0.025
		Nickel	7440-02-0	NA	0.32
		Selenium	7782-49-2	NA	5.7
		Silver	7440-22-4	NA	0.072
K001	Table CCW in 268.43	Lead	7439-92-1	NA	0.51
K002	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K003	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K004	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K005	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K006 (anhydrous)	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K006 (hydrated)	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	5.2
K007	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K008	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K015	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	1.7
		Lead	7439-92-1	NA	0.2
K021	Table CCW in 268.43	Antimony	7440-36-0	NA	0.23#
K022	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	5.2
		Nickel	7440-02-2	NA	0.32
K028	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.073
		Lead	7439-92-1	NA	0.021
		Nickel	7440-02-0	NA	0.088
K031	Table CCW in 268.43	Arsenic	7440-38-2	NA	5.6#
K046	Table CCW in 268.43	Lead	7439-92-1	NA	0.18
K048	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K049	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K050	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K051	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K052	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K061 (Low Zinc Subcategory—less than 15% Total Zinc).	Table CCW in 268.43	Cadmium	7440-43-9	NA	0.14
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.24
		Nickel	7440-02-0	NA	0.32
K062	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K069 (Calcium Sulfate Subcategory)	Table 2 in 268.42 and Table CCW in 268.43.	Cadmium	7440-43-9	NA	0.14
		Lead	7439-92-1	NA	0.24
K071 (Low Mercury Subcategory—less than 16 mg/kg Mercury).	Table CCW in 268.43	Mercury	7439-97-8	NA	0.025
K083	Table CCW in 268.43	Nickel	7440-02-0	NA	0.088
K084	Table CCW in 268.43	Arsenic	7440-38-2	NA	5.6#
K086	Table CCW in 268.43	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K087	Table CCW in 268.43	Lead	7439-92-1	NA	0.51
K100	Table CCW in 268.43	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
K101	Table CCW in 268.43	Arsenic	7440-38-2	NA	5.6#
K102	Table CCW in 268.43	Arsenic	7440-38-2	NA	5.6#
K106 (Low Mercury Subcategory—less than 260 mg/kg Mercury—residues from RMERC).	Table 2 in 268.42 and Table CCW in 268.43.	Mercury	7439-97-6	NA	0.20
K106 (Low Mercury Subcategory—less than 260 mg/kg Mercury—that are not residues from RMERC).	Table 2 in 268.42 and Table CCW in 268.43.	Mercury	7439-97-6	NA	0.025

TABLE CCWE.—CONSTITUENT CONCENTRATIONS IN WASTE EXTRACT—Continued

Waste code	See also	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/l)
K115	Table CCW	Nickel	7440-02-0	NA	0.32

#—These treatment standards have been based on EP Leachate analysis but this does not preclude the use of TCLP analysis.
*—These waste codes are not subcategorized into wastewaters and nonwastewaters.
NA—Not Applicable.

TABLE CCWE.—CONSTITUENT CONCENTRATIONS FOR WASTE EXTRACTS

Waste code	See also	Commercial chemical name	Regulated hazardous constituent	CAS number for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/l)
10	Table CCW in 268.43	Arsenic acid	Arsenic	7440-38-2	NA	5.6
11	Table CCW in 268.43	Arsenic pentoxide	Arsenic	7440-38-2	NA	5.6
12	Table CCW in 268.43	Arsenic trioxide	Arsenic	7440-38-2	NA	5.6
13	Table CCW in 268.43	Barium cyanide	Barium	7440-39-3	NA	52
36	Table CCW in 268.43	Dichlorophenylarsine	Arsenic	7440-38-2	NA	5.6
38	Table CCW in 268.43	Diethylarsine	Arsenic	7440-38-2	NA	5.6
65 (Low Mercury Subcategory—less than 260 mg/kg Mercury-residues from RMERC).	Table 2 in 268.42 and Table CCW in 268.43.	Mercury fulminate	Mercury	7439-97-6	NA	0.20
65 (Low Mercury Subcategory—less than 260 mg/kg Mercury-incinerator residues (and are not residues from RMERC)).	Table 2 in 268.42 and Table CCW in 268.43.	Mercury fulminate	Mercury	7439-97-6	NA	0.025
73	Table CCW in 268.43	Nickel carbonyl	Nickel	7440-02-0	NA	0.32
74	Table CCW in 268.43	Nickel cyanide	Nickel	7440-02-0	NA	0.32
92 (Low Mercury Subcategory—less than 260 mg/kg Mercury residues from RMERC).	Table 2 in 268.42 and Table CCW in 268.43.	Phenyl mercury acetate	Mercury	7439-97-6	NA	0.20
92 (Low Mercury Subcategory—less than 260 mg/kg Mercury-incinerator residues (and are not residues from RMERC)).	Table 2 in 268.42 and Table CCW in 268.43.	Phenyl mercury acetate	Mercury	7439-97-6	NA	0.025
99	Table CCW in 268.43	Potassium silver cyanide	Silver	7440-22-4	NA	0.072
03	Table CCW in 268.43	Selenourea	Selenium	7782-49-2	NA	5.7
04	Table CCW in 268.43	Silver cyanide	Silver	7440-22-4	NA	0.072
10	Table CCW in 268.43	Tetraethyl lead	Lead	7439-92-1	NA	0.51
14	Table CCW in 268.43	Thallium selenite	Selenium	7782-49-2	NA	5.7
32	Table CCW in 268.43	Calcium chromate	Chromium (Total)	7440-47-32	NA	0.094
51	Table CCW in 268.43	Creosote	Lead	7439-92-1	NA	0.51
36	Table CCW in 268.43	Cacodylic acid	Arsenic	7440-38-2	NA	5.6
44	Table CCW in 268.43	Lead acetate	Lead	7439-92-1	NA	0.51
45	Table CCW in 268.43	Lead phosphate	Lead	7439-92-1	NA	0.51
46	Table CCW in 268.43	Lead subacetate	Lead	7439-92-1	NA	0.51
61 (Low Mercury Subcategory—less than 260 mg/kg Mercury—residues from RMERC).	Table CCW in 268.43 and in Table 2 in 268.42.	Mercury	Mercury	7439-97-6	NA	0.20
61 (Low Mercury Subcategory—less than 260 mg/kg Mercury—that are not residues from RMERC).	Table CCW in 268.43 and Table 2 in 268.42.	Mercury	Mercury	7439-97-6	NA	0.025
04	Table CCW in 268.43	Selenium dioxide	Selenium	7782-49-2	NA	5.7
05	Table CCW in 268.43	Selenium sulfide	Selenium	7782-49-2	NA	5.7

—These treatment standards have been based on EP Leachate analysis but this does not preclude the use of TCLP analysis.
*—These waste codes are not subcategorized into wastewaters and nonwastewaters.
NA—Not Applicable.

* * * *

Section 268.42 is amended by revising ragraphs (a) introductory text and (2), by removing paragraphs (a)(3) d (a)(4), by revising paragraph (b), d by adding paragraphs (c), (d), and to read as follows:

§ 268.42 Treatment standards expressed as specified technologies.

(a) The following wastes in paragraphs (a)(1) and (a)(2) of this section and in Table 2 and Table 3 of this section must be treated using the technology or technologies specified in paragraphs (a)(1) and (a)(2) and Table 1 of this section.

* * * * *

(2) Nonliquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentration greater than or equal to 1,000 mg/kg and liquid HOC-containing

wastes that are prohibited under § 268.32(e)(1) of this part must be incinerated in accordance with the requirements of 40 CFR part 264, subpart O or 40 CFR part 265, subpart O. These treatment standards do not apply where the waste is subject to a part 268, subpart C treatment standard for specific HOC (such as a hazardous waste chlorinated solvent for which a treatment standard is established under § 268.41(a)).

TABLE 1.—TECHNOLOGY CODES AND DESCRIPTION OF TECHNOLOGY-BASED STANDARDS

Technology code	Description of technology-based standard
ADGAS	Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid)—venting can be accomplished through physical release utilizing values/piping; physical penetration of the container; and/or penetration through detonation.
AMLGM	Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.
BIODG	Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).
CARBN	Carbon adsorption (granulated or powdered) of non-metallic inorganics, organo-metallics, and/or organic constituents, operated such that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., Total Organic Carbon can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs.
CHOXD	Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combinations or reagents: (1) Hypochlorite (e.g. bleach); (2) chlorine; (3) chlorine dioxide; (4) ozone or UV (ultraviolet light) assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permangantes; and/or (9) other oxidizing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination.
CHRED	Chemical reduction utilizing the following reducing reagents (or waste reagents) or combinations of reagents: (1) Sulfur dioxide; (2) sodium, potassium, or alkali salts of sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; and/or (5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Halogens can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues). Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state.
DEACT	Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, and/or reactivity.
FSUBS	Fuel substitution in units operated in accordance with applicable technical operating requirements.
HLVIT	Vitrification of high level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the Nuclear Regulatory Commission.
IMERC	Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of 40 CFR part 264, subpart O and 40 CFR part 265, subpart O. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., High or Low Mercury Subcategories).
INCIN	Incineration in units operated in accordance with the technical operating requirements of 40 CFR part 264, subpart O and 40 CFR part 265, subpart O.
LLEXT	Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse and a raffinate (extracted liquid waste) proportionately low in organics that must undergo further treatment as specified in the standard.
MACRO	Macroencapsulation with surface coating materials such as polymeric organics (e.g. resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to 40 CFR 260.10.
NEUTR	Neutralization with the following reagents (or waste reagents) or combinations of reagents: (1) Acids; (2) bases; or (3) water (including wastewaters) resulting in a pH greater than 2 but less than 12.5 as measured in the aqueous residuals.
NLDBR	No land disposal based on recycling.
PRECP	Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, flourides, or phosphates. The following reagents (or waste reagents) are typically used alone or in combination: (1) Lime (i.e., containing oxides and/or hydroxides of calcium and/or magnesium; (2) caustic (i.e., sodium and/or potassium hydroxides; (3) soda ash (i.e., sodium carbonate); (4) sodium sulfide; (5) ferric sulfate or ferric chloride; (6) alum; or (7) sodium sulfate. Additional floculating, coagulation, or similar reagents/processes that enhance sludge dewatering characteristics are not precluded from use.
RBERY	Thermal recovery of Beryllium.
RCGAS	Recovery/reuse of compressed gases including techniques such as reprocessing of the gases for reuse/resale; filtering/adsorption of impurities; remixing for direct reuse of resale; and use of the gas as a fuel source.
RCORR	Recovery of acids or bases utilizing one or more of the following recovery technologies: (1) Distillation (i.e., thermal concentration); (2) ion exchange; (3) resin or solid adsorption; (4) reverse osmosis; and/or (5) incineration for the recovery of acid—Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.
RLEAD	Thermal recovery of lead in secondary lead smelters.
RMERC	Retorting or roasting in a thermal processing unit capable of volatilizing mercury and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit (or facility) must be subject to one or more of the following: (a) A National Emissions Standard for Hazardous Air Pollutants (NESHAP) for mercury; (b) a Best Available Control Technology (BACT) or a Lowest Achievable Emission Rate (LAER) standard for mercury imposed pursuant to a Prevention of Significant Deterioration (PSD) permit; or (c) a state permit that establishes emission limitations (within meaning of Section 302 of the Clean Air Act) for mercury. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., High or Low Mercury Subcategories).
RMETL	Recovery of metals or inorganics utilizing one or more of the following direct physical/removal technologies: (1) Ion exchange; (2) resin or solid (i.e., zeolites) adsorption; (3) reverse osmosis; (4) chelation/solvent extraction; (5) freeze crystalization; (6) ultrafiltration; and/or 6 simple precipitation (i.e., crystalization)—Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.
RORGS	Recovery of organics utilizing one or more of the following technologies: (1) Distillation; (2) thin film evaporation; (3) steam stripping; (4) carbon adsorption; (5) critical fluid extraction; (6) liquid-liquid extraction; (7) precipitation/crystallization (including freeze crystallization); or (8) chemical phase separation techniques (i.e., addition of acids, bases, demulsifiers, or similar chemicals); Note: This does not preclude the use of other physical phase separation techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.
RTHRM	Thermal recovery of metals or inorganics from nonwastewaters in units defined in 40 CFR 260.10, paragraphs (1), (6), (7), (11), and (12), under the definition of "industrial furnaces".

TABLE 1.—TECHNOLOGY CODES AND DESCRIPTION OF TECHNOLOGY-BASED STANDARDS—Continued

Technology code	Description of technology-based standard
RZINC	Resmelting in for the purpose of recovery of zinc high temperature metal recovery units.
STABI.	Stabilization with the following reagents (or waste reagents) or combinations of reagents: (1) Portland cement; or (2) lime/pozzolans (e.g., fly ash and cement kiln dust)—this does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set/cure time and/or compressive strength, or to overall reduce the leachability of the metal or inorganic.
SSTRP	Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as, temperature and pressure ranges have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit such as, the number of separation stages and the internal column design. Thus, resulting in a condensed extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse and an extracted wastewater that must undergo further treatment as specified in the standard.
WETOX	Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues).
WTRRX	Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic/ignitable levels of gases released during the reaction.

NOTE 1: When a combination of these technologies (i.e., a treatment train) is specified as a single treatment standard, the order of application is specified in 268.42, Table 2 by indicating the five letter technology code that must be applied first, then the designation "fb." (an abbreviation for "followed by"), then the five tter technology code for the technology that must be applied next, and so on.

NOTE 2: When more than one technology (or treatment train) are specified as *alternative* treatment standards, the five letter technology codes (or the treatment ains) are separated by a semicolon (;) with the last technology preceded by the word "OR". This indicates that any one of these BDAT technologies or treatment ains can be used for compliance with the standard.

TABLE 2.—TECHNOLOGY-BASED STANDARDS BY RCRA WASTE CODE

Waste code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
001		Ignitable Liquids based on 261.21(a)(1)—Wastewaters.	NA	DEACT	NA.
001		Ignitable Liquids based on 261.21(a)(1)—Low TOC Ignitable Liquids Subcategory—Less than 10% total organic carbon.	NA	NA	DEACT.
001		Ignitable Liquids based on 261.21(a)(1)—High TOC Ignitable Liquids Subcategory—Greater than or equal to 10% total organic carbon.	NA	NA	FSUBS; RORGS; or INCIN.
001		Ignitable compressed gases based on 261.21(a)(3).	NA	NA	DEACT**.
001		Ignitable reactives 261.21(a)(2)	NA	NA	DEACT.
001		Oxidizers based on 261.21(a)(4)	NA	DEACT	DEACT.
002		Acid subcategory based on 261.22(a)(1)	NA	DEACT	DEACT.
002		Alkaline subcategory based on 261.22(a)(1)	NA	DEACT	DEACT.
002		Other corrosives based on 261.22(a)(2)	NA	DEACT	DEACT.
003		Reactive sulfides based on 261.23(a)(5)	NA	DEACT	DEACT.
003		Explosives based on 261.23(a) (6), (7), and (8)	NA	DEACT	DEACT.
003		Water reactives based on 261.23(a) (2), (3), and (4).	NA	NA	DEACT.
003		Other reactives based on 261.23(a)(1)	NA	DEACT	DEACT.
006		Cadmium containing batteries	7440-43-9	NA	RTHRM.
008		Lead acid batteries (Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of 40 CFR 268 or exempted under other EPA regulations (see 40 CFR 266.80).).	7439-92-1	NA	RLEAD.
009	Table CCWE in 268.41 and Table CCW in 268.43.	Mercury: (High Mercury Subcategory—greater than or equal to 260 mg/kg total Mercury—contains mercury and organics (and are not incinerator residues)).	7439-97-6	NA	IMERC; or RMERC.
009	Table CCWE in 268.41 and Table CCW in 268.43.	Mercury: (High Mercury Subcategory—greater than or equal to 260 mg/kg total Mercury—inorganics (including incinerator residues and residues from RMERC)).	7439-97-6	NA	RMERC.
012	Table CCW in 268.43	Endrin	72-20-8	BIODG; or INCIN	NA.
013	Table CCW in 268.43	Lindane	58-89-9	CARBN; or INCIN	NA.
014	Table CCW in 268.43	Methoxychlor	72-43-5	WETOX; or INCIN	NA.
015	Table CCW in 268.43	Toxaphene	8001-35-1	BIODG; or INCIN	NA.
016	Table CCW in 268.43	2,4-D	94-75-7	CHOXD; BIODG; or INCIN	NA.
017	Table CCW in 268.43	2,4,5-TP	93-72-1	CHOXD; or INCIN	NA.
005	Table CCWE in 268.41 and Table CCW in 268.43.	2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.

TABLE 2.—TECHNOLOGY-BASED STANDARDS BY RCRA WASTE CODE—Continued

Waste code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
F005	Table CCWE in 268.41 and Table CCW in 268.43.	2-Ethoxyethanol	110-80-5	BIODG: or INCIN	INCIN.
F024	Table CCWE in 268.41 and Table CCW in 268.43.		NA	INCIN	INCIN.
K025		Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	NA	LLEXT fb SSTRP fb CARBN; or INCIN	INCIN.
K026		Stripping still tails from the production of methyl ethyl pyridines.	NA	INCIN	INCIN.
K027		Centrifuge and distillation residues from toluene diisocyanate production.	NA	CARBN; or INCIN	FSUBS; or INCIN.
K039		Filter cake from the filtration of diethylphosphorodithioc acid in the production of phorate.	NA	CARBN; or INCIN	FSUBS; or INCIN.
K044		Wastewater treatment sludges from the manufacturing and processing of explosives.	NA	DEACT	DEACT.
K045		Spent carbon from the treatment of wastewater containing explosives.	NA	DEACT	DEACT.
K047		Pink/red water from TNT operations	NA	DEACT	DEACT.
K061	Table CCW in 268.43.	Emission control dust/sludge from the primary production of steel in electric furnaces (High Zinc Subcategory—greater than or equal to 15% total Zinc).	NA	NA	NLDBR.
K069	Table CCWE in 268.41 and Table CCW in 268.43.	Emission control dust/sludge from secondary lead smelting: Non-Calcium Sulfate Subcategory.	NA	NA	RLEAD.
K106	Table CCWE in 268.41 and Table CCW in 268.43.	Wastewater treatment sludge from the mercury cell process in chlorine production: (High Mercury Subcategory-greater than or equal to 260 mg/kg total mercury).	NA	NA	RMERC.
K113		Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	CARBN; or INCIN	FSUBS; or INCIN.
K114		Vicinals from the purification of toluenediame in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	CARBN; or INCIN	FSUBS; or INCIN.
K115		Heavy ends from the purification of toluenediame in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	CARBN; or INCIN	FSUBS; or INCIN.
K116		Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	NA	CARBN; or INCIN	FSUBS; or INCIN.
P001		Warfarin (>0.3%)	81-81-2	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
P002		1-Acetyl-2-thiourea	591-08-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P003		Acrolein	107-02-8	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
P005		Allyl alcohol	107-18-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
P006		Aluminum phosphide	20859-73-8	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN.
P007		5-Aminoethyl 3-isoxazolol	2763-96-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P008		4-Aminopyridine	504-24-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P009		Ammonium picrate	131-74-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
P014		Thiophenol (Benzene thiol)	108-98-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P015		Beryllium dust	7440-41-7	NA	RMETL; or RTHRM.
P016		Bis(chloromethyl)ether	542-88-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P017		Bromoacetone	598-31-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P018		Brucine	357-57-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P022	Table CCW in 268.43.	Carbon disulfide	75-15-0	NA	INCIN.
P023		Chloroacetaldehyde	107-20-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P026		1-(o-Chlorophenyl) thiourea	5344-82-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P027		3-Chloropropionitrile	542-76-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P028		Bensyl chloride	100-44-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.

TABLE 2.—TECHNOLOGY-BASED STANDARDS BY RCRA WASTE CODE—Continued

Waste code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
P031		Cyanogen	460-19-5	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN.
P033		Cyanogen chloride	506-77-4	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN.
P034		2-Cyclohexyl-4,6-dinitrophenol	131-89-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P040		0,0-Diethyl 0-pyrazinyl phosphorothioate	297-97-2	CARBN; or INCIN	FSUBS; or INCIN.
P041		Diethyl-p-nitrophenyl phosphate	311-45-5	CARBN; or INCIN	FSUBS; or INCIN.
P042		Epinephrine	51-43-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P043		Diisopropylfluorophosphate (DFP)	55-91-4	CARBN; or INCIN	FSUBS; or INCIN.
P044		Dimethoate	60-51-5	CARBN; or INCIN	FSUBS; or INCIN.
P045		Thiofanox	39196-18-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P046		alpha, alpha-Dimethylphenethylamine	122-09-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P047		4,6-Dinitro-o-cresol salts	534-52-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P049		2,4-Dithiobiuret	541-53-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P054		Aziridine	151-56-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P056	Table CCW in 268.43	Fluorine	7782-41-4	NA	ADGAS fb NEUTR.
P057		Fluoroacetamide	640-19-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P058		Fluoroacetic acid, sodium salt	62-74-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P062		Hexaethyltetraphosphate	757-58-4	CARBN; or INCIN	FSUBS; or INCIN.
P064		Isocyanic acid, ethyl ester	624-83-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P065	Table CCWE in 268.41 and Table CCW in 268.43.	Mercury fulminate: (High Mercury Subcategory—greater than or equal to 260 mg/kg total Mercury—either incinerator residues or residues from RMERC).	628-86-4	NA	RMERC.
P065	Table CCWE in 268.41 and Table CCW in 268.43.	Mercury fulminate: (All nonwastewaters that are not incinerator residues from RMERC; regardless of Mercury Content).	628-86-4	NA	IMERC.
P066		Methomyl	16752-77-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P067		2-Methylaziridine	75-55-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P068		Methyl hydrazine	60-34-4	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
P069		Methyllactonitrile	75-86-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P070		Aldicarb	116-06-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P072		1-Naphthyl-2-thiourea	86-88-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P075		Nicotine and salts	54-11-5*	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P076		Nitric oxide	10102-43-9	ADGAS	ADGAS.
P078		Nitrogen dioxide	10102-44-0	ADGAS	ADGAS.
P081		Nitroglycerin	55-63-0	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
P082	Table CCW in 268.43	N-Nitrosodimethylamine	62-75-9	NA	INCIN.
P084		N-Nitrosomethylvinylamine	4549-40-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P085		Octamethylpyrophosphoramide	152-16-9	CARBN; or INCIN	FSUBS; or INCIN.
P087		Osmium tetroxide	20816-12-0	NA	RMETL; or RTHRM.
P088		Endothall	145-73-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
P092	Table CCWE in 268.41 and Table CCW in 268.43.	Phenyl mercury acetate: (High Mercury Subcategory—greater than or equal to 260 mg/kg total Mercury—either incinerator residues or residues from RMERC).	62-38-4	NA	RMERC.
P092	Table CCWE in 268.41 and Table CCW in 268.43.	Phenyl mercury acetate: (All nonwastewaters that are not incinerator residues and are not residues from RMERC: regardless of Mercury Content).	62-38-4	NA	IMERC; or RMERC.
P093		N-Phenylthiouea	103-85-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P095		Phosgene	75-44-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P096		Phosphine	7803-51-2	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN.

TABLE 2.—TECHNOLOGY-BASED STANDARDS BY RCRA WASTE CODE—Continued

Waste code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
P102		Propargyl alcohol	107-19-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
P105		Sodium azide	26628-22-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
P108		Strychnine and salts	57-24-9*	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P109		Tetraethyldithiopyrophosphate	3689-24-5	CARBN; or INCIN	FSUBS; or INCIN.
P112		Tetranitromethane	509-14-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
P113	Table CCW in 268.43	Thallic oxide	1314-32-5	NA	RTHRM; or STABL.
P115	Table CCW in 268.43	Thallium (I) sulfate	7446-18-6	NA	RTHRM; or STABL.
P116		Thiosemicarbazide	79-19-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P118		Trichloromethanethiol	75-70-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
P119	Table CCW in 268.43	Ammonium vanadate	7803-55-6	NA	STABL.
P120	Table CCW in 268.43	Vanadium pentoxide	1314-62-1	NA	STABL.
P122		Zinc Phosphide (<10%)	1314-84-7	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN.
U001		Acetaldehyde	75-07-0	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U003	Table CCW in 268.43	Acetonitrile	75-05-8	NA	INCIN.
U006		Acetyl Chloride	75-36-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U007		Acrylamide	79-06-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U008		Acrylic acid	79-10-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U010		Mitomycin C	50-07-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U011		Amitrole	61-82-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U014		Auramine	492-80-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U015		Azaserine	115-02-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U016		Benz(c)acridine	225-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U017		Benzal chloride	98-87-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U020		Benzenesulfonyl chloride	98-09-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U021		Benzidine	92-87-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U023		Benzotrichloride	98-07-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U026		Chlornaphazin	494-03-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U033		Carbonyl fluoride	353-50-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U034		Trichloroacetaldehyde (Chloral)	75-87-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U035		Chlorambucil	305-03-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U038	Table CCW in 268.43	Chlorobenzilate	510-15-6	NA	INCIN.
U041		1-Chloro-2,3-epoxypropane (Epichlorohydrin)	106-89-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U042	Table CCW in 268.43	2-Chloroethyl vinyl ether	110-75-8	NA	INCIN.
U046		Chloromethyl methyl ether	107-30-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U049		4-Chloro-o-toluidine hydrochloride	3165-93-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U053		Crotonaldehyde	4170-30-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U055		Cumene	98-82-8	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U056		Cyclohexane	110-82-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U057	Table CCW in 268.43	Cyclohexanone	108-94-1	NA	FSUBS; or INCIN.
U058		Cyclophosphamide	50-18-0	CARBN; or INCIN	FSUBS; or INCIN.
U059		Daunomycin	20830-81-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U062		Diallate	2303-16-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U064		1,2,7,8-Dibenzopyrene	189-55-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.

TABLE 2.—TECHNOLOGY-BASED STANDARDS BY RCRA WASTE CODE—Continued

Waste code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
U073		3,3'-Dichlorobenzidine	91-94-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U074		cis-1,4-Dichloro-2-butene	1476-11-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
		trans-1,4-Dichloro-2-butene		(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U085		1,2:3,4-Diepoxybutane	1464-53-5	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U086		N,N-Diethylhydrazine	1615-80-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U087		0,0-Diethyl S-methyldithiophosphate	3288-58-2	CARBN; or INCIN	FSUBS; or INCIN.
U089		Diethyl stilbestrol	56-53-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U090		Dihydrosafrole	94-58-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U091		3,3'-Dimethoxybenzidine	119-90-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U092		Dimethylamine	124-40-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U093	Table CCW in 268.43	p-Dimethylaminoazobenzene	621-90-9	NA	INCIN.
U094		7,12-Dimethyl benz(a)anthracene	57-97-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U095		3,3'-Dimethylbenzidine	119-93-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U096		a,a-Dimethyl benzyl hydroperoxide	80-15-9	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U097		Dimethylcarbomyl chloride	79-44-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U098		1,1-Dimethylhydrazine	57-14-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U099		1,2-Dimethylhydrazine	540-73-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U103		Dimethyl sulfate	77-78-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U109		1,2-Diphenylhydrazine	122-66-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U110		Dipropylamine	142-84-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U113		Ethyl acrylate	140-88-5	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U114		Ethylene bis-dithiocarbamic acid	111-54-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U115		Ethylene oxide	75-21-8	(WETOX or CHOXD) fb CARBN; or INCIN	CHOXD; or INCIN.
U116		Ethylene thiourea	96-45-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U119		Ethyl methane sulfonate	62-50-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U122		Formaldehyde	50-00-0	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U123		Formic acid	64-18-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U124		Furan	110-00-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U125		Furfural	98-01-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U126		Glycidaldehyde	765-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U132		Hexachlorophenene	70-30-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U133		Hydrazine	302-01-2	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U134	Table CCW in 268.43	Hydrogen Flouride	7664-39-3	NA	ADGAS fb NEUTR; or NEUTR.
U135		Hydrogen Sulfide	7783-06-4	CHOXD; CHRED, or INCIN	CHOXD; CHRED; or INCIN.
U143		Lasiocarpine	303-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U147		Maleic anhydride	108-31-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U148		Maleic hydrazide	123-33-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U149		Malononitrile	109-77-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U150		Melphalan	148-82-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.

TABLE 2.—TECHNOLOGY-BASED STANDARDS BY RCRA WASTE CODE—Continued

Waste code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
U151	Table CCWE in 268.41 and Table CCW in 268.43.	Mercury: (High Mercury Subcategory—greater than or equal to 260 mg/kg total Mercury).	7439-97-6	NA	RMERC.
U153		Methane thiol	74-93-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U154		Methanol	67-56-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U156		Methyl chlorocarbonate	79-22-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U160		Methyl ethyl ketone peroxide	1338-23-4	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN.
U163		N-Methyl N'-nitro N-Nitrosoguanidine	70-25-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U164		Methylthiouracil	56-04-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U166		1,4-Naphthoquinone	130-15-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U167		1-Naphthlyamine	134-32-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U168	Table CCW in 268.43	2-Naphthlyamine	91-59-8	NA	INCIN.
U171		2-Nitropropane	79-48-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U173		N-Nitroso-di-n-ethanolamine	1116-54-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U176		N-Nitroso-N-ethylurea	759-73-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U177		N-Nitroso-N-methylurea	684-93-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U178		N-Nitroso-N-methylurethane	615-53-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U182		Paraldehyde	123-63-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U184		Pentachloroethane	76-01-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U186		1,3-Pentadiene	504-60-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U189		Phosphorus sulfide	1314-80-3	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN.
U191		2-Picoline	109-06-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U193		1,3-Propane sultone	1120-71-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U194		n-Propylamine	107-10-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U197		p-Benzoquinone	106-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U200		Reserpine	50-55-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U201		Resorcinol	108-46-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U202		Saccharin and salts	81-07-2*	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U206		Streptozatocin	18883-66-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U213		Tetrahydrofuran	109-99-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U214	Table CCW in 268.43	Thallium (I) acetate	563-68-8	NA	RTHRM; or STABL.
U215	Table CCW in 268.43	Thallium (I) carbonate	6533-73-9	NA	RTHRM; or STABL.
U216	Table CCW in 268.43	Thallium (I) chloride	7791-12-0	NA	RTHRM; or STABL.
U217	Table CCW in 268.43	Thallium (I) nitrate	10102-45-1	NA	RTHRM; or STABL.
U218		Thioacetamide	62-55-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U219		Thiourea	62-56-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U221		Toluenediamine	25376-45-8	CARBN; or INCIN	FSUBS; or INCIN.
U222		o-Toluidine hydrochloride	636-21-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U223		Toluene diisocyanate	26471-62-5	CARBN; or INCIN	FSUBS; or INCIN.
U234		sym-Trinitrobenzene	99-35-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U236		Trypan Blue	72-57-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U237		Uracil mustard	66-75-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U238		Ethyl carbamate	51-79-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.

TABLE 2.—TECHNOLOGY-BASED STANDARDS BY RCRA WASTE CODE—Continued

Waste code	See also	Waste descriptions and/or treatment subcategory	CAS No. for regulated hazardous constituents	Technology code	
				Wastewaters	Nonwastewaters
U240		2,4-Dichlorophenoxyacetic (salts and esters)	94-75-7*	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U244		Thiram	137-26-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN.
U246		Cyanogen bromide	506-68-3	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN.
U248		Warfarin (greater than or equal to 3%)	81-81-2	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN.
U249		Zinc Phosphide (<10%)	1314-84-7	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN.

* CAS Number given for parent compound only.
** This waste code exists in gaseous form and is not categorized as wastewater or nonwastewater forms.
NA—Not Applicable.

TABLE 3.—TECHNOLOGY-BASED STANDARDS FOR SPECIFIC RADIOACTIVE HAZARDOUS MIXED WASTE

Waste code	Waste descriptions and/or treatment subcategory	CAS Number	Technology code	
			Wastewaters	Nonwastewaters
D002	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D004	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D005	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D006	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D007	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D008	Radioactive Lead Solids Subcategory (Note: these lead solids include, but are not limited to, all forms of lead shielding, and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stabilization, nor do they include organo-lead materials that can be incinerated and stabilized as ash.).	7439-92-1	NA	MACRO
D008	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D009	Elemental mercury contaminated with radioactive materials	7439-97-6	NA	AMLGM
D009	Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory	7439-97-6	NA	INCIN
D009	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D010	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
D011	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	HLVIT
U151	Mercury: Elemental mercury contaminated with radioactive materials	7439-97-6	NA	AMLGM

NA—Not Applicable.

(b) Any person may submit an application to the Administrator demonstrating that an alternative treatment method can achieve a measure of performance equivalent to that achievable by methods specified in paragraphs (a), (c), and (d) of this section. The applicant must submit information demonstrating that his treatment method is in compliance with federal, state, and local requirements and is protective of human health and the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in paragraphs (a), (c), and (d) of this section. Any approval must be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such approval is issued must comply with all limitations contained in such a determination.

(c) As an alternative to the otherwise applicable subpart D treatment standards, lab packs are eligible for land disposal provided the following requirements are met:

(1) The lab packs comply with the applicable provisions of 40 CFR 264.316 and 40 CFR 265.316;

(2) All hazardous wastes contained in such lab packs are specified in appendix IV or appendix V to part 268;

(3) The lab packs are incinerated in accordance with the requirements of 40 CFR part 264, subpart O or 40 CFR part 265, subpart O; and

(4) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in subpart D of this part.

(d) Radioactive hazardous mixed wastes with treatment standards specified in Table 3 of this section are not subject to any treatment standards specified in § 268.41, § 268.43, or Table 2 of this section. Radioactive hazardous mixed wastes not subject to treatment standards in Table 3 of this section remain subject to all applicable treatment standards specified in

§ 268.41, § 268.43, and Table 2 of this section.

12. Section 268.43 is amended by revising paragraph (a) and Table CCW—Constituent Concentrations in Wastes, and by adding paragraph (c) to read as follows:

§ 268.43 Treatment standards expressed as waste concentrations.

(a) Table CCW identifies the restricted wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the waste or treatment residual (not an extract of such waste or residual) for the allowable land disposal of such waste or residual. Compliance with these concentrations is required based upon grab samples, unless otherwise noted in the following Table CCW.

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
D003 (Reactive cyanides subcategory—based on 261.23(a)(5)).		Cyanides (Total)	57-12-5	Reserved	# 590
		Cyanides (Amenable)	57-12-5	0.86	30
D004	Table CCWE in 268.41	Arsenic	7440-38-2	5.0	NA
D005	Table CCWE in 268.41	Barium	7440-39-3	100	NA
D006	Table CCWE in 268.41	Cadmium	7440-43-9	1.0	NA
D007	Table CCWE in 268.41	Chromium (Total)	7440-47-32	5.0	NA
D008	Table CCWE in 268.41	Lead	7439-92-1	5.0	NA
D009	Table CCWE in 268.41	Mercury	7439-97-6	0.20	NA
D010	Table CCWE in 268.41	Selenium	7782-49-2	1.0	NA
D011	Table CCWE in 268.41	Silver	7440-22-4	5.0	NA
D012	Table 2 in 268.42	Endrin	720-20-8	NA	0.13
D013	Table 2 in 268.42	Lindane	58-89-9	NA	0.066
D014	Table 2 in 268.42	Methoxychlor	72.43-5	NA	0.18
D015	Table 2 in 268.42	Toxaphene	8001-35-1	NA	1.3
D016	Table 2 in 268.42	2,4-D	94-75-7	NA	10.0
D017	Table 2 in 268.42	2,4,5-TP Silvex	93-76-5	NA	7.9
F001–F005 spent solvents	Table CCWE in 268.41 and Table 2 in 268.42.	1,1,2-Trichloroethane	71-55-6	0.030	● 7.6
		Benzene	71-43-2	0.070	● 3.7
F001–F005 spent solvents (Pharmaceutical industry wastewater subcategory).		Methylene chloride	75-09-2	0.44	NA
F006	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.2	590
		Cyanides (Amenable)	57-12-5	0.86	30
		Cadmium	7440-43-9	1.6	NA
		Chromium	7440-47-32	0.32	NA
		Lead	7439-92-1	0.040	NA
		Nickel	7440-02-0	0.44	NA
F007	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.9	590
		Cyanides (Amenable)	57-12-5	0.1	30
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA
F008	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.9	590
		Cyanides (Amenable)	57-12-5	0.1	30
		Chromium	7440-47-32	0.32	NA
		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA
F009	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.9	590
		Cyanides (Amenable)	57-12-5	0.1	30
		Chromium	7440-47-32	0.32	NA
		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA
F010		Cyanides (Total)	57-12-5	1.9	1.5
		Cyanides (Amenable)	57-12-5	0.1	NA
F011	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.9	110
		Cyanides (Amenable)	57-12-5	0.1	9.1
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA
F012	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.9	110
		Cyanides (Amenable)	57-12-5	0.1	9.1
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA
F019	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.2	# 590
		Cyanides (Amenable)	57-12-5	0.86	# 30
		Chromium (Total)	7440-47-32	0.32	NA
F024	Table CCWE in 268.41 and Table 2 in 268.42 (Note: F024 organic standards must be treated via incineration (INCIN)).	2-Chloro-1,3-butadiene	126-99-8	● 0.28	● 0.28
		3-Chloropropene	107-05-1	● 0.28	● 0.28
		1,1-Dichloroethane	75-34-3	● 0.014	● 0.014
		1,2-Dichloroethane	107-08-2	● 0.014	● 0.014
		1,2-Dichloropropane	78-87-5	● 0.014	● 0.014
		cis-1,3-Dichloropropene	10061-01-5	● 0.014	● 0.014
		trans-1,3-Dichloropropene	10061-02-6	● 0.014	● 0.014

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Bis(2-ethylhexyl)phthalate	117-81-7	[e] 0.036	[e] 1.8
		Hexachloroethane	67-72-1	[e] 0.036	[e] 1.8
		Chromium (Total	7440-47-32	0.35	NA
		Nickel	7440-02-0	0.47	NA
F025 (Light ends subcategory)		Chloroform	67-66-3	[e] 0.046	[e] 6.2
		1,2-Dichloroethane	107-06-2	[e] 0.21	[e] 8.2
		1,1-Dichloroethylene	75-35-4	[e] 0.025	[e] 6.2
		Methylene chloride	75-9-2	[e] 0.089	[e] 31
		Carbon tetrachloride	56-23-5	[e] 0.057	[e] 6.2
		1,1,2-Trichloroethane	79-00-5	[e] 0.054	[e] 6.2
		Trichloroethylene	79-01-6	[e] 0.054	[e] 5.6
		Vinyl chloride	75-01-4	[e] 0.27	[e] 33
F025 (Spent filters/aids and desiccants subcategory).		Chloroform	67-66-3	[e] 0.046	[e] 6.2
		Methylene chloride	75-9-2	[e] 0.089	[e] 31
		Carbon tetrachloride	56-23-5	[e] 0.057	[e] 6.2
		1,1,2-Trichloroethane	79-00-5	[e] 0.054	[e] 6.2
		Trichloroethylene	79-01-6	[e] 0.054	[e] 5.6
		Vinyl chloride	75-01-4	[e] 0.27	[e] 33
		Hexachlorobenzene	118-74-1	[e] 0.055	[e] 37
		Hexachlorobutadiene	87-68-3	[e] 0.055	[e] 28
		Hexachloroethane	67-72-1	[e] 0.055	[e] 30
F039	Table CCWE in 268.41	Acetone	67-64-1	[e] 0.28	[e] 160
		Acenaphtalene	208-96-8	[e] 0.059	[e] 3.4
		Acenaphthene	83-32-9	[e] 0.059	[e] 4.0
		Acetonitrile	75-05-8	[e] 0.17	NA
		Acetophenone	96-86-2	[e] 0.010	[e] 9.7
		2-Acetylaminofluorene	53-96-3	[e] 0.059	[e] 140
		Acrylonitrile	107-13-1	[e] 0.24	[e] 84
		Aldrin	309-00-2	[e] 0.021	[e] 0.066
		4-Aminobiphenyl	92-67-1	[e] 0.13	NA
		Aniline	62-53-3	[e] 0.81	[e] 14
		Anthracene	120-12-7	[e] 0.059	[e] 4.0
		Aroclor 1016	12674-11-2	[e] 0.013	[e] 0.92
		Aroclor 1221	11104-28-2	[e] 0.014	[e] 0.92
		Aroclor 1232	11141-16-5	[e] 0.013	[e] 0.92
		Aroclor 1242	53469-21-9	[e] 0.017	[e] 0.92
		Aroclor 1248	12672-29-6	[e] 0.013	[e] 0.92
		Aroclor 1254	11097-69-1	[e] 0.014	[e] 1.8
		Aroclor 1260	11096-82-5	[e] 0.014	[e] 1.8
		alpha-BHC	319-84-6	[e] 0.00014	[e] 0.066
		beta-BHC	319-85-7	[e] 0.00014	[e] 0.066
		delta-BHC	319-86-8	[e] 0.023	[e] 0.066
		gamma-BHC	58-89-9	[e] 0.0017	[e] 0.066
		Benzene	71-43-2	[e] 0.14	[e] 36
		Benzo(a)anthracene	56-55-3	[e] 0.059	[e] 8.2
		Benzo(b)fluoranthene	205-99-2	[e] 0.055	[e] 3.4
		Benzo(k)fluoranthene	207-08-9	[e] 0.059	[e] 3.4
		Benzo(g,h,i)perylene	191-24-2	[e] 0.0055	[e] 1.5
		Benzo(a)pyrene	50-32-8	[e] 0.061	[e] 8.2
		Bromodichloromethane	75-27-4	[e] 0.35	[e] 15
		Bromoform	75-25-2	[e] 0.63	[e] 15
		Bromomethane (methyl bromide)	74-83-9	[e] 0.11	[e] 15
		4-Bromophenyl phenyl ether	101-55-3	[e] 0.055	[e] 15
		n-Butyl alcohol	71-36-3	[e] 5.6	[e] 2.6
		Butyl benzyl phthalate	85-68-7	[e] 0.017	[e] 7.9
		2-sec-Butyl-4,6-dinitrophenol	88-85-7	[e] 0.066	[e] 2.5
		Carbon tetrachloride	56-23-5	[e] 0.057	[e] 5.6
		Carbon disulfide	75-15-0	[e] 0.014	NA
		Chlordane	57-74-9	[e] 0.0033	[e] 0.13
		p-Chloroaniline	106-47-8	[e] 0.46	[e] 16
		Chlorobenzene	108-90-7	[e] 0.057	[e] 5.7
		Chlorobenzilate	510-15-6	[e] 0.10	[e] NA
		Chlorodibromomethane	124-48-1	[e] 0.057	[e] 16
		Chloroethane	75-00-3	[e] 0.27	[e] 6.0
		bis(2-Chloroethoxy) methane	111-91-1	[e] 0.036	[e] 7.2
		bis(2-Chloroethyl) ether	111-44-4	[e] 0.033	[e] 7.2
		2-Chloroethyl vinyl ether		[e] 0.057	NA
		Chloroform	67-66-3	[e] 0.046	[e] 5.6
		bis(2-Chloroisopropyl) ether	39638-32-9	[e] 0.055	[e] 7.2
		p-Chloro-m-cresol	59-50-7	[e] 0.018	[e] 14
		Chloromethane (Methyl chloride)	74-87-3	[e] 0.19	[e] 33
		2-Chloronaphthalene	91-8-7	[e] 0.055	[e] 5.6
		2-Chlorophenol	95-57-8	[e] 0.044	[e] 5.7
		3-Chloropropene	107-05-1	[e] 0.036	[e] 28
		Chrysene	218-01-9	[e] 0.059	[e] 8.2
		o-Cresol	95-48-7	[e] 0.11	[e] 5.6

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Cresol (m- and p-isomers)		[1] 0.77	[2] 3.2
		Cyclohexanone	108-94-1	[1] 0.36	NA
		1,2-Dibromo-3-chloropropane	96-12-8	[1] 0.11	[2] 15
		1,2-Dibromoethane (Ethylene dibromide).	106-93-4	[1] 0.028	[2] 15
		Dibromomethane	74-95-3	[1] 0.11	[2] 15
		2,4-Dichlorophenoxyacetic acid (2,4-D).	94-75-7	[1] 0.72	[2] 10
		o,p'-DDD	53-19-0	[1] 0.023	[2] 0.087
		p,p'-DDD	72-54-8	[1] 0.023	[2] 0.087
		o,p'-DDE	3424-82-6	[1] 0.031	[2] 0.087
		p,p'-DDE	72-55-9	[1] 0.031	[2] 0.087
		o,p'-DDT	789-02-6	[1] 0.0039	[2] 0.087
		p,p'-DDT	50-29-3	[1] 0.0039	[2] 0.087
		Dibenzo(a,h)anthracene	53-70-3	[1] 0.055	[2] 8.2
		m-Dichlorobenzene	541-73-1	[1] 0.036	[2] 6.2
		o-Dichlorobenzene	95-50-1	[1] 0.088	[2] 6.2
		p-Dichlorobenzene	106-46-7	[1] 0.090	[2] 6.2
		Dichlorodifluoromethane	75-71-8	[1] 0.23	[2] 7.2
		1,1-Dichloroethane	75-34-3	[1] 0.059	[2] 7.2
		1,2-Dichloroethane	107-06-2	[1] 0.21	[2] 7.2
		1,1-Dichloroethylene	75-35-4	[1] 0.025	[2] 33
		trans-1,2-Dichloroethene		[1] 0.054	[2] 33
		2,4-Dichlorophenol	120-83-2	[1] 0.044	[2] 14
		2,6-Dichlorophenol	87-65-0	[1] 0.044	[2] 14
		1,2-Dichloropropane	78-87-5	[1] 0.85	[2] 18
		cis-1,3-Dichloropropene	10061-01-5	[1] 0.036	[2] 18
		trans-1,3-Dichloropropene	10061-02-6	[1] 0.036	[2] 18
		Dieldrin	60-57-1	[1] 0.017	[2] 0.13
		Diethyl phthalate	84-66-2	[1] 0.20	[2] 28
		p-Dimethylaminoazobenzene	60-11-3	[1] 0.13	NA
		2,4-Dimethyl phenol	105-67-9	[1] 0.036	[2] 14
		Dimethyl phthalate	131-11-3	[1] 0.047	[2] 28
		Di-n-butyl phthalate	84-74-2	[1] 0.057	[2] 28
		1,4-Dinitrobenzene	100-25-4	[1] 0.32	[2] 2.3
		4,6-Dinitro-o-cresol	534-52-1	[1] 0.28	[2] 160
		2,4-Dinitrophenol	51-28-5	[1] 0.12	[2] 160
		2,4-Dinitrotoluene	121-14-2	[1] 0.32	[2] 140
		2,6-Dinitrotoluene	606-20-2	[1] 0.55	[2] 28
		Di-n-octyl phthalate	117-84-0	[1] 0.017	[2] 28
		Di-n-propylnitrosoamine	621-64-7	[1] 0.40	[2] 14
		1,2-Diphenyl hydrazine		[1] 0.087	NA
		1,4-Dioxane	123-91-1	[1] 0.12	[2] 170
		Disulfoton	298-04-4	[1] 0.017	[2] 6.2
		Endosulfan I	939-98-8	[1] 0.023	[2] 0.066
		Endosulfan II	33213-6-5	[1] 0.029	[2] 0.13
		Endosulfan sulfate	1-31-07-8	[1] 0.029	[2] 0.13
		Endrin	7-20-8	[1] 0.0028	[2] 0.13
		Endrin aldehyde	7421-93-4	[1] 0.025	[2] 0.13
		Ethyl acetate	141-78-6	[1] 0.34	[2] 33
		Ethyl cyanide		[1] 0.24	NA
		Ethyl benzene	100-41-4	[1] 0.057	[2] 6.0
		Ethyl ether	60-29-7	[1] 0.12	[2] 160
		bis(2-Ethylhexyl) phthalate	117-81-7	[1] 0.28	[2] 28
		Ethyl methacrylate	97-63-2	[1] 0.14	[2] 160
		Ethylene oxide	75-21-8	[1] 0.12	NA
		Famphur	52-85-7	[1] 0.017	[2] 15
		Fluoranthene	206-44-0	[1] 0.068	[2] 8.2
		Fluorene	86-73-7	[1] 0.059	[2] 4.0
		Fluorotrichloromethane	75-69-4	[1] 0.020	[2] 33
		Heptachlor	76-44-8	[1] 0.0012	[2] 0.066
		Heptachlor epoxide	1024-57-3	[1] 0.016	[2] 0.066
		Hexachlorobenzene	118-74-1	[1] 0.055	[2] 37
		Hexachlorobutadiene	87-68-3	[1] 0.055	[2] 28
		Hexachlorocyclopentadiene	77-47-4	[1] 0.057	[2] 3.6
		Hexachlorodibenzo-furans		[1] 0.000063	[2] 0.001
		Hexachlorodibenzo-p-dioxins		[1] 0.000063	[2] 0.001
		Hexachloroethane	67-72-1	[1] 0.055	[2] 28
		Hexachloropropene	1888-71-7	[1] 0.035	[2] 28
		Indeno(1,2,3,-c,d)pyrene	193-39-5	[1] 0.0055	[2] 8.2
		Iodomethane	74-88-4	[1] 0.019	[2] 65
		Isobutanol	78-83-1	[1] 5.6	[2] 170
		Isodrin	465-73-6	[1] 0.021	[2] 0.066
		Isosafrole	120-58-1	[1] 0.081	[2] 2.6
		Kepone	143-50-8	[1] 0.0011	[2] 0.13
		Methacrylonitrile	126-98-7	[1] 0.24	[2] 84
		Methapyrilene	91-80-5	[1] 0.081	[2] 1.5

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Methoxychlor	72-43-5	*0.25	●0.18
		3-Methylcholanthrene	56-49-5	*0.0055	●15
		4,4-Methylene-bis-(2-chloroaniline)	101-14-4	*0.50	●35
		Methylene chloride	75-09-2	*0.089	●33
		Methyl ethyl ketone	78-93-3	*0.28	●36
		Methyl isobutyl ketone	108-10-1	*0.14	●33
		Methyl methacrylate	80-62-6	*0.14	●160
		Methyl methansulfonate		*0.018	NA
		Methyl parathion	298-00-0	*0.014	●4.6
		Naphthalene	91-20-3	*0.059	●3.1
		2-Naphtylamine	91-59-8	*0.52	NA
		p-Nitroaniline	100-01-6	*0.028	●28
		Nitrobenzene	98-95-3	*0.068	●14
		5-Nitro-o-toluidine	99-55-8	*0.32	●28
		4-Nitrophenol	100-02-7	*0.12	●29
		N-Nitrosodiethylamine	55-18-5	*0.40	●28
		N-Nitrosodimethylamine	62-75-9	*0.40	NA
		N-Nitroso-di-n-butylamine	924-16-3	*0.40	●17
		N-Nitrosomethylethylamine	10595-95-6	*0.40	●2.3
		N-Nitrosomorpholine	59-89-2	*0.40	●2.3
		N-Nitrosopiperidine	100-75-4	*0.013	●35
		N-Nitrosopyrrolidine	930-55-2	*0.013	●35
		Parathion	56-38-2	*0.017	●4.6
		Pentachlorobenzene	608-93-5	*0.055	●37
		Pentachlorodibenzo-furans		*0.000035	●0.001
		Pentachlorodibenzo-p-dioxins		*0.000063	●0.001
		Pentachloronitrobenzene	82-68-8	*0.055	●4.8
		Pentachlorophenol	87-86-5	*0.089	●7.4
		Phenacetin	62-44-2	*0.081	●16
		Phenanthrene	85-01-8	*0.059	●3.1
		Phenol	108-95-2	*0.039	●6.2
		Phorate	298-02-2	*0.021	●4.6
		Propanenitrile (ethyl cyanide)	107-12-0	*0.24	●360
		Pronamide	23950-58-5	*0.093	●1.5
		Pyrene	129-00-0	*0.067	●8.2
		Pyridine	110-86-1	*0.014	●16
		Safrole	94-59-7	*0.081	●22
		Silvex (2,4,5-TP)	93-72-1	*0.72	●7.9
		2,4,5-T	93-76-5	*0.72	●7.9
		1,2,4,5,-Tetrachlorobenzene	95-94-3	*0.055	●19
		Tetrachlorodibenzo-furans		*0.000063	●0.001
		Tetrachlorodibenzo-p-dioxins		*0.000063	●0.001
		2,3,7,8-Tetrachlorodibenzo-p-dioxin		*0.000063	NA
		1,1,1,2-Tetrachloroethane	630-20-6	*0.057	●42
		1,1,2,2-Tetrachloroethane	79-34-6	*0.057	●42
		Tetrachloroethene	127-18-4	*0.056	●5.6
		2,3,4,6-Tetrachlorophenol	58-90-2	*0.030	●37
		Toluene	108-88-3	*0.080	●28
		Toxaphene	8001-35-1	*0.0095	●1.3
		1,2,4-Trichlorobenzene	120-82-1	*0.055	●19
		1,1,1-Trichloroethane	71-55-6	*0.054	●5.6
		1,1,2-Trichloroethane	79-00-5	*0.054	●5.6
		Trichloroethylene	79-01-6	*0.054	●5.6
		2,4,5-Trichlorophenol	95-95-4	*0.18	●37
		2,4,6-Trichlorophenol	88-06-2	*0.035	●37
		1,2,3-Trichloropropane	96-18-4	*0.85	●28
		1,1,2-Trichloro-1,2,2-trifluoro-ethane	76-13-1	*0.057	●28
		Vinyl chloride	75-01-4	*0.27	●33
		Xylene(s)		*0.32	●28
		Cyanides (Total)	57-12-5	*1.2	●1.8
		Cyanides (Amenable)	57-12-5	*0.86	NA
		Fluoride	16964-48-6	*35	NA
		Sulfide	8496-25-8	*14	NA
		Antimony	7440-38-0	*1.9	NA
		Arsenic	7440-38-2	*5.0	NA
		Barium	7440-39-3	*1.2	NA
		Beryllium	7440-41-7	*0.82	NA
		Cadmium	7440-43-9	*0.20	NA
		Chromium (Total)	7440-47-32	*0.37	NA
		Copper	7440-50-8	*1.3	NA
		Lead	7439-92-1	*0.28	NA
		Mercury	7439-97-6	*0.15	NA
		Nickel	7440-02-0	*0.55	NA
		Selenium	7782-49-2	*0.82	NA
		Silver	7440-22-4	*0.29	NA
		Vanadium	7440-62-2	*0.042	NA
001	Table CCWE in 268.41	Naphthalene	91-20-3	●0.031	●1.5

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Pentachlorophenol	87-86-5	● 0.031	● 1.5
		Phenanthrene	85-01-8	● 0.031	● 1.5
		Pyrene	129-00-0	● 0.028	● 1.5
		Toluene	108-88-3	● 0.028	● 28
		Xylenes (Total)		● 0.032	● 33
		Lead	7439-92-1	● 0.037	NA
K002	Table CCWE in 268.41	Chromium (Total)	7440-47-32	* 2.9	NA
		Lead	7439-92-1	* 3.4	NA
K003	Table CCWE in 268.41	Chromium (Total)	7440-47-32	* 2.9	NA
		Lead	7439-92-1	* 3.4	NA
K004	Table CCWE in 268.41	Chromium (Total)	7440-47-32	* 2.9	NA
		Lead	7439-92-1	* 3.4	NA
K005	Table CCWE in 268.41	Chromium (Total)	7440-47-32	* 2.9	NA
		Lead	7439-92-1	* 3.4	NA
		Cyanides (Total)	57-12-5	* 0.74	(*)
K006	Table CCWE in 268.41	Chromium (Total)	7440-47-32	* 2.9	NA
		Lead	7439-92-1	* 3.4	NA
K007	Table CCWE	Chromium (Total)	7440-47-32	* 2.9	NA
		Lead	7439-92-1	* 3.4	* NA
		Cyanides (Total)	57-12-5	* 0.74	
K008	Table CCWE in 268.41	Chromium (Total)	7440-47-32	* 2.9	NA
		Lead	7439-92-1	* 3.4	NA
K009		Chloroform	67-66-3	0.1	● 6.0
K010		Chloroform	67-66-3	0.1	6.0
K011		Acetonitrile	75-05-8	38	1.8
		Acrylonitrile	107-13-1	0.06	1.4
		Acrylamide	79-06-1	19	23
		Benzene	71-43-2	0.02	0.03
		Cyanide (Total)	57-12-5	21	57
K013		Acetonitrile	75-05-8	38	● 1.8
		Acrylonitrile	107-13-1	0.06	● 1.4
		Acrylamide	79-06-1	19	● 23
		Benzene	71-43-2	0.02	● 0.03
		Cyanide (Total)	57-12-5	21	57
K014		Acetonitrile	75-05-8	38	● 1.8
		Acrylonitrile	107-13-1	0.06	● 1.4
		Acrylamide	79-06-1	19	● 23
		Benzene	71-43-2	0.02	● 0.03
		Cyanide (Total)	57-12-5	21	57
K015	Table CCWE in 268.41	Anthracene	120-12-7	1.0	● 3.4
		Benzal chloride	98-87-3	0.28	● 6.2
		Sum of Benzo(b)fluoranthene and Benzo(k)fluoranthene.	205-99-2 207-08-9	0.029	3.4
		Phenanthrene	85-01-8	0.27	● 3.4
		Toluene	108-88-3	0.15	● 6.0
		Chromium (Total)	7440-47-32	0.32	NA
		Nickel	7440-02-0	0.44	NA
K016		Hexachlorobenzene	118-74-1	● 0.033	● 28
		Hexachlorobutadiene	87-68-3	● 0.007	● 5.6
		Hexachlorocyclopentadiene	77-47-4	● 0.007	● 5.6
		Hexachloroethane	67-72-1	● 0.033	● 28
		Tetrachloroethene	127-18-4	● 0.007	● 6.0
K017		1,2-Dichloropropane	78-87-5	*,@ 0.85	● 18
		1,2,3-Trichloropropane	96-18-4	*,@ 0.85	● 28
		Bis(2-chloroethyl)ether	111-44-4	*,@ 0.033	● 7.2
K018		Chloroethane	75-00-3	● 0.007	● 6.0
		1,1-Dichloroethane	75-34-3	● 0.007	● 6.0
		1,2-Dichloroethane	107-06-2	● 0.007	● 6.0
		Hexachloroethane	67-72-1	● 0.007	● 28
		Hexachlorobutadiene	87-68-3	● 0.033	● 5.6
		Hexachloroethane	67-72-1	● 0.007	● 28
		Pentachloroethane	76-01-7	● 0.007	● 5.6
		1,1,1-Trichloroethane	71-55-6	● 0.007	● 6.0
K019		Bis(2-chloroethyl)ether	111-44-4	● 0.007	● 5.6
		Chlorobenzene	108-90-7	● 0.006	● 6.0
		Chloroform	67-66-3	● 0.007	● 6.0
		p-Dichlorobenzene	106-46-7	● 0.008	NA
		1,2-Dichloroethane	107-06-2	● 0.007	● 6.0
		Fluorene	86-73-7	● 0.007	NA
		Hexachloroethane	67-72-1	● 0.033	● 28
		Naphthalene	91-20-3	● 0.007	● 5.6
		Phenanthrene	85-01-8	● 0.007	● 5.6
		1,2,4,5-Tetrachlorobenzene	95-94-3	● 0.017	NA
		Tetrachloroethene	127-18-4	● 0.007	● 6.0
		1,2,4-Trichlorobenzene	120-82-1	● 0.023	● 19
		1,1,1-Trichloroethane	71-55-6	● 0.007	● 6.0
K020		1,2-Dichloroethane	106-93-4	● 0.007	● 6.0

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		1,1,2,2-Tetrachloroethane	79-34-6	[e] 0.007	[e] 5.6
		Tetrachloroethene	127-18-4	[e] 0.007	[e] 6.0
K021	Table CCWE in 268.41	Chloroform	67-66-3	[*] 0.046	[e] 6.2
		Carbon tetrachloride	56-23-5	[*] 0.057	[e] 6.2
		Antimony	7440-36-0	[*] 0.60	NA
K022	Table CCWE in 268.41	Toluene	108-88-3	[*] 0.080	[e] 0.034
		Acetophenone	96-86-2	0.010	[e] 19
		Diphenylamine	22-39-4	[*] 0.52	NA
		Diphenylnitrosamine	86-30-6	[*] 0.40	NA
		Sum of Diphenylamine and Diphenylnitrosamine.		NA	[e] 13
		Phenol	108-95-2	0.039	[e] 12
		Chromium (Total)	7440-47-32	0.35	NA
		Nickel	7440-02-0	0.47	NA
23		Phthalic anhydride (measured as Phthalic acid).	85-44-9	[e] 0.54	[e] 28
24		Phthalic anhydride (measured as Phthalic acid).	85-44-9	[e] 0.54	[e] 28
28	Table CCWE in 268.41	1,1-Dichloroethane	75-34-3	[e] 0.007	[e] 6.0
		trans-1,2-Dichloroethane		[e] 0.033	[e] 6.0
		Hexachlorobutadiene	87-68-3	[e] 0.007	[e] 5.6
		Hexachloroethane	67-72-1	[e] 0.033	[e] 28
		Pentachloroethane	76-01-7	[e] 0.033	[e] 5.6
		1,1,1,2-Tetrachloroethane	630-20-6	[e] 0.007	[e] 5.6
		1,1,2,2-Tetrachloroethane	79-34-6	[e] 0.007	[e] 5.6
		1,1,1-Trichloethane	71-55-6	[e] 0.007	[e] 6.0
		1,1,2-Trichlorethane	79-00-5	[e] 0.007	[e] 6.0
		Tetrachloroethylene	127-18-4	[e] 0.007	[e] 6.0
		Cadmium	7440-43-9	6.4	NA
		Chromium (Total)	7440-47-32	0.35	NA
		Lead	7439-92-1	0.037	NA
		Nickel	7440-02-0	0.47	NA
29		Chloroform	67-66-3	0.46	[e] 6.0
		1,2-Dichloroethane	107-06-2	0.21	[e] 6.0
		1,1-Dichloroethylene	75-35-4	0.025	[e] 6.0
		1,1,1-Trichloroethane	71-55-6	0.054	[e] 6.0
		Vinyl chloride	75-01-4	0.27	[e] 6.0
30		o-Dichlorobenzene	95-50-1	[e] 0.008	NA
		p-Dichlorobenzene	106-46-7	[e] 0.008	NA
		Hexachlorobutadiene	87-68-3	[e] 0.007	[e] 5.6
		Hexachlorobutadiene	67-72-1	[e] 0.033	[e] 28
		Hexachloropropene	1888-71-7	NA	[e] 19
		Pentachlorobenzene	608-93-5	NA	[e] 28
		Pentachloroethane	76-01-7	[e] 0.007	[e] 5.6
		1,2,4,5-Tetrachlorobenzene	95-94-3	[e] 0.017	[e] 14
		Tetrachloroethane	127-18-4	[e] 0.007	[e] 6.0
		1,2,4-Trichlorobenzene	120-82-1	[e] 0.023	[e] 19
31	Table CCWE in 268.41	Arsenic	7440-38-2	0.79	NA
32		Hexachloropentadiene	77-47-4	[*] 0.057	[e] 2.4
		Chlordane	57-74-9	[*] 0.0033	[e] 0.26
		Heptachlor	76-44-8	[*] 0.012	[e] 0.066
		Heptachlor epoxide	1024-57-3	[*] 0.016	[e] 0.066
33		Hexachlorocyclopentadiene	77-47-4	[*] 0.057	[e] 2.4
34		Hexachlorocyclopentadiene	77-47-4	[*] 0.057	[e] 2.4
35		Acenaphthene	83-32-9	NA	[e] 3.4
		Anthracene	120-12-7	NA	[e] 3.4
		Benz(a)anthracene	56-55-3	[*] 0.059	[e] 3.4
		Benzo(a)pyrene	50-32-8	NA	[e] 3.4
		Chrysene	218-01-9	[*] 0.059	[e] 3.4
		Dibenz(a,h)anthracene	53-70-3	NA	[e] 3.4
		Fluoranthene	206-44-0	[*] 0.068	[e] 3.4
		Fluorene	86-73-7	NA	[e] 3.4
		Indeno(1,2,3-cd)pyrene	193-39-5	NA	[e] 3.4
		Cresols (m- and p-isomers)		[*] 0.77	NA
		Naphthalene	91-20-3	[*] 0.059	[e] 3.4
		o-cresol	95-48-7	[*] 0.11	NA
		Phenanthrene	65-01-8	[*] 0.059	[e] 3.4
		Phenol	108-95-2	0.039	NA
		Pyrene	129-00-0	[*] 0.067	[e] 8.2
36		Disulfoton	298-04-4	[*] 0.025	[e] 0.1
37		Disulfoton	298-04-4	[*] 0.025	[e] 0.1
		Toluene	108-88-3	[*] 0.080	[e] 28
38		Phorate	298-02-2	0.025	[e] 0.1
40		Phorate	298-02-2	0.025	[e] 0.1
41		Toxaphene	6001-35-1	[*] 0.0095	[e] 2.6
42		1,2,4,5-Tetrachlorobenzene	95-94-3	[*] 0.055	[e] 4.4
		o-Dichlorobenzene	95-50-1	[*] 0.088	[e] 4.4

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		p-Dichlorobenzene	106-46-7	[1] 0.090	[2] 4.4
		Pentachlorobenzene	608-93-5	[1] 0.055	[2] 4.4
		1,2,4-Trichlorobenzene	120-82-1	[1] 0.055	[2] 4.4
K043		2,4-Dichlorophenol	120-83-2	[2] 0.049	[2] 0.38
		2,6-Dichlorophenol	87-65-0	[2] 0.013	[2] 0.34
		2,4,5-Trichlorophenol	95-95-4	[2] 0.016	[2] 8.2
		2,4,6-Trichlorophenol	88-06-2	[2] 0.039	[2] 7.6
		Tetrachlorophenols (Total)		[2] 0.018	[2] 0.68
		Pentachlorophenol	87-86-5	[2] 0.22	[2] 1.9
		Tetrachloroethene	79-01-6	[2] 0.006	[2] 1.7
		Hexachlorodibenzo-p-dioxins		[2] 0.001	[2] 0.001
		Hexachlorodibenzo-furans		[2] 0.001	[2] 0.001
		Pentachlorodibenzo-p-dioxins		[2] 0.001	[2] 0.001
		Pentachlorodibenzo-furans		[2] 0.001	[2] 0.001
		Tetrachlorodibenzo-p-dioxins		[2] 0.001	[2] 0.001
		Tetrachlorodibenzo-furans		[2] 0.001	[2] 0.001
K046	Table CCWE in 268.41	Lead	7439-92-1	0.037	NA
K048	Table CCWE in 268.41	Benzene	71-43-2	[2] 0.011	[2] 14
		Benzo(a)pyrene	50-32-8	[2] 0.047	[2] 12
		Bis(2-ethylhexyl)phthalate	117-81-7	[2] 0.043	[2] 7.3
		Chrysene	218-01-9	[2] 0.043	[2] 15
		Di-n-butyl phthalate	84-74-2	[2] 0.06	[2] 3.6
		Ethylbenzene	100-41-4	[2] 0.011	[2] 14
		Fluorene	86-73-7	[2] 0.05	NA
		Naphthalene	91-20-3	[2] 0.033	[2] 42
		Phenanthrene	85-01-8	[2] 0.039	[2] 34
		Phenol	108-95-2	[2] 0.047	[2] 3.6
		Pyrene	129-00-0	[2] 0.045	[2] 36
		Toluene	108-88-3	[2] 0.011	[2] 14
		Xylene(s)		[2] 0.011	[2] 22
		Cyanides (Total)	57-12-5	[2] 0.028	[2] 1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K049	Table CCWE in 268.41	Anthracene	120-12-7	[2] 0.039	[2] 28
		Benzene	71-43-2	[2] 0.011	[2] 14
		Benzo(a)pyrene	50-32-8	[2] 0.047	[2] 12
		Bis(2-ethylhexyl)phthalate	117-81-7	[2] 0.043	[2] 7.3
		Carbon disulfide	75-15-0	[2] 0.011	NA
		Chrysene	2218-01-9	[2] 0.043	[2] 15
		2,4-Dimethylphenol	105-67-9	[2] 0.033	NA
		Ethylbenzene	100-41-4	[2] 0.011	[2] 14
		Naphthalene	91-20-3	[2] 0.033	[2] 42
		Phenanthrene	85-01-8	[2] 0.039	[2] 34
		Phenol	108-95-2	[2] 0.047	[2] 3.6
		Pyrene	129-00-0	[2] 0.045	[2] 36
		Toluene	108-88-3	[2] 0.011	[2] 14
		Xylene(s)		[2] 0.011	[2] 22
		Cyanides (Total)	57-12-5	[2] 0.028	[2] 1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K050	Table CCWE in 268.41	Benzo(a)pyrene	50-32-8	[2] 0.047	[2] 12
		Phenol	108-95-2	[2] 0.047	[2] 3.6
		Cyanides (Total)	57-12-5	[2] 0.028	[2] 1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K051	Table CCWE in 268.41	Acenaphthene	208-96-8	[2] 0.05	NA
		Anthracene	120-12-7	[2] 0.039	[2] 28
		Benzene	71-43-2	[2] 0.011	[2] 14
		Benzo(a)anthracene	50-32-8	[2] 0.043	[2] 20
		Benzo(a)pyrene	117-81-7	[2] 0.047	[2] 12
		Bis(2-ethylhexyl)phthalate	75-15-0	[2] 0.043	[2] 7.3
		Chrysene	2218-01-9	[2] 0.043	[2] 15
		Di-n-butyl phthalate	105-67-9	[2] 0.06	[2] 3.6
		Ethylbenzene	100-41-4	[2] 0.011	[2] 14
		Fluorene	86-73-7	[2] 0.05	[2] NA
		Naphthalene	91-20-3	[2] 0.033	[2] 42
		Phenanthrene	85-01-8	[2] 0.039	[2] 34
		Phenol	108-95-2	[2] 0.047	[2] 3.6
		Pyrene	129-00-0	[2] 0.045	[2] 36
		Toluene	108-88-3	[2] 0.011	[2] 14
		Xylene(s)		[2] 0.011	[2] 22
		Cyanides (Total)	57-12-5	[2] 0.028	[2] 1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K052	Table CCWE in 268.41	Benzene	71-43-2	[2] 0.011	[2] 14
		Benzo(a)pyrene	50-32-8	[2] 0.047	[2] 12
		o-Cresol	95-48-7	[2] 0.011	[2] 6.2

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		p-Cresol	106-44-5	●0.011	●6.2
		2,4-Dimethylphenol	105-67-9	●0.033	●NA
		Ethylbenzene	100-41-4	●0.011	●14
		Naphthalene	91-20-3	●0.033	●42
		Phenanthrene	85-01-8	●0.039	●34
		Phenol	108-95-2	●0.047	●3.6
		Toluene	108-88-3	●0.011	●14
		Xylenes		●0.011	●22
		Cyanides (Total)	57-12-5	●0.028	●1.8
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K060		Benzene	71-43-2	*,●0.17	●0.071
		Benzo(a)pyrene	50-32-8	*,●0.035	●3.6
		Naphthalene	91-20-3	*,●0.028	●3.4
		Phenol	108-95-2	*,●0.042	●3.4
		Cyanides (Total)	57-12-5	1.9	1.2
61	Table CCWE in 268.41 and Table 2 in 268.42.	Cadmium	7440-43-9	1.61	NA
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.51	NA
		Nickel	7440-02-0	0.44	NA
62	Table CCWE in 268.41	Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA
69	Table CCWE in 268.41 and Table 2 in 268.42.	Cadmium	7440-43-9	1.6	NA
		Lead	7439-92-1	0.51	NA
71	Table CCWE in 268.41	Mercury	7439-97-6	0.030	NA
73		Carbon tetrachloride	56-23-5	*0.057	●6.2
		Chloroform	67-66-3	*0.046	●6.2
		Hexachloroethane	67-72-1	*0.055	●30
		Tetrachloroethene	127-18-4	*0.056	●6.2
		1,1,1-Trichloroethane	71-55-6	*0.054	●6.2
83	Table CCWE in 268.41	Benzene	71-43-2	*0.14	●6.6
		Aniline	62-53-3	*0.81	●14
		Diphenylamine	22-39-4	*0.52	NA
		Diphenylnitrosamine	86-30-6	*0.40	NA
		Sum of Diphenylamine and Diphenylnitrosamine.		NA	●14
		Nitrobenzene	98-95-3	*0.068	●14
		Phenol	108-95-2	0.039	●5.6
		Cyclohexanone	108-94-1	0.36	●30
		Nickel	7440-02-0	0.47	NA
84		Arsenic	7440-38-2	0.79	NA
85		Benzene	71-43-2	*0.14	●4.4
		Chlorobenzene	108-90-7	*0.057	●4.4
		o-Dichlorobenzene	95-50-1	*0.088	●4.4
		m-Dichlorobenzene	541-73-1	*0.036	●4.4
		p-Dichlorobenzene	106-46-7	*0.090	●4.4
		1,2,4-Trichlorobenzene	120-82-1	*0.055	●4.4
		1,2,4,5-Tetrachlorobenzene	95-94-3	*0.055	●4.4
		Pentachlorobenzene	608-93-5	0.055	●4.4
		Hexachlorobenzene	118-74-1	*0.055	●4.4
		Aroclor 1016	12674-1, 2	*0.013	●0.92
		Aroclor 1221	11104-28-2	*0.014	●0.92
		Aroclor 1232	11141-16-5	*0.013	●0.92
		Aroclor 1242	53469-21-9	*0.017	●0.92
		Aroclor 1248	12672-29-6	*0.013	●0.92
		Aroclor 1254	11097-69-1	*0.014	●1.8
		Aroclor 1260	11096-82-5	*0.014	●1.8
86	Table CCWE in 268.41	Acetone	67-64-1	0.28	●160
		Acetophenone	96-86-2	0.010	●9.7
		Bis(2-ethylhexyl)phthalate	117-81-7	*0.28	●28
		n-Butyl alcohol	71-36-3	5.6	●2.6
		Butylbenzylphthalate	85-68-7	*0.017	●7.9
		cyclohexanone	108-94-1	0.36	NA
		1,2-Dichlorobenzene	95-50-1	0.088	●6.2
		Diethyl phthalate	84-66-2	*0.20	●28
		Dimethyl phthalate	131-11-3	*0.047	●28
		Di-n-butyl phthalate	84-74-2	*0.057	●28
		Di-n-octyl phthalate	117-84-0	*0.017	●28
		Ethyl acetate	141-78-6	*0.34	●33
		Ethylbenzene	100-41-4	*0.057	●6.0
		Methanol	67-56-1	*5.6	NA
		Methyl isobutyl ketone	108-10-1	0.14	●33
		Methyl ethyl ketone	78-93-3	0.28	●36
		Methylene chloride	75-09-2	*0.089	●33

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		Naphthalene	91-20-3	[1] 0.059	[2] 3.1
		Nitrobenzene	98-95-3	[1] 0.068	[2] 14
		Toluene	108-88-3	[1] 0.080	[2] 28
		1,1,1-Trichloroethane	71-55-6	[1] 0.054	[2] 5.6
		Trichloroethylene	79-01-6	[1] 0.054	[2] 5.6
		Xylenes (Total)		[1] 0.32	[2] 28
		Cyanides (Total)	57-12-5	1.9	1.5
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.037	NA
K087	Table CCWE in 268.41	Acenaphthalene	208-96-8	[2] 0.028	3.4
		Benzene	71-43-2	[2] 0.014	[2] 0.071
		Chrysene	218-01-9	[2] 0.028	[2] 3.4
		Fluoranthene	206-44-0	[2] 0.028	[2] 3.4
		Indeno(1,2,3-cd)pyrene	193-39-5	[2] 0.028	[2] 3.4
		Naphthalene	91-20-3	[2] 0.028	[2] 3.4
		Phenanthrene	85-01-8	[2] 0.028	[2] 3.4
		Toluene	108-88-3	[2] 0.008	[2] 0.65
		Xylenes		[2] 0.014	[2] 0.07
		Lead	7439-92-1	0.037	NA
K093		Phthalic anhydride (measured as Phthalic acid).	85-44-9	[2] 0.54	[2] 28
K094		Phthalic anhydride (measured as Phthalic acid).	85-44-9	[2] 0.54	[2] 28
K095		1,1,1,2-Tetrachloroethane	630-20-6	0.057	[2] 5.6
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	[2] 5.6
		Tetrachloroethene	127-18-4	0.056	[2] 6.0
		1,1,2-Trichloroethane	79-00-5	0.054	[2] 6.0
		Trichloroethylene	79-01-6	0.054	[2] 5.6
		Hexachloroethane	67-72-1	0.055	[2] 28
		Pentachloroethane	76-01-7	0.055	[2] 5.6
K096		1,1,1,2-Tetrachloroethane	630-20-6	0.057	[2] 5.6
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	[2] 5.6
		Tetrachloroethene	127-18-4	0.056	[2] 6.0
		1,1,2-Trichloroethane	79-00-5	0.054	[2] 6.0
		Trichloroethene	79-01-6	0.054	[2] 5.6
		1,3-Dichlorobenzene	541-73-1	0.036	[2] 5.6
		Pentachloroethane	76-01-7	0.055	[2] 5.6
		1,2,4-Trichlorobenzene	120-82-1	0.055	[2] 19
K097		Hexachlorocyclopentadiene	77-47-4	[1] 0.057	2.4
		Chlordane	57-74-9	[1] 0.0033	[2] 0.26
		Heptachlor	76-44-8	[1] 0.0012	[2] 0.066
		Heptachlor epoxide	1024-57-3	[1] 0.016	[2] 0.066
K098		Toxaphene	8001-35-1	[1] 0.0095	[2] 2.6
K099		2,4-Dichlorophenoxyacetic acid	94-75-7	[2] 1	[2] 1
		Hexachlorodibenzo-p-dioxins		[2] 0.001	[2] 0.001
		Hexachlorodibenzofurans		[2] 0.001	[2] 0.001
		Pentachlorodibenzo-p-dioxins		[2] 0.001	[2] 0.001
		Pentachlorodibenzofurans		[2] 0.001	[2] 0.001
		Tetrachlorodibenzo-p-dioxins		[2] 0.001	[2] 0.001
		Tetrachlorodibenzofurans		[2] 0.001	[2] 0.001
K100	Table CCWE in 268.41	Cadmium	7440-43-9	1.6	NA
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.51	NA
K101		o-Nitroaniline		[2] 0.27	[2] 14
		Arsenic	7440-38-2	0.79	NA
		Cadmium	7440-43-9	0.24	NA
		Lead	7439-92-1	0.17	NA
		Mercury	7439-97-6	0.082	NA
K102	Table CCWE in 268.41	o-Nitrophenol		[2] 0.028	[2] 13
		Arsenic	7440-38-2	0.79	NA
		Cadmium	7440-43-9	0.24	NA
		Lead	7439-92-1	0.17	NA
		Mercury	7439-97-6	0.082	NA
K103		Aniline	62-53-3	[2] 4.5	5.6
		Benzene	71-43-2	[2] 0.15	[2] 6.0
		2,4-Dinitrophenol	51-28-5	[2] 0.61	[2] 5.6
		Nitrobenzene	98-95-3	[2] 0.073	[2] 5.6
		Phenol	108-95-2	[2] 1.4	[2] 5.6
K104		Aniline	62-53-3	[2] 4.5	[2] 5.6
		Benzene	71-43-2	[2] 0.15	[2] 6
		2,4-Dinitrophenol	51-28-5	[2] 0.61	5.6
		Nitrobenzene	98-95-3	[2] 0.073	[2] 5.6
		Phenol	108-95-2	[2] 1.4	[2] 5.6
		Cyanides (Total)	57-12-5	2.7	[2] 1.8
K105		Benzene	71-43-2	0.14	[2] 4.4
		Chlorobenzene	108-90-7	0.057	[2] 4.4
		o-Dichlorobenzene	95-50-1	0.088	[2] 4.4

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
		p-Dichlorobenzene	106-46-7	0.090	● 4.4
		2,4,5-Trichlorophenol	95-95-4	0.18	● 4.4
		2,4,6-Trichlorophenol	88-06-2	0.035	● 4.4
		2-Chlorophenol	95-57-8	0.044	● 4.4
		Phenol	108-95-2	0.039	● 4.4
K106	Table CCWE in 268.41 and Table 2 in 268.42.	Mercury	7439-97-6	0.030	NA
K115	Table CCWE in 268.41	Nickel	7440-02-0	0.47	NA

● Treatment standards for this organic constituent were established based upon incineration in units operated in accordance with the technical requirements of 40 CFR Part 264 Subpart O or Part 265 Subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may certify compliance with these treatment standards according to provisions in 40 CFR Section 268.7.

* Based on analysis of composite samples.

As analyzed using SW-846 Method 9010; sample size: 0.5-10; distillation time: one hour to one hour and fifteen minutes.

NA—Not Applicable.

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES

e	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
	Aldrin		Aldrin	309-00-2	* 0.21	0.066
	Arsenic acid	Table CCWE in 268.41	Arsenic	7440-38-2	0.79	NA
	Arsenic pentoxide	Table CCWE in 268.41	Arsenic	7440-38-2	0.79	NA
	Arsenic trioxide	Table CCWE in 268.41	Arsenic	7440-38-2	0.79	NA
	Barium cyanide	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)		2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	● 2.5
	Calcium cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
	Carbon disulfide	Table 2 in 268.42	Carbon disulfide	75-15-0	0.014	NA
	p-Chloroaniline		p-Chloroaniline	106-47-8	0.46	● 16
	Copper cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
	Cyanides (soluble salts and complexes)		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
	Dichlorophenylarsine	Table CCWE in 268.41	Arsenic	7440-38-2	0.79	NA
	Dieldrin		Dieldrin	60-57-1	* 0.017	● 0.13
	Diethylarsine	Table CCWE in 268.41	Arsenic	7740-38-2	0.79	NA
	Disulfoton		Disulfoton	298-04-4	0.017	● 0.1
	4,6-Dinitro-o-cresol		4,6-Dinitro-o-cresol	534-52-1	* 0.28	● 160
	2,4-Dinitrophenol		2,4-Dinitrophenol	51-28-5	* 0.12	● 160
	Endosulfan		Endosulfan I	939-98-8	* 0.023	● 0.066
			Endosulfan II	33213-6-5	* 0.029	● 0.13
			Endosulfan sulfate	1031-07-8	* 0.029	● 0.13
	Endrin		Endrin	72-20-8	* 0.0028	● 0.13
			Endrin aldehyde	7421-93-4	* 0.025	● 0.13
	Fluoride	Table 2 in 268.42	Fluoride	16964-48-8	35	NA
	Heptachlor		Heptachlor	76-44-8	* 0.0012	● 0.066
			Heptachlor epoxide	1024-57-3	* 0.016	● 0.066
	Isodrin		Isodrin	465-73-6	* 0.021	● 0.066
	Hydrogen cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
	Mercury fulminate	Table CCWE in 268.41 and Table 2 in 268.42.	Mercury	7439-97-6	0.030	NA
	Methyl parathion		Methyl parathion	298-00-0	0.025	● 0.1
	Nickel carbonyl	Table CCWE in 268.41	Nickel	7440-02-0	0.44	NA
	Nickel cyanide	Table CCWE in 268.41	Cyanides (Table)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
			Nickel	7440-02-0	0.44	NA
	p-Nitroaniline		p-Nitroaniline	100-01-6	* 0.028	● 28
	N-Nitrosodimethylamine	Table 2 in 268.42	N-Nitrosodimethylamine	62-75-9	* 0.40	NA
	Parathion		Parathion	56-38-2	0.025	● 0.1
	Phenylmercury acetate	Table CCWE in 268.41 and Table 2 in 268.42.	Mercury	7439-97-6	0.030	NA
	Phorate		Phorate	298-02-2	0.025	● 0.1
	Famphur		Famphur	52-85-7	0.025	● 0.1
	Potassium cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
	Potassium silver cyanide	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.1	9.1
			Silver	7440-22-4	0.29	NA
	Ethyl cyanide (Propanenitrile)		Ethyl cyanide (Propanenitrile)	107-12-0	* 0.24	● 360
	Selenourea	Table CCWE in 268.41	Selenium	7782-49-2	* 1.0	NA

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
P104	Silver cyanide	Table CCWE in 268.41	Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
			Silver	7440-22-4	0.29	NA
P106	Sodium cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
P110	Tetraethyl lead	Table CCWE in 268.41 and Table 2 in 268.42	Lead	7439-92-1	0.040	NA
P113	Thallic oxide	Table 2 in 268.42	Thallium	7440-28-0	[1] 0.14	NA
P114	Thallium selenite	Table CCWE in 268.41	Selenium	7782-49-2	1.0	NA
P115	Thallium(I)sulfate	Table 2 in 268.42	Thallium	7440-28-0	[1] 0.14	NA
P119	Ammonia vanadate	Table 2 in 268.42	Vanadium	7440-62-2	[1] 28	NA
P120	Vanadium pentoxide	Table 2 in 268.42	Vanadium	7440-62-2	[1] 28	NA
P121	Zinc cyanide		Cyanides (Total)	57-12-5	1.9	110
			Cyanides (Amenable)	57-12-5	0.10	9.1
P123	Toxaphene		Toxaphene	8001-35-1	[1] 0.0095	[2] 1.3
U002	Acetone		Acetone	67-64-1	0.28	[2] 160
U003	Acetonitrile	Table 2 in 268.42	Acetonitrile	75-05-8	017	NA
U004	Acetophenone		Acetophenone	98-86-2	[2] 0.010	[2] 9.7
U005	2-Acetylaminofluorene		2-Acetylaminofluorene	53-96-3	[1] 0.059	[2] 140
U009	Acrylonitrile		Acrylonitrile	107-13-1	[1] 0.24	[2] 84
U012	Aniline		Aniline	62-53-3	0.81	[2] 14
U018	Benz(a)anthracene		Benz(a)anthracene	56-55-3	[1] 0.059	[2] 8.2
U019	Benzene		Benzene	71-43-2	[1] 0.14	[2] 36
U022	Benzo(a)pyrene		Benzo(a)pyrene	50-32-8	[1] 0.061	[2] 8.2
U024	Bis(2-chloroethoxy)methane		Bis(2-chloroethoxy)methane	111-91-1	0.036	[2] 7.2
U025	Bis(2-chloroethyl)ether		Bis(2-chloroethyl)ether	111-44-4	0.033	[2] 7.2
U027	Bis(2-chloroisopropyl) ether		Bis(2-chloroisopropyl) ether	39638-32-9	[1] 0.055	[2] 7.2
U028	Bis(2-ethylhexyl) pthalate		Bis(2-ethylhexyl) pthalate	117-81-7	[2] 0.54	[2] 28
U029	Bromomethane (Methyl bromide)		Bromomethane (Methyl bromide)	74-83-9	[1] 0.11	[2] 15
U030	4-Bromophenyl phenyl ether		4-Bromophenyl phenyl ether	101-55-3	[1] 0.055	[2] 15
U031	n-Butyl alcohol		n-Butyl alcohol	71-36-3	5.6	[2] 2.6
U032	Calcium chromate	Table CCWE in 268.41	Chromium (Total)	7440-47-32	0.32	NA
U036	Chlordane (alpha and gamma)		Chlordane (alpha and gamma)	57-74-9	[1] 0.0033	[2] 0.13
U037	Chlorobenzene		Chlorobenzene	108-90-7	[1] 0.057	[2] 5.7
U038	Chlorobenzilate	Table 2 in 268.42	Chlorobenzilate	510-15-6	[1] 0.10	NA
U039	p-Chloro-m-cresol		p-Chloro-m-cresol	59-50-7	[1] 0.018	[2] 14
U042	2-Chloroethyl vinyl	Table 2 in 268.42	2-Chloroethyl vinyl	110-75-8	0.057	NA
U043	Vinyl chloride		Vinyl chloride	75-01-4	[1] 0.27	[2] 33
U044	Chloroform		Chloroform	67-66-3	[1] 0.046	[2] 5.6
U045	Chloromethane (Methyl chloride)		Chloromethane (Methyl chloride)	74-87-3	[1] 0.19	[2] 33
U047	2-Chloronaphthalene		2-Chloronaphthalene	91-58-7	[1] 0.055	[2] 5.6
U048	2-Chlorophenol		2-Chlorophenol	95-57-8	[1] 0.044	[2] 5.7
U050	Chrysene		Chrysene	218-01-9	[1] 0.059	[2] 8.2
U051	Creosote	Table CCWE in 268.41	Naphthalene	91-20-3	[2] 0.031	[2] 1.5
			Pentachlorophenol	87-86-5	[2] 0.18	[2] 7.4
			Phenanthrene	85-01-8	[2] 0.031	[2] 1.5
			Pyrene	129-00-0	[2] 0.028	[2] 28
			Toluene	108-88-3	[2] 0.028	[2] 33
			Xylenes (Total)	7439-92-1	[2] 0.032	NA
			Lead		[2] 0.037	
U052	Cresols (Cresylic acid)		o-Cresol	95-48-7	[1] 0.11	[2] 5.6
			Cresols (m- and p- isomers)		[1] 0.77	[2] 3.2
U057	Cyclohexanone	Table 2 in 268.42	Cyclohexanone	108-94-1	0.36	NA
U060	DDD		o,p'-DDD	53-19-0	0.023	[2] 0.087
			p,p'-DDD	72-54-8	0.023	[2] 0.087
U061	DDT		o,p'-DDT	789-02-6	[1] 0.0039	[2] 0.087
			p,p'-DDT	50-29-3	[1] 0.0039	[2] 0.087
			o,p'-DDD	53-19-0	[1] 0.023	[2] 0.087
			p,p'-DDD	72-54-8	[1] 0.023	[2] 0.087
			o,p'-DDE	3424-82-6	[1] 0.031	[2] 0.087
			p,p'-DDE	72-55-9	[1] 0.031	[2] 0.087
U063	Dibenzo(a,h)anthracene		Dibenzo(a,h)anthracene	53-70-3	[1] 0.055	[2] 8.2
U066	1,2-Dibromo-3-chloropropane		1,2-Dibromo-3-chloropropane	96-12-8	[1] 0.11	[2] 15
U067	1,2-Dibromoethane (Ethylenedibromide)		1,2-Dibromoethane (Ethylene dibromide)	106-93-4	[1] 0.028	15
U068	Dibromomethane		Dibromomethane	74-95-3	[1] 0.11	15
U069	Di-n-butyl phthalate		Di-n-butyl phthalate	84-74-2	[2] 0.54	[2] 28
U070	o-Dichlorobenzene		o-Dichlorobenzene	95-50-1	[1] 0.088	[2] 6.2
U071	m-Dichlorobenzene		m-Dichlorobenzene	541-73-1	0.036	6.2
U072	p-Dichlorobenzene		p-Dichlorobenzene	104-46-7	[1] 0.090	[2] 6.2
U075	Dichlorodifluoromethane		Dichlorodifluoromethane	75-71-8	[1] 0.23	[2] 7.2
U076	1,1-Dichloroethane		1,1-Dichloroethane	75-34-3	[1] 0.059	7.2
U077	1,2-Dichloroethane		1,2-Dichloroethane	107-06-2	[1] 0.21	[2] 7.2
U078	1,1-Dichloroethylene		1,1-Dichloroethylene	75-35-4	[1] 0.025	[2] 33
U079	1,2-Dichloroethylene		trans-1,2-Dichloroethylene	156-60-5	[1] 0.054	[3] 33
U080	Methylene chloride		Methylene chloride	75-09-2	[3] 0.089	[3] 33
U081	2,4-Dichlorophenol		2,4-Dichlorophenol	120-83-2	[3] 0.044	[3] 14
U082	2,6-Dichlorophenol		2,6-Dichlorophenol	87-65-0	[3] 0.044	[3] 14

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
U083	1,2-Dichloropropane		1,2-Dichloropropane	78-87-5	[2] 0.85	[1] 18
U084	1,3-Dichloropropene		cis-1,3-Dichloropropylene	10061-01-5	[2] 0.036	[1] 18
			trans-1,3-Dichloropropylene	10061-02-6	[2] 0.036	[1] 18
U088	Diethyl phthalate		Diethyl phthalate	84-66-2	[1] 0.54	[1] 28
U093	p-Dimethylaminoazobenzene	Table 2 in 268.42	p-Dimethylaminoazobenzene	60-11-7	[2] 0.13	NA
U101	2,4-Dimethylphenol		2,4-Dimethylphenol	105-67-9	[2] 0.036	[1] 14
U102	Dimethyl phthalate		Dimethyl phthalate	131-11-3	[1] 0.54	[1] 28
U105	2,4-Dinitrotoluene		2,4-Dinitrotoluene	121-14-2	[2] 0.32	[1] 140
U106	2,6-Dinitrotoluene		2,6-Dinitrotoluene	606-20-2	[2] 0.55	[1] 28
U107	Di-n-octyl phthalate		Di-n-octyl phthalate	117-84-0	[1] 0.54	[1] 28
U108	1,4-Dioxane		1,4-Dioxane	123-91-1	[2] 0.12	[1] 170
U111	Di-n-propylnitrosoamine		Di-n-propylnitrosoamine	621-64-7	[2] 0.40	[1] 14
U112	Ethyl acetate		Ethyl acetate	141-78-6	[2] 0.34	[1] 33
U117	Ethyl ether		Ethyl ether	60-29-7	[2] 0.12	[1] 160
U118	Ethyl methacrylate		Ethyl methacrylate	97-63-2	[2] 0.14	[1] 160
U120	Fluoranthene		Fluoranthene	206-44-0	[2] 0.068	[1] 8.2
U121	Trichloromonofluoromethane		Trichloromonofluoromethane	75-69-4	[2] 0.020	[1] 33
U127	Hexachlorobenzene		Hexachlorobenzene	118-74-1	[2] 0.055	[1] 37
U128	Hexachlorobutadiene		Hexachlorobutadiene	87-68-3	[2] 0.055	[1] 28
U129	Lindane		alpha-BHC	319-84-6	[2] 0.00014	[1] 0.066
			beta-BHC	319-85-7	0.00014	[1] 0.066
			Delta-BHC	319-86-8	0.023	[1] 0.066
			gamma-BHC (Lindane)	58-89-9	0.0017	[1] 0.066
U130	Hexachlorocyclopentadiene		Hexachlorocyclopentadiene	77-47-7	[2] 0.057	[1] 3.6
U131	Hexachloroethane		Hexachloroethane	67-72-1	[2] 0.055	[1] 28
U134	Hydrogen fluoride	Table 2 in 268.42	Fluoride	16964-48-8	35	NA
U136	Cacodylic acid	Table CCWE in 268.41	Arsenic	7440-38-2	0.79	NA
U137	Indeno(1,2,3-c,d)pyrene		Indeno(1,2,3-c,d)pyrene	193-39-5	[2] 0.0055	[1] 8.2
U138	Iodomethane		Iodomethane	74-88-4	[2] 0.19	[1] 65
U140	Isobutyl alcohol		Isobutyl alcohol	78-83-1	5.6	[1] 170
U141	Isosafrole		Isosafrole	120-58-1	0.081	[1] 2.6
U142	Kepone		Kepone	143-50-8	0.0011	[1] 0.13
U144	Lead acetate	Table CCWE in 268.41	Lead	7439-92-1	0.040	NA
U145	Lead phosphate	Table CCWE in 268.41	Lead	7439-92-1	0.040	NA
U146	Lead subacetate	Table CCWE in 268.41	Lead	7439-92-1	0.040	NA
U151	Mercury	Table CCWE in 268.41 and Table 2 in 268.42.	Mercury	7439-97-6	0.030	NA
U152	Methacrylonitrile		Methacrylonitrile	126-98-7	[2] 0.24	[1] 84
U155	Methapyrilene		Methapyrilene	91-80-5	0.081	[1] 1.5
U157	3-Methylcholanthrene		3-Methylcholanthrene	56-49-5	[2] 0.0055	[1] 15
U158	4,4'-Methylenebis(2-chloroaniline)		4,4'-Methylenebis(2-chloroaniline)	101-14-4	[2] 0.50	[1] 35
U159	Methyl ethyl ketone		Methyl ethyl ketone	78-93-3	0.28	[1] 36
U161	Methyl isobutyl ketone		Methyl isobutyl ketone	108-10-1	0.14	[1] 33
U162	Methyl methacrylate		Methyl methacrylate	80-62-6	0.14	[1] 160
U165	Naphthalene		Naphthalene	91-20-3	[2] 0.059	[1] 3.1
U168	2-Naphthylamine	Table 2 in 268.42	2-Naphthylamine	91-59-8	[2] 0.52	NA
U169	Nitrobenzene		Nitrobenzene	98-95-3	[2] 0.068	[1] 14
U170	4-Nitrophenol		4-Nitrophenol	100-02-7	[2] 0.12	[1] 29
U172	n-Nitrosodi-n-butylamine		n-Nitrosodi-n-butylamine	924-16-3	[2] 0.40	[1] 17
U174	N-Nitrosodiethylamine		n-Nitrosodiethylamine	55-18-5	[2] 0.40	[1] 28
U179	N-Nitrosopiperidine		n-Nitrosopiperidine	100-75-4	[2] 0.013	[1] 35
U180	N-Nitrosopyrrolidine		n-Nitrosopyrrolidine	930-55-2	[2] 0.013	[1] 35
U181	5-Nitro-o-toluidine		5-Nitro-o-toluidine	99-55-8	[2] 0.32	[1] 28
U183	Pentachlorobenzene		Pentachlorobenzene	608-93-5	[2] 0.055	[1] 37
U185	Pentachloronitrobenzene		Pentachloronitrobenzene	82-68-8	[2] 0.055	[1] 4.8
U187	Phenacetin		Phenacetin	62-44-2	0.081	[1] 16
U188	Phenol		Phenol	108-95-2	0.039	[1] 6.2
U190	Phthalic anhydride (measured as Phthalic acid).		Phthalic anhydride (measured as Phthalic acid).	85-44-9	[1] 0.54	[1] 28
U192	Pronamide		Pronamide	23950-58-5	0.093	[1] 1.5
U196	Pyridine		Pyridine	110-86-1	[2] 0.014	[1] 16
U203	Safrole		Safrole	94-59-7	0.081	[1] 22
U204	Selenium dioxide	Table CCWE in 268.41	Selenium	7782-49-2	1.0	NA
U205	Selenium sulfide	Table CCWE in 268.41	Selenium	7782-49-2	1.0	NA
U207	1,2,4,5-Tetrachlorobenzene		1,2,4,5-Tetrachlorobenzene	95-94-3	[2] 0.055	[1] 19
U208	1,1,1,2-Tetrachloroethane		1,1,1,2-Tetrachloroethane	630-20-6	0.057	[1] 42
U209	1,1,2,2-Tetrachloroethane		1,1,2,2-Tetrachloroethane	79-34-5	[2] 0.057	[1] 42
U210	Tetrachloroethylene		Tetrachloroethylene	127-18-4	[2] 0.056	[1] 5.6
U211	Carbon tetrachloride		Carbon tetrachloride	56-23-5	[2] 0.057	[1] 5.6
U214	Thallium(I)acetate	Table 2 in 268.42	Thallium	7440-28-0	[2] 0.14	NA
U215	Thallium(I)carbonate	Table 2 in 268.42	Thallium	7440-28-0	[2] 0.14	NA
U216	Thallium(I)chloride	Table 2 in 268.42	Thallium	7440-28-0	[2] 0.14	NA
U217	Thallium(I)nitrate	Table 2 in 268.42	Thallium	7440-28-0	[2] 0.14	NA
U220	Toluene		Toluene	108-88-3	[2] 0.080	[1] 28
U225	Tribromomethane (Bromoform)		Tribromomethane (Bromoform)	75-25-2	[2] 0.63	[1] 15
U226	1,1,1-Trichloroethane		1,1,1-Trichloroethane	71-55-6	[2] 0.054	[1] 5.6
U227	1,1,2-Trichloroethane		1,1,2-Trichloroethane	79-00-5	[2] 0.054	[1] 5.6

TABLE CCW.—CONSTITUENT CONCENTRATIONS IN WASTES—Continued

Waste code	Commercial chemical name	See also	Regulated hazardous constituent	CAS No. for regulated hazardous constituent	Wastewaters concentration (mg/l)	Non-wastewaters concentration (mg/kg)
U228	Trichloroethylene		Trichloroethylene	79-01-6	[3] 0.054	[1] 5.6
U235	tris-(2,3-Dibromopropyl)-phosphate		tris-(2,3-Dibromopropyl)-phosphate	126-72-7	0.025	[1] 0.10
U239	Xylenes		Xylenes		[3] 0.32	[1] 28
U240	2,4-Dichlorophenoxyacetic acid		2,4-Dichlorophenoxyacetic acid	94-75-7	0.72	[1] 10
U243	Hexachloropropene		Hexachloropropene	1888-71-7	[2] 0.035	28
U247	Methoxychlor		Methoxychlor	72-43-5	[3] 0.25	[1] 0.18

[1] Treatment standards for this organic constituent were established based upon incineration in units operated in accordance with the technical requirements of 40 CFR Part 264 Subpart O or Part 265 Subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may certify compliance with these treatment standards according to provisions in 40 CFR Section 268.7.
[2] Based on analysis of composite samples.
[3] As analyzed using SW-846 Method 9010; sample size: 0.5-10; distillation time: one hour to one hour fifteen minutes.
NA—Not Applicable.

* * * * *

(c) Notwithstanding the prohibitions specified in paragraph (a) of this section, treatment and disposal facilities may demonstrate (and certify pursuant to § 268.7(b)(5)) compliance with the treatment standards for organic constituents specified in this section provided the following conditions are satisified:

(1) The treatment for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart O or 40 CFR part 265, subpart O, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

(2) The organic constituents have been treated using the methods referenced in paragraph (c)(1) of this section; and

(3) The treatment or disposal facility has been unable to detect the organic constituents despite using its best good-faith efforts as defined by applicable Agency guidance or standards. Until such guidance or standards are developed, such good-faith efforts may be demonstrated where the treatment or disposal facility has detected the organic constituents at levels within an order of magnitude of the treatment standard specified in this section.

13. Appendix IV is added to part 268 to read as follows:

Appendix IV—Organometallic Lab Packs

Hazardous waste with the following EPA waste codes may be placed in an "organometallic" or "Appendix IV lab pack:"

P001, P002, P003, P004, P005, P006, P007, P008, P009, P013, P014, P015, P016, P017, P018, P020, P022, P023, P024, P025, P026, P027, P028, P031, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P047, P048, P049, P050, P051, P054, P056, P057, P058, P059, P060, P062, P063, P064, P065, P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P077, P081, P082, P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P104, P105, P108, P109, P110, P112, P113, P114, P115, P116, P118, P119, P120, P122, P123

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U032, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U134, U135, U136, U137, U136, U137, U138, U139, U140, U141, U142, U143, U144, U145, U146, U147, U148, U149, U150, U152, U154, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U164, U165, U166, U167, U168 U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186 U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U205, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216, U217, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249, U328, U353, U359

F001, F002, F003, F004, F005, F006, F010, F020, F021, F023, F024, F026, F027, F028

K001, K002, K008, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K028, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K046, K047, K048, K049, K050, K051, K052, K054, K060, K061, K064, K065, K066, K069, K071, K073, K083, K084, K085, K086, K087, K093, K094, K095, K096, K097, K098, K099, K101, K102, K103, K104, K105, K111, K112, K113, K114, K115, K116, K117, K118, K123, K124, K125, K126, K136

D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D012, D013, D014, D015, D016, D017

U032, U136, U144, U145, U146, U163, U214, U215, U216, U217

14. Appendix V is added to part 268 to read as follows:

Appendix V—Organic Lab Packs

Hazardous wastes with the following EPA Hazardous Waste Code No. may be placed in an "organic" or "Appendix V:"

P001, P002, P003, P004, P005, P006, P007, P008, P009, P013, P014, P015, P016, P017, P018, P020, P022, P023, P025, P024, P026, P027, P028, P031, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P057, P058, P059, P060, P062, P063, P064, P064, P065, P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P077, P081, P082, P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P104, P105, P108, P109, P110, P111, P112, P113, P114, P115, P116, P118, P119, P120, P122, P123

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U033, U034, U035, U036, U037, U038,

U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U135, U137, U138, U139, U140, U141, U142, U143, U147, U148, U149, U150, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168 U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186 U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U205, U206, U207, U208, U209, U210, U211, U213, U214, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249, U328, U353, U359

F001, F002, F003, F004, F005, F010, F020, F021, F023, F024, F026, F027, F028

K001, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K046, K047, K048, K049, K050, K051, K052, K054, K060, K065, K073, K083, K084, K085, K086, K087, K093, K094, K095, K096, K097, K098, K099, K101, K102, K103, K104, K105, K111, K112, K113, K114, K115, K116, K117, K118, K123, K124, K125, K126, K136

D001, D012, D013, D014, D015, D016, D017

15. Appendix VI is added to part 268, to read as follows:

Appendix VI—Recommended Technologies to Achieve Deactivation of Characteristics in Section 268.42

The treatment standard for many subcategories of D001, D002, and D003 wastes as well as for K044, K045, and K047 wastes is listed in 268.42 simply as "Deactivation to remove the characteristics of ignitability, corrosivity, and reactivity". EPA has determined that many technologies, when used alone or in combination, can achieve this standard. The following appendix presents a partial list of these technologies, utilizing the five letter technology codes established in 40 CFR 268.42 Table 1. Use of these specific technologies is not mandatory and does not preclude direct reuse, recovery, and/or the use of other pretreatment technologies provided deactivation is achieved and these alternative methods are not performed in units designated as land disposal.

Waste code/subcategory	Nonwastewaters	Wastewaters
001 Ignitable Liquids based on 261.21(a)(1)—Low TOC Nonwastewater Subcategory (containing 1% to <10% TOC).	RORGS	n.a.
	INCIN	
	WETOX	
	CHOXD	
	BIODG	
001 Ignitable Liquids based on 261.21(a)(1)—Ignitable Wastewater Subcategory (containing <1% TOC)	n.a.	RORGS
		INCIN
		WETOX
		CHOXD
		BIODG
001 Compressed Gases based on 261.21(A)(3)	RCGAS	n.a.
	INCIN	
	FSUBS	
	ADGAS fb. INCIN	
	ADGAS fb. (CHOXD; or CHRED)	
001 Ignitable Reactives based on 261.21(a)(2)	WTRRX	n.a.
	CHOXD	
	CHRED	
	STABL	
	INCIN	
001 Ignitable Oxidizers based on 261.21(a)(4)	CHRED	CHRED
	INCIN	INCIN
002 Acid Subcategory based on 261.22(a)(1) with pH less than or equal to 2	RCORR	NEUTR
	NEUTR	INCIN
	INCIN	
002 Alkaline Subcategory based on 261.22(a)(1) with pH greater than or equal to 12.5	NEUTR	NEUTR
	INCIN	INCIN
002 Other Corrosives based on 261.22(a)(2)	CHOXD	CHOXD
	CHRED	CHRED
	INCIN	INCIN
	STABL	
003 Water Reactives based on 261.23(a) (2), (3), and (4)	INCIN	n.a.
	WTRRX	
	CHOXD	
	CHRED	
003 Reactive Sulfides based on 261.23(a)(5)	CHOXD	CHOXD
	CHRED	CHRED
	INCIN	BIODG
	STABL	INCIN
003 Explosives based on 261.23(a) (6), (7), and (8)	INCIN	INCIN
	CHOXD	CHOXD
	CHRED	CHRED
		BIODG
		CARBN
003 Other Reactives based on 261.23(a)(1)	INCIN	INCIN
	CHOXD	CHOXD
	CHRED	CHRED
		BIODG
		CARBN

Waste code/subcategory	Nonwastewaters	Wastewaters
K044 Wastewater treatment sludges from the manufacturing and processing of explosives	CHOXD	CHOXD
	CHRED	CHRED
	INCIN	BIODG
		CARBN
		INCIN
K045 Spent carbon from the treatment of wastewaters containing explosives	CHOXD	CHOXD
	CHRED	CHRED
	INCIN	BIODG
		CARBN
		INCIN
K047 Pink/red water from TNT operations	CHOXD	CHOXD
	CHRED	CHRED
	INCIN	BIODG
		CARBN
		INCIN

Note: "n.a." stands for "not applicable"; "fb." stands for "followed by".

16. Appendix VII is added to part 268, to read as follows:

APPENDIX VII.—EFFECTIVE DATES OF SURFACE DISPOSED WASTES REGULATED IN THE LDRS [a]

[Comprehensive List]

Waste code	Waste category	Effective date
California list	Liquid hazardous wastes, including free liquids associated with solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l or certain metals or compounds of these metals greater than or equal to the prohibition levels.	July 8, 1987.
California list	Liquid (aqueous) hazardous wastes having a pH less than or equal to 2.	July 8, 1987.
California list	Dilute HOC wastewaters, defined as HOC-waste mixtures that are primarily water and that contain greater than or equal to 1,000 mg/l but less than 10,000 mg/l.	July 8, 1987.
California list	Liquid hazardous waste containing PCBs greater than or equal to 50 ppm.	July 8, 1987.
California list	Other liquid and non-liquid hazardous wastes containing HOCs in total concentration greater than or equal to 1,000 mg.	Nov. 8, 1988.
California list	Soil and debris HOCs not from CERCLA/RCRA corrective actions.	July 8, 1989.
California list	Soil and debris HOCs from CERCLA/RCRA corrective actions.	Nov. 8, 1990.
D001	All	Aug. 8, 1990.
D002	All	Aug. 8, 1990.
D003	All	Aug. 8, 1990.
D004	Inorganic solid debris.	May 8, 1992.
D004	Nonwastewater	May 8, 1992.
D004	Wastewater	Aug. 8, 1990.
D005	Inorganic solid debris.	May 8, 1992.
D005	All others	Aug. 8, 1990.
D006	Inorganic solid debris.	May 8, 1992.
D006	All others	Aug. 8, 1990.
D007	Inorganic solid debris.	May 8, 1992.
D007	All others	Aug. 8, 1990.
D008	Inorganic solid debris.	May 8, 1992.
D008	Lead acid batteries.	May 8, 1992.
D008	All others	Aug. 8, 1990.
D009	Inorganic solid debris.	May 8, 1992.
D009	High mercury non-wastewater.	May 8, 1992.
D009	Low mercury non-wastewater.	May 8, 1992.
D009	All others	Aug. 8, 1990.
D010	Inorganic solid debris.	May 8, 1992.
D010	All others	Aug. 8, 1990.
D011	Inorganic solid debris.	May 8, 1992.
D011	All others	Aug. 8, 1990.
D012	All	Aug. 8, 1990.
D013	All	Aug. 8, 1990.
D0014	All	Aug. 8, 1990.
D0015	All	Aug. 8, 1990.
D0016	All	Aug. 8, 1990.
D0017	All	Aug. 8, 1990.
F001–F005	All, except:	Nov. 8, 1986.
F001–F005	Small quantity generators, CERCLA/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids, and non CERCLA/RCRA corrective action soils with less than 1 percent total solvent constituents.	Nov. 8, 1988.
F001–F005	Soil and debris	Nov. 8, 1990.
F002 [b]	All	Aug. 8, 1990.
F005 [c]	All	Aug. 8, 1990.
F006	Wastewater	Aug. 8, 1990.
F006	Nonwastewater	Aug. 8, 1988.
F006 (cyanides).	Nonwastewater	July 8, 1989.
F007	All	July 8, 1989.
F008	All	July 8, 1989.
F009	All	July 8, 1989.
F010	Soil and debris	June 8, 1991.
F010	All others	June 8, 1989.
F011	All	July 8, 1989.
F012	All	July 8, 1989.
F019	All	Aug. 8, 1990.
F020	Soil and debris	Nov. 8, 1990.
F020	All others	Nov. 8, 1988.
F021	Soil and debris	Nov. 8, 1990.

APPENDIX VII.—EFFECTIVE DATES OF SURFACE DISPOSED WASTES REGULATED IN THE LDRs [a]—Continued

[Comprehensive List]

Waste code	Waste category	Effective date
F021	All others	Nov. 8, 1988.
F022	Soil and debris	Nov. 8, 1990.
F022	All others	Nov. 8, 1988.
F023	Soil and debris	Nov. 8, 1990.
F023	All others	Nov. 8, 1988.
F024	Soil and debris	June 8, 1991.
F024 (metals)	Nonwastewater	Aug. 8, 1990.
F024 (dioxins/furans).	All	Aug. 8, 1990.
[illegible]	All others	June 8, 1989.
[illegible]5	All	Aug. 8, 1990.
[illegible]6	Soil and debris	Nov. 8, 1990.
[illegible]6	All others	Nov. 8, 1988.
[illegible]7	Soil and debris	Nov. 8, 1990.
[illegible]7	All others	Nov. 8, 1988.
[illegible]8	Soil and debris	Nov. 8, 1990.
[illegible]8	All others	Nov. 8, 1988.
[illegible]9	Wastewater	Aug. 8, 1990.
[illegible]9	Nonwastewater	May. 8, 1992.
[illegible]01	Soil and debris	Aug. 8, 1990.
[illegible]01 (lead/organics).	All	Aug. 8, 1990.
[illegible]01	All others	Aug. 8, 1988.
[illegible]02	All	Aug. 8, 1990.
[illegible]03	All	Aug. 8, 1990.
[illegible]04	All	Aug. 8, 1990.
[illegible]05 [d]	All	Aug. 8, 1990.
[illegible]06	All	Aug. 8, 1990.
[illegible]07 [d]	All	Aug. 8, 1990.
[illegible]08	All	Aug. 8, 1990.
[illegible]09	Soil and debris	June 8, 1991.
[illegible]09	All others	June 8, 1989.
[illegible]10	Soil and debris	June 8, 1991.
[illegible]10	All others	June 8, 1989.
[illegible]11	Wastewater	Aug. 8, 1990.
[illegible]11	Nonwastewater	June 8, 1989.
[illegible]11	Soil and debris	June 8, 1991.
[illegible]13	Wastewater	Aug. 8, 1990.
[illegible]13	Nonwastewater	June 8, 1989.
[illegible]13	Soil and debris	June 8, 1991.
[illegible]14	Wastewater	Aug. 8, 1990.
[illegible]14	Nonwastewater	June 8, 1989.
[illegible]14	Soil and debris	June 8, 1991.
[illegible]15	Wastewater	Aug. 8, 1988.
[illegible]15	Nonwastewater	Aug. 8, 1990.
[illegible]16	Soil and debris	Aug. 8, 1990.
[illegible]16	All others	Aug. 8, 1988.
[illegible]17	All	Aug. 8, 1990.
[illegible]18	Soil and debris	Aug. 8, 1990.
[illegible]18	All others	Aug. 8, 1988.
[illegible]19	Soil and debris	Aug. 8, 1990.
[illegible]19	All others	Aug. 8, 1988.
[illegible]20	Soil and debris	Aug. 8, 1990.
[illegible]20	All others	Aug. 8, 1988.
[illegible]21 [e]	All	Aug. 8, 1990.
[illegible]22	Wastewater	Aug. 8, 1990.
[illegible]22	Nonwastewater	Aug. 8, 1988.
[illegible]22	Soil and debris	Aug. 8, 1990.
[illegible]23	Soil and debris	June 8, 1991.
[illegible]23	All others	June 8, 1989.
[illegible]24	Soil and debris	Aug. 8, 1990.
[illegible]24	All others	Aug. 8, 1988.
[illegible]25 [e]	All	Aug. 8, 1990.
[illegible]26	All	Aug. 8, 1990.
[illegible]27	Soil and debris	June 8, 1991.
[illegible]27	All others	June 8, 1989.
[illegible]28	Soil and debris	June 8, 1991.
[illegible]28 (metals).	Nonwastewater	Aug. 8, 1990.
[illegible]28	All others	June 8, 1989.
[illegible]29	Wastewater	Aug. 8, 1990.
[illegible]29	Nonwastewater	June 8, 1989.
[illegible]29	Soil and debris	June 8, 1991.
[illegible]30	Soil and debris	Aug. 8, 1990.

APPENDIX VII.—EFFECTIVE DATES OF SURFACE DISPOSED WASTES REGULATED IN THE LDRs [a]—Continued

[Comprehensive List]

Waste code	Waste category	Effective date
K030	All others	Aug. 8, 1988.
K031	Wastewater	Aug. 8, 1990.
K031	Nonwastewater	May 8, 1992.
K032	All	Aug. 8, 1990.
K033	All	Aug. 8, 1990.
K034	All	Aug. 8, 1990.
K035	All	Aug. 8, 1990.
K036 [e]	All	Aug. 8, 1990.
K037	Soil and debris	Aug. 8, 1990.
K037	Wastewater	Aug. 8, 1990.
K037	All others	Aug. 8, 1988.
K038	Soil and debris	June 8, 1991.
K038	All others	June 8, 1989.
K039	Soil and debris	June 8, 1991.
K039	All others	June 8, 1989.
K040	Soil and debris	June 8, 1991.
K040	All others	June 8, 1989.
K041	All	Aug. 8, 1990.
K042	All	Aug. 8, 1990.
K043	Soil and debris	June 8, 1991.
K043	All others	June 8, 1989.
K044	All	Aug. 8, 1990.
K045	All	Aug. 8, 1990.
K046	Nonreactive non-wastewater.	Aug. 8, 1988.
K046	All others	Aug. 8, 1990.
K047	All	Aug. 8, 1990.
K048	Wastewater	Aug. 8, 1990.
K048	Nonwastewater	Nov. 8, 1990.
K049	Wastewater	Aug. 8, 1990.
K049	Nonwastewater	Nov. 8, 1990.
K050	Wastewater	Aug. 8, 1990.
K050	Nonwastewater	Nov. 8, 1990.
K051	Wastewater	Aug. 8, 1990.
K051	Nonwastewater	Nov. 8, 1990.
K052	Wastewater	Aug. 8, 1990.
K052	Nonwastewater	Nov. 8, 1990.
K060 [e]	All	Aug. 8, 1990.
K061	Wastewater	Aug. 8, 1990.
K061	Nonwastewater	Aug. 8, 1988.
K062	All	Aug. 8, 1988.
K069	All	Aug. 8, 1990.
K073	All	Aug. 8, 1990.
K083	All	Aug. 8, 1990.
K084	Wastewater	Aug. 8, 1990.
K084	Nonwastewater	May 8, 1992.
K085	All	Aug. 8, 1990.
K086	All	Aug. 8, 1990.
K087	Soil and debris	Aug. 8, 1990.
K087	All others	Aug. 8, 1988.
K093	Soil and debris	June 8, 1991.
K093	All others	June 8, 1989.
K094	Soil and debris	June 8, 1991.
K094	All others	June 8, 1989.
K095	Wastewater	Aug. 8, 1990.
K095	Nonwastewater	June 8, 1989.
K095	Soil and debris	June 8, 1991.
K096	Wastewater	Aug. 8, 1990.
K096	Nonwastewater	June 8, 1989.
K096	Soil and debris	June 8, 1991.
K097	All	Aug. 8, 1990.
K098	All	Aug. 8, 1990.
K099	All	Aug. 8, 1988.
K100 [e]	All	Aug. 8, 1990.
K101	Wastewater	Aug. 8, 1988.
K101	Nonwastewater	May 8, 1992.
K102	Wastewater	Aug. 8, 1988.
K102	Nonwastewater	May 8, 1992.
K103	Soil and debris	Aug. 8, 1990.
K103	All others	Aug. 8, 1988.
K104	Soil and debris	Aug. 8, 1990.
K104	All others	Aug. 8, 1988.
K105	All	Aug. 8, 1990.

APPENDIX VII.—EFFECTIVE DATES OF SURFACE DISPOSED WASTES REGULATED IN THE LDRs [a]—Continued

[Comprehensive List]

Waste code	Waste category	Effective date
K106	High mercury non-wastewater.	May 8, 1992.
K106	Low mercury non-wastewater.	May. 8, 1992.
K106	All others	Aug. 8, 1990.
K113	Soil and debris	June 8, 1991.
K113	All others	June 8, 1989.
K114	Soil and debris	June 8, 1991.
K114	All others	June 8, 1989.
K115	Soil and debris	June 8, 1991.
K115	All others	June 8, 1989.
K116	Soil and debris	June 8, 1991.
K116	All others	June 8, 1989.
P001	All	Aug. 8, 1990.
P002	All	Aug. 8, 1990.
P003	All	Aug. 8, 1990.
P004	All	Aug. 8, 1990.
P005	All	Aug. 8, 1990.
P006	All	Aug. 8, 1990.
P007	All	Aug. 8, 1990.
P008	All	Aug. 8, 1990.
P009	All	Aug. 8, 1990.
P010	Wastewater	Aug. 8, 1990.
P010	Nonwastewater	May 8, 1992.
P011	Wastewater	Aug. 8, 1990.
P011	Nonwastewater	May 8, 1992.
P012	Wastewater	Aug. 8, 1990.
P012	Nonwastewater	May 8, 1992.
P013	All	Aug. 8, 1990.
P014	All	Aug. 8, 1990.
P015	All	Aug. 8, 1990.
P016	All	Aug. 8, 1990.
P017	All	Aug. 8, 1990.
P018	All	Aug. 8, 1990.
P020	All	Aug. 8, 1990.
P021	All	June 8, 1989.
P022	All	Aug. 8, 1990.
P023	All	Aug. 8, 1990.
P024	All	Aug. 8, 1990.
P026	All	Aug. 8, 1990.
P027	All	Aug. 8, 1990.
P028	All	Aug. 8, 1990.
P029	All	June 8, 1989.
P030	All	June 8, 1989.
P031	All	Aug. 8, 1990.
P033	All	Aug. 8, 1990.
P034	All	Aug. 8, 1990.
P036	Wastewater	Aug. 8, 1990.
P036	Nonwastewater	May 8, 1992.
P037	All	Aug. 8, 1990.
P038	Wastewater	Aug. 8, 1990.
P038	Nonwastewater	May 8, 1992.
P039	Soil and debris	June 8, 1991.
P039	All others	June 8, 1989.
P040	Soil and debris	June 8, 1991.
P040	All others	June 8, 1989.
P041	Soil and debris	June 8, 1991.
P041	All others	June 8, 1989.
P042	All	Aug. 8, 1990.
P043	Soil and debris	June 8, 1991.
P043	All others	June 8, 1989.
P044	Soil and debris	June 8, 1991.
P044	All others	June 8, 1989.
P045	All	Aug. 8, 1990.
P046	All	Aug. 8, 1990.
P047	All	Aug. 8, 1990.
P048	All	Aug. 8, 1990.
P049	All	Aug. 8, 1990.
P050	All	Aug. 8, 1990.
P051	All	Aug. 8, 1990.
P054	All	Aug. 8, 1990.
P056	All	Aug. 8, 1990.
P057	All	Aug. 8, 1990.

APPENDIX VII.—EFFECTIVE DATES OF SURFACE DISPOSED WASTES REGULATED IN THE LDRs [a]—Continued

[Comprehensive List]

Waste code	Waste category	Effective date
P058	All	Aug. 8, 1990.
P059	All	Aug. 8, 1990.
P060	All	Aug. 8, 1990.
P062	Soil and debris	June 8, 1991.
P062	All others	June 8, 1989.
P063	All	June 8, 1989.
P064	All	Aug. 8, 1990.
P065	High mercury non-wastewater.	May 8, 1992.
P065	Low mercury non-wastewater.	May 8, 1992.
P065	All others	Aug. 8, 1990.
P066	All	Aug. 8, 1990.
P067	All	Aug. 8, 1990.
P068	All	Aug. 8, 1990.
P069	All	Aug. 8, 1990.
P070	All	Aug. 8, 1990.
P071	Soil and debris	June 8, 1991.
P071	All others	June 8, 1989.
P072	All	Aug. 8, 1990.
P073	All	Aug. 8, 1990.
P074	All	June 8, 1989.
P075	All	Aug. 8, 1990.
P076	All	Aug. 8, 1990.
P077	All	Aug. 8, 1990.
P078	All	Aug. 8, 1990.
P081	All	Aug. 8, 1990.
P082	All	Aug. 8, 1990.
P084	All	Aug. 8, 1990.
P085	Soil and debris	June 8, 1991.
P085	All others	June 8, 1989.
P087	All	May 8, 1992.
P088	All	Aug. 8, 1990.
P089	Soil and debris	June 8, 1991.
P089	All others	June 8, 1989.
P092	High mercury non-wastewater	May 8, 1992.
P092	Low mercury non-wastewater	May 8, 1992.
P092	All others	Aug. 8, 1990.
P093	Soil and debris	May 8, 1992.
P093	All others	Aug. 8, 1990.
P094	Soil and debris	June 8, 1991.
P094	All others	June 8, 1989.
P095	Soil and debris	May 8, 1992.
P095	All others	Aug. 8, 1990.
P096	All	Aug. 8, 1990.
P097	Soil and debris	June 8, 1991.
P097	All others	June 8, 1989.
P098	All	June 8, 1989.
P099 (silver)	Wastewater	Aug. 8, 1990.
P099 (cyanides).	Wastewater	June 8, 1989.
P099 (cyanides/silver).	Nonwastewater	June 8, 1989.
P101	All	Aug. 8, 1990.
P102	All	Aug. 8, 1990.
P103	All	Aug. 8, 1990.
P104 (silver)	Wastewater	Aug. 8, 1990.
P104 (cyanides).	Wastewater	June 8, 1989.
P104 (cyanides/silver).	Nonwastewater	June 8, 1989.
P105	All	Aug. 8, 1990.
P106	All	June 8, 1989.
P108	Soil and debris	May 8, 1992.
P108	All others	Aug. 8, 1990.
P109	Soil and debris	June 8, 1991
P109	All others	June 8, 1989.
P110	All	Aug. 8, 1990.
P111	Soil and debris	June 8, 1991.
P111	All others	June 8, 1989.
P112	All	Aug. 8, 1990.
P113	All	Aug. 8, 1990.
P114	All	Aug. 8, 1990.
P115	All	Aug. 8, 1990.
P116	Soil and debris	May 8, 1992.
P116	All others	Aug. 8, 1990.
P118	Soil and debris	May 8, 1992.
P118	All others	Aug. 8, 1990.
P119	All	Aug. 8, 1990.
P120	All	Aug. 8, 1990.
P121	All	June 8, 1989.
P122	All	Aug. 8, 1990.
P123	All	Aug. 8, 1990.
U001	All	Aug. 8, 1990.
U002	All	Aug. 8, 1990.
U003	Soil and debris	May 8, 1992.
U003	All others	Aug. 8, 1990.
U004	All	Aug. 8, 1990.
U005	All	Aug. 8, 1990.
U006	Soil and debris	May 8, 1992.
U006	All others	Aug. 8, 1990.
U007	Soil and debris	May 8, 1992.
U007	All others	Aug. 8, 1990.
U008	All	Aug. 8, 1990.
U009	All	Aug. 8, 1990.
U010	Soil and debris	May 8, 1992.
U010	All others	Aug. 8, 1990.
U011	Soil and debris	May 8, 1992.
U011	All others	Aug. 8, 1990.
U012	All	Aug. 8, 1990.
U014	Soil and debris	May 8, 1992.
U014	All others	Aug. 8, 1990.
U015	Soil and debris	May 8, 1992.
U015	All others	Aug. 8, 1990.
U016	All	Aug. 8, 1990.
U017	Soil and debris	May 8, 1992.
U017	All others	Aug. 8, 1990.
U018	All	Aug. 8, 1990.
U019	All	Aug. 8, 1990.
U020	Soil and debris	May 8, 1992.
U020	All others	Aug. 8, 1990.
U021	Soil and debris	May 8, 1992.
U021	All others	Aug. 8, 1990.
U022	All	Aug. 8, 1990.
U023	All	Aug. 8, 1990.
U024	All	Aug. 8, 1990.
U025	All	Aug. 8, 1990.
U026	Soil and debris	May 8, 1992.
U026	All others	Aug. 8, 1990.
U027	All	Aug. 8, 1990.
U028	Soil and debris	June 8, 1991.
U028	All others	June 8, 1989.
U029	All	Aug. 8, 1990.
U030	All	Aug. 8, 1990.
U031	All	Aug. 8, 1990.
U032	All	Aug. 8, 1990.
U033	Soil and debris	May 8, 1992.
U033	All others	Aug. 8, 1990.
U034	Soil and debris	May 8, 1992.
U034	All others	Aug. 8, 1990.
U035	Soil and debris	May 8, 1992.
U035	All others	Aug. 8, 1990.
U036	All	Aug. 8, 1990.
U037	All	Aug. 8, 1990.
U038	Soil and debris	May 8, 1992.
U038	All others	Aug. 8, 1990.
U039	All	Aug. 8, 1990.
U041	Soil and debris	May 8, 1992.
U041	All others	Aug. 8, 1990.
U042	Soil and debris	May 8, 1992.
U042	All others	Aug. 8, 1990.
U043	All	Aug. 8, 1990.
U044	All	Aug. 8, 1990.
U045	All	Aug. 8, 1990.
U046	Soil and debris	May 8, 1992.
U046	All others	Aug. 8, 1990.
U047	All	Aug. 8, 1990.
U048	All	Aug. 8, 1990.
U049	Soil and debris	May 8, 1992.
U049	All others	Aug. 8, 1990.
U050	All	Aug. 8, 1990.
U051	All	Aug. 8, 1990.
U052	All	Aug. 8, 1990.
U053	All	Aug. 8, 1990.
U055	All	Aug. 8, 1990.
U056	All	Aug. 8, 1990.
U057	All	Aug. 8, 1990.
U058	Soil and debris	June 8, 1992.
U058	All others	June 8, 1989.
U059	Soil and debris	May 8, 1992.
U059	All others	Aug. 8, 1990.
U060	Soil and debris	May 8, 1992.
U060	All others	Aug. 8, 1990.
U061	Soil and debris	May 8, 1992.
U061	All others	Aug. 8, 1990.
U062	Soil and debris	May 8, 1992.
U062	All others	Aug. 8, 1990.
U063	All	Aug. 8, 1990.
U064	All	Aug. 8, 1990.
U066	All	Aug. 8, 1990.
U067	All	Aug. 8, 1990.
U068	All	Aug. 8, 1990.
U069	Soil and debris	June 8, 1991.
U069	All others	June 8, 1989.
U070	All	Aug. 8, 1990.
U071	All	Aug. 8, 1990.
U072	All	Aug. 8, 1990.
U073	Soil and debris	May 8, 1992.
U073	All others	Aug. 8, 1990.
U074	Soil and debris	May 8, 1992.
U074	All others	Aug. 8, 1990.
U075	All	Aug. 8, 1990.
U076	All	Aug. 8, 1990.
U077	All	Aug. 8, 1990.
U078	All	Aug. 8, 1990.
U079	All	Aug. 8, 1990.
U080	All	Aug. 8, 1990.
U081	All	Aug. 8, 1990.
U082	All	Aug. 8, 1990.
U083	All	Aug. 8, 1990.
U084	All	Aug. 8, 1990.
U085	All	Aug. 8, 1990.
U086	All	Aug. 8, 1990.
U087	Soil and debris	June 8, 1991.
U087	All others	June 8, 1989.
U088	Soil and debris	June 8, 1991
U088	All others	June 8, 1989.
U089	All	Aug. 8, 1990.
U090	All	Aug. 8, 1990.
U091	Soil and Debris	May 8, 1992.
U091	All others	Aug. 8, 1990.
U092	Soil and debris	May 8, 1992.
U092	All others	Aug. 8, 1990.
U093	Soil and debris	May 8, 1992.
U093	All others	Aug. 8, 1990.
U094	All	Aug. 8, 1990.
U095	Soil and debris	May 8, 1992.
U095	All others	Aug. 8, 1990.
U096	All	Aug. 8, 1990.
U097	Soil and debris	May 8, 1992.
U097	All others	Aug. 8, 1990.
U098	All	Aug. 8, 1990.
U099	All	Aug. 8, 1990.
U101	All	Aug. 8, 1990.
U102	Soil and debris	June 8, 1991
U102	All others	June 8, 1989.
U103	All	Aug. 8, 1990.

APPENDIX VII.—EFFECTIVE DATES OF SURFACE DISPOSED WASTES REGULATED IN THE LDRS [a]—Continued

[Comprehensive List]

Waste code	Waste category	Effective date
U105	All	Aug. 8, 1990.
U106	All	Aug. 8, 1990.
U107	Soil and debris	June 8, 1991.
U107	All others	June 8, 1989.
U108	All	Aug. 8, 1990.
U109	All	Aug. 8, 1990.
U110	Soil and debris	May 8, 1992.
U110	All others	Aug. 8, 1990.
U111	All	Aug. 8, 1990.
U112	All	Aug. 8, 1990.
U113	All	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	Wastewater	Aug. 8, 1990.
[illegible]	Nonwastewater	May 8, 1992.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	High mercury non-wastewater.	May 8, 1992.
[illegible]	Low mercury non-wastewater.	May 8, 1992.
[illegible]	Soil and debris	May 8, 1992.
[illegible]	All others	Aug. 8, 1990.
[illegible]	All	Aug. 8, 1990.
[illegible]	Soil and debris	May 8, 1992.

APPENDIX VII.—EFFECTIVE DATES OF SURFACE DISPOSED WASTES REGULATED IN THE LDRS [a]—Continued

[Comprehensive List]

Waste code	Waste category	Effective date
U153	All others	Aug. 8, 1990.
U154	All	Aug. 8, 1990.
U155	All	Aug. 8, 1990.
U156	Soil and debris	May 8, 1992.
U156	All others	Aug. 8, 1990.
U157	All	Aug. 8, 1990.
U158	All	Aug. 8, 1990.
U159	All	Aug. 8, 1990.
U160	All	Aug. 8, 1990.
U161	All	Aug. 8, 1990.
U162	All	Aug. 8, 1990.
U163	Soil and debris	May 8, 1992.
U163	All others	Aug. 8, 1990.
U164	Soil and debris	May 8, 1992.
U164	All others	Aug. 8, 1990.
U165	All	Aug. 8, 1990.
U166	All	Aug. 8, 1990.
U167	Soil and debris	May 8, 1992.
U167	All others	Aug. 8, 1990.
U168	Soil and debris	May 8, 1992.
U168	All others	Aug. 8, 1990.
U169	All	Aug. 8, 1990.
U170	All	Aug. 8, 1990.
U171	Soil and debris	May 8, 1992.
U171	All others	Aug. 8, 1990.
U172	All	Aug. 8, 1990.
U173	Soil and debris	May 8, 1992.
U173	All others	Aug. 8, 1990.
U174	All	Aug. 8, 1990.
U176	Soil and debris	May 8, 1992.
U176	All others	Aug. 8, 1990.
U177	Soil and debris	May 8, 1992.
U177	All others	Aug. 8, 1990.
U178	Soil and debris	May 8, 1992.
U178	All others	Aug. 8, 1990.
U179	All	Aug. 8, 1990.
U180	All	Aug. 8, 1990.
U181	All	Aug. 8, 1990.
U182	All	Aug. 8, 1990.
U183	All	Aug. 8, 1990.
U184	Soil and debris	May 8, 1992.
U184	All others	Aug. 8, 1990.
U185	All	Aug. 8, 1990.
U186	All	Aug. 8, 1990.
U187	All	Aug. 8, 1990.
U188	All	Aug. 8, 1990.
U189	All	Aug. 8, 1990.
U190	Soil and debris	June 8, 1991.
U190	All others	June 8, 1989.
U191	Soil and debris	May 8, 1992.
U191	All others	Aug. 8, 1990.
U192	All	Aug. 8, 1990.
U193	Soil and debris	May 8, 1992.
U193	All others	Aug. 8, 1990.
U194	Soil and debris	May 8, 1992.
U194	All others	Aug. 8, 1990.
U196	All	Aug. 8, 1990.
U197	All	Aug. 8, 1990.
U200	Soil and debris	May 8, 1992.
U200	All others	Aug. 8, 1990.
U201	All	Aug. 8, 1990.
U202	Soil and debris	May 8, 1992.
U202	All others	Aug. 8, 1990.
U203	All	Aug. 8, 1990.
U204	All	Aug. 8, 1990.
U205	All	Aug. 8, 1990.
U206	Soil and debris	May 8, 1992.

APPENDIX VII.—EFFECTIVE DATES OF SURFACE DISPOSED WASTES REGULATED IN THE LDRS [a]—Continued

[Comprehensive List]

Waste code	Waste category	Effective date
U206	All others	Aug. 8, 1990.
U207	All	Aug. 8, 1990.
U208	All	Aug. 8, 1990.
U209	All	Aug. 8, 1990.
U210	All	Aug. 8, 1990.
U211	All	Aug. 8, 1990.
U213	All	Aug. 8, 1990.
U214	All	Aug. 8, 1990.
U215	All	Aug. 8, 1990.
U216	All	Aug. 8, 1990.
U217	All	Aug. 8, 1990.
U218	Soil and debris	May 8, 1992.
U218	All others	Aug. 8, 1990.
U219	Soil and debris	May 8, 1992.
U219	All others	Aug. 8, 1990.
U220	All	Aug. 8, 1990.
U221	Soil and debris	June 8, 1991.
U221	All others	June 8, 1989.
U222	Soil and debris	May 8, 1992.
U222	All others	Aug. 8, 1990.
U223	Soil and debris	June 8, 1991.
U223	All others	June 8, 1989.
U225	All	Aug. 8, 1990.
U226	All	Aug. 8, 1990.
U227	All	Aug. 8, 1990.
U228	All	Aug. 8, 1990.
U234	Soil and debris	May 8, 1992.
U234	All others	Aug. 8, 1990.
U235	Soil and debris	June 8, 1991.
U235	All others	June 8, 1989.
U236	Soil and debris	May 8, 1992.
U236	All others	Aug. 8, 1990.
U237	Soil and debris	May 8, 1992.
U237	All others	Aug. 8, 1990.
U238	Soil and debris	May 8, 1992.
U238	All others	Aug. 8, 1990.
U239	All	Aug. 8, 1990.
U240	Soil and debris	May 8, 1992.
U240	All others	Aug. 8, 1990.
U243	All	Aug. 8, 1990.
U244	Soil and debris	May 8, 1992.
U244	All others	Aug. 8, 1990.
U246	All	Aug. 8, 1990.
U247	All	Aug. 8, 1990.
U248	All	Aug. 8, 1990.
U249	All	Aug. 8, 1990.

[a] This table does not include mixed radioactive wastes (from the First, Second, and Third Third rules) which are receiving a national capacity variance until May 8, 1992 for all applicable treatment technologies.

[b] Standards are being promulgated for 1,1,2-trichloroethane and 2-nitropropane for wastewaters and nonwastewaters.

[c] Standards are being promulgated for benzene and 2-ethoxyethanol for wastewaters and nonwastewaters.

[d] Treatment standards for nonwastewaters disposed of after June 8, 1989, were promulgated June 8, 1989.

[e] Treatment standards for nonwastewaters disposed of after August 17, 1988, were promulgated May 2, 1989.

Note: This table is provided for the convenience of the reader.

17. Appendix VIII is added to part 268, to read as follows:

APPENDIX VIII—NATIONAL CAPACITY LDR VARIANCES FOR UIC WASTES [a] Comprehensive List

Waste code	Waste category	Effective date
[illegible]1–F005	All spent F001–F005 solvent containing less than 1 percent total F001–F005 solvent constituents.	August 8, 1990.

APPENDIX VIII—NATIONAL CAPACITY LDR VARIANCES FOR UIC WASTES [a] Comprehensive List—Continued

Waste code	Waste category	Effective date
California list	Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l, or containing certain metals or compounds of these metals greater than or equal to the prohibition levels.	August 8, 1990.
California list	Liquid hazardous waste having a pH less than or equal to 2	August 8, 1990.
California list	Hazardous wastes containing HOCs in total concentrations less than 10,000 mg/l but greater than or equal to 1,000 mg/l.	August 8, 1990.
D002 [b]	All	May 8, 1992.
D003 (cyanides)	All	May 8, 1992.
D003 (sulfides)	All	May 8, 1992.
D003 (explosives, reactives)	All	May 8, 1992.
D007	All	May 8, 1992.
D009	High Mercury Nonwastewater	May 8, 1992.
D009	Low Mercury Nonwastewater	May 8, 1992.
F011	All	June 8, 1991.
F039	Wastewater	May 8, 1992.
K009	Wastewater	June 8, 1991.
K011	Nonwastewater	June 8, 1991.
K011	Wastewater	May 8, 1992.
K013	Nonwastewater	June 8, 1991.
K013	Wastewater	May 8, 1992.
K014	All	May 8, 1992.
K016 (dilute)	All	June 8, 1991.
K048	All	August 8, 1990.
K049	All	August 8, 1990.
K050	All	August 8, 1990.
K051	All	August 8, 1990.
K052	All	August 8, 1990.
K062	All	August 8, 1990.
K071	All	August 8, 1990.
K104	All	August 8, 1990.

[a] Wastes that are deep well disposed on-site receive a six-month variance, with restrictions effective in November 1990.
[b] Deepwell injected D002 liquids with a pH less than 2 must meet the California List treatment standards on August 8, 1990.
Note: This table is provided for the convenience of the reader.

PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

1. The authority citation for part 270 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912, 6924, 6925, 6927, 6939, and 6974.

Subpart D—Changes to Permit

2. Section 270.42, appendix I is amended by redesignating item B(1)(b) as B(1)(c), and adding item B(1)(b) as follows:

§ 270.42 Permit modification at the request of the permittee.

* * * * *

APPENDIX I TO SECTION 270.42—CLASSIFICATION OF PERMIT MODIFICATION

Modification	Class
* * * * *	
B. General Facility Standards	
1. * * *	
b. To incorporate changes associated with F039 (multi-source leachate) sampling or analysis methods....	1
* * * * *	

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

1. The authority citation for part 271 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), and 6926.

Subpart A—Requirements for Final Authorization

2. Section 271.1(j) is amended by adding the following entry to Table 1 in chronological order by date of publication in the **Federal Register**:

§ 271.1 Purpose and scope.

* * * * *

(j) * * *

TABLE 1.—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Promulgation date	Title of regulation	Federal Register reference	Effective date
June 1, 1990	Land Disposal Restrictions for Third Third wastes	[Insert page numbers]	May 8, 1990.

3. Section 271.1(j) is amended by revising the entry for May 8, 1990 in Table 2 to read as follows:

§ 271.1 Purpose and Scope.

* * * * *

(j) * * *

TABLE 2.—SELF-IMPLEMENTING PROVISIONS OF THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Effective	Self-implementing provision	RCRA citation	Federal Register reference
May 8, 1990	Prohibition on land disposal of 3/3 of listed wastes.	3004(g)(6)(C)	[June 1, 1990 and page numbers of this document.]

PART 302—DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION

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

Authority: Sec. 102 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9602; secs. 311 and 501(a) of the Federal Water Pollution Control Act, 33 U.S.C. 1321 and 1361.

2. Section 302.4 is amended by adding the following entry in alphabetical order under the column "Hazardous Substance" and adding as the first footnote, footnote † to read as follows. Footnotes 1* and 4 are republished.

§ 302.4 Designation of Hazardous Substances.

* * * * *

Hazardous Substance	CASRN	Regulatory Synonyms	Statutory			Final RQ	
			RQ	Code†	RCRA Waste Number	Category	Pounds (Kg)
•	•	•	•	•	•	•	
Multi Source Leachate			1*	4	F039	X	1 (0.454)
•	•	•	•	•	•	•	

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

* * * * *

4—indicates that the statutory source for designation of this hazardous substance under CERCLA is RCRA Section 3001.
1*—indicates that the 1-pound RQ is a CERCLA statutory RQ.

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