ILLINOIS POLLUTION CONTROL BOARD
December 7, 2000

IN THE MATTER OF:	)	
	)	
RCRA SUBTITLE C UPDATE, USEPA	)	R01-3
AMENDMENTS (January 1, 2000, through	)	(Identical-in-Substance
June 30, 2000)	)	Rulemaking - Land)

Adopted Rule. Final Order.

OPINION AND ORDER OF THE BOARD (by S.T. Lawton, Jr.):

Under Sections 7.2 and 22.4(a) of the Environmental Protection Act (Act) (415 ILCS 5/7.2 and 22.4(a) (1998)), the Board adopts amendments to the Illinois regulations that are "identical in substance" to hazardous waste regulations that the United States Environmental Protection Agency (USEPA) adopted to implement Subtitle C of the federal Resource Conservation and Recovery Act of 1976 (RCRA Subtitle C) (42 U.S.C. §§ 6921 *et seq*. (1998)). The nominal timeframe of this docket includes federal RCRA Subtitle C amendments that USEPA adopted in the period January 1, 2000, through June 30, 2000.

Sections 7.2 and 22.4(a) provide for quick adoption of regulations that are identical in substance to federal regulations that USEPA adopts to implement Sections 3001 through 3005 of RCRA (42 U.S.C. §§ 6921-6925 (1998)). Section 22.4(a) also provides that Title VII of the Act and Section 5 of the Administrative Procedure Act (APA) (5 ILCS 100/5-35 and 5-40 (1998)) do not apply to the Board's adoption of identical-in-substance regulations. The federal RCRA Subtitle C regulations are found at 40 C.F.R. 260 through 266, 268, 270, 271, 273, and 279.

The Board will delay filing the adopted amendments with the Office of the Secretary of State for 30 days following the date of this opinion. The delay is pursuant to an agreement between USEPA and the State of Illinois that allows USEPA additional time to review the adopted amendments before they become effective.

FEDERAL ACTIONS CONSIDERED IN THIS RULEMAKING

The following briefly summarizes the federal actions considered in this rulemaking.

Docket R01-3: January 1, 2000, through June 30, 2000, RCRA Subtitle C Amendments

USEPA amended the federal RCRA Subtitle C regulations on five occasions during the period January 1, 2000, through June 30, 2000. Each is summarized below:

65 Fed. Reg. 12378 (March 8, 2000)
USEPA extended the accumulation time applicable to wastewater treatment sludge from the metal finishing industry that is accumulated for high temperature metals recovery.

65 Fed. Reg. 14472 (March 17, 2000)
USEPA withdrew the hazardous waste listings and land disposal restrictions for organobromine production wastes in response to a judicial vacature in Great Lakes Chemical Corp. v. EPA, no. 98-1312 (D.C. Cir. Apr. 9, 1999).

65 Fed. Reg. 30886 (May 15, 2000)
USEPA adopted amendments to its NPDES regulations to eliminate rules that are obsolete, ineffective, or unduly burdensome. The amendments streamline various permitting procedures, including those for UIC and RCRA Subtitle C permits.

65 Fed. Reg. 32214 (May 22, 2000)
USEPA made a formal regulatory determination not to include wastes from fossil fuel combustion as listed hazardous waste.

65 Fed. Reg. 36365 (June 8, 2000)
USEPA corrected typographical errors in its March 17, 2000 (65 Fed. Reg. 14472) organobromine production waste rule and its August 6, 1998 (63 Fed. Reg. 42110) listing of four petroleum wastes.

No Later RCRA Subtitle C (Hazardous Waste) Amendments of Interest

The Board engages in ongoing monitoring of federal actions. As of the date of this opinion and accompanying order, we have not identified any USEPA actions since June 30, 2000, that further amend the RCRA Subtitle C hazardous waste rules within the scope any of the subject matters as those already involved in this docket. When the Board observes an action outside the nominal timeframe of a docket that would require expedited consideration in the pending docket, the Board will expedite consideration of those amendments. Federal actions that could warrant expedited consideration include those that directly affect the amendments involved in this docket, those for which compelling reasons would warrant consideration as soon as possible, and those for which the Board has received a request for expedited consideration.

Other Federal Actions Having an Ancillary Impact on the Illinois RCRA Subtitle C Regulations

In addition to the amendments to the federal RCRA Subtitle C regulations, another set of federal amendments might have an effect on the corresponding Illinois rules. Most notably, 35 Ill. Adm. Code 720.111 includes several incorporations of federal regulations by reference, and USEPA has amended 40 C.F.R. 136, which is included among the incorporated references. The set of federal amendments to 40 C.F.R. 136 is as follows:

65 Fed. Reg. 3008 (January 19, 2000)
USEPA adopted wastewater effluent limitation guidelines, pretreatment standards, and new source performance standards for the landfill point source category. One segment of this rulemaking was the amendment of Methods 625 and 1625 in 40 C.F.R. 136.3, Appendix A.

65 Fed. Reg. 14344 (March 16, 2000)
USEPA corrected its January 19,2000 effluent guidelines, pretreatment standards, and new source performance standards for the landfill source category.

RCRA Subtitle C (Hazardous Waste) Amendments on Which No Board Action Was Necessary

Among the various federal RCRA Subtitle C amendments examined by the Board and listed above, there are some on which no Board action was necessary in the present update docket R01-3. The reasons why no Board action was necessary vary from one federal action to another. The Board lists these five federal actions among those considered in this docket for the benefit of the regulated community, but we do not further discuss them in this opinion.

1. No Board action was necessary on the federal action of March 8, 2000 (65 Fed. Reg. 12378). The Board completed action on the federal accumulation time amendments in the prior update docket RCRA Subtitle C Update, USEPA Amendments (July 1, 1999, through December 31, 1999) (May 18, 2000), R00-13.

2. Similarly, no Board action was necessary on the federal action of March 17, 2000 (65 Fed. Reg. 14472). The Board also removed the hazardous waste listings for organobromine wastes in the prior update docket RCRA Subtitle C Update, USEPA Amendments (July 1, 1999, through December 31, 1999) (May 18, 2000), R00-13.

3. No further action was necessary as to the federal cleanup amendments of May 15, 2000 (65 Fed. Reg. 30886). The Board has examined the hazardous waste-related segments of the federal amendments (40 C.F.R. 270.32(c) and 270.43(b)) and the corresponding Illinois rules (35 Ill. Adm. Code 702.161(b)(2) and 702.186), and the altered segment of the federal text (references to the consolidated permit procedures of 40 C.F.R. 124) have no counterpart in the corresponding Illinois regulations.

4. The federal action of May 22, 2000 (65 Fed. Reg. 32214), was a determination not to regulate categories of wastes from certain activities. The federal action included no amendments to the federal regulations. Thus, the Board does not need to amend the Illinois rules in response.

5. Finally, the Board has examined the March 16, 2000 (65 Fed. Reg. 14344) corrections to the January 19, 2000 (65 Fed. Reg. 3008) wastewater effluent limitation guidelines, pretreatment standards, and new source performance standards for the landfill point source category. None of the corrections affect the amendment of Methods 625 and 1625 in 40 C.F.R. 136.3, Appendix A, so the Board does not need to update the incorporation of 40 C.F.R. 136 to include a reference to these corrections.

Summary Listing of the Federal Actions Forming the Basis of the Board's Actions in this Docket

Based on the foregoing, the federal actions that form the basis for Board action in this update docket are as follows, in chronological order:

65 Fed. Reg. 3008 (January 19, 2000)	USEPA amendment of the analytical methods of 40 C.F.R. 136, which are incorporated by reference in 35 Ill. Adm. Code 720.111.
65 Fed. Reg. 36365 (June 8, 2000)	USEPA corrected its March 17, 2000 (65 Fed. Reg. 14472) withdrawal of the organobromine production waste rule and its August 6, 1998 (63 Fed. Reg. 42110) listing of four petroleum wastes.

PUBLIC COMMENTS

The Board adopted a proposal for public comment in this matter on September 21, 2000. Notices of Proposed Amendments appeared in the October 13, 2000 issue of the *Illinois Register*, at 24 Ill. Reg. 14945 (Part 720), 14959 (Part 721), and 14971 (Part 728). The Board received public comments on this proposal for a period of 45 days following its publication in the *Illinois Register*. The public comment period ended on November 27, 2000. The Board now immediately considers adoption of the amendments, making the necessary changes made evident through the public comments. The Board will delay filing these adopted rules with the Secretary of State for 30 days after adoption, particularly to allow additional time for USEPA to review the adopted amendments before they are filed and become effective.

PC 1 Illinois Environmental Protection Agency (Agency): "Response of the Illinois Environmental Protection Agency Pursuant to Public Comment Period for Proposed Identical-in-Substance Rules," dated November 27, 2000, from Susan J. Schroeder, Associate Counsel, Division of Legal Counsel (received November 28, 2000).

The Agency, in PC 1, discusses a single provision in the proposed amendments. The Agency states that it believes that a certain federal amendment to 40 C.F.R. 261.31(a) is accurately reflected in corresponding 35 Ill. Adm. Code 721.131(a), but that that federal amendment was an error. That federal amendment and the Agency's comments are considered in

greater detail in the discussion of the withdrawal of the organobromine waste rule at page 7 below.

In addition to the public comments received, the Board received from Joint Committee on Administrative Rules (JCAR) on October 12, 2000 a series of three documents (one for each Part involved in this proceeding) entitled "Line Numbered Version." To accompany those documents, JCAR submitted three additional documents (one for each Part) entitled "Suggested Revisions."

DISCUSSION

The following discussion begins with a description of the types of deviations the Board makes from the literal text of federal regulations in adopting identical-in-substance rules. It is followed by a discussion of the amendments and actions undertaken in direct response to the federal actions involved in this proceeding. This first series of discussions is organized by federal subject matter, generally appearing in chronological order of the relevant *Federal Register* notices involved. Finally, this discussion closes with a description of the amendments and actions that are not directly derived from the federal actions.

General Revisions and Deviations from the Federal Text

In incorporating the federal rules into the Illinois system, some deviation from the federal text is unavoidable. This deviation arises primarily through differences between the federal and state regulatory structure and systems. Some deviation also arises through errors in and problems with the federal text itself. The Board conforms the federal text to the Illinois rules and regulatory scheme and corrects errors that we see in the text as we engage in these routine update rulemakings.

In addition to the amendments derived from federal amendments, the Board often finds it necessary to alter the text of various passages of the existing rules as provisions are opened for update in response to USEPA actions. This involves correcting deficiencies, clarifying provisions, and making other changes that are necessary to establish a clear set of rules that closely parallel the corresponding federal requirements within the codification scheme of the Illinois Administrative Code.

The Board updates the citations to the *Code of Federal Regulations* to the most recent version available. As of the date of this opinion, the most recent version of the *Code of Federal Regulations* available to the Board is the July 1, 1999 version. Thus, we have updated all citations to the 1999 version, adding references to later amendments using their appropriate *Federal Register* citation, where necessary.

The Board substituted "or" for "/" in most instances where this appeared in the federal base text, using "and" where more appropriate. The Board further used this opportunity to make a number of corrections to punctuation, grammar, spelling, and cross-reference format throughout the opened text. We changed "who" to "that" and "he" or "she" to "it," where the

person to which the regulation referred was not necessarily a natural person, or to "he or she," where a natural person was evident; changed "which" to "that" for restrictive relative clauses; substituted "must" for "shall"; capitalized the section headings and corrected their format where necessary; and corrected punctuation within sentences.

In addition, the federal rules have been edited to establish a uniform usage throughout the Board's regulations. For example, with respect to "shall," "will," and "may," "must" is used when an action is required by the rule, without regard to whether the action is required of the subject of the sentence or not. "Shall" is no longer, since it is not used in everyday language. Thus, where a federal rule uses "shall," the Board substitutes "must." This is a break from our former practice where "shall" was used when the subject of a sentence has a duty to do something. "Will" is used when the Board obliges itself to do something. "May" is used when choice of a provision is optional. "Or" is used rather than "and/or," and denotes "one or both." "Either . . . or" denotes "one but not both." "And" denotes "both."

The JCAR has requested that the Board refer to the United States Environmental Protection Agency in the same manner throughout all of our bodies of regulations—*i.e.*, air, water, drinking water, RCRA Subtitle D (municipal solid waste landfill), RCRA Subtitle C (hazardous waste), underground injection control (UIC), etc. The Board has decided to refer to the United States Environmental Protection Agency as "USEPA." We will continue this conversion in future rulemakings as additional sections become open to amendment. We will further convert "EPA" used in federal text to "USEPA," where USEPA is clearly intended.

The Board has assembled tables to aid in the location of these alterations and to briefly outline their intended purpose. The tables set forth the miscellaneous deviations from the federal text and corrections to the pre-amended base text of the rules in detail. The tables are set forth and explained beginning at page 7. There is no further discussion of most of the deviations and revisions elsewhere in this opinion.

Discussion of Particular Federal Actions

Update to the Clean Water Act Analytical Methods Incorporated by Reference—Section 720.111

On January 19, 2000 (65 Fed. Reg. 3008), USEPA adopted wastewater effluent limitation guidelines, pretreatment standards, and new source performance standards for the landfill point source category. One segment of this rulemaking was the amendment of Clean Water Act analytical methods, Methods 625 and 1625, in 40 C.F.R. 136.3, Appendix A. Method 625 is the analysis of base/neutral and acid organics in wastewater by gas chromatography, and Method 1625 is the analysis of semivolatile organic compounds by capillary column gas chromatography-mass spectrometry. The Board has incorporated the methods of 40 C.F.R. 136 into the hazardous waste regulations by reference in Section 720.111(b).

The Board has incorporated the federal amendments into the Illinois hazardous waste regulations by updating the incorporation of 40 C.F.R. 136 by reference. This required updating the version of 40 C.F.R. 136 incorporated by reference at 35 Ill. Adm. Code 720.111 by adding a

reference to the January 19, 2000 *Federal Register* notice of adopted amendments at 65 Fed. Reg. 3008. Persons interested in the substance of the underlying federal action should refer to the notice that appeared in the January 19, 2000 issue of the *Federal Register*.

The Board requested public comment on our incorporation of the January 19, 2000 federal revisions to Methods 625 and 1625 into the Illinois hazardous waste regulations. We received no comments on this aspect of the September 7, 2000, proposal for public comment.

Corrections to the Withdrawal of the Organobromine Waste Rule and the Petroleum Production Wastes Listings—Section 721.131 and Appendix G to Part 728

On June 8, 2000 (65 Fed. Reg. 36565), USEPA corrected two of its prior actions. USEPA corrected its March 17, 2000 (65 Fed. Reg. 14472) withdrawal of its May 4, 1998 (63 Fed. Reg. 24596) organobromine production waste rule and its August 6, 1998 (63 Fed. Reg. 42110) listing of four petroleum wastes. The Board originally adopted the organobromine production waste rule in RCRA Update, USEPA Regulations (July 1, 1997, through December 31, 1997), RCRA Update, USEPA Regulations (January 1, 1998, through June 30, 1998), UIC Update, USEPA Regulations (January 1, 1998, through June 30, 1998) (December 17, 1998), R98-21/R99-2/R99-7 (consolidated). As briefly mentioned above, the Board adopted the March 17, 2000 withdrawal in RCRA Subtitle C Update, USEPA Amendments (July 1, 1999, through December 31, 1999) (May 18, 2000), R00-13. We adopted the August 6, 1998 petroleum production waste listings in RCRA Subtitle C Update, USEPA Amendments (July 1, 1998, through December 31, 1998) (June 17, 1999), R99-15.

The Board incorporated the June 8, 2000 corrections into the September 7, 2000, proposal for public comment with no deviation from the federal text. Persons interested in the details of the federal amendments should consult the June 8, 2000 *Federal Register* notice.

The Board requested public comment on our incorporation of the June 8, 2000 federal corrections. We received a single comment from the Agency on the September 7, 2000 proposal. In PC 1, the Agency noted in that while the Board amendments to the F037 waste listing in Section 721.131(a) accurately reflect the June 8, 2000 federal amendments, there is a significant substantive difference between an "oil cooling water" and an "oily cooling water." The Federal amendments changed "oily cooling water" to "oil cooling water." The Agency believes that the language should have remained "oily cooling waters," which are cooling waters containing oil, rather than "oil cooling waters," which are those waters used to cool oil.

The Agency's observations caused the Board to re-examine the F037 waste listing. We examined the November 2, 1990 *Federal Register* notice in which USEPA originally adopted that listing. As a result, we believe that the recent federal changed from "oily cooling waters" to "oil cooling waters" was an inadvertent error. In adopting the F037 listing, USEPA stated as follows:

> Wastewaters may be generally classified as process, oily cooling, oil-free, and sanitary wastewaters. . . . Sludges generated from the treatment of completely segregated oil-free and sanitary wastewaters are not affected by today's listings.
>
> 55 Fed. Reg. 46354, 46359 (November 2, 1990).

Thus, USEPA clearly did not intend to include wastewater sludges that do not contain oil in its definition of F037 waste. The Board notes that implicit to the Agency's observations relating to "oily cooling water" and "oil cooling water" is the distinction that "oil cooling water" does not necessarily contain oil, whereas "oily cooling water" does. If we retain the change from "oily cooling waters" to "oil cooling waters," the F037 waste listing would expand to include wastewaters that do not necessarily contain oil. Not only is this contrary to the intent originally announced by USEPA in the November 2, 1990 listing of F037 waste, but nothing in the June 8, 2000 notice of corrections specifically indicates that USEPA intended to expand the F037 listing in this way.

As a result, the Board has decided to alter the text of the amendments. Specifically, we have removed the amendment changing "oily cooling waters" to "oil cooling waters" in the hazardous waste listing in Section 721.131(a) for F037 waste. We are aware that this will create a difference between this listing in the Illinois regulations and that in 40 C.F.R. 261.31(a) on which it is based. We believe that the Illinois rules accurately reflect the federal intent. If USEPA believes otherwise, it may notify us of that fact during the 30-day period following our vote to adopt these amendments before they become final and effective.

<u>F023 Tri- and Tetrachlorophenol and Tetra-, Penta-, and Hexachlorobenzene Production Waste—Section 721.131(a)</u>

One of the suggestions offered by JCAR warrants specific discussion. JCAR suggested that the Board change the F023 waste listing in Section 721.131(a). As it stands, that waste listing is virtually identical to its federal counterpart, which reads as follows:

> F023 Wastes . . . from the production of materials on equipment previously used for the production of materials on equipment previously used for the production or manufacturing use . . . of tri- and tetrachlorophenols. 40 C.F.R. 261.31(a) (1999).

JCAR suggested that the Board should change the segment that reads "materials on equipment" to read "materials or equipment." This change would alter the meaning of the waste definition. Instead of waste from production of materials on equipment that could be contaminated from previous use relating to the two chlorinated phenols, the JCAR-revised listing would include wastes or equipment (when it becomes a waste) from production of the two compounds. These would already be included in the hazardous waste listing designated F020. The Board cannot make this change, which would render the Illinois regulations less stringent than the corresponding federal rules in this regard.

The situation is similar with regard to the JCAR suggestion to make the same change in language in the F026 waste listing. The F026 listing is very similar to the F023 listing, but it relates to tetra-, penta-, and hexachlorobenzene. The JCAR suggestion would make the F026 waste listing subsumed by the F022 listing, which is the listing for tetra-, penta-, and hexachlorobenzene wastes. The Board cannot make this suggested change.

When it adopted the F023 and F026 waste listings USEPA made it clear that it intended to include wastes contaminated from previously-used equipment as hazardous waste. USEPA stated as follows:

> Also listed are wastes that are generated in the course of a manufacturing process performed on equipment previously used for . . . [production of tri- and tetrachlorophenols or tetra-, penta-, and hexachlorobenzene]. 50 Fed. Reg. 1978, 1979 (January 14, 1985).

The JCAR-suggested revisions to the F023 and F026 waste listings would exclude such wastes despite USEPA's intent to include them in the listings. Again the Board believes that the rules adopted here accurately reflect the federal intent. USEPA is invited to comment on our reading within the next 30 days.

Agency or Board Action

Section 7.2(a)(5) of the Act requires the Board to specify for which portions of the program USEPA will retain decision making authority. Based on the general division of functions within the Act and other Illinois statutes, the Board is also to specify which State agency is to make decisions.

In situations in which the Board has determined that USEPA will retain decision-making authority, the Board has replaced "Regional Administrator" with USEPA, so as to avoid specifying which office within USEPA is to make a decision.

In some identical-in-substance rules, certain decisions pertaining to a permit application are not appropriate for the Agency to consider. In determining the general division of authority between the Agency and the Board, the following factors should be considered:

1. Whether the person making the decision is applying a Board regulation, or taking action contrary to ("waiving") a Board regulation. It generally takes some form of Board action to "waive" a Board regulation.

2. Whether there is a clear standard for action such that the Board can give meaningful review to an Agency decision.

3. Whether the action would result in exemption from the permit requirement itself. If so, Board action is generally required.

4. Whether the decision amounts to "determining, defining or implementing environmental control standards" within the meaning of Section 5(b) of the Act. If so, it must be made by the Board.

There are four common classes of Board decisions: variance, adjusted standard, site-specific rulemaking, and enforcement. The first three are methods by which a regulation can be temporarily postponed (variance) or adjusted to meet specific situations (adjusted standard or site-specific rulemaking). There often are differences in the nomenclature for these decisions between the USEPA and Board regulations.

Discussion of Miscellaneous Housekeeping Amendments

Table 1 below list numerous corrections and amendments that are not based on current federal amendments. Table 1 (beginning immediately below) includes deviations made in this final order from the verbatim text of the federal amendments. Table 2 (beginning after table 1 immediately below) contains corrections and clarifications that the Board made in the base text involved in this proposal. The amendments listed in this table are housekeeping amendments not directly derived from the current federal amendments. Table 3 (beginning on page 11 below) is a listing of revisions made to the text of the amendments from that proposed and set forth in the Board's opinion and order of September 21, 2000. Table 3 indicates the changes made, as well as the source that suggested each of the changes. Table 4 (beginning on page 12 below) lists a small number of suggested revisions that the Board cannot incorporate into the text of the amendments. Table 4 indicates the suggested revision, the source of the suggestion, and the reason we cannot make the suggested change. Some of the entries in these tables are discussed further in appropriate segments of the general discussion beginning at page 4 of this opinion.

Table 1:
Deviations from the Text of the Federal Amendments

Illinois Section	40 C.F.R. Section	Revision(s)
721.131(a) "F037"	261.31(a)	Removed the change from "oily cooling water" to "oil cooling water"
721.131(a) "F038"	261.31(a)	Changed "DAF" to "dissolved air flotation (DAF)"

Table 2:
Board Housekeeping Amendments

Section	Source	Revision(s)
720.111(a) "APTI"	JCAR, Board	Removed the listing of "APTI" as the source of "APTI Course 415"
720.111(a) "NTIS"	JCAR, Board	Replaced "USEPA Publication EPA 450/2-81-005" with "PB80208895" for "APTI Course 415"
720.111(b)	Board	Changed "40 CFR 268.Appendix IX" to "40 CFR 268, Appendix IX"

721 Table of Contents	JCAR	Used lower-case "from" in heading for Section 721.131
721.131 Heading	JCAR	Used lower-case "from"
721.131(a)	JCAR	Changed "Section Appendix I of this Part" to "Appendix I of this Part"
721.131(a) "F024"	JCAR	Added a comma before "including" to offset a parenthetical
721.131(a) "F027"	JCAR	Moved the ending period inside the closing parenthesis mark
721.131(a) "F032"	JCAR	Removed the unnecessary comma after "wastewaters"
721.131(a) "F034"	JCAR	Removed the unnecessary comma after "wastewaters"
721.131(a) "F037"	Board	Changed to the singular "sludge" (four times); changed "subsection (b)(2), below" to "subsection (b)(2) of this Section"; added a comma to offset the final element of a series
721.131(a) "F038"	JCAR, Board	Changed "DAF" to "dissolved air flotation (DAF)"; changed "subsection (b)(2), below" to "subsection (b)(2) of this Section"
721.131(b)(2)(A)	JCAR	Removed the unnecessary comma after "or"; removed the unnecessary comma after "tank"
721.131(b)(2)(B)	Board	Changed "shall" to "must"
728.Appendix G, Table 1, entry 1	JCAR	Changed "of" to "or" for "CERCLA response or RCRA corrective actions"

Table 3:
Revisions to the Text of the Proposed Amendments in Final Adoption

Section Revised	Source(s) of Revision(s)	Revision(s)
720.111(a) "APTI"	JCAR, Board	Removed the listing of "APTI" as the source of "APTI Course 415"
720.111(a) "NTIS"	JCAR, Board	Replaced "USEPA Publication EPA 450/2-81-005" with "PB80208895" for "APTI Course 415"
721 Table of Contents	JCAR	Used lower-case "from" in heading for Section 721.131
721.131 Heading	JCAR	Used lower-case "from"
721.131(a)	JCAR	Changed "Section Appendix I of this Part" to "Appendix I of this Part"
721.131(a) "F024"	JCAR	Added a comma before "including" to offset a parenthetical
721.131(a) "F027"	JCAR	Moved the ending period inside the closing parenthesis mark
721.131(a) "F032"	JCAR	Removed the unnecessary comma after "wastewaters"
721.131(a) "F034"	JCAR	Removed the unnecessary comma after "wastewaters"

721.131(a) "F037"	JCAR	Removed the change from "oily cooling water" to "oil cooling water"
721.131(a) "F038"	JCAR	Changed "DAF" to "dissolved air flotation (DAF)"
721.131(b)(2)(A)	JCAR	Removed the unnecessary comma after "or"; removed the unnecessary comma after "tank"
728.Appendix G, Table 1, entry 1	JCAR	Changed "of" to "or" for "CERCLA response or RCRA corrective actions"

Table 4
Requested Revisions to the Text of the Proposed Amendments Not Made in Final Adoption

Section Affected	Source(s) of Request: Requested Revision(s)	Explanation
720 Source note	JCAR: Change "amended in R01-3 at 25 Ill. Reg. . . ." to "amended at R01-3 at 25 Ill. Reg. . . ."	The preposition "in" is universally used for the Board docket number, and the preposition "at" is universally used for the *Illinois Register* citation.
721.131(a) "F023"	JCAR: Change "materials on equipment" to "materials or equipment"	The suggested revision would render the Illinois listing for F023 waste substantively different than the corresponding federal listing on which it was based. See the discussion beginning at page 7 of this opinion.
721.131(a) "F026"	JCAR: Change "materials on equipment" to "materials or equipment"	The suggested revision would render the Illinois listing for F026 waste substantively different than the corresponding federal listing on which it was based. See the discussion beginning at page 7 of this opinion.
721.131(a) "F037"	JCAR: Change "oily cooling wastewaters" to "oil cooling wastewaters" to agree with a similar federal amendment above in this entry	USEPA left the word "oily" in one location in the text of its amendments. It is possible that the change to "oil" in the single location was an error. As it stands, even with this internal inconsistency, the Board text agrees with the corresponding federal text.
721.131(a) "F037"	JCAR: change "process or oily cooling wastewaters" to plural "processes or oil cooling wastewaters"	From the context, it appears that the word "process" is intended as an adjective that modifies "waters," rather than a noun, so the singular to agree with the corresponding federal text is more appropriate.

721.131(a) "F037"	JCAR: change "oily cooling wastewaters" to "oil cooling wastewaters" to agree with a similar federal amendment above in this entry	USEPA left the word "oily" in one location in the text of its amendments. It is possible that the change to "oil" in the single location was an error. See the discussion beginning at page 8 of this opinion.
721.131(a) "F038"	JCAR: change "oily cooling wastewaters" to "oil cooling wastewaters" to agree with a similar federal amendment above in this entry (two locations)	USEPA left the word "oily" in one location in the text of its amendments to the entry for "F037." It is possible that the change to "oil" in the single location in the "F037" entry was an error. As it stands, even with this internal inconsistency, the Board text agrees with the corresponding federal text.

HISTORY OF RCRA SUBTITLE C AND UIC ADOPTION ILLINOIS ENVIRONMENTAL PROTECTION AGENCY OR BOARD ACTION EDITORIAL CONVENTIONS

It has previously been the practice of the Board to include a historical discussion in its RCRA Subtitle C and UIC identical-in-subs tance rulemaking proposals. However, in the last RCRA Subtitle C update docket, RCRA Subtitle C Update, USEPA Amendments (July 1, 1999, through December 31, 1999) (May 18, 2000), R00-13, the Board indicated that it would cease this practice. Therefore, for a complete historical summary of the Board's RCRA Subtitle C and UIC rulemakings and programs, interested persons should refer back to the May 18, 2000 opinion and order in R00-13.

The historical summary contains all Board actions taken to adopt and maintain these programs since their inception and until May 18, 2000. It includes a listing of all site-specific rulemaking and adjusted standards proceedings filed that relate to these programs. It also lists all USEPA program authorizations issued during that time frame. As necessary the Board will continue to update the historical summary as a segment of the opinion in each RCRA Subtitle C and UIC update docket, but those opinions will not repeat the information contained in the opinion of May 18, 2000 in docket R00-13.

The following summarizes the history of the Illinois RCRA Subtitle C hazardous waste and UIC programs since May 18, 2000:

History of RCRA Subtitle C and State Hazardous Waste Rules Adoption

The Board has adopted and amended the RCRA Subtitle C hazardous waste rules in the following docket since May 18, 2000:

R00-13 RCRA Subtitle C Update, USEPA Regulations (January 1, 1999, through June 30, 1999) (May 18, 2000), R00-13; published at 24 Ill. Reg.9443 (July 7, 2000), effective June 20, 2000.

R01-3 RCRA Subtitle C Update, USEPA Regulations (January 1, 2000, through June 30, 2000), R01-3. (This docket.)

History of UIC Rules Adoption

The Board has adopted and amended Underground Injection Control (UIC) regulations in the following dockets since May 18, 2000:

R00-11 UIC Update, USEPA Regulations (July 1, 1999, through December 31, 1999), R00-11. (Adopted on December 7, 2000; consolidated with docket R01-1.)

R01-1 UIC Update, USEPA Regulations (January 1, 2000, through June 30, 2000), R01-1. (Adopted on December 7, 2000; consolidated with docket R00-11.)

ORDER

The complete text of the proposed amendments follows:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 720
HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

SUBPART A: GENERAL PROVISIONS

Section
720.101 Purpose, Scope, and Applicability
720.102 Availability of Information; Confidentiality of Information
720.103 Use of Number and Gender

SUBPART B: DEFINITIONS

Section
720.110 Definitions
720.111 References

SUBPART C: RULEMAKING PETITIONS AND OTHER PROCEDURES

Section

AUTHORITY: Implementing Sections 7.2, 13, and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 13, 22.4, and 27].

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-19 at 7 Ill. Reg. 14015, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11819, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 968, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 13998, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20630, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6017, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13435, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19280, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2450, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 12999, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 362, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18278, effective November 13, 1989; amended in R89-2 at 14 Ill. Reg. 3075, effective February 20, 1990; amended in R89-9 at 14 Ill. Reg. 6225, effective April 16, 1990; amended in R90-10 at 14 Ill. Reg. 16450, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7934, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9323, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14446, effective September 30, 1991; amended in R91-13 at 16 Ill. Reg. 9489, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17636, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5625, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20545, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6720, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12160, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17480, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9508, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 10929, August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 256, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7590, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17496, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1704, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9094, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1063, effective January 6, 2000; amended in R00-13 at

24 Ill. Reg. 9443, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. _____, effective _____.

SUBPART B: DEFINITIONS

Section 720.111 References

The following documents are incorporated by reference for the purposes of this Part and 35 Ill. Adm. Code 703 through 705, 721 through 726, 728, 730, 733, 738, and 739:

a) Non-Regulatory Government Publications and Publications of Recognized Organizations and Associations:

ACI. Available from the American Concrete Institute, Box 19150, Redford Station, Detroit, Michigan 48219:

ACI 318-83: "Building Code Requirements for Reinforced Concrete", adopted September 1983.

ANSI. Available from the American National Standards Institute, 1430 Broadway, New York, New York 10018, 212-354-3300:

ANSI B31.3 and B31.4. See ASME/ANSI B31.3 and B31.4.

API. Available from the American Petroleum Institute, 1220 L Street, N.W., Washington, D.C. 20005, 202-682-8000:

"Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems", API Recommended Practice 1632, Second Edition, December 1987.

"Evaporative Loss from External Floating-Roof Tanks", API Publication 2517, Third Edition, February 1989.

"Guide for Inspection of Refinery Equipment, Chapter XIII, Atmospheric and Low Pressure Storage Tanks", 4th Edition, 1981, reaffirmed December 1987.

"Installation of Underground Petroleum Storage Systems", API Recommended Practice 1615, Fourth Edition, November 1987.

~~APTI. Available from the Air and Waste Management Association, Box 2861, Pittsburgh, PA 15230, 412-232-3444:~~

~~APTI Course 415: Control of Gaseous Emissions, USEPA Publication EPA-450/2-81-005, December 1981.~~

ASME. Available from the American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017, 212-705-7722:

"Chemical Plant and Petroleum Refinery Piping", ASME/ANSI B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988. Also available from ANSI.

"Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols", ASME/ANSI B31.4-1986, as supplemented by B31.4a-1987. Also available from ANSI.

ASTM. Available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103, 215-299-5400:

ASTM C 94-90, Standard Specification for Ready-Mixed Concrete, approved March 30, 1990.

ASTM D 88-87, Standard Test Method for Saybolt Viscosity, April 24, 1981, reapproved January 1987.

ASTM D 93-85, Standard Test Methods for Flash Point by Pensky-Martens Closed Tester, approved October 25, 1985.

ASTM D 1946-90, Standard Practice for Analysis of Reformed Gas by Gas Chromatography, approved March 30, 1990.

ASTM D 2161-87, Standard Practice for Conversion of Kinematic Viscosity to Saybolt Universal or to Saybolt Furol Viscosity, March 27, 1987.

ASTM D 2267-88, Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, approved November 17, 1988.

ASTM D 2382-88, Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High Precision Method), approved October 31, 1988.

ASTM D 2879-92, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved 1992.

ASTM D 3828-87, Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester, approved December 14, 1988.

ASTM E 168-88, Standard Practices for General Techniques of Infrared Quantitative Analysis, approved May 27, 1988.

ASTM E 169-87, Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, approved February 1, 1987.

ASTM E 260-85, Standard Practice for Packed Column Gas Chromatography, approved June 28, 1985.

ASTM Method G 21-70 (1984a), Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi.

ASTM Method G 22-76 (1984b), Standard Practice for Determining Resistance of Plastics to Bacteria.

MICE. Methods Information Communication Exchange Service, 703-821-4690:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA Publication number SW-846, Update IIIA (April 1998).

GPO. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402,202-512-1800:

Standard Industrial Classification Manual (1972), and 1977 Supplement, republished in 1983.

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA Publication number SW-846 (Third Edition, November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August, 1993), IIB (January 1995), and III (December 1996) (Document Number 955-001-00000-1).

NACE. Available from the National Association of Corrosion Engineers, 1400 South Creek Dr., Houston, TX 77084, 713-492-0535:

"Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems", NACE Recommended Practice RP-02-85, approved March 1985.

NFPA. Available from the National Fire Protection Association, Batterymarch Park, Boston, MA 02269, 617-770-3000 or 800-344-3555:

"Flammable and Combustible Liquids Code" NFPA 30, issued July 17, 1987. Also available from ANSI.

NTIS. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, 703-605-6000 or 800-553-6847:

APTI Course 415: Control of Gaseous Emissions, ~~USEPA Publication EPA-450/2-81-005~~ PB80208895, December 1981.

"Generic Quality Assurance Project Plan for Land Disposal Restrictions Program", EPA/530-SW-87-011, March 15, 1987 (document number PB88-170766).

"Guideline on Air Quality Models", Revised 1986 (document number PB86-245-248 (Guideline) and PB88-150-958 (Supplement), also set forth at 40 CFR 51, Appendix W).

"Method 164, Revision A, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry" (document number PB99-121949).

"Methods for Chemical Analysis of Water and Wastes", Third Edition, March 1983 (document number PB84-128677).

"Methods Manual for Compliance with BIF Regulations", December 1990 (document number PB91-120-006).

"Petitions to Delist Hazardous Wastes — A Guidance Manual, Second Edition", EPA/530-R-93-007, March 1993 (document number PB93-169 365).

"Screening Procedures for Estimating the Air Quality Impact of Stationary Sources", October 1992, Publication Number EPA-450/R-92-019.

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA Publication number SW-846 (Third Edition, November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III

(December 1996), and IIIA (April 1998) (document number 955-001-00000-1).

OECD. Organisation for Economic Co-operation and Development, Environment Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France:

OECD Guideline for Testing of Chemicals, Method 301B: "CO_2 Evolution (Modified Sturm Test)", adopted 17 July 1992.

Table 2.B of the Annex of OECD Council Decision C(88)90(Final) of 27 May 1988.

STI. Available from the Steel Tank Institute, 728 Anthony Trail, Northbrook, IL 60062, 708-498-1980:

"Standard for Dual Wall Underground Steel Storage Tanks" (1986).

USDOD. Available from the United States Department of Defense:

"DOD Ammunition and Explosive Safety Standards" (DOD 6055.9-STD), as in effect on November 8, 1995.

The Motor Vehicle Inspection Report (DD Form 626), as in effect on November 8, 1995.

Requisition Tracking Form (DD Form 1348), as in effect on November 8, 1995.

The Signature and Tally Record (DD Form 1907), as in effect on November 8, 1995.

Special Instructions for Motor Vehicle Drivers (DD Form 836), as in effect on November 8, 1995.

USEPA. Available from United States Environmental Protection Agency, Office of Drinking Water, State Programs Division, WH 550 E, Washington, D.C. 20460:

"Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells", EPA 570/9-87-002, August 1987.

USEPA. Available from Receptor Analysis Branch, USEPA (MD-14), Research Triangle Park, NC 27711:

"Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised", October 1992, Publication Number EPA-450/R-92-019.

USEPA. Available from RCRA Information Center (RIC), 1235 Jefferson-Davis Highway, first floor, Arlington, VA 22203 (Docket # F-94-IEHF-FFFFF):

OECD Amber List of Wastes, Appendix 4 to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (May 1993).

OECD Green List of Wastes, Appendix 3 to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (May 1994).

OECD Red List of Wastes, Appendix 5 to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (May 1993).

Table 2.B of the Annex of OECD Council Decision C(88)90(Final) (May 27, 1988).

USGSA. Available from the United States Government Services Administration:

Government Bill of Lading (GBL) (GSA Standard Form 1109), as in effect on November 8, 1995.

b) Code of Federal Regulations. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, 202-783-3238:

10 CFR 20, Appendix B (1999)

40 CFR 51.100(ii) (1999)

40 CFR 51, Appendix W (1999)

40 CFR 52.741, Appendix B (1999)

40 CFR 60 (1999)

40 CFR 61, Subpart V (1999)

40 CFR 63 (1999)

40 CFR 136 (1999), as amended at 64 Fed. Reg. 73414 (December 30, 1999) and 65 Fed. Reg. 3008 (January 19, 2000)

40 CFR 142 (1999)

40 CFR 220 (1999)

40 CFR 232.2 (1999)

40 CFR 260.20 (1999)

40 CFR 264 (1999)

40 CFR 268.41 (1990)

40 CFR 268~~.~~, Appendix IX (1999)

40 CFR 270.5 (1999)

40 CFR 302.4, 302.5, and 302.6 (1999)

40 CFR 761 (1999)

49 CFR 171 (1999)

49 CFR 173 (1999)

49 CFR 178 (1999)

c) Federal Statutes

Section 3004 of the Resource Conservation and Recovery Act (42 USC 6901 et seq.), as amended through December 31, 1987.

Sections 201(v), 201(w), and 360b(j) of the Federal Food, Drug, and Cosmetic Act (FFDCA; 21 USC 321(v), 321(w), and 512(j)), as amended through October 25, 1994.

Section 1412 of the Department of Defense Authorization Act of 1986, Pub. L. 99-145, 50 USC 1521(j)(1) (1997).

d) This Section incorporates no later editions or amendments.

(Source: Amended at 25 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 721
IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SUBPART A: GENERAL PROVISIONS

Section
721.101 Purpose and Scope
721.102 Definition of Solid Waste
721.103 Definition of Hazardous Waste
721.104 Exclusions
721.105 Special Requirements for Hazardous Waste Generated by Small Quantity Generators
721.106 Requirements for Recyclable Materials
721.107 Residues of Hazardous Waste in Empty Containers
721.108 PCB Wastes Regulated under TSCA
721.109 Requirements for Universal Waste

SUBPART B: CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE AND FOR LISTING HAZARDOUS WASTES

Section
721.110 Criteria for Identifying the Characteristics of Hazardous Waste
721.111 Criteria for Listing Hazardous Waste

SUBPART C: CHARACTERISTICS OF HAZARDOUS WASTE

Section
721.120 General
721.121 Characteristic of Ignitability
721.122 Characteristic of Corrosivity
721.123 Characteristic of Reactivity
721.124 Toxicity Characteristic

SUBPART D: LISTS OF HAZARDOUS WASTE

Section
721.130 General
721.131 Hazardous Wastes ~~From~~ from Nonspecific Sources

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4 and 27].

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19 at 7 Ill. Reg. 13999, effective October 12, 1983; amended in R84-34, 61 at 8 Ill. Reg. 24562, effective December 11, 1984; amended in R84-9 at 9 Ill. Reg. 11834, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 998, effective January 2, 1986; amended in R85-2 at 10 Ill. Reg. 8112, effective May 2, 1986; amended in R86-1 at 10 Ill. Reg. 14002, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20647, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6035, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13466, effective August 4, 1987; amended in R87-32 at 11 Ill. Reg. 16698, effective September 30, 1987; amended in R87-5 at 11 Ill. Reg. 19303, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2456, effective January 15, 1988; amended in R87-30 at 12 Ill. Reg. 12070, effective July 12, 1988; amended in R87-39 at 12 Ill. Reg. 13006, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 382, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18300, effective November 13, 1989;

amended in R90-2 at 14 Ill. Reg. 14401, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16472, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7950, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9332, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14473, effective September 30, 1991; amended in R91-12 at 16 Ill. Reg. 2155, effective January 27, 1992; amended in R91-26 at 16 Ill. Reg. 2600, effective February 3, 1992; amended in R91-13 at 16 Ill. Reg. 9519, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17666, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5650, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20568, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6741, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12175, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17490, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9522, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 10963, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 275, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7615, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17531, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1718, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9135, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9481, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. _____, effective _____.

SUBPART D: LISTS OF HAZARDOUS WASTE

Section 721.131 Hazardous Wastes ~~From~~ from Nonspecific Sources

a) The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under 35 Ill. Adm. Code 720.120 and 720.122 and listed in ~~Section~~ Appendix I of this Part.

USEPA Hazardous Waste No.	Industry and Hazardous Waste	Hazard Code
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride and chlorinated fluorocarbons; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)

F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane; all spent solvent mixtures and blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F003	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone and methanol; all spent solvent mixtures and blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures and blends containing, before use, one or more of the above non-halogenated solvents and a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I)
F004	The following spent non-halogenated solvents: cresols and cresylic acid and nitrobenzene; all spent solvent mixtures and blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol and 2-nitropropane; all spent solvent mixtures and blends, containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I, T)

F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	(T)
F007	Spent cyanide plating bath solutions from electroplating operations.	(R, T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	(T)
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tri- or tetra-chlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)

F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	(H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tetra-, penta- or hexachlorobenzenes under alkaline conditions.	(H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts and wastes listed in this Section or Section 721.132.)	(T)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	(T)

F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tetra-, penta- or hexachlorobenzene under alkaline conditions.	(H)
F027	Discarded unused formulations containing tri-, tetra- or pentachlorophenol or discarded unused formulations containing compounds derived from these chloro-phenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)~~.~~	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with hazardous waste numbers F020, F021, F022, F023, F026 and F027.	(T)
F032	Wastewaters~~,~~ (except those that have not come into contact with process contaminants), process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with Section 721.135 and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachloro-phenol.	(T)
F034	Wastewaters~~,~~ (except those that have not come into contact with process contaminants), process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.	(T)

F035	Wastewaters, (except those that have not come into contact with process contaminants), process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachloro-phenol.	(T)
F037	Petroleum refinery primary oil/water/solids separation sludge -- Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. ~~Sludges~~ Sludge generated in stormwater units that do not receive dry weather flow, ~~sludges~~ sludge generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, ~~sludges~~ sludge generated in aggressive biological treatment units as defined in subsection (b)(2)~~, below,~~ of this Section (including ~~sludges~~ sludge generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units), and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under Section 721.104(a)(12)(A) if those residuals are to be disposed of.	(T)

F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge -- Any sludge or float generated from the physical or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air floatation (IAF) units, tanks and impoundments, and all sludges generated in dissolved air flotation (DAF) units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in subsection (b)(2)~~, below~~ of this Section (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units), F037, K048 and K051 wastes are not included in this listing.	(T)
F039	Leachate (liquids which have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Subpart D. (Leachate resulting from the disposal of one or more of the following USEPA hazardous wastes and no other hazardous wastes retains its USEPA hazardous waste number(s): F020, F021, F022, F026, F027 or F028.)	(T)

BOARD NOTE: The primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability), and C (Corrosivity). The letter H indicates Acute Hazardous Waste.

b) Listing specific definitions.

1) For the purpose of the F037 and F038 listings, oil/water/solids is defined as oil or water or solids.

2) For the purposes of the F037 and F038 listings:

A) Aggressive biological treatment units are defined as units which employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or~~,~~ high-rate aeration. High-rate aeration is a system of surface

impoundments or tanks~~,~~ in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and:

i) The units employ a minimum of six horsepower per million gallons of treatment volume; and either

ii) The hydraulic retention time of the unit is no longer than five days; or

iii) The hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the toxicity characteristic.

B) Generators and treatment, storage or disposal (TSD) facilities have the burden of proving that their sludges are exempt from listing as F037 or F038 wastes under this definition. Generators and TSD facilities ~~shall~~ must maintain, in their operating or other on site records, documents and data sufficient to prove that:

i) The unit is an aggressive biological treatment unit as defined in this subsection; and

ii) The sludges sought to be exempted from F037 or F038 were actually generated in the aggressive biological treatment unit.

3) Time of generation. For the purposes of the designated waste, the time of generation is as follows:

A) For the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

B) For the F038 listing:

i) Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement; and

ii) Floats are considered to be generated at the moment they are formed in the top of the unit.

(Source: Amended at 25 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 728
LAND DISPOSAL RESTRICTIONS

SUBPART A: GENERAL

Section

SUBPART B: SCHEDULE FOR LAND DISPOSAL PROHIBITION AND ESTABLISHMENT OF TREATMENT STANDARDS

Section

SUBPART C: PROHIBITION ON LAND DISPOSAL

Section

SUBPART D: TREATMENT STANDARDS

SUBPART E: PROHIBITIONS ON STORAGE

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the

Environmental Protection Act [415 ILCS 5/7.2, 22.4 and 27].

SOURCE: Adopted in R87-5 at 11 Ill. Reg. 19354, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13046, effective July 29, 1988; amended in R89-1 at 13 Ill. Reg. 18403, effective November 13, 1989; amended in R89-9 at 14 Ill. Reg. 6232, effective April 16, 1990; amended in R90-2 at 14 Ill. Reg. 14470, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16508, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9462, effective June 17, 1991; amended at 15 Ill. Reg. 11937, effective August 12, 1991; amendment withdrawn at 15 Ill. Reg. 14716, October 11, 1991; amended in R91-13 at 16 Ill. Reg. 9619, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5727, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20692, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6799, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12203, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17563, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9660, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11100, August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 783, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7685, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17706, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1964, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9204, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9623, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. _____, effective _____.

Section 728.Appendix G Federal Effective Dates

The following are the effective dates for the USEPA rules in 40 CFR 268. These generally became effective as Illinois rules at a later date.

TABLE 1
EFFECTIVE DATES OF SURFACE DISPOSED WASTES (NON-SOIL AND DEBRIS) REGULATED IN THE LDRS[a]—COMPREHENSIVE LIST

Waste code	Waste category	Effective date
D001[c]	All (except High TOC Ignitable Liquids)	Aug. 9, 1993.
D001	High TOC Ignitable Liquids	Aug. 8, 1990.
D002[c]	All	Aug. 9, 1993.
D003[e]	Newly identified surface-disposed elemental phosphorus processing wastes	May 26, 2000.
D004	Newly identified D004 and mineral processing wastes	Aug. 24, 1998.
D004	Mixed radioactive/newly identified D004 or mineral processing wastes	May 26, 2000.
D005	Newly identified D005 and mineral processing wastes	Aug. 24, 1998.
D005	Mixed radioactive/newly identified D005 or mineral processing wastes	May 26, 2000.

D006	Newly identified D006 and mineral processing wastes	Aug. 24, 1998.
D006	Mixed radioactive/newly identified D006 or mineral processing wastes	May 26, 2000.
D007	Newly identified D007 and mineral processing wastes	Aug. 24, 1998.
D007	Mixed radioactive/newly identified D007or mineral processing wastes	May 26, 2000.
D008	Newly identified D008 and mineral processing waste	Aug. 24, 1998.
D008	Mixed radioactive/newly identified D008 or mineral processing wastes	May 26, 2000.
D009	Newly identified D009 and mineral processing waste	Aug. 24, 1998.
D009	Mixed radioactive/newly identified D009or mineral processing wastes	May 26, 2000.
D010	Newly identified D010 and mineral processing wastes	Aug. 24, 1998.
D010	Mixed radioactive/newly identified D010 or mineral processing wastes	May 26, 2000.
D011	Newly identified D011 and mineral processing wastes	Aug. 24, 1998.
D011	Mixed radioactive/newly identified D011or mineral processing wastes	May 26, 2000.
D012 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	Dec. 14, 1994.
D013 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	Dec. 14, 1994.
D014 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	Dec. 14, 1994.
D015 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	Dec. 14, 1994.
D016 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	Dec. 14, 1994.
D017 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	Dec. 14, 1994.
D018	Mixed with radioactive wastes	Sep. 19, 1996.
D018	All others	Dec. 19, 1994.
D019	Mixed with radioactive wastes	Sep. 19, 1996.

D019	All others	Dec. 19, 1994.
D020	Mixed with radioactive wastes	Sep. 19, 1996.
D020	All others	Dec. 19, 1994.
D021	Mixed with radioactive wastes	Sep. 19, 1996.
D021	All others	Dec. 19, 1994.
D022	Mixed with radioactive wastes	Sep. 19, 1996.
D022	All others	Dec. 19, 1994.
D023	Mixed with radioactive wastes	Sep. 19, 1996.
D023	All others	Dec. 19, 1994.
D024	Mixed with radioactive wastes	Sep. 19, 1996.
D024	All others	Dec. 19, 1994.
D025	Mixed with radioactive wastes	Sep. 19, 1996.
D025	All others	Dec. 19, 1994.
D026	Mixed with radioactive wastes	Sep. 19, 1996.
D026	All others	Dec. 19, 1994.
D027	Mixed with radioactive wastes	Sep. 19, 1996.
D027	All others	Dec. 19, 1994.
D028	Mixed with radioactive wastes	Sep. 19, 1996.
D028	All others	Dec. 19, 1994.
D029	Mixed with radioactive wastes	Sep. 19, 1996.
D029	All others	Dec. 19, 1994.
D030	Mixed with radioactive wastes	Sep. 19, 1996.
D030	All others	Dec. 19, 1994.
D031	Mixed with radioactive wastes	Sep. 19, 1996.
D031	All others	Dec. 19, 1994.
D032	Mixed with radioactive wastes	Sep. 19, 1996.
D032	All others	Dec. 19, 1994.
D033	Mixed with radioactive wastes	Sep. 19, 1996.
D033	All others	Dec. 19, 1994.
D034	Mixed with radioactive wastes	Sep. 19, 1996.
D034	All others	Dec. 19, 1994.
D035	Mixed with radioactive wastes	Sep. 19, 1996.
D035	All others	Dec. 19, 1994.
D036	Mixed with radioactive wastes	Sep. 19, 1996.
D036	All others	Dec. 19, 1994.
D037	Mixed with radioactive wastes	Sep. 19, 1996.
D037	All others	Dec. 19, 1994.
D038	Mixed with radioactive wastes	Sep. 19, 1996.
D038	All others	Dec. 19, 1994.
D039	Mixed with radioactive wastes	Sep. 19, 1996.
D039	All others	Dec. 19, 1994.
D040	Mixed with radioactive wastes	Sep. 19, 1996.
D040	All others	Dec. 19, 1994.
D041	Mixed with radioactive wastes	Sep. 19, 1996.
D041	All others	Dec. 19, 1994.

D042	Mixed with radioactive wastes	Sep. 19, 1996.
D042	All others	Dec. 19, 1994.
D043	Mixed with radioactive wastes	Sep. 19, 1996.
D043	All others	Dec. 19, 1994.
F001	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F001	All others	Nov. 8, 1986.
F002 (1,1,2-trichloroethane)	Wastewater and Nonwastewater	Aug. 8, 1990.
F002	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F002	All others	Nov. 8, 1986.
F003	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F003	All others	Nov. 8, 1986.
F004	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F004	All others	Nov. 8, 1986.
F005 (benzene, 2-ethoxy ethanol, 2-nitropropane)	Wastewater and Nonwastewater	Aug. 8, 1990.
F005	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F005	All others	Nov. 8, 1986.
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	All	June 8, 1989.
F011 (cyanides)	Nonwastewater	Dec. 8, 1989.
F011	All others	July 8, 1989.
F012 (cyanides)	Nonwastewater	Dec. 8, 1989.
F012	All others	July 8, 1989.
F019	All	Aug. 8, 1990.
F020	All	Nov. 8, 1988.

F021	All	Nov. 8, 1988.
F025	All	Aug. 8, 1990.
F026	All	Nov. 8, 1988.
F027	All	Nov. 8, 1988.
F028	All	Nov. 8, 1988.
F032	Mixed with radioactive wastes	May 12, 1999.
F032	All others	Aug. 12, 1997.
F034	Mixed with radioactive wastes	May 12, 1999.
F034	All others	Aug. 12, 1997.
F035	Mixed with radioactive wastes	May 12, 1999.
F035	All others	Aug. 12, 1997.
F037	Not generated from surface impoundment cleanouts or closures	June 30, 1993.
F037	Generated from surface impoundment cleanouts or closures	June 30, 1994.
F037	Mixed with radioactive wastes	June 30, 1994.
F038	Not generated from surface impoundment cleanouts or closures	June 30, 1993.
F038	Generated from surface impoundment cleanouts or closures	June 30, 1994.
F038	Mixed with radioactive wastes	June 30, 1994.
F039	Wastewater	Aug. 8, 1990.
F039	Nonwastewater	May 8, 1992.
K001 (organics)[b]	All	Aug. 8, 1988.
K001	All others	Aug. 8, 1988.
K002	All	Aug. 8, 1990.
K003	All	Aug. 8, 1990.
K004	Wastewater	Aug. 8, 1990.
K004	Nonwastewater	Aug. 8, 1988.
K005	Wastewater	Aug. 8, 1990.
K005	Nonwastewater	June 8, 1989.
K006	All	Aug. 8, 1990.
K007	Wastewater	Aug. 8, 1990.
K007	Nonwastewater	June 8, 1989.
K008	Wastewater	Aug. 8, 1990.
K008	Nonwastewater	Aug. 8, 1988.
K009	All	June 8, 1989.
K010	All	June 8, 1989.
K011	Wastewater	Aug. 8, 1990.
K011	Nonwastewater	June 8, 1989.
K013	Wastewater	Aug. 8, 1990.
K013	Nonwastewater	June 8, 1989.
K014	Wastewater	Aug. 8, 1990.
K014	Nonwastewater	June 8, 1989.
K015	Wastewater	Aug. 8, 1988.

K015	Nonwastewater	Aug. 8, 1990.
K016	All	Aug. 8, 1988.
K017	All	Aug. 8, 1990.
K018	All	Aug. 8, 1988.
K019	All	Aug. 8, 1988.
K020	All	Aug. 8, 1988.
K021	Wastewater	Aug. 8, 1990.
K021	Nonwastewater	Aug. 8, 1988.
K022	Wastewater	Aug. 8, 1990.
K022	Nonwastewater	Aug. 8, 1988.
K023	All	June 8, 1989.
K024	All	Aug. 8, 1988.
K025	Wastewater	Aug. 8, 1990.
K025	Nonwastewater	Aug. 8, 1988.
K026	All	Aug. 8, 1990.
K027	All	June 8, 1989.
K028 (metals)	Nonwastewater	Aug. 8, 1990.
K028	All others	June 8, 1989.
K029	Wastewater	Aug. 8, 1990.
K029	Nonwastewater	June 8, 1989.
K030	All	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	Wastewater	June 8, 1989.
K036	Nonwastewater	Aug. 8, 1988.
K037[b]	Wastewater	Aug. 8, 1988.
K037	Nonwastewater	Aug. 8, 1988.
K038	All	June 8, 1989.
K039	All	June 8, 1989.
K040	All	June 8, 1989.
K041	All	Aug. 8, 1990.
K042	All	Aug. 8, 1990.
K043	All	June 8, 1989.
K044	All	Aug. 8, 1988.
K045	All	Aug. 8, 1988.
K046 (Nonreactive)	Nonwastewater	Aug. 8, 1988.
K046	All others	Aug. 8, 1990.
K047	All	Aug. 8, 1988.
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	Wastewater	Aug. 8, 1990.
K060	Nonwastewater	Aug. 8, 1988.
K061	Wastewater	Aug. 8, 1990.
K061	Nonwastewater	June 30, 1992.
K062	All	Aug. 8, 1988.
K069 (Non-Calcium Sulfate)	Nonwastewater	Aug. 8, 1988.
K069	All others	Aug. 8, 1990.
K071	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 (organics)[b]	All	Aug. 8, 1988.
K086	All others	Aug. 8, 1988.
K087	All	Aug. 8, 1988.
K088	Mixed with radioactive wastes	Apr. 8, 1998.
K088	All others	Oct. 8, 1997.
K093	All	June 8, 1989.
K094	All	June 8, 1989.
K095	Wastewater	Aug. 8, 1990.
K095	Nonwastewater	June 8, 1989.
K096	Wastewater	Aug. 8, 1990.
K096	Nonwastewater	June 8, 1989.
K097	All	Aug. 8, 1990.
K098	All	Aug. 8, 1990.
K099	All	Aug. 8, 1988.
K100	Wastewater	Aug. 8, 1990.
K100	Nonwastewater	Aug. 8, 1988.
K101 (organics)	Wastewater	Aug. 8, 1988.
K101 (metals)	Wastewater	Aug. 8, 1990.
K101 (organics)	Nonwastewater	Aug. 8, 1988.
K101 (metals)	Nonwastewater	May 8, 1992.
K102 (organics)	Wastewater	Aug. 8, 1988.
K102 (metals)	Wastewater	Aug. 8, 1990.
K102 (organics)	Nonwastewater	Aug. 8, 1988.
K102 (metals)	Nonwastewater	May 8, 1992.
K103	All	Aug. 8, 1988.

K104	All	Aug. 8, 1988.
K105	All	Aug. 8, 1990.
K106	Wastewater	Aug. 8, 1990.
K106	Nonwastewater	May 8, 1992.
K107	Mixed with radioactive wastes	June 30, 1994.
K107	All others	Nov. 9, 1992.
K108	Mixed with radioactive wastes	June 30, 1994.
K108	All others	Nov. 9, 1992.
K109	Mixed with radioactive wastes	June 30, 1994.
K109	All others	Nov. 9, 1992.
K110	Mixed with radioactive wastes	June 30, 1994.
K110	All others	Nov. 9, 1992.
K111	Mixed with radioactive wastes	June 30, 1994.
K111	All others	Nov. 9, 1992.
K112	Mixed with radioactive wastes	June 30, 1994.
K112	All others	Nov. 9, 1992.
K113	All	June 8, 1989.
K114	All	June 8, 1989.
K115	All	June 8, 1989.
K116	All	June 8, 1989.
K117	Mixed with radioactive wastes	June 30, 1994.
K117	All others	Nov. 9, 1992.
K118	Mixed with radioactive wastes	June 30, 1994.
K118	All others	Nov. 9, 1992.
K123	Mixed with radioactive wastes	June 30, 1994.
K123	All others	Nov. 9, 1992.
K124	Mixed with radioactive wastes	June 30, 1994.
K124	All others	Nov. 9, 1992.
K125	Mixed with radioactive wastes	June 30, 1994.
K125	All others	Nov. 9, 1992.
K126	Mixed with radioactive wastes	June 30, 1994.
K126	All others	Nov. 9, 1992.
K131	Mixed with radioactive wastes	June 30, 1994.
K131	All others	Nov. 9, 1992.
K132	Mixed with radioactive wastes	June 30, 1994.
K132	All others	Nov. 9, 1992.
K136	Mixed with radioactive wastes	June 30, 1994.
K136	All others	Nov. 9, 1992.
K141	Mixed with radioactive wastes	Sep. 19, 1996.
K141	All others	Dec. 19, 1994.
K142	Mixed with radioactive wastes	Sep. 19, 1996.
K142	All others	Dec. 19, 1994.
K143	Mixed with radioactive wastes	Sep. 19, 1996.
K143	All others	Dec. 19, 1994.
K144	Mixed with radioactive wastes	Sep. 19, 1996.

K144	All others	Dec. 19, 1994.
K145	Mixed with radioactive wastes	Sep. 19, 1996.
K145	All others	Dec. 19, 1994.
K147	Mixed with radioactive wastes	Sep. 19, 1996.
K147	All others	Dec. 19, 1994.
K148	Mixed with radioactive wastes	Sep. 19, 1996.
K148	All others	Dec. 19, 1994.
K149	Mixed with radioactive wastes	Sep. 19, 1996.
K149	All others	Dec. 19, 1994.
K150	Mixed with radioactive wastes	Sep. 19, 1996.
K150	All others	Dec. 19, 1994.
K151	Mixed with radioactive wastes	Sep. 19, 1996.
K151	All others	Dec. 19, 1994.
K156	Mixed with radioactive wastes	Apr. 8, 1998.
K156	All others	July 8, 1996.
K157	Mixed with radioactive wastes	Apr. 8, 1998.
K157	All others	July 8, 1996.
K158	Mixed with radioactive wastes	Apr. 8, 1998.
K158	All others	July 8, 1996.
K159	Mixed with radioactive wastes	Apr. 8, 1998.
K159	All others	July 8, 1996.
K160	Mixed with radioactive wastes	Apr. 8, 1998.
K160	All others	July 8, 1996.
K161	Mixed with radioactive wastes	Apr. 8, 1998.
K161	All others	July 8, 1996.
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 (barium)	Nonwastewater	Aug. 8, 1990.
P013	All others	June 8, 1989.
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	All	June 8, 1989.
P040	All	June 8, 1989.
P041	All	June 8, 1989.
P042	All	Aug. 8, 1990.
P043	All	June 8, 1989.
P044	All	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.
P058	All	Aug. 8, 1990.
P059	All	Aug. 8, 1990.
P060	All	Aug. 8, 1990.
P062	All	June 8, 1989.
P063	All	June 8, 1989.
P064	All	Aug. 8, 1990.
P065	Wastewater	Aug. 8, 1990.
P065	Nonwastewater	May 8, 1992.
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	All	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	All	June 8, 1989.
P087	All	May 8, 1992.
P088	All	Aug. 8, 1990.
P089	All	June 8, 1989.
P092	Wastewater	Aug. 8, 1990.
P092	Nonwastewater	May 8, 1992.
P093	All	Aug. 8, 1990.
P094	All	June 8, 1989.
P095	All	Aug. 8, 1990.
P096	All	Aug. 8, 1990.
P097	All	June 8, 1989.
P098	All	June 8, 1989.
P099 (silver)	Wastewater	Aug. 8, 1990.
P099	All others	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	All others	June 8, 1989.
P105	All	Aug. 8, 1990.
P106	All	June 8, 1989.
P108	All	Aug. 8, 1990.
P109	All	June 8, 1989.
P110	All	Aug. 8, 1990.
P111	All	June 8, 1989.
P112	All	Aug. 8, 1990.
P113	All	Aug. 8, 1990.
P114	All	Aug. 8, 1990.
P115	All	Aug. 8, 1990.
P116	All	Aug. 8, 1990.

P118	All	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.
P127	Mixed with radioactive wastes	Apr. 8, 1998.
P127	All others	July 8, 1996.
P128	Mixed with radioactive wastes	Apr. 8, 1998.
P128	All others	July 8, 1996.
P185	Mixed with radioactive wastes	Apr. 8, 1998.
P185	All others	July 8, 1996.
P188	Mixed with radioactive wastes	Apr. 8, 1998.
P188	All others	July 8, 1996.
P189	Mixed with radioactive wastes	Apr. 8, 1998.
P189	All others	July 8, 1996.
P190	Mixed with radioactive wastes	Apr. 8, 1998.
P190	All others	July 8, 1996.
P191	Mixed with radioactive wastes	Apr. 8, 1998.
P191	All others	July 8, 1996.
P192	Mixed with radioactive wastes	Apr. 8, 1998.
P192	All others	July 8, 1996.
P194	Mixed with radioactive wastes	Apr. 8, 1998.
P194	All others	July 8, 1996.
P196	Mixed with radioactive wastes	Apr. 8, 1998.
P196	All others	July 8, 1996.
P197	Mixed with radioactive wastes	Apr. 8, 1998.
P197	All others	July 8, 1996.
P198	Mixed with radioactive wastes	Apr. 8, 1998.
P198	All others	July 8, 1996.
P199	Mixed with radioactive wastes	Apr. 8, 1998.
P199	All others	July 8, 1996.
P201	Mixed with radioactive wastes	Apr. 8, 1998.
P201	All others	July 8, 1996.
P202	Mixed with radioactive wastes	Apr. 8, 1998.
P202	All others	July 8, 1996.
P203	Mixed with radioactive wastes	Apr. 8, 1998.
P203	All others	July 8, 1996.
P204	Mixed with radioactive wastes	Apr. 8, 1998.
P204	All others	July 8, 1996.
P205	Mixed with radioactive wastes	Apr. 8, 1998.
P205	All others	July 8, 1996.
U001	All	Aug. 8, 1990.
U002	All	Aug. 8, 1990.
U003	All	Aug. 8, 1990.

U004	All	Aug. 8, 1990.
U005	All	Aug. 8, 1990.
U006	All	Aug. 8, 1990.
U007	All	Aug. 8, 1990.
U008	All	Aug. 8, 1990.
U009	All	Aug. 8, 1990.
U010	All	Aug. 8, 1990.
U011	All	Aug. 8, 1990.
U012	All	Aug. 8, 1990.
U014	All	Aug. 8, 1990.
U015	All	Aug. 8, 1990.
U016	All	Aug. 8, 1990.
U017	All	Aug. 8, 1990.
U018	All	Aug. 8, 1990.
U019	All	Aug. 8, 1990.
U020	All	Aug. 8, 1990.
U021	All	Aug. 8, 1990.
U022	All	Aug. 8, 1990.
U023	All	Aug. 8, 1990.
U024	All	Aug. 8, 1990.
U025	All	Aug. 8, 1990.
U026	All	Aug. 8, 1990.
U027	All	Aug. 8, 1990.
U028	All	June 8, 1989.
U029	All	Aug. 8, 1990.
U030	All	Aug. 8, 1990.
U031	All	Aug. 8, 1990.
U032	All	Aug. 8, 1990.
U033	All	Aug. 8, 1990.
U034	All	Aug. 8, 1990.
U035	All	Aug. 8, 1990.
U036	All	Aug. 8, 1990.
U037	All	Aug. 8, 1990.
U038	All	Aug. 8, 1990.
U039	All	Aug. 8, 1990.
U041	All	Aug. 8, 1990.
U042	All	Aug. 8, 1990.
U043	All	Aug. 8, 1990.
U044	All	Aug. 8, 1990.
U045	All	Aug. 8, 1990.
U046	All	Aug. 8, 1990.
U047	All	Aug. 8, 1990.
~~U048~~	~~All~~	~~Aug. 8, 1990.~~
U049	All	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	All	June 8, 1989.
U059	All	Aug. 8, 1990.
U060	All	Aug. 8, 1990.
U061	All	Aug. 8, 1990.
U062	All	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	All	June 30, 1992.
U070	All	Aug. 8, 1990.
U071	All	Aug. 8, 1990.
U072	All	Aug. 8, 1990.
U073	All	Aug. 8, 1990.
U074	All	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	All	June 8, 1989.
U088	All	June 8, 1989.
U089	All	Aug. 8, 1990.
U090	All	Aug. 8, 1990.
U091	All	Aug. 8, 1990.
U092	All	Aug. 8, 1990.
U093	All	Aug. 8, 1990.
U094	All	Aug. 8, 1990.
U095	All	Aug. 8, 1990.
U096	All	Aug. 8, 1990.
U097	All	Aug. 8, 1990.

U098	All	Aug. 8, 1990.
U099	All	Aug. 8, 1990.
U101	All	Aug. 8, 1990.
U102	All	June 8, 1989.
U103	All	Aug. 8, 1990.
U105	All	Aug. 8, 1990.
U106	All	Aug. 8, 1990.
U107	All	June 8, 1989.
U108	All	Aug. 8, 1990.
U109	All	Aug. 8, 1990.
U110	All	Aug. 8, 1990.
U111	All	Aug. 8, 1990.
U112	All	Aug. 8, 1990.
U113	All	Aug. 8, 1990.
U114	All	Aug. 8, 1990.
U115	All	Aug. 8, 1990.
U116	All	Aug. 8, 1990.
U117	All	Aug. 8, 1990.
U118	All	Aug. 8, 1990.
U119	All	Aug. 8, 1990.
U120	All	Aug. 8, 1990.
U121	All	Aug. 8, 1990.
U122	All	Aug. 8, 1990.
U123	All	Aug. 8, 1990.
U124	All	Aug. 8, 1990.
U125	All	Aug. 8, 1990.
U126	All	Aug. 8, 1990.
U127	All	Aug. 8, 1990.
U128	All	Aug. 8, 1990.
U129	All	Aug. 8, 1990.
U130	All	Aug. 8, 1990.
U131	All	Aug. 8, 1990.
U132	All	Aug. 8, 1990.
U133	All	Aug. 8, 1990.
U134	All	Aug. 8, 1990.
U135	All	Aug. 8, 1990.
U136	Wastewater	Aug. 8, 1990.
U136	Nonwastewater	May 8, 1992.
U137	All	Aug. 8, 1990.
U138	All	Aug. 8, 1990.
U140	All	Aug. 8, 1990.
U141	All	Aug. 8, 1990.
U142	All	Aug. 8, 1990.
U143	All	Aug. 8, 1990.
U144	All	Aug. 8, 1990.

U145	All	Aug. 8, 1990.
U146	All	Aug. 8, 1990.
U147	All	Aug. 8, 1990.
U148	All	Aug. 8, 1990.
U149	All	Aug. 8, 1990.
U150	All	Aug. 8, 1990.
U151	Wastewater	Aug. 8, 1990.
U151	Nonwastewater	May 8, 1992.
U152	All	Aug. 8, 1990.
U153	All	Aug. 8, 1990.
U154	All	Aug. 8, 1990.
U155	All	Aug. 8, 1990.
U156	All	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	All	Aug. 8, 1990.
U164	All	Aug. 8, 1990.
U165	All	Aug. 8, 1990.
U166	All	Aug. 8, 1990.
U167	All	Aug. 8, 1990.
U168	All	Aug. 8, 1990.
U169	All	Aug. 8, 1990.
U170	All	Aug. 8, 1990.
U171	All	Aug. 8, 1990.
U172	All	Aug. 8, 1990.
U173	All	Aug. 8, 1990.
U174	All	Aug. 8, 1990.
U176	All	Aug. 8, 1990.
U177	All	Aug. 8, 1990.
U178	All	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	All	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	All	June 8, 1989.
U191	All	Aug. 8, 1990.
U192	All	Aug. 8, 1990.
U193	All	Aug. 8, 1990.
U194	All	June 8, 1989.
U196	All	Aug. 8, 1990.
U197	All	Aug. 8, 1990.
U200	All	Aug. 8, 1990.
U201	All	Aug. 8, 1990.
U202	All	Aug. 8, 1990.
U203	All	Aug. 8, 1990.
U204	All	Aug. 8, 1990.
U205	All	Aug. 8, 1990.
U206	All	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	All	Aug. 8, 1990.
U219	All	Aug. 8, 1990.
U220	All	Aug. 8, 1990.
U221	All	June 8, 1989.
U222	All	Aug. 8, 1990.
U223	All	June 8, 1989.
U225	All	Aug. 8, 1990.
U226	All	Aug. 8, 1990.
U227	All	Aug. 8, 1990.
U228	All	Aug. 8, 1990.
U234	All	Aug. 8, 1990.
U235	All	June 8, 1989.
U236	All	Aug. 8, 1990.
U237	All	Aug. 8, 1990.
U238	All	Aug. 8, 1990.
U239	All	Aug. 8, 1990.
U240	All	Aug. 8, 1990.
U243	All	Aug. 8, 1990.
U244	All	Aug. 8, 1990.
U246	All	Aug. 8, 1990.
U247	All	Aug. 8, 1990.

U248	All	Aug. 8, 1990.
U249	All	Aug. 8, 1990.
U271	Mixed with radioactive wastes	Apr. 8, 1998.
U271	All others	July 8, 1996.
U277	Mixed with radioactive wastes	Apr. 8, 1998.
U277	All others	July 8, 1996.
U278	Mixed with radioactive wastes	Apr. 8, 1998.
U278	All others	July 8, 1996.
U279	Mixed with radioactive wastes	Apr. 8, 1998.
U279	All others	July 8, 1996.
U280	Mixed with radioactive wastes	Apr. 8, 1998.
U280	All others	July 8, 1996.
U328	Mixed with radioactive wastes	June 30, 1994.
U328	All others	Nov. 9, 1992.
U353	Mixed with radioactive wastes	June 30, 1994.
U353	All others	Nov. 9, 1992.
U359	Mixed with radioactive wastes	June 30, 1994.
U359	All others	Nov. 9, 1992.
U364	Mixed with radioactive wastes	Apr. 8, 1998.
U364	All others	July 8, 1996.
U365	Mixed with radioactive wastes	Apr. 8, 1998.
U365	All others	July 8, 1996.
U366	Mixed with radioactive wastes	Apr. 8, 1998.
U366	All others	July 8, 1996.
U367	Mixed with radioactive wastes	Apr. 8, 1998.
U367	All others	July 8, 1996.
U372	Mixed with radioactive wastes	Apr. 8, 1998.
U372	All others	July 8, 1996.
U373	Mixed with radioactive wastes	Apr. 8, 1998.
U373	All others	July 8, 1996.
U375	Mixed with radioactive wastes	Apr. 8, 1998.
U375	All others	July 8, 1996.
U376	Mixed with radioactive wastes	Apr. 8, 1998.
U376	All others	July 8, 1996.
U377	Mixed with radioactive wastes	Apr. 8, 1998.
U377	All others	July 8, 1996.
U378	Mixed with radioactive wastes	Apr. 8, 1998.
U378	All others	July 8, 1996.
U379	Mixed with radioactive wastes	Apr. 8, 1998.
U379	All others	July 8, 1996.
U381	Mixed with radioactive wastes	Apr. 8, 1998.
U381	All others	July 8, 1996.
U382	Mixed with radioactive wastes	Apr. 8, 1998.
U382	All others	July 8, 1996.
U383	Mixed with radioactive wastes	Apr. 8, 1998.

U383	All others	July 8, 1996.
U384	Mixed with radioactive wastes	Apr. 8, 1998.
U384	All others	July 8, 1996.
U385	Mixed with radioactive wastes	Apr. 8, 1998.
U385	All others	July 8, 1996.
U386	Mixed with radioactive wastes	Apr. 8, 1998.
U386	All others	July 8, 1996.
U387	Mixed with radioactive wastes	Apr. 8, 1998.
U387	All others	July 8, 1996.
U389	Mixed with radioactive wastes	Apr. 8, 1998.
U389	All others	July 8, 1996.
U390	Mixed with radioactive wastes	Apr. 8, 1998.
U390	All others	July 8, 1996.
U391	Mixed with radioactive wastes	Apr. 8, 1998.
U391	All others	July 8, 1996.
U392	Mixed with radioactive wastes	Apr. 8, 1998.
U392	All others	July 8, 1996.
U393	Mixed with radioactive wastes	Apr. 8, 1998.
U393	All others	July 8, 1996.
U394	Mixed with radioactive wastes	Apr. 8, 1998.
U394	All others	July 8, 1996.
U395	Mixed with radioactive wastes	Apr. 8, 1998.
U395	All others	July 8, 1996.
U396	Mixed with radioactive wastes	Apr. 8, 1998.
U396	All others	July 8, 1996.
U400	Mixed with radioactive wastes	Apr. 8, 1998.
U400	All others	July 8, 1996.
U401	Mixed with radioactive wastes	Apr. 8, 1998.
U401	All others	July 8, 1996.
U402	Mixed with radioactive wastes	Apr. 8, 1998.
U402	All others	July 8, 1996.
U403	Mixed with radioactive wastes	Apr. 8, 1998.
U403	All others	July 8, 1996.
U404	Mixed with radioactive wastes	Apr. 8, 1998.
U404	All others	July 8, 1996.
U407	Mixed with radioactive wastes	Apr. 8, 1998.
U407	All others	July 8, 1996.
U409	Mixed with radioactive wastes	Apr. 8, 1998.
U409	All others	July 8, 1996.
U410	Mixed with radioactive wastes	Apr. 8, 1998.
U410	All others	July 8, 1996.
U411	Mixed with radioactive wastes	Apr. 8, 1998.
U411	All others	July 8, 1996.

[a] This table does not include mixed radioactive wastes (from the First, Second, and Third

rules) which are receiving a national capacity variance until May 8, 1992. This table also does not include contaminated soil and debris wastes.

[b] The standard was revised in the Third Third Final Rule (adopted by USEPA at 55 Fed. Reg. 22520 (June 1, 1990) and by the Board in docket R90-11 by orders dated April 11, May 23, and August 8 and 22, 1991).

[c] USEPA amended the standard in the Third Third Emergency Rule (at 58 Fed. Reg. 29860 (May 24, 1993), which the Board adopted in docket R93-16 on March 17, 1994); the original effective date was August 8, 1990.

[d] The standard was revised in the Phase II Final Rule (which USEPA adopted at 59 Fed. Reg. 47982 (Sept. 19, 1994) and the Board adopted in docket R95-6 by orders dated June 1 and 15, 1995); the original effective date was August 8, 1990.

[e] The standards for selected reactive wastes was revised in the Phase III Final Rule (which USEPA adopted at 61 Fed. Reg. 15566 (Apr. 8, 1996) and the Board adopted in docket R96-10/R97-3/R97-5 (consolidated) by an order dated November 6, 1997); the original effective date was August 8, 1990.

TABLE 2
SUMMARY OF EFFECTIVE DATES OF LAND DISPOSAL RESTRICTIONS
FOR CONTAMINATED SOIL AND DEBRIS (CSD)

Restricted hazardous waste in CSD	Effective date
1. Solvent-(F001-F005) and dioxin-(F020-F023 and F026-F028) containing soil and debris from CERCLA response ~~of~~ or RCRA corrective actions.	Nov. 8, 1990.
2. Soil and debris not from CERCLA response or RCRA corrective actions contaminated with less than one percent total solvents (F001-F005) or dioxins (F020-F023 and F026-F028).	Nov. 8, 1988.
3. All soil and debris contaminated with First Third wastes for which treatment standards are based on incineration.	Aug. 8, 1990.
4. All soil and debris contaminated with Second Third wastes for which treatment standards are based on incineration.	June 8, 1991.
5. All soil and debris contaminated with Third Third wastes or, First or Second Third "soft hammer" wastes which had treatment standards promulgated in the Third Third rule, for which treatment standards are based on incineration, vitrification, or mercury retorting, acid leaching followed by chemical precipitation, or thermal recovery of metals, as well as all inorganic solids debris contaminated with D004-D011 wastes, and all soil and debris contaminated with mixed RCRA/radioactive wastes.	May 8, 1992.
6. Soil and debris contaminated with D012-D043, K141-K145, and K147-151 wastes.	Dec. 19, 1994.
7. Debris (only) contaminated with F037, F038, K107-K112, K117, K118, K123-K126, K131, K132, K136, U328, U353, U359.	Dec. 19, 1994

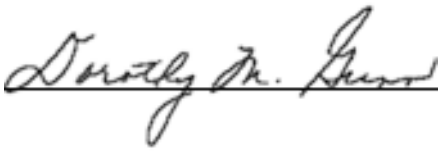
8.	Soil and debris contaminated with K156- K161, P127, P128, P188-P192, P194, P196- P199, P201-P205, U271, U277-U280, U364-U367, U372, U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411 wastes.	July 8, 1996.
9.	Soil and debris contaminated with K088 wastes.	Oct. 8, 1997.
10.	Soil and debris contaminated with radioactive wastes mixed with K088, K156-K161, P127, P128, P188-P192, P194, P196-P199, P201-P205, U271, U277-U280, U364-U367,U372, U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411 wastes.	April 8, 1998.
11.	Soil and debris contaminated with F032, F034, and F035.	May 12, 1997.
12.	Soil and debris contaminated with newly identified D004-D011 toxicity characteristic wastes and mineral processing wastes.	Aug. 24, 1998.
13.	Soil and debris contaminated with mixed radioactive newly identified D011 characteristic wastes and mineral processing wastes.	May 26, 2000.

BOARD NOTE: This table is provided for the convenience of the reader.

(Source: Amended at 25 Ill. Reg. _____, effective _____)

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, do hereby certify that the above opinion and order was adopted on the 7th day of December 2000 by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board