

ILLINOIS POLLUTION CONTROL BOARD
January 21, 1993

IN THE MATTER OF:)
)
RCRA UPDATE, USEPA REGULATIONS) R92-10
(1/1/92 - 6/30/92)) (Identical in Substance
) Rules)
)

Adopted Rule. Final Order.

OPINION OF THE BOARD (by J. Anderson):

By a separate Order, pursuant to Section 7.2 and 22.4(a) of the Environmental Protection Act (Act), the Board is amending the RCRA hazardous waste regulations. The amendments involve 35 Ill. Adm. Code 702, 703, 720, 721, 724, 725, 726 and 728. The Board will not file the adopted rules until 30 days after the date of this order, to allow time for post-adoption comments, particularly from the agencies involved in the authorization process.

Section 22.4 of the Act governs adoption of regulations establishing the RCRA program in Illinois. Section 22.4(a) provides for quick adoption of regulations which are "identical in substance" to federal regulations; Section 22.4(a) provides that Title VII of the Act and Section 5 of the Administrative Procedure Act shall not apply. Because this rulemaking is not subject to Section 5 of the Administrative Procedure Act, it is not subject to first notice or to second notice review by the Joint Committee on Administrative Rules (JCAR). The federal RCRA regulations are found at 40 CFR 260 through 270. This rulemaking updates Illinois' RCRA rules to correspond with federal amendments during the period January 1 through June 30, 1992. The USEPA actions during this period are as follows:

<u>57 Fed. Reg.</u>	<u>Date</u>	<u>Summary</u>
14	Jan. 2, 1992	Criteria for listing toxic hazardous waste.
3486	Jan. 29, 1992	Leak detection system ("LDS") rules for land disposal units.
5861	Feb. 18, 1992	Extension of stay for coatings for wood preserving drip pads.
7632	Mar. 3, 1992	Mixture and derived-from rules, "sunset" rule.
8088	Mar. 6, 1992	Third-third corrections.

0138-0765

20770	May 15, 1992	General "capacity variance" for "debris"
21534	May 20, 1992	Exclusion of used oil filters.
23063	June 1, 1992	Correction to mixture and derived-from rules.
27888	June 22, 1992	Exclusion of coke by-product residues.
28632	June 26, 1992	National capacity "variance" for certain reclaimed lead storage batteries.

On July 1, 1992, at 57 Fed. Reg. 29220, USEPA also published a correction to the May 20 used oil filter rule. In addition, at 57 Fed. Reg. 30658, July 10, 1992, USEPA published corrections to the toxicity characteristic leaching procedure (TCLP) rules. The Board will address these corrections in this Docket, even though the corrections are outside the time frame of this batch period.

Most of the volume of this rulemaking comes from the leak detection system ("LDS") rules in the January 29, 1992, Fed. Reg. USEPA has provided the Board with an electronic copy. Although the Board has below noted a number of editorial errors with this large rulemaking, these are of a type and frequency expected in any large project.

The March 3 and June 1, 1992, Federal Registers added an April 28, 1993, "sunset" provision to the "mixture and derived from" rules in 40 CFR 261.3(e) [Sections 721.103(a)(2)(D) and (c)(2)(A)]. However, USEPA repealed the sunset provision at 57 Fed. Reg. 49278, October 30, 1992. On November 19, 1992, the Board entered an order alerting possible commenters about the repeal.

Section 7.2 of the Environmental Protection Act limits identical in substance batch periods to no more than six months. The October 30, 1992, repeal of the sunset provision is outside the batch period for R92-10, which began on January 2, 1992. However, the Board frequently addresses USEPA corrections with the original adoption of the equivalent rule, even if the corrections fall outside the batch period. The Board does not construe Section 7.2 as requiring it to adopt incorrect USEPA rules pending the proper batch period.

If the Board were to delay proposing the repeal of the sunset provision until the next update docket dealing with USEPA actions between July 1 and December 31, 1992, it would risk being

0138-0766

unable to take final action until after April 28, 1993. This could result in a temporary, but major difference between the USEPA and Board rules. The Board will therefore not adopt the sunset provision.

USEPA also terminated the wood preserving stays at 57 Fed. Reg. 61492, December 24, 1992. As is discussed below in connection with Section 724.673 and 725.543, the Board is extending the stays of the State rules until the Board is able to address the accompanying revisions to the wood preserving rules in R93-4.

The USEPA amendments include several site-specific delistings. As provided in 35 Ill. Adm. Code 720.122(p), as amended in R90-17, the Board will not consider adoption of site-specific delistings as determined by the USEPA unless and until someone files a proposal before the Board showing that the waste will be generated or managed in Illinois.

PUBLIC COMMENT

The Board adopted a proposal for public comment on October 16, 1992. The proposed rules appeared on November 6, 1992, at 16 Ill. Reg. 16776. The Board has received the following public comment:

PC 1 Department of Commerce and Community Affairs,
Regulatory Flexibility Unit (DCCA), November 12,
1992

PC 2 Administrative Code Division, December 8, 1992

DCCA indicated that the proposed rules will not significantly impact small business. The Code Division noted a number of minor editorial problems, which have been corrected.

The Board staff has received informal comment from USEPA by telephone, and has acted on it as discussed below. The Board expects to receive a written comment from USEPA shortly, but, because of the time limitations discussed below, cannot postpone this order. The Board will handle this comment as post-adoption comment, and will, if necessary, enter an order modifying this opinion and order pursuant to the comment.

EXTENSION OF TIME ORDERS

Section 7.2(b) of the Act requires that identical in substance rulemakings be completed within one year after the first USEPA action in the batch period. If the Board is unable to do so it must enter an "extension of time" Order. The earliest USEPA action in the Docket was January 2, 1992. On December 17, 1992, the Board entered an extension of time order,

0138-0767

indicating that January 21, 1993, is the anticipated completion date.

REGULATORY HISTORY

The complete history of the RCRA, UST and UIC rules appears at the end of this opinion. While a short form of reference to the adopting opinions will be used in the body of this opinion, complete citations are included in the history.

AGENCY OR BOARD ACTION?

The USEPA RCRA rules contain decisions which, as worded, are to be made by the USEPA Regional Administrator. These generally pose a question as to who is supposed to make the decision at the State level: USEPA, the Board, the Agency or some other entity? Section 7.2(a)(5) of the Act requires the Board to specify which decisions USEPA will retain. In addition, the Board is to specify which State agency is to make decisions, based on the general division of functions within the Act and other Illinois statutes. In effectuating this requirement, the Board has almost always changed "Regional Administrator" to "Agency". However, in some situations "Regional Administrator" has been changed to "USEPA" or "Board".

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 a few instances in identical in substance rules decisions are not appropriate for Agency action pursuant to a permit application. Among the considerations in determining the general division of authority between the Agency and the Board are the following:

1. Is the person making the decision 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. For example, the Agency clearly has authority to apply a regulation which says "If A, do X; if not A, do Y". On the other hand, regulations which say "If not A, the state shall waive X" are more troubling.
2. Is there a clear standard for action such that the Board can give meaningful review to an Agency decision?
3. Is there a right to appeal? Agency actions are generally appealable to the Board.

0138-0768

4. Does this action concern a person who is required to have a permit anyway? If so there is a pre-existing permit relationship which can easily be used as a context for Agency decision. If the action concerns a person who does not have a permit, it is more difficult to place the decision into a procedural context which would be within the Agency's jurisdiction. Decisions involving interim status are often more ambiguous as to whether they are permit actions.
5. Does the action result in exemption from the permit requirement itself? If so, Board action is generally required.
6. Does the decision amount 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.

Once it is determined that a decision must be made by the Board, rather than the Agency, it is necessary to determine what procedural context is best suited for that decision. There are four common classes of Board decision: 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). Note that there are differences in the nomenclature for these decisions between the USEPA and Board regulations. These differences have caused past misunderstandings with USEPA.

A variance is initiated by the operator filing a petition pursuant to Title IX of the Act and 35 Ill. Adm. Code 104. The Agency files a recommendation as to what action the Board should take. The Board may conduct a public hearing, and must do so if there is an objection to the variance.

Board variances are: temporary; based on arbitrary or unreasonable hardship; and, require a plan for eventual compliance with the general regulation. To the extent a USEPA decision involves these factors, a Board variance is an appropriate mechanism.

A variance is not an appropriate mechanism for a decision which is not based on arbitrary or unreasonable hardship, or which grants permanent relief without eventual compliance. To grant permanent relief, the Board needs to grant a site specific regulation or an adjusted standard pursuant to Sections 27 or 28.1 of the Act, and 35 Ill. Adm. Code 102 or 106.

0138-0769

EDITORIAL CONVENTIONS

As a final note, the rules have been edited to establish a uniform usage with respect to "shall", "must", "will", and "may". "Shall" is used when the subject of a sentence has to do something. "Must" is used when someone has to do something, but that someone is not the subject of the sentence. "Will" is used when the Board obliges itself to do something. "May" is used when a provision is optional. Some of the USEPA rules appear to say something other than what was intended. Others do not read correctly when "Board" or "Agency" is substituted into the federal rule. The Board does not intend to make any substantive change in the rules by way of these edits.

Much of the text discussed below exists both as a Board and USEPA rule. When discussing one rule set, the Board has provided frequent citations to the other to aid in cross referencing. These usually appear in brackets following a citation. For example, "40 CFR 270.4 [702.181]" or "Section 702.181 [270.4]". The first reference is the rule set primarily being discussed, and the second [in brackets] is the equivalent (or comparable) rule in the other set. The second reference is usually just the number, with the "40 CFR", etc., understood.

The following discussion also includes many quotations from the Board and USEPA rule sets. Bold type is frequently used to call attention to specific language within the quotes. The language in bold is usually discussed following the quotation.

PART 702: RCRA AND UIC PERMITS

This Part includes permit rules which apply to both the RCRA and UIC program.

Section 702.181

This Section is derived from 40 CFR 270.4, which was amended at 57 Fed. Reg. 3486, January 29, 1992, in connection with the new leak detection¹ requirements. As amended, the USEPA rule reads as follows:

- (a) Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with subtitle C of RCRA except for those requirements not included in the permit which:

¹The USEPA rules affect liners, leachate collection and removal systems and leak detection systems. For the sake of brevity, in this opinion, we will refer to these as "leak detection" (or "LDS"), except where the discussion focuses on differences among these.

- (1) Become effective by statute;
- (2) Are promulgated under part 268 of this chapter restricting the placement of hazardous wastes in or on the land; or
- (3) Are promulgated under part 264 of this chapter regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, COA programs, monitoring, action leakage rates, and response action plans, and will be implemented through the procedures of § 270.42 Class 1* permit modifications.

The Board rule, 35 Ill. Adm. Code 702.181(a) is quite different:

The existence of a RCRA or UIC permit does not constitute a defense to a violation of the Environmental Protection Act or this Subtitle, except for development, modification or operation without a permit. However, a permit may be modified, reissued or revoked during its term for cause as set forth in 35 Ill. Adm. Code 703.270 through 703.273 (RCRA) and 35 Ill. Adm. Code 704.261 through 704.263 (UIC) and Section 702.186.

The Board and USEPA rules go in opposite directions with respect to the effect of the permit: while compliance with the USEPA permit is deemed compliance with the federal law, the State permit affords no such protection. In R81-32 (at p. 7)², the Board determined that this was required by Illinois law, citing Landfill, Inc., v. IPCB, (1978), 74 Ill. 2d 541, 387 N.E. 2d 258.

The USEPA amendment is setting additional limitations on the extent to which the RCRA permit is an enforcement shield. These amendments are not needed in the Illinois program, since the entire concept is reversed.

The final sentence of the USEPA amendment specifies that the "leak detection system requirements include double liners, COA programs, monitoring, action leakage rates, and response action plans, and will be implemented through the procedures of § 270.42 Class 1* permit modifications." This is unrelated to the "effect of permit" subject matter of the remainder of the Section. It is

²As discussed in the regulatory history below, R81-32 was the original adoption of the UIC program.

0138-0771

possible that this language needs to be inserted elsewhere. The Board has not, however, done so, since the language appears to be merely a statement of intent. As is discussed below, USEPA has specified in the Appendix to Section 270.42 [703.App A] that these are Class 1* modifications. Nothing more is needed.

As is discussed in a footnote to the 1991 Edition of 40 CFR 270.4(a), USEPA inadvertently dropped the following sentence in a 1988 amendment:

However, a permit may be modified, reissued or revoked during its term for cause as set forth ...

The CFR indicates that USEPA would add the sentence back in a future correction. USEPA did not do so in this rulemaking. The Board rule still contains the sentence, and the Board will not repeal it at this time.

The Board has updated the Board note in this Section, and to make other minor editorial changes. However, the substance of this Section remains the same.

PART 703: RCRA PERMITS

This Part contains rules governing RCRA permits. It is derived from 40 CFR 270. All of the amendments are derived from the liner and leak detection system (LDS) rules at 57 Fed. Reg. 3486, January 29, 1992.

Section 703.203

This Section is derived from 40 CFR 270.17, which specifies the contents of the RCRA Part B application module for a surface impoundment. The amendments (mainly to subsection (b)) reflect detailed new rules, discussed below in Part 724, concerning liners, leak detection and removal, and construction quality assurance (CQA).

As is discussed below in connection with Section 724.321(b), the Board is utilizing the adjusted standards procedure for the "alternative design and operating practices" determination for a surface impoundment. At the USEPA level, 40 CFR 270.17(b)(1) [703.203(b)(1)] would require the operator to submit information for this determination with the Part B permit application. At the State level, the information would be submitted pursuant to a Part 106 adjusted standards petition, as provided below in Section 724.321(b).

USEPA has informally indicated that the adjusted standards procedure will be acceptable if it is equivalent to the USEPA procedure for the "alternative design and operating practices"

0138-0772

determination. At the USEPA level, this would take place as part of the review of a Part B permit application (or modification).

As is discussed in general above, under Illinois law, certain decisions under the RCRA rules are not appropriate as Agency decisions, but must be made by the Board. Section 724.321(b) falls into this category, since it allows a permittee to take action contrary to the general rule. When the Board adopted Section 724.321(b), in R82-19, it provided that this decision was to be made by variance or site-specific rule. The variance mechanism would be of limited use for this type of decision, since it could be granted for no more than five years. Since that time, the adjusted standards mechanism has been added as Section 28.1 of the Act. This is a simpler and more appropriate procedural vehicle for this type of Board decision. The "justification" for the adjusted standard, set forth below in Section 724.321, is identical to the criteria for grant of this relief under 40 CFR 264.221.

The procedures for granting an adjusted standard are set forth in 35 Ill. Adm. Code 106.Subpart G. They provide for a method of review and public participation which is similar to that used by USEPA for the grant of a Part B RCRA permit. The procedures were summarized in the R90-17 opinion, at p. 5, which discussion is repeated here.

The adjusted standard procedure may be initiated by a petitioner acting alone, or with the Agency as a co-petitioner. (Section 106.703.) The contents of the petition are specified in Section 106.705. If the Agency is not a co-petitioner, it is required to file a response within 30 days after the filing of the petition, in which it must recommend a grant or denial of the petition, and supporting rationale. (Section 106.714.)

Within 14 days after the filing of the petition, the petitioner must publish a public notice of the filing of the petition in a newspaper in the area likely to be affected. (Section 106.711.) The notice gives members of the public 21 days to request a public hearing. (Section 106.713.) The Board will schedule a hearing if one is requested, or if it otherwise determines that one is advisable. (Section 106.801.) Interested persons are allowed to present testimony and exhibits. (Section 106.806.) A final comment period is allowed following the public hearing. (Section 106.807.)

It would be duplicative to require the information in the permit application also. All the Agency needs is a copy of the Board order on the adjusted standard. The Board has therefore amended Section 703.203(b)(1) as follows:

The liner system (except for an existing portion of a surface impoundment). If an exemption from the

0138-0773

requirement for a liner is sought as provided by 35 Ill. Adm. Code 724.321(b), ~~submit detailed plans and engineering and hydrogeologic reports as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time a copy of the Board order granting an adjusted standard pursuant to 35 Ill. Adm. Code 724.321(b);~~

40 CFR 270.17(b)(5) requires the operator to include a proposed "action leakage rate" and "response action plan" with the application. These are addressed below in connection with Section 724.322 and 724.323. However, 40 CFR 270.17 does not require the operator to include the "proposed pump operating level" addressed in 40 CFR 264.226(d)(3) [724.326(d)(3)]. Since this appears to be a parallel determination, the Board has added it to Section 703.203(b)(5), so that the Board rule reads:

Proposed action leakage rate, with rationale, if required under 35 Ill. Adm. Code 724.322, response action plan, if required under 35 Ill. Adm. Code 724.323, and a proposed pump operating level, if required under 35 Ill. Adm. Code 724.326(d)(3);

Section 703.204

This Section is derived from 40 CFR 270.18, which specifies the contents of the RCRA Part B permit application module for a waste pile.

Section 703.204(c)(1)(A) [270.18(c)(1)(i)] contains the permit application module for the "alternate designs" demonstration in Section 724.351(b), below. For the reasons discussed above with Section 703.203(b)(1), the Board is requiring a copy of the Board order with the permit application, rather than a repetition of the information.

The main amendments are in Section 703.204(c)(1)(B) - (E). There are no major problems with the text. The language concerning the pump operating level is absent from the waste pile application, as discussed below with Section 724.352.

Section 703.204(d) [270.18(d)] contains an erroneous cross reference which the Board has corrected: "703.183(se)".

Section 703.207

This Section is derived from 40 CFR 270.21, which specifies the contents of the RCRA Part B permit application module for a landfill. The main amendments are to Section 703.207(b)(1)(B) - (E).

0138-0774

Section 703.207(b)(1)(A) [270.21(b)(1)(i)] contains the "alternative designs" application module related to Section 724.401(b), below. For the reasons discussed above in connection with Section 703.203(b)(1)(A), the Board is replacing the detailed information request in the application with a requirement to include the Board order granting the adjusted standard.

The Board has added a "proposed pump operating level" to this Section for use in Section 724.403(c)(3), below, for reasons similar to those discussed above. The text of Section 703.207(b)(1)(E) is:

proposed action leakage rate, with rationale, if required under 35 Ill. Adm. Code 724.402, and response action plan, if required under 35 Ill. Adm. Code 724.404, and proposed pump operating level, if required under 35 Ill. Adm. Code 724.403;

The Federal Register for 40 CFR 270.21(b)(1)(v) contains an erroneous cross reference to "264.303" for the response action plan, which the Board has corrected [in 703.207(b)(1)(E)]. This should read "264.304" [724.404].³

The Fed. Reg. includes a revised text for section 270.21(c) [703.207(c)]:

(c) A description of how each landfill, including the double liner system, leachate collection and removal system, leak detection system, cover system, and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of § 264.303(a), (b), and (c) of this chapter. This information must be included in the inspection plan submitted under § 270.14(b)(5);

The existing language of Section 270.21(c) [703.207(c)] governs the permit application for the "exemption" of former Section 264.302 [724.402], which was repealed following HSWA (R86-1). Retention of the Section was an error in both the USEPA and Board rules. The new language governs the "inspection plan" associated with the LDS rules. The text of Section 703.207(c) [270.21(c)] is:

³This is somewhat confusing, because the USEPA rule is citing to the pump operating level instead of the response action plan. However, as discussed above, the Board is modifying this rule to address both the pump operating level and the response action plan. Therefore Section 724.403 winds up also being cited in the Board rule.

0138-0775

A description of how each landfill, including the double liner system, leachate collection and removal system, leak detection system, cover system, and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of 35 Ill. Adm. Code 724.403(a), (b), and (c). This information must be included in the inspection plan submitted under Section 703.183(e);

This language is similar to Section 270.21(d) [703.207(d)]. The Board solicited comment on the possibility that USEPA intended to amend that Section, rather than to replace subsection (c). Another possibility was that subsection (d) continued to govern landfills which are not subject to the LDS rules. The Board received no response, and has retained Section 703.207(d) [270.21(d)]:

A description of how each landfill, including the liner and cover systems, will be inspected in order to meet the requirements of the 35 Ill. Adm. Code 724.403(a) and (b). This information ~~should~~ **must** be included in the inspection plan submitted under Section 703.183(e);

Section 703.Appendix A

This Appendix is drawn from 40 CFR 270.42, Appendix I. It specifies the type of permit modification procedure to be used for various changes. The amendments add items (B)(7), (H)(6) and (7), and (J)(7) and (8), dealing with changes to the construction quality assurance (CQA) plan, and modifications to meet the new liner and leak detection and removal requirements.

The procedures are specified in Section 703.280 et seq., which are not involved in this rulemaking. The permittee may make a Class 1 change followed by notification to the Agency. The permittee must notify the Agency in advance of a Class 2 change, and may make the change unless the Agency objects. Class 3 modifications require prior approval.

Several of the new types of changes are "Class 1*". As provided in Section 703.281(a)(2) and (b), the Agency must give prior written approval for a Class 1* change. Public notice is given following the Agency approval.

PART 720: GENERAL PROVISIONS

This Part specifies definitions, incorporations by reference and other general provisions governing the hazardous waste program. It is drawn from 40 CFR 260. The USEPA amendments are drawn entirely from 57 Fed. Reg. 3486, January 29, 1992, the amendments to the liner and leak detection requirements.

0138-0776

Section 720.110 Definitions

The proposed definition of "qualified groundwater scientist" was adopted in R92-1, with revisions to the text. Therefore, the text has been revised to conform with R92-1, and the underlining has been removed.

The Board has added a definition of "LDS", an acronym for "leak detection system" which is used sporadically in the USEPA rules. The Board will use this acronym in this opinion, and in the body of the rules. The Board will restate the definition of the acronym at places to avoid confusion.

USEPA has added a new definition and amended a second: "replacement unit" and "sump". The first definition poses several problems. It reads as follows:

Replacement unit means a landfill, surface impoundment, or waste pile unit (1) from which all or substantially all of the waste is removed, and (2) that is subsequently reused to treat, store, or dispose of hazardous waste. "Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with an approved closure plan or EPA or State approved corrective action.

The structure of the definition violates two basic Code Division format rules: One cannot have numbered paragraphs in a definition; and, one cannot break a numbered list out in the middle of a paragraph. Retaining the list structure would involve turning the definition inside out. However, this appears to be unnecessary, since the definition is understandable with the numbers simply removed.

The next problem is the "'Replacement unit' does not apply to..." language. In a definition, this would be better stated as "does not include".

The final problems involve the exclusion of units which are subsequently used solely for disposal of waste from that unit or other closing units at the facility. Such units would not be "replacement units", and hence would not be subject to the new liner and leachate collection requirements. For example, see Section 724.351(c), below.

Non-replacement units are limited to those receiving waste in accordance with "an approved closure plan or EPA or State approved corrective action." For one thing, it is not clear why the corrective action must be approved specifically by USEPA or a

0138-0777

State, but not the closure plan. The Board suggests that this is an editorial error, so that both must receive the same type of approval.

The main problem is whether the Illinois rule needs to address the possibility of approval by other states, or by USEPA. With respect to the approval by other states, the USEPA definition appears to be limited to disposal of waste from units at a single facility. In other words, a unit receiving waste from a facility closing in another state could not qualify as a non-replacement unit. The Board does not therefore have to allow for approval by other states.

The next question is whether the Board should allow for approval by USEPA. Within Illinois, HSWA-driven USEPA amendments become effective immediately upon federal adoption. Sections 7.2 and 22.4(a) of the Act require the Board to adopt the federal requirement, which then becomes a State requirement. A dual federal/State regulatory scheme then exists until USEPA authorizes the Illinois rule, at which time the federal requirement is no longer effective in Illinois. (See 57 Fed. Reg. 3480, January 29, 1992) There is therefore a possibility that a portion of a closure or post-closure care plan would have been primarily approved by USEPA. It appears that the federal intent of the limitation has been met so long as either USEPA or the Agency has approved the closure or post-closure plan. The Board solicited comment as to whether approval by just the Agency ought to control at the State level, but received no response.

The text of the definition is as follows:

"Replacement unit" means a landfill, surface impoundment or waste pile unit from which all or substantially all of the waste is removed, and which is subsequently reused to treat, store or dispose of hazardous waste. "Replacement unit" does not include a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with a closure or corrective action plan approved by USEPA or the Agency.

USEPA has also amended the definition of "sump" to give it a special meaning in the context of the liner and leachate collection rules. The definition adopted by the Board is as follows:

"Sump" means any pit or reservoir that meets the definition of tank and those troughs or trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment or

0138-0778

disposal facilities; except that, as used in the landfill, surface impoundment and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

PART 721: DEFINITION OF 'HAZARDOUS WASTE'

This part contains the definitions of "solid waste" and hazardous waste", together with the procedures for listing and the listings themselves. It is derived from 40 CFR 261. USEPA has amended these rules in several isolated rulemakings, which will be identified with each Section.

Section 721.103

This Section is the definition of "hazardous waste". USEPA amended it at 57 Fed. Reg. 7632, March 3, 1992, and corrected the amendment at 57 Fed. Reg. 23063, June 1, 1992. The amendments concern the "mixture and derived-from" rules. Although USEPA has reprinted the entire text of Section 261.3, the amendments appear to be to only a small portion of the text.

In Section 721.103(a)(2)(A), the main amendment (in the correction) is that the reference to the EP toxicity test has been changed to reference the toxicity characteristic, measured by the TCLP test, which replaced the EP toxicity test for most purposes. The Board adopted the TCLP test in R90-10.

Most of the language in Section 721.103(a)(2)(A) concerns the "Bevill exclusion" for certain mining wastes. The Board adopted this language in R90-2. The Board noted and corrected numerous minor editorial problems with the USEPA rule. These have not been fixed, and account for most of the differences between the Board and USEPA text. The Board has not changed its text. USEPA has made several other minor changes in wording to Section 721.103(a)(2)(B) et seq., which the Board has followed.

In section 261.3(a)(2)(iv)(E) [721.103(a)(2)(D)(v)] USEPA has apparently added a comma to the second proviso, so it reads: "provided the wastes, combined annualized average..." This is obviously wrong, and the Board has made no change.⁴

40 CFR 261.3(c)(2)(ii)(C) [721.103(c)(2)(B)(iii)] was added in R91-13, based on the August 19, 1991 Federal Register. The addition was a correction concerning "high temperature metal recovery wastes", which the Board addressed with the underlying

⁴It is possible that USEPA intended this as a possessive: "wastes'".

0138-0779

rule, sooner than in the normal batch period. Apparently the subsection was inadvertently repealed with the March 3 Fed. Reg., and then restored with the June 1, 1992, correction. This USEPA amendment has no effect on the Board rules.

When the Board adopted its version of 40 CFR 261.3(c)(2)(ii)(C) [721.103(c)(2)(B)(iii)], it noted and corrected a number of editorial errors. This is discussed in the R91-13 Opinion, at p. 22 - 25. USEPA has not corrected these editorial errors in this correction. The Board has not been able to identify any substantive changes in the USEPA correction with respect to this subsection, and has made none.

The March 3, 1992, Fed. Reg. addressed the "mixture and derived-from" rules which are in 40 CFR 261.3(d). One change appears to have been the omission of the "however" clause from section 261.3(d)(1) [721.103(d)(1):

(However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of part 268, even if they no longer exhibit a characteristic at the point of land disposal.)

However, this was added back in the June 1 corrections.

The March 3 Fed. Reg. added section 261.3(e) [721.103(e)]:

(e) Sunset provision. Paragraphs (a)(2)(iv) and (c)(2)(i) of this section shall remain in effect only until April 28, 1993.

40 CFR 261.3(a)(2)(iv) [721.103(a)(2)(D)] is a lengthy elaboration on the mixture rule with respect to various types of listed waste. 40 CFR 261.3(c)(2)(i) [721.103(c)(2)(A)] includes solid wastes generated from the treatment of listed hazardous waste. As is discussed in the general introduction to this opinion, USEPA repealed the sunset provision at 57 Fed. Reg. 49278, October 30, 1992, which would normally be addressed in R93-4. However, based on this USEPA action, the Board will not adopt the sunset provision in this Docket.

Section 721.104

This Section contains exclusions from the definition of "hazardous waste". It was amended at 57 Fed. Reg. 21534, May 20, 1992 and at 57 Fed. Reg. 27888, June 22, 1992 and at 57 Fed. Reg. 30658, July 10, 1992. The last is a correction to the TCLP rules, which the Board is addressing outside the normal batch period. Also, the May 20 action was corrected at 57 Fed. Reg. 29220, July 1, 1992, which the Board is also addressing outside the normal batch period.

0138-0780

40 CFR 261.4(a) [721.104(a)] lists exclusions which are neither hazardous waste nor "solid waste". USEPA amended 40 CFR 261.4(a)(10) at 57 Fed. Reg. 27888, June 22, 1992. This modifies the exclusion for certain recycled coke/coal tar by-products. The amendment, as adopted by the Board, is as follows [721.104(a)(10)]:

~~When used as a fuel, coke and coal tar from the iron and steel industry that contains or is produced from decanter tank tar sludge, USEPA hazardous waste K087. The process of producing coke and coal tar from such decanter tank tar sludge in a coke oven is likewise excluded from regulation. Hazardous waste number K087, and any wastes from the coke by-products processes which are hazardous only because they exhibit the toxicity characteristic specified in Section 721.124, when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar or are mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or the tar refining process.~~

40 CFR 261.4(b) [721.104(b)] lists exclusions of "solid wastes" which are hazardous wastes. USEPA corrected 40 CFR 261.4(b)(6)(ii) [721.104(b)(6)(B)] at 57 Fed. Reg. 30658, July 10, 1992, to replace the reference to the EP toxicity characteristic with a reference to the toxicity characteristic (measured by TCLP). The Board language is as follows [721.104(b)(6)(B)]:

Specific wastes which meet the standard in subsections (b)(6)(A)(i), (ii) and (iii), above, (so long as they do not fail the test for the toxicity characteristic for any other constituent of EP toxicity, and do not ~~fail the test for exhibit~~ any other characteristic) are: ...

USEPA corrected 40 CFR 261.4(b)(9) [Section 721.104(b)(9)] at 57 Fed. Reg. 30658, July 10, 1992, also in connection with the TCLP corrections. The Board language is:

Solid waste which consists of discarded arsenical-treated wood or wood products which fails the test for the toxicity characteristic ~~solely for arsenic~~ for hazardous waste codes D004 through D017 and which is not a hazardous waste for any other reason ~~or reasons~~ if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.

0138-0781

USEPA added a new exclusion as 40 CFR 261.4(b)(15) [721.104(b)(15)] at 57 Fed. Reg. 21534, May 20, 1992. This was corrected at 57 Fed. Reg. 29220, July 1, 1992. This excludes certain used oil filters which have been properly drained. The Board language is:

Non-terne plated used oil filters which are not mixed with wastes listed in Subpart D, if these oil filters have been gravity hot-drained using one of the following methods:

- A) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
- B) Hot-draining and crushing;
- C) Dismantling and hot-draining; or,
- D) Any other equivalent hot-draining method which will remove used oil.

The subsection numbering in the USEPA and Board rule now jumps from (b)(12) to (15), with (13) and (14) missing. The Board has numbered its rule in parallel with the USEPA numbering. The Board solicited comment as to whether something might be missing, but received no response.

The Code Division noted the gap in numbering. (PC 2.) The Board cannot renumber (b)(15) to (13), without reviewing the entire rule set (Parts 702 through 728) for cross-references, and setting up a continuing program to keep track of this anomaly in perpetuity. The Board has instead inserted "filler" sections into (b)(13) and (14).

Section 721.111

This Section is drawn from 40 CFR 261.11, which was amended at 57 Fed. Reg. 14, January 2, 1992. These are the criteria used by USEPA for listing hazardous waste. Section 721.111 was recently amended in R90-17, which revised the delisting rules to better accommodate delegation of this authority by USEPA.

The "how to list a waste" rules are different from most of the rest of the USEPA RCRA rules in that, rather than governing hazardous waste operations, they govern future rulemaking actions to be taken by USEPA. The Board did not initially adopt an equivalent rule, since a Board rule would seem to be a State rule regulating USEPA, since USEPA was not going to delegate listing authority, and since the Board would not be governed by the regulatory language to the extent it did exercise listing authority. The Board instead incorporated the USEPA rule by reference. However, once delisting authority was delegated, it

0138-0782

became apparent that the listing standards within 40 CFR 261.11 were critical for delisting. In R90-17, the Board therefore adopted most of the text of section 261.11, but worded it as a recitation of USEPA's criteria for listing, rather than as a rule enforceable against USEPA. There are, therefore, numerous differences in wording between the Board and USEPA rules.

Apart from the functional differences between the Board and USEPA rules, there are a number of editorial problems with the USEPA rule, which were discussed in the R90-17 Opinion. In particular, section 261.11(a)(3), the topic of the January 2, 1992, amendment, includes a "hanging paragraph" in which the text returns to the original level of indentation after a list is broken out. The Code Division prohibits this format. The Board therefore had to restructure this portion of the rule in R90-17. The hanging paragraph became two Board notes, following the introduction to subsection (a)(3) and subsection (a)(3)(K).

USEPA made a minor, but important, change in wording to 40 CFR 261.11(a)(3) at 55 Fed. Reg. 18726, May 4, 1990. The Board picked this up in R90-17. As discussed at 57 Fed. Reg. 13, USEPA initially treated the change as a technical revision, which was made without notice and opportunity for comment. However, after opposition arose, USEPA made a new proposal, which appeared at 55 Fed. Reg. 33238, July 19, 1991. This resulted in the January 2, 1992, USEPA action, which is the subject of this Docket.

The USEPA amendment appears to require only a minor change in wording to Section 721.111(a)(3) [261.11(a)(3)]:

Toxic waste. It contains any of the toxic constituents listed in Appendix H and, after considering ~~any~~ of the following factors, USEPA concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed:...

Section 721.Appendix I, Table D (Not Amended)

This Appendix is a listing of delisting adjusted standards. This currently lists only the Keystone delisting adopted in AS 91-1. None have been adopted since. The Board has therefore made no changes to this Appendix, but will make changes at a later date to list any additional adjusted standards.

PART 724: STANDARDS FOR PERMITTED HWM FACILITIES

This Part contains the standards for owners and operators of hazardous waste management (HWM) facilities with RCRA permits. Standards for interim status facilities are in Part 725, below. This Part is drawn from 40 CFR 264. Most of the amendments come

0138-0783

from the liner and leak detection system (LDS) amendments at 57 Fed. Reg. 3486, January 29, 1992. This includes the addition of numerous Sections to this Part.

USEPA is reusing several section numbers which were used for Sections which were repealed following the HSWA Act (R86-1 at the State level). Under the Administrative Code Division rules, repealed Sections remain as a heading, with a "Repealed" designation (a "ghost"). The new Sections will therefore appear at the State level as amendments replacing the "ghosts". Pursuant to a request from the Administrative Code Division, there are minor changes in the format for removing the "ghosts" as between the proposed and final orders.

Section 724.113 General Waste Analysis

This Section is derived from 40 CFR 264.13, which was amended at 57 Fed. Reg. 8088, March 6, 1992, in connection with the "third third" corrections. The "third third" land disposal bans were the main topic of R90-11. The last Board amendment to this Section was in R90-11. The amendments are minor changes in the wording of 40 CFR 264.13(a)(1) [724.113(a)(1)], which are easier to set forth than describe. The Board amendment is as follows:

Before an owner or operator treats, stores or disposes of any hazardous wastes, or non-hazardous wastes if applicable under Section 724.213(d), the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, this the analysis must contain all the information which must be known to treat, store or dispose of the waste in accordance with the ~~requirements of this Part or and 35 Ill. Adm. Code 728, or with the conditions of a permit issued under 35 Ill. Adm. Code 702, 703 and 705.~~

Section 724.115 General Inspection Requirements

This Section is derived from 40 CFR 264.15, which was amended at 57 Fed. Reg. 3486, in connection with LDS rules. This Section deals with "inspections" which must be performed and documented by the operator. The amendments are mainly changes to cross references to reflect new rules discussed below. The Board amendment to Section 724.115(b)(4) is:

The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of ~~possible~~ deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction or any operator error goes undetected between inspections.

0138-0784

Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the terms and frequencies called for in Sections 724.274, ~~724.294~~, 724.293, 724.295, 724.326, ~~724.353~~, 724.354, 724.378, 724.403, 724.447, 724.702, 724.933, 724.952, 724.953 and 724.958, where applicable.

Section 724.119 Construction Quality Assurance Program

This new Section is derived from 40 CFR 264.19, adopted at 57 Fed. Reg. 3486, in connection with LDS rules. This requires a "Construction Quality Assurance Program" (CQA Program) for certain surface impoundments, waste piles and landfill units. Among other things, the CQA program has to address the construction of soil liners, geomembrane liners, leachate collection and removal systems, and leak detection systems. The operator has to have a CQA plan and a CQA officer, and has to certify, before receiving waste, that the CQA plan was successfully carried out.

40 CFR 264.19(c)(2) requires test fills or other measurements of hydraulic conductivity of recompacted liners. The USEPA rule reads as follows:

The CQA program shall include test fills for compacted soil liners, using the same compaction methods as in the full scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of §§ 264.221(c)(1)(i)(B), 264.251(c)(1)(i)(B), and 264.301(c)(1)(i)(B) in the field. Compliance with the hydraulic conductivity requirements must be verified by using in-situ testing on the constructed test fill. The Regional Administrator may accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of §§ 264.221(c)(1)(i)(B), 264.251(c)(1)(i)(B), and 264.301(c)(1)(i)(B) in the field.

There are several minor problems with this language. The first problem concerns the agency with authority to make this decision at the State level. A general discussion of how the Board decides this appears in the introduction to this Opinion. The Board sees no indication that USEPA intends to retain this authority. The choice is therefore as between the Board and Agency. This decision, in Part 264 [724], concerns an operator who either has a permit or is required to get one. The general rule requires a test fill, or an alternative demonstration "where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements". Rather than a

0138-0785

"waiver" of the test fill requirement, this is an alternative way of showing the same thing. This is a technical showing of a type typically made by the Agency on a permit application.

The USEPA rule provides that the Regional Administrator "may accept" the alternative. As "may" is defined in the general introduction above, this could be construed as meaning that the decision maker "may or may not" accept the alternative, regardless of whether the data was "sufficient" under the standard. The Board has therefore worded this as "the Agency shall accept...where data are sufficient". The Board solicited comment as to whether there might be other grounds on which the Agency should be able to reject the alternative, but received no response.

The USEPA rule also is worded so as to require that the data be sufficient to show compliance with the impoundment, pile and landfill rules. The alternative data need to be sufficient only to meet the requirements for the type of unit in question.

The text of Section 724.119(c)(2) [264.19(c)(2)], as adopted by the Board, is as follows:

The CQA program must include test fills for compacted soil liners, using the same compaction methods as in the full scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of Sections 724.321(c)(1)(A)(ii), 724.351(c)(1)(A)(ii) or 724.401(c)(1)(A)(ii) in the field. Compliance with the hydraulic conductivity requirements must be verified by using in-situ testing on the constructed test fill. The Agency shall accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of Sections 724.321(c)(1)(A)(ii), 724.351(c)(1)(A)(ii) or 724.401(c)(1)(A)(ii) in the field.

40 CFR 264.19(d) [724.119(d)] prohibits acceptance of waste until the CQA officer certified that the CQA program has been carried out and that the unit meets the requirements of this Part, and:

The procedure in § 270.30(1)(2)(ii) of this chapter has been completed.⁵

40 CFR 270.30(1)(2) corresponds with Section 703.247; 270.30(1)(2)(ii) is 703.247(b). This prohibits receipt of waste

⁵The reference is to "1", as in "ell".

following notification to the State, until either the State has inspected the unit, or 15 days have lapsed without State action.

Section 724.173 Operating Record

This Section is drawn from 40 CFR 264.73, which was also amended in connection with LDS rules. The amendments add cross references to the new requirements.

40 CFR 264.73(b)(6) the operator to record the following:

Monitoring, testing or analytical data, and corrective action where required by subpart F and §§ 264.19, 264.191, 264.193, 264.195, 264.222, 264.223, 264.226, 264.252-264.254, 264.276, 264.278, 264.280, 264.302-264.304, 264.309, 264.347, 264.602, 264.1034(c)-264.1034(f), 264.1035, 264.1063(d)-264.1063(i), and 264.1064.

As worded, the USEPA rule appears to require the data to be recorded only if required by all the listed Sections, some of which are mutually exclusive. The Board believes this is an editorial error by USEPA, and has retained "or" in its equivalent rule [724.173(b)(6)].

The Board also believes that the reference to "corrective action" has an understood "data" after it. The Board has inserted this word. The text of Section 724.173(b)(6) is as follows:

Monitoring, testing or analytical data and corrective action data where required by Subpart F or Sections 724.119, 724.291, 724.293, 724.295, 724.322, 724.323, 724.326, 724.353, 724.353 through 724.354, 724.376, 724.378, 724.380, 724.403, 724.402 through 724.404, 724.409, 724.447, 724.702, 724.934(c) through (f), 724.935, 724.963(d) through (i) or 724.964.

SUBPART K: SURFACE IMPOUNDMENTS

This Subpart contains design and operating requirements for surface impoundments. The amendments specify the design and

0138-0787

operating requirements for leak detection⁶ at new⁷ surface impoundments.

Section 724.321 Design and operating requirements (surface impoundments)

This Section is drawn from 40 CFR 264.221.

Section 724.321(b) allows for approval of alternate design or operating practices. As adopted by the Board (in R82-19), this allowed alternative practices only pursuant to a variance or site-specific rulemaking. Since that time, Section 28.1 has been added to the Act, authorizing this type of decision by "adjusted standard". The Board has modified this Section to allow the use of adjusted standards for this approval.

Section 28.1(b) allows the Board to specify the "level of justification" at the time it adopts the rule authorizing an adjusted standard procedure. The USEPA rule, and existing Board rule, contain language appropriate as the level of justification. The language appears below. The Board has reworded the Section to make it clear what the level of justification is.

At one time the Board adopted procedures which were specific to RCRA adjusted standards. These remain in the rule book as 35 Ill. Adm. Code 106.Subpart D, for use with the rules that specifically reference them. The Board has since adopted general adjusted standards procedures in 35 Ill. Adm. Code 106.Subpart G. The Board has referenced these, rather than the RCRA-specific procedures. These procedures are discussed in detail above, in connection with Section 703.203.

The USEPA rule includes at least six procedures involving "alternative design [and] [or] operating practices". While this one uses "and", USEPA has apparently changed subsection (d) below to read "or". Of the other four, some say "and", others "or" and others both. The Board suggests that "or" is more correct, and has revised all these procedures to be consistent.

⁶The USEPA rules affect liners, leachate collection and removal systems and leak detection systems ("LDSs"). For the sake of brevity, in the rest of this opinion, we will refer to them as "leak detection" or "LDS", except where the discussion focusses on differences among these.

⁷The applicability of the requirements is stated in the subsection quoted below in connection with Section 724.321(c), which is repeated for each type of unit. For the sake of brevity, in this opinion, we will refer to these as "new" units, except where the discussion focusses on the different types.

0138-0788

The text of the Board's rule [724.321(b)] is as follows:

- b) The owner or operator will be exempted from the requirements of subsection (a) above if the Board ~~finds, based on a demonstration by the owner or operator, in a variance and/or site-specific rulemaking, grants an adjusted standard pursuant to 35 Ill. Adm. Code 106. Subpart G. The level of justification is a demonstration by the owner or operator~~ that alternate design and or operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see Section 724.193) into the groundwater or surface water at any future time. In deciding whether to grant an exemption adjusted standard, the Board will consider:
- 1) The nature and quantity of the wastes;
 - 2) The proposed alternate design and operation;
 - 3) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and groundwater or surface water; and
 - 4) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.

The applicability of the new leak detection requirements is governed by 40 CFR 264.221(c) [724.321(c)], which reads as follows:

The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992 and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992 must install two or more liners and a leachate collection and removal system between such liners. "Construction commences" is as defined in § 260.10 of this chapter under "existing facility".

These dates have already passed. This raises a question as to whether the Board ought to adopt the rule with a later State effective date. This depends in part on whether these are HSWA-driven amendments, which are already effective as federal law in Illinois. The new leak detection (and other) requirements do appear to be HSWA-driven rules (57 Fed. Reg. 3462). Since

0138-0789

Illinois facilities are already subject to these requirements, there appears to be no problem with adopting the State rule with a retroactive date.

40 CFR 264.221(c)(1)(i)(B) and (c)(2)(ii) [724.321(c)(1)(A)(ii) and (c)(2)(B)] include three numerical standards, as follows:

[A composite bottom liner ...] The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} /cm/sec.

[LDS ...] Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-1} /cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-4} /m²sec or more;

There are several editorial problems with the numerical standards. First, each exponent is surrounded by a "/" /", both in the Fed. Reg. and in the USEPA electronic version. The Board assumes this is an artifact⁸ of a change in word processing systems at some point in the development of the rule, and has removed the characters.

The first two standards are for hydraulic conductivity, which is normally measured in units of cm/sec. The third standard, however, is for synthetic or geonet drainage materials with a transmissivity apparently expressed as "m²sec"⁹. Appropriate units for transmissivity would be "m²/sec".

USEPA has also amended 40 CFR 264.221(d) [724.321(d)], which allows for an alternative liner demonstration. When the Board originally adopted this provision, it determined that this was an appropriate decision for the Agency to make in the context of RCRA permit issuance. The Board revised the wording of the USEPA rule to make it clear that this was to be an Agency action

⁸An alternative possibility is that, while the "/" in advance of the exponent is an artifact, the "/" following the exponent is a part of the units, i.e. " 1×10^{-7} /cm/sec". This would be equivalent to " 1×10^{-7} sec/cm", which would be the reciprocal of the hydraulic conductivity units indicated in the first two standards. This would clearly be wrong for the first two standards.

⁹The USEPA rule could be read as "m²sec". This would, however, be inconsistent with the reading of the "/" /" typographical error above, and would be incorrect units for transmissivity.

0138-0790

pursuant to a permit application. Most of the differences between the USEPA and Board rule result from this. The current USEPA amendments modify the standard to allow an alternative demonstration with respect to leak detection.

As discussed above in connection with Section 724.321(b), there is a question as to whether this subsection ought to read "alternative design and" or "alternative design or operating practices". The Board has followed the USEPA amendment and used "or".

The amendment to Section 724.321(d) is as follows:

Subsection (c) will not apply if the owner or operator demonstrates to the Agency and the Agency finds for such surface impoundment, that alternative design and or operating practices, together with location characteristics, ~~will~~ :

- 1) Will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as such the liners and leachate collection and removal systems specified in subsection (c) above; and
- 2) Will allow detection of leaks of hazardous constituents through the top liner at least as effectively.

USEPA has also added 40 CFR 264.221(f) [724.321(f)], pushing the existing subsection (f), et seq., down one. The new language is as follows:

(f) The owner or operator of any replacement surface impoundment unit is exempt from paragraph (c) of this section if:

- (1) The existing unit was constructed in compliance with the design standards of sections 3004 (o) (1) (A) (i) and (o) (5) of the Resource Conservation and Recovery Act; and
- (2) There is no reason to believe that the liner is not functioning as designed.

The direct reference to the RCRA Act poses an editorial problem in that it might be necessary to handle this as an incorporation by reference at the State level. As was discussed in R90-2, at p. 17 and 27, the APA is unclear as to whether this type of reference is an incorporation by reference, and as to whether it is allowable. Regardless, this type of reference is

0138-0791

functioning as an incorporation by reference of design standards in the federal law, and should be avoided, to maintain clarity.

The cited provisions are HSWA Act provisions which set design standards for surface impoundments that were effective until USEPA promulgated new design requirements. They read as follows:

...At a minimum, such regulations shall require ...

(1) (A) For each new landfill or surface impoundment, ..., for which an application for a final determination regarding issuance of a permit under section 3005(c) is received after the date of enactment of [HSWA]

(i) the installation of two or more liners and a leachate collection system above (in the case of a landfill) and between such liners; ... [3004 (o)(1)(A)(i).]

(5) (A) The Administrator shall promulgate regulations or issue guidance documents implementing ... (1)(A) within two years after [HSWA].

(B) Until the effective date of such regulations or guidance documents, the requirement for the installation of two or more liners may be satisfied by the installation of a top liner designed, operated, and constructed of materials to prevent the migration of any constituent into such liner during the period such facility remains in operation (including any post-closure monitoring period), and a lower liner designed, operated, and constructed to prevent the migration of any constituent through such liner during such period. For the purpose of the preceding sentence, a lower liner shall be deemed to satisfy such requirement if it is constructed of at least a 3-foot thick layer of recompacted clay or other natural material with a permeability of no more than 1×10^{-7} [cm/sec]. [3004(o)(5).]

These requirements appear to represent Section 724.321(c) through (e), as they existed prior to the amendments in this Docket. That Section assumed its post-HSWA form in R86-1, at 10 Ill. Reg. 14119, effective August 12, 1986. The Board has referenced that version of its rule, and added an explanatory note. The language is as follows [724.321(f)]:

0138-0792

f) The owner or operator of any replacement surface impoundment unit is exempt from subsection (c) above if:

- 1) The existing unit was constructed in compliance with the design standards of 35 Ill. Adm. Code 724.321(c), (d) and (e), as amended in R86-1, at 10 Ill. Reg. 14119, effective August 12, 1986; and

BOARD NOTE: The cited subsections implemented the design standards of sections 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.).

- 2) There is no reason to believe that the liner is not functioning as designed.

Section 724.322 Action Leakage Rate

This Section is derived from 40 CFR 264.222, which USEPA adopted with the new leak detection rules. The new USEPA section replaces a "ghost" at the State level. This Section governs the "action leakage rate" for a "new"¹⁰ surface impoundment. The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 foot. To determine if the action leakage rate has been exceeded, the owner or operator converts the weekly or monthly flow rate from the monitoring data to an average daily flow rate (gallons per acre per day) for each sump. Response action under the following Sections results if the action leakage rate is exceeded.

The USEPA rule includes two decisions which are to be made by the Regional Administrator. A general discussion appears above as to how the Board determines who will make these decisions in the State program. The Board believes that both decisions are to be delegated.

The first decision [in 724.322(a)] is the approval of the action leakage rate. 40 CFR 270.17(b)(5) [703.203(b)(5)] requires the operator to file a proposed action leakage rate, with rationale, with the permit application. The approval of the action leakage rate would thus come in the context of a permit application. This would be an engineering-type demonstration of a type typically made by the Agency pursuant to a permit application, the question being whether the leakage rate would

¹⁰As noted above, the Board is using "new" as a shorthand for the types of units subject to these requirements.

cause more than a one foot head on the liner, considering slope, permeabilities, etc.

The second decision is in 40 CFR 264.222(b), which reads as follows:

Unless the Regional Administrator approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period, and if the unit is closed in accordance with § 264.228(b), monthly during the post-closure care period when monthly monitoring is required under § 264.226(d).

Although this is worded in terms of a "different calculation", it does not appear to allow a different formula to be used. Rather, the rule is referring to the frequency with which the leakage rate must be recalculated and, by implication, the period over which the daily leakage is averaged. It is closely linked with section 264.226(d) [724.326(d)], which specifies monitoring frequency.

This subsection authorizes an alternative frequency, but specifies no criteria for decision. However, the criteria appear to be in 40 CFR 264.226(d)(2) [724.326(d)(2)]:

After the final cover is installed, the amount of liquids removed from each leak detection system sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semi-annually.

Although there is a specific variable frequency rule applicable following closure, section 264.226(d)(1) [724.326(d)(1)] is quite specific that weekly monitoring is required up to the point of closure. It thus appears that the alternative frequency decision applies only after closure.

The Board has adopted the following language [724.322(b)]:

To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Section 724.326(d) to an average daily flow rate (gallons per acre per day) for each sump. The average daily flow rate for each sump must be calculated weekly during the active life and closure

0138-0794

period and, if the unit is closed in accordance with Section 724.328(b), monthly during the post-closure care period, unless the Agency approves a different frequency pursuant to Section 724.326(d).

Section 724.323 Response Actions

This new Section is derived from 40 CFR 264.223, which USEPA adopted with the leak detection rules. It requires the operator of a "new" impoundment to have an approved "response action plan". If the action leakage rate is exceeded, the operator must implement the response action plan. This entails notification, an assessment of the leak, a response and monthly reports.

The operator is required to file a "response action plan" with the Part B permit application under 40 CFR 270.17(b)(5) [703.203(b)(5)]. The plan is reviewed and approved by the Agency pursuant to normal permit review procedures.

This Section has some minor editorial problems. 40 CFR 264.223(b)(6) [724.323(b)(6)] includes a reference to the "analyses" in subsections (b)(3), (4) and (5). Those rules are all worded as directives to the operator to "determine", for example, the location of a leak. USEPA refers to these rules as "determinations" at other points. The Board has therefore replaced "analyses" with "determinations".

40 CFR 264.223(c) [724.323(c)] has a subsection (1) with no text. This is prohibited by the Code Division. The Board has inserted the word "either" at this level, since the subsection appears to have the form [(A, B and C) or D]. In addition, this subsection has an "and/or", an expression to which the Code Division sometimes objects. As used by the Code Division, "A or B" means "A or B or both", the same thing as "and/or".

The text of Section 724.323(c) adopted by the Board is as follows:

- c) To make the leak or remediation determinations in subsections (b)(3), (4) and (5) above, the owner or operator shall:
 - 1) Either:
 - A) Assess the source of liquids and amounts of liquids by source;
 - B) Conduct a fingerprint, hazardous constituent or other analyses of the liquids in the LDS to identify the source of liquids and possible location

0138-0795

of any leaks, and the hazard and mobility of the liquid; and

- C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

- 2) Document why such assessments are not needed.

Section 724.326 Monitoring and Inspection

This Section is derived from 40 CFR 264.226, which USEPA amended with the leak detection rules. The amendment adds a new subsection (d). This governs monitoring and inspection of liquid levels in sumps. This deals with "inspection" which must be performed and documented by the operator. It is closely related to Section 724.322, discussed above. Subsection (d) also is an empty level. The Board has inserted "Monitoring of LDS" as a grouping heading.

This rule depends in part on the "pump operating level". The monitoring frequency is reduced to less than monthly if liquids remain below the pump operating level for long periods of time. 40 CFR 264.226(d)(3) provides that:

"Pump operating level" is a liquid level proposed by the owner or operator and approved by the Regional Administrator based on pump activation level, sump dimensions, and level that avoids backup into the drainage layer and minimizes head in the sump.

The pump operating level is potentially a very important determination, since monitoring frequencies depend in part on how often liquids reach the pump operating level. A high pump operating level could lead to very infrequent monitoring.

This is a technical decision which is closely related to the action leakage rate and response plan. As is discussed above, 40 CFR 270.17(b)(5) requires a proposed action leakage rate and response plan in the permit application, but omits the pump operating level. The Board has above included it in Section 703.203(b)(5). With the decision placed into the normal context of a permit application, there is no need to create a special procedure.

The text of Section 724.326(d) adopted by the Board is as follows:

- d) Monitoring of LDS.

- 1) An owner or operator required to have a LDS under Section 724.321(c) or (d) shall record

0138-0796

the amount of liquids removed from each LDS sump at least once each week during the active life and closure period.

- 2) After the final cover is installed, the amount of liquids removed from each LDS sump must be recorded at least monthly. If the liquid level in the sump stays below the pump operating level for two consecutive months, the amount of liquids in the sumps must be recorded at least quarterly. If the liquid level in the sump stays below the pump operating level for two consecutive quarters, the amount of liquids in the sumps must be recorded at least semi-annually. If at any time during the post-closure care period the pump operating level is exceeded at units on quarterly or semi-annual recording schedules, the owner or operator shall return to monthly recording of amounts of liquids removed from each sump until the liquid level again stays below the pump operating level for two consecutive months.
- 3) "Pump operating level" is a liquid level proposed by the owner or operator pursuant to 35 Ill. Adm. Code 703.203(b)(5) and approved by the Agency based on pump activation level, sump dimensions and level that avoids backup into the drainage layer and minimizes head in the sump.

Section 724.328 Closure and Post-closure Care

This Section is drawn from 40 CFR 264.228. The amendment adds section 264.228(b)(2) [724.328(b)(2)], which requires the operator to maintain and monitor the LDS during and after closure.

SUBPART L: WASTE PILES

This Subpart specifies design and operating requirements for waste piles. A waste pile is a type of storage unit. A pile in which waste is permanently placed would be a type of landfill. These provisions were also amended with the LDS rules, at 57 Fed. Reg. 3486, January 29, 1992. These amendments largely repeat the amendments to the surface impoundment rules, discussed above. However, piles differ from surface impoundments in one major respect: while liquid is expected to be present on top of the first liner in an impoundment, such liquid must be removed from the top liner under a pile. Moreover, USEPA has never adopted rules implementing HSWA requirements with respect to piles.

0138-0797

Section 724.351 Design and Operating Requirements for Waste Piles

This Section is drawn from 40 CFR 264.251.

Section 724.351(a) contains the general liner requirement for a waste pile: a single liner which will prevent migration through the liner during the active life of the pile. The pile must also have leachate collection and removal above the liner.

Section 724.351(b) allows for approval of alternate design or operating practices. As adopted by the Board (in R82-19), this allowed alternative practices only pursuant to a variance or site-specific rulemaking. For the reasons discussed above in connection with Section 724.321(b), the Board is replacing these determinations with an adjusted standards procedure.

The text of the Board rule [724.351(b)] is as follows:

- b) The owner or operator will be ~~exempted~~ from the requirements of ~~paragraph subsection (a) above~~ if the Board finds, ~~based on a demonstration by the owner or operator, in a variance and/or site-specific rulemaking,~~ grants an adjusted standard pursuant to 35 Ill. Adm. Code 106. Subpart G. The level of justification is a demonstration by the owner or operator that alternate design and ~~or~~ operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see Section 724.193) into the groundwater or surface water at any future time. In deciding whether to grant an ~~exemption~~ adjusted standard, the Board will consider:
- 1) The nature and quantity of the wastes;
 - 2) The proposed alternate design and operation;
 - 3) The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and groundwater or surface water; and
 - 4) All other factors which ~~would~~ influence the quality and mobility of the leachate product and the potential for it to migrate to groundwater or surface water.

The USEPA amendments consist of the addition of 40 CFR 264.251(c) - (f) [724.351(c) - (f)], and renumbering of existing subsections. The amendments are very similar to Section 724.321(c) et seq., discussed above. The leak detection

requirements apply to new piles.¹¹ The requirements are keyed to January 29 and July 29, 1992, dates, which have already passed. However, there appears to be no retroactivity problem with the Board keying the State rules to these same dates, since operators are already subject to these HSWA-driven requirements as federal law.

As was discussed above, there were a number of editorial problems with the numerical standards in the surface impoundment rule. The comparable provisions differ for waste piles, in part because of the fundamental difference between a pile and surface impoundment: while liquid is expected to exist above the top liner in the impoundment, liquid must be removed from under the pile. The numerical standards for pile liners in 40 CFR 264.251(c) [724.351(c)] are as follow:

...The lower [liner] component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. [264.251(c) (1) (B)]

...The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and post-closure care period. The Regional Administrator will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). [264.251(c) (2)]

The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. [264.251(c) (3)]

[The lower LDS must be] Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m²/sec or more: [264.251(c) (3) (ii)]

There appear to be no errors in the numerical standards of the type discussed above for surface impoundments. The 3×10^{-5}

¹¹The applicability statement is actually quite complex, and appears to be identical to that for surface impoundments, above. As noted above, the Board is using the term "new" as a shorthand description of these units.

m²/sec transmissivity standard for the synthetic drainage materials is equal to 0.3 cm²/sec, corresponding with the transmissivity of 30.5 cm gravel layer with a conductivity of 1×10^{-2} cm/sec.

40 CFR 264.251(d) [724.351(d)] provides for alternative design or operating practices:

(d) The Regional Administrator may approve alternative design or operating practices to those specified in paragraph (c) of this section if the owner or operator demonstrates to the Regional Administrator that such design and operating practices, together with location characteristics:

(1) Will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in paragraph (c) of this section; and

(2) Will allow detection of leaks of hazardous constituents through the top liner at least as effectively.

This is quite similar to Section 724.321(d), discussed above.¹² This is a technical showing which, rather than exempting the operator from requirements, allows alternative methods of accomplishing the same thing. The Agency can make this type of determination pursuant to a permit application. The Board has worded the introductory paragraph [724.351(d)] as follows:

The Agency shall approve alternative design or operating practices to those specified in subsection (c) above if the owner or operator demonstrates to the Agency, by way of permit or permit modification application, that such design and operating practices, together with location characteristics:...

40 CFR 264.251(f) includes an exemption based on design standards in the RCRA Act:

(f) The owner or operator of any replacement waste pile unit is exempt from paragraph (c) of this section if:

¹²One difference is that, while the alternative showing for a surface impoundment already exists, the language for piles is completely new.

(1) The existing unit was constructed in compliance with the design standards of section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act; and

(2) There is no reason to believe that the liner is not functioning as designed.

This is comparable to Section 724.321(f), discussed above. There the Board determined that the cited Sections of RCRA (as amended by HSWA) had been implemented in the subsections of the regulations which were amended. The Board cited to the Illinois Register publication of the repealed rules, and added an explanatory note. Here, however, the HSWA language was never added to the regulations, since there has been no post-HSWA amendment to this Section.^{13 14} The Board has therefore added a paraphrase of the RCRA/HSWA provisions in a Board Note [724.351(f)(1)]:

The existing unit was constructed in compliance with the design standards of section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act (42 USC 6901 et seq.); and

BOARD NOTE: The cited provisions required the installation of two or more liners and a leachate collection system above (in the case of a landfill) and between such liners, including a top liner designed, operated and constructed of materials to prevent the migration of any constituent into such liner during the period the facility remained in operation (including any post-closure monitoring period), and a lower liner to prevent the migration of any constituent through the liner during such period. The lower liner was deemed to satisfy the requirement if it was constructed of at least a 3-foot thick layer of recompacted clay or other natural material with a permeability of no more than 1×10^{-7} cm/sec.

¹³The CFR carries a source note referencing 50 Fed. Reg. 4514, January 31, 1985. This was addressed in R85-22. The cited Fed. Reg. merely announced OMB approval of the July 26, 1982, USEPA amendments to this Section.

¹⁴In view of the absence of any post-HSWA amendments, one might question whether the amendments to the pile rules are HSWA-driven. However, USEPA has unambiguously stated that it regards the new pile rules as HSWA-driven. (57 Fed. Reg. 3480, column 3.)

0138-0801

Section 724.352 Action Leakage Rate

This Section is drawn from 40 CFR 264.252, which was adopted with the leak detection rules. The new Board Section replaces a "ghost" section.

This Section governs the action leakage rate. It is comparable to Section 724.322, above. The operator has to propose an action leakage rate in the permit application pursuant to 40 CFR 270.18(c)(1)(v) [703.204(c)(1)(E)].

40 CFR 264.252(b) [724.352(b)] reads as follows:

To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly flow rate from the monitoring data obtained under § 264.254(c), to an average daily flow rate (gallons per acre per day) for each sump. Unless the Regional Administrator approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period.

As discussed above in connection with Section 724.322(b), the Board construes this as referring to a different frequency of calculation, rather than method of calculation. However, with this understanding, there are differences between this and the comparable Section applicable to surface impoundments. Differences appear to stem from the absence of post-closure care rules for waste piles.¹⁵ While the other Section includes cross references to post-closure care rules and a monitoring rule with criteria for when the calculation frequency is to be reduced, the Section on piles includes no such cross references. Indeed, no criteria are present in the pile rules for reducing the frequency.¹⁶ The Board therefore suggests that the "unless" clause is an editorial error, and has to omitted it. The language adopted by the Board [724.352(b)] is as follows:

To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Section 724.354(c) to an average daily flow rate (gallons per acre per day) for each sump.

¹⁵A waste pile is a temporary repository for waste, which will be removed upon closure of the pile. A "pile" in which waste will remain permanently is a type of landfill.

¹⁶The reduced calculation frequency provisions for impoundments depend on the pump activation level, which provisions are also missing from the waste pile provisions.

The average daily flow rate for each sump must be calculated weekly during the active life and closure period.

Section 724.353 Response Actions

This Section is derived from 40 CFR 264.253, which was also added with the leak detection rules. The new Section replaces a "ghost" Section.

This Section governs the response actions which the operator must take if the action leakage rate is exceeded. The operator proposes a response action plan in the permit application pursuant to 40 CFR 270.18(c)(1)(v) [703.204(c)(1)(E)].

This Section is comparable to Section 724.323 [264.223] above. There appear to be no major problems with the text.

Section 724.354 Monitoring and Inspection

This Section is drawn from 40 CFR 264.254, which was also amended with the leak detection rules. This Section governs "inspection" of the unit by the operator.

The amendment adds subsection (c), requiring weekly monitoring of sumps:

An owner or operator required to have a LDS under Section 724.351(c) shall record the amount of liquids removed from each LDS sump at least once each week during the active life and closure period.

There is no provision for monitoring following closure, because all wastes and residues must be removed from a pile on closure.

SUBPART N: LANDFILLS

This Subpart specifies design and operating requirements for landfill units at permitted facilities. It is derived from 40 CFR 264, Subpart N, which was amended with respect to the leak detection rules, at 57 Fed. Reg. 3486, January 29, 1992. These amendments are comparable to the amendments discussed above with respect to surface impoundment and waste pile units.

Section 724.401 Design and Operating Requirements

This Section is drawn from 40 CFR 264.301. Subsections (c) and (d) are largely replaced, a new (f) is added, and everything below is moved down.

0138-0803

Section 724.401(b) allows for approval of alternative practices as approved by site-specific rulemaking or variance. The Board has replaced site-specific rulemaking with a reference to the adjusted standards procedures, for the reasons discussed above in connection with Section 724.321(b).

40 CFR 264.301(c) [724.401(c)] controls the applicability of the new leak detection requirements. This appears to be identical to 40 CFR 264.221(c) [724.321(c)], which is set out above. As noted there, the Board is using the term "new" as a shorthand description for the units to which the new requirements are applicable, and is using "leak detection" or "LDS" to describe the requirements, which also include liner and leachate collection and removal requirements.

40 CFR 264.301(c)(1)(i)(B) and (c)(2) [724.401(c)(1)(A)(ii) and (c)(2)] include numerical standards for liner and drainage layer hydraulic conductivity, etc.:

A composite bottom liner, consisting of at least two components... The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. [264.301(c)(1)(i)(B)]

The leachate collection and removal system between the liners, and immediately above the bottom composite liner... Constructed of granular drainage materials with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m²/sec or more; [264.301(c)(2)]

The standards for conductivity and transmissivity in the drainage layer are approximately equivalent. These rules differ from the surface impoundment rules in that the drainage layers can be up to ten times less permeable, apparently reflecting the smaller liquid volumes expected under a landfill. Indeed, the standards are equal to the standards for a waste pile.

40 CFR 264.301(c)(2) includes the following cross-reference:

The leachate collection and removal system must comply with paragraphs (3)(c)(iii) and (iv) of this section.

This is probably a reference to "(c)(3)(iii) and (iv)". The Board has cited to the equivalent "(c)(3)(C) and (D)".

40 CFR 264.301(d) [724.401(d)] allows for alternative design or operating practices. This is similar to Section 724.321(d), above. When the Board adopted this provision, it modified the

0138-0804

USEPA language to make it clear that this technical decision is to be made pursuant to a permit application. The language now adopted by the Board is as follows:

Subsection (c) will not apply if the owner or operator demonstrates to the Agency, and the Agency finds for such landfill, that alternative design ~~and or~~ operating practices, together with location characteristics, ~~will~~
 i

- 1) Will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as such liners and leachate collection and removal systems, specified in subsection (c) above; and
- 2) Will allow detection of leaks of hazardous constituents through the top liner at least as effectively.

USEPA has also added 40 CFR 264.301(f) [724.401(f)], which includes an exemption for replacement units constructed in compliance with section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act. This poses problems which are similar to those discussed above with respect to Section 724.321(f). The Board has handled this as above, by referencing the repealed provisions which implemented the cited RCRA Act provisions. The language is as follows:

- f) The owner or operator of any replacement landfill unit is exempt from subsection (c) above if:
 - 1) The existing unit was constructed in compliance with the design standards of 35 Ill. Adm. Code 724.401(c), (d) and (e), as amended in R86-1, at 10 Ill. Reg. 14119, effective August 12, 1986; and

BOARD NOTE: The cited subsections implemented the design standards of sections 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.).

- 2) There is no reason to believe that the liner is not functioning as designed.

Existing Sections 724.401(f) - (j) are promoted to (g) - (k). 40 CFR 264.301(l) is a site-specific rule applicable only in Alabama, and does not appear in the Illinois rules.

0138-0805

Section 724.402 Action Leakage Rate

This Section is drawn from 40 CFR 264.302, which was adopted with the leak detection rules. At the State level, the new language replaces a "ghost" Section. It specifies the "action leakage rate", which triggers response actions under the ensuing Sections. It is similar to Section 724.322, above.

40 CFR 264.302(a) [724.402(a)] has an apparent editorial error, which the Board has corrected. The USEPA Section should apply to "landfill units", rather than "surface impoundments".

40 CFR 264.302 [724.402] includes two decisions, which are similar to those discussed above [in Section 724.322]. The Regional Administrator approves the action leakage rate, and may approve an alternative "calculation" of the rate. The former is clearly a part of the permit application under 40 CFR 270.21(b)(1)(v) [703.207(b)(1)(E)]. The latter is a subsidiary demonstration which is really addressing the frequency of calculation, rather than the formula for the calculation. The standard for the alternative frequency is in 40 CFR 264.303(c)(2) [724.403(c)(2)], below. As is the case with the surface impoundment rule, the alternative frequency is available only following closure. The Board has adopted the following [724.402(b)]:

To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Section 724.403(c) to an average daily flow rate (gallons per acre per day) for each sump. The average daily flow rate for each sump must be calculated weekly during the active life and closure period, and monthly during the post-closure care period, unless the Agency approves a different frequency pursuant to Section 724.403(c)(2).

Section 724.403 Monitoring and Inspection¹⁷

This Section is drawn from 40 CFR 264.303. USEPA has added a subsection (c) with the leak detection rules. This provision is comparable to 40 CFR 264.226(d) [724.326(d)], discussed above in connection with surface impoundments.¹⁸

¹⁷This Section deals with "inspection" which is to be performed by the operator.

¹⁸The order of the rules is different as between the surface impoundment and landfill rules.

As is discussed in connection with the surface impoundments, this Section depends in part on the "pump operating level", which the Regional Administrator is to approve pursuant to 40 CFR 264.403(d)(3). This determination is similar to the action leakage rate and response plan determinations discussed above and below. In Section 703.207(b)(1)(E), above, the Board has added a component to the Part B application addressing the pump operating level, alongside the action leakage rate and response plan. This brings the determination clearly into the permit application process, avoiding any need for specialized procedures. The pump operating level language is as follows [724.403(c)(3)]:

"Pump operating level" is a liquid level proposed by the owner or operator pursuant to 35 Ill. Adm. Code 703.207(b)(1)(E) and approved by the Agency based on pump activation level, sump dimensions and level that avoids backup into the drainage layer and minimizes head in the sump.

Section 724.404 Response Actions

This new Section is drawn from 40 CFR 264.304, which was added with the leak detection rules. It governs the response actions the operator must take if the action leakage rate is exceeded. This section is comparable to Section 724.323, discussed above in connection with surface impoundments.

The operator is required to file a "response action plan" with the permit application pursuant to Section 703.207(b)(1)(E). The Agency approves the plan pursuant to normal permit approval procedures. This Section governs the contents of the plan.

40 CFR 264.304 has three minor editorial problems which are identical to those discussed above in connection with Section 724.323 ("analyses", "and/or" and "either").

Section 724.410 Closure and Post-closure Care

This Section is drawn from 40 CFR 264.310, which was amended with the leak detection rules. The amendments add a new subsection (b)(3) [724.410(b)(3)], which requires the operator to maintain and monitor the LDS during the post-closure care period. Existing subsections (b)(3) - (5) are then renumbered.

SUBPART W: DRIP PADS

This Subpart governs "drip pads", a type of hazardous waste management unit on which wood products are stored following

0138-0807

application¹⁹ of wood preservatives. Drip pads were a major topic in R91-1 and R91-26. USEPA has amended the rules at 57 Fed. Reg. 5861, February 18, 1992.

Section 724.673 Design and Operating Requirements

This Section was drawn from 40 CFR 264.573. It governs design and operating requirements for drip pads at permitted facilities. USEPA has amended this Section "by revising paragraph (a)(4) to read as follows:"

[Drip pads must:...]

Be impermeable, e.g., concrete pads must be sealed, coated, or covered with an impermeable material such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system.

Note: The requirement that existing drip pads be impermeable, e.g., that drip pads be sealed, coated, or covered, with an impermeable material is administratively stayed. The stay will remain in effect until October 30, 1992.

The drip pad administrative stays have a complex history, which may be relevant to the current stay. USEPA adopted the drip pad rules on December 6, 1990, and published a stay on June 13, 1991. This was coupled with a stay of the related F034 and F035 listings in 40 CFR 261.31. USEPA also corrected the rules on July 1, 1991. The Board addressed all of these when it adopted Section 724.673 in R91-1.

The stay situation is complicated by the HSWA status of different provisions. As discussed above, USEPA amendments which are required by the HSWA amendments to the RCRA Act become effective immediately in authorized states, including Illinois. The F032 listing of chlorophenolic preservatives was HSWA-driven. On the other hand, the F034 and F035 listings were not HSWA-driven, and hence, from the USEPA perspective, would not become effective in states until authorized. However, Sections 7.2 and 22.4(a) of the Act required Illinois to adopt these rules on a "fast-track", regardless of HSWA status and USEPA's authorization schedule. Thus, USEPA had to write different stays for the HSWA

¹⁹In other words, following "treatment" of wood to produce "treated wood". However, "treatment" and "treated" are important terms within the hazardous waste rules and have a very different meaning.

and non-HSWA portions, and was operating with an incorrect perspective as to the effect of its actions in Illinois. (See Opinions in R91-1 and R91-26.)

The Board adopted the USEPA stays of the F032, F034 and F035 listings, and of the coating requirement of Section 724.673 in R91-1. However, the Board extended some of the notification dates for the non-HSWA portions of the rules, so as to give persons in Illinois more time to take actions to qualify for the stay.

Following the adoption of R91-1, the Board received calls from wood preservers who stated that they were unable to meet the specified dates for application of coatings because of the onset of winter, and that they had been misled by statements at the national level that they would not have to comply with the non-HSWA portions of the rule in authorized states. The Board opened R91-26 to further extend the dates associated with the stays for the non-HSWA listings F034 and F035. R91-26 was adopted just prior to the February 18, 1992, USEPA stay.

The R91-1 stay of the impermeable coating requirement of Section 724.673 [264.573] was embodied in a note following subsection (a)(4). As worded by USEPA, it read:

Note: The requirement that new drip pads be impermeable, e.g., that new drip pads be sealed, coated, or covered with an impermeable material, is administratively stayed. The stay will remain in effect until further administrative action is taken. [40 CFR 264.573(a)(4), 56 Fed. Reg. 27336, June 13, 1991.]

As was discussed in R91-1, at p. 14, USEPA omitted the note from the corrections which appeared two weeks later (56 Fed. Reg. 30192, July 1, 1991). The Board construed this as an error by USEPA, and retained the note in the rules as adopted. The note does not appear in the 1991 Edition of the CFR (which, anachronistically, included the July 1 corrections).

The February 18, 1992, USEPA stay makes no mention of the June 13, 1991, stay. It differs in that it applies to "existing", rather than "new" pads, and it terminates on a date certain (October 30, 1992). In the proposal, the Board was uncertain as to whether the June 13 stay was still in

0138-0809

existence.²⁰ The Board proposed to retain the stay, but solicited comment.

BOARD NOTE: The requirement that new drip pads be impermeable, e.g., that new drip pads be sealed, coated or covered with an impermeable material, is administratively stayed. The stay will remain in effect until further administrative action is taken. The requirement that existing drip pads be impermeable, e.g., that drip pads be sealed, coated or covered with an impermeable material, is administratively stayed. The stay will remain in effect until October 30, 1992.

USEPA informally alerted the Board that USEPA had terminated the stays, and revised the regulations, at 57 Fed. Reg. 61492, December 24, 1992. The background discussion at 57 Fed. Reg. 61493 makes it fairly clear that USEPA regarded the June 13, 1991, stay as still in existence. However, the December 24, 1992, action raises other problems.

One problem is that part of the stay expired on October 30, 1992. Adopting it at this point might force Illinois wood preservers to comply with rules that have already been modified at the USEPA level. Although the Board could avoid this problem by terminating the stay and adopting the December 24, 1992, modifications, this would be taking action on a USEPA rulemaking outside the batch period required by Section 7.2 of the Act.

The December 24 action could be construed as a correction to a matter already before the Board, and taken with this Docket, as has been done with respect to other similar corrections discussed in the general introduction to this opinion. The Board, however, declines to take such action at this late date. For one thing, this would require the Board to act on Sections which were not included in the original proposal, and to act without affording notice and the opportunity to comment. Moreover, it would entail at least a two-week delay in this rulemaking, which is subject to an extension of time order already. The Board has therefore extended the stay until the time the Board takes further regulatory action implementing the December 24, 1992, USEPA amendments.

Part of the USEPA stay is "until further administrative action is taken". At the State level, this means action by the Board to remove the note: i.e., a final order in R93-4. We expect such action by July 10, 1993.

²⁰USEPA may have intended to repeal the June 13 stay with the July 1 corrections. Or, the Board may have missed an intervening USEPA action removing the stay. Or, the newest stay may have replaced the prior stay.

0138-0810

Some drip pads may be subject to HSWA-driven requirements which are already effective at the federal level. The extended State stay will not be construed as excusing owners or operators from complying with federal requirements already in effect in Illinois.

The language adopted by the Board is as follows:

BOARD NOTE: The requirement that new drip pads be impermeable, e.g., that new drip pads be sealed, coated or covered with an impermeable material, is administratively stayed. ~~The stay will remain in effect until further administrative action is taken.~~ The requirement that existing drip pads be impermeable, e.g., that drip pads be sealed, coated or covered with an impermeable material, is administratively stayed. The stays will remain in effect until the Board removes this note by further regulatory action implementing USEPA amendments at 57 Fed. Reg. 61492, December 24, 1992, expected in Docket R93-4. The extended State stay will not be construed as excusing owners or operators from complying with any federal requirements already in effect in Illinois.

PART 725: INTERIM STATUS STANDARDS

This Part is drawn from 40 CFR 265, which was amended mainly in connection with the leak detection rules for certain new units.²¹ This Part contains the design and operating requirements for hazardous waste management facilities with "interim status", i.e., those who have filed a Part A permit application under 40 CFR 270 [703], but who have not received a permit.

The Part 265 [725] rules are nearly identical to the Part 264 [724] rules, above, which apply to permitted facilities. One difference is that the interim status rules often need special decision-making procedures to be used in the absence of a permit system.

The new leak detection rules apply to "new" units. Interim status facilities are generally prohibited from building new units under 35 Ill. Adm. Code 703.155. There are, however, numerous exceptions, including units added to comply with

²¹As noted above, in this opinion, the Board is using "leak detection" or "LDS" as a shorthand for rules which also include new liner and leachate collection requirements. The Board is also using "new" to describe the applicability of the new requirements, which is actually quite complex. See Section 724.321, above, for the applicability.

0138-0811

enforcement orders. It is therefore possible that an interim status facility could be required to build a new unit outside the permit system.

SUBPART B: GENERAL FACILITY STANDARDS

This Subpart contains general rules governing all types of interim status hazardous waste facilities.

Section 725.113 General Waste Analysis

This Section is drawn from 40 CFR 265.13, which was amended at 57 Fed. Reg. 8088, March 6, 1992, in connection with the "third third" corrections. This involves minor changes in wording to Section 725.113(a)(1):

Before an owner or operator treats, stores or disposes of any hazardous wastes, or non-hazardous wastes if applicable under Section 725.213(d), the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, ~~this~~ the analysis must contain all the information which must be known to treat, store or dispose of the waste in accordance with ~~the~~ requirements of this Part and 35 Ill. Adm. Code 728.

Section 725.115 General Inspection Requirements

This Section is drawn from 40 CFR 265.15, which was amended at 57 Fed. Reg. 3486, in connection with the leak detection requirements. The Section governs "inspection" of the facility to be performed by the operator. The amendments mainly add, to subsection (b)(4), cross-references to the new rules discussed below:

The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of ~~possible~~ deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule ~~must~~ must include ~~the~~ the items and frequencies called for in Sections 725.274, 725.293, 725.295, 725.326, 725.360, 725.378, 725.404, 725.447, 725.477, 725.503, 725.933, 725.952, 725.953 and 725.958, where applicable.

Section 725.119 Construction Quality Assurance [CQA] Program

This new Section is derived from 40 CFR 265.19, which was adopted with the LDS rules. It is similar to Section 724.119, above, except for problems caused by the absence of a procedural context for decisions.

40 CFR 265.19 includes several references to design and operating rules contained in 40 CFR 264 [724]. The Board has generally followed these citations, which appear to reference provisions not repeated in the interim status rules.

40 CFR 265.19(a) includes the following sentence:

The [CQA] program must ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit.

USEPA has informally advised the Board that this appears to be an editorial error in that interim status units will not have permits. The Board has cited to the Part, with the understanding that some of the criteria and specifications are actually referenced in from Part 724 [264]. The adopted language [725.119(a)] is:

The [CQA] program must ensure that the constructed unit meets or exceeds all design criteria and specifications in this Part.

The introductory sentence to 40 CFR 265.19(b) [725.119(b)] is quite a bit different from the comparable language in 264.19(b) [724.119(b)]:

Before construction begins on a unit subject to the CQA program under paragraph (a) of this section, the owner or operator must develop a written CQA plan.

For a permitted facility, the operator is required to "develop and implement" the plan, with an unstated understanding that this is to be prior to construction. The Board has followed the USEPA language in this Section on this. The new language may be setting up the differences between the permit and interim status rules, which become more pronounced below.

40 CFR 265.19(c)(2) [725.119(c)(2)] requires test fills for compacted soil liners to confirm conductivity predictions. As discussed above with respect to Section 724.119(c)(2), this provision contains two "and's" which ought to be "or's".

40 CFR 265.19(c)(2) [725.119(c)(2)] also contains the first decision point in the rule. This is comparable to 40 CFR 264.19(c)(2) [724.119(c)(2)] discussed above. However, while for

0138-0813

a permitted facility the Regional Administrator "may accept" an alternative demonstration of conductivity, the interim status provision is worded as a self-implementing waiver:

The test fill requirement is waived where data are sufficient to show that a constructed soil liner meets the hydraulic conductivity requirements of [part 264] in the field. [40 CFR 265.19(c)(2).]

The Board has left this as a self-implementing waiver. In other words, the operator alone decides whether data are "sufficient" to dispense with the test fill. However, he does so at the risk that the Agency might disagree and initiate enforcement at a later date. The alternative, which the Board is not following, would be to create a prior approval mechanism. The Board solicited comment on this, but received no response.

The major differences between the permit and interim status rules lie in 40 CFR 265.19(d) [725.119(d)]. For the permitted facility, the CQA officer merely delivers a certification to the Agency, initiating procedures for initial inspection of new units under the permit program. For the interim status unit, a similar procedure is created within the rule [265.19(d)]:

Certification. The owner or operator of units subject to § 265.19 must submit to the Regional Administrator by certified mail or hand delivery, at least 30 days prior to receiving waste, a certification signed by the CQA officer that the CQA plan has been successfully carried out and that the unit meets the requirements of §§ 265.221(a), 265.254, or 265.301(a). The owner or operator may receive waste in the unit after 30 days from the Regional Administrator's receipt of the CQA certification unless the Regional Administrator determines in writing that the construction is not acceptable, or extends the review period for a maximum of 30 more days, or seeks additional information from the owner or operator during this period. Documentation supporting the CQA officer's certification must be furnished to the Regional Administrator upon request.

This clearly sets up a permit-type action which needs to be subject to an appeal to the Board. The Board has adopted the following [725.119(d) and (-)]:

- d) Certification. The owner or operator of units subject to this Section must submit to the Agency by certified mail or hand delivery, at least 30 days prior to receiving waste, a certification signed by the CQA officer that the CQA plan has been successfully carried out and that the unit meets the requirements of Sections 725.321(a),

0138-0814

725.354 or 725.401(a). The owner or operator may receive waste in the unit after 30 days from the Agency's receipt of the CQA certification unless the Agency determines in writing that the construction is not acceptable, or extends the review period for a maximum of 30 more days, or seeks additional information from the owner or operator during this period. Documentation supporting the CQA officer's certification must be furnished to the Agency upon request.

- e) Final Agency determinations pursuant to this Section are deemed to be permit denials for purposes of appeal to the Board pursuant to Section 40 of the Environmental Protection Act.

The above subsection includes a "may", which the Board has left alone. If the Agency fails to respond, the operator has an option as to whether to receive waste or not.

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

Section 725.173 Operating Record

This Section is drawn from 40 CFR 265.73, which was amended with the LDS rules. The amendments to Section 725.173(b)(6) add cross references to the new rules discussed below, requiring the recording of data required there. As is discussed above in Section 724.173, this Section has two "and's" which need to be "or's", since some of the referenced Sections are mutually exclusive. The text of Section 725.173(b)(6) is as follows:

Monitoring, testing or analytical data and corrective action data where required by Subpart F or Sections 725.190, 725.194, 725.291, 725.293, 725.295, 725.322, 725.323, 725.326, 725.355, 725.359, 725.360, 725.376, 725.378, 725.380(d)(1), 725.402 through 725.404, 725.447, 725.477, 725.934(c) through (f), 725.935, 725.963(d) through (i) and or 725.964;

SUBPART K: SURFACE IMPOUNDMENTS

This Subpart sets design and operating requirements for interim status surface impoundment units. It has been modified by the LDS rules at 57 Fed. Reg. 3486, January 29, 1992.

Section 725.321 Design and Operating Requirements

This Section is drawn from 40 CFR 265.221, which was amended with the LDS rules. It contains design requirements for surface impoundments. This Section is closely related to 40 CFR 264.221 [724.321], which indeed is referenced.

0138-0815

The amendments add a new subsection (a), which serves as the basic statement of what types of units are subject to the LDS requirements, and as to what the requirements are. As adopted by the Board, Section 725.321(a) reads:

The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, shall install two or more liners and a leachate collection and removal system between such liners, and operate the leachate collection and removal system, in accordance with 35 Ill. Adm. Code 724.321(c), unless exempted under 35 Ill. Adm. Code 724.321(d), (e) or (f). "Construction commences" is as defined in 35 Ill. Adm. Code 720.110 under "existing facility."

These dates have already passed. As discussed above, there appears to be no retroactivity problem with adopting these dates for HSWA-driven requirements which are already applicable as federal law.

Existing 40 CFR 265.221(c) contains the alternative design and operating practices demonstration which is discussed above in connection with Section 724.321(d). This has apparently been repealed and replaced with new language which is unrelated to the alternative demonstration. The Board has followed USEPA and repealed this language. The Board solicited comment as to whether this might be an editorial error by USEPA, but received no response. On the one hand, it is possible that USEPA intended to instead replace subsection (b)²², which contains a notification requirement which may be in conflict with the new language in 40 CFR 265.19(d) [725.119(d)] above. On the other hand, it is possible that USEPA has determined that the alternative should be available for permitted units only. If USEPA intended to retain the language, it has failed to make amendments which would be necessary to accommodate the LDS rules.

The new language of 40 CFR 265.221(c) [725.321(c)] concerns the exemption for surface impoundments which were designed to meet standards set out in the RCRA Act, and which are not leaking. This was discussed above in connection with Section 724.321(f), in which the Board referenced the regulatory version of the RCRA standards, rather than the statute itself. The Board has followed the same course here. However, in that the interim

²²This notice requirement is, however, back-referenced in 40 CFR 265.222(a).

0138-0816

status rules were apparently never amended to reflect the statutory requirements, the Board has to cited Part 724 [264] version. The text of Section 725.321(c) is as follows:

The owner or operator of any replacement surface impoundment unit is exempt from subsection (a) above if:

- 1) The existing unit was constructed in compliance with the design standards of 35 Ill. Adm. Code 724.321(c), (d) and (e), as amended in R86-1, at 10 Ill. Reg. 14119, effective August 12, 1986; and

BOARD NOTE: The cited subsections implemented the design standards of sections 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.).

- 2) There is no reason to believe that the liner is not functioning as designed.

The Board has made minor editorial revisions to existing Section 725.321(d), as follows:

~~The double liner requirement Agency shall not require a double liner as set forth in subsection (a) may be waived by the Agency for any monofill, if:...~~

Pursuant to bullet 6 in the Fed. Reg., Sections 725.322(a) and (b) have been moved to become Sections 725.321(f) and (g). This has to be shown as a repeal and new adoption of the language under the Administrative Code. A cross reference in former Section 725.322(a) [265.222(a)] has to be changed from "subsection (b)" to "subsection (g)" to correspond with the new numbering.

The existing Board rule has a subsection which is not present in the CFR. Section 725.321(f) authorizes appeal of the Agency determinations under this Section. It will be renumbered to 725.321(h). Although one Agency determination is repealed above, others remain.

Section 725.322 Action Leakage Rate

This Section is drawn from 40 CFR 265.222. As discussed above, USEPA has moved the existing text to the preceding Section, and adopted new language in connection with the LDS rules. This Section now specifies the action leakage rate, the amount of liquid in the LDS which triggers a response action. It

0138-0817

is similar to Section 724.322 above, except for the complexities introduced by the absence of a permit system.

40 CFR 265.222(a) [725.322(a)] sets up an approval procedure for interim status leakage rates:

The owner or operator of surface impoundment units subject to § 265.221(a) must submit a proposed action leakage rate to the Regional Administrator when submitting the notice required under § 265.221(b). Within 60 days of receipt of the notification, the Regional Administrator will: Establish an action leakage rate, either as proposed by the owner or operator or modified using the criteria in this section; or extend the review period for up to 30 days. If no action is taken by the Regional Administrator before the original 60 or extended 90 day review periods, the action leakage rate will be approved as proposed by the owner or operator.

Section 725.322(a) follows this language closely, subject to the appeal language in Section 725.322(d).

40 CFR 265.222(b) [725.322(b)] contains the standard for the action leakage rate determination. This is very similar to Section 724.322(a)²³ above.

40 CFR 265.222(c) [725.322(c)] specifies the method by which the leakage rate is calculated. This includes an alternative "calculation", which suffers from the same problems as discussed above in Section 724.322(b): the alternative applies to the frequency of calculation, and relates only to the post-closure care period. The language adopted by the Board is as follows [725.322(c)]:

To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Section 725.326(b) to an average daily flow rate (gallons per acre per day) for each sump. The average daily flow rate for each sump must be calculated weekly during the active life and closure period and, if the unit is closed in accordance with Section 725.328(a)(2), monthly during the post-closure care period, unless the Agency approves a different frequency pursuant to Section 725.326(b).

²³The standard gets pushed down in the rule because of the greater complexity of the procedures for the interim status unit, even at the federal level.

The Board has added language allowing appeals of Agency determinations under this Section [725.322(d)]:

Final Agency determinations pursuant to this Section are deemed to be permit denials for purposes of appeal to the Board pursuant to Section 40 of the Environmental Protection Act.

Section 725.323 Response Actions

This Section is drawn from 40 CFR 265.223. There is a fundamental ambiguity in the USEPA action on this Section, at 57 Fed. Reg. 3486, January 29, 1992, with the LDS rules. Bullet 7 in the Fed. Reg. instructs that Section 265.223 "is added". However, there is an existing, unrelated 40 CFR 265.223. The Board suggests that USEPA intended to insert the new Section into the "reserved" Section 265.224, and to retain the existing Section 265.223.

USEPA has informally advised the Board that this was an error, but that it has not decided on which way to correct it. The Board could correct this apparent error in two ways: the Board could either use the reserved number for the new Section, or move the existing Section over to the new number. The Board has followed the latter course. The pre-existing text (a three-line Section) will appear below, as Section 725.324. This alternative avoids the necessity of correcting numerous cross-references into this Section.

The new text deals with response actions which are required if the action leakage rate is exceeded. It is similar to Section 724.323, above, except for the complexities introduced in the absence of a permit system.

40 CFR 265.223(a) [725.323(a)] requires that the operator submit a response action plan with the proposed action leakage rate under the preceding Section. That portion of the procedure thus appears to be subsumed within that Section. However, this Section also has decision points following notification of any exceedence. These potentially could be the subject of an appeal to the Board. The Board has therefore added Section 725.223(d), authorizing appeals.

40 CFR 265.223(c) [725.323(c)] has three minor editorial problems, which are the same as those discussed above for 264.223: "analyses", "and/or" and "either".

The complete text of Section 725.323 as adopted by the Board is as follows:

- a) The owner or operator of surface impoundment units subject to Section 725.321(a) shall submit a

0138-0819

response action plan to the Agency when submitting the proposed action leakage rate under Section 725.322. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) below.

- b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the owner or operator shall:
- 1) Notify the Agency in writing of the exceedence within 7 days of the determination;
 - 2) Submit a preliminary written assessment to the Agency within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size and cause of any leaks, and short-term actions taken and planned;
 - 3) Determine to the extent practicable the location, size and cause of any leak;
 - 4) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs or controls, and whether or not the unit should be closed;
 - 5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
 - 6) Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3), (4) and (5) above, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator shall submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3), (4) and (5) above, the owner or operator shall:

0138-0820

- 1) Either:
 - A) Assess the source of liquids and amounts of liquids by source;
 - B) Conduct a fingerprint, hazardous constituent or other analyses of the liquids in the LDS to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
 - C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
- 2) Document why such assessments are not needed.
- d) Final Agency determinations pursuant to this Section are deemed to be permit denials for purposes of appeal to the Board pursuant to Section 40 of the Environmental Protection Act.

Section 725.324 Containment System

As discussed above, USEPA appears to have inadvertently repealed the text of 40 CFR 265.223. The Board has retained the text under this new Section number. This may require revision to conform with USEPA's forthcoming correction.

Section 725.326 Monitoring and Inspection

This Section is drawn from 40 CFR 265.226, which was amended in connection with the LDS. It deals with monitoring and inspection to be performed by the operator. This Section is comparable to Section 724.326 above.

The prior federal Section violated Code Division subsection lettering requirements, requiring rearrangement when this Section was adopted in 1982. The amendment accidentally brings the USEPA text into compliance, so that the Board can rearrange its Section to conform with the USEPA language.

The USEPA amendments add subsections (b)(1) - (3). The Board has added a grouping heading to comply with Code Division requirements.

This Section includes the pump operating level determination, which winds up being a quasi-permit action in this Part. The operator is required to file a proposed pump operating level with the proposed action leakage rate in Section 265.222(a) [725.322(a)] above. Arguably the procedures specified above

0138-0821

would suffice. However, the Board has added procedural language here as Section 725.326(c).

Section 725.328 Closure and Post-closure Care

This Section is drawn from 40 CFR 265.228. Subsection (b)(2) was added with the LDS rules, to require maintenance and monitoring of the LDS after closure. As adopted by the Board, Section 725.328(b)(2) reads:

Maintain and monitor the LDS in accordance with 35 Ill. Adm. Code 724.321(c)(2)(D) and (c)(3) and 725.326(b) and comply with all other applicable LDS requirements of this Part;

The USEPA amendment includes a typographical error which the Board has fixed. 40 CFR 265.228(b)(2) [725.328(b)(2)] references Section "265.221(c)(2)(iv) and (c)(3)". However, no such Sections exist. USEPA apparently intended to reference to the design standards in Part 264 [724], which are referenced into Part 265 [725]. The comparable USEPA landfill rule discussed below as Section 725.410(b)(2) contains the correct citation, which the Board is following.

SUBPART L: WASTE PILES

This Subpart governs design and operating requirements for interim status waste piles. USEPA amended these rules in connection with the leak detection system (LDS) rules at 57 Fed. Reg. 3486, January 29, 1992. These rules are comparable to the rules for permitted waste piles in Section 724.351, et seq., above, and to the rules for interim status surface impoundments immediately above. The rules differ from the Part 724 rules in that a procedural context for decisions generally needs to be created in the absence of a formal permit system. The rules differ from the surface impoundment (and landfill) rules in that piles are storage units from which wastes will be removed on closure.²⁴

Section 725.354 Design and Operating Requirements

This Section is drawn from 40 CFR 265.254, which was completely revised with the LDS rules. This contains the statement of applicability to "new" piles, and references the design standards of Section 724.351, above. The applicability is identical to that stated above with respect to surface impoundments.

²⁴A "pile" in which waste is to remain after closure is a type of landfill.

40 CFR 265.255 [725.355], discussed below, references "the notice required under" this Section. However, the notice requirement appears to have been omitted from the Federal Register [265.254]. The Board has adopted the following language, which is drawn from 40 CFR 265.221(b) [725.321(b)], the comparable language for interim status surface impoundments discussed above:

The owner or operator of each unit referred to in this Section shall notify the Agency at least sixty days prior to receiving waste. The owner or operator of each facility submitting notice shall file a Part B application within six months of the receipt of such notice.

This has been added as sentences to this Section, which lacks a subsection structure. When USEPA corrects this, it will probably make this into a subsection (b). The Board has not done so at this time, to preserve correspondence with the current USEPA subsection lettering.

Section 725.355 Action Leakage Rates

This Section is drawn from 40 CFR 265.255, which was added with the LDS rules. This Section governs the action leakage rate, the amount of liquid in the LDS which triggers a response below. It is comparable to Section 724.352 for permitted piles, and to 725.322 for interim status surface impoundments, above.

The operator proposes an action leakage rate, which is subject to approval (or default approval) as discussed above for Section 725.322. The Board has added Section 725.355(d) to establish an appeal mechanism.

40 CFR 265.255(c) [725.355(c)] includes a reference to approval of a "different calculation" of the leakage rate. This raises issues similar to those discussed above with respect to Section 724.352. The rule is actually referring to the frequency, rather than the method of calculation. However, the standards for the alternative frequency appear to be absent from the waste pile rules, which lack post-closure care provisions. For the reasons discussed above, the Board suggests that the inclusion of the "different calculation" language is an editorial error. The Board has omitted this clause.

Section 725.359 Response Actions

This new Section is drawn from 40 CFR 265.259, which was added with the LDS rules. This specifies the response actions which must be taken if the action leakage rate is exceeded. This Section is comparable to Section 724.353 for permitted piles, and to 725.323 for interim status surface impoundments. The language

0138-0823

is very similar to Section 725.323. There appear to be no major problems with the text (other than the "analyses", "either" and "and/or" discussed above). The Board has added a subsection (d) to authorize appeals of Agency determinations.

Section 725.360 Monitoring and Inspection

This new Section is drawn from 40 CFR 265.260, which was added with the LDS rules. It reads as follows:

An owner or operator required to have a LDS under Section 725.354 shall record the amount of liquids removed from each LDS sump at least once each week during the active life and closure period.

SUBPART N: LANDFILLS

This Subpart governs interim status landfill units. It was also amended mainly with the LDS rules at 57 Fed. Reg. 3486, January 29, 1992. The amendments to this Subpart are similar to the amendments for permitted landfills in Section 724.401 et seq., above, and for interim status surface impoundments Section 725.321 et seq., above.

Section 725.401 Design and Operating Requirements

This Section was amended both with the LDS rules, and with the "third third" corrections. This Section contains the design and operating requirements for interim status landfills. It is comparable to Sections 724.401 and 725.321.

40 CFR 265.301(a) contains the applicability statement for "new"²⁵ landfill units which must install LDS. The Section references the design standards in Section 724.401, above. The retroactive dates should pose no problem for these HSWA requirements.

USEPA has informally confirmed that there is a typographical error in the applicability statement in 40 CFR 265.301(a) [725.401(a)] as set forth in the Federal Register. A line has been dropped from the language as set forth at five other places in the Federal Register. The Board has added the line, which is indicated in bold below [725.401(a)]:

[O]perate the leachate collection and removal systems, in accordance with 35 Ill. Adm. Code 724.401(c), **unless exempted by 35 Ill. Adm. Code 724.401(d), (e) or (f).**

²⁵The Board is using "new" to describe this complex applicability statement, which is identical to that set forth above for Section 725.321.

0138-0824

40 CFR 265.301(c) apparently replaces the "alternative design and operating practices" determination. As is discussed in connection with Section 725.321(c), the Board has followed this repeal, which raised questions discussed above.

New Section 265.301(c) [725.401(c)] contains new language referencing design standards in the RCRA Act. These standards are apparently contained in Section 724.401, as it existed prior to these amendments. The Board has used the same language discussed above in connection with that Section. The language is [725.401(c)]:

The owner or operator of any replacement landfill unit is exempt from subsection (a) above if:

- 1) The existing unit was constructed in compliance with the design standards of 35 Ill. Adm. Code 724.401(c), (d) and (e), as amended in R86-1, at 10 Ill. Reg. 14119, effective August 12, 1986; and

BOARD NOTE: The cited subsections implemented the design standards of sections 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.).

- 2) There is no reason to believe that the liner is not functioning as designed.

40 CFR 265.301(d)(1) [725.401(d)(1)] was amended in connection with the "third third" corrections. The amendments change a reference to the EP toxicity characteristic to toxicity characteristic, limited to D004 through D017. In addition, the Board has modified language to eliminate the term "waived" [725.401(d)(1)]:

~~The double liner requirement~~ Agency shall not require a double liner as set forth in subsection (a) may be waived by the Agency for any monofill, if:

- 1) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such ~~wastes do~~ waste does not contain constituents which ~~would~~ render the wastes hazardous for reasons other the ~~EP toxicity characteristics in 35 Ill. Adm. Code 721.124~~ toxicity characteristic in 35 Ill. Adm. Code 721.124, with hazardous waste number D004 through D017; ...

The text of 40 CFR 265.302 has been moved into this Section, where it will now appear as Section 265.301(f) - (i) [725.401(f)

0138-0825

- (i)]. Existing Section 725.401(f), which deals with appeals and has no federal counterpart, has been moved down to (j).

Section 725.402 Action Leakage Rate

This Section was drawn from 40 CFR 265.302. With the LDS rules, USEPA has moved the existing text to the preceding Section, and has adopted new text dealing with the action leakage rate, the quantity of liquid in the LDS which triggers a response. This Section is comparable to Section 724.402, and to Section 725.322, above.

40 CFR 265.302(b) [725.402(b)] contains the same typographical error as 40 CFR 264.302(a) [724.402(a)]. The Section applies to "landfills" rather than "surface impoundments".

40 CFR 265.302(c) contains the alternative "calculation" which is discussed above in connection with Section 724.402 and 725.322. The Board has followed the language set out above. The text of Section 725.402(c) is as follows:

To determine if the action leakage rate has been exceeded, the owner or operator shall convert the weekly or monthly flow rate from the monitoring data obtained under Section 725.404 to an average daily flow rate (gallons per acre per day) for each sump. The average daily flow rate for each sump must be calculated weekly during the active life and closure period, and monthly during the post-closure care period unless the Agency approves a different period under Section 725.404(b).

The Board has added Section 725.402(d), allowing appeals of Agency determinations pursuant to the interim status rules:

Final Agency determinations pursuant to this Section are deemed to be permit denials for purposes of appeal to the Board pursuant to Section 40 of the Environmental Protection Act.

Section 725.403 Response Actions

This new Section is drawn from 40 CFR 265.303, which was added with the LDS rules. It governs response actions which must be taken if liquids enter the LDS in excess of the action leakage rate. It is similar to Section 724.404²⁶ and 725.323 above.

²⁶The interim status landfill rules are in a different order.

This Section contains three minor editorial problems which are the same as discussed above ("analyses", "and/or" and "either"). The Board has added subsection (d), authorizing appeals of the interim status determinations.

Section 725.404 Monitoring and Inspection

This new Section is drawn from 40 CFR 265.304, which was added with the LDS rules. It governs "monitoring and inspection" which is to be performed by the operator of a landfill unit. It is similar to Section 724.403, for permitted landfills, and 725.326, for interim status surface impoundments.

This Section includes the standard for reduction in sump monitoring frequency, and the standard for determination of the "pump operating level". The Board has added a subsection (d), authorizing appeals of these interim status determinations.

Section 725.410 Closure and Post-Closure Care

This Section is drawn from 40 CFR 265.310, which was amended with the LDS rules. A new subsection (b)(2) is added, requiring the operator to maintain and monitor the LDS during the post-closure care period. This Section cites to requirements for permitted landfills in Part 724 [264].

SUBPART W: DRIP PADS

This Subpart governs interim status "drip pads", a type of hazardous waste management unit on which wood products are stored following application²⁷ of wood preservatives. Drip pads were a major topic in R91-1 and R91-26. USEPA has amended the rules at 57 Fed. Reg. 5861, February 18, 1992. The rules are quite similar to the rules above for permitted facilities. The interim status rules may be of greater practical importance, since there are probably many new interim status facilities which were recently brought into the program by the regulation of this new type of hazardous waste management unit, and who are required to undertake new construction to come into compliance.

Section 725.543 Design and Operating Requirements

This Section is drawn from 40 CFR 265.443, which was amended at 57 Fed. Reg. 5861. The amendment adds to Section 725.543 a stay for existing drip pads at interim status facilities. This Section is similar to Section 724.673 above. The extensive

²⁷In other words, following "treatment" of wood to produce "treated wood". However, "treatment" and "treated" are important terms within the hazardous waste rules and have a very different meaning.

0138-0827

discussion above as to whether the existing stay for new facilities remains is inapplicable, since the Fed. Reg. is clear that the existing stay continues for the interim status units.

As is also discussed above, USEPA terminated these stays, and amended the drip pad rules, at 57 Fed. Reg. 61492, December 24, 1992. For the reasons discussed above, the Board cannot act on these amendments in this Docket, but will address them in R93-4. The Board has therefore added language extending the stay until the completion of that Docket.

The adopted text of Section 725.543(a)(4) is as follows:

Be impermeable, e.g., concrete pads must be sealed, coated or covered with an impermeable material such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials or other wastes while being routed to an associated collection system; and

BOARD NOTE: The requirement that existing drip pads be impermeable, e.g., that drip pads be sealed, coated or covered with an impermeable material, is administratively stayed. The requirement that new drip pads be impermeable, e.g., that new drip pads be sealed, coated or covered with an impermeable material, is administratively stayed. The stays will remain in effect until further administrative action is taken the Board removes this note by further regulatory action implementing USEPA amendments at 57 Fed. Reg. 61492, December 24, 1992, expected in Docket R93-4. The extended State stay will not be construed as excusing owners or operators from complying with any federal requirements already in effect in Illinois..

**PART 726: STANDARDS FOR THE MANAGEMENT OF SPECIFIC WASTE
AND SPECIFIC TYPES OF FACILITIES
SUBPART H: HAZARDOUS WASTE BURNED IN BOILERS
AND INDUSTRIAL FURNACES**

This Subpart regulates boilers and industrial furnaces ("BIFs") which burn hazardous wastes as fuel. The BIF rules were adopted in R91-13.

Section 726.200 Applicability

This Section is drawn from 40 CFR 266.100, which was amended at 57 Fed. Reg. 27888, June 22, 1992, in connection with the exclusion of coke by-product residues. The amendment removes [from subsection (a)] a stay of the BIF rules with respect to coke residues.

0138-0828

The stay was added in the September 5, 1991, Federal Register. The Board added the stay in R91-13 when it adopted the BIF rules, even though it was outside the normal batch period. The lifting of the stay is coupled with the revision of Section 721.104(a)(10) above, which clarifies the exemption for this type of recycling.

PART 728: LAND DISPOSAL RESTRICTIONS

This Part is derived from 40 CFR 268, which contains the USEPA land disposal restrictions. It was amended in several USEPA actions, mainly the "third third" corrections at 57 Fed. Reg. 8088, March 6, 1992, the latest correction of the third third land disposal rules adopted by the Board in R90-11.

Section 728.103 Dilution Prohibited

This Section is derived from 40 CFR 268.3, which was amended at 57 Fed. Reg. 8088, March 6, 1992, the third third corrections. The amendment authorizes dilution as a treatment for a D003 reactive cyanide wastewater or nonwastewater. The text of Section 728.103(b) is as follows:

Dilution of wastes that are hazardous only because they exhibit a characteristic in a treatment system which treats wastes subsequently discharged to a water of the State pursuant to an NPDES permit issued under 35 Ill. Adm. Code 309 or which treats wastes for purposes of pretreatment requirements under 35 Ill. Adm. Code 310 is not impermissible dilution for purposes of this Section unless a method has been specified as the treatment standard in Section 728.142, or unless the waste is a D003 cyanide reactive wastewater or nonwastewater.

40 CFR 268.3 was the subject of a recent federal court decision in Chemical Waste Management et al. v. USEPA, 976 Fed. 2d 2, decided September 25, 1992, in the U.S. Court of Appeals for the District of Columbia. This case mainly concerns the related dilution rule for the UIC program in 40 CFR 148.3. In a comment received in R92-13, USEPA indicated that, although a motion for reconsideration is pending, it expects that the UIC rule will have to be modified in response to the litigation. Chemical Waste Management appears to have limited, if any, impact on the RCRA rule. (976 Fed. 2d 24.)

Section 728.135 Third Third Prohibitions

This Section is drawn from 40 CFR 268.35, which was amended at 57 Fed. Reg. 20770, May 15, 1992 and 57 Fed. Reg. 28632, June 26, 1992.

0138-0829

It is difficult to compare the USEPA and Board texts of this Section. The USEPA Section has several sentences with multi-page lists in the middle. To meet Code Division requirements, these had to be rearranged to put the lists at the end. The Board therefore broke several portions of the rule into subsections which, although much easier to read, don't look much like the USEPA rules. The Board subsections referenced below are tiny specks in the midst of large paragraphs in the USEPA rule.

The text of Section 728.135(c)(6) has a minor typographical error which apparently occurred during Board adoption. The specific citation to 40 CFR 268.2(g) in the USEPA rule is equivalent to Section 728.102 at the Board level. This is referring to an alphabetical definition list which does not have subsections at the State level, in accordance with Code Division requirements. The text of Section 728.135(c)(6) is:

Inorganic solids debris as defined in 35 Ill. Adm. Code 728.102 (which also applies to chromium refractory bricks carrying the EPA Hazardous Waste Numbers K048-K052); and

The June 26, 1992, amendment adds a "national capacity variance" for certain reclaimed lead storage batteries which are hazardous by reason of the characteristic for lead (D008). The amendments involve Sections 728.135(c)(5) and (k). The amendment removes the D008 lead battery prohibition from subsection (c)(5), and adds a detailed rule as subsection (k), with a delayed effective date. The text of Section 728.135(k) is as follows:

Effective May 8, 1993, D008 lead materials stored before secondary smelting are prohibited from land disposal. On or before March 1, 1993, the owner or operator of each secondary lead smelting facility shall submit to the Agency the following: A binding contractual commitment to construct or otherwise provide capacity for storing such D008 wastes prior to smelting which complies with all applicable storage standards; documentation that the capacity to be provided will be sufficient to manage the entire quantity of such D008 wastes; and, a detailed schedule for providing such capacity. Failure by a facility to submit such documentation will render such D008 managed by that facility prohibited from land disposal effective March 1, 1993. In addition, no later than July 27, 1992, the owner or operator of each facility shall place in the facility record documentation of the manner and location in which such wastes will be managed pending completion of such capacity, demonstrating that such management capacity will be adequate and complies with all applicable requirements of 35 Ill. Adm. Code 720 through 728.

0138-0830

There are some minor problems with the USEPA language, which the Board has addressed in its rule. First, to qualify for the "variance", the operator had to document the management methods by July 27, 1992, a date which has already passed. The Board has retained this date in the State rule. Operators were required to meet this HSWA-driven date as a matter of federal law, so there is no problem with adopting a retroactive State date.

Second, the USEPA rule contains a reference to "subtitle C requirements" in the last line. The Board takes this to mean subtitle C of the RCRA Act, the statutory basis for the federal hazardous waste program. The Board has referenced 35 Ill. Adm. Code 720 through 728 as State equivalents.

The May 15, 1992, amendment adds a "general capacity variance" until May 8, 1993, for debris which is contaminated with certain hazardous waste. The text of Section 728.135(e) is as follows:

~~Effective May 8, 1992, the wastes specified in this Section having a treatment standard in Subpart D based on incineration, mercury retorting, vitrification, acid leaching followed by chemical precipitation or thermal recovery of metals and which are contaminated soil or debris, are prohibited from land disposal. Effective May 8, 1993, debris that is contaminated with wastes listed in Sections 728.110, 728.111 or 728.112, and debris that is contaminated with any characteristic waste for which treatment standards are established in Subpart D, are prohibited from land disposal.~~

The new language apparently replaces an unrelated "capacity variance" involving thermal recovery of metals. That variance expired on May 8, 1992.

The USEPA text makes reference to 40 CFR 268.10, 268.11 and 268.12. At the USEPA level, these are HSWA-required rules which set up the schedule by which USEPA adopted the land disposal bans. The Board originally avoided adopting these, since the verbatim text would appear to be a State rule enforceable against USEPA. However, in R91-13, the Board noted that these rules also define the first, second and third thirds, and are sometimes used for this purpose in the rules. Between them they include all hazardous waste, except newly listed wastes. The Board therefore incorporated the rules by reference, setting up dummy Sections. The Board has referenced the dummy Sections.

The USEPA rule grants a variance for debris contaminated with wastes listed in all three Sections. Since the lists are mutually exclusive, this would be the null set. The Board has changed the "and" to an "or".

0138-0831

Section 728.141 CCWE Treatment Standards

This Section is drawn from 40 CFR 268.41, which was amended at 57 Fed. Reg. 8088, March 6, 1992, the third third corrections. The Section establishes treatment standards expressed as constituent concentrations in the waste extract (CCWE), one of the three types of treatment standards in this part.

The amendments contain a large number of minor changes to the text of Section 728.141(a). The Board language is as follows:

Table A identifies the restricted wastes and the concentrations of their associated ~~hazardous~~ constituents which may not be exceeded by the extract of a waste or waste treatment residual developed using the test method in Appendix A for the allowable land disposal of such wastes, with the exception of wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, ~~P038~~ and U136. ~~Table A identifies the restricted wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136 and the concentrations of their associated constituents which shall not be exceeded by the extract of a waste or waste treatment residual developed using the test method in 35 Ill. Adm. Code 721. Appendix A or B for the allowable land disposal of such wastes. (Appendix B of this Part provides guidance on treatment methods that have been shown to achieve the Table A levels for the respective wastes. Appendix B of this Part is not a regulatory requirement but is provided to assist generators and owners or operators in their selection of appropriate treatment methods.) Compliance with these concentrations is required based upon grab samples, unless otherwise noted in Table A.~~

There are several possible USEPA editorial errors, some of which have been corrected in the above language. The language in question is shown in bold above. First, the Fed. Reg. has changed the first sentence to read: "... of this part of the allowable..." The CFR and Board rule both read "for", which seems to make more sense. This appears to be a typographical error, which the Board has corrected.

Second, the USEPA rule changes the "K031" entry to "D031". USEPA has informally confirmed that this was a typographical error in the Federal Register. The Board has left it as "K031".

The existing USEPA rule includes the listing of waste numbers two times. In the amendment, the second list has apparently been dropped. This may be a deliberate editorial change to the Section, or it may be a typographical error. The

0138-0832

Board has followed the USEPA text and deleted the second list, since the meaning seems unchanged.

The main change to this Section, the one discussed in the preamble, is the final "unless" clause, which allows sampling other than by grab samples, as specified in the Table. However, USEPA has cited to "Table CCW" [Table B]. This Section governs Table CCWE [Table A]²⁸. The Board has corrected this error.

USEPA has also changed the references to Appendices in this Section. The Board noted in prior opinions that these appeared to be wrong, but followed the USEPA language in the absence of clear cut resolution. The issue has been confused by the references to Appendix II [B] in two different Parts. The Board has followed the USEPA clarification.

Table D Technology-based Standards

This Table is drawn from 40 CFR 268.42, Table 2, which was amended at 57 Fed. Reg. 8088, March 6, 1992, the third third corrections. The amendment correlates with the exclusion of cyanide characteristic wastes from the no dilution rule above. D003 Sulfide reactive wastes may not be diluted as a substitute for treatment.

HISTORY OF RCRA, UST and UIC ADOPTION

The Illinois RCRA, UST (Underground Storage Tanks) and UIC (Underground Injection Control) regulations, together with more stringent State regulations particularly applicable to hazardous waste, include the following:

702	RCRA and UIC Permit Programs
703	RCRA Permit Program
704	UIC Permit Program
705	Procedures for Permit Issuance
709	Wastestream Authorizations
720	General
721	Identification and Listing
722	Generator Standards
723	Transporter Standards
724	Final TSD Standards
725	Interim Status TSD Standards
726	Specific Wastes and Management Facilities
728	USEPA Land Disposal Restrictions
729	Landfills: Prohibited Wastes

²⁸The Administrative Code format requirements forced the Board to separate the very large CCWE and CCW tables into "Tables", which float at the end of the Part, like Appendices. CCWE corresponds with A, and CCW with Table B.

730 UIC Operating Requirements
 731 Underground Storage Tanks
 738 Injection Restrictions

Special procedures for RCRA cases are included in Parts 102, 103, 104 and 106.

Adoption of these regulations has proceeded in several stages. The Phase I RCRA regulations were adopted and amended as follows:

R81-22 45 PCB 317, February 4, 1982, 6 Ill. Reg. 4828, April 23, 1982.

R82-18 51 PCB 31, January 13, 1983, 7 Ill. Reg. 2518, March 4, 1983.

Illinois received Phase I interim authorization on May 17, 1982 (47 Fed. Reg. 21043).

The UIC regulations were adopted as follows:

R81-32 47 PCB 93, May 13, 1982; October 15, 1982, 6 Ill. Reg. 12479.

The UIC regulations were amended in R82-18, which is referenced above. The UIC regulations were also amended in R83-39:

R83-39 55 PCB 319, December 15, 1983; 7 Ill. Reg. 17338, December 20, 1983.

Illinois received UIC authorization February 1, 1984. The Board has updated the UIC regulations:

R85-23 70 PCB 311, June 20, 1986; 10 Ill. Reg. 13274, August 8, 1986.

R86-27 Dismissed at 77 PCB 234, April 16, 1987 (No USEPA amendments through 12/31/86).

R87-29 January 21, 1988; 12 Ill. Reg. 6673, April 8, 1988; (1/1/87 through 6/30/87).

R88-2 June 16, 1988; 12 Ill. Reg. 13700, August 26, 1988. (7/1/87 through 12/31/87).

R88-17 December 15, 1988; 13 Ill. Reg. 478, effective December 30, 1988. (1/1/88 through 6/30/88).

R89-2 January 25, 1990; 14 Ill. Reg. 3059, effective February 20, 1990 (7/1/88 through 12/31/88).

0138-0834

- R89-11 May 24, 1990; 14 Ill. Reg. 11948, July 20, 1990, effective July 9, 1990. (1/1/89 through 11/30/89).
- R90-5 Dismissed March 22, 1990 (12/1/89 through 12/31/89)
- R90-14 Adopted May 23, 1991; 15 Ill. Reg. 11425, effective July 24, 1991 (1/1/90 through 6/30/90)
- R91-4 Dismissed February 28, 1991 (7/1 through 12/31/90)
- R91-16 Dismissed December 6, 1991 (1/1 through 6/30/91)
- R92-4 Dismissed April 9, 1992 (7/1/91 through 12/31/91)
- R92-13 Proposed 10/16/92 (1/1/92 through 6/30/92)
- R93-6 Next UIC Docket (7/1/92 through 12/31/92)

The Phase II RCRA regulations included adoption of Parts 703 and 724, which established the permit program and final TSD standards. The Phase II regulations were adopted and amended as follows:

- R82-19 53 PCB 131, July 26, 1983, 7 Ill. Reg. 13999, October 28, 1983.
- R83-24 55 PCB 31, December 15, 1983, 8 Ill. Reg. 200, January 6, 1984.

On September 6, 1984, the Third District Appellate Court upheld the Board's actions in adopting R82-19 and R83-24. (Commonwealth Edison et al. v. IPCB, 127 Ill. App. 3d 446; 468 NE 2d 1339 (Third Dist. 1984).)

The Board updated the RCRA regulations to correspond with USEPA amendments in several dockets. The period of the USEPA regulations covered by the update is indicated in parentheses:

- R84-9 64 PCB 427, June 13, 1985; 9 Ill. Reg. 11964, effective July 24, 1985. (through 4/24/84)
- R85-22 67 PCB 175, 479, December 20, 1985 and January 9, 1986; 10 Ill. Reg. 968, effective January 2, 1986. (4/25/84 -- 6/30/85)
- R86-1 71 PCB 110, July 11, 1986; 10 Ill. Reg. 13998, August 22, 1986. (7/1/85 -- 1/31/86)

0138-0835

R86-19 73 PCB 467, October 23, 1986; 10 Ill. Reg. 20630, December 12, 1986. (2/1/86 -- 3/31/86)

R86-28 75 PCB 306, February 5, 1987; and 76 PCB 195, March 5, 1987; 11 Ill. Reg. 6017, April 3, 1987. Correction at 77 PCB 235, April 16, 1987; 11 Ill. Reg. 8684, May 1, 1987. (4/1/86 -- 6/30/86)

R86-46 July 16, 1987; August 14, 1987; 11 Ill. Reg. 13435. (7/1/86 -- 9/30/86)

R87-5 October 15, 1987; 11 Ill. Reg. 19280, November 30, 1987. (10/1/86 -- 12/31/86)

R87-26 December 3, 1987; 12 Ill. Reg. 2450, January 29, 1988. (1/1/87 -- 6/30/87)

R87-32 Correction to R86-1; September 4, 1987; 11 Ill. Reg. 16698, October 16, 1987.

R87-39 Adopted June 14, 1988; 12 Ill. Reg. 12999, August 12, 1988. (7/1/87 -- 12/31/87)

R88-16 November 17, 1988; 13 Ill. Reg. 447, effective December 28, 1988 (1/1/88 -- 7/31/88)

R89-1 September 13, October 18 and November 16, 1989; 13 Ill. Reg. 18278, effective November 13, 1989 (8/1/88 -- 12/31/88)

R89-9 March 8, 1990; 14 Ill. Reg. 6225, effective April 16, 1990 (1/1/89 through 6/30/89)

R90-2 July 3 and August 9, 1990; 14 Ill. Reg. 14401, effective August 22, 1990 (7/1/89 through 12/31/89)

R90-10 August 30 and September 13, 1990; 14 Ill. Reg. 16450, effective September 25, 1990 (TCLP Test) (1/1/90 through 3/31/90)

R90-11 April 11, May 23, 1991; 15 Ill. Reg. 9323, effective June 17, 1991 (Third Third) (4/1/90 through 6/30/90); Corrected August 8, 1991; Uncorrected August 22, 1991.

R90-17 Delisting Procedures (See below)

R91-1 August 8, 1991; 15 Ill. Reg. 14446, effective September 30, 1991 (Wood Preserving) (7/1/90 through 12/30/90)

0138-0836

- R91-13 April 9, 1992; 16 Ill. Reg. 9489, effective June 9, 1992; Boilers and Industrial Furnaces (BIFs); (1/1/91 through 6/30/91)
- R91-26 Wood Preserving Compliance Dates; January 9, 1992; 16 Ill. Reg. 2600, effective February 3, 1992.
- R92-1 September 17, 1992, 16 Ill. Reg. 17636, effective November 6, 1992 (7/1/91 through 12/31/91)
- R92-10 This Docket (1/1/92 through 6/30/92)
- R93-4 Next RCRA Docket (7/1/92 through 12/31/92)

Illinois received final authorization for the RCRA program effective January 31, 1986.

The Underground Storage Tank rules were adopted in R86-1 and R86-28, which were RCRA update Dockets discussed above. They are currently being handled in their own Dockets:

- R88-27 April 27, 1989; 13 Ill. Reg. 9519, effective June 12, 1989 (Technical standards, September 23, 1989)
- R89-4 July 27, 1989; 13 Ill. Reg. 15010, effective September 12, 1989 (Financial assurance, October 26, 1989)
- R89-10 February 22, 1990; 14 Ill. Reg. 5797, effective April 10, 1990 (Initial update, through 6/30/89)
- R89-19 April 26, 1990; 14 Ill. Reg. 9454, effective June 4, 1990 (UST State Fund)
- R90-3 June 7, 1990; (7/1/89 - 12/31/89)
- R90-12 February 28, 1991 (1/1/90 - 6/30/90)
- R91-2 July 25, 1991 (7/1 through 12/31/90)
- R91-14 April 9, 1992 (1/1/91 through 6/30/91)
- R92-2 Dismissed June 4, 1992 (7/1/91 through 12/31/91)
- R92-11 Dismissed August 13, 1992 (1/1/92 through 6/30/92)
- R93-5 Next UST Docket (7/1/92 through 12/31/92)

The Board added to the federal listings of hazardous waste by listing dioxins pursuant to Section 22.4(d) of the Act:

0138-0837

R84-34 61 PCB 247, November 21, 1984; 8 Ill. Reg. 24562, effective December 11, 1984.

This was repealed by R85-22, which included adoption of USEPA's dioxin listings. Section 22.4(d) was repealed by S.B. 1834.

The Board has adopted USEPA delistings at the request of Amoco, Enviroline and USX:

R85-2 69 PCB 314, April 24, 1986; 10 Ill. Reg. 8112, effective May 2, 1986.

R87-30 June 30, 1988; 12 Ill. Reg. 12070, effective July 12, 1988.

R91-12 December 19, 1991; 16 Ill. Reg. 2155, Effective January 27, 1992 (USX)

The Board has modified the delisting procedures to allow the use of adjusted standards in lieu of site-specific rulemakings:

R90-17 February 28, 1991; 15 Ill. Reg. 7934, effective May 9, 1991

The Board has granted a delisting by way of adjusted standard:

AS91-1 Keystone, February 6, 1992

The Board has procedures to be followed in cases before it involving the RCRA regulations:

R84-10 62 PCB 87, 349, December 20, 1984 and January 10, 1985; 9 Ill. Reg. 1383, effective January 16, 1985.

The Board also adopted in Part 106 special procedures to be followed in certain determinations. Part 106 was adopted in R85-22 and amended in R86-46, listed above.

The Board has also adopted requirements limiting and restricting the landfilling of liquid hazardous waste, hazardous wastes containing halogenated compounds and hazardous wastes generally:

R81-25 60 PCB 381, October 25, 1984; 8 Ill. Reg. 24124, December 4, 1984;

R83-28 February 26, 1986; 10 Ill. Reg. 4875, effective March 7, 1986.

0138-0838

R86-9 Emergency regulations adopted at 73 PCB 427,
October 23, 1986; 10 Ill. Reg. 19787, effective
November 5, 1986.

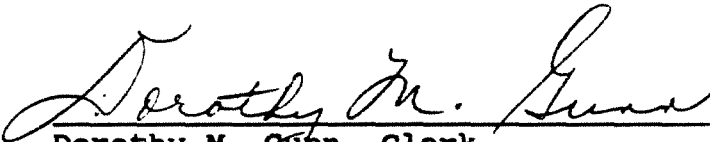
The Board's action in adopting emergency regulations in R86-9 was reversed (CBE and IEPA v. IPCB et al., First District, January 26, 1987).

CONCLUSION

This opinion supports the Board's order of this same date. The Board will not file the adopted rules until 30 days after the date of this order, to allow time for post-adoption comments, particularly from the agencies involved in the authorization process.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion was adopted on the 21st day of January, 1993, by a vote of 6-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

0138-0839