ILLINOIS POLLUTION CONTROL BOARD
April 9, 1992

IN THE MATTER OF:	)	
	)	R91-13
RCRA UPDATE, USEPA REGULATIONS)	)	Identical in Substance
(1/1/91 - 6/30/91)	)	Rules)

Adopted Rule. Final Order.

OPINION OF THE BOARD (by J. Anderson):

[1]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 703, 720, 721, 722, 724, 725, 726 and 728. The Board will not file the adopted rules before May 8, 1992, to allow time for post-adoption comments, from the agencies involved in the authorization process.

As is discussed below, the Board has added the August 19, 1991, USEPA amendments concerning K061, electric arc furnace dust to this rulemaking. These amendments may pose problems of interpretation which commenters need to review during the post-adoption comment period. As is discussed below in connection with Section 721.104(b)(11), the Board has restricted the temporary "free product recovery exclusion" to free product recovery carried out pursuant to the UST rules, thereby immediately bringing into the hazardous waste program any free product recoveries carried out at facilities with above-ground tanks, such as refineries. Commenters will need to provide, during the post-adoption period, the identity of the "written agreement" used in such clean-ups in Illinois, if they want the exclusion added back. As is discussed below in connection with Section 726.203(a)(1), the Board has modified the definition of "existing facility" in connection with the "BIF" rules so as to make the USEPA action on the "certification of precompliance" dispositive as to whether a BIF is an "existing facility".

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

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[1]The Board acknowledges the contributions of Morton Dorothy and LouAnn Burnett of the Scientific/Technical Section, Deborah Frank, Regulatory Assistant, and Barbara Higgins, Paralegal, in the preparation of this Opinion and Order.

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, 1991. The USEPA actions during this period are as follows:

Date	56 Fed. Reg.	Description
January 31, 1991	3876	Third third correction
February 1, 1991	3978	Hydrocarbon Recovery
February 13, 1991	5915	Toxicity characteristic/CFCs
February 21, 1991	7206	Boilers and Industrial Furnaces (BIFs)
February 25, 1991	7568	Strontium sulfide delisting correction
March 25, 1991	12355	Site specific treatment standard variance
April 2, 1991	13411	Hydrocarbon recovery--extended compliance date
April 26, 1991	19290	Process vents correction
May 1, 1991	19952	Administrative stay of K069 listing
May 13, 1991	21958	Modification of petroleum refinery listings
June 13, 1991	27318	Mining wastes exclusion
June 13, 1991	27336	Administrative stay of wood preserving rules

The major USEPA actions are the third third correction and the BIF rules. The actions are further discussed below.

As is discussed below, the Board has partially addressed some of these USEPA actions in prior Dockets (R90-11, R90-17 and R91-1), including a portion of the third third correction, administrative stays and extensions of compliance dates.

USEPA also published a correction to the wood preserving rules at 56 Fed. Reg. 30195, July 1, 1991. The Board addressed this in R90-11, even though it is actually beyond the scope of even this update.

As is also discussed below, after the conclusion of this batch period, USEPA published three corrections to the BIF rules. These appeared at: 56 Fed. Reg. 32688, July 17, 1991; 56 Fed. Reg. 42511, August 27, 1991; and, 56 Fed. Reg. 43877, September 5, 1991. The Board has addressed the corrections in this Docket.

As is discussed below in connection with Section 721.103, 721.104, and 728.Tables A and D, the third third corrections left a loose string hanging concerning the high zinc subcategory of K061. This was the subject of a USEPA correction at 56 Fed. Reg.

41176, August 19, 1992. PC 1 and 2 asked the Board to include this USEPA action in this Update. As is discussed below, the Board has amended these Sections in response to the August 19, 1992 Federal Register, even though this is outside the normal scope of this rulemaking.

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 adopt site-specific delistings as determined by the USEPA unless and until someone files a proposal showing that the waste will be generated or managed in Illinois.

As is discussed below, the Board will handle the March 25, 1991, site specific "treatment standard variance" in much the same way as a site specific delisting: the Board will take no action on the site specific USEPA rule without some form of petition.

PUBLIC COMMENT

The proposed rules were published on January 17, 1992, at 16 Ill. Reg. 791. The Board has received the following public comment:

PC 1 Keystone Steel and Wire, January 3, 1992

PC 2 Peoria Disposal Company, February 2, 1992

PC 3 Administrative Code Division, February 20, 1992

PC 4 Charles Licht Engineering Associates, Inc., March 2, 1992

PC 5 USEPA, March 9, 1992

PC 6 David Piech, Ross and Hardies, February 7, 1992

PC 1 and 2 requested inclusion of the August 19, 1991, Federal Register, which corrected the BDAT standard for K061 waste. This is discussed below in connection with Part 268.

PC 4 noted an apparent controversy in the interpretation of Section 721.122(b), as to whether the corrosivity characteristic can be applied to a waste which is not a liquid. Because this Section is not involved in this rulemaking, the Board will not take any action on this comment at this time, after the opportunity for regular public comment has passed. The Board intends to address this language in R92-1.

PC 5 is a detailed comment from USEPA, noting a number of minor errors in the proposal. The Board has generally corrected

these errors.

PC 6 is a short comment addressing analytical methods for measuring "SSU", a viscosity measurement discussed with Section 726.200.

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 first USEPA action in this batch period was on January 31, 1991. This update was therefore due by January 31, 1992. The Board entered an extension of time Order on January 9, 1992. Reasons included the length of this proposal, difficulties in obtaining the USEPA text on diskette, and delays in R91-3. The Board anticipated adoption of this Order on March 26, 1992.

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
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).

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 Proposed November 8, 1990; November 26, 1990; 14 Ill. Reg. 18681 (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 Next UIC Docket (7/1/91 through 12/31/91)

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)

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)

R91-13 This Docket (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 Next RCRA Docket (7/1/91 through 12/31/91)

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 Current Docket; Proposed January 9 and 23, 1992 (1/1/91 through 6/30/91)

R92-2 Next UST Docket (7/1/91 through 12/31/91)

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

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, Envirite 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.

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).

AGENCY OR BOARD ACTION?

The Board has almost always changed "Regional Administrator" to "Agency". However, in some situations "Regional Administrator" has been changed to "USEPA" or "Board". 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 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.

The regulations will eventually require a RCRA permit for each HWM facility. However, many "existing units" are still in "interim status". Decisions involving interim status are often more ambiguous as to whether they are permit actions.

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.

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.

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 conducts 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.

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.

DETAILED DISCUSSION

A Section-by-Section discussion of the amendments appears below. The federal actions involved in this rulemaking are summarized as follows:

January 31, 1991	56 Fed. Reg. 3876	Third third correction
February 1, 1991	56 Fed. Reg. 3978	Hydrocarbon Recovery
February 13, 1991	56 Fed. Reg. 5915	Toxicity characteristic/CFCs
February 21, 1991	56 Fed. Reg. 7206	Boilers and Industrial Furnaces (BIFs)
February 25, 1991	56 Fed. Reg. 7568	Strontium sulfide delisting correction
March 25, 1991	56 Fed. Reg. 12355	Site specific treatment standard variance

April 2, 1991	56 Fed. Reg. 13411	Hydrocarbon recovery--extended compliance date
April 26, 1991	56 Fed. Reg. 19290	Process vents correction
May 1, 1991	56 Fed. Reg. 19952	Administrative stay of K069 listing
May 13, 1991	56 Fed. Reg. 21958	Modification of petroleum refinery listings
June 13, 1991	56 Fed. Reg. 27318	Mining wastes exclusion
June 13, 1991	56 Fed. Reg. 27336	Administrative stay of wood preserving rules

The largest components of this update are the corrections to the "third third" land disposal bans, adopted in R90-11, and the new BIF rules. USEPA has essentially reprinted the "third third" rules to correct numerous editorial errors. This has posed major problems, since USEPA does not give any indication as to what the changes are.

As is discussed above, the BIF rules were the subject of three corrections which occurred outside this update period, but which are addressed in this Docket. These are 56 Fed. Reg. 32688, July 17, 1991; 56 Fed. Reg. 42511, August 27, 1991; and, 56 Fed. Reg. 43877, September 5, 1991.

As was also discussed above, the Board has included USEPA corrections concerning the high zinc subcategory of K061, based on 56 Fed. Reg. 41176, even though that action was outside this update period.

On February 1 and April 2, 1991, USEPA extended the temporary exclusion from the TCLP test for UST clean-up wastes in Section 721.104(b)(11). The former extension was adopted in R91-1, even though it was outside the scope of that update. The April 2 extension was not brought to the Board's attention in R91-1, and will be addressed in this update.

On February 13, 1991, USEPA also modified the TCLP rules to avoid encouraging venting of ozone-depleting CFCs.

On February 25, 1991, USEPA repealed the strontium sulfide listings. This corrects a USEPA action at 53 Fed. Reg. 43881, October 31, 1988, which failed to remove the listing because of

an error in the notice. This requires no action, since the Board successfully removed this listing in R89-1.

On April 26, 1991, USEPA corrected the process vent rules, which the Board adopted in R90-11.

On May 1, 1991, USEPA entered an administrative stay of listing K069. This concerns sludges from pollution control equipment at lead smelters. This appears to be closely related to the problems with the K066 listing, which was extensively discussed in R91-1. On June 13, 1991, USEPA appears to have also addressed the mining wastes exclusion, which also figured into the R91-1 Opinion.

On May 13, 1991, USEPA modified the new petroleum refinery listings, F037 and F038. The Board adopted these in R91-1.

On June 13, 1991, USEPA entered an administrative stay of the wood preserving rules. The Board addressed this stay in R91-1.

PART 703: RCRA PERMITS

This Part, along with Part 702, contains the RCRA permit requirement. Most of the amendments to this Part relate to the new "BIF" ("boiler and industrial furnace") rules in Part 726, below. Parts 702 and 703 are drawn from 40 CFR 270.

Section 703.150

USEPA published a correction to the BIF rules at 56 Fed. Reg. 32688, July 17, 1991. As is discussed above and in connection with Part 726, the Board has included this correction in this update Docket. The correction includes an amendment to 40 CFR 270.1(b), which is not listed as having an equivalent Board rule in the correspondence tables last published in R89-9. However, the subject matter of 40 CFR 270.1(b) appears to be identical to 40 CFR 270.10(e)(1)(i), which appears in the Board rules as Section 703.150(a)(1).

The USEPA correction to 40 CFR 270.1(b) is an addition of a cross-reference to "part 266" [Part 726]. This appears to be correcting a longstanding problem with the USEPA rule, since the reference to "part 266" exists in the language in 40 CFR 270.10(e)(1)(i), which otherwise says the same thing.

As if this is not confusing enough, the Board's equivalent rule, Section 703.150(a)(1), does not have the reference to Part 726 [266]. This appears to be a longstanding error in the Board's rules, which probably occurred when the Section was originally adopted. At that time the Board did not expect to have to adopt Part 266, and hence omitted all references. The

Board has therefore added the needed references, although this action is more in the nature of a correction to conform with the CFR than a response to the USEPA correction.

It is rather difficult to compare Section 703.150 with 40 CFR 270.10(e). This mainly stems from the arrangement of the subsections. The Board rearranged Section 703.150 so it tracks 40 CFR 270.10(e) more closely. Also, the Board has added "Board notes" to each subsection referencing the equivalent federal rule.

Section 703.155

This Section is drawn from 40 CFR 270.72, which was amended at 56 Fed. Reg. 7206, February 21, 1991. This Section prohibits changes to interim status facilities without filing a Part B permit application. The amendments add subsections (a)(6) and (b)(7), which allow a revised Part A application to cover newly regulated units. In other words, persons with newly regulated BIF units will be able to file a Part A to acquire interim status for the BIF.

The USEPA language requires the Part A "on or before the unit becomes subject to the new requirements". The Board has adopted the USEPA language verbatim. However, at the State level this would trigger the Part A on the Board's adoption of the new requirement. The Board solicited comment as to whether USEPA wanted the Part A to be triggered on the date of adoption by USEPA, but received no written response.

Section 703.157

This Section is drawn from 40 CFR 270.73, which was amended at 56 Fed. Reg. 7206, February 21, 1991, and corrected at 56 Fed. Reg. 32688, July 17, 1991, and at 56 Fed. Reg. 42511, August 27, 1991. This Section governs termination of interim status.

The amendment affects Section 703.157(f) and (g). The existing rule terminates interim status for incinerators and other facilities by November 8, 1986 and 1988. The amendments (as corrected) add the phrase "which has achieved interim status prior to November 8, 1984" to these termination dates. The result appears to be to allow extended interim status for BIFs now being brought into the program.

Section 703.208

This Section is drawn from 40 CFR 270.22, which was adopted at 56 Fed. Reg. 7206, February 21, 1991, and corrected at 56 Fed. Reg. 32688, July 17, 1991. This specifies the RCRA permit application module for a BIF.

40 CFR 270.22(b)(4)(ii) [Section 703.208(b)(4)(B)] requires the trial burn plan to:

> Identify the types and concentrations of organic compounds listed in [35 Ill. Adm. Code 721.Appendix H], that are emitted when burning hazardous waste **in conformance with procedures prescribed by the Director;**

In the first place, this probably has a misplaced modifier. The "in conformance clause" is probably intended to modify "Identify" rather than "burning".[2] In other words, the rule should read:

> Identify, **in conformance with procedures prescribed by the Director,** the types and concentrations of organic compounds listed in [35 Ill. Adm. Code 721.Appendix H], that are emitted when burning hazardous waste;

The second problem is that the rule does not provide a procedural context in which the Director would "prescribe" procedures. This is part of the alternative hydrocarbon limit showing discussed below in connection with Section 726.204(f)(3)(C)(i). Consistent with the discussion below, the Board believes that the Director is supposed to "prescribe" the conditions when he approves the trial burn plan under 40 CFR 270.66(d) [Section 703.232(d)]. The Board has therefore worded this to reference that subsection. The language of Section 703.208(b)(4)(B) is as follows:

> Identify, in conformance with Section 703.232(d), the types and concentrations of organic compounds listed in 35 Ill. Adm. Code 721.Appendix H that are emitted when burning hazardous waste;

Section 703.210 (Not Amended)

This Section is drawn from 40 CFR 270.24, which was amended at 56 Fed. Reg. 19290, April 26, 1991. The Board made this correction to the process vent rules in R91-1.

Section 703.211

This Section is drawn from 40 CFR 270.25, which was amended at 56 Fed. Reg. 19290, April 26, 1991. This is another

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[2]If the "in conformance" clause modifies "burning", then the rule would leave it to the Director to specify all of the requirements for burning hazardous waste. This would contradict Part 266 [726] which specifies these. At the State level, it would be an unacceptable subdelegation of the Board's duty to adopt environmental control standards under Section 5 of the Act.

correction to the process vent rules adopted in R91-1. Item 18 in the correction is directed to 40 CFR 270.25(e)(2). However, there appears to be no such subsection. The Board believes that this correction is directed to 40 CFR 270.25(d)(2). The Board made the correction at the corresponding Section 703.211(d)(2).

Section 703.232

This Section is drawn from 40 CFR 270.66, which was added at 56 Fed. Reg. 7206, February 21, 1991, with the BIF rules. This Section was also corrected at 56 Fed. Reg. 32688, July 17, 1991. This new Section appears in the portion of the USEPA and Board rules which governs "short term and phased permits". The operator of a BIF gets a succession of permits which allow trial burns to establish conditions for the Part B RCRA permit.

40 CFR 270.66(d)(3) [703.232(d)(3)] requires the operator to submit the results of the trial burn to the State Director "within 90 days of completion of the trial burn, or later if approved by the Director". This poses a potential problem as to whether this is a "waiver" of a Board rule which would require some form of Board action, as is discussed in the general introduction to this Opinion. However, as the Board construes the USEPA rule, it is specifying a condition in the trial burn plan, along with a provision allowing the Agency to specify a different length of time. So construed, the provision falls squarely into the Agency's permit issuance authority. The Board has modified the text of the USEPA rule to make this interpretation clear. The text of Section 703.232(d)(3) reads as follows:

> The applicant shall submit to the Agency a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and submit the results of all the determinations required in subsection (c). The Agency shall, in the trial burn plan, require that the submission be made within 90 days after completion of the trial burn, or later, if the Agency determines that a later date is acceptable.

Section 703.280

This Section is drawn from 40 CFR 270.42, which was amended at 56 Fed. Reg. 7206, and corrected at 56 Fed. Reg. 32688, July 17, 1991. This Section deals with permit modification at the request of the permittee. The amendments are a part of the BIF rules, and hence deal with permit modification for persons who already have a RCRA permit, and also have a BIF, which now needs to be added to the permit. These persons are authorized to continue operating the BIF if they submit a permit modification request within 180 days after the effective date of the new

rules.

40 CFR 270.42(g)(1)(iv) [703.280(g)(1)(D)] is the provision which requires the modification application. There are three minor problems with its wording. As corrected, 40 CFR 270.42(g)(1)(iv) reads as follows:

> [The permittee is authorized if...] The permittee also submits a complete Class 2 or 3 modification request within 180 days **of the effective date** of the rule listing or identifying the waste, or subjecting the unit to **RCRA Subtitle C** management standards;

The first problem is the "within 180 days of". This clearly means "after", the language the Board used in originally adopting the equivalent of this Section.

The second problem is, when is the "effective date"? The Board has adopted the verbatim USEPA text. However, at the State level, this will mean "within 180 days after the effective date of the Board rule". The Board solicited comment as to whether USEPA wanted the Board to use the earlier federal effective date, but received no written response.

The third problem is the reference to "RCRA Subtitle C management standards". At the State level, this probably would be an incorporation by reference.[3] Rather than deal with the problems of making this type of reference, the Board has cited to the "RCRA management standards" as embodied in the State rules. This appears to be Parts 724, 725 and 726.

As adopted by the Board, Section 703.280(g)(1)(D) reads as follows (with striking and underlining relating to the existing Board rule):

> ~~In the case of Classes 2 and 3 modifications, t~~The permittee also submits a complete ~~permit~~ class 2 or 3 modification request within 180 days after the effective date of the rule listing or identifying the waste, or subjecting the unit to management standards under 35 Ill. Adm. Code 724, 725 or 726;

Section 703.283

This Section is drawn from 40 CFR 270.42(c), whicn was corrected at 56 Fed. Reg. 32688, July 17, 1991. This is also connected with the BIF amendments and correction. This

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[3]Indeed, the USEPA rule needs a definition of "RCRA Subtitle C management standards". As written, this could be construed to mean the adoption of statutory changes by Congress.

subsection was only amended in connection with the corrections.

The change to 40 CFR 270.42(c)(1)(iv) [703.283(a)(4)] is rather simple, with striking and underlining shown vis-a-vis the 1990 Edition of the CFR:

> Provides the applicable information required by 40 CFR 270.13 through 270.~~21~~22, 270.62, ~~and~~ 270.63, and 270.66.

However, this becomes rather more complex at the State level, since smaller Sections are used. The following is a correspondence table for the Sections cited:

40 CFR 270.	35 IAC 703.
270.13	703.181
270.14	703.182 - 703.187
270.15	703.201
270.16	703.202
270.17	703.203
270.18	703.204
270.19	703.205
270.20	703.206
270.21	703.207
270.22	703.208
270.23	703.209
270.62	703.222 - 703.225
270.63	703.230
270.66	270.232

The equivalent Board amendment reads as follows:

> Provides the applicable information required by Section 703.181 through ~~703.185~~703.187, 703.201 through ~~703.207~~703.209, 703.221 through 703.225, ~~and~~ 703.230 and 703.232.

Appendix A

This Section is drawn from 40 CFR 270, Appendix I, which was amended at 56 Fed. Reg. 7206, and corrected at 56 Fed. Reg. 32688, July 17, 1991. This Appendix lists types of permit modifications, and assigns them to Classes, which determines the procedures needed for that type of modification. The amendment assigns various BIF-related modifications to Classes.

The amendments address heading "L.", at the end of the Appendix. Items L.5.b and c are omitted from the Federal Register publication. However, the dots appear to mean that they are retained without change.

PART 720: GENERAL PROVISIONS

Part 720 includes the definitions and incorporations by reference for the standards of Parts 721 through 728.

Section 720.110 Definitions

This Section was amended at 56 Fed. Reg. 7206, February 21, 1991. It adds new definitions related to the new BIF rules. New definitions include: "carbon regeneration unit", "infrared incinerator", "plasma arc incinerator" and "sludge dryer". The existing definitions of "incinerator" and "industrial furnace" are amended.

Two of the USEPA definitions have subdivisions. These are not allowed under Code Division rules. Rather, the subdivisions must be presented as unnumbered blocks, with subordination indicated by the levels of subdivision.

The new definition of "incinerator" is extraordinarily complex, but appears to make sense as written. The USEPA definition reads as follows:

"Incinerator" means any enclosed device that:

1) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer or carbon regeneration unit, nor is listed as an industrial furnace; or

2) Meets the definition of infrared incinerator or plasma arc incinerator.

This would be easier to state if paragraphs (1) and (2) were reversed, placing the catch-all and exclusions at the end. In other words, an "incinerator" is an "infrared incinerator", a "plasma arc incinerator", or some other type of device which uses "controlled flame combustion", other than a "boiler", "dryer", etc.

Rather than rewrite the definition, the Board broken out paragraph (1) for greater clarity. As presented in the Code Division format, the definition reads as follows:

> "Incinerator" means any enclosed device that:
>
> > Uses controlled flame combustion and neither:
> >
> > > Meets the criteria for classification as a boiler, sludge dryer or carbon regeneration unit, nor
> > >
> > > Is listed as an industrial furnace; or
> >
> > Meets the definition of infrared incinerator or plasma arc incinerator.

Within the definition of "industrial furnace", a new specific type has been added, the "halogen acid furnace". These are used in chemical production facilities to produce, for example, hydrochloric acid from a chlorinated organic waste.

The definitions of "infrared incinerator" and "plasma arc incinerator" have similar, minor grammatical problems. The Board has reworded these so they take the form of "'X' means A which is B and which is C". As adopted, these definitions read as follows:

> "Infrared incinerator" means any enclosed device which uses electric powered resistance heaters as a source of radiant heat and which is not listed as an industrial furnace.
>
> "Plasma arc incinerator" means any enclosed device which uses a high intensity electrical discharge or arc as a source of heat and which is not listed as an industrial furnace.

The new definition of "sludge dryer" appears to have a minor substantive error. The definition specifies a sludge dryer is a device which "has a maximum total thermal input ... of 2500 Btu/lb..." This probably would be better stated as "has a ~~maximum~~ total thermal input ... of 2500 Btu/lb or less..." (As worded, the USEPA seems to say that the rated maximum of the dryer has to be exactly 2500 Btu/lb.) The Board has worded this definition as follows:

> "Sludge dryer" means any enclosed thermal treatment device which is used to dehydrate sludge and which has a total thermal input, excluding the heating value of the sludge itself, of 2500 Btu/lb or less of sludge treated on a wet weight basis.

Section 720.111 Incorporations by Reference

This Section was amended at 56 Fed. Reg. 7206, February 21, 1991. The amendment adds a reference to "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources", available from NTIS. In addition, as is discussed below in connection with Section 726.Appendix I and J, two other documents were referenced into 40 CFR 266, but not added to the table in 40 CFR 260.11. The three added references are as follows:

> "Guidance on Air Quality Models", Revised 1986 (Document number PB86-245-248 (Guideline) and PB88-150-958 (Supplement)).
>
> "Methods Manual for Compliance with BIF Regulations", December, 1990. (Document number PB91-120-006)
>
> "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources", August, 1988 (Document number PB89-159396).

As is discussed in connection with Section 726.200(g), the Board has added a definition for "SSU", a unit of measure for viscosity. This is measured by two ASTM Methods (PC 6), which the Board has added to this Section:

> ASTM D88-87, Standard Test Method for Saybolt Viscosity, April 24, 1981, reapproved January, 1987.
>
> ASTM D2161-87, Standard Practice for Conversion of Kinematic Viscosity to Saybolt Universal or to Saybolt Furol Viscosity, March 27, 1987.

PC 6 recommended ASTM D445 and D2161. However, D88 appears to be more generally applicable than D445.

In addition, as is discussed below in connection with Section 726.200(g), USEPA references 40 CFR 51.100(ii) for the definition of "good engineering practice stack height". This has to be treated as an incorporation by reference at the State level.

The Board has also updated all other routine references to the Code of Federal Regulations to reflect the 1991 Edition, which includes rules adopted by USEPA through June 30, 1991.

PART 721: DEFINITION OF HAZARDOUS WASTE

This Part is the definition of "solid waste" and "hazardous waste". It defines the scope of the program so far as subject

matter is concerned.

Section 721.102 "Solid Waste"

This Section was amended at 56 Fed. Reg. 7206, February 21, 1991. This adds a new subsection (d)(2), which includes in the definition of "inherently waste-like materials", secondary materials, which are listed or characteristic hazardous waste, and which are fed to a "halogen acid furnace", which is defined above.

This Section was corrected in the BIF corrections discussed mainly in connection with Part 726. In the July 17, 1991 correction, the instructions for the addition of new subsection (d)(2) were revised. However, it is not clear what was changed.

In the August 27, 1991 BIF corrections, 40 CFR 261.2(d)(2)(i) - (iii) [721.102(d)(2)(A) - (C)] were added. This is a new exclusion for certain brominated wastes which are the subject of an internal recycle to a halogen acid furnace.

Section 721.103 "Hazardous Waste"

This Section was amended at 56 Fed. Reg. 3876, January 31, 1991, the "third third" corrections. In addition, the Section was corrected in connection with the BIF rules in both the July 17 and August 27, 1991, corrections.

There was no amendment to this Section in connection with the original BIF rules on February 21, 1991. However, a cross reference in 40 CFR 261.3(c)(2)(ii)(B) was corrected and recorrected in the corrections. The cross reference appears at Section 721.103(c)(2)(B)(ii), as follows:

> [The following solid wastes are not hazardous...] Wastes from burning any of the materials exempted from regulation by Section 721.106(a)(3)(E), (F), (G)~~,~~ or (H) ~~or (I)~~.

The main amendment was adopted by USEPA in connection with the third third corrections. It adds a proviso to Section 721.103(d)(1). Characteristic hazardous wastes generally are removed from the regulatory definition if the hazardous characteristic is removed. However, under the amendment, such wastes may still be subject to the land disposal restrictions in Part 728.

As discussed in general above, the Board has expanded the scope of this update to include USEPA amendments addressing the high zinc subcategory of K061. These adopted at 56 Fed. Reg. 41176, August 19, 1991. (PC 1, 2) This includes the addition of 40 CFR 261.3(c)(2)(ii)(C) [721.103(c)(2)(B)(iii)], a rather

lengthy subsection which establishes a new exclusion from the definition of "hazardous waste" for certain residues from "high temperature metals recovery" ("HTMR") of hazardous waste. There are a number of minor editorial problems with this subsection.

The USEPA rule includes a cross reference to "industrial furnaces (as defined in 40 CFR 260.10 (6), (7), and (12))". This appears to be referring to subsections within the definition of "industrial furnace". As is discussed above in connection with Section 720.110, the Administrative Code does not allow this type of numbering with definitions. It is therefore necessary to find a way to reference the appropriate types of industrial furnace, without relying on the numbers. The Board has adopted the rule based on inclusion of the following types of furnaces:

6) Blast furnaces

7) Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters and foundry furnaces)

12) Other furnaces designated by the Agency on the basis of factors listed in the definition of "industrial furnace" in 35 Ill. Adm. Code 720.110.

Item (12) in the current version of the CFR actually corresponds with "halogen acid furnaces" ("HAFs"), defined in Section 720.110. It would not make sense to include this type of furnace in the HTMR rules. The Board therefore assumes that this cross reference is in error, and that USEPA intends to reference the "catch-all", which is now actually paragraph (13) in the definition.

With the inclusion of the list of types of "industrial furnace", the first sentence of the USEPA rule becomes too complex to understand. The Board has therefore separated the types of units into a separate sentence, which is worded as follows [721.103(c)(2)(B)(iii)]:

> The types of units are: rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or the following types of industrial furnaces (as defined in 35 Ill. Adm. Code 720.110): blast furnaces; smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters and foundry furnaces); and other furnaces designated by the Agency pursuant to that definition.

The next editorial problem is the references to "Subtitle D

units". This apparently refers to Subtitle D of the federal RCRA Act, which governs non-hazardous waste facilities. At the State level, this might be an incorporation by reference of a federal statute. It is not clear how this should be handled under the Administrative Procedure Act. The Board has used the term "non-hazardous waste unit", i.e., a unit other than a "hazardous waste management unit".

40 CFR 261.3(c)(2)(ii)(C) also requires that:

> [A]t a minimum, composite samples of residues must be collected and analyzed quarterly **and/or** when the process or operation generating the waste changes.

As is discussed in general above, the Administrative Code does not allow "and/or". Usually "and/or" means the same thing as "or". However, in this context, "or" would appear to give the operator the choice of sampling either quarterly, or just at process changes. The USEPA rule probably means "and", the word the Board has used [in Section 721.103(c)(2)(B)(iii)]. In other words, the operator has to take both quarterly samples, and additional samples to document process changes.

40 CFR 261.3(c)(2)(ii)(C) requires:

> For each shipment of K061 HTMR residues **sent to a Subtitle D unit** that meets the generic exclusion levels for all constituents, and does not exhibit any characteristic, a notification and certification must be sent to...

This has some missing commas, extra commas, and misplaced modifiers. It would be better stated as follows:

> For each shipment, **sent to a Subtitle D unit**, of K061 HTMR residues that meets the generic exclusion levels for all constituents and does not exhibit any characteristic, a notification and certification must be sent to...

There is, however, a deeper problem with this provision. As worded, it requires the notice and certification only for shipments meeting the requirements. This could be construed as exempting the non-conforming shipments from the rule. The Board does not believe this is USEPA's intent. Rather, the repetition of the requirements is mere surplusage, which the Board has deleted. So worded, it's clear that the notice and certification have to be given for all shipments of this waste:

> For each shipment of K061 HTMR residues sent to a nonhazardous waste management unit, a notification and certification must be sent to...

40 CFR 261.3(c)(2)(ii)(C) requires the notification and certification to be sent for each shipment:

> [T]o the appropriate EPA Regional Administrator (or delegated representative) or State authorized to implement part 268 requirements.

The Board believes that this is intended to require a notice to the appropriate authority in the state receiving the waste. The Board has adopted the following language:

> [T]o the Agency (or, for out-of-State shipments, to the appropriate Regional Administrator of USEPA or state agency authorized to implement 40 CFR 268 requirements).

The notification requirements include numbered subparagraphs. However, the Administrative Code does not allow subparagraphs beyond the fourth level (at which this complex rule started). These have therefore collapsed into a block.

Bringing this all together, the Board has adopted the following equivalent for 40 CFR 261.3(c)(2)(ii)(C) [721.103(c)(2)(B)(iii):

> [The following solid wastes are not hazardous ... unless they exhibit ... characteristics ...:]
>
> iii) Nonwastewater residues, such as slag, resulting from high temperature metal recovery (HTMR) processing of K061 waste, in units identified below, that are disposed of in non-hazardous waste units, provided that these residues meet the generic exclusion levels identified below for all constituents, and exhibit no characteristics of hazardous waste. The types of units are: rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or the following types of industrial furnaces (as defined in 35 Ill. Adm. Code 720.110): blast furnaces, smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters and foundry furnaces), and other furnaces designated by the Agency pursuant to that definition. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and when the process or operation generating the waste

changes. The generic exclusion levels are:

Constituent	Maximum for any single composite sample (mg/L)
Antimony	0.063
Arsenic	0.056
Barium	6.3
Beryllium	0.0063
Cadmium	0.032
Chromium (total)	0.33
Lead	0.095
Mercury	0.009
Nickel	0.63
Selenium	0.16
Silver	0.30
Thallium	0.013
Vanadium	1.26

For each shipment of K061 HTMR residues sent to a nonhazardous waste management unit, a notification and certification must be sent to the Agency (or, for out-of-State shipments, to the appropriate Regional Administrator of USEPA or state agency authorized to implement 40 CFR 268 requirements). The notification must include the following information: The name and address of the nonhazardous waste management unit receiving the waste shipment; The USEPA hazardous waste number and treatability group at the initial point of generation; The treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows:

"I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

Section 721.104 Exclusions

This Section contains a list of specific exclusions from the definition of "hazardous waste". It was amended five times during the update period, at 56 Fed. Reg. 3978, 5915, 7206, 13411 and 27318, and again after the update period.

Section 721.104(a)(10) was amended at 56 Fed. Reg. 7206, in connection with the BIF rules. This excludes from the definition

of "solid waste" and "hazardous waste", coke and coal tar from the iron and steel industry, which is produced from "decanter tank car sludge", K087.

40 CFR 261.4(a)(11) [Section 721.104(a)(11)] was added in connection with the amendments concerning the high zinc subcategory of K061, which is drawn from the August 19, 1991 Federal Register. (PC 1, 2) This provision excludes from the definition of "solid waste" and "hazardous waste", certain K061 HTMR residues, as follows:

> Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.

Section 721.104(b)(4), (7) and (8) were also amended in connection with the BIF rules. These add cross references to new Section 726.212 for the following types of excluded wastes: fly ash, mining wastes and cement kiln dust. Facilities operating under these exclusions are potentially subject to these new rules.

Section 721.104(b)(7) was also amended at 56 Fed. Reg. 27318, June 13, 1991, which specifically addressed the mining waste exclusion, which was a major topic in the R91-1 Opinion. The only change to the text of the rule appears to be a shift from "will include" to "includes" in the introductory language to the list of "processing" operations. The Board has made this change. However, a 12 page "Appendix" appears after the text of the regulatory language in the Federal Register. The "Appendix" is prefaced with a note that it "will not appear in the Code of Federal Regulations". The Board requested comment as to whether it ought to add a "Board Note" to Section 721.104(b)(7), referencing this "Appendix", but received no response. The Board will therefore make no specific reference to this Appendix, which it takes to be a part of the USEPA preamble.

Section 721.104(b)(11) was amended two times, at 56 Fed. Reg. 3978, February 1, 1991, and at 56 Fed. Reg. 13411, April 2, 1991. These amendments both concern the applicability of the TCLP test, adopted in R90-10, to groundwater which is reinjected pursuant to petroleum recovery corrective action.

As was discussed on p. 28 in the R91-1 Opinion, the TCLP test had the effect of bringing many petroleum recovery clean-up waters into the definition of "hazardous waste", potentially subjecting UST clean-ups to additional regulatory requirements. During the "free phase recovery" portion of a groundwater cleanup, the operator is attempting to remove petroleum product which is essentially floating on the water table. Water is separated from the product on the surface. This water is

saturated with petroleum product, and hence may fail the TCLP test. It would be possible to treat this water prior to reinjection. However, this would reduce the efficiency of the free product recovery, since additional free product would just be dissolved in the water, and become unrecoverable. After the free product recovery phase, the clean-up enters the groundwater clean-up phase, in which the dissolved product is removed.

The February 1 action was an extension of the effective date of the temporary USEPA extension, to March 25, 1991. The Board acted on this in R91-1, even though it was outside the normal scope of that update.

The April 2, 1991, USEPA action extends the free product recovery exclusion to January 25, 1993, subject to new limitations affecting the scope of the exclusion. The Board has adopted the USEPA extension.

One of the new limitations is that the clean-up has to be conducted pursuant to a "written state agreement", a copy of which has to be filed with USEPA. This poses two minor problems in implementing the rules: identifying the "state agreement" with reference to Illinois law, and whether the agreement needs to be separately filed with the Agency.

In the UST program proper, the "agreement" would appear to be the "free product recovery report" under Section 731.164. However, the exclusion appears to extend also to releases from above-ground tanks at refineries. The Board requested comment as to the identity of the agreement in such a case. Furthermore, the Board requested comment as to whether the Agency needs a second copy of the agreement filed with it. The Board received no response.

The Board has limited the "written agreement" to the "free product removal report" under the UST rules. A copy of the report will have to be sent to USEPA. The Agency will already have a copy under the UST rules, and will not need a second copy.

This resolution of the problem will mean that the free product recovery exclusion will not extend to injected groundwater from free product recovery at above-ground tanks at petroleum refineries, terminals and bulk plants. The Board will consider adding them to this exclusion if it receives, during the post-adoption comment period, information as to the nature of the "written agreement" used in Illinois for such clean-ups.

Technically the Board's rules will have been without the free product recovery exclusion since March 25. However, the Board views short-term USEPA extensions of this sort as automatically operative in Illinois pending Board action on the extension.

The final USEPA amendment to this Section is the addition of Section 721.104(b)(12), at 56 Fed. Reg. 5915, February 13, 1991. This excludes used chlorofluorocarbon (CFC) refrigerants from the definition of "hazardous waste" provided they are reclaimed. Some CFCs may be hazardous waste under the new TCLP test (R90-10) because of traces of regulated constituents, such as carbon tetrachloride. CFC refrigerant recycling does not pose any significant hazard to groundwater, the primary focus of the hazardous waste regulations. However, if the CFC refrigerant recycling industry is brought into the hazardous waste program, operators will probably vent the CFCs to the atmosphere, rather than comply with the paperwork requirements associated with hazardous waste. This would contribute to upper-atmosphere ozone depletion. USEPA has therefore excluded CFC refrigerant recycling.

The USEPA rule has a minor typo which the Board has corrected. This involves the insertion of a comma following the list of equipment.

Section 721.106 Requirements for Recyclable Materials

This Section was amended at 56 Fed. Reg. 7206, February 21, 1991, in connection with the BIF rules. The Section was also corrected in the July 17, 1991, correction to the BIF rules.

Section 721.106(a)(3)(G) has been deleted, and subsequent subsections renumbered. This removes coke and coal tar from the materials which are excluded from the definition of "hazardous waste", based on recycling. This has been replaced with the more limited exclusion in Section 721.104(a)(10), discussed above.

The July 17, 1991, correction concerns a cross-references in 40 CFR 261.6(a)(2) and (a)(2)(ii) [721.106(a)(2) and (a)(2)(B)]. These add references to new Subpart H in Part 266 [726].

Section 721.120 Hazardous Characteristics in General

This Section was amended at 56 Fed. Reg. 3876, January 31, 1991, the "third third" correction. The Board apparently made the correction in R90-11. However, there appears to be an additional error in the USEPA, and Board, rule which ought to have been corrected in connection with the incineration rules (February 21, 1991). This Section should also cite to Part 726. The Board has made this correction.

Section 721.131 Listed waste from Nonspecific Sources

This Section was amended in three USEPA actions, at 56 Fed. Reg. 3877, 21958 and 27336.

The amendments at 56 Fed. Reg. 27336, June 13, 1991, concern

F032, F034 and F035. This is the "administrative stay" of the wood preserving rules. The Board acted on this stay in R91-1, even though it was outside the normal scope of that update. On January 9, 1992, in R91-26, the Board also extended some of the compliance dates associated with this stay. In the proposed Order, the Board used the pre-R91-26 text as the base text, but showed the R91-26 changes. The base text now has to be reformatted to show the R91-26 text as the base text. The basically involves clearing the striking and underlining involved in R91-26.

The amendments at 56 Fed. Reg. 21958, May 13, 1991, concern F037 and F038, petroleum refinery oil/water/solids separation sludges. The Board adopted these listings in R91-1. The amendments add to the lists of what is excluded from the listings. The new exclusion is solids separated from certain non-contact cooling waters.

The F037 and F038 listings appear to have two minor typos. In F037, USEPA appears to have changed a "sludges" to a "sludge" for no apparent reason. In F038, the USEPA rule has a series which reads "X, Y and Z and B, C, and D", which the Board has shortened to "X, Y, Z, B, C and D".

USEPA amended the F039 listing at 56 Fed. Reg. 3876, January 31, 1991, the third third corrections. F039 is leachate from disposal of mixed hazardous wastes. The amendments appear to be a refinement of the definition of this listing.

Section 721.132 Listed Wastes from Specific Sources

Listing K069 was amended at 56 Fed. Reg. 19952, May 1, 1991. This is an administrative stay of the listing of emission control dust and sludge from secondary lead smelting. This appears to be closely related to the issues concerning K066, which were discussed at length in R91-1. The Board has adopted the language of the USEPA stay.

The K069 listing appears to be a "non-HSWA" regulation[4], which has already been adopted by Illinois, and which is a part of Illinois' authorized program. As such, the USEPA regulation and stay do not apply directly in Illinois. However, the Illinois "identical in substance" mandate requires the Board to adopt the USEPA stay within one year.

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[4]A "HSWA" regulation is one which USEPA was required to adopt pursuant to the 1986 HSWA Amendments to the RCRA Act. Such rules are immediately effective as federal law, even in authorized States. "Non-HSWA" rules are other USEPA RCRA rules. They are not effective in authorized states, such as Illinois, until the state adopts them.

The USEPA stay provides[5] that:

> This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting (sic) this stay, EPA will publish a notice of the action in the Federal Register.

The wording of this provision is somewhat different than the wording of the notes to the wood preserving listings in F032 - F035, which were addressed above and in R91-1, and which caused problems for Board implementation. In this stay, USEPA is specific that a further regulatory action would be required to remove the stay, as opposed to an internal "administrative action". Since a regulatory action will be taken, it is clear that the Board will be able to remove the stay by a normal regulatory action pursuant to Sections 7.2 and 22.4(a) of the Act. Accordingly, the Board has provided that the stay will continue until the note is removed. The complete language is as follows:

> BOARD NOTE: This listing is administratively stayed for sludge generated from secondary acid scrubber systems. The stay will remain in effect until this note is removed.

An alternative formulation would provide that the stay would continue only until USEPA removed the note from the federal rule, and would deem the federal action to apply in Illinois until the Board took action. The Board requested comment on this alternative, but received no response.

Section 721.133 (Not Amended)

USEPA amended 40 CFR 261.33, and Appendix VIII (Section 721.133 and Appendix H) at 56 Fed. Reg. 7568, February 25, 1991. This removed strontium sulfide from the listed wastes (P107), and as a hazardous constituent. This corrects a USEPA action at 53 Fed. Reg. 43881, October 31, 1988, which failed to remove the listing because of an error in the notice. This requires no action, since the Board successfully removed this listing in R89-1.

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[5]Although the USEPA stay language is written in general terms, USEPA discusses it as though it were a site-specific stay for a facility in Pennsylvania (56 Fed. Reg. 19951). As is discussed in the general introduction to this Opinion, the Board ordinarily adopts only rules which are applicable in Illinois [Section 7.2(a)(1) of the Act]. Here the Board is following the language of the USEPA rule, rather than the discussion.

Appendix I Site Specific Delistings

USEPA amended 40 CFR 261, Appendix IX, at 56 Fed. Reg. 19586. This is a site-specific delisting for USX in Chicago and Gary, IN. As provided in Section 720.122(m) et seq., as amended in R90-17, the Board does not adopt such site-specific rules unless and until someone files a petition showing that the rule needs to be adopted as a part of the Illinois program. This delisting was adopted by the Board in R91-12.

On February 6, 1992, the Board adopted the first adjusted standard delisting, on the petition of Keystone Steel, in AS91-1. The Board has added to this Appendix a listing of site-specific adjusted standards delistings, of which this is the first entry.

PART 722: GENERATOR STANDARDS

This Part includes the standards which are applicable to generators of hazardous waste.

Section 722.110

This Section is drawn from 40 CFR 262.10, which was amended at 56 Fed. Reg. 3876, January 31, 1991, the third third corrections. The amendment adds a reference to Part 268 [728] to "Note 2" following 40 CFR 262.10(f).

The Administrative Code prohibits multiple "Notes" such as are used in the CFR. Therefore, in the Board rules, "Note 1" appears after Section 722.110(f), and "Note 2" after Section 722.110(e). This makes it difficult to compare the Board and USEPA text. The Board has therefore moved the text of "Note 2" down so it follows "Note 1". However, these have to appear as a single "Note". The amendment appears in the underlined portion of the Note following Section 722.110(f).

Section 722.111 Not Amended

This Section is drawn from 40 CFR 262.11, which was amended at 56 Fed. Reg. 3876, January 31, 1991, the third third corrections. The Board made this correction in R91-1.

Section 722.134

This Section is drawn from 40 CFR 262.34, which was amended at 56 Fed. Reg. 3876, January 31, 1991, the third third corrections. The correction adds to Section 722.134(d)(4) a reference to Section 728.107(a)(4).

The USEPA language includes a series of the form "A, B, C". USEPA clearly intends that these be connected with an "and", which the Board has inserted. Moreover, the USEPA rule is worded

as "complies with the requirements of A, the requirements of B, [and] the requirements of C". The Board has shortened this by consolidating the multiple "requirements". The Board's language is as follows:

> The generator complies with the requirements of subsections (a)(2) and ~~(a)~~(3), ~~and the requirements~~ of 35 Ill. Adm. Code 725.Subpart C and of 35 Ill. Adm. Code 728.107(a)(4);

PART 724: STANDARDS FOR PERMITTED HWM FACILITIES

This Part includes the standards for facilities which include a HWM (hazardous waste management) unit and which have a permit. Part 725 applies prior to permit issuance.

Section 724.212

This Section is drawn from 40 CFR 264.112, which was amended at 56 Fed. Reg. 7206, February 21, 1991, the BIF rules. The amendment adds a sentence to Section 724.212(d) concerning closure of a BIF. The new language is as follows:

> The owner or operator shall notify the Agency in writing at least 45 days prior to the date on which the owner or operator expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier.

The "whichever is earlier" apparently refers to the "partial or final" closure option.

Section 724.440

This Section is drawn from 40 CFR 264.340, which was amended at 56 Fed. Reg. 7206, February 21, 1991, the BIF rules. This Section is the introduction to the incinerator rules. The amendment affects Section 724.440(a). The text of the Board rule is as follows:

> The regulations in this Subpart apply to owners and operators of ~~facilities that incinerate~~ hazardous waste incinerators (as defined in 35 Ill. Adm. Code 720.110), except as Section 724.101 provides otherwise. ~~The following facility owners and operators are considered to incinerate hazardous waste:~~
>
> ~~1) Owners or operators of hazardous waste incinerators (as defined in 35 Ill. Adm. Code 720.110); and~~
>
> ~~2) Owners or operators who burn hazardous waste~~

~~in boilers or in industrial furnaces in order to destroy them, or who burn hazardous waste in boilers or in industrial furnaces for any recycling purpose and elect to be regulated under this Subpart.~~

The instructions in the Federal Register are ambiguous as to whether the second sentence and (a)(1) and (2) are to be repealed. The Board believes, however, that the repeal is consistent with the remainder of the BIF rules. The incinerator rules in Part 724 now defer to the Part 720 definition of "incinerator" for their scope. "BIFs" are regulated under Part 726, rather than Part 724.

Section 724.672 Not Amended

This Section is drawn from 40 CFR 264.572, which was amended at 56 Fed. Reg. 27336, June 13, 1991. This was the administrative stay of the wood preserving rules, which the Board adopted in R91-1.

Section 724.930 Process Vents

This and the following Sections are drawn from 40 CFR 264.1030, et seq., which were amended at 56 Fed. Reg. 19290. This is the corrections to the process vent rules, which the Board adopted in R90-11. The USEPA corrections came too late for the Board to consider them in R90-11. However, the Board identified most of the errors, and corrected them on its own motion. In the following discussion, the Board will mention only the errors listed in the Federal Register which require correction in the Board rules.

Section 724.930 et seq. are drawn from 40 CFR 264.1030 et seq. The numbering of these Sections does not follow the general scheme for translating Board and USEPA numbers. In these Sections, "264.10xx" becomes "724.9xx".

In the introduction to Section 724.930(b), a cross reference has been changed as follows: "Sections 724.934(d) and ~~724.935~~(e)", such that the reference is now to subsections of the same Section.

Section 724.935

In Section 724.935(b)(4)(B), a comma has been inserted.

PART 725: INTERIM STATUS STANDARDS FOR HWM FACILITIES

This Part contains the standards for HWM units on facilities which do not have a permit. Standards for permitted facilities are in Part 724. Indeed, Parts 724 and 725 are identical in most

respects.

Section 725.113

This Section is drawn from 40 CFR 265.13, which was amended at 56 Fed. Reg. 19290, April 26, 1991. This Section, and most of the following Sections, are again the corrections to the process vent rules adopted in R90-11. The Board made most of these corrections independently in R90-11. Unless otherwise stated, the changes to this Part are from the process vent corrections. Only those corrections requiring a change in the Board rules will be discussed here.

In Section 725.113(b)(6), a reference to "725.293" has been changed to "725.300".

Section 725.173

In Section 725.273(b)(3), a reference to "725.293" has been changed to "725.300".

Section 725.212

This Section is drawn from 40 CFR 265.112, which was amended at 56 Fed. Reg. 7206, February 21, 1991, and corrected at 56 Fed. Reg. 42511, August 27, 1991. This is the BIF rules and second correction.

The first sentence of 40 CFR 265.112(a) is amended as follows:

> By May 19, 1981, or by six months after the effective date of the rule that first subjects a facility to provisions of this Section, t~~T~~he owner or operator of a hazardous waste management facility must have a written closure plan.

The immediate effect of this change is to require newly regulated BIFs to have a closure plan within six months after the effective date of the BIF rules. However, there are three possible problems.

The first problem stems from the general way in which the rule is stated. To the extent this is the proper place for the "six months after the effective date" provision, it appears to be a retroactive requirement for any newly regulated HWM units since 1981. The Board followed this language, but solicited comment, which went unanswered.

Second, the USEPA rule refers to "the effective date" of the new rule. If the Board adopts the verbatim text, the State rule will wind up referencing the State adoption date. The Board

proposed to do so, but solicited comment as to whether USEPA intended the State to reference the earlier USEPA effective date. The Board received no written response.

Third, in originally adopting an equivalent to the rule, the Board omitted the "May 19, 1981" date, since it had already passed. Rather, the State rule required immediate notification by everybody.

The language adopted by the Board in Section 725.212(a) is as follows:

> Within six months after the effective date of the rule that first subjects a facility to provisions of this Section, t~~T~~he owner or operator of a hazardous waste management facility shall have a written closure plan.

The next USEPA amendment concerns 40 CFR 265.112(d)(1) and (2) [725.212(d)(1) and (2)]. This adds notification of closure requirements for BIFs.

40 CFR 265.112(d)(1), as amended, consists of six sentences. It is virtually impossible to understand the changes to this dense block of text. The Board has therefore broken out six subsections, labeled (d)(1)(A) - (F), each corresponding with a sentence. The USEPA amendments involve the addition of (B) and (E), and minor changes to the other provisions. The text is as follows:

d) Notification of partial closure and final closure.

1) When notice is required.

A) The owner or operator shall submit the closure plan to the Agency at least 180 days prior to the date on which the owner or operator expects to begin closure of the first surface impoundment, waste pile, land treatment or landfill unit, or final closure ~~of a facility with~~if it involves such a unit, whichever is earlier.

B) The owner or operator shall submit the closure plan to the Agency at least 45 days prior to the date on which the owner or operator expects to begin partial or final closure of a boiler or industrial furnace.

C) The owner or operator shall submit the closure plan to the Agency at least 45 days prior to the date on which the owner or operator expects to begin final closure of a

facility with only tanks, container storage or incinerator units.

D) Owners or operators with approved closure plans shall notify the Agency in writing at least 60 days prior to the date on which the owner or operator expects to begin closure of a surface impoundment, waste pile, landfill or land treatment unit, or final closure of a facility involving such a unit.

E) Owners or operators with approved closure plans shall notify the Agency in writing at least 45 days prior to the date on which the owner or operator expects to begin partial or final closure of a boiler or industrial furnace.

F) Owners and operators with approved closure plans shall notify the Agency in writing at least 45 days prior to the date on which the owner or operator expects to begin final closure of a facility with only tanks, container storage or incinerator units.

USEPA also adopted extensive revisions to 40 CFR 265.112(d)(2) with the BIF rules. However, the original language was restored with the August 27 corrections.

Comparison of the language of 40 CFR 265.112(d)(2) with Section 725.212(d)(2) has disclosed an error which the Board apparently made in adopting this subsection. In (d)(2)(B), "final known volume" should read "known final volume". The Board has corrected this.

There are several minor problems with the USEPA language in 40 CFR 265.112(d)(2) which the Board corrected on original adoption of its equivalent. These have not been corrected in the USEPA version. The Board will retain its version. These include USEPA's use of "can demonstrate" for "demonstrates", and "the operator ... can demonstrate ... and he has taken".

Section 725.213

This Section is drawn from 40 CFR 265.113, which was also amended with the BIF rules and the August 27, 1991, BIF corrections. USEPA adopted extensive changes to the introductory paragraphs to 40 CFR 265.113(a) and (b), but restored the original language in the correction. The net result is no change, except for correction of a minor typo in the Board's text.

Section 725.440

This Section is drawn from 40 CFR 265.340, which was also amended with the BIF rules. This is the introduction to the applicability Section for interim status incinerators. The language has been revised along the lines discussed above for Section 724.440. The incinerator rules now depend on the definition of "incinerator" for their applicability, and BIFs are regulated under Part 726.

Section 725.470

This Section is drawn from 40 CFR 265.370, which was amended with the July 17, 1991, BIF corrections. This is the introduction to the Subpart governing "other thermal treatment". The amendment is as follows:

> The regulations in this Subpart apply to owners and operators of facilities that thermally treat hazardous waste in devices other than enclosed devices using controlled flame combustion except, as Section 725.101 provides otherwise. Thermal treatment in enclosed devices using controlled flame combustion is subject to the requirements of Subpart O if the unit is an incinerator, and 35 Ill. Adm. Code 726.Subpart H, if the unit is a boiler or industrial furnace as defined in 35 Ill. Adm. Code 720.110.

Section 725.543 Not amended

This Section is drawn from 40 CFR 265.443, which was amended at 56 Fed. Reg. 27336, June 13, 1991. This is the stay of the wood preserving rules, which the Board acted on in R91-1.

Section 725.930 Process Vents

This and the following Sections are drawn from 40 CFR 265.1030, et seq., which were amended at 56 Fed. Reg. 19290. This is the corrections to the process vent rules, which the Board adopted in R90-11. The USEPA corrections came too late for the Board to consider them in R90-11. However, the Board identified most of the errors, and corrected them on its own motion. In the following discussion, the Board will mention only the errors listed in the Federal Register which require correction in the Board rules.

Section 725.934 Not amended

The USEPA corrections include a correction to a cross reference in 40 CFR 265.1034(c)(1)(vi) [725.934(c)(1)(F)]. The Board has made no change, in that the correction appears to have been made.

Section 725.935

The Board has inserted a comma after "Records" in Section 725.935(b)(4)(B).

Section 725.952

The Board has corrected a cross reference in Section 725.952(e)(3) as follows: "~~(a)(2)~~(e)(2)"

PART 726: MANAGEMENT STANDARDS FOR SPECIFIC TYPES OF HAZARDOUS WASTE AND FACILITIES

This Subpart sets management standards for specific types of hazardous waste and specific types of facilities. The existing standards include Subparts for certain types of recycling, including used batteries and precious metals recovery, and for used oil. The major change, which is the major change in this Docket, concerns standards for burning hazardous waste in boilers and industrial furnaces (BIFs). Existing Subpart D is replaced by a new Subpart H.

SUBPART D: HAZARDOUS WASTE BURNED FOR ENERGY RECOVERY

This Subpart was adopted in R85-22. It is being repealed and replaced by new Subpart H.

Section 726.136 was previously repealed in R90-11.

SUBPART H: HAZARDOUS WASTE BURNED IN BIFs

This new Subpart is drawn from 40 CFR 266, Subpart H, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. It sets new standards for burning hazardous waste in BIFs.

The USEPA rules were the subject of three corrections which occurred outside the normal batch period of this update Docket. The corrections were at 56 Fed. Reg. 32688, July 17, 1991; 56 Fed. Reg. 42511, August 27, 1991; and 56 Fed. Reg 43877, September 5, 1991. In initially reviewing the rules, the Board staff observed a large number of apparent errors in the USEPA February 21 rules. Rather than undertake an independent review of these rules, the Board has decided to incorporate the corrections into this Docket. However, this has resulted in a substantial delay.

Before proceeding into a Section-by-Section discussion of the amendments, the Board will first set forth a general discussion of the types of changes the Board has made at multiple points to the corrected USEPA rules. A general discussion of the types of changes the Board makes appears in the general introduction to this Opinion.

Definitions

The USEPA rules use a large number of acronyms sporadically. The Board has consolidated all of the acronym definitions into Section 726.200(g), and used them throughout.

The USEPA rules also include a number of terms related to monitoring (such as "hourly rolling average"). These are repeatedly redefined in the rules (with substantially the same definition). These redefinitions occur at the 5th or 6th level of subdivision, beyond the level allowed by the Administrative Code. Therefore, to retain the definitions in situ, the Board would have to collapse the subparagraphs into a dense block of text, which would be unintelligible. The Board has instead consolidated these definitions in Section 726.200(g) also. The Board requested comment on this format, but received no response.

Shall, Must, Will and May

The Board has generally edited the USEPA text to establish a uniform usage for shall, must, will, may and related words. The wording of some of the USEPA provisions is wrong when translated into State rules, mainly because a different agency issues permits. As is discussed in previous Opinions, it is far simpler to establish a uniform usage for these terms, rather than debate whether each occurrence is correct. In making these changes, the Board intends to translate the USEPA rules into the Illinois two-agency context, using the terms as defined. The Board does not intend to make any substantive changes in the USEPA rules.

The USEPA rules are not necessarily wrong in these word usages. The Board has established special, self-consistent, usages in these rules to simplify the process of translation.

The Board has used "shall" when the subject of the sentence has to do some action if the stated condition obtains. For example, "The operator shall fill out the form..." The Board has used "must" where an action is required, but not by the subject of the sentence. For example: "The form must be filled out..."

The major change is "will" to "shall". The USEPA rules are written as neutral statements of future intent by the permit writer. For example: "[USEPA] will issue a permit if..." In the two-agency context, this becomes: "The Agency shall issue a permit if..."

The USEPA rules contain many occurrences of "may". The Board has attempted to restrict these to situations in which the operator (or Agency) has an option to do the stated action or not do it. For example, "The operator may apply for an alternative standard..." Or, "The Agency may initiate enforcement..."

A few USEPA rules specify an option in which the operator has to do one of two things. For example: "The operator may do A or B. The operator may do A; or the operator may do B". The problem with this wording is that, as "may" is defined above, it would leave open the possibility that the operator could also do C or D. These have been worded as follows: "The operator shall do either A or B. The operator shall do A; or the operator shall do B".

The USEPA rules contain many occurrences of "may not". For example, "The operator may not despoil the environment." The Board has generally changed these to "shall not".

Another repeated use of "may" is in provisions which say "evidence of X may be 'information' justifying modification or revocation ... of a permit..." The Board construes "may" in this situation as meaning that the State may or may not initiate action to modify or revoke the permit. How the Agency decides this is governed by 35 Ill. Adm. Code 703.270 et seq. However, the information either is or is not sufficient grounds. If it "is not" there would be a non-rule. The Board therefore concludes that the USEPA rule means "is", and has used "is".

"State Director"

The USEPA rules generally specify that the "State Director" is to make decisions. The Board has given the factors it considers in deciding whether a decision ought to be made by the Board or Agency in the general introduction to this Opinion. Almost all of the decisions in this Subpart are appropriate as Agency permit decisions. The Board has therefore generally changed "State Director" to "Agency". The USEPA rules include some other aphorisms, such as "permit writer" and "permit authority", which have also been changed to "Agency".

There is one occurrence of "Regional Administrator" [Section 726.204(a)(2)], which, as is discussed below, raises a question as to whether USEPA intends to retain partial administrative oversight. At the opposite extreme, some of the USEPA rules appear to leave no room for USEPA action prior to authorization [40 CFR 266.103(c)(7)(ii)].

"RCRA Operating Permit"

The USEPA rules contain many occurrences of the phrase "RCRA operating permit". This is a new term, whose meaning we do not know. USEPA corrected some of these to "RCRA permit" at 56 Fed. Reg. 43877. The Board has attempted to correct all of them, on the assumption that they are all in error.

"Particulate [Matter] Standard"

The USEPA rules include standards for particulate matter. This is sometimes abbreviated "PM". The Board has used the acronym uniformly throughout the Subpart.

USEPA sometimes apparently abbreviates "particulate matter standard" as "particulate standard". The Board believes this refers to the same thing, and has used "PM standard" throughout.

Format for Formulas and Exponents

The USEPA rules have several formulas which make extensive use of Greek letters, subscripts and a multi-line format. These violate Administrative Code format requirements. Moreover, it is nearly impossible to get these to consistently print right, and impossible to get them right in the printed versions of the rules published by the Agency and Secretary of State. This is adequately demonstrated by USEPA's efforts to correct the formulas in the Federal Register. USEPA is introducing new errors at a rate which is approximately equal to the rate of correction.

Rather than fight this battle, the Board has rewritten all of the formulas to eliminate all subscripts. Mostly this is just by dropping unnecessary subscripts. For example, "W_{out}" and "W_{in}" become "O" and "I".

Another type of subscript is indicating indexes for summation. This is related to the "Σ" notation for indicating summation. The Board has replaced this with "SUM(Xi)", a notation commonly used in computer programming, which is defined with each formula. Indices have simply been placed on the same line as the variable. Parameters for summing are always the same: i = 1 to n. These have been moved into the definition of "SUM". This avoids alignment problems which always crop up.

A similar alignment problem occurs with the use of a horizontal line to indicate division. The Board has rearranged the formulas so as to use "/" to indicate division.

The Board has had a longstanding problem with how to write, in compliance with Code Division requirements, numbers in rules using scientific notation (for example, 6.3×10^{-8}). In one format the Board has used in past rulemakings, this would be written as "6.3E-08", the form in which this would be written in many programming languages. This rule contains extensive numerical tables in which USEPA has itself adopted this format. The Board has followed this format.

In a few instances, USEPA has departed from the "E" convention. The Board has edited the text to uniformly follow this convention. In addition, in a few places USEPA has inserted

an "x" (for "times"), which the Board has deleted. For example, "6.3xE-08" has been rendered as "6.3E-08".

Certification of Precompliance

40 CFR 266.103(b) is an enormous subsection which required operators to file a "certification of precompliance" with USEPA by August 21, 1991. The time for compliance with this requirement is already past. Moreover, it appears to have no future impact. (For example, there appears to be no requirement that new facilities go through the precompliance step.) The Board has therefore [in Section 726.203(b)] simply referenced the certification of precompliance to USEPA. In other words, the Board will not require a separate certification to the Agency.

Extensions of Time

40 CFR 266.103(c) requires a certification of compliance by August 21, 1992. The Board has adopted these requirements, which will still have a future impact at the time the Board adopts them. This will mean that facilities will have to certify compliance both to USEPA and the Agency (unless USEPA authorizes Illinois to administer these rules before August). This duplicate certification appears to be mandated by Sections 7.2 and 22.4(a) of the Act.

40 CFR 266.103(c)(7)(ii) allows an extension of time for the certification of compliance. This rather large subsection starts near the maximum number of levels of subdivision allowed under the Administrative Code. If it were kept at its USEPA location, it would collapse into a dense block, and be unreadable. The Board has therefore moved it out to Section 726.219. A cross reference remains at Section 726.203(c)(7)(B).

It's rather unlikely that USEPA will authorize these rules before August, 1992. This will mean that a dual federal/State regulatory system will still be in place. It would therefore require both a State and federal extension to miss this date. An alternative approach would deem the State date extended if USEPA grants an extension. However, the USEPA rule, as written, allows only State extensions. The Board requested comment on this possible error in the USEPA rules, but received no response.

Existing Boiler Determinations

The BIF rules replace earlier rules adopted by the Board in R85-22. These include the "boiler determination" procedures of 35 Ill. Adm. Code 720.132. This is apparently unaffected by the new USEPA rules. There would still be a possibility that a person could make application for a "boiler determination". However, the effect of that determination would now be to place the unit into the new BIF rules.

The boiler and related determinations may need updating to reflect the new generic adjusted standards procedures. The Board requested comment as to whether it ought to undertake this in this Docket, but received no response.

Total Chlorine and Chloride

The USEPA rules make frequent reference to "total chlorine and chloride" and to "total chloride and chlorine". The Board believes that these are all referring to the same thing, and that the former is correct.

Section-by-Section Discussion of BIF Rules

Section 726.200

This Section is drawn from 40 CFR 266.100, which was adopted at 56 Fed. Reg. 32688, February 21, 1991. The Section was corrected at: 56 Fed. Reg. 32688, July 17, 1991; 56 Fed. Reg. 42511, August 27, 1991; and 56 Fed. Reg 43877, September 5, 1991.

This Section is the introduction to the BIF rules. This Subpart applies to boilers and industrial furnaces ("BIFs") burning hazardous waste for energy recovery or destruction, or processing for materials recovery or as an ingredient. The basic applicability terms are defined in Part 720 above.

The September 5 USEPA action added a "Note" to Section 726.200(a). This grants a stay of the applicability to coke ovens processing coke oven by-products exhibiting the toxicity characteristic. The USEPA stay will terminate when USEPA removes the "Note" from its rules. This eliminates possible problems discussed in R91-1 in connection with similar stays. The Board stay will terminate when the Board removes the note from its rules, which will occur in the normal update process within one year after USEPA removes its note.

As is discussed in general above, the Board has added Section 726.200(g). This is a collection of abbreviations and definitions implied by, but not stated in, the USEPA rules.

The first type of definition is acronyms, most of which are repeatedly defined at scattered locations in the USEPA rules. These include the following widely used acronyms which will also be used in the Opinion:

"BIF" means boiler or industrial furnace.

"CO" means carbon monoxide.

"DRE" means destruction or removal efficiency.

"HC" means hydrocarbon.

"HCl" means hydrogen chloride gas.

"MEI" means maximum exposed individual.

"MEI location" means the point with the maximum annual average off-site (unless on-site is required) ground level concentration.

"PIC" means product of incomplete combustion.

"PM" means particulate matter.

"POHC" means principal organic hazardous constituent.

"RAC" means reference air concentration, the acceptable ambient level for the noncarcinogenic metals for purposes of this Subpart. RACs are specified in Appendix D.

"RSD" means risk-specific dose, the acceptable ambient level for the carcinogenic metals for purposes of this Subpart. RSDs are specified in Appendix E.

"TESH" means terrain-adjusted effective stack height.

The Board has added additional explanation and cross-references for the definitions of "RAC" and "RSD". These are taken from 40 CFR 266.106(d)(2).

The term "MEI" ("maximum exposed individual") is used in Section 726.204(e) Several documents are referenced in that Section. The Board requested comment as to whether there might be a definition of this term in one of those references, or somewhere else, but received no response.

The second type of definition is drawn from air monitoring rules. These definitions are repeated numerous times with specific monitoring provisions. The Board has collected them into this definition set to shorten the rules, and to avoid problems which would arise because USEPA has defined these at a level of subdivision beyond what the Board can use in the Administrative Code. These definitions are as follow:

"Continuous monitor" is a monitor which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value

at least every 60 seconds.

"One hour block average" means the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour

"Rolling average for the selected averaging period" means the arithmetic mean of one hour block averages for the averaging period.

Some of these definitions were modified in the corrections listed above.

The Board has reviewed the USEPA rules, and does not see any reason why these should not be made Subpart definitions. The Board requested comment as to whether there might be some problem with making these definitions, but received no comment.

Related to the air monitoring definitions is the term "feed rate". This appears to be measured as specified in Section 726.202(e)(6). The Board has placed a cross reference in the definition.

USEPA also has a repeated definition of "good engineering practice stack height":

"Good engineering practice stack height" is as defined by 40 CFR 51.100(ii)

The Board has incorporated this by reference in 35 Ill. Adm. Code 720.111. The "51.100(ii)" is unusual, but correct. This is from a long list of lettered definitions. 51.100(ii) follows 51.100(aa), et seq. It is hard to find near 51.100(hh)(1)(ii).

The USEPA rules make frequent reference to "Tiers" I, II and III. These appear to be defined by Section 726.206(b), (c) and (d). The Board has defined the terms by reference to those Sections. The Board requested comment on this, but received no response.

The USEPA rules make frequent reference to "carcinogenic metals" and "noncarcinogenic metals", which are parenthetically defined. The Board has moved these definitions to this Section, as follows:

"Carcinogenic metals" means arsenic, beryllium, cadmium and chromium.

"Noncarcinogenic metals" means antimony, barium, lead, mercury, thallium and silver.

With respect to metals, the USEPA rules are clear that they are defining these terms in this manner. In particular, it would not make any regulatory difference if subsequent research shifted some metals from the "noncarcinogenic" to the "carcinogenic" category. The ways the rules are written, the standards and methods for addressing these metals would remain the same (until USEPA amended the rules). With respect to the nonmetals, however, the term "carcinogenic" is used in a different sense. [For example, see Section 626.204(f)(3)(D)] In this situation, the rules appear to mean "in fact carcinogenic". Moreover, there is no definition of "carcinogenic", or procedures for such determination.

The way the rules are drafted, they appear to imply that the Agency must make a case-by-case determination of carcinogenicity (of nonmetals) in the context of each permit application. If there were a list (or definition or procedure) which is dispositive of "carcinogenicity", it would need to be referenced into the rules. The Board requested comment on this, but received no response. Therefore, as adopted, this rule will require an *ab initio* determination of carcinogenicity in each case.

The term "SSU" is used in 40 CFR 266.110(f)(1) as a measure of viscosity, without definition. The Board has moved the definition to this point, and has determined that "SSU" stands for "Saybolt Seconds Universal", which is measured by ASTM D445-88 and D2161-87. These Methods are incorporated by reference in Section 720.111, above.

Another term which is used without explicit definition is "toxicity equivalent". The definition is implied by 40 CFR 266.104(e)(2). The Board has added the following definition, referencing the equivalent Board rule:

> "Toxicity equivalence" is estimated, pursuant to Section 726.204(e), using "Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners" in Appendix I ("eye").

This term is used in 40 CFR 266.103(c)(4)(ii)(B) [726.203(c)(4)(B)(ii)], prior to the implied definition.

Section 726.201 Management prior to burning

This Section is drawn from 40 CFR 266.101, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. This specifies which portions of the generator, transporter and storage facility rules apply prior to burning in a BIF.

Section 726.202 Permit standards for burners

This Section is drawn from 40 CFR 266.102, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Section was also subject to correction at 56 Fed. Reg. 32688, July 17, 1991 and 56 Fed. Reg. 42511, August 27, 1991.

40 CFR 266.102(a)(2)(vii) provides that "States and the Federal government" are exempt from the financial assurance requirement. The Board rule provides that "the State of Illinois and the federal government" are exempt.

40 CFR 266.102(b)(1) [726.202(b)(1)] governs waste analysis. It is worded as follows:

> This analysis **will be used to provide** all information required by this subpart and ... and **to enable** the permit writer to prescribe such permit conditions as necessary to protect human health and the environment.

This can be shortened and made clearer, as follows:

> This analysis **must provide** all information required by this Subpart and 35 Ill. Adm. Code 703.208 and 703.232 and **must enable** the Agency to prescribe such permit conditions as necessary to protect human health and the environment.

The analysis must "provide all information ... to enable the Agency to prescribe such permit conditions as necessary to protect human health and the environment". The analysis may be submitted with the Part B application, or for certain facilities, as a portion of a trial burn plan which "may be submitted before the Part B application". This appears to be a true option residing with the operator.

40 CFR 266.102(b)(1) also refers to "other analysis required by the Agency". The criterion for whether the Agency can require the additional analysis appears to be whether the information is necessary for it to write conditions "necessary to protect human health and the environment".

40 CFR 266.102(e)(1) [726.202(e)(1)] appears to have a typo which USEPA has not yet corrected. A BIF must be operated in accordance with the rules "at all times **where** there is hazardous waste in the unit". USEPA probably means "when", which the Board has used.

40 CFR 266.102(e)(2)(i) [726.202(e)(2)(A)] also appears to have a typo, although it is not altogether clear how to fix it. The provision reads:

> Operating conditions must be specified either: on a case-by-case basis for each hazardous waste burned **as**

> **those demonstrated** (in a trial burn or by alternative data as specified in 35 Ill. Adm. Code 703.208) to be sufficient to comply with the DRE performance standard of Section 726.204(a); or, as **those** special operating requirements provided by Section 726.204(a)(4) for the waiver of the DRE trial burn.

The Board requested comment on how to fix this, but received no response. The Board has adopted the following language [726.202(e)(2)(A)]:

> Operating conditions must be specified either: on a case-by-case basis for each hazardous waste burned, **which conditions must be demonstrated** (in a trial burn or by alternative data as specified in 35 Ill. Adm. Code 703.208) to be sufficient to comply with the DRE performance standard of Section 726.204(a); or, as special operating requirements provided by Section 726.204(a)(4) for the waiver of the DRE trial burn.

40 CFR 266.102(e)(3)(ii) and (iii) provide that, for certain types of facilities, "permit conditions to ensure compliance with the [PM] standard **shall not**" be in the permit (for facilities exempt from the PM standard). Consistent with the general discussion above on the use of "shall" and "must", the Board has edited this to "must not". [726.202(e)(3)(A) and (B)]

40 CFR 266.102(e)(5)(i)(A) [726.202(e)(5)(A)(i)] appears to have a typo which USEPA has not yet corrected. "Total chloride and chlorine" should probably read "total chlorine and chloride".

40 CFR 266.102(e)(6)(i)(B) contains definitions which have been moved to Section 726.200(g). The definitions were the subject of the corrections listed above.

40 CFR 266.102(e)(6)(i)(B) also appears to have a definition of "carcinogenic metals". This has been moved to Section 726.200(g).

40 CFR 266.102(e)(6)(iv)(B) [726.202(e)(6)(D)(ii)] includes a possible typo which USEPA has not yet corrected. The rule provides that "the **facility** must operate under trial burn conditions..." This probably should read "unit". The Board has followed the latter wording.

40 CFR 266.102(e)(6)(iv)(B) requires the unit to reach steady-state operations before testing. It includes the following proviso:

> The Director **may** determine, however, that industrial furnaces that recycle collected particulate matter back into the furnace and that comply with an alternative

> implementation approach for metals under § 266.106(f), need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals emissions.

As written this appears to allow the State the option of either making the determination or not making it, with no criterion for deciding whether to make the determination. This is probably not what USEPA meant (if an operator asks for a determination, he has a right to a yes or no answer). The Board assumes that the "may" means that the operator under the alternative approach has the option of testing before reaching steady-state, or after. This leaves open the question of whether prior approval needs to be given. The Board believes that the approval should come pursuant to the referenced 40 CFR 266.106(f) [726.206(f)], rather than this Section. The Board has therefore worded this as:

> However, industrial furnaces that recycle collected PM back into the furnace and that comply with an alternative implementation approach for metals under Section 726.206(f) need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals emissions.

40 CFR 266.102(e)(7)(ii) [726.202(e)(7)(B)] specifies general requirements for automatic waste feed cutoff. The introduction authorizes the State to limit the number of cutoffs during any operating period, as follows:

> A boiler or industrial furnace must be operated with a functioning system that automatically cuts off the hazardous waste feed when operating conditions deviate from those established under this section. **The Director may limit the number of cutoffs per an operating period on a case-by-case basis.**

Following this introduction are three other types of conditions concerning waste feed cutoffs. For example, the State is to specify minimum combustion temperature and residence times, etc. The problem with the quoted language is that it does not give any criterion by which the State decides whether to limit the number of cutoffs, or any criterion for deciding what the appropriate number should be. The Board therefore proposed not to allow such limits, but requested comment. The Board received no response.

40 CFR 266.102(e)(7)(iii) [726.202(e)(7)(C)] reads as follows:

> A [BIF] must cease burning hazardous waste when **changes in** combustion properties, or feed rates of the hazardous waste, other fuels, or industrial furnace

> feedstocks, or **changes in** the [BIF] design or operating conditions deviate from the limits as specified in the permit.

The permit should specify the combustion properties, etc. The BIF should cease burning when the combustion properties, etc. "deviate from" the permit limits. It is not clear how "changes in" the combustion properties could be specified in the permit, or how the "changes in" could "deviate from".[6] The Board has deleted the "changes in", so that Section 726.202(e)(7)(C) reads as follows:

> A BIF must cease burning hazardous waste when combustion properties, or feed rates of the hazardous waste, other fuels or industrial furnace feedstocks, or the BIF design or operating conditions deviate from the limits as specified in the permit.

40 CFR 266.102(e)(8)(i)(C) [726.202(e)(8)(A)(iii)] requires the operator to conduct sampling and analysis of waste, fuel, residue and exhaust, "Upon the request of the Director, ... to verify that the operating requirements established in the permit achieve the applicable standards..." The Board believes the "to verify" phrase is a sufficient criterion for the exercise of this authority. In that this procedure would take place following the issuance of the permit, the procedural context would either be Agency-initiated permit modification pursuant to Section 703.270 et seq., or as set out in the permit itself.

40 CFR 266.102(e)(8)(iv) [726.202(e)(8)(D)] requires weekly inspections of cutoff systems unless the operator demonstrates to the State that weekly inspections will "unduly restrict or upset operations", in which case an alternative rate (greater than monthly) must be used. The criterion appears to be adequate to allow Agency action. The procedural context would be in the permit application, or an application by the operator to modify.

Section 726.203 Interim Status Standards for Burners

This Section is drawn from 40 CFR 266.103, which was adopted at 56 Fed. Reg. 7206, February 21, 1991, and corrected as listed above. It establishes "interim status standards" for existing BIFs pending issuance of a RCRA permit.

40 CFR 266.103(a)(1)(ii) [726.203(a)(1)(B)] defines "existing" facility. This includes facilities which have

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[6]Ordinarily a permit would specify a range of operating conditions. The "changes in" language may be intended to mean "outside the specified range". However, this is taken care of by the language of the permit condition itself.

"commenced construction" by August 21, 1991. This, in turn, is conditioned on the operator having obtained "the Federal, State and local approvals or permits necessary to begin physical construction". The Board requested comment as to the identity of any specific such approvals required in Illinois for BIFs, but received no response. However, because the USEPA handled the "certification of precompliance", the definition in the State rules need only reference the action taken by the USEPA under the federal rules.

As is discussed in general above, and below in connection with Section 726.203(b), the USEPA rules required a "certification of precompliance" to be filed by August 21, 1991. The complete text of the USEPA rule is set forth below. Because these are "HSWA" rules, operators were required to file this certification with USEPA pursuant to the federal rules, even in authorized States, such as Illinois. The Board proposed to merely incorporate these rules by reference, without requiring a new certification to be filed with the Agency after adoption of the State rules. The Board received positive comment on this aspect of the Proposal, and has adopted the certification of precompliance rules as proposed.

Among other things, the "certification of precompliance" requires the operator to give public notice of the certification, to establish operating limits for the BIF, and to bind itself to meeting these limits as though they were permit conditions. The question of what is an "existing facility" arises in the context of the "certification of precompliance". If USEPA determines that the facility does qualify as an "existing facility", the facility may legally operate as an interim status BIF, subject to the operating limits established in the certification.

The Board has therefore defined "existing facility" by reference to whether the facility filed a certification of precompliance with USEPA. The language is as follows:

a) Purpose, scope, applicability.

1) General.

A) The purpose of this Section is to establish minimum national standards for owners and operators of "existing" BIFs that burn hazardous waste where such standards define the acceptable management of hazardous waste during the period of interim status. The standards of this Section apply to owners and operators of existing facilities until either a permit is issued under Section 726.202(d) or until closure responsibilities identified in this Section are fulfilled.

B) "Existing" or "in existence" means a BIF ~~that on or before August 21, 1991 is either in operation burning or processing hazardous waste or for which construction (including the ancillary facilities to burn or to process the hazardous waste) has commenced. A facility has commenced construction if the owner or operator has obtained the federal, State and local approvals or permits necessary to begin physical construction; and either:~~

~~i) A continuous on-site, physical construction program has begun; or~~

~~ii) The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction of the facility to be completed within a reasonable time.~~ <u>for which the owner or operator filed a certification of precompliance with USEPA pursuant to 40 CFR 266.103(b), incorporated by reference in subsection (b), below; provided, however, that USEPA has not determined that the certification is invalid.</u>

40 CFR 266.103(a)(1)(iii) [726.203(a)(1)(C)] reads as follows:

> If a [BIF] is located at a facility that already has a **permit or interim status**, then the **facility must** comply with the applicable regulations dealing with permit modifications ... or changes in interim status in ...

As the Board construes this, it is referring to a facility with a "RCRA permit or interim status". The common example of this would be a facility which has a hazardous waste management unit, other than the BIF, for which it already has a permit or interim status. Such a facility has to proceed by way of modification of the facility permit, instead of by the initial application procedures generally specified. Actually, it is the "owner or operator" which has to proceed, rather than the inanimate facility. The Board has adopted the following language in Section 726.203(a)(1)(C):

> If a BIF is located at a facility that already has a RCRA permit or interim status, then the owner or operator shall comply with the applicable regulations dealing with permit modifications in 35 Ill. Adm. Code

703.280 or changes in interim status in 35 Ill. Adm. Code 703.155.

40 CFR 266.103(a)(5)(i)(D) includes a reference to the "hydrocarbon controls of § 266.104(c)". This reference appears to be wrong. In Section 726.203(a)(5)(A)(iv), the Board has referenced Section 726.204(f) [266.104(f)].

Certification of Precompliance

40 CFR 266.103(b) governs the "certification of precompliance" requirement for interim status. As is discussed in general above, the Board has merely referenced the USEPA rules into Section 726.203(b). The certification of precompliance was due on August 21, 1991, which has already passed. The Board solicited comment as to whether there is any continuing need for these provisions in the Board rules. The Board received no written response.

As is discussed above, the certification of precompliance determines whether a facility which first becomes regulated because of a BIF is an "existing facility". The Board will set forth the complete text of the USEPA certification of precompliance rules in this Opinion [40 CFR 266.103(b)]:

> (b) Certification of precompliance-(1) General. The owner or operator must provide complete and accurate information specified in paragraph (b)(2) of this section to the Director on or before August 21, 1991, and must establish limits for the operating parameters specified in paragraph (b)(3) of this section. Such information is termed a "certification of precompliance" and constitutes a certification that the owner or operator has determined that, when the facility is operated within the limits specified in paragraph (b)(3) of this section, the owner or operator believes that, using best engineering judgment, emissions of particulate matter, metals, and HCl and Cl_2 are not likely to exceed the limits provided by §§ 266.105, 266.106, and 266.107. The facility may burn hazardous waste only under the operating conditions that the owner or operator establishes under paragraph (b)(3) of this section until the owner or operator submits a revised certification of precompliance under paragraph (b)(8) of this section or a certification of compliance under paragraph (c) of this section, or until a permit is issued.
>
> (2) Information required. The following information must be submitted with the certification of precompliance to support the determination that the

limits established for the operating parameters identified in paragraph (b)(3) of this section are not likely to result in an exceedance of the allowable emission rates for particulate matter, metals, and HCl and Cl_2:

(i) General facility information:

(A) EPA facility ID number;

(B) Facility name, contact person, telephone number, and address;

(C) Description of boilers and industrial furnaces burning hazardous waste, including type and capacity of device;

(D) A scaled plot plan showing the entire facility and location of the boilers and industrial furnaces burning hazardous waste; and

(E) A description of the air pollution control system on each device burning hazardous waste, including the temperature of the flue gas at the inlet to the particulate matter control system.

(ii) Except for facilities complying with the Tier I feed rate screening limits for metals or total chlorine and chloride provided by §§ 266.106 (b) or (e) and 266.107 (b)(1) or (e) respectively, the estimated uncontrolled (at the inlet to the air pollution control system) emissions of particulate matter, each metal controlled by § 266.106, and hydrogen chloride and chlorine, and the following information to support such determinations:

(A) The feed rate (lb/hr) of ash, chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium in each feedstream (hazardous waste, other fuels, industrial furnace feedstocks);

(B) The estimated partitioning factor to the combustion gas for the materials identified in paragraph (b)(ii)(A) of this section and the basis for the estimate and an estimate of the partitioning to HCl and Cl_2 of total chloride and chlorine in feed materials. To estimate the partitioning factor, the owner or operator must use either best engineering judgment or the procedures specified in appendix IX of this part.

(C) For industrial furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions standards under paragraph (c)(3)(ii)(A), the estimated enrichment factor for each metal. To estimate the enrichment factor, the owner or operator must use either best engineering judgment or the procedures specified in "Alternative Methodology for Implementing Metals Controls" in appendix IX of this part.

(D) If best engineering judgment is used to estimate partitioning factors or enrichment factors under paragraphs (b)(ii)(B) or (b)(ii)(C) respectively, the basis for the judgment. When best engineering judgment is used to develop or evaluate data or information and make determinations under this section, the determinations must be made by a qualified, registered professional engineer and a certification of his/her determinations in accordance with § 270.11(d) of this chapter must be provided in the certification of precompliance.

(iii) For facilities complying with the Tier I feed rate screening limits for metals or total chlorine and chloride provided by §§ 266.106 (b) or (e) and 266.107 (b)(1) or (e), the feed rate (lb/hr) of total chloride and chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium in each feedstream (hazardous waste, other fuels, industrial furnace feedstocks).

(iv) For facilities complying with the Tier II or Tier III emission limits for metals or HCl and Cl_2 (under §§ 266.106 (c) or (d) or 266.107(b)(2) or (c)), the estimated controlled (outlet of the air pollution control system) emissions rates of paticulate matter, each metal controlled by § 266.106, and HCl and Cl_2, and the following information to support such determinations:

(A) The estimated air pollution control system (APCS) removal efficiency for particulate matter, HCl; Cl_2, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium.

(B) To estimate APCS removal efficiency, the owner or operator must use either best engineering judgment or the procedures prescribed in appendix IX of this part.

(C) If best engineering judgment is used to

estimate APCS removal efficiency, the basis for the judgment. Use of best engineering judgment must be in conformance with provisions of paragraph (b)(2)(ii)(D) of this section.

(v) Determination of allowable emissions rates for HCl, Cl_2, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium, and the following information to support such determinations:

(A) For all facilities:

(1) Physical stack height;

(2) Good engineering practice stack height as defined by 40 CFR 51.100(ii);

(3) Maximum flue gas flow rate;

(4) Maximum flue gas temperature;

(5) Attach a US Geological Service topographic map (or eqivalent) showing the facility location and surrounding land within 5 km of the facility.

(6) Identify terrain type: complex or noncomplex; and

(7) Identify land use: urban or rural.

(B) For owners and operators using Tier III site specific dispersion modeling to determine allowable levels under § 266.106(d) or § 266.107(c), or adjusted Tier I feed rate screening limits under §§ 266.106(e) or 266.107(e):

(1) Dispersion model and version used;

(2) Source of meterological data;

(3) The dilution factor in micrograms per cubic meter per gram per second of emissions for the maximum annual average off-site (unless on-site is required) ground level concentration (MEI location); and

(4) Indicate the MEI location on the map required under paragraph (b)(2)(v)(A)(5);

(vi) For facilities complying with the Tier II or III emissions rate controls for metals or HCl and Cl_2,

a comparison of the estimated controlled emissions rates determined under paragraph (b)(2)(iv) with the allowable emission rates determined under paragraph (b)(2)(v);

(vii) For facilities complying with the Tier I (or adjusted Tier I) feed rate screening limits for metals or total chloride and chlorine, a comparison of actual feed rates of each metal and total chlorine and chloride determined under paragraph (b)(2)(iii) of this section to the Tier I allowable feed rates; and

(viii) For industrial furnaces that feed hazardous waste for any purpose other than solely as an ingredient (as defined by paragraph (a)(5)(ii) of this section) at any location other than the product discharge end of the device, documentation of compliance with the requirements of paragraphs (a)(5)(i) (A), (B), and (C) of this section.

(ix) For industrial furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions standards under paragraph (c)(3)(ii) (A) of this section:

(A) The applicable particulate matter standard in lb/hr; and

(B) The precompliance limit on the concentration of each metal in collected PM.

(3) Limits on operating conditions. The owner and operator shall establish limits on the following parameters consistent with the determinations made under paragraph (b)(2) of this section and certify (under provisions of paragraph (b)(9) of this section) to the Director that the facility will operate within the limits during interim status when there is hazardous waste in the unit until revised certification of precompliance under paragraph (b)(8) of this section or certification of compliance under paragraph (c) of this section:

(i) Feed rate of total hazardous waste and (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under § 266.106(b) or (e)) pumpable hazardous waste:

(ii) Feed rate of each metal in the following feed streams;

(A) Total feed streams, except that industrial furnaces that comply with the alternative metals implementation approach under paragraph (b)(4) of this section must specify limits on the concentration of each metal in collected particulate matter in lieu of feed rate limits for total feedstreams;

(B) Total hazardous waste feed; and

(C) Total pumpable hazardous waste feed, unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under § 266.106 (b) or (e);

(iii) Total feed rate of chlorine and chloride in total feed streams;

(iv) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited; and

(v) Maximum production rate of the device in appropriate units when producing normal product.

(4) Operating requirements for furnaces that recycle PM. Owners and operators of furnaces that recycle collected particulate matter (PM) back into the furnace and that will certify compliance with the metals emissions controls under paragraph (c)(3)(ii)(A) of this section must comply with the special operating requirements provided in "Alternative Methodology for Implementing Metals Controls" in appendix IX of this part.

(5) Measurement of feed rates and production rate-(i) General requirements. Limits on each of the parameters specified in paragraph (b)(3) of this section (except for limits on metals concentrations in collected particulate matter (PM) for industrial furnaces that recycle collected PM) shall be established and continuously monitored under either of the following methods:

(A) Instantaneous limits. A limit for a parameter may be established and continuously monitored on an instantaneous basis (i.e., the value that occurs at any time) not to be exceeded at any time; or

(B) Hourly rolling average limits. A limit for a parameter may be established and continuously monitored on an hourly rolling average basis defined as follows:

(1) A continuous monitor is one which continuously

samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(2) An hourly rolling average is the arithmetic mean of the 60 most recent 1-minute average values recorded by the continuous monitoring system.

(ii) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals (arsenic, beryllium, cadmium, and chromium) and lead may be established either on an hourly rolling average basis as prescribed by paragraph (b)(5)(i)(B) or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an averaging period from 2 to 24 hours:

(A) The feed rate of each metal shall be limited at any time to ten times the feed rate that would be allowed on a hourly rolling average basis;

(B) The continuous monitor shall meat the following specifications:

(1) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

(2) The rolling average for the selected averaging period is defined as the arithmetic mean of the most recent one hour block averages for the averaging period. A one hour block average is the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of preceding clock hour.

(iii) Feed rate limits for metals, total chloride and chlorine, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of paragraphs (b)(5)(i) and (ii) of this section.

(6) Public notice requirements at precompliance. On or before [August 21, 1991] the owner or operator

must submit a notice with the following information for publication in a major local newspaper of general circulation and send a copy of the notice to the appropriate units of State and local government. The owner and operator must provide to the Director with the certification of precompliance evidence of submitting the notice for publication. The notice, which shall be entitled "Notice of Certification of Precompliance with Hazardous Waste Burning Requirements of 40 CFR 266.103(b)", must include:

(i) Name and address of the owner and operator of the facility as well as the location of the device burning hazardous waste;

(ii) Date that the certification of precompliance is submitted to the Director;

(iii) Brief description of the regulatory process required to comply with the interim status requirements of this section including required emissions testing to demonstrate conformance with emissions standards for organic compounds, particulate matter, metals, and HCl and Cl_2;

(iv) Types and quantities of hazardous waste burned including, but not limited to, source, whether solids or liquids, as well as an appropriate description of the waste;

(v) Type of device(s) in which the hazardous waste is burned including a physical description and maximum production rate of each device;

(vi) Types and quantities of other fuels and industrial furnace feedstocks fed to each unit;

(vii) Brief description of the basis for this certification of precompliance as specified in paragraph (b)(2) of this section;

(viii) Locations where the operating record for the facility can be viewed and copied by interested parties. These locations shall at a minimum include:

(A) The Agency office where the supporting documentation was submitted or another location designated by the Director; and

(B) The facility site where the device is located;

(ix) Notification of the establishment of a facility mailing list whereby interested parties shall notify the Agency that they wish to be placed on the mailing list to receive future information and notices about this facility; and

(x) Location (mailing address) of the applicable EPA Regional Office, Hazardous Waste Division, where further information can be obtained on EPA regulation of hazardous waste burning.

(7) Monitoring other operating parameters. When the monitoring systems for the operating parameters listed in paragraphs (c)(1)(v through xiii) of this section are installed and operating in conformance with vendor specifications or (for CO, HC, and oxygen) specifications provided by appendix IX of this part, as appropriate, the parameters shall be continuously monitored and records shall be maintained in the operating record.

(8) Revised certification of precompliance. The owner or operator may revise at any time the information and operating conditions documented under paragraphs (b)(2) and (b)(3) of this section in the certification of precompliance by submitting a revised certification of precompliance under procedures provided by those paragraphs.

(i) The public notice requirements of paragraph (b)(6) of this section do not apply to recertifications.

(ii) The owner and operator must operate the facility within the limits established for the operating parameters under paragraph (b)(3) of this section until a revised certification is submitted under this paragraph or a certification of compliance is submitted under paragraph (c) of this section.

(9) Certification of precompliance statement. The owner or operator must include the following signed statement with the certification of precompliance submitted to the Director:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results and other information used to determine

conformance with the requirements of § 266.103(b) are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manages the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also acknowledge that the operating limits established in this certification pursuant to § 266.103(b) (3) and (4) are enforceable limits at which the facility can legally operate during interim status until: (1) A revised certification of precompliance is submitted, (2) a certification of compliance is submitted, or (3) an operating permit is issued."

The USEPA rules appear to have a major substantive error. As is explained at 56 Fed. Reg. 7204, this is mainly a HSWA-driven rulemaking. Therefore, USEPA administers its rules in authorized states pending authorization of the program component. However, the USEPA rule is actually worded so that the "State Director" is supposed to administer the certifications of precompliance under the USEPA rules. Even in a state which has adopted the rules before the August 21, 1991 deadline, that state would be implementing its own rules not the USEPA's. Yet the USEPA rules do not allow the Regional Administrator to administer these provisions. The Board requested comment as to how these rules were supposed to work, but received no response. The USEPA rule needs to be read as meaning "Regional Administrator" for the rule to make any sense.

Certification of Compliance

40 CFR 266.103(c) [726.203(c)] governs the "certification of compliance", which is generally due by August 21, 1992. The Board has adopted these rules. This will mean that a certification of compliance will have to be directed to IEPA. These rules suffer from the same problems as 40 CFR 266.103(b). However, if USEPA were to expect the certification to come to it directly until the rules are authorized, there would be a dual certification requirement in Illinois.

40 CFR 266.103(c)(1) requires the operator to establish limits on certain parameters based on a compliance test. The operator notifies the State of these limits, which then function as permit limits pending action by the State. 40 CFR 266.103(c)(1)(iii) [726.203(c)(1)(C)] reads as follows:

> Total feed rate of **chlorine and chloride** in total feed streams;

As is discussed above, at other points in the rules, USEPA refers to "total chlorine and chloride", the term the Board has used. This however, puts three "totals" into this provision. Section 726.203(c)(1)(C) reads as follows:

> Total feed rate of total chlorine and chloride in total feed streams;

40 CFR 266.103(c)(3)(ii)(B) [726.203(c)(3)(B)(ii)] governs compliance testing for interim status facilities. It requires analysis for metals content to be sufficient to determine "if changes in metals content **may** affect the ability of the **facility** to meet the metals emissions standards..." There are two problems with this language. First, as "may" is defined above, "may affect" would seem to mean "may or may not affect", resulting in a non-rule. The Board has changed "may affect" to "affect", which seems to say what USEPA intended.

Second, "facility" should probably be changed to "unit", since the emissions standards would apply to each unit on a facility.

In 40 CFR 266.103(c)(4)(ii)(B), USEPA has a list which exceeds the four levels of subdivision allowed in the Administrative Code. The subsections have therefore been collapsed into Section 726.203(c)(4)(B)(ii).

In 40 CFR 266.103(c)(4)(ii)(B)(5) [726.2003(c)(4)(B)(ii)], there is a reference to the "toxicity equivalency factor". The implied definition is in Section 726.204(e)(2), which the Board has referenced in the definitions [Section 726.200(b)].

40 CFR 266.103(c)(4)(iv)(B) and (C) also have excess levels of subdivision. However, the definitions have been moved to Section 726.200(g), as discussed above.

The header for 40 CFR 266.103(c)(4)(iv)(D) [726.203(c)(4)(D)(iv)] has a "total chloride and chlorine" which the Board has corrected to "total chlorine and chloride".

40 CFR 266.103(c)(4)(v) [726.103(c)(4)(E)] specifies the form for the certificate of compliance. The second paragraph of the conditions refers to "operating **conditions** established **in this certification** pursuant to § 266.103(c)(4)(v)". There are two minor problems with this wording. First, the quoted Section establishes "operating **limits**", the phrase the Board has used. Second, **"in this certification"** doesn't seem to make any sense at all. The Board has to omitted it, so that the provision reads:

I also acknowledge that the operating limits established pursuant to 35 Ill. Adm. Code 726.203(c)(4)(D) are enforceable limits at which the facility can legally operate during interim status until a revised certification of compliance is submitted.

40 CFR 266.103(c)(5) [726.203(c)(5)] provides that "a conditioned gas monitoring system may be used..." for HC under certain conditions. This appears to be a true option which the operator may exercise.

40 CFR 266.103(c)(7)(B) authorizes case-by-case extensions for the compliance times for the certification of compliance. The Board has moved this to Section 726.219, since it exceeds the available levels of subdivision in the Administrative Code, and since it is potentially more complex at the State level.

40 CFR 266.103(h) governs fugitive emissions at interim status BIFs. Subsection (h)(3) allows: "An alternate means of control that the owner or operator **can** demonstrate **provide** fugitive emissions control equivalent" to negative pressure. There are two problems with this language. First, the USEPA language is subject to the interpretation that the operator can unilaterally apply the alternate means if he believes he "can demonstrate" equivalency. The Board has dropped the "can" to make it clear that the operator must actually make this demonstration in the context of a permit application. Second, "provide" is not grammatically correct. It should be either demonstrates "provides" or "to provide". The Board has adopted the former.

40 CFR 266.103(i) includes the "changes in ... deviate from" language discussed above in connection Section 726.202(e)(7)(C). The Board has deleted the "changes in" consistent with that discussion.

40 CFR 266.103(j)(1)(i) has a "total chloride and chlorine" which the Board has corrected in Section 726.203(j)(1)(A).

Section 726.204 Standards for Organic Emissions

This Section is drawn from 40 CFR 266.104, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The USEPA rule was also corrected as noted above. This Section sets a "destruction and removal efficiency" ("DRE") standard for "principal organic hazardous constituents" ("POHCs"). This is similar to Section 724.443, governing incinerators. The Section also includes standards for carbon monoxide (CO), hydrocarbons (HC), dioxins and furans.

The formula in 40 CFR 266.104(a)(1) was corrected at 56 Fed.

Reg. 32688. As is discussed in general above, the Board has further simplified the formula to avoid future errors.

40 CFR 266.104(a)(2) [726.204(a)(2)] governs the selection of POHCs. The Agency selects the POHCs based on the hazardous constituents list in 35 Ill. Adm. Code 721.Appendix H [40 CFR 261, App. VIII] and the constituents present in the waste feed. The Agency normally selects as POHCs hazardous constituents which are in the waste feed. However, the subsection goes on to provide:

> However, if the **applicant** demonstrates to the **Regional Administrator's satisfaction** that a compound not listed in appendix VIII **or** not present in the normal waste feed is a suitable indicator of compliance with the DRE requirements of this section, that compound **may be** designated as a POHC. Such POHCs need not be toxic or organic compounds.

There are several potential problems with this language. First, the designation of alternate POHCs appears to be triggered only on "application". This seems to mean that the permit writer cannot add alternate POHCs on his own initiative. This would foreclose regulation of toxic materials formed in the combustion process, unless the process is initiated by the operator. The Board has followed this formulation. The alternative would be to word this as "If the Agency determines...", without necessarily requiring an application. The Board solicited comment on the alternative, but received no response.

Second, while the USEPA rule is specific that the "State Director" is supposed to make the basic POHC determination, the rule is worded such that only the "Regional Administrator" can designate alternate POHCs. It is possible that USEPA intends that the Regional Administrator should retain this authority. However, there is no specific application process set up. The Board believes this is an editorial error by USEPA, and that USEPA intends to delegate this to the State also. The Board has therefore substituted "Agency" for "Regional Administrator". The Board solicited comment, but received no response.

Third, the applicant must make this demonstration "to the Regional Administrator's satisfaction". There are two problems with this formulation. It is worded: as a subjective standard; and, as a personal decision by the Regional Administrator. The Board has reworded this to make it a collective decision by the Agency, based on an objective standard. As adopted, the applicant would just "demonstrate to the Agency".

Fourth, while normal POHCs are both listed **and** present in the feed, the conditions for the alternative are worded as alternatives: "a compound not listed in appendix VIII **or** not

present in the normal waste feed". In other words, an alternative could be: an unlisted constituent which is in the waste; a listed constituent which is not in the feed; or, a constituent which is neither listed nor in the feed.

Fifth, the USEPA rule provides that the alternative "may be" designated as a POHC if the requirements are met. The Board believes that, if the applicant makes the required showing, he is entitled to the alternative POHC. The Board has therefore worded this as "must be".

The language adopted by the Board in Section 726.204(a)(2) is as follows:

> However, if the applicant demonstrates to the Agency that a compound not listed in 35 Ill. Adm. Code 721.Appendix H or not present in the normal waste feed is a suitable indicator of compliance with the DRE requirements of this Section, that compound must be designated as a POHC. Such POHCs need not be toxic or organic compounds.

40 CFR 266.104(c)(1) allows for an alternative CO standard. It provides that emissions "may exceed" the 100 ppmv limit under certain circumstances. This appears to be a true option residing in the operator.

40 CFR 266.104(f) [726.204(f)] allows an alternative HC limit for furnaces with organic matter in raw material.

> [T]he **Director may** establish an alternative HC limit on a case-by-case basis (under a part B permit proceeding) at a level that ensures that flue gas HC (and CO) concentrations when burning hazardous waste are not greater than when not burning hazardous waste (the baseline HC level) provided...

The Board has rendered this as the "Agency shall establish an alternative..." If the applicant makes the required showing, he is entitled to the alternative.

40 CFR 266.104(f)(3)(iii)(A) [726.204(f)(3)(C)(i)] provides that:

> Sampling and analysis of organic emissions shall be conducted using procedures prescribed by the Director.

This applies to the alternative HC limit. It prescribes sampling and analysis to be conducted during a trial burn. It is unclear as to the procedural context in which the Director is to make this determination. The Board assumes a reference to new 40 CFR 270.22(a) is intended. This would be equivalent to 35 Ill. Adm.

Code 703.232(d). The Board requested comment as to whether this is correct, but received no response.

40 CFR 266.104(f)(3)(iv)(A) and (B) make reference to the "noncarcinogenic" and "carcinogenic" compounds in Appendix IV an V [Appendix D and E]. As is discussed above, carcinogenicity of non-metals is determined on a case-by-case basis.

40 CFR 266.104(g) provides that cement kilns "may comply" with the CO and HC limits "by monitoring in the by-pass duct" under certain conditions. This appears to be a true option for the operator.

Section 726.205 PM Standards

This Section is drawn from 40 CFR 266.105, which was adopted at 56 Fed. Reg. 7206, February 21, 1991.

Section 726.206 Metals Standards

This Section is drawn from 40 CFR 266.106, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. It was also corrected as described above. This Section specifies emissions standards for metals.

40 CFR 266.106(b)(1) deals with "noncarcinogenic metals", which are implicitly defined as "antimony, barium, lead, mercury, thallium and silver". These have been defined in Section 726.200(g).

40 CFR 266.106(b)(1)(i) and (ii) [726.206(b)(1)(A) and (B)] contain cross references to definitions of "hourly rolling average". As is discussed in general above, the Board has moved these definitions to Section 726.200(g), which is cited here also.

40 CFR 266.106(b)(2) deals with "carcinogenic metals", which are implicitly defined as "arsenic, cadmium, beryllium and chromium". These have been defined in Section 726.200(g).

40 CFR 266.106(b)(2) includes a formula which limits the emissions of carcinogenic metals. The Board has changed the format of the formula along the lines discussed in general above. This reflects a substantive change to the formula which was made in the July 17 Federal Register correction ("<" to "≤").

40 CFR 266.106(b)(3) [726.206(b)(3)] defines the "terrain adjusted effective stack height" ("TESH"). The definition of the acronym and "good engineering practice stack height" have been moved to Section 726.200(g).

40 CFR 266.106(b)(3)(iii) [726.206(b)(3)(C)] reads as

follows:

> If the TESH for a **particular facility** is not listed in the table in **the appendices**, the nearest lower TESH listed in the **table** shall be used. If the TESH is four meters or less, a value of four meters shall be used.

There are several potential problems with this language. The first is the reference to "the appendices". The Board believes this is a reference to Appendices I through III [A through C].

The second problem is the reference to "tables". This may be prohibited under the Administrative Code, since a "Table" is a portion of a rule which is different than an "Appendix".

Third, the reference to a "particular facility" would lead one to expect the "appendices" to list facilities by name. This is not the case, at least with Appendices I - III [A - C]. Indeed, these do not contain a listing of "TESHs" at all. Rather, it is a listing of "feed rates and emissions screening limits" for various values of TESH. The Board is unable to find any tables in the Appendices which list TESH as the output. Moreover, any such table would contradict the formula in 40 CFR 266.106(b)(3)(i) [726.206(b)(3)(A)], which gives a value of TESH based on physical stack height, plume rise and terrain rise. The Board therefore believes that this paragraph is totally wrong. One possibility, which the Board assumes to be the case, is that the paragraph is telling people which value of the "feed rates and emissions screening limits" to use for various values of TESH.[7] The Board has redrafted 40 CFR 266.106(b)(3)(iii) [726.206(b)(3)(C)] to read as follows:

> If the TESH calculated pursuant to subsection (b)(3)(A) is not listed in Appendices A - C, the values for the nearest lower TESH listed in the table must be used. If the TESH is four meters or less, a value based on four meters must be used.

40 CFR 266.106(b)(6) gives a formula for the "worst case stack" to be used for compliance purposes if there are multiple stacks. The adopted rule reflects major revisions in the July 17 correction.

40 CFR 266.106(b)(7) specifies conditions under which facilities must use stricter "Tier III" screening limits. 40 CFR 266.106(b)(7)(v) [726.206(b)(7)(E)] requires "Tier III" limits if:

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[7]The other possibility, which the Board is not following, is that this paragraph is a relic from an earlier draft, which may have had a table instead of the formula.

> The Director determines that standards based on site-specific dispersion modeling are required.

This language was present in the proposal. The Board indicated it would delete it unless commenters provided the Board with meaningful criteria for this decision. The Board received no response, and has therefore deleted this provision.

40 CFR 266.106(d) governs the "Tier III site-specific risk assessment". 40 CFR 266.106(d)(2) [726.206(d)(2)] reference the RACs and RSDs of Appendices IV and V [D and E]. These are specified as "for purposes of this **rule**". This is ambiguous. The Board believes that "Subpart" is intended, and has used that term instead.

The formula in 40 CFR 266.106(d)(3) was corrected on July 17. However, in attempting to correct minor errors in appearance, USEPA has made a major error in the formula as corrected. This amply illustrates the futility of attempting to write the formulas in this format.

40 CFR 266.106(e) reads as follows:

> Adjusted Tier I feed rate screening limits. The owner or operator **may** adjust the feed rate screening limits provided by Appendix I ... to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit for a metal is determined by back-calculating from the acceptable ambient levels provided by Appendices IV and V ... using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit. The feed rate screening limits for carcinogenic metals are implemented as prescribed in paragraph (b)(2)...

The USEPA rule is ambiguous as to the procedural context for this adjustment. The Board believes that this provision is giving the operator an option to use alternative calculations in filing the Part B application. The Agency has no basis to object to this. However, once the permit is issued, the operator cannot change the method of calculation without filing a new permit application. With this understanding, the language is acceptable, and appears in substantially the same form in Section 726.206(e).

40 CFR 266.106(f)(1) [726.206(f)(1)] reads as follows:

> The Director **may** approve on a case-by-case basis approaches to implement the Tier II or Tier III metals emission limits provided by paragraphs (c) or (d) of this section alternative to monitoring the feed rate of

metals in each feedstream.

The rule then goes on to specify how the generally applicable rules are to be modified under the alternative approach. The Board believes that this forms the criterion under which the Agency is to decide whether to approve the alternative. Consistent with this, the Board has added a citation to subsection (f)(2). The language is as follows:

> Pursuant to subsection (f)(2), the Agency shall approve on a case-by-case basis approaches to implement the Tier II or Tier III metals emission limits provided by subsections (c) or (d) alternative to monitoring the feed rate of metals in each feedstream.

40 CFR 266.106(h) contains references to Appendices X and IX, in that order. These correspond with Appendices J and I. It is unusual to cite numbered documents out of order, raising the possibility of a typo. However, the citations appear to be correct. The Board has followed the federal language.

Section 726.207 Standards for HCl and Cl_2

This Section is drawn from 40 CFR 266.107, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Section was also corrected as described above. This Section sets emission standards for hydrogen chloride and chlorine gas.

40 CFR 266.207(e) provides for adjusted Tier I feed rate screening limits. The citation to "Appendix I" was corrected to "Appendix II" [Appendix B] in the July 17 corrections.

40 CFR 266.207(e) provides that "The owner or operator **may** adjust the feed rate screening limit provided by Appendix B..." This poses the same problems as discussed above in connection with 40 CFR 266.106(e) [726.207(e)]. The Board has left this as "may adjust", with the same understanding as discussed above.

Section 726.208 Small Quantity Exemption

This Section is drawn from 40 CFR 266.208, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. It was also corrected as discussed above. This Section creates an exemption for on-site burning by small quantity generators.

On July 17, USEPA corrected 40 CFR 266.108(a) to create an exemption from the entire Subpart.

40 CFR 266.108(a)(1) includes a table which gives exempt quantities as a function of TESH. The table has been moved to Table A, which will appear after the Appendices.

40 CFR 266.108(c) includes a formula which was corrected on July 17. The correction specifies that the "<" symbol should be changed to "≤". However, although the February 21 Federal Register is only marginally legible, it appears to be correct. Moreover, the disks provided by USEPA have this as "≤".[8] The Board has adopted this as "≤". USEPA has not corrected the major error in the formula, which is the alignment of the "≤ 1.0". The Board has avoided this problem altogether by reformatting the formulas, as discussed above.

40 CFR 266.108(d) [726.208(d)] requires exempt facilities to notify USEPA. The Board has required the notice to be directed to the Agency.

40 CFR 266.108(d)(3) [726.208(d)(3)] requires the exempt operator to notify the appropriate agency of the "The maximum quantity of hazardous waste that the facility **may** burn per month as provided by..." The Board has rendered this as "is allowed to burn".

Section 726.209 Low Risk Waste Exemption

This Section is drawn from 40 CFR 266.109, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. This Section was also corrected as noted above. It provides "waiver" mechanisms for "low risk waste". If the "waivers" are granted, the unit is exempt from the DRE and/or PM standards.

An initial question centers on whether the "waivers" are in the nature of permit decisions which the Agency can make pursuant to Section 39 of the Act, or whether they are decisions which are reserved to the Board. A general discussion of the factors the Board considers in making this type of determination appears in the introduction to this Opinion.

One consideration is whether this is, on the one hand, truly a "waiver" of a Board rule, which would require some form of Board action, or, on the other hand, merely a permit decision which requires the applicant to comply with an alternative Board regulation. The Board does not believe that the "waivers" in the USEPA rules amount to waivers which would require Board action. To receive an exemption, the operator makes a technical showing of a type which is ordinarily received by the Agency in permit applications. The showing establishes that there is no need for

[8]One possibility, which the Board is not following, is that USEPA intended to change this from "≤" to "<", but stated the correction backwards. However, if the formula were applied to a single stack burning the allowable quantity, Ci/Li would equal 1. Since the facility would be burning an "allowable quantity", "≤" would be correct.

compliance with DRE and PM standards. The operator is required to comply with conditions, specified by Board rule, which operate in lieu of these standards. Moreover, the operator remains subject to the rest of the regulatory program, including other standards and the permit requirement. The Board therefore has adopted these "waivers" as Agency permit decisions.

One of the criteria for exemption from the DRE standard is that the BIF must primarily burn fossil or similar fuel. 40 CFR 266.109(a)(1)(i) reads as follows:

> A minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the Director on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel.

The standard for the case-by-case decision is "nonhazardous fuel with combustion characteristics comparable to fossil fuel". This is again a technical determination which is appropriate for Agency decision in the context of permit issuance. Section 726.209(a)(1)(A) reads as follows:

> A minimum of 50 percent of fuel fired to the device must be fossil fuel, fuels derived from fossil fuel, tall oil or, if approved by the Agency on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel.

The Section goes on to define the terms used in this provision. These were the subject of corrections on both July 17 and August 27, 1991.

40 CFR 266.109(a)(2)(iv)(B) [726.209(a)(2)(D)(ii)] contains a formula in narrative form:

> For the carcinogenic compounds listed in [Appendix E], the sum for all constituents of the ratios of the actual ground level concentration to the level established in [Appendix E] cannot exceed 1.0;

This could be written like similar provisions, as follows:

SUM(Ai/Li) ≤ 1.0

where:

SUM(Xi) means the sum of the values of X for each carcinogen i, from i = 1 to n.

n means the number of carcinogenic compounds;

Ai = Actual ground level concentration of carcinogen "i".

Li = Level established in Appendix E for carcinogen "i".

The Board has adopted the formula format.

Section 726.210 Waiver of DRE trial Burn for Boilers

This Section is drawn from 40 CFR 266.110, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. This Section was also corrected as discussed above.

This Section contains a "waiver" of the trial burn requirement and DRE standard for boilers. This is rather similar to the preceding Section. The "waiver" is again a permit-type decision in which the Agency applies an alternative set of Board regulations after reviewing a technical submission in a permit application. No Board action is required for the "waiver".

40 CFR 266.110(f)(1) limits hazardous waste fuel burned under the waiver to that with a viscosity less than "300 SSU". The Board has defined this (as "Saybolt Seconds Universal") in Section 726.200(g).

Section 726.211 Standards for Direct Transfer

This Section is drawn from 40 CFR 266.111, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. It was corrected in the August 27 Federal Register. This Section governs the direct transfer of hazardous waste from a vehicle to a BIF, without a storage unit intervening.

40 CFR 266.111(c)(2) reads as follows:

> Direct transfer equipment used for pumpable hazardous waste must always be closed, except when necessary to add or remove the waste, and must not be opened, handled or stored in a manner that **may** cause any rupture or leak.

As is discussed above, the Board has attempted to restrict the use of "may" to situations in which the operator or Agency has an option. This usage does not fit that mold. The Board has rendered this as "could", which appears to mean the same thing.

40 CFR 266.111(d)(2) was substantially amended in the August 27 corrections. This added a reference to NFPA 30, the "Flammable and Combustible Liquids Code". Rather than repeat the bibliographical information, the Board has just cited to the preexisting reference in 35 Ill. Adm. Code 720.111.

Section 726.212 Residues

This Section is drawn from 40 CFR 266.112, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Section was the subject of extensive modification in the August 27 corrections discussed above. The Section number was corrected in the July 17 corrections.

This Section regulates residues from BIFS.

Section 726.219 Extensions of Time

This Section was drawn from 40 CFR 266.103(c)(7)(ii), which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Section was also subject to the correction in the July 17, 1991, Federal Register, as discussed above. This Section allows a case-by-case extension of time to file the certification of compliance pursuant to Section 726.203(c) [266.103(c)]. These provisions have been moved out of the main text, since the USEPA text uses levels of subdivision which are not allowed in the Administrative Code. Moreover, this procedural text could become more complex at the State level.

This Section poses a question as to whether it is the Board or Agency which should be able to grant this extension of time. The general factors which the Board considers in making this type of decision are discussed above, in the general introduction to this Opinion.

This decision amounts to an extension of time to file a document which functions in lieu of a permit. Moreover, it amounts to a temporary variance from the requirement to comply with the HC standards. This clearly requires a Board action. The variance procedures of Title IX of the Act are an appropriate procedural mechanism for granting a temporary extension of a compliance deadline. Indeed, this provision is similar to the extension of time to file a Part A application under 35 Ill. Adm. Code 703.150(c), which requires a variance petition.

The Board has therefore required a person seeking extension of time for filing the certification of compliance to file a RCRA variance petition pursuant to 35 Ill. Adm. Code 104. The Board will grant the variance if the petitioner meets the requirements for the extension derived from the USEPA rules, and otherwise meets the requirements for a variance. The following is the text of Section 726.219:

Section 726.219 Extensions of Time

The owner or operator may request a case-by-case extension of time to extend any time limit provided by Section 726.203(c). The operator shall file a petition

for a RCRA variance pursuant to 35 Ill. Adm. Code 104. The Board will grant the variance if compliance with the time limit is not practicable for reasons beyond the control of the owner or operator.

a) In granting an extension, the Board will apply conditions as the facts warrant to ensure timely compliance with the requirements of Section 726.203 and that the facility operates in a manner that does not pose a hazard to human health and the environment;

b) When an owner and operator request an extension of time to enable them to obtain a RCRA permit because the facility cannot meet the HC limit of Section 726.204(c):

1) The Board will, in considering whether to grant the extension:

A) Determine whether the owner and operator have submitted in a timely manner a complete Part B permit application that includes information required under 35 Ill. Adm. Code 703.208(b); and

B) Consider whether the owner and operator have made a good faith effort to certify compliance with all other emission controls, including the controls on dioxins and furans of Section 726.204(e) and the controls on PM, metals and HCl/chlorine gas.

2) If an extension is granted, the Board will, as a condition of the extension, require the facility to operate under flue gas concentration limits on CO and HC that, based on available information, including information in the Part B permit application, are baseline CO and HC levels as defined by Section 726.204(f)(1).

BOARD NOTE: Derived from 40 CFR 266.103(c)(7)(ii), adopted at 56 Fed. Reg. 7206, February 21, 1991; and 56 Fed. Reg. 32688, July 17, 1991.

As is discussed in the general introduction to this Subpart, the BIF rules are mainly HSWA-driven. Ordinarily such rules would be administered by USEPA up to the point of authorization. However, USEPA's rules appear to allow only the "State Director"

to grant these waivers. If USEPA does intend to retain control, this provision would require both a Board variance and USEPA approval prior to authorization.

Appendix A Tier I and II Feed Rate and Emissions Screening Limits

This Appendix was drawn from 40 CFR 266, Appendix I, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Appendix was also subject to the corrections in the July 17 and August 27, 1991, Federal Registers, as discussed above.

There is possible confusion in the numbering between the USEPA and Board Appendices. USEPA Appendix I corresponds with Board Appendix A. USEPA Appendix IX corresponds with Board Appendix I. The Board's method of numbering is dictated by Administrative Code requirements, which the Board cannot change. However, to avoid confusion, in the text of the rules, the Board has inserted "('eye')" after each reference to Appendix I, to remind readers that this is letter "I", not Roman numeral "one".

This Appendix sets "feed rate and emissions screening limits" for metals. The title of Table I-A was corrected to refer to "noncarcinogenic metals" in the July 17, 1991 corrections.

Appendix B Tier I feed rate screening limits for Total Chlorine

This Appendix was drawn from 40 CFR 266, Appendix II, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Appendix was also subject to the corrections in the July 17, 1991, Federal Register, as discussed above.

The original text of this Appendix set screening limits in lbs/hr. This was changed to g/hr in the correction.

The title of 40 CFR 266, Appendix II was also changed in the July 17, 1991, correction. While the original table referred to screening limits for "total chlorine and chloride", the corrected table is headed as just "total chlorine". This may be an error by USEPA, since the related rules use this table to regulate "total chlorine and chloride". However, the Board has followed the USEPA text.

Appendix C Tier II Emission Rate screening limits for free chlorine and hydrogen chloride.

This Appendix was drawn from 40 CFR 266, Appendix III, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Appendix was also subject to the corrections in the July 17, 1991, Federal Register, as discussed above.

The numerical data in this table was changed from g/sec to g/hr, necessitating retyping. In addition, two columns were added, giving emission rates for urban and rural areas with "complex terrain", which is defined in the rules. This apparently replaces the separate two-column table for complex terrain which appeared in the original rules.

Appendix D Reference Air Concentrations ("RACs")

This Appendix was drawn from 40 CFR 266, Appendix IV, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Appendix was also subject to the corrections in the July 17, 1991, Federal Register, as discussed above.

"RAC" is defined in Sections 726.200(g) and 726.206(d)(2). This is the acceptable ambient level for the noncarcinogenic metals for purposes of this Subpart.

Following Appendix IV [D] is a note specifying that other 40 CFR 261, Appendix VIII [H] constituents have a RAC of 0.1 ug/ cu m. Footnotes are not allowed in Administrative Code rules. The Board has rendered this as a "Board Note" at the beginning of the Appendix.

The July 17, 1991, corrections involve the spelling of chemical names. The Board has corrected additional names.

Appendix E Risk Specific Doses (RSDs)

This Appendix was drawn from 40 CFR 266, Appendix V, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. As defined in Sections 726.200(g) and 726.206(d)(2), this is the acceptable ambient level for the carcinogenic metals for purposes of this Subpart. These are based on a risk of 1E-05, or 1/100,000.

The Appendix has two columns. One is headed "Unit risk (m3/ug)". The other is headed "RsD (ug/m3)". The Board has corrected these to use the abbreviations outlined above, so they read: "Unit risk (cu m/ug)" and "RSD (ug/cu m)". The Board requested comment as to whether these headings might be in error, but received no response.

Appendix F Stack Plume Rise

This Appendix was drawn from 40 CFR 266, Appendix VI, which was adopted at 56 Fed. Reg. 7206, February 21, 1991. This gives the stack plume rise, which is used in the formula for TESH in Section 726.206(b)(3).

Appendix G Limits for Exclusion of Residues

This Appendix was drawn from 40 CFR 266, Appendix VII, which

was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Appendix was also subject to the corrections in the July 17, 1991, Federal Register, as discussed above. This Appendix is used, in Section 726.212, in connection with the exclusion of certain BIF residues from regulation as hazardous wastes.

Appendix VII [G] includes two tables. While the first specifies "Metals - TCLP Extract Concentration Limits", the second specifies "Nonmetals - Residue Concentration Limits" The July 17 corrections included replacing the entries for thallium in the "Nonmetals" table with a single entry under "Metals".[9]

A second correction changed the units for the TCLP extraction limits from "mg/kg" to "mg/L", the appropriate units for extraction limits. However, USEPA has not changed the footnote following the Appendix, which continues to specify "mg/kg" for all other 40 CFR 261, Appendix VIII [H] constituents. This is may be an error, since there are additional constituents which could be measured by the TCLP test, for which the limit ought to be stated in mg/L. However, this probably doesn't make a lot of difference, since the density of the TCLP extract is approximately 1 mg/L, so that mg/L is approximately equal to mg/kg. The Board requested as to whether it ought to try to fix this apparent error, but received no response. The Board has followed the USEPA text.

Appendix H Potential PICs

This Appendix was drawn from 40 CFR 266, Appendix VIII [H], which was adopted at 56 Fed. Reg. 7206, February 21, 1991. The Appendix was also subject to the corrections in the July 17, 1991, Federal Register, as discussed above. These are used in connection with the residue exclusions in Section 726.212.

Appendix I Methods Manual for Compliance with BIF Regulations

This Appendix was drawn from 40 CFR 266, Appendix IX, which was adopted at 56 Fed. Reg. 32688, July 17, 1991. The Appendix was also subject to the corrections in the August 27, 1991, Federal Register.

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[9]Actually, these headings are misleading. There are metal salts in the nonmetals table (nickel cyanide), and nonmetals in the metals table (selenium and, arguably, thallium). Also, there are nonmetals for which the TCLP test could be used. It would be better if the metals/nonmetals distinction were dropped from the tables. The true distinction is that, while some parameters are to be measured by TCLP, others are to be measured in the whole residue.

This and the following Appendix were referenced, but not contained in, the original February 21, 1991, Federal Register. While the original reference was to the NTIS documents, USEPA published the entire documents with the July 17 corrections.

Because these documents are rather lengthy and detailed, the Board has not adopted the verbatim text. Rather, the Board will incorporate the text by reference.

The Board has cited to both the NTIS and the CFR versions of these documents, since the NTIS version is apt to be more available and usable to some people than the CFR version. The citation is as follows:

> See "Methods Manual for Compliance with BIF Regulations". This document is available from two sources. It is available through NTIS, incorporated by reference in 35 Ill. Adm. Code 720.111. It is also available as 40 CFR 266, Appendix IX, adopted at 56 Fed. Reg. 32688, July 17, 1991 and amended at 56 Fed. Reg. 42511, August 27, 1991, which is incorporated by reference. This incorporation includes no future editions or amendments.

The references are handled differently because, while the CFR version is a "normal" incorporation by reference, the NTIS version is "abnormal". The "normal" incorporation occurs at the point in the text which is equivalent to the USEPA rule cited. Any amendments will automatically be incorporated in the normal updating process. On the other hand, the NTIS version is an "abnormal" reference, which belongs in 35 Ill. Adm. Code 720.111. Updatinq of that reference would be handled differently.

Appendix J Guideline on Air Quality Models

This Appendix was drawn from 40 CFR 266, Appendix X, which was adopted at 56 Fed. Reg. 32688, July 17, 1991. The Appendix was also subject to the corrections in the August 27, 1991, Federal Register. It is subject to the same problems as Appendix I. The text of the reference is as follows:

> See "Guideline on Air Quality Models (Revised)". This document is available from two sources. It is available through NTIS, incorporated by reference in 35 Ill. Adm. Code 720.111. It is also available as 40 CFR 266, Appendix X, adopted at 56 Fed. Reg. 32688, July 17, 1991 and amended at 56 Fed. Reg. 42511, August 27, 1991, which is incorporated by reference. This incorporation includes no future editions or amendments.

Appendix K Lead-Bearing Materials in Exempt Lead Smelters

This Appendix was drawn from 40 CFR 266, Appendix XI, which was adopted at 56 Fed. Reg. 42511, August 27, 1991. This again is an addition to the original February 21, 1991 rules. It contains a list of the types of lead-bearing hazardous waste which can be introduced into a lead smelter which is exempt from the BIF rules. The exemption appears above in connection with Section 726.200(c).

Appendix L Nickel or Chromium-Bearing Materials in exempt Nickel-Chromium Recovery Furnaces

This Appendix was drawn from 40 CFR 266, Appendix XII, which was adopted at 56 Fed. Reg. 42511, August 27, 1991. This again is an addition to the original February 21, 1991 rules. It contains a list of the types of nickel or chromium-bearing materials in exempt Nickel-Chromium Recovery Furnaces which are exempt from the BIF rules. The exemption appears above in connection with Section 726.200(c).

40 CFR 266, Appendix XII contains the following footnote: "If a hazardous waste under an authorized State program." It's not clear how to translate this into a State rule. At a deeper level, it's not clear what function this note serves. If the waste were not a hazardous waste, there would be no prohibition at all on burning it in the recovery furnace. If it were, then it would be exempt, the same result. The Board has therefore simply omitted it from Appendix L.

PART 728: LAND DISPOSAL BANS

This Part contains the USEPA land disposal prohibitions. It was extensively amended in R90-11, to add the enormous "third third" land disposal regulations. During the pendency of R90-11, USEPA published a massive correction of the third third rules, at 56 Fed. Reg. 3876, January 31, 1991. The Board made a small number of these corrections in R90-11. However, it was not possible to address all the corrections in R90-11. Apart from the sheer volume of the corrections, there is the added problem of identifying what has been changed, since USEPA does not use a "strike and underline" format in the Federal Register.

Almost all of the revisions to this Part stem from the third third correction. The Board will expressly indicate any changes which do not arise from the third third corrections.

Section 728.107

The amendments to this Section include more or less identical changes in wording to the following provisions: Section 728.107(a)(1)(B), (a)(2)(A)(ii), (a)(3)(B) and (b)(4)(B). These include references to the USEPA definitions of "wastewater" and "nonwastewater" in 40 CFR 268.2(f) and (d). The equivalent

Board definitions are in Section 728.102. However, they appear as an alphabetical list, in accordance with Code Division requirements, rather than as lettered subsections. The Board has therefore replaced the specific references with a general reference to the definition list. The Board's rule is as follows:

> [The notice must include...]The corresponding treatment standards for wastes F001-F005, F039 and wastes prohibited pursuant to Section 728.132 or Section 3004(d) of the Resource Conservation and Recovery Act, referenced in Section 728.139. Treatment standards for all other restricted wastes must either be included, or be referenced ~~as above, or~~ by including on the notification the ~~subcategory of the waste, the treatability group(s) of the waste(s),~~wastewater or nonwastewater (as defined in Section 728.102) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003, reactive cyanides), and the Section and subsection where the applicable treatment standard~~s~~ appears...

The USEPA correction also includes a new 40 CFR 268.107(a)(6), which reads as follows:

> If a generator determines that the he is managing a restricted waste that is excluded from the definition of hazardous or solid waste or exempt from Subtitle C regulation, under 40 CFR 261.2 - 261.6 subsequent to the point of generation, the he must place a one-time notice stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from Subtitle C regulation, and the disposition of the waste, in the facility's file.

There are quite a few problems with this language. The first has to do with the references to "Subtitle C regulation". This is a reference to Subtitle C of the federal RCRA Act, which governs hazardous waste. At the State level, this would probably have to be handled as an incorporation by reference. Rather than deal with the complexity of such a reference, it is simpler to cite to the State definition of "hazardous waste", which is derived from RCRA Subtitle C. However, USEPA already appears to cite to its regulations, from which the Board rules are derived. The "Subtitle C" references therefore appear to be mere surplusage. The Board has replaced them with the phrase "RCRA hazardous waste". The Board requested comment on this, but received no response

The USEPA provision has several misplaced modifiers, missing commas and extra commas. The Board has rearranged the provision to make it easier to read. The language is as follows:

If a generator determines, subsequent to the time of generation, that the generator is managing a restricted waste which is excluded from the definition of hazardous or solid waste or exempt from regulation as a RCRA hazardous waste under 35 Ill. Adm. Code 721.102 - 721.106, the generator shall place, in the facility's file, a one-time notice stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from regulation as a RCRA hazardous waste, and the disposition of the waste.

Section 728.109

Section 728.109(d)(1)(B) includes language similar to that discussed above in connection with Section 728.107(a)(1)(B). The Board has replaced the specific references to USEPA definitions with a generic reference to the definition set in Section 728.102.

Sections 728.110 - 728.113

The Board has added four new Sections incorporating 40 CFR 268.10 - 268.13 by reference. The USEPA Sections set forth USEPA's schedule for promulgating the land disposal bans. As such, they apply only to USEPA, and are not appropriate for adoption with the Illinois program. However, it has become clear that these Sections also serve as a definition of the "thirds". As such, they may be necessary in the Illinois rules.

Section 728.133

In adopting this and the following Sections, the Board broke the long USEPA blocks of text into subsections, and reversed the wording of most Sections so as to place lists at the end of provisions (as required in the Administrative Code). This makes the Section easier to use, but harder to compare with the USEPA text.

Section 728.133(b) has been corrected so that it applies only to K071.

This Section contains a large number of temporary provisions which no longer have any prospective effect. The Board has deleted them. If persons violated them while they were in effect, enforcement will be possible under the regulations which were in existence at the time.

In some cases entire subsections are being deleted. The Board is not renumbering the subsections, in order to maintain correspondence with federal numbering.

Section 728.135

This Section is the subject of numerous minor corrections.

In the Proposal, in Section 728.134(a)(3), the Board has an erroneous second entry for "P024". The second entry should have been "P026". (PC 3, 5)

Section 728.135(d) includes a back-reference to the definitions of the thirds in Section 728.110 et seq. In adopting this Section, the Board referenced 40 CFR 268.10 et seq. directly. The reference, which is the subject of USEPA amendments, is now changed to reference Section 728.110 et seq.

40 CFR 268.35(d), as amended, and (j) include references to wastes "listed in 40 CFR 268.10, 268.11 **and** 268.12". Since these lists are mutually exclusive, this reference reduces to the null set. USEPA probably means "or", which the Board has adopted.

The instructions in the Federal Register are clear that, while only 40 CFR 268.33(a) - (e) are reprinted, (f) et seq. are retained without changes. However, the Board is unable to find the change in (e).

Section 728.140

Section 728.140(a) is the subject of numerous changes to cross references. The text is as follows:

> A restricted waste identified in Section 728.141 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using the test method ~~Appendix A~~35 Ill. Adm. Code 721.Appendix B does not exceed the value shown in Table A for any hazardous constituent listed in Table A for that waste, with the following exceptions: D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136. ~~Wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136~~These wastes may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using either the test method in 35 Ill. Adm. Code 721.Appendix ~~A~~B or the test method in ~~35 Ill. Adm. Code 728.~~Appendix ~~B~~I ("eye") of this Part does not exceed the ~~value~~concentrations shown in Table ~~B~~A for any hazardous constituent listed in Table A for that waste.

There are several potentially confusing aspects to this. First, 40 CFR 268.41, Table CCWE appears in the Board rules as 35 Ill. Adm. Code 728.Table A. This is a floating Table, which appears at the end of the part, like an Appendix. The Administrative Code does not allow extensive tables inside Sections.

Second, the final sentence has a reference to Appendix B of Part 721, or Appendix I of Part 728. Appendix I corresponds with 40 CFR 268, Appendix IX. In other words, the State rule is letter "I", not Roman numeral "I". As is discussed above for Part 726, the Board has added an "('eye')" after each of these referEhcès unferbudatenfhatohhp7USEPA rule is worded with a

complex reference (to another Part) followed by a simple reference (to the same Part). In the proper Code format, these are ambiguous, in that the second could be taken as a continuation of the first. For this reason, the Board has added a superfluous "of this Part" to the second reference.

Section 728.141

This Part is drawn from 40 CFR 268.41, which includes Table CCWE. All the corrections to this Section are in the Table, which appears as Table A, at the end of the Board rules. There are no changes in the Third Third corrections to the text of the Section proper. However, as was discussed above, and below in connection with Table A [CCWE] the Board has received public comment asking that it address in this Update Docket the amendments concerning K061 high zinc waste at 56 Fed. Reg. 41176, August 19, 1991.

The amendment to Section 728.141(b) is as follows:

> When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern, except that mixtures of high and low zinc nonwastewater K061 are subject to the treatment standard for high zinc K061.

Section 728.142

This Section establishes treatment standards by way of requiring certain technologies. This Section includes three Tables, which appear as Tables C, D and E in the Board rules.

40 CFR 268.42(a)(2) requires halogenated organic compounds (HOCs) to be incinerated pursuant to the incinerator rules in Subpart O of Part 264 or 265. This may conflict with the BIF rules, which have moved the BIF regulations to Part 266. The Board did not attempt to correct this possible error, but requested comment. The Board received no response.

Although new Section 728.142(a)(3) was added with the third third corrections, it appears to be more closely related to the process vent rules. It deals with wastewater mixed with de

minimis losses of materials from manufacturing operations. The USEPA rules refer to:

> A mixture consisting of wastewater, the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act, and de minimis losses of materials...

Sections 402 and 307(b) of the CWA refer to the NPDES permit requirement and to the pretreatment standards. The Board has replaced this with a reference to the equivalent State regulations at 35 Ill. Adm. Code 309 and 310.[10]

40 CFR 268.42(a)(3) ends with a list defining "de minimis losses". The Board has broken subsections out to make this more readable. The language is as follows:

3) A mixture consisting of wastewater, the discharge of which is subject to regulation under 35 Ill. Adm. Code 309 or 310, and de minimis losses of materials from manufacturing operations in which these materials are used as raw materials or are produced as products in the manufacturing process, and that meet the criteria of the D001 ignitable liquids containing greater than 10% total organic constituents (TOC) subcategory, is subject to the DEACT treatment standard described in Table C. For purposes of this subsection, "de minimis losses" include:

   A) Those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials);

   B) Minor leaks from process equipment, storage tanks, or containers;

   C) Leaks from well-maintained pump packings and

[10]The USEPA reference is asymmetric in that it refers to surface effluent discharge permit requirement and the pretreatment standards. The Board has proposed to replace this with a reference to the two permit requirements. Part 309 is the NPDES permit requirements, and Part 310 contains the requirement to obtain a pretreatment permit or "authorization to discharge" from local government before discharging to a sewer. The latter permit requirement attaches if an indirect discharger is subject to one of the pretreatment standards under 307(b) of the CWA, the reference given in the USEPA rule.

seals;

D) Sample purgings; and

E) Relief device discharges.

Section 728.143 (Not Amended)

This Section sets CCW Treatment Standards.[11] The Board addressed the USEPA corrections to this Section in R90-11. The corrections left much to be desired, so that the Board was forced to make several changes to the USEPA language. The Board will not further modify this Section until USEPA provides additional corrections.

Section 728.144 Treatability "variances"

This Section governs "treatability variances".[12] It was adopted in R87-5, and amended in R89-1. As adopted by the Board, it utilizes the "adjusted standards" procedures of 35 Ill. Adm. Code 106 and Section 28.1 of the Act for making these determinations.

USEPA amended 40 CFR 268.44(o) to add two site specific "treatability variances" at 56 Fed. Reg. 12355, March 25, 1991. The Board is not adopting these at this time, for several reasons.

The general language of 40 CFR 268.44 was not specific that USEPA would grant site-specific treatability "variances" by way of adopting a rule. Therefore, in R87-5 and R89-1, the Board did not specifically address the possibility of adopting a site-specific "identical in substance" treatability "variance". Instead, the equivalent Section 728.144 provides only for Board action on an adjusted standard petition.

As USEPA is using it, 40 CFR 268.44 appears to be similar to 40 CFR 260.22 [720.122], which provides for site-specific delisting of hazardous waste. When the Board originally adopted Section 720.122, it allowed two mechanisms for delisting. The first allowed for Board action in "identical in substance" rulemaking following a USEPA delisting. The second (which was

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[11]Table CCW appears in the Board rules as Table B, which floats at the end of the Part, following the Appendices.

[12]The USEPA rules are using the term "variance" in a manner which is different from the way the term is used in the Environmental Protection Act. In this situation the USEPA variance is similar to a site specific rule or adjusted standard in the Environmental Protection Act.

never used) allowed the Board to delist wastes pursuant to general rulemaking. These provisions were extensively amended in R90-17, replacing the second mechanism with the adjusted standards procedure.

Site specific delistings for the most part have no effect on the Illinois program. The Board cannot generally tell, from the Federal Register notices, which site-specific delistings affect the Illinois program. Accordingly, Section 720.122(p) allows site-specific delistings only on a showing that a waste will be "generated or managed in Illinois".

It would be possible to adopt similar provisions governing "treatability variances". The Board has not, however, done so. The Board anticipates that Illinois will be delegated primacy for treatability "variances" in the near future. A rule allowing site-specific treatability "variances" by identical in substance rulemaking would therefore be a transitional rule. After Illinois is granted primacy, any treatability "variances" granted pursuant to the transitional rule would have an ambiguous status. Any modifications to the "variances" might entail the simultaneous repeal of the site-specific rule and granting of an adjusted standard.

The Part 268 land disposal bans are HSWA-driven rules. Part 268 therefore applies directly in Illinois upon adoption by USEPA. However, Sections 7.2 and 22.4(a) of the Act require the Board to adopt identical in substance rules within 12 months. The result is, pending authorization by USEPA, a dual regulatory system in which persons must comply with both Part 268 and 728. A person who obtains a treatability "variance" from USEPA pursuant to Part 268 must still get an adjusted standard pursuant to Part 728. During the transitional period, the dual procedural requirement may be burdensome. However, in the long run it would allow for more efficient procedures should modification be needed following authorization.

As discussed above, for identical in substance site specific delisting, the Board does not automatically adopt a delisting with the RCRA Updates. Rather, the person seeking the delisting must file a petition with the Board showing that the waste is generated or managed in Illinois. Therefore, even if Section 728.144 were patterned after the delisting rules, the Board would not handle these treatability "variances" in this Docket. Rather, the Board would open separate Dockets on receipt of rulemaking petitions.

In this case it is likely that both of the facilities involved are located in Illinois. The Board cannot tell for certain, since the USEPA rule could be giving the address of the corporate office, rather than the specific facility. Furthermore, the Board cannot tell from the Federal Register

whether the wastes are managed inside Illinois. In the Proposed Opinion, the Board indicated that, if these generators (or the receiving facilities) need the Board to adopt these treatability "variances", they should follow one or both of the following courses. First, they could ask the Board to add an "identical in substance" procedure to this rule, and prepare to file a rulemaking petition. Second, they could immediately file an adjusted standard petition, asking the Board to grant an adjusted standard based on USEPA's prior determination. We note that the procedural time frames for Board decision should not be all that different in either case. The Board received no response to the request for comment, and has adopted the rule as proposed.

The Board has made some minor changes to Section 728.144. These involve changes to cross references to the delisting procedures to conform with R90-17. In addition, the Board has referenced the newer generic adjusted standards procedure, rather than the RCRA-specific adjusted standards procedures. The Board has added a requirement, patterned after Section 720.122(n)(3), that the Board maintain a list of adjusted standards in the rules. In addition, the Board has added a paraphrase of Section 28.1(d)(3), which requires the Board to publish a list of adjusted standards at the end of each fiscal year in the Illinois Register and Environmental Register (See Section 28.1).

Appendix D and E

40 CFR 268, Appendices IV and V were amended with the third third corrections. The corrections involve numerous replacements of specific entries in these lists.

Appendix G and H

40 CFR 268, Appendices VII and VIII were also amended with the third third corrections. These are listings which show the effective dates of various federal requirements and "variances". Changes appear to have been made to more than 50% of the entries in these Appendices. The Board has stricken the entire existing Appendices, and replaced them with new text drawn from the USEPA diskettes.

Appendix I ("eye")

40 CFR 268, Appendix IX is a new appendix which contains the EP Toxicity test. This test was formerly used in the definition of hazardous waste in Section 721.124. It has been replaced by the TCLP test. However, the EP Toxicity test is still used for some of the land disposal bans. USEPA has therefore set forth the text of the test method in Part 268 [728].

The Board has used incorporation by reference for this detailed test method.

As was discussed above in connection with Part 726, the Board has added a "eye" after references to this Appendix, to avoid possible confusion with 40 CFR 268, Appendix I ("one").

Table A and B CCWE and CCW

These Tables are drawn from 40 CFR 268.41, Table CCWE, and from 268.43, Table CCW. The Administrative Code does not allow large Tables such as this to appear inside the text of a Section. The Board therefore placed the text in floating "Tables", which appear after the Appendices, at the end of the Part.

Tables CCWE and CCW were extensively amended in the third third corrections. The main problem is that USEPA did not present the changes in a "strike and underline" format, so that the Board faced a very time-consuming process of cross-reading the tables to find the changes.

The USEPA diskette version of the third third corrections contains a notation that the Federal Register version of the corrections itself had numerous errors, which have been corrected on disk. The Board is clearly required to follow the text in the Federal Register, rather than the diskette version. Although the Board has referred to the diskette version to correct a few apparent[13] errors in the Federal Register version, it has not undertaken a detailed comparison of its version with the diskette version.

Table A CCWE

This Table gives treatment standards expressed as CCWE (constituent concentrations in waste extract). Some wastes may be landfilled if an extract from the waste meets a CCWE standard. The extract is derived from the TCLP test, or the EP Toxicity test in a few cases.

Most of the changes are to the form of the footnotes. USEPA has replaced the footnote symbols with numbers in a separate column. The Board simply does not have room for two extra columns in its format. The Board therefore has to keep the footnote symbols in the same column with the numerical standards. Numbered notes tend to get confused with the numerical standards.

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[13]The Board has consulted the improved version where it observes an error, such as a misspelled word, in the Federal Register. The Board has used the improved version for guidance as to how to correct such apparent errors. This type of use would not lead to correction of errors which are not apparent, such as wrong names, correctly spelled, or incorrect numerical standards. USEPA will have to correct these in the Federal Register before the Board can act.

The Board has therefore replaced the numbers with capital letters, with "A" equal to "1", etc.

In the entry for F020-F023, the standards entry for "TCDF-All Tetrachlorodibenzofurans" is blank. On the disk, the blank has been moved up to "TCDD-All Tetrachlorodibenzo-p-dioxins". In all probability, both the Federal Register and the disk are wrong: the standards should be "<1. ppb" for each of these. The Board has nonetheless followed the Federal Register (with furans blank). The Board requested comment on this, but received no response.

In the Proposed Opinion, the Board noted that the entry for K061, high zinc subcategory, expired on August 7, 1991. The Board requested comment as to whether the rule had been extended. Two commenters noted the USEPA action at 56 Fed. Reg. 41176, August 19, 1991. (PC 1, 2) As is discussed above, the Board has acted on this Federal Register, even though it was outside the scope of this update. This resolves the problems resulting from the expiration of the K061, high zinc treatment standard.

There are several minor editorial problems with the K061, high zinc entry in Table CCWE. First, the headings of the Table appear to conform more closely with the headings used for the U and P Subtable than the D, F and K Subtable. In particular, the heading for "Commercial chemical name" is not appropriate for the D, F and K Subtable. Also, the entry in that column, "Electric Arc Furnace Dust", is not appropriate in a column with that heading. Moreover, "Electric Arc Furnace Dust" would not be appropriate in any of the existing columns in the D, F and K Subtable (or the U and P Subtable, for that matter). The Board has moved the phrase into the "Waste Code" heading, which seems to come the closest.

USEPA has also dropped the "CAS No." column for the regulated hazardous constituents, and, of course, the CAS Numbers. The Board has retained this column, and has inserted the CAS Numbers, which are given in other entries.

Table B CCW

This Table sets treatment standards expressed as CCW (constituent concentrations in the waste).

In the entry for F024, 3-Chloropropene, the CAS No. is partly blank in both the Federal Register and the disk version. The Board has retained "107-05-1" from the original adoption.

In the entry for F039, the Board Proposal listed "Aramine". This should read "Aramite". (PC 5)

In the entry for F039, 2,6-Dichlorophenol, the CAS No. in

the Federal Register appears to be "87-85-0". However, this is clearly "87-65-0" on the disk. Also, in the Proposal, the wastewater standard for Diphenylamine was "0.51". This should have read "0.52". The CAS No. for Methanol should have read "67-56-1". The CAS No. for Phthalic anhydride should have read "85-44-9". (PC 5)

In the entry for K006, the entries for chromium and lead appear to have been scrambled in both the Federal Register and disk versions. The Board has corrected these so as to state wastewater standards for chromium and lead, with "NA" in the nonwastewater column.

In K028, there is an entry for "**trans**-1,2-Dichloroeth**a**ne". This name is internally inconsistent, since ethane cannot have cis- and trans- isomers. The Board has retained "trans-1,2-Dichloroethene", based on the presumption that the simpler mistake is the one which was made.

In K048, in the Proposal, the wastewater standard for Xylene(s) should have read "0.028".

In K049, and throughout, USEPA has modified the CAS No. for Chrysene, from "2218-01-9" to "218-01-9". The former is the number used in 40 CFR 261, Appendix VIII. The Board has retained "2218", pending clarification.

In K051, as originally adopted by the Board, the CAS Nos. for Benzo(a)anthracene and Benzo(a)pyrene were the same. USEPA appears to have recognized this error, but has erroneously corrected it with the CAS Nos. reversed (at least according to Appendix VIII). The Board has corrected this so that the CAS Nos. reflect those in 40 CFR 261, Appendix VIII, pending clarification. (PC 5)

Also in K051, all of the standards following ethylbenzene appear to have been shifted down one line. This was not corrected on the disk. The Board has retained the original text.

A similar offset error appeared in the Federal Register in the entries following K086, butylbenzylphthalate. These appear to be corrected on the disk.

As is discussed above, the Board is addressing the amendments to the K061 provisions, based on the August 19, 1991, Federal Register. Item 3, at 56 Fed. Reg. 41177 says:

> In § 268.42, Table 2 is amended by removing the entry for K061.

The entry for K061 in that Table [Table D below] was already repealed by USEPA. One explanation is that USEPA intended to

repeal the entry in this Table [268.43, Table CCW]. The Board has not done so, **but alerts the commenters to this possibility. The Board may revise this provision during the post-adoption comment period.** As this Subpart is structured, the K061 would remain subject to the CCW standard, potentially removing much of the benefit to industry from the extensive revision of the CCWE standard.

In K096, USEPA has added an entry for "Trichloroethylene". However, this is another name for the preceding entry "Trichloroethene". The Board has added "Trichloroethylene" as an alternative name to the first entry.

Table C Technology Codes

This Table is drawn from 40 CFR 268.42, Table 1. It defines acronyms for technologies which are specified in Table D.

The definitions of "RTHRM" (thermal recovery) includes a reference to "40 CFR 260.10 (1), (6), (7), (11), and (12) under the definition of 'industrial furnace'". As is discussed above in connection with Section 720.110, in the Administrative Code, the Board cannot use numbering to indicate subordination within a definition set. Rather, the Board has to use unnumbered subparagraphs. Therefore, in adopting this Table, the Board had to replace the cross reference with a narrative description of the types of "industrial furnace" which are included in "RTHRM". These are:

> [C]ement kilns, blast furnaces, smelting, melting and refining furnaces, combustion devices used to recover sulfur values from spent sulfuric acid and "other devices" determined by the Agency pursuant to 35 Ill. Adm. Code 720.110, the definition of "industrial furnaces"

The USEPA cross reference is now wrong, because of the changes to the definition of "industrial furnace" discussed above in the BIF rules. "(12)" is now "halogen acid furnaces", and "(13)" is "other". The Board believes that USEPA intends to continue referencing "other" for two reasons. First, the rule needs a catch-all. Second, halogenated compounds usually have a low BTU value, such that they would not be burned for legitimate thermal recovery. The Board requested comment on this, but received no response.

Table D Required Treatment Technologies

This Table is derived from 40 CFR 268.42, Table 2. It contains treatment standards in the form of required technologies. For certain wastes, certain specified treatment is required. This differs from the performance-based CCW and CCWE

standards.

In the Proposal, the entry for D008, the CAS No. (for lead) should have read "7439-92-1". (PC 5)

As is discussed above, item 3 at 56 Fed. Reg. 41177, August 19, 1991, says to remove the entry for K061 in this Table. However, this entry was already repealed in the Third Third corrections. As discussed above, in connection with Table B, the Board has requested post-adoption comment as to whether the entry in that Table should have been repealed.

In the entry for P002, USEPA appears to have uncorrected the spelling of "1-Acetyl-". Also, in P093, "Phenylthiourea" has been uncorrected.

In U126, the Board has corrected the spelling of the regulated constituent, as follows: "Glycidylaldehyde". This is wrong in both the USEPA and Board rule. The corrected spelling is taken from 40 CFR 261, Appendix VIII.

In the Proposal, under U248, the entry should have read "Warfarin (0.3% or less)". (PC 5)

Following Table D is a Board Note with important explanatory material which appears in the USEPA rule as a note to the equivalent of Table C. The Board has moved this to Table D, where the note is used.

Table E Radioactive Mixed Wastes

This Table specifies required treatment technologies for radioactive mixed waste. Although radioactivity is not a hazardous characteristic under Part 721 [261], wastes which are hazardous for other reasons may exhibit radioactivity.

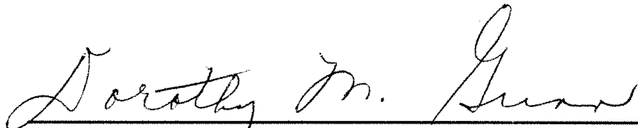
Basically, the only change to this Table is the change from "INCIN" to "IMERC" for D009. However, the Board has repealed and replaced the entire Table with a better text obtained from USEPA in this Docket.

This Opinion supports the Board's Order of this same date. The Board will not file the adopted rules until after May 8, 1992, to allow time for post-adoption comment by the agencies involved in the authorization process.

IT IS SO ORDERED.

B. Forcade and J. Theodore Meyer dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion was adopted on the 9th day of April, 1992, by a vote of 5-2.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board