ILLINOIS POLLUTION CONTROL BOARD
June 20, 1986

IN THE MATTER OF:	)	
	)	
UIC UPDATE, USEPA REGULATIONS (THROUGH 6/30/85)	)	R85-23
	)	

FINAL ORDER. ADOPTED RULES.

OPINION OF THE BOARD (by J. Anderson):

By a separate Order, pursuant to Section 13(c) and 22.4(a) of the Environmental Protection Act (Act), the Board is amending the UIC regulations.

On October 1, 1985, the Illinois Environmental Protection Agency (Agency) filed with the Board a rough draft of a proposal to update the RCRA and UIC regulations. In R85-22, the Board amended the RCRA regulations in an Order and Opinion of December 20, 1985 and January 9, 1986, respectively. This Docket, R85-23, concerns the UIC rules. The Agency's submittal is marked PC 1 in both dockets.

Section 13(c) of the Act governs adoption of regulations establishing the UIC program in Illinois. Section 13(c) provides for quick adoption of regulations which are "identical in substance" to federal regulations. Neither Title VII of the Act nor Section 5 of the Administrative Procedure Act applies to rules adopted under Section 13(c). Because this rulemaking is not subject to Section 5 of the Administrative Procedure Act, it is not subject to review by the Joint Committee on Administrative Rules (JCAR). The federal UIC regulations are found at 40 CFR 144 and 146. This rulemaking updates Illinois' UIC rules to correspond with federal amendments adopted through June 30, 1985. The Federal Registers utilized are as follows:

49 Fed. Reg. 20138	May 11, 1984	(Ex 10)
49 Fed. Reg. 45304	November 15, 1984	(Ex 23)

Copies of these items are attached to PC 1 as exhibits with the number indicated. In that the November 15, 1985 amendments are irrelevant to the Illinois program, only the May 11, 1984 amendments have resulted in any changes.

On February 6, 1986, the Board adopted an Opinion and Order proposing to amend the UIC rules. The proposal appeared on March 14, 1986 at 10 Ill. Reg. 4371.

PUBLIC COMMENT

The following is a list of the public comment in this matter:

PC1	Draft proposal from the Agency (10/1/85)
PC2	Financial assurance forms
PC3	United States Environmental Protection Agency (USEPA) (3/25/86)
PC4	LTV Steel Company and Illinois Steel Group (LTV) (4/29/86)
PC5	Agency (5/5/86)
PC6	LTV (5/6/86)
PC7	Agency (5/27/86)

PC1 and PC2 were preliminary documents which the Board placed in the public comment file. PC2 through PC 5 were received in response to the proposal. However, LTV refiled its comment for clarification. This was filed as PC6.

On May 7, 1986, the Hearing Officer requested that other participants comment on the LTV comments. On May 27, 1986, the Board received from the Agency PC 7 in reply to the LTV comments.

On April 10, 1986, the Board received codification comments from the Administrative Code Unit.

HISTORY OF RCRA and UIC ADOPTION

The Illinois RCRA and UIC rules, together with more stringent state rules 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
729	Landfills: Prohibited Wastes
730	UIC Operating Requirements

Special procedures for RCRA cases are included in Parts 102, 103, 104 and 106. Part 731, Underground Storage Tanks, has been proposed in R86-1, described below.

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

R81-32 47 PCB 93, 6 Ill. Reg. 12479.

The UIC rules were amended in R82-18, which is referenced above. The UIC rules 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 Phase II RCRA rules included adoption of Parts 703 and 724, which established the permit program and final TSD standards. The Phase II rules 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 N.E. 2d 1339 (3rd Dist. 1984).)

The Board updated the RCRA rules to correspond with USEPA amendments in two dockets:

R84-9 June 13, 1985; 9 Ill. Reg. 11964, effective July 24, 1985.

R85-22 December 20, 1985 and January 9, 1986; 10 Ill. Reg. 968, effective January 2, 1986.

Authorization for the RCRA program was received from USEPA, effective 1:00 p.m. EST January 31, 1986.

The Board has two pending dockets to update the RCRA rules:

R86-1 April 24, 1986; proposed on May 23, 1986 at 10 Ill. Reg. 8256.

R86-19 Docket opened June 5, 1986

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 effectively repealed by R85-22, which included adoption of USEPA's dioxin listings.

The Board adopted procedures to be followed in cases before it involving the RCRA rules:

R84-10 December 20, 1984, and January 10, 1985; 9 Ill. Reg. 1409, effective January 16, 1985.

The Board adopted in Part 106 special procedures to be followed in certain determinations. Part 106 was adopted in R85-22, which is listed above.

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

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

R83-28 February 26, 1986; 10 Ill. Reg. 4864, March 7, 1986.

The Board has opened dockets R86-9 and R86-11 to address additional issues concerning restrictions on land disposal.

Section 6.2 of the Act requires the Illinois Department of Energy and Natural Resources to conduct a study of underground injection in the State. The Board will open a docket and conduct the hearings required by Section 6.2 after it receives the report.

GENERAL SUMMARY

Major issues which have arisen in this matter include the following:

1. Consistency with USEPA's reorganized rules.

2. Whether to adopt "USEPA specific" language in the May 11, 1984 amendments.

3. Whether to give retroactive effect to the USEPA prohibition on Class IV wells (Section 704.124).

4. Whether packers are required of existing wells authorized by rule (Section 704.150).

A general discussion of the first two areas follows. Detailed discussion of the prohibition on Class IV wells and packer requirements appear with the detailed discussion of specific Sections.

CONSISTENCY WITH REORGANIZED RULES

The RCRA and UIC programs were originally derived from 40 CFR 122, which also included the NPDES and other major federal programs. The Board adopted the programs as Parts 702, 703 and 704. Part 702 included material in common between the RCRA and UIC programs; while Parts 703 and 704 included, respectively, specific RCRA and UIC material. A major reason for structuring the rules in this manner was to aid in future comparison with the federal rules. However, USEPA has now deconsolidated its permit rules, placing the UIC program in 40 CFR 144 and the RCRA program in 40 CFR 270. This has made it very difficult to compare the Board's rules with USEPA's rules. The Board will therefore place correspondence tables into this Opinion to aid future comparison of the rules with the USEPA rules.

The correspondence tables represent the rules as amended, which involves some renumbering and additions to the existing language. Federal provisions which have no Illinois counterpart have a "fed" entry.

There are two tables: one to find the source of an Illinois Section, the other to find the disposition of a USEPA provision. The conversion table from the Illinois Administrative Code to the CFR is as follows:

TABLE 1

35 Ill. Adm. Code	40 CFR
702.103	144.5
702.121	144.31(b)
702.122	144.31(d)
702.123	144.31(e)
702.124	144.31(f)
702.125	144.37
702.126	144.32
702.140	144.52(c)
702.141	144.51(a)
702.142	144.51(b)
702.143	144.51(c)
702.144	144.51(d)
702.145	144.51(e)
702.146	144.51(f)
702.147	144.51(g)

702.148	144.51(h)
702.149	144.51(i)
702.150(a)	144.51(j)(1)
702.150(b)	144.51(j)(2)(i)
702.150(c)	144.51(j)(3)
702.151	144.51(k)
702.152	144.51(l)
702.160(a)	144.52(a)
702.160(b)	144.52(b)
702.160(c)	144.51
702.161	144.36
702.162	144.53(a)
702.163	144.53(b)
702.164	144.54
702.181	144.35
702.182	144.38
702.183	144.39
702.184	144.39(a)
702.184(f)	144.39(b)
702.185	144.39(c)
702.186	144.40
702.187	144.41
704.101	144.1(a)
704.102	144.1(g)
704.103	144.1(g)
704.104	144.1(g)
704.104	144.7(b)(1)
704.105	144.1(g)(1)-(3)
704.106	144.6
704.107	144.3
704.121	144.11
704.122	144.12
704.123(a)	144.7(a)
704.123(b)(2)	144.7(b)(2)
704.123(b)(3)	144.7(b)(3)
704.123(b)(3)	144.7(c)
704.124	144.13
704.141	144.21
704.141	144.21(b)
704.142	144.23
704.143	144.21(a)
704.144	144.21(c)
704.145	144.23
704.146	144.24
704.147	144.25
704.148	144.26
704.149	144.27
704.150	144.28
704.161(a)	144.31(a)
704.161(b)	144.31(c)
704.161(c)	144.31(g)
704.161(d)	144.31(e)(9)
704.162	144.33

704.163	144.34
704.164	144.32(a)(1)
704.181(a)	144.51(a)
704.181(b)	144.51(j)(2)(ii)
704.181(c)	144.51(m)
704.181(d)	144.51(l)(6)
704.181(e)	144.51(n)
704.181(f)	144.51(o)
704.181(g)	144.51(p)
704.182	144.52(a)
704.183	144.52(a)(1)
704.184	144.52(a)(2)
704.185	144.52(a)(3)
704.186	144.52(a)(4)
704.187	144.52(a)(5)
704.188	144.52(a)(6)
704.189	144.52(a)(7)
704.190	144.52(a)(8)
704.191	144.52(a)(9)
704.192	144.16
704.193	144.55
704.201	144.14(a)
704.202	144.14(b)
704.203	144.14(c)
704.210	144.60
704.211	144.61
704.212	144.62
704.213	144.63
704.214	144.63(a)
704.215	144.63(b)
704.216	144.63(c)
704.217	144.63(d)
704.218	144.63(e)
704.219	144.63(f)
704.220	144.63(g)
704.221	144.63(h)
704.222	144.63(i)
704.230	144.64
704.240	144.70
fed	144.1(b)
fed	144.1(c)
fed	144.1(d)
fed	144.1(e)
fed	144.1(f)
fed	144.2
fed	144.4
fed	144.8
fed	144.15
fed	144.22
fed	144.65
fed	144.66

TABLE 2

40 CFR	35 Ill. Adm. Code
144.1(a)	704.101
144.1(b)	fed
144.1(c)	fed
144.1(d)	fed
144.1(e)	fed
144.1(f)	fed
144.1(g)	704.102
144.1(g)	704.103
144.1(g)	704.104
144.1(g)(1)-(3)	704.105
144.2	fed
144.3	704.107
144.4	fed
144.5	702.103
144.6	704.106
144.7(a)	704.123(a)
144.7(b)(1)	704.104
144.7(b)(2)	704.123(b)(2)
144.7(b)(3)	704.123(b)(3)
144.7(c)	704.123(b)(3)
144.8	fed
144.11	704.121
144.12	704.122
144.13	704.124
144.14(a)	704.201
144.14(b)	704.202
144.14(c)	704.203
144.15	fed
144.16	704.192
144.21	704.141
144.21(a)	704.143
144.21(b)	704.141
144.21(c)	704.144
144.22	fed
144.23	704.142
144.23	704.145
144.24	704.146
144.25	704.147
144.26	704.148
144.27	704.149
144.28	704.150
144.31(a)	704.161(a)
144.31(b)	702.121
144.31(c)	704.161(b)
144.31(d)	702.122
144.31(e)	702.123
144.31(e)(9)	704.161(d)
144.31(f)	702.124
144.31(g)	704.161(c)

144.32	702.126
144.32(a)(1)	704.164
144.33	704.162
144.34	704.163
144.35	702.181
144.36	702.161
144.37	702.125
144.38	702.182
144.39	702.183
144.39(a)	702.184
144.39(b)	702.184(f)
144.39(c)	702.185
144.40	702.186
144.41	702.187
144.51	702.160(c)
144.51(a)	702.141
144.51(a)	704.181(a)
144.51(b)	702.142
144.51(c)	702.143
144.51(d)	702.144
144.51(e)	702.145
144.51(f)	702.146
144.51(g)	702.147
144.51(h)	702.148
144.51(i)	702.149
144.51(j)(1)	702.150(a)
144.51(j)(2)(i)	702.150(b)
144.51(j)(2)(ii)	704.181(b)
144.51(j)(3)	704.150(c)
144.51(k)	702.151
144.51(l)	702.152
144.51(l)(6)	704.181(d)
144.51(m)	704.181(c)
144.51(n)	704.181(e)
144.51(o)	704.181(f)
144.51(p)	704.181(g)
144.52(a)	704.160(a)
144.52(a)	704.182
144.52(a)(1)	704.183
144.52(a)(2)	704.184
144.52(a)(3)	704.185
144.52(a)(4)	704.186
144.52(a)(5)	704.187
144.52(a)(6)	704.188
144.52(a)(7)	704.189
144.52(a)(8)	704.190
144.52(a)(9)	704.191
144.52(b)	702.160(b)
144.52(c)	702.140
144.53(a)	702.162
144.53(b)	702.163
144.54	702.164
144.55	704.193
144.60	704.210

144.61	704.211
144.62	704.212
144.63	704.213
144.63(a)	704.214
144.63(b)	704.215
144.63(c)	704.216
144.63(d)	704.217
144.63(e)	704.218
144.63(f)	704.219
144.63(g)	704.220
144.63(h)	704.221
144.63(i)	704.222
144.64	704.230
144.65	fed
144.66	fed
144.70	704.240

In the course of preparing the proposal, the Board reviewed the UIC-related provisions against the existing USEPA rules. The Board corrected a number of inconsistent provisions. The reasons for these inconsistencies appear to include: USEPA's reorganization of the rules; incorrect placement of RCRA- or UIC-specific language in Part 702; and USEPA amendments which may have earlier gone unnoticed.

"USEPA SPECIFIC" PROGRAM ELEMENTS

The amendments to 40 CFR 144 at 49 Fed. Reg. 20181 include many provisions which state that they apply only in USEPA-administered UIC programs. This caused difficulty in drafting the proposal (PC 5).

Section 13(c) of the Act requires the Board to adopt a UIC program which is "identical in substance" to the UIC program contained in the Safe Drinking Water Act and federal regulations adopted pursuant thereto. In earlier adopting the UIC program, the Board adopted rules which were verbatim with USEPA rules, except where there was a good reason why the rule could not be adopted in Illinois. The resulting rules have been approved by USEPA. Now that USEPA has adopted a large number of "USEPA specific" provisions, a question arises as to whether the Board should attempt to keep its UIC rules as nearly verbatim as possible with the rules as administered by USEPA, or whether the Board should move to a program which adopts only those USEPA provisions which are minimally necessary to maintain "substantial equivalence" in the opinion of USEPA. The Board has followed the former approach. In so doing, the Board believes that this up-front effort will shorten the review time needed for subsequent updating, will make comparison easier, will avoid a "drifting apart" of the Federal and State text, will assure that the program remains "identical in substance" with the USEPA UIC program as well as "substantially equivalent", will make compliance easier for the public, and, most importantly, will

assure over time that the pieces of the program will continue to mesh.

For these reasons the Board will maintain its rules as nearly verbatim as possible with the UIC rules as applied by USEPA in States where USEPA administers the UIC program.

DETAILED DISCUSSION

Section 702.123

This is derived in part from 40 CFR 144.31(e), which was amended at 49 Fed. Reg. 20185 to add special notice requirements for surrounding landowners. Since this applies only to UIC, it will be dealt with by adding a new Section 704.161(d) corresponding to 40 CFR 144.31(e)(9). (v.i.)

Section 702.126

The UIC application for a corporation must be signed by an officer of at least the level of vice president. (40 CFR 144.32(a)(1)) In order to make the UIC program more consistent with the federal, the Board will add a new Section 704.164 to express this UIC-specific requirement. (v.i.)

Section 702.144

The duty to mitigate is worded differently in 40 CFR 144.51(d) and 270.30(d), for UIC and RCRA permits. In order to make the programs more consistent with the federal, this Section has been split into subsections specifying the language for each program.

Section 702.150

The final sentence of paragraph (b) applies only to RCRA permits (40 CFR 144.51(j) and 270.30(j).). It has therefore been stricken from Part 702. The identical RCRA-specific language is found in existing Section 703.243, which is not affected by this proposal.(PC 3)

Section 702.152

This Section is drawn from 40 CFR 144.51(e). Paragraphs (e) and (f) contain RCRA-specific material dealing with compliance schedules and twenty-four hour reporting. The permittee is allowed 14 days for RCRA progress reports and 30 days for UIC reports. The 14-day time has been deleted from paragraph (e) and a reference added to Section 702.162, which specifies the correct times for both programs.

Paragraph (f) contains RCRA-specific provisions relating to 24-hour reporting. The paragraph has been replaced with a reference to Sections 703.245 and 704.181(d), which are discussed

below. Material which is in common between RCRA and UIC has been repeated in Parts 703 and 704 to make future comparison easier.
Section 702.160

Paragraph (a) lists Sections under which the Agency will establish conditions on a case-by-case basis. 40 CFR 144.52(a) and 270.32(a) each list the equivalents of Section 702.150 and 702.163, in addition to those presently listed, as applicable to the UIC and RCRA programs. The Board will make this Section equivalent.

Section 702.182

The UIC and RCRA provisions differ in that automatic transfer of UIC permits is allowed under certain conditions (40 CFR 144.38 and 270.40). This Section appears to adequately convey the federal rules in a combined format. The Board is required to adopt the automatic transfer provisions for UIC. (PC 5, paragraph 3(b)). This applies only to wells which do not inject hazardous waste: Class III and V wells. (PC 5, paragraph 3(c)).

As it presently exists, Section 702.182 does not allow for "revocation and reissuance" of permits as a method of modification. This was discussed in correction with Section 702.184 in the Board's Opinion adopting the Phase II RCRA rules (R82-19, July 26, 1983, 53 PCB 155). The problem arises because "revocation" authority lies with the Board under Section 33(b) of the Act. However, the problem is one of semantics rather than substance, since the "revocation" in "revocation and reissuance" is an administrative step taken in response to an application, rather than a penalty for violation of the Act. The Board has resolved this problem by using "reissue" instead of "revoke and reissue". This avoids possible confusion with the permit revocation procedures of Section 33(b), and yet allows for the reissuance mechanism. It is sufficiently clear that the old permit ceases to exist when transfer by reissuance occurs. (PC 5, paragraph (3)(a)).

Paragraph (a) also differs from 40 CFR 144.38 and 270.40 in that the Board, in originally adopting this Section, added a requirement that the transferee of a permit comply with its conditions. The Board has made no change to this provision.

The Board has amended this Section only to correct the reference to the federal UIC and RCRA provisions.

Section 702.184 (not amended)

Section 702.184 contains provisions involving reissuance of permits which are similar to those discussed above in connection with Section 702.182 (PC 5, paragraph (3)(a).) This Section is proposed for amendment in R86-1, but not in this docket. The

Board will address the Agency's comments on this Section in correction with R86.1

Section 703.245

This is the only RCRA-only provision which the Board will modify in this Docket. The Board has moved RCRA-specific provisions from Section 702.152. Related UIC-specific provisions have been moved to Section 704.181.

Section 704.101 (not amended)

The introductory material to 40 CFR 144.1 was amended at 49 Fed. Reg. 20181. In that these amendments relate only to the USEPA-administered programs, the Board proposed no changes.

Section 704.124

This Section is drawn from 40 CFR 144.13, which was amended at 49 Fed. Reg. 20181. The federal amendment prohibits Class IV wells except under certain limited situations discussed below. Class IV wells are those used to inject hazardous or radioactive waste into or above an Underground Source of Drinking Water (USDW).

As originally adopted, Section 704.124 prohibited certain Class IV well activities as of February 1, 1984, the date of Illinois RCRA authorization. Section 704.124(a)(4) prohibited the operation of any Class IV well injecting hazardous waste directly into a USDW after August 1, 1984.

The federal amendment makes the prohibitions more specific and more inclusive. The federal amendment did the following things:

1. It prohibited "maintenance" of a well, as well as construction and operation.

2. It specified that closure of the well was required, not just cessation of operation.

3. It extended the prohibition to Class IV wells injecting above (but not into) a USDW.

The federal amendment immediately prohibited the operation or maintenance of Class IV wells placed into operation after July 18, 1980, but delayed the prohibition of operation or maintenance of older wells until six months after UIC program approval in a State. This date, August 1, 1984 for Illinois, has already passed. To have maintained complete consistency with the federal rules, Illinois should have modified this provision prior to that date. The fundamental question is whether to adopt this amendment retroactive to August 1, 1984.

It is important to note that very few Class IV wells exist nationwide (49 Fed. Reg. 20141). Although there may be some Class IV wells in Illinois, this Section is not prohibiting a common practice. Furthermore, the construction of new Class IV wells or operation of those which may exist is already prohibited. The chance that there happens to be a Class IV well which ceased operating but continued maintenance is low. Also, the extension of the ban to wells which inject above, but not into, USDW's is irrelevant in Illinois unless there are areas in which it would be possible to so inject. This too is unlikely, since there are freshwater aquifers near the surface in all areas of the State.

A retroactive rule would be extremely complex, with different prohibitions for time spans between promulgation of USEPA's original rules, adoption of the Board rules, UIC authorization, the May, 1984 amendments, the August, 1984 date and the effective date of these amendments. Such complexity would invite loopholes. Also, the retroactive nature of the rule would invite court challenges. The Board has therefore not written a complex, retroactive rule, which may prove unenforceable, to regulate wells which may not even exist in the State. The Board has instead adopted a simple rule which prohibits the construction, operation and maintenance of any Class IV wells as of the effective date of the rule. Any Class IV wells operating prior to that date would be subject to enforcement under the terms of then existing Section 704.124, and would be required to close immediately under the new Section.

Paragraph (c) repeats a new exception drawn from the amendments at 49 Fed. Reg. 20181. Class IV wells approved as part of a site clean-up under CERCLA or RCRA are not subject to the prohibition. Many clean-ups involve pumping contaminated groundwater, treating it and reinjecting it into the same formation. Although contaminant levels may be reduced, reinjected fluids may still be "hazardous waste".

Paragraph (d) contains clarification as to what constitutes a Class IV well. In particular, wells which inject hazardous waste into "exempted aquifers", or where there is no USDW, are Class I wells, which are subject to the regulatory program, but are not prohibited.

Section 704.141

This Section authorizes Class I and III wells by rule. The existing wording is drawn from the preamble to 40 CFR 144.21. It has been edited to make it read exactly like Section 144.21, except for the exclusion of Class II wells. The time limitations in the deleted material are redundant, since these are dealt with at length in Section 704.143.

Paragraph (b) has been added. This is an affirmative statement that usual operations may continue in Class III wells

authorized by rule. It is drawn from 40 CFR 144.21(b). It was never incorporated into the Illinois UIC rules, possibly because of an oversight.

The amendments to 40 CFR 144.21 at 49 Fed. Reg. 20181 do not affect the provisions reflected in Section 704.141.

Section 704.143

This Section is drawn from 40 CFR 144.21(a), which was amended at 49 Fed. Reg. 20181. These amendments specify time limitations for the continuation of authorizations and for filing of applications. The Illinois rule is within the range specified in the rule for State programs, so that the Board proposed no changes.

Existing Sections 704.143(c) and (d) reference provisions which result in loss of authorization by rule. There provisions exist (or existed) in the federal rules, but were not referenced in 40 CFR 144.21(a). The provisions concerning expiration of authorization of Class IV wells are now moot and have been repealed. Since this completely eliminates paragraph (d), old paragraph (e) has been relettered. Actual dates have been inserted into the rule.

Section 704.144

The existing rule listed the provisions of the permit rules which wells authorized by rule had to follow. This has been replaced by a complete set of rules to be followed by authorized wells. (Section 704.149, 40 CFR 144.28, as amended at 49 Fed. Reg. 20181).

Section 704.145

This Section is drawn from 40 CFR 144.23, which was amended at 49 Fed. Reg. 20181. The USEPA amendments to paragraph (a) are irrelevant since the Board is prohibiting all Class IV wells immediately. The Board has amended paragraph (a) to state this.

Paragraph (b) is "USEPA specific" language which the Board has adopted. Actual closure of Class IV wells, as opposed to mere cessation of operation, is a major portion of the USEPA proposal, which appears to be essential to protection of USDW's Without this provision, the Board rules would seem to lack a major program element which would be necessary for a complete, rational program.

Section 704.147

This Section is drawn from 40 CFR 144.25, which as amended at 49 Fed. Reg. 20182. The federal amendments have been incorporated into this Section nearly verbatim.

Paragraph (b) specifies the form of the notice which must be given an operator before a permit is required. The equivalent federal Section and amendments are optional "USEPA specific" provisions which the Board has adopted.

Section 704.148

This Section is drawn from 40 CFR 144.26, which was amended at 49 Fed. Reg. 20182. This requires additional inventory information of certain types of wells which are authorized by rule. This is an optional "USEPA specific" provision which the Board has adopted.

40 CFR 144.26(d) has been amended to change the deadlines for submitting the inventory information. The existing Board rule required information to be submitted within one year after authorization by rule. The federal amendment on the other hand specifies one year after approval of the State program, which is already passed. The entire Section would be moot if the time for submission of inventory information had already passed. The Agency noted that this probably represents an error in the federal rule, since it would not result in inventory information from future new Class V wells, which will be authorized by rule for an indefinite period of time. Paragraph (b) is mainly concerned with these Class V wells. Accordingly, the Board will continue to key the inventory requirement to the date of authorization by rule rather than the date of approval of the program.

The Board has added to this Section a note referencing the February 1, 1985, date for inventory information from existing wells, and explaining that future inventory information is expected only from Class V wells. (PC 5, paragraph 5).

The provision in the federal rule concerning the deadline for Class IV wells is unnecessary, since existing Section 704.148 required inventory information from these wells by February 1, 1985, and Section 704.124 prohibited construction of new Class IV wells.

Section 704.149

This is a new Section drawn from 40 CFR 144.27, which was added at 49 Fed. Reg. 20182. It allows the Agency to require additional information from any wells which are authorized by rule, and which is necessary for the Agency to determine whether the well is endangering a USDW. The Board has adopted this optional "USEPA specific" provision.

Section 704.150

This is a new Section drawn for 40 CFR 144.28, which was added at 49 Fed. Reg. 20182. This contains a set of detailed requirements which wells authorized by rule must comply with. This replaces Section 704.144 (40 CFR 144.21(c)). The old rule

referenced standard permit conditions which were applicable to wells authorized by rule.

40 CFR 144.28 includes several optional "USEPA specific" provisions. The Board has generally adopted these, making such changes as are necessary to accommodate Illinois law.

Paragraph (c)(1) provides that "temporary intermittent cessation" of injection is not "abandonment" of a well, which would trigger the application of financial assurance for plugging and abandonment. This is mainly an issue for Class II wells which may temporarily shut down because of low petroleum prices. These are regulated by the Department of Mines and Minerals rather than the Board. However, it may also arise with respect to other wells, including those used to inject on a stand-by basis in the event of failure of another well or treatment method. Section 704.150(c)(2)(D) requires the operator to plug and abandon after a cessation of operations of two years or more, unless the operator makes a special showing to the Agency. (PC 5, paragraph 6).

40 CFR 144.28(c)(2)(iv)(B) allows USEPA to "waive," for temporarily abandoned wells, technical requirements applicable to active wells. Because there are no standards which the Agency could use to decide whether to grant such waivers, the Board will require operators to obtain variances in such situations. (PC 5, paragraph 7(b)).

The Agency questions whether operators could avoid the expense of plugging and abandonment by injecting an inconsequential amount of waste every two years. (PC 5, paragraph 7(c)). Class I hazardous waste injection wells must now have permit applications on file. The Agency can terminate the authorization by rule at any time by acting on the application. Furthermore, abandonment is a question of fact which depends on the operators intent as manifested by the circumstances. The Agency could show abandonment without regard to the two-year presumption of abandonment.

Paragraph (c)(2) specifies details of the plugging and abandonment plan which must be submitted for a Class I or III well authorized by rule. These have been adopted more or less verbatim. The Agency will be allowed to promulgate forms based on this Section and Part 730.

Paragraph (d) specifies the form of financial assurance required for these wells. 40 CFR 144.28(d)(1) allows the Director of the State program to prescribe the form of financial assurance. Section 13(c) of the Act confers such authority on the Board rather than the Agency. Therefore, the Board has modified the provision to require financial assurance acceptable to the Agency, and has adopted provisions which specify the form of financial assurance to a greater degree than the minimal State

program. The Board will adopt detailed rules in Subpart G on the form of financial assurance for hazardous waste wells.

40 CFR 144.28(e) specifies casing and cementing requirements for enhanced recovery and hydrocarbon storage wells. These are Class II wells subject to regulation by the Department of Mines and Minerals rather than the Board. (Section 730.105).

Paragraph (e) specifies operating requirements for Class I and III wells authorized by rule. 40 CFR 144.28(f)(2) contains an optional "USEPA specific" provision: that the annulus of Class I wells completed with tubing and packer be filled with a non-corrosive fluid which is to be maintained at a positive pressure, or, for other completion methods, that the operator insure that the alternative completion method will reliably provide a comparable level of protection of USDW. States need only require a demonstration that an alternative completion method provides a comparable level of protection to USDW. The Board has adopted the "USEPA specific" requirement.

Paragraph (e) was the subject of the public comment from LTV on which the Board asked for additional comment. (PC 4, 6 and 7). After reviewing these comments, the Board has determined that the problem stems from the inadvertent omission of the alternative showing from the "USEPA specific" language in the proposal. With this language corrected, the rule no longer contains an absolute requirement of completion with a packer.

Paragraph (f) specifies monitoring requirements. The Board has included a reference to optional "USEPA specific" analytical methods taken from 40 CFR 144.28(g).

Paragraph (g) specifies a three-year period for retention of records. 40 CFR 144.28(i)(2) contains alternative provisions for State and USEPA administered programs. It is sufficient if the Agency has authority to extend the retention period. However, in USEPA-administered programs the operator must deliver the records to USEPA unless it has written approval to discard them. The Board has adopted the optional "USEPA specific" language.

Paragraph (i) requires notice of abandonment. 40 CFR 144.28(j)(1) allows States to specify a time prior to abandonment for notice to the State; while paragraph (j)(2) specifies a 45 day period for USEPA-administered programs. As required by Section 13(c) of the Act, the Board specifies such details of the Illinois program. The Board has specified 45 days, consistent with the "USEPA specific" requirement.

Paragraphs (j) and (k) require plugging and abandonment reports and change of ownership notification. The Board adopted these optional "USEPA specific" program elements. (40 CFR 144.28(k) and (l))

Paragraph (l) references additional requirements for Class I hazardous waste wells. The Board has adopted an optional "USEPA specific" requirement of decontamination of well equipment. (40 CFR 144.28 (m))

Section 704.161

This Section is drawn from 40 CFR 144.31. It needs to be read in conjunction with Section 702.123, which contains application requirements in common between the RCRA and UIC programs. Section 704.161(a) has been amended to make it read more like existing federal language.

As noted above in connection with Section 704.148, Class V wells will be authorized by rule for an indefinite period of time pursuant to Section 704.146. As worded, Section 704.161(b) seems to require Class V well operators to apply for permits even though they are authorized by rule and there are no technical standards for the Agency to use in reviewing the applications. The USEPA rule includes a clause in the second sentence of Section 144.31(a) which requires persons authorized by rule to apply for permits "unless the authorization was for the life of the well or project". This was omitted from Section 704.161(a) because it seemed to be directed at Class II wells, which are regulated by the Department of Mines and Minerals, and which may be authorized "for the life of the well or project." (Section 144.22). *However, it appears that this clause was also directed at Class V wells, although these are authorized only until future rules become available.* The Board has therefore added a clause to Section 704.161(a) providing that persons authorized by rule must apply for permits "unless the authorization is for a Class V well under Section 704.146." (PC 5, paragraph 5)

Section 704.161(b)(1) is drawn from 40 CFR 144.31(c)(1), which was amended at 49 Fed. Reg. 20185 to set an upper limit for receipt of permit applications for existing wells. These amendments do not need to be incorporated into Board rules, since the Board set tighter limits in originally adopting the UIC program. The actual dates have been inserted into the rule, replacing language which depended on the date of program approval. The last date for applications was February 1, 1986. (PC 5, paragraph 8).

Section 704.161(c) is drawn from 40 CFR 144.31(g). As worded it is misleading when placed into the Illinois rule, since the contents of the application specified in 40 CFR 144.31(c) are located in Part 702. The Board has added a reference to Section 702.123. The Agency may waive this aspect of the application requirement if the site is located in a populous area such that *listing all owners would be impracticable.* (PC 5, paragraph 9).

40 CFR 144.31(e)(9) adds a UIC-specific information requirement to this list, which is otherwise contained in Section 702.123. The Board has added this as paragraph (d).

The additional information requirement is a list of property owners within one-fourth of a mile of the well. It is a "USEPA specific provision which the Board has adopted.

Section 704.163

This Section is drawn from 40 CFR 144.34, which was amended at 49 Fed. Reg. 20185. Paragraph (a) was amended to allow temporary emergency permits to override authorization by rule or regular permits.

Section 704.164

This Section has been added to make the signatory requirement of Section 702.126(a)(1) consistent with the UIC-specific requirements of 40 CFR 144.32(a)(1).

Section 704.181

This Section modifies Sections 702.140 et seq. to add UIC-specific provisions so as to achieve consistency with 40 CFR 144.51. The Board has added notes referencing each paragraph since these provisions are so scattered.

Sections 704.181(b), and 702.150(b), are drawn in part from 40 CFR 144.51(j)(2)(ii), which was amended at 49 Fed. Reg. 20185. The Board has incorporated the "USEPA specific" language which requires the operator to retain records after the retention period unless he delivers them to the Agency or obtains written approval to discard them. This is similar to Section 704.150(i), which is applicable to wells authorized by rule.

Paragraph (d) has been amended to transfer UIC-specific requirements from Section 702.152 (f). This is discussed in connection with that Section.

Paragraphs (f) and (g) are drawn from 40 CFR 144.51(o) and (p), which were added at 49 Fed. Reg. 20185. The Board has adopted these "USEPA specific" provisions in UIC permits. Under paragraph (f) permittees will be required to submit a report after plugging a well. Under paragraph (g) the Agency can establish a schedule for mechanical integrity demonstrations.

Section 704.187

This Section is drawn from 40 CFR 144.52(a)(5), which was amended at 49 Fed. Reg. 20185. These "USEPA specific" amendments specify certain analytical methods and allow the Agency to specify other methods in the permit.

Section 704.188

This Section is drawn from 40 CFR 144.52(a)(6), which was amended at 49 Fed. Reg. 20185. The old plugging and abandonment

requirements applicable to permitted wells have been replaced with a requirement that the operator implement an abandonment plan within two years after cessation of operations unless approval is obtained from the Agency. The general rules for active wells now apply to inactive wells prior to plugging and abandonment.

Section 704.189

This Section is drawn from 40 CFR 144.52(a)(7), which was amended at 49 Fed. Reg. 20185. The federal amendment appears to set up two different financial responsibility requirements, depending on whether or not the well injects hazardous waste. The Board has split Section 704.189 into two paragraphs to make it clear that the general material in Section 704.189 does not supersede the specific financial assurance requirements for hazardous waste wells, which will be discussed below.

Paragraph (a) has been amended to state the Agency's authority to require periodic updating of cost estimates and financial assurance for non-hazardous waste wells. This "USEPA specific" language is drawn from 49 Fed. Reg. 20185.

Section 704.201

This Section is drawn from 40 CFR 144.14(a). It has been amended to improve consistency.

Section 704.202

This Section has been amended to correctly state the date on which applications were required from wells injecting waste from off-site. It is drawn from 40 CFR 144.14(b).

Section 704.203

This Section has been amended to improve consistency with 40 CFR 144.14(c). This Section states the requirements applicable to off-site wells which were required to file permit applications pursuant to Section 704.202. (PC 5)

Section 704.210

This Subpart establishes requirements for financial assurance for plugging and abandonment of Class I hazardous waste injection wells. Other wells are subject to less specific financial assurance requirements under Section 704.189. The Subpart is drawn from 40 CFR 144.60 et seq., which was added at 49 Fed. Reg. 20189.

Section 704.211

The Board has added "plan" as an alternative phrase for "plugging and abandonment plan", and "current cost estimate" as

an alternative for "current plugging cost estimate", which in turn the Board has corrected to read "current plugging and abandonment and cost estimate," the term which is consistently used in the federal rule except in this definition. The Board has edited the following text to use these stated alternatives wherever clarity is maintained. This has resulted in a substantial shortening of the text since these terms are used frequently.

Section 704.212

This requires the operator to prepare a cost estimate for plugging and abandoning the well, and to update the cost estimate each year, producing the "current cost estimate". The cost estimate is based on the plugging and abandonment plan required under Section 704.181(f).

Section 704.213

Because of its length and codification requirements the Board has broken 40 CFR 144.63 into several sections. This Section includes the preamble to Section 144.63. It is necessary to list and reference the ensuing Sections to preserve the meaning of the federal Section.

This Section also serves as a definition of "financial assurance". Use of this defined term allows the Board to avoid lengthy repeated descriptions in the ensuing rules. These descriptions would be longer even than the descriptions in the federal rules because of the break-up of Section 704.213.

Section 704.214

This Section is drawn from 40 CFR 144.63(a). It allows the operator to provide financial assurance through a trust fund with the Agency as beneficiary. It also allows the creation of a standby trust fund to receive any proceeds pursuant to the financial assurance mechanisms in the ensuing Sections.

In R84-22, the Board determined that standby trust funds are costly, and unnecessary under Illinois law. (R84-22C, Opinion and Order, October 10, 1985). However, since this is a Section 13(c) rulemaking, the Board feels constrained to leave these provisions in the rules.

The funded trust fund is expected to pay the plugging and abandonment cost in the absence of any default by the operator. It is a savings account over which the Agency has control.

In paragraph (k)(2) the Board has made a final simplifying edit which is followed in the ensuing Sections. "Releases the owner or operator from the requirements of this section in accordance with Section 144.63(i)" has been replaced with "releases the owner or operator in accordance with Section

704.222." The quoted Section adequately defines what is "released" without the excess verbiage, which would be difficult to translate into the Board rules because of the break-up of "this Section".

Section 704.212(b) requires the operator to update the cost estimate annually for inflation. 40 CFR 144.70(a)(1) specifies the form of the trust agreement. Section 15 requires the trustee to give the Agency notice on non-payment during the pay-in period. Section 10 requires the trustee to give the Agency an annual evaluation of the trust, both during and after the pay-in period. It is up to the Agency to review the value of the trust to discern whether it appears sufficient to provide for plugging and abandonment at current costs. If the value appears to be inadequate, the Agency should inspect the cost estimate, which must be kept at the facility. (PC 5, paragraph 11)

Section 704.215

This Section, which is drawn from 40 CFR 144.63(b), allows the operator to meet the financial assurance requirement with a forfeiture bond, payable into a standby trust fund if the operator fails to plug and abandon the well when required to do so. In this Subpart, the Board has generally replaced "Regional Administrator" with "Agency" except in a few instances, including Section 704.215(d)(2). Only the Board has authority to "order" plugging and abandonment.

Section 704.216

This allows the operator to submit a performance bond as financial assurance. This is identical to Section 704.215, except that the surety has the option of performing the plugging and abandonment instead of funding the standby trust in the event of a default. [Section 704.216(e)] Note that this mechanism cannot be used in combinations under Section 704.220.

Section 704.217

This Section is drawn from 40 CFR 144.63(d). It allows the operator to provide financial assurance by delivering a letter of credit from a financial institution to the Agency. In the event of a default, the Agency presents the financial institution with a draft payable to the standby trust fund. The financial institution then must attempt to collect the amount paid from the operator as a loan.

Section 704.218

This Section is drawn from 40 CFR 144.63(e). It allows the operator to provide financial assurance through plugging and abandonment insurance.

Like the trust fund, the plugging and abandonment insurance pays the cost of plugging and abandoning the well regardless of any default by the operator. In this respect, it is comparable to a savings account or life insurance rather than liability insurance. The amount of the required insurance is based on an engineering plan for plugging and abandoning the well, rather than estimated costs of unexpected contingencies. There is no provision for payment to third parties who may be injured.
Section 704.219

This Section is drawn from 40 CFR 144.63(f). It allows an operator to provide financial assurance by meeting a financial ratio test. The test is identical to the RCRA test in Parts 724 and 725. The financial test cannot be used in combinations pursuant to Section 704.220.

Section 704.220

This is drawn from 40 CFR 144.63(g). It allows an operator to use a combination of mechanisms to provide financial assurance in an amount equal to the cost estimate. The USEPA rule uses the phrase "adjusted plugging and abandonment cost", which has been changed to the defined term "current cost estimate". This corrects an apparent error in the USEPA rule.

Section 704.221

This is drawn from 40 CFR 144.63(h). It allows the operator to lump several wells into a single cost estimate for providing financial assurance. USEPA allows national lumping. This could cause problems in the Illinois context if the Agency were to have to go into the courts of another State to collect financial assurance, possibly governed by the laws of yet another State. This could cause more of a problem than under RCRA (Section 724.243(h)), since USEPA demands less consistency among the States with regard to UIC regulations. Keeping in mind that adoption of these detailed rules is optional in the first place, the Board will limit lumping to wells located in Illinois.

Section 704.222

This Section is drawn from 40 CFR 144.63(i). It requires the Agency to release the operator from the financial assurance requirement for a well within 60 days after receiving certification that plugging and abandonment has been accomplished in accordance with the plan, unless the Agency has reason to believe the contrary.

Section 704.230

This Section is drawn from 40 CFR 144.64. Paragraph (a) requires the operator, and any corporate guarantor, to notify the Agency within ten days after bankruptcy of the operator. Paragraph (b) requires the operator to provide substitute

financial assurance within 60 days after any bankruptcy of a financial institution which issued financial assurance to the operator.

The final sentence of 40 CFR 144.64(b) requires the operator to establish "other financial assurance or liability coverage within 60 days" after bankruptcy of a financial institution. The reference to liability coverage is probably an error in the USEPA rule, which may have been copied from 40 CFR 264.148. The Board has deleted this since there is no liability insurance requirement for UIC.

Section 704.240

The Agency has already promulgated financial assurance forms which closely track those specified in 40 CFR 144.70. The Agency apparently requires operators to use these forms pursuant to the general financial assurance requirement of Section 704.189. The Board obtained a set of these forms As noted above, they were designated PC 2.

Rather than set the forms out in detail in the rules, the Board will allow the Agency to promulgate forms based on 40 CFR 144.70, and to require the use of these forms.

Because these amendments potentially change the RCRA program, the Board will wait 30 days before filing the adopted rules. The Board will entertain motions for reconsideration during this time period.

This Opinion supports the Board's Final Order of this same day.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion was adopted on the 20th day of June, 1986, by a vote of 7-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board