

ILLINOIS POLLUTION CONTROL BOARD  
February 2, 1989

IN THE MATTER OF: )  
UST UPDATE, USEPA REGULATIONS ) R88-27  
(SEPTEMBER 23, 1988) )

PROPOSAL FOR PUBLIC COMMENT

PROPOSED OPINION OF THE BOARD (by J. Anderson):

By a separate Order, pursuant to Section 22.4(e) of the Environmental Protection Act (Act), the Board is amending the UST underground storage tank regulations.

Section 22.4 of the Act governs adoption of regulations establishing the RCRA program in Illinois. Section 22.4(e) provides for quick adoption of regulations which are "identical in substance" to federal regulations. Section 22.4(e) provides that Title VII of the Act and Section 5 of the Administrative Procedure Act (APA) shall not apply. Because this rulemaking is not subject to Section 5 of the APA, it is not subject to first notice or to second notice review by the Joint Committee on Administrative Rules (JCAR). The federal UST rules are found at 40 CFR 280. This rulemaking updates Illinois' UST rules to correspond with major federal amendments which appeared at 53 Fed. Reg. 37082, September 23, 1988.

USEPA added financial assurance rules to the UST program at 53 Fed. Reg. 43370, October 26, 1988. The Board will follow USEPA's lead and address these amendments in a separate Docket which will be opened shortly.

HISTORY OF UST RULES

The UST rules are contained in 35 Ill. Adm. Code 731. They were adopted and amended as follows:

- R86-1 71 PCB 110, July 11, 1986; 10 Ill. Reg. 13998, August 22, 1986.
- 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.

Up to this time the UST rules have been addressed in the RCRA update Dockets. The Board has separated the September 23, 1988 rules from the RCRA update process because of the size and timing of the rulemaking, and because of the desirability of developing a separate mailing list for persons interested only in tanks. The Board will consider recombining the RCRA and UST updates after initial adoption of the program, including the October 26 financial assurance rules.

STATUTORY AUTHORITY

Section 22.4(e) of the Act was added by P.A. 84-1072. This was implemented in R86-1 and R86-28. Section 22.4(e) was amended by P.A. 85-861. Section 22.4(e) was probably renumbered to Section 22.4(d) by S.B. 1834 (P.A. 85-1048) which deleted old Section 22.4(d). However, in this Opinion, the Board will continue to refer to the UST authority as "Section 22.4(e)", the numbering used in P.A. 85-861.

P.A. 85-861 changed the directive of Section 22.4(e) from adoption of regulations which "are no less stringent" to "identical in substance". The Board believes that the regulations adopted in R86-1 and 28 meet either standard. However, the USEPA modification to 40 CFR 280 requires that the existing regulations be repealed and replaced with new rules anyway.

Section 22.4(e) now requires the Board to adopt regulations which are identical in substance with USEPA rules. Ill. Rev. Stat. 1987, ch. 127 1/2, par. 154(b)(i) requires the Fire Marshal to also adopt rules which are identical in substance. Par. 154(b)(ii) authorizes the Fire Marshal to adopt "additional regulations relating to an underground storage tank program that are not inconsistent with and at least as stringent as" USEPA regulations. The Fire Marshal has to notify the Board within 60 days after adopting any rules. Section 22.4(e) allows the Board to adopt any such additional regulations as "identical in substance" rules within 180 days after notification. Ill. Rev. Stat. 1987, ch. 127 1/2, par. 154(b)(ii) prohibits additional Fire Marshal regulations relating to "corrective action".

P.A. 85-861 gives authority to both the Agency and the Fire Marshal to implement the UST program. There is no explicit statement as to the division of authority between the agencies. The Board believes that the division is implied by the limitation on "corrective action" requirements in Ill. Rev. Stat. 1987, ch. 127 1/2, par. 154(b)(ii). Additional requirements relating to corrective action must be adopted pursuant normal Board rulemaking under Section 27 of the Act. These would be implemented by the Agency. Therefore, the portions of the program which are subject to this limitation, those dealing with "corrective action", are to be implemented by the Agency.

P.A. 84-172 and 85-161 deal with "petroleum", "hazardous substance" and "hazardous waste" underground storage tanks. On first reading Section 4(v) of the Act appears to limit the Agency's authority to petroleum tanks. However, the existing language of Section 4(q) of the Act gives the Agency authority to act on releases of hazardous substances, including those in UST's. Pursuant to Section 22.4(a) of the Act, Board has adopted, in 35 Ill. Adm. Code 724 and 725, regulations governing hazardous waste tanks. (R86-46, July 16 and August 14, 1987, 11 Ill. Reg. 13435)

The USEPA rules refer to the "implementing agency". In the proposal the Board has inserted "Fire Marshal" or "Agency" according to which agency is responsible for the portion of the program in question. The Board solicits comment as to whether this accurately reflects the division of authority contemplated in P.A. 85-861.

As is discussed below, the term "corrective action" has a special, limited meaning in the USEPA rules. See 40 CFR 280.66 and 35 Ill. Adm. Code 731.166. Tank leaks are addressed by a series of measures, including the following:

- Testing on installation
- Leak detection program
- Confirmation of suspected leak
- Initial response to confirmed leak
- Free product removal
- Corrective action plan
- Groundwater cleanup
- Permanent closure

There is a question as to whether the General Assembly intended "corrective action" in the limited sense used in the rules, or whether it intended the term to be read in a more general sense to mean any actions taken to correct a leak. In that the USEPA rules were not available to the General Assembly at the time it adopted P.A. 85-861, the Board believes that the use of the same term was accidental. The Board therefore proposes to read the term "corrective action" in the broader sense. In the proposal discussed below, the Agency will implement the rules beginning with confirmation of a suspected leak. The Fire Marshal will implement the rules concerning installation of the tank and routine leak detection up to the time a leak is confirmed. The Fire Marshal will implement the rules concerning the routine closure of tanks which are not suspected of leaking. Again, the Board solicits comment as to whether the proposal is consistent with the legislation.

The directive to both the Fire Marshal and the Board is to adopt regulations which are "identical in substance" with USEPA rules. This term has been defined in Section 7.2 of the Act, adopted in S.B. 1834 (P.A. 85-1048), in a manner consistent with the Board's longstanding interpretation of the term. (See R85-23, June 20, 1986, 70 PCB 311, 320; R86-44, December 3, 1987, pages 14 and 19.) The directive to adopt "identical in substance" rules means to adopt the federal text verbatim, except under certain circumstances which are specified in the definition. These include the need to modify language to reflect the requirements of the Administrative Code.

USEPA might be able to approve a state UST program which had little language in common with the federal rules, so long as the program was "substantially equivalent." However, the Illinois mandate to adopt "identical in substance" rules requires Illinois to remain closer to the verbatim federal text than USEPA itself requires.

#### "ALTERNATIVE ACTION" PROVISIONS

The federal rules include numerous provisions which specifically allow alternative actions by the implementing agency. For example, see 40 CFR 280.20(a)(2) and 35 Ill. Adm. Code 731.120(a)(2). As the Board reads the USEPA rules, these are the areas in which state deviation is invited. (53 Fed. Reg. 37186) The simplest way to read P.A. 85-861 in conjunction with the federal rules is to interpret the points at which State alternatives are allowed as being the points which are subject to adoption of "additional requirements" by the Fire Marshal, or additional corrective action requirements by the Board pursuant to Section 27 of the Act. For the reasons discussed below, the Board has deleted most of these "alternative action" provisions from the proposal. If the Fire Marshal adopts additional

requirements on these points, the Board will consider adding an identical in substance provision pursuant to Section 22.4(e).

These alternative action provisions could become serious loopholes in the UST program unless they are carefully addressed in the regulations. Suppose the Fire Marshal adopted an alternative action provision which simply repeated the USEPA directive. For example, consider a rule which says "design tanks according to the abc standard unless the implementing agency provides otherwise." Years later the tank leaks, and the cause of the leak is traced to the use of an inadequate standard, xyz. The Agency would then be the implementing agency, and an enforcement action would be before the Board. With the rule as written, the operator could claim that he had oral permission from the Fire Marshal to use the xyz standard.

The main defense against this type of loophole is for the Board to insist that, at the time the rules are adopted, the rules be specific as to whether a case-by-case deviation from the rule will be allowed. If so, at a minimum, the Board must insist that the permission from the Fire Marshal be in writing, and based on a standard articulated in the rule. If the alternative actions provisions adopted by the Fire Marshal fail in any of these respects, the Board will not adopt the equivalent as a Board rule. The effect of this will be to render the alternative moot with respect to Agency enforcement.

Most of the "alternative action" provisions appear to involve features which are not necessary for the program. For example, an alternative action provision might require that tanks to be designed according to standard abc "or some other standard approved by the implementing agency." The program will work just fine with only the abc standard pending adoption of the xyz standard. These are the provisions which the Board has deleted pending action by the Fire Marshal. On the other hand, in a few cases the provision appears to be essential to the program, in the sense that some language has to be adopted now to have a set of rules which would meet the mandate of Section 22.4(e). Section 7.2 of the Act, as adopted in S.B. 1834, allows the Board, in an "identical in substance" proceeding, to craft language meeting the federal prescription.

In the proposal, some of the "alternative action" provisions involve corrective action, and are to be implemented by the Agency. Where these invite alternative action by rulemaking, Board rulemaking pursuant to Section 27 of the Act would be required to provide an alternative. In these situations the "alternative action" provision has been deleted in the proposal. The Board would be receptive to a proposal to add the alternatives pursuant to Section 27. In those cases in which the alternative action provision is essential to the program, the Board has added language.

Not all of the "alternative action" provisions necessarily invite rulemaking. For example, 40 CFR 280.20(a)(5) (35 Ill. Adm. Code 731.120(a)(5)) allows the implementing agency to approve tank construction and corrosion protection which it determines are no less protective of human health and the environment than the specified methods. This could be implemented through adoption of regulations specifying additional approved designs, or it could be implemented through approval of individual designs submitted by operators. These provisions have generally been deleted from the proposal. The Fire Marshal's office could either adopt a rule specifying an

alternative, or it could adopt rules specifying procedures and standards for case-by-case approval, which the Board could consider adopting.

The "alternative action" provisions generally fail to specify procedures for granting individual approval for alternatives. USEPA specifically avoids specifying procedures, in order to allow states to adapt local procedures. (53 Fed. Reg. 37186) P.A. 85-861 may require an ongoing permit program, administered by the Fire Marshal, of the type specified in Sections 12 or 21 of the Act for effluent discharges or waste disposal. The Board invites comment as to how this type of approval is best handled, and as to the best terminology for describing the process.

Other "alternative action" provisions appear to actually be cross references. For example, 40 CFR 280.20(a)(5), discussed above, could be read to be back-referencing the "alternative action" provision in 40 CFR 280.20(a)(2)(iv). Where the Board believes this is the case, a more specific reference has been inserted. (This is probably not the case in the example, since a circular reference would be created.)

#### Section 731.110

Section 731.110(c) includes deferrals for tanks regulated under the Atomic Energy Act or by the NRC pursuant to 10 CFR 50, Appendix A. As is discussed below, the first reference is really to an action by a federal agency, and is not treated as an incorporation by reference. The NRC is also the regulatory agency for the cited section of the Atomic Energy Act.

The reference to the NRC regulations could be interpreted the same as the statute. However, the Board has handled all references to federal regulations as incorporations by reference, since they are clearly mentioned in the APA.

#### Section 731.112 Definitions

The federal definitions from 40 CFR 280.12 have been adopted more or less verbatim, except as noted.

The Board has added a definition of "Act", meaning the Environmental Protection Act. This is to be distinguished from the "Gasoline Act", defined below. The Board has also defined "Agency" to mean the Illinois Environmental Protection Agency, one of the implementing agencies in Illinois. "Board" has also been added to ease any reference to Board procedures.

"CERCLA" has been added to make it easier to reference the federal Superfund Act.

The definition of "corrosion expert", is drawn from the federal rules. This is defined as a person with accreditation by NACE, or a registered professional engineer who has certification or licensing that includes education and experience in corrosion control in tanks and piping.

The Board has added a definition of "ESDA", the acronym for the Illinois Emergency Services and Disaster Agency. As is discussed below, ESDA will receive the initial notifications of leaks.

The Board has added a definition of "Fire Marshal" as a short form of "Illinois State Fire Marshal" which is, as is discussed below, one of the implementing agencies in Illinois.

The Board has added a definition of "Gasoline Act" as an abbreviated name for "An Act to regulate the storage, transportation, sale and use of gasoline and volatile oils", as amended, including P.A. 85-861. This is Ill. Rev. Stat. 1987, ch. 127 1/2, par. 151 et seq. Because this Act is not familiar to most persons using the Board rules, the Ill. Rev. Stat. reference is always given in the text of the rules.

The definition of "hazardous substance UST system" in 40 CFR 280.12 includes a reference to Section 101(14) of CERCLA. As is discussed below, this would be an incorporation by reference of a federal statute, which is arguably prohibited by the APA. The Board has avoided this problem by setting forth the text of the definition from CERCLA. However, this makes the definition of "hazardous substance UST system" too complex. The Board has therefore created a separate definition of "hazardous substance", and shortened the definition of "hazardous substance UST system". As is discussed below, the Board has given parallel treatment to the related definition of "petroleum UST system". This change also makes the rules much clearer. No substantive change is intended. The Board solicits comment as to whether this modification has been accomplished without substantive change.

The definition in Section 101(14) of CERCLA itself has several references to other federal statutes. Placing the definition verbatim into State rules would actually compound the problem. However, it appears that USEPA, acting pursuant to Section 102 of CERCLA, has published in 40 CFR 302.4 a consolidated list of all "hazardous substances". (See 50 Fed. Reg. 13450, April 4, 1985.) The Board has therefore cited only to this list, which is incorporated by reference in Section 731.113. The Board will update the reference as USEPA modifies its list.

Section 3.14 of the Act defines "hazardous substance" in a manner which appears to be identical to the definition in Section 101(14) of CERCLA. The Board could define "hazardous substance" by reference to the definition in the Act. However, the Board has rejected this course. Assuming there is some difference between the definition of "hazardous substance" in the Act and the federal regulations and statutes, the Board believes that the federal statutes and regulations would control. As has been discussed in previous rulemakings, the directive to adopt "identical in substance" rules requires that the Board adopt the definition sets upon which the federal rules rely. (See R81-32, February 4, 1982, 45 PCB 317, 333; R86-44, December 3, 1987, pages 8 and 27) To do otherwise could change the scope of the program, and carry a risk of altering the way the rules relate to each other, either of which would violate the mandate of Section 22.4(e) of the Act.

The implied definition of "hazardous substances", as used in the UST program, excludes CERCLA "hazardous substances" which are RCRA "hazardous wastes". The Board has cited to 35 Ill. Adm. Code 721, which are the State rules which are equivalent to 40 CFR 261, which in turn are the rules which USEPA adopted to implement the RCRA definition of "hazardous waste".

40 CFR 280.12 includes a definition of "implementing agency". As is

discussed above, the proposal does not use this term, but, rather, replaces it with "Fire Marshal" or "Agency", depending on which implements a given provision. The Board has added Section 731.114, discussed below, to state the general rule for division of authority. The Board has inserted a cross reference in place of the federal definition, in order to avoid future confusion in updating these rules.

The definition of "owner" is drawn from the USEPA definition. It refers to the person who owns the "UST system". This is somewhat different from the distinction drawn in other environmental regulations in which the "owner" is equated with the owner of the property on which the regulated facility is located. For tanks in use since November 8, 1984, the "owner" is the current owner. For tanks out of service prior to that date, the "owner" is the person who owned the UST system immediately before discontinuation of use.

As was discussed above, the Board has defined "petroleum" in a manner parallel with "hazardous substance." The definition is drawn from the definition of "petroleum UST system" and "regulated substance". These definitions appear to repeat an implied definition of "petroleum".

The Board believes that the "hanging paragraph" following the definition of "regulated substance" in 40 CFR 280.12 is intended to modify only the portion of the definition involving "petroleum". The positioning of this in a hanging paragraph seems to be intended to make it modify "hazardous substance", but the list of obvious petroleum products is not consistent with this interpretation. Accordingly, the list has been moved to the new definition of "petroleum".

The list of petroleum products is repeated in the definitions of "petroleum UST system" and "regulated substance" in 40 CFR 280.12. In the proposal the list appears only once, in the definition of "petroleum".

As organized by the Board, the applicability definitions are quite simple. The basic definitions are "hazardous substance" and "petroleum". If one has either, or a mixture, he has a "regulated substance". The rules differentiate "hazardous substance UST systems" from "petroleum UST systems". A "hazardous substance UST system" is a tank system that holds a hazardous substance, or a mixture of hazardous substances and petroleum, which is not regulated as a "petroleum UST system". The latter includes tank systems which hold petroleum or a mixture of petroleum and "de minimus" quantities of hazardous substances. This term is not defined in the rules. (53 Fed. Reg. 37108) However, all it does is shift a tank from one portion of the rules to another. It is not an exclusion.

The definition of "SARA" in 40 CFR 280.12 is not actually used in the rules, and has been deleted. This avoids possible incorporation by reference problems.

The definition of "UST" is virtually the same as adopted in old Section 731.101. The references to the federal Natural Gas and Hazardous Liquid Pipeline Safety Acts serve to identify federal actions, and are hence not incorporations by reference. References have been given to specific editions of USCA in order to make it easier to find the references in the event provisions are renumbered. Because these are not incorporations by reference,

citation of a specific date does not foreclose future amendments.

The definition of "UST" includes an exception for tanks used for storing heating oil on the premises where consumed, regardless of the size of the tank.

### Section 731.113 Incorporations by Reference

Section 6.02 of the Administrative Procedure Act (APA) sets limitations on incorporation by reference into regulations. Section 22.4(e) of the Act exempts this identical in substance rulemaking from the requirements of the APA, which includes prior approval from JCAR. However, the Board has complied with the substance of the APA incorporation by reference requirements. (See R86-44, December 3, 1987, p. 13.)

The APA and derived rules allow agencies to incorporate a standard by reference without setting forth the complete text if:

1. The standard is from a nationally recognized organization or association.
2. The rule contains the complete address and telephone number of the organization for purposes of ordering the standard.
3. The organization makes copies readily available to the public.
4. The rule includes the date of the standard.
5. The rule states that it does not include later editions or amendments.
6. The agency maintains a copy of the standard in its files for public inspection and copying.

The UST rules contain a large number of incorporations by reference. The Board has consolidated these into Section 731.113, in a manner similar to that employed in Section 720.111. The use of a single Section has several advantages. It allows the Board to give the complete APA-required citation to the document only once in the Part. It provides a table of contents to incorporations which the affected public can use to assemble the needed documents. It will allow the Board to update the incorporations by reference without having to propose amendments to the many Sections in which they are used. By minimizing verbiage, it will minimize the chances of typographical errors.

Section 731.113(a) incorporates standards and guidelines of organizations and associations. The Board has assigned a short name to each organization, such as ANSI. For the familiar organizations, this is the acronym by which they are widely known. For the less familiar organizations, the Board solicits comment as to better names. In the text of the rules in which the standards are used, they will be referenced by the short name and number of the standard. For example, "ANSI B31.3".

Section 731.113 includes the date or edition of each standard. In many

cases this information is included in the numbers associated with the standard. For example, "ASTM D4021-86" means the version of ASTM D4021 which was approved in 1986. In this situation the date of the standard is really present twice in Section 731.113. When standards are used in subsequent Sections, no date is specified. This is to allow all references to a standard to be updated by a simple amendment to Section 731.113. For this reason, edition numbers have been stripped from the standards when they are used. For example, "ASTM D4021-86" is referenced as "ASTM D4021" in the Sections in which it is used. After ASTM updates this standard, the Board will update Section 731.113, and the references in the rules will continue to be valid without the need for modification.

The NACE standards include the year of original adoption in their permanent number. For example, NACE RP0169-83 was originally adopted in 1969, and last revised in 1983. The Board will use "NACE RP0169" in the text of the rules, intending to refer to the version currently referenced in Section 731.113.

USEPA intends to reference future amendments to these standards. (53 Fed. Reg. 37090, 37185) This cannot be done under the APA. The Board has therefore referenced the current editions of the standards, and will update these automatically in the future as it learns of new editions.

The APA limits incorporations by reference to standards of a "nationally recognized organization or association". Many of these, such as ASTM, obviously fit this category. Others required considerable effort to locate. However, since their standards are incorporated in a federal rule, they are "nationally recognized."

The second largest group of standards are from UL Canada. This raises a slightly different question of national recognition. The APA does not provide a definition of "nationally recognized." It is possible that the APA intends to allow the use of national standards of any nation, perhaps based on recognition by the International Organization for Standardization (ISO). (See 53 Fed. Reg. 37185 and 19 U.S.C.A. §2532 and 2533) Also, foreign standards organizations may maintain a sufficient presence in the U.S. to become "nationally recognized" here. However, if a federal agency such as USEPA relies on their standards, they become "nationally recognized" without the need for further inquiry.

The USEPA rules describe these standards organizations as "nationally recognized". USEPA does not explain what it means by "nationally recognized." (Again see 53 Fed. Reg. 37185 and 19 U.S.C.A. §2532 and 2533) The Board does not believe that USEPA's description controls the Illinois APA, since USEPA has no authority to implement the Illinois APA, and there is no indication that USEPA is implementing a similar federal law.

As of the date of the Proposal, the Board has not received any response from the National Leak Prevention Association (NLPA). This standard remains in the proposal. However, the Board will drop this standard from the rule if it is not able to contact the organization and obtain its standards by the time the rules are adopted. Clearly, if they are not available to the Board, they are not "readily available to the public". The Board does not interpret the "identical in substance mandate" as requiring it to reference secret

standards in this situation. As the USEPA and Board rules are written, operators will be able to rely on these standards if they demonstrate to the Fire Marshal or Agency on a case-by-case basis that the organizations are "nationally recognized", even though the standards will not be listed in the rules.

The USEPA incorporations by reference are all incomplete from the APA perspective. Furthermore, it is fair to say that they are almost all incorrect in some respect. However, most of the errors are minor errors, such as words omitted from the title, so that there is little doubt as to the correct reference. The Board has obtained almost all of the documents listed. The Board solicits comment as to whether its list correctly reflects USEPA's intentions. Specific errors are discussed in the following paragraphs. A single reference has been given to the USEPA rules, although some of the errors are repeated.

In the following paragraphs many of the references to the CFR do not appear to be CFR references. This is because USEPA has departed from the usual CFR format, actually using Ill. Adm. Code format in many places.

The title of the reference to ACT-100 in 40 CFR 280.20(a)(3) should include the word "/Composite" following "FRP Clad".

API publishes "Recommended Practices" and "Publications". Almost without exception the USEPA references to API "Recommended Practice" should be changed to "Publication", and vice versa. (See 40 CFR 280.20(b)(2)(iv)(B) and (C)). The API catalogue lists all documents by number, regardless of whether they are a "Recommended Practice" or "Publication". For the items listed, there is only one API document bearing that number, so there is little doubt as to the correct reference. In API 1631, in 40 CFR 280.21(b)(3)(ii)(A), the words "Existing Steel" should not be in the title.

API has a number of additional documents which appear to be relevant to UST's, but which are not referenced in the text of the USEPA rules. These include API 1628, "Underground Spill Cleaup Manual", API 1635, "Management of Underground Storage Systems ...", and API 2015, "Cleaning Petroleum Storage Tanks. Under the language of the federal rule, it appears that these could be used as "standards of a nationally recognized organization" where relevant. The Board solicits comment as to whether USEPA intended that these not be used, or inadvertently omitted them. Note that API 1628 is mentioned in the preamble to the federal rule (53 Fed. Reg. 37091), but is not in the text of any rule. The preamble also contains many other references which are not reflected in the rules.

The NACE references have been changed to the format preferred by the organization, which is described above. For example, "Standard RP-02-85" has been changed to "Standard Recommended Practice RP0285-85". (See 40 CFR 280.11(b)).

The PEI reference has also been changed to the format preferred by PEI: "PEI/RP100-87"

Two UL standards referenced by USEPA have not yet been adopted by UL. 40 CFR 280.20(a)(2)(iv)(B) references UL 1746, which was proposed in November,

1987, but has not been adopted. 40 CFR 280.20(b)(1)(A) references UL Subject 971, which is under consideration, but has not yet been proposed. These references have been omitted from the proposal. In the case of UL Subject 971, UL has indicated that there is no document yet in existence which could be placed in the file, and that it objects to the Board referencing the number. In the case of UL 1746, the APA authorizes only the incorporation by reference of "standards or guidelines", not proposed standards. The Board is on UL's notice list to receive these standards and will add them to the list when they are adopted.

40 CFR 280.20(a)(2)(iv)(C) references UL Canada "CAN4-G03.1-M85". This should read "CAN4-S603.1-85". Also, "Steel" should be inserted before "Underground" in the title. 40 CFR 280.20(b)(1)(D) references UL Canada CAN4-S633-M81. The current reference is to the 1984 edition ("-M84"), which the Board has used. 40 CFR 280.20(b)(1)(C) references UL Canada "Guide ULC-107". The intended reference appears to be "Subject C107C-M84", which has a title close to that given. UL Canada "Subject C107" exists, but is unrelated to the subject matter of the reference.

Section 731.113(b) incorporates federal regulations by reference. 10 CFR 50, Appendix A is an NRC regulation which is used to define an exemption for certain radioactive waste tanks.

40 CFR 280.3 is from the now-repealed UST rules. It required notification of the existence of UST tanks. As is discussed below, the Board has referenced the old rule. The repealed date is specified to make it clear that the incorporation by reference is not to be updated.

40 CFR 302.4 et seq. are USEPA's listing of CERCLA hazardous substances and reportable quantities. These are used in the definition of "hazardous substances" discussed above.

The USEPA rules also include references to a large number of federal statutes. These are troubling in that they could be construed as incorporations by reference. The APA neither specifically authorizes nor prohibits the incorporation by reference of a federal statute.

Many of the federal statute references are mere surplusage which have no real function in the rule. These have been deleted. Other references are to federal statutes or rules which have been implemented at the State level in other identical in substance rulemakings. For example, as discussed above, the RCRA definition of "hazardous waste" exists in 35 Ill. Adm. Code 721. In these situations the equivalent Illinois rule is cited.

Other references are really references to an action by a federal agency, with the statutory reference serving only to identify the nature of the action. For example, 40 CFR 280.10 exempts UST systems containing materials that are "regulated under the Atomic Energy Act..." These do not appear to serve the function of an incorporation by reference, and hence have not been placed in the incorporations Section.

Some of the federal statute references do appear to serve the same function as an incorporation by reference. For example, the definition of "hazardous substance UST system" in 40 CFR 280.12, discussed above, defers to

Section 101(14) of CERCLA. It would be appropriate to treat this as an incorporation by reference, since the rule is deferring to another document for the substance of a definition. However, as is discussed above, the Board has instead proposed to set forth the text of the CERCLA definition, and to replace the statutory references within that definition with incorporations by reference of the federal regulations which implement the referenced statutes.

Section 731.114

The Board has added a Section explaining the rationale for substituting "Fire Marshal" or "Agency" for "implementing agency" in the USEPA rules. Generally, the Agency is the implementing agency for corrective action beyond immediate response. The Fire Marshal is the implementing agency for everything else. This is discussed further in the specific Sections below.

Section 731.120

This and the following Sections are numbered from the USEPA rule according to a simple correspondence rule:

USEPA Section number	268.20
Insert zeros to right of decimal point so there are 3 digits after decimal	268.020
Add constant	<u>463.100</u>
Section number in 35 Ill. Adm. Code	731.120

In the following discussion the Board will avoid unnecessary repetition of the CFR and Ill. Adm. Code numbers for Sections. In some cases a reference to the Board Section number should be taken as a reference to the underlying CFR number, and vice versa.

Section 731.120 sets the performance standard for new UST systems. This Section involves several "alternative action" provisions, which are discussed above in general. 40 CFR 280.20(a)(2)(iv) and (b)(2)(iv) allow for alternative guidelines by the implementing agency. The Board has proposed to delete this language, but could consider adopting any alternatives which the Fire Marshal adopts.

40 CFR 280.20(a)(5), (b)(4), (c)(2)(i) and (e)(6) allow operators to comply with another method which is determined by the implementing agency "to be no less protective of human health and the environment". The Fire Marshal could address these either by rules specifying other methods, or by rules establishing procedures for case-by-case determinations. The Board has proposed to delete this language, but could consider adopting any alternatives which the Fire Marshal adopts.

Section 731.121

This Section sets technical standards for upgrading of existing UST systems.

40 CFR 280.21(b)(2)(iv) allows operators to comply with another method

which is determined by the implementing agency "to be no less protective of human health and the environment". The Fire Marshal could address these either by rules specifying other methods, or by rules establishing procedures for case-by-case determinations. The Board has proposed to delete this language, but could consider adopting any alternatives which the Fire Marshal adopts.

#### Section 731.122

This Section requires notification to the Fire Marshal of new tanks. It is similar to repealed Section 731.103.

Section 9002 of RCRA and repealed 40 CFR 280.3 required notification of existing tanks by May 8, 1986. The Board adopted the equivalent in R86-28. However, Section 731.901 delayed compliance until USEPA authorized Illinois' UST program. At the time the Board adopted that Section, it anticipated that USEPA would quickly authorize the Illinois program. However, this has not yet happened, and does not appear likely in the near future.

P.A. 85-861, Ill. Rev. Stat. 1987, ch. 127 1/2, par. 156(b)(1), required notification by December 31, 1987, for tanks which held regulated substances after January 1, 1974.

The legislation on USTs in P.A. 85-861 can be read as mandating that the Board adopt a State UST program which would function as a State program enforceable under State law pending approval by USEPA. The Board has therefore proposed to repeal the delayed compliance date in Section 731.901, discussed below.

The federal rule contains references to Sections 9002 of RCRA and Section 103(c) of CERCLA. For the reasons discussed above in connection with incorporations by reference, the Board has replaced these with references to the federal regulations which implement the statutes. The repealed RCRA UST notification requirement was in 40 CFR 280.3 (1987). The CERCLA notification requirement is in 40 CFR 302.6. These are incorporated by reference in Section 731.113.

As proposed by the Board, the note advises users that notification was required under 40 CFR 280.3, unless CERCLA notification was given under 40 CFR 302.6, and under Ill. Rev. Stat. 1987, ch. 127 1/2, par. 156(b)(1).

#### Section 731.130

This Section requires that the operator ensure that releases due to spilling or overfilling do not occur.

#### Section 731.131

This Section requires maintenance and inspection of corrosion control equipment in steel tanks.

40 CFR 280.31(b)(1) requires testing of cathodic protection systems every three years, or according to another time frame established by the implementing agency. The Board has proposed not to adopt the alternative, but

could consider adopting any alternatives which the Fire Marshal adopts.

#### Section 731.132

This Section requires that materials used in construction or liners be compatible with the substance stored in the tank.

#### Section 731.133

This Section governs repairs of UST systems.

40 CFR 280.33(d)(3) allows operators to use another test method which is determined by the implementing agency "to be no less protective of human health and the environment". The Fire Marshal could address these either by rules specifying other methods, or by rules establishing procedures for case-by-case determinations. The Board has proposed to delete this language, but could consider adopting any alternatives which the Fire Marshal adopts.

#### Section 731.134

This Section governs reporting and recordkeeping.

The introduction to 40 CFR 280.34 requires operators of UST systems to cooperate with inspections by the implementing agency, "as well as requests for documents submission, testing and monitoring by the ... operator pursuant to section 9005 ..." of RCRA. There is a question as to whether USEPA intends this provision to preserve federal document request rights following delegation to the states, or whether this is merely a careless reference to the federal statutory basis for document requests which are provided for in the rules, and which will be delegated to the states. Section 9005 of RCRA appears to contemplate that states will take over information requesting functions from USEPA. The Board has therefore proposed to follow the latter interpretation, but solicits comment. The reference to Section 9005 is therefore unnecessary, and has been deleted.

#### Section 731.140

This and the following Sections govern leak detection systems. Section 731.140(b) requires the operator to notify ESDA when the leak detection system indicates that a leak may have occurred.

40 CFR 280.40(c) contains a table which specifies compliance dates for release detection. For pressurized piping, release detection is required by December 22, 1990. For tanks and suction piping, release detection is required at various dates through 1993, depending on the age of the system.

It would be difficult to meet Administrative Code Unit margin requirements if the table were kept in the rule. Rather than move the table to an Appendix, the Board has replaced the table with a narrative statement of the compliance dates. It appears that this is actually shorter and clearer than the table.

#### Section 731.141

This Section contains the release detection requirements for petroleum tanks.

#### Section 731.142

This Section contains the release detection requirements for hazardous substance tanks. These include release detection in secondary containment, double walls and external liners.

40 CFR 280.42(b)(5) allows other methods of release detection if the operator demonstrates other methods which are as effective as the methods specified in 40 CFR 280.43, and obtains prior approval from the implementing agency. This alternative appears to be one which the Fire Marshal could address by adopting rules specifying procedures allowing such approval. The Board has deleted this provision, but will consider adoption of any procedures adopted by the Fire Marshal.

#### Section 731.143

This Section specifies the methods of release detection for tanks. Methods include inventory control, manual tank gauging, tightness testing, automatic gauging, soil vapor monitoring, groundwater monitoring or interstitial monitoring.

40 CFR 280.43(a)(5) requires product dispensing in accordance with state or local standards, or to within 6 cubic inches per five gallons of product withdrawn. Presumably this means that the State is to require compliance with the more stringent, or else the inventory control would fail to reliably indicate the absence of leaks. Gasoline metering is regulated by the Illinois Department of Agriculture. (Ill. Rev. Stat. 1987, ch. 147, par. 143). The regulations appear to be at 8 Ill. Adm. Code 600.120 and 600.650. The regulations fail to specify a metering standard. Therefore the Board has deleted the reference to state and local standards from the rule, and will rely only on the federal standard. The Board has proposed to add a note referencing the Department of Agriculture rules, but providing that each operator relying on inventory control has to obtain independent certification of meter accuracy.

40 CFR 280.43(g)(2) requires a secondary barrier which is "sufficiently thick and impermeable (at least  $10^{-6}$  cm/sec) ..." USEPA probably means "at most  $10^{-6}$  cm/sec". The Board has corrected this apparent typographical error in proposed Section 731.143(g)(2). Also, the Board has replaced  $10^{-6}$  with 0.000001 to conform with codification requirements which limit the use of superscripts. (1 Ill. Adm. Code 100.340(i)) The Board regrets the loss of clarity associated with this change.

The Administrative Code Unit rule is based on the General Assembly's data processing limitations: their system will print " $10^{-6}$ " as "10-6", which is the way the rule will appear in the State's official printed version of the Administrative Code. In addition, the Code Unit eventually wants to have the Code in a data base form which will allow users to search the Code and obtain electronic transmission of relevant portions. Superscripts and other exotic characters would limit the use of such a data base in the absence of a universal standard on how these commands and characters are implemented at the

machine level. The Code Unit does have procedures for granting individual approval "if absolutely necessary", provided the agency prepares a "camera ready" copy of the rule for publication. The Code Unit could also insist that the rule be moved to an Appendix, which is not subject to the format requirements.

Another alternative would be to define a function such as:

"AEn" means A times 10 raised to the nth power.

The rule would then be written as "1.0E-6 cm/sec". This would probably be understood by a majority of readers without referring to the definitions, since this is the way  $10^{-6}$  would be written in many programming languages. An alternative would be a narrative standard such as "ten to the minus six cm/sec." Another alternative would be to express this as "100 micrometers /sec." The Board solicits comment as to which version is more understandable.

40 CFR 280.43(h) allows alternative leak detection methods if the operator demonstrates to the implementing agency that the method can detect a leak of 0.2 gallons per hour with a probability of 95% and a false alarm rate of 5%. This alternative appears to be one which the Fire Marshal could address either by adopting rules specifying other testing methods or by adopting rules specifying procedures allowing approval on a case-by-case basis.

This alternative action provision is somewhat different than the others. It includes a precise numerical standard for action by the implementing agency, but lacks procedures for approval of alternative methods. The Board is concerned that the specific test methods enumerated in the rule may not be applicable to every conceivable situation, so that a method of case-by-case approval is an essential part of the program. The Board has therefore proposed to adopt a rule with minimal procedural requirements, specifically that the approval be given by permit condition. The Board could consider adopting any other procedural requirements adopted by the Fire Marshal.

#### Section 731.144

This Section specifies the methods of leak detection in piping.

#### Section 731.145

This Section requires the operator to maintain records concerning release detection methods. The operator must maintain equipment manufacturer's claims for five years, and the results of monitoring and documentation of calibration, maintenance or repair of release detection equipment for one year.

40 CFR 280.45 allows for alternative reasonable record retention times to be specified by the implementing agency. The Board has proposed to delete this language, but could consider adopting any alternatives which the Fire Marshal adopts.

Section 731.150

40 CFR 280.50 requires operators to report suspected releases to the implementing agency within 24 hours or "another reasonable time period specified by the implementing agency". This clearly solicits action by way of rulemaking, since it would be impossible to request an individual extension of the reporting period without in effect reporting the suspected release. This provision is evidently intended to allow states to adjust the reporting time to accommodate local release reporting requirements. In Illinois CERCLA-type reporting must be done to the ESDA within 24 hours. There is therefore no reason to provide for an alternative reporting period.

40 CFR 280.50 requires reporting to the "implementing agency". The Board has proposed to require reporting to ESDA instead. ESDA will relay the report to the Fire Marshal and Agency, which will coordinate their response. Reporting to ESDA is more consistent with existing Illinois requirements concerning releases.

Section 731.151

40 CFR 280.51 requires operators to conduct a release investigation when required by the implementing agency. The implementing agency may require a release investigation under this Section if it discovers off-site impacts, such as free product in basements, sewers or waterways. Although the remedial action itself would be within the Agency's jurisdiction, the investigation, prior to confirmation that the release is from a particular source, is within the Fire Marshal's jurisdiction. The proposal therefore provides that the Fire Marshal is the agency from which an order to investigate must come.

This Section uses the word "investigate" to describe the operator's actions following notification. This is a poor choice of words, since it invites confusion with the Agency's powers to "investigate" under Section 4 of the Act. This Section is not in any way intended to transfer those powers to the operator. The Agency can conduct whatever investigation it sees fit, within its statutory authority, in parallel with the operator's investigation. However, the operator's investigation appears to be a condition precedent to a confirmation of a leak under the following Sections. Therefore, if the Agency learns of off-site impacts prior to the Fire Marshal, it should coordinate with the Fire Marshal to get orders sent to all suspected sources.

The rules need to specify the procedure by which the Fire Marshal orders an investigation. This is clearly an essential part of the program, since the rules would not require corrective action if there were no mechanism for issuing these orders. The Board has therefore proposed minimal procedural requirements, specifically a written order from the Fire Marshal or an oral order followed by a written confirmation. The Board will consider replacing this language with any more specific procedures adopted by the Fire Marshal.

Section 731.152

40 CFR 280.52 requires operators to immediately investigate suspected releases and to report to the implementing agency within seven days "or another reasonable time period". This appears to invite rulemaking by the

Fire Marshal. The Board has proposed to delete this language, but could consider adopting any alternative which the Fire Marshal adopts.

#### Section 731.153

Section 731.153(a)(2) includes a reference to reportable quantities under CERCLA. The implementing regulations appear to be at 40 CFR 302.4 and 302.5. These have been incorporated by reference in Section 731.113.

The note following Section 731.153(b) includes a cross reference to CERCLA reporting requirements. Although this is gratuitous, the Board has modified the text so as to retain the references consistent with APA requirements. For the reasons discussed above in connection with incorporations by reference, the Board has replaced the statutory reference with a reference to the implementing regulations. These appear to be 40 CFR 302.6, which has been incorporated by reference in Section 731.113. The Board has added the phone number for the National Response Center, so as to identify the agency to receive the notice. The "local authority" to receive notice is governed by Section 750.410. The Board has also added the phone number for the ESDA, which will also receive notices under this Part.

40 CFR 280.53 includes three "alternative action" provisions. Two of these allow the implementing agency to specify an alternative to the 25 gallon reportable quantity limit for petroleum product spills. The other allows the implementing agency to specify a time other than 24 hours for clean up of a spill. The Board has proposed to delete this language, but could consider adopting any alternatives which the Fire Marshal adopts.

#### Section 731.160

The following Sections specify what the operator does by way of immediate response and corrective action.

#### Section 731.161

40 CFR 280.61 requires the operator to take certain initial response actions within 24 hours, "or another reasonable period of time". The actions include reporting the release, preventing further release and identifying and mitigating fire, explosion and vapor hazards. This appears to invite rulemaking by the state implementing agency to specify a time consistent with local law. As noted above, Illinois generally requires reporting of releases within 24 hours. The proposal therefore specifies a 24 hour time frame for initial response.

#### Section 731.162

40 CFR 280.62(a) requires operators to perform certain specified initial abatement measures, "unless directed to do otherwise by the implementing agency". 40 CFR 280.62(b) requires the operator to report to the implementing agency on initial abatement measures, within 20 days after confirmation "or another reasonable period of time." The initial abatement measures include removal of regulated substances from the system; visual inspection; mitigation of fire and safety hazards; remediation of hazards posed by any excavated soils; measurement for the release at the site where contamination

is most likely to be present; and, investigation to determine the presence of free product and initiation of free product removal as soon as practicable.

These provisions form the bridge between immediate response, subject to the Fire Marshal's jurisdiction, and corrective action, subject to the Agency's jurisdiction. This Section covers a 20 day time period spanning confirmation of the leak through submission of the initial report. Some of the actions must begin immediately, and hence might be subject to oversight by the Fire Marshal. Others, including the investigation and initial report, take up to 20 days, and merge into corrective action proper. Clearly the report needs to be submitted to the Agency, since it forms the basis of the corrective action steps which follow.

In that these are transitional rules between the Fire Marshal's and Agency's jurisdiction, there is a question as to which agency should be able to modify the initial abatement measures or the time for submitting the report. In the proposal this question is avoided by omitting the alternatives. The initial abatement measures are basic, common sense directives such as empty the tank and avoid fire or explosion. There seems to be no need either to modify the rules, or to provide a mechanism for adjusting the requirements on a case-by-case basis. Likewise, there is no need to allow for extension of the 20 day period for the initial report. If the operator is unable to collect some of the required data within 20 days, he should so report. The missing data can be supplied in the subsequent reports.

#### Section 731.163

This Section governs the initial site characterization, which is a report which the operator is supposed to send to the Agency within 45 days after the date of a release. 40 CFR 280.63(a) provides that the operator is to prepare the report unless directed otherwise by the implementing agency. 40 CFR 280.63(b) requires the operator to submit the report within 45 days "or another reasonable period of time determined by the implementing agency." The latter provision could be addressed through rulemaking. Either could allow for case-by-case waivers or extensions by the implementing agency. With respect to the 45-day period, there does not appear to be any reason to change this number through rulemaking. As for case-by-case waivers or extensions of the period, the rule does not include any standards for agency action. In that such waivers or extensions do not appear to be essential to the program, the Board has not proposed any standards or procedures for granting such, but invites comment.

#### Section 731.164

This Section governs free product removal, and requires the operator to prepare and submit a free product removal report.

40 CFR 280.64 requires the operator to remove free product "to the maximum extent practicable as determined by the implementing agency." However, no procedures are specified for such determination.

There are two possible interpretations of this standard. The first is that "the maximum extent practicable" is a subjective standard within the unreviewable discretion of the agency. This would be unacceptable as a matter

of Illinois administrative law. The second is that it is an objective standard upon which the operator can present an expert opinion in the free product removal report, and with which the agency is free to disagree, based on its own experts. This is undoubtedly what the USEPA rule is intended to mean. However, it makes "as determined by the implementing agency" surplusage, since compliance with all of the standards is determined by the agency. The Board has therefore proposed to delete the surplusage, but solicits comment.

40 CFR 280.64(a) requires the operator to conduct free product removal in a manner that "properly treats, discharges or disposes of recovery byproducts in compliance with applicable local, state and federal regulations." The Board solicits comments as to what these regulations are, and proposes to insert as comprehensive a list as possible.

40 CFR 280.64(d) requires the operator to submit the free product removal report within 45 days "unless directed otherwise." This appears to contemplate a case-by-case extension of the time period. However, there is no standard or procedures for agency action. In that it does not appear to be an essential part of the program to have such extensions, the Board has not proposed any mechanism for granting such extensions.

#### Section 731.165

This Section requires the operator to conduct an investigation for soil and groundwater cleanup if: wells have been affected; free product is in need of recovery; contaminated soil may be in contact with groundwater; or, if the implementing agency requests, based on the potential effects of contaminated soil or groundwater on nearby surface water and groundwater resources.

40 CFR 280.65(b) requires the report "as soon as practicable or in accordance with a schedule established by the implementing agency" This appears to be acceptable, assuming the Agency is to establish a schedule leading to a report "as soon as practicable."

#### Section 731.166

This Section allows the Agency to require operators to submit a corrective action plan after it has reviewed the reports in the previous Sections. The plan must provide for "adequate protection of human health and the environment."

#### Section 731.167

This Section sets out public participation requirements for closure plans.

#### Section 731.170

This and the following Sections concern out-of-service UST systems and closure of systems. These rules concern the routine closure of tanks which are not suspected of leaking. They are to be implemented by the Fire Marshal.

Section 731.170 concerns temporary closure of tanks. The operator has to continue corrosion protection and leak detection, unless the tank is empty. After 12 months the operator must permanently close the tank, unless it meets the standards for new or upgraded tanks.

40 CFR 280.70(c) allows the implementing agency to extend the temporary closure period for substandard tanks. This could be done either through rulemaking, or through a case-by-case extension. However, the USEPA rule does not provide a standard under which the extension should be granted, or procedures. There appears to be no reason to adopt a time other than 12 months, and the availability of extensions appears to not be essential to the program. The Board has therefore deleted the language concerning extensions, but could consider any provisions the Fire Marshal adopts.

#### Section 731.171

This Section requires that the operator notify the Fire Marshal 30 days before beginning closure or change of service of a tank. Change in use to storage of a non-regulated substance is a change in service.

40 CFR 280.71(a) allows the implementing agency to determine another "reasonable time" for the notification requirement. This could be addressed only through rulemaking, since an operator could not request an alternative time without in effect notifying the Fire Marshal that he was considering closure or change in service. There seems to be no reason to depart from the 30 day requirement, but the Board could consider any alternatives the Fire Marshal may adopt.

#### Section 731.172

Before closure or change in service is completed, the operator must conduct a site assessment to measure for the presence of a release where contamination is most likely to be present. If contamination is discovered, the operator must begin corrective action.

#### Section 731.173

When directed by the Fire Marshal, the owner or operator of a UST system permanently closed before December 22, 1988, must assess the excavation zone and close the UST system in accordance with this Subpart if releases poses a current or potential threat to human health or the environment.

40 CFR 280.73 refers to human health "and" the environment. The Board has changed this to "or". This is probably a typographical error by USEPA. It seems unlikely that USEPA intends the implementing agency to find both conditions before ordering an assessment.

#### Section 731.174

This Section requires that records be maintained for three years after closure or change of service.

#### Section 731.900 (Repealed)

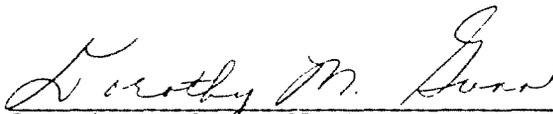
This was the incorporation by reference section for the UST rules adopted in R86-1 and 28. ASTM G57-78 is a method of measuring soil conductivity which was used in an exemption for tanks located in non-corrosive soils. USEPA has now dropped this exemption.

Section 731.901

This was the delayed compliance date for the old UST rules. As was discussed above, the Board has proposed to adopt a set of rules which will be immediately effective as State rules pending approval by USEPA.

This proposed Opinion supports the Board's proposed Order of this same date. The Board will accept written public comment for a period of 45 days after the date of publication of the proposed rules in the Illinois Register.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Proposed Opinion was adopted on the 2<sup>nd</sup> day of February, 1989, by a vote of 7-0.

  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board