

ILLINOIS POLLUTION CONTROL BOARD  
May 27, 1993

IN THE MATTER OF: )  
 )  
RCRA SUBTITLE D AMENDMENTS ) (Identical in Substance Rule)  
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R93-10

Proposal for Public Comment.

Proposed Opinion of the Board (by J. Anderson):

The Board today adopts this proposed opinion in support of the proposed Resource Conservation and Recovery Act (RCRA) Subtitle D amendments to the Board's nonhazardous solid waste landfill regulations. The text of the proposed amendments appears in a separate order, adopted on May 20, 1993 pursuant Section 7.2 of the Act. They have been submitted for publication in the Illinois Register, which initiates a 45 day public comment period.

The Board initiated this rulemaking to amend its nonhazardous waste landfill (NWLFL) regulations in order to make them at least as stringent as the USEPA regulations implementing Subtitle D of the RCRA. The USEPA regulations address Municipal Solid Waste Landfill Facilities (MSWLF).

The enabling State legislation, HB 299, contains a new Section 22.40 in the Environmental Protection Act (Act) which mandates Board rulemaking. This mandate requires that the Board adopt regulations pursuant to Section 7.2 of the Act that are identical in substance to regulations adopted by the USEPA to implement Sections 4004 and 4010 of the Resource Conservation and Recovery Act (RCRA) of 1976 (P.L. 94-580, codified as 42 U.S.C. para. 6944 & 6950). Section 22.40 provides that Section 5 of the Administrative Procedure Act (5 ILCS 100/1-1 et seq.) shall not apply. Because this rulemaking is not subject to Section 5 of the APA, it is not subject to first notice or second notice review by JCAR.

The Board started the "public comment" phase of this rulemaking by adopting the proposal for public comments on May 20, 1993. The Board provides the justification and support for the proposed amendments in today's opinion.

AGENCY OR BOARD ACTION?  
EDITORIAL CONVENTIONS

The Board appended two routine discussions at the end of this opinion. The first is a discussion of how the Board codifies requirements that call for state determinations, such as for exemptions, exceptions, etc. The second discussion relates

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codifies requirements that call for state determinations, such as for exemptions, exceptions, etc. The second discussion relates to our use of language in the codification of identical-in-substance rules. We intend these as reference aids for interested persons in the regulated community.

#### RCRA SUBTITLE D PROGRAM

The USEPA promulgated on October 9, 1991, the final municipal solid waste landfill regulations pursuant to the requirements of the Resource Conservation and Recovery Act of 1976 (P.L. 94-580, codified as 42 U.S.C §§ 6944 & 6950) (Subtitle D landfill regulations). The Subtitle D regulations (Subtitle D Regulations) establish minimum national criteria for municipal solid waste landfill (MSWLF) units. Section 4005(c)(1) of the RCRA requires all RCRA authorized states including Illinois to adopt and implement a permit program or other system of approval that complies with the performance standards of the Subtitle D Regulations on or before October 9, 1991.

The Subtitle D Regulations prescribe minimum criteria for MSWLFs including location restrictions, facility design and operating criteria, groundwater monitoring requirements; corrective action requirements, closure and postclosure care requirements, and financial assurance requirements. The regulations establish differing requirements for existing and new units. The states are required to seek a determination by the USEPA that their state programs comply with the minimum standards of the Subtitle D Regulations, within two years of the effective date of the Subtitle D Regulations (October 9, 1993). The Subtitle D Regulations provide flexibility to the states in choosing any design standards that will secure compliance with the federal rule's performance standards.

#### BOARD ACTION

The new Section 22.40 of the Environmental Protection Act (Act) requires the Board to adopt regulations that are identical-in-substance to the federal regulations relating to MSWLF program in accordance with Section 7.2 of the Act. However, where federal regulations authorize the state to adopt alternative standards, procedures or schedules to those contained in the federal regulations, Section 22.40 provides that the Board may retain existing regulations that establish such alternative standards. Since the Board's existing nonhazardous solid waste landfill regulations prescribe comprehensive standards that address all elements covered by the Subtitle D Regulations, the Board intends to retain existing requirements as far as possible.

The approach taken by the Board in the instant proposal is to: (i) clarify the applicability of existing regulations to include MSWLF units; and (ii) only where Board rules are

deficient, prescribe additional requirements applicable only to MSWLF units. The Board concludes that this is consistent with the identical in substance mandate. Also, it avoids the creation of a dual permit program for MSWLF units, which may cause considerable administrative difficulties to both the Agency and the regulated community. Moreover, extensive changes to the existing regulations will not be not required to comply with the Subtitle D Regulations since they are substantially equivalent to the Subtitle D Regulations.

#### Existing Nonhazardous Solid Waste Landfill Regulations

Currently in Illinois, landfills accepting municipal solid wastes are regulated under the Board's nonhazardous solid waste landfill regulations found at 35 Ill. Adm. Code 807 and 810 through 815. These regulations prescribe comprehensive standards that use a mix of performance and minimum design standards, so as to protect the existing environment, both above and below ground, from degradation. Among the significant requirements are:

Interrelated systems of checks and balances to control transport of contaminants, including a stringent groundwater assessment program;

Liners of compacted earth, or compacted earth and geomembrane;

Leachate collection systems;

State of the art leachate treatment and disposal requirements;

Landfill gas monitoring and management;

Detailed construction and operating oversight requirements;

Postclosure care for as many years as is necessary at each landfill to demonstrate that contamination is no longer a problem;

A groundwater monitoring system designed to quickly detect potential problems, and to trigger prompt remedial action where indicated;

Built-in provisions to avoid sensitive areas ranging from airports to nature preserves;

More intensive permitting and reporting requirements; and

Phase-out of existing landfills timed to the level of compliance with the new regulations.

Equivalency Determination and the Agency's Application

At the outset, the Board notes that the proposed amendments are based on the equivalency determination made by the Agency as part of its application to the USEPA. The Agency filed its solid waste management permit program application with the USEPA for determination of adequacy, pursuant to Section 4005(c) of Subtitle D of RCRA on March 31, 1993. A significant portion of the application consists of a demonstration of compliance of the Board's existing landfill regulations with the Subtitle D Regulations. The demonstration includes a detailed section-by-section evaluation of the Subtitle D Regulations and the corresponding requirements in the Board's existing NSWLF regulations. The Agency's analysis shows that the Board's existing regulations are substantially equivalent to the Subtitle D Regulations contained in 40 CFR 258. However, the analysis also identifies a number of deficiencies in relation to the NSWLF regulations.

The Board's review of the Agency's application indicates that, except for a few major items such as interpretation of existing units/lateral expansions, corrective action procedures, and financial assurance requirements, the deficiencies are minor in nature. The Board recognizes that the Agency's application is a preliminary filing and other deficiencies may come to light upon the USEPA's review. However, the Board proposes to address all the deficiencies identified in the Agency's application. If additional shortcomings come to light upon the USEPA's review, the Board will address them during the comment period.

Due to the significant reliance on the Agency's application in this rulemaking, the Board will not discuss the details of the equivalency determination in this opinion. Instead, the Board will incorporate the Agency's application by reference. The Board notes that the Agency's application is marked as Public Comment #1 (PC #1). The Board will limit its discussion to the major issues associated with the proposed amendments, and the actual changes in the rules.

FEDERAL ACTIONS COVERED BY THIS RULEMAKING

The RCRA Subtitle D regulations (Subtitle D Regulations) was drawn from 40 CFR 258 (1992) (Solid waste disposal facility criteria). The following USEPA actions are covered in this rulemaking:

56 Fed. Reg. 50978, October 9, 1991	(Subtitle D Regulations)
57 Fed. Reg. 28626 February 22, 1992	(Subtitle D Regulations corrections)

## REGULATORY FRAMEWORK

Under the instant proposal, the MSWLFs will be regulated as a subset of the putrescible waste landfill category. The MSWLF units will be subject to putrescible waste landfill requirements, and the additional requirements adopted pursuant to this rulemaking. The framework for regulating the nonhazardous landfills will remain the same, i.e. the new MSWLFs will be subject to the requirements of Part 811 and the existing MSWLFs and lateral expansions will be subject to the requirements of Part 814.

Permitting Requirements for MSWLFs

The Subtitle D Regulations require the State to implement a permit program to regulate all MSWLFs including on-site facilities, which are currently exempted from the landfill permit program pursuant to Section 21 (d) of the Act. The legislative amendments (HB 299) at Sections 21(d), 21(t), 22.42, and 22.43 of the Act provide for the implementation of the permit requirements applicable to MSWLFs. The statutory changes are reflected in proposed amendments to Part 814 relating to the permit requirements for MSWLF units. The permitting procedures under the instant proposal are explained below.

New MSWLF Units: In the case of new MSWLFs, the owner or operator, prior to waste disposal, will have to comply with all the requirements of Part 811 and obtain a permit in accordance with Parts 812 and 813.

Existing MSWLF Units: The implementation of the permit program in the case of existing units is more complicated due to the existing transition rules of Part 814. The Board's existing regulations at Sections 814.104 allow the owners or operators of existing facilities until September, 1994 to file an application for a permit modification, unless the Agency notifies the owners or operators to file the application at an earlier date. Such facilities are allowed to operate under their Part 807 permit until the approval of the permit modifications under Part 814. Thus, a facility may continue operation under a Part 807 permit until September 1994 and still be in compliance with Part 814.

In order to bring existing MSWLFs under compliance with the permitting requirements of the Subtitle D Regulations before October 9, 1993, the Act was amended to include a new section (Section 22.42) dealing with the interim permit requirements for existing MSWLF units. Section 22.42 requires the owners or operators of existing MSWLF units to submit a written application to the Agency for a permit (if no permit has been issued for the MSWLF unit under Section

21(d) of the Act) or a permit modification (if a permit has been issued under Section 21(d) of the Act. Such applications must be filed by 30 days of the effective date of the amendatory Act, or September 1, 1993, whichever occurs first. The owners or operators who file such applications are deemed to have an interim permit on October 9, 1993 or 30 days after the Agency receives the application, whichever occurs first.

Section 22.42 allows the Agency to impose conditions to ensure compliance with the requirements of the MSWLF interim rules of Section 22.41 of the Act. The interim regulations are essentially a combination of the most stringent requirements of the Subtitle D Regulations and the Board regulations, which ensures the compliance of the State program with the Subtitle D Regulations. The Board notes that these interim rules will take effect on the effective date of the amendatory Act of 1993 and expire when: (i) the State receives full approval of its MSWLF program by the USEPA; and (ii) rules adopted by the Board in the instant rulemaking have been reviewed by the USEPA.

Also, according to Section 22.42, no interim permit or interim permit modification are deemed issued if the Agency provides a written notification that the application is incomplete or the applicant must file an application for a lateral expansion. The Board notes that the deemed issued permits are intended mainly to ensure compliance with the Subtitle D Regulations. The owners or operators of existing MSWLF units are still required to submit applications for significant modification of their permits in accordance with Section 814.104 by September 9, 1994.

Finally, Section 22.42 sets forth the terms for the termination of the interim permits.

The Board notes that it has proposed the requirements of Section 22.42 of the Act in Section 814.107.

Lateral Expansions: Section 21(t) of the Act prohibits a lateral expansion of a MSWLF unit on or after October 9, 1993 without a permit modification granted by the Agency. The statutes do not prescribe any specific permitting requirements for lateral expansions other than granting authority to the Agency to issue such permit modifications (Section 22.43 of the Act). Also, the Board notes that the interim permit requirements of Section 22.42 do not apply to lateral expansions. Since for the most part, lateral expansions are treated as new MSWLF units under the Subtitle D Regulations, the Board has proposed permitting requirements at Section 814.108, which parallels the requirements for application for significant modification of

permits at Section 814.104.

Section 814.108 requires owners or operators of MSWLFs planning lateral expansions after October 9, 1993 to file an application for a permit modification with the Agency. The permit application must comply with the requirements and procedures of Parts 812 and 813. The owners or operators may begin lateral expansion of a MSWLF unit only upon the Agency's approval of the permit modification pursuant to the procedures of Part 813.

#### MAJOR REVISIONS

##### Existing Units and Lateral Expansions

The new statutory definitions of the terms "existing MSWLF unit" and "lateral expansion", proposed at Section 810.103, change the existing interpretation of what constitutes a lateral expansion, as far as MSWLFs are concerned. Under the existing landfill program, an expansion beyond the existing permitted area is considered as a lateral expansion. However, under the proposed definition of "lateral expansion," a horizontal expansion is considered as any area where solid waste is placed for the first time directly upon the bottom liner of the unit on or after October 9, 1993. According to this definition, the waste boundary is the actual foot print of the waste and not the originally permitted area. Thus, any horizontal expansion beyond the actual foot print of the waste at an existing MSWLF unit on or after October 9, 1993 will be considered as a lateral expansion, which will be subject to the additional requirements.

The Board notes that the proposed definition of "Existing MSWLF unit" in Section 810 does not retain the language in the Subtitle D definition, which specifies that expansion of an "existing MSWLF unit"<sup>1</sup> would have to be consistent with past operating practices or operating practices modified to ensure good management. This additional language was included by the USEPA to discourage the owners and operators from prematurely enlarging their facilities to avoid compliance, but at the same time account for legitimate landfill expansions. The Board notes that even though the proposed statutory definition of "existing MSWLF unit" does not contain the additional language, the USEPA's intent still applies. The owners or operators of MSWLF units are expected to continue their existing operating practices.

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<sup>1</sup>"Existing MSWLF unit" is defined in 40 CFR 258.2 as any municipal solid waste landfill unit that is receiving solid waste as of the effective date of this part (October 9, 1993). Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management.

### Groundwater monitoring and corrective Action

The proposed amendments to the groundwater monitoring program requirements under Section 811.319 prescribe a number of additional requirements applicable to MSWLFs. These amendments are incorporated within the framework of the existing groundwater monitoring program. The revisions include: more frequent monitoring of organic chemicals, additional assessment monitoring requirements, notification requirements, and detail procedures for assessment and implementation of corrective action.

The existing detection monitoring requirement at Section 811.319(a)(3)(B) specifies that organic chemicals must be monitored once every two years. However, the Subtitle D Regulations require the monitoring frequency to be at least once every year for the alternate list adopted by the State. Therefore, the Board is proposing to require monitoring of organic chemicals at MSWLFs to be performed on an annual basis.

The assessment monitoring requirements at Section 811.319(b) specify minimum requirements, which include monitoring of additional constituents that indicate the source and extent of contamination. The Board's existing regulations do not specify a specific list of constituents. However, the Subtitle D Regulations specify a comprehensive list of constituents (40 CFR 258, Appendix II) that must be monitored during assessment monitoring. In addition, the Subtitle D Regulations specify the subsequent steps that must be taken based on the results of such monitoring. In order to make the existing regulations as stringent as the Subtitle D Regulations, the Board proposes to amend Section 811.319(b) to incorporate the federal requirements relating to monitoring of additional constituents during assessment monitoring.

The Board's existing regulations specify general performance standards and time schedules for implementing remedial action. The remedial action requirements do not address the various aspects of the implementation of corrective action in detail, as required by the Subtitle D Regulations. In order to cure this deficiency, the Board proposes to adopt, in verbatim, the corrective action requirements of the Subtitle D Regulations found at 40 CFR 258.56, 258.57, and 258.58. The federal regulations specify detail requirements and procedures for assessment of corrective action measures, selection of remedy, and implementation of corrective action.

### Postclosure care

The Subtitle D Regulations require the owner or operator of a MSWLF to conduct postclosure care for a minimum period of 30 years after closure. The Board regulations also specify a similar postclosure care period for putrescible waste landfills.



However, the Board regulations provide for the reduction of the postclosure care period depending on the nature of the wastes accepted or recycling of leachate. In addition, the Board regulations provide a reduced minimum time period of 15 years for the implementation of certain elements of postclosure care such as groundwater monitoring and postclosure maintenance. The Board notes that these reductions are not inconsistent with the flexibility offered in the Subtitle D Regulations. However, the amendments to the statutory requirements relating to postclosure care, found at Section 22.17 of the Act, extends the minimum postclosure care period to 30 years for MSWLFs. Therefore, in order to be consistent with the statutes, the Board proposes to amend the existing regulations to include a minimum postclosure care period of 30 years.

The proposed amendments at Sections 811.111 and 811.319 require a 30-year minimum period for postclosure maintenance and groundwater monitoring, respectively. The Board notes that the instant proposal provides for reduction of the minimum postclosure care period through an Agency determination.

#### Financial Assurance Requirements

The proposed amendments to the financial assurance requirements under Section 811.Subpart G include two significant changes. First, the scope of the financial assurance requirements is expanded to include units of local governments. Second, the proposed amendments require the owner or operator of a MSWLF unit to provide financial assurance for corrective action. The board finds that these changes are necessary to comply with the requirements of the Subtitle D Regulations.

The existing regulations at Section 811.700 exempt facilities that are owned and operated by local units of governments from the financial assurance requirements, pursuant to Section 21.1(a) of the Act. However, the statute has been amended to remove the financial assurance exemption provided to units of local government (Section 21.1(a.5) of the Act). The statute requires any person, other than the State government and its agencies, to provide financial assurance to conduct the operation of a MSWLF unit on or after April 9, 1994<sup>2</sup>. The proposed changes to Section 811.700(c) reflect the statutory requirements concerning the exemption to units of local governments.

Section 21.1(a.5) of the Act requires the owner or operator of a MSWLF unit to provide financial assurance for closure, post closure care, and corrective action. The Board notes that the

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<sup>2</sup>The financial assurance requirements of the SDR become effective on April 9, 1994.

existing regulations require financial assurance for only closure and postclosure care. The instant proposal incorporates the statutory requirements relating to financial assurance for corrective action at Section 811.700(f).

SECTION-BY-SECTION DESCRIPTION OF THE AMENDMENTS  
TO PARTS 810, 811, AND 814

Part 810

Definitions (Section 810.103)

The Subtitle D amendments include the addition of the following statutory definitions relating to municipal solid waste landfill (MSWLF) units to Section 810.103: "Existing MSWLF unit", "Household waste", "Lateral expansion", "Municipal solid waste landfill unit" or "MSWLF unit", "New MSWLF unit", and "Resource conservation and recovery Act". These definitions are substantially similar to the definitions contained in 40 CFR 258.2 (1992).

An "Existing MSWLF unit" is defined as any municipal solid waste landfill unit that has received household waste before October 9, 1993. This statutory definition does not provide any limitation on waste placement similar to the federal definition of "Existing MSWLF unit". However, the intent of the Subtitle D Regulations is maintained by the modified statutory definition of "lateral expansion".

A "Household waste" is defined as any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

A "lateral expansion" is defined as a horizontal expansion of the actual waste boundaries of an existing MSWLF unit occurring on or after October 9, 1993, where a horizontal expansion is considered as any area where solid waste is placed for the first time directly upon the bottom liner of the unit on or after October 9, 1993. According to this definition, the waste boundary is the actual foot print of the waste and not the originally permitted area. Thus, any horizontal expansion beyond the actual foot print of the waste on or after October 9, 1993 will be considered as a lateral expansion, which is consistent with the USEPA's interpretation.

A "Municipal solid waste landfill unit" or "MSWLF unit" is defined as a contiguous area of land or an excavation that receives household waste, and that is not a land application, surface impoundment, injection well, or any pile of noncontainerized accumulations of solid, nonflowing waste that is

used for treatment or storage. The definition notes that a MSWLF unit may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, small quantity generator waste and industrial solid waste. Such a landfill may be publicly or privately owned or operated. A MSWLF unit may be a new MSWLF unit, an existing mswlf unit or a lateral expansion. A sanitary landfill is subject to regulation as a MSWLF if it receives household waste.

"New MSWLF unit" is defined as any municipal solid waste landfill unit that receives household waste on or after october 9, 1993 for the first time.

In addition to the above statutory definitions, the Board has the defined the term "owner" in Section 810.103 for purposes of clarity. The Board notes that the terms "owner" and "operator" have been used interchangeably, and sometimes together in various Sections of the existing landfill regulations at Parts 810 through 815. However, in the Subtitle D Regulations, both the terms "owner" and "operator" are used together consistently. The Board notes that its intent has always been that the owner is the operator if there is no other person operating the disposal facility operator, as indicated by the definition of "owner" at 35 Ill. Adm. Code 807.104. Therefore, the Board proposes to include the definition of "owner" in order to avoid any confusion regarding the applicability of the regulations to MSWLF units and other nonhazardous solid waste landfills. The Board notes that this definition is essentially the same as the definition of "owner" found at 35 Ill. Adm Code 807.104.

"Owner" is defined as a person who has an interest, directly or indirectly, in land, including a leasehold interest, on which a person operates and maintains a solid waste disposal facility. Further, the "owner" is the "operator" if there is no other person who is operating and maintaining a solid waste disposal facility.

Finally, the Board proposes to include the statutory definition of RCRA, which means the Resource Conservation and Recovery Act of 1976 (P.L. 94-580, codified as 42 usc. §§ 6901 et seq.) As amended.

#### Incorporation by Reference (Section 810.104)

The amendments to Section 810.104 includes the incorporation by reference to two documents. The first document is entitled "Test Methods for Evaluating Solid Waste, Physical/Chemical methods, EPA Publication SW-846", which contains test methods for evaluating solid waste. The second document is a list of hazardous organic and inorganic constituents found at 40 CFR 258.Appendix II (1992).

Part 811Purpose, Scope and Applicability (Section 811.101)

The scope of the Board's nonhazardous solid waste landfill regulations is significantly broader than the Subtitle D Regulations since it is not limited to only MSWLF units. The Board's existing regulations cover all existing and new landfills in the State that accept nonhazardous solid waste including wastes that are characterized as inert, putrescible and chemical waste. However, in order to incorporate the federal requirements in the State's existing landfill program, the statutes created a new category of landfills, which is based on the federal definition of municipal solid waste landfill (MSWLF) unit. Under the Board's existing regulations, the MSWLF category is a subset of putrescible waste landfills.

The applicability requirements relating to new landfills at Section 811.101 is amended to reflect the applicability of the Board's existing landfill regulations to new MSWLF units. The amendment at Section 811.101(d) specifies that the standards applicable to new MSWLF units include: (i) the standards applicable to putrescible waste landfills under Part 811; and (ii) the requirements adopted pursuant to this rulemaking, which are identical-in-substance to the Subtitle D Regulations. In addition, subsection 811.101(d)(2) notes the inclusion of a new appendix to Part 811, which provides a section-by-section correlation between the federal MSWLF regulations and the Board's NSWLF regulations.

Operating Standards (Section 811.107)

The Subtitle D landfill amendments add a new Section 811.107(m) that prohibits the disposal of bulk or noncontainerized liquid waste in MSWLF units, except for the following exceptions: (i) household waste other than septic wastes; and (ii) leachate and gas condensate derived from the MSWLF unit where the unit is equipped with a composite liner and leachate collection system designed and constructed to maintain less than 30 centimeters of head above the liner. Subsection 811.107(m), which is derived from 40 CFR 258.28 (1992) also defines the terms "liquid wastes" and "gas condensate."

Closure and Postclosure Care (Sections 811.110 and 811.110)

The proposed amendments prescribe additional requirements for MSWLF units concerning closure and post closure care. The closure requirements for MSWLF units are specified at subsections 811.110(e) through 811.110(h). Mainly, the proposed amendments to closure requirements specify the deadlines for initiating and completing closure, and require a deed notation to be made regarding the property.

An owner or operator is required to initiate closure within 30 days of the final receipt of waste, but no later than one year if the unit has remaining capacity and there is reasonable likelihood of receiving additional waste. The amendments allow the Agency to grant extensions beyond the 1-year deadlines if the owner or operator of the affected unit demonstrates that the unit does not pose a threat to human health and environment. The Board notes that Section 811.110(e), which, as presently proposed, requires an Agency determination, but does not provide adequate guidance to the Agency to consider in making its decision. **The Board particularly requests comments as to whether such a determination might be addressed through a variance (or provisional variance) proceeding.** (see the discussion entitled "Agency or Board Action?", at the end of this opinion)

The proposed amendment at Section 811.110(f) requires the completion of closure within 180 days of beginning of closure. The Agency is allowed to grant extensions beyond the 180-day deadlines under limited circumstances. The Board notes that Section 811.110(f), which, as presently proposed, requires an Agency determination, but does not provide adequate guidance to the Agency to consider in making its decision. **The Board particularly requests comments as to whether such a determination might be addressed through a variance (or provisional variance) proceeding.** (see the discussion entitled "Agency or Board Action?", at the end of this opinion)

Subsection 811.110 (g) requires the owner or operator, upon closure, to record a notation on deed to the property that notifies any potential buyer of the property that the land has been used as a landfill and that its use is restricted. The notation from the deed may be removed only if the owner or operator demonstrates that all wastes are removed from the facility.

Additional postclosure care requirements for MSWLF units are specified at Sections 811.111(c) and 811.111(d). Section 811.111 (c) extends the minimum postclosure care period to 30 years from 15 years for MSWLF units to comply with the minimum federal requirement at 40 CFR 258.61 (1992). The Board notes that a similar change has been proposed at Section 811.303, which specifies the requirements for establishing the design period for chemical and putrescible waste landfills. Section 811.111(d)(1) requires the owner or operator of MSWLF unit to provide a description of the planned uses of the property during the postclosure care period. Further, Section 811.111(d)(2) specifies that such uses must not disturb the integrity of the final cover, liner, or any other components of the containment system, unless such uses are necessary to comply with the requirements of Part 811. Section 811.111(d)(3) requires the Agency to approve any other disturbances if the owner or operator

demonstrates the disturbance will not increase the potential threat to human health or the environment.

The Board notes that Section 811.111(d)(3), which, as presently proposed, requires an Agency determination, but does not provide adequate guidance to the Agency to consider in making its decision. **The Board particularly requests comments as to whether such a determination might be addressed through a variance (or provisional variance) proceeding.** (see the discussion entitled "Agency or Board Action?", at the end of this opinion)

#### Recordkeeping Requirements (Section 811.110)

The instant proposal prescribes recordkeeping requirements applicable to MSWLF units at Section 811.112. The Board notes that these requirements are in addition to the existing recordkeeping requirements of Parts 812 and 813. Section 811.112 requires the owner or operator to maintain an operating record at the site or in a location specified by the Agency. Further, the amendments specify the type of information that must be retained in the operating record, which includes location restriction demonstrations, inspection records, gas monitoring results, groundwater monitoring, financial assurance documentation, etc.

#### Design period (Section 811.303)

The revisions to Section 811.303 reflect the minimum 30-year postclosure care period required for MSWLF units under the Subtitle D Regulations. The proposed changes to Section 811.303(a) clarify that the minimum postclosure care period for putrescible waste landfills is 30 years. Further, Section 811.303(a) specifies that any reduction of the postclosure care period at a MSWLF unit must be in accordance with Section 811.303(d), which as drafted requires an Agency determination. Again, the Board questions whether Section 811.303(d) provides adequate guidance for the Agency to consider in making its decision. **In view of this, the Board particularly requests comments as to whether such a determination should be addressed through an adjusted standard proceeding.** (see the discussion entitled "Agency or Board Action?", at the end of this opinion)

Also, the Board notes that it has added the term "postclosure care" at end of Sections 811.303(b) and 811.303(c) for purposes of clarity.

#### Groundwater Monitoring Program and Corrective Action (Sections 811.319, 811.324, 811.325, and 811.326)

The proposed amendments to Section 811.319 include a number of additional requirements applicable to MSWLF units. The proposed changes are described below.

### Detection Monitoring

Section 811.319(a)(1)(A) requires groundwater monitoring to be continued for a minimum period of 30 years after closure. This change reflects the 30-year minimum postclosure care period required by the Subtitle D Regulations. A similar change is proposed at Section 811.319(a)(1)(C).

Section 811.319(a)(3)(C) requires an operator of a MSWLF unit to monitor each monitoring well for the organic chemicals listed in Section 811.319(a)(3)(A) on an annual basis, which is the minimum monitoring frequency under the Subtitle D Regulations.

### Assessment Monitoring

The additional requirements applicable to MSWLF units have been proposed at Section 811.319(b)(5).

Essentially the owner or operator of a MSWLF unit is required to monitor the groundwater for the constituents listed in 40 CFR 258.Appendix II during assessment monitoring (Section 811.319(b)(5)(A)). The list contains approximately 300 inorganic and organic constituents. If any constituents are detected, within 14 days obtaining the sampling results, a notice identifying the such constituent must be placed in the operating record and the Agency must be notified (Section 811.319(b)(5)(B)). The owner or operator is required to establish background concentrations for the detected constituents (section 811.319(b)(5)(C)).

If any constituent concentration exceeds an applicable groundwater quality standard, the owner or operator must place a notice in the operating record identifying such constituents and notify the Agency, officials of the local municipality or county, and all persons who own land or reside on land that directly overlies any part of the plume of contamination if the plume has migrated off-site.

### Remedial/Corrective Action

At the outset, the Board notes that the term "remedial action" used in the Board's existing regulations has the same meaning as the term "corrective action" used in the Subtitle D Regulations. However, the term "corrective action" has been used in the instant proposal in relation to the MSWLFs since the same terminology has been used in the Act.

Since the existing landfill regulations do not prescribe detail requirements for the corrective action procedures, the Board has proposed the requirements of the Subtitle D

Regulations relating assessment of corrective action measures (40 CFR 258.56), selection of remedy (40 CFR 258.57), and implementation of corrective action (40 CFR 258.58) in the new Sections 811.324, 811.325, and 811.326.

Assessment of corrective action measures (Section 811.324)

The assessment of corrective action measures is triggered when the groundwater impact assessment, performed in accordance with Section 811.319(c), indicates that corrective action is needed or if the assessment monitoring indicates that a confirmed exceedance above the applicable groundwater quality standard is attributable to the facility. The Board notes that these triggers for assessment of corrective action measures, specified at Section 811.324(a) are the same as those specified for remedial action under Section 811.319(d). The Board finds them to be consistent with the triggers specified in the Subtitle D Regulations.

Section 811.324(b) requires the owner or operator to complete the evaluation alternative corrective action measures within a reasonable period of time. The Board notes that the instant proposal requires the Agency to specify the time period in the facility's permit. The Board requests comments on whether specifying a specific time limit would be a more workable alternative.

Section 811.324(c) requires the owner or operator to continue monitoring in accordance with the assessment monitoring program.

Section 811.324(d) requires the evaluation of corrective action measure to meet the requirements and objectives of Section 811.325 and specifies a list of items that the owner or operator must address in the assessment. The items include time required to complete the remedy, cost of implementation, reliability, ease of implementation, and institutional requirements.

Finally, Section 811.324(e) requires the owner or operator to hold a public meeting, prior to the selection of a remedy, to discuss the results of the assessment of corrective measures.

Selection of Remedy (Section 811.325)

The owner or operator is required to select one or more remedies based on the results of the assessment of corrective measures. The selected remedy must meet the objectives specified in Section 811.325(b), which require that the remedy must be protective of human health and



environment, attain groundwater quality standards, control the sources of release, and comply with the standards of waste management during the implementation phase. Section 811.324(c) specifies the criteria that must be considered in selecting the remedy.

Section 811.324(d) requires the owner or operator to specify the time schedules for initiating and completing the selected remedy. The Agency is required by Section 811.324(d)(2) to specify the time schedules in the facility's permit. The factors that must be considered by the owner or operator to specify the time schedules are prescribed in Section 811.324(d)(3).

Section 811.324(e) requires the Agency to determine that remediation of a release is not required upon a demonstration by the owner or operator that the: (i) the groundwater is contaminated by multiple sources and cleanup of the contamination resulting from the MSWLF will not result in significant reduction in risk; (ii) contaminated groundwater is not a source currently or reasonably expected to be used as source of drinking water and is not hydraulically connected to other sources of drinking water; (iii) remediation is not technically feasible; or (iv) unacceptable cross media impact would result from remediation. However, an Agency determination will not affect the State's authority to require the owner or operator undertake source control or other measures.

#### Implementation of Corrective Action (Section 811.326)

The requirements relating to the implementation of the corrective action is set forth in this Section. Section 811.325(a)(1) requires the owner or operator to establish a corrective action groundwater monitoring program, which at minimum meets the assessment monitoring requirements, indicates the effectiveness of the remedy, and demonstrates compliance with the groundwater quality standards. The owner or operator is required by section 811.325(a)(3) to take any necessary interim measures to protect human health and environment. Section 811.325(b) requires the owner or operator to implement alternative methods to achieve compliance if the selected remedy fails to achieve compliance. The Agency must be notified prior to the implementation of any alternative methods.

If the owner or operator determines that compliance cannot be achieved by currently available methods, the owner or operator is required by Section 811.325(c) to obtain a certification to that effect, by a qualified groundwater scientist or a determination by the Agency. The owner or operator is required to implement alternate measures to

control the source of contamination or for removal of equipment, units, devices, or structures.

The remedy is considered to be complete when compliance is achieved with the groundwater quality standards over a period of three years. Section 811.325(e) allows the Agency to specify alternative time period by giving consideration to the factors listed under Section 811.325(e)(2), which include extent and concentration of release, contaminant characteristics, groundwater flow, etc. Upon completion of the remedy, the owner or operator is required to obtain a certification by a qualified groundwater scientist or a determination by the Agency that the remedy is completed.

#### Load checking (Section 811.323)

The proposed amendments to section 811.323 require the load checking program at MSWLF units to include the inspection of incoming waste loads for polychlorinated biphenyl (PCB) wastes in addition to checking for hazardous wastes.

#### Financial Assurance Requirements (Section 811.Subpart G)

##### Applicability (Section 811.700)

The amendments to Section 811.700 remove the exemption applicable to units of local governments from providing financial assurance at MSWLFs. Section 811.700(f) requires the owners or operators of MSWLFs to provide financial assurance for closure, postclosure, and corrective action. The Board notes that the existing regulations do not require financial assurance for corrective action.

##### Written Cost estimate (Section 811.704)

The amendments at Section 811.704(k) specify the requirements for the written cost estimate for corrective action at MSWLFs. Essentially, the owner or operator of a MSWLF unit is required to prepare a detailed cost estimate, in current dollars, of the cost hiring a third party to perform the corrective action. The owner or operator is required to adjust the cost estimate annually for inflation. The cost estimate must be increased if changes in the corrective action program increases the maximum cost of corrective action. Requirements are also prescribed to allow the owner or operator to reduce the corrective action cost estimate if such estimate exceeds the maximum remaining costs of the corrective action. Lastly, the owner or operator is required to provide coverage until released from the financial assurance requirements.

Revision of Cost Estimate (Section 811.705)

The proposed amendments at Section 811.705(d) requires the owner or operator of a MSWLF unit to adjust the cost estimates of closure, postclosure, and corrective action for inflation on an annual basis. Section 811.705(d) also specifies the time period during which such adjustments must be made.

Mechanisms for Financial Assurance (Section 811.706)

The proposed amendments clarify the applicability of the various mechanisms for providing financial assurance for corrective action at MSWLF units. In addition, Section 811.706(b) requires the owner or operator to ensure that: (i) the amount assured is sufficient to cover the costs of closure, postclosure care, and corrective action sufficient funds; and (ii) the funds will be available in a timely and fashion when needed. Section 811.706(c) specifies the dates at which the owner or operator must provide financial assurance.

The proposed amendments to Sections 811.710 (trust fund), 811.711(surety bond guaranteeing payment), 811.712 (surety bond performance), and 811.713 (letter of credit) clarify the applicability of the different mechanisms for providing financial assurance for closure, postclosure care and corrective action at MSWLFs. The substantive requirements of the mechanisms have not been changed.

Editorial Changes

The existing regulations under Section 811.Subpart G prescribe requirements applicable to the operator of a facility. However, the Subtitle D Regulations refer to "owner and operator." The Board notes that its intent has always been that the owner is the operator if there is no other person operating the disposal facility operator, as indicated by the definition of "owner" at 35 Ill. Adm. Code 807.104 (see discussion under Definitions-Section 810.103). The Board proposes to amend the Subpart G requirements to include the terms "owner and operator" at all locations of the text where the term "operator " has been used in order to avoid any confusion regarding the applicability of the regulations. The Board notes that it intends to make similar changes to other sections of the regulations during the comment period. The Board also notes that it has proposed a definition of the term "owner" under Section 810.103 to clarify its intent.

Part 814

The proposed amendments to the existing landfill regulations of Part 814 clarify the applicability of the rules, prescribe permitting requirements, and additional landfill standards for

existing MSWLF units and lateral expansions.

Applicability (Section 814.101)

Section 814.101 clarifies the applicability of the Part 814 regulations to existing MSWLF units and lateral expansions. The existing MSWLF units are required to comply with the interim permit requirements in addition to complying with permitting requirements under the existing regulations (see discussion under regulatory framework).

Compliance Date (Section 814.102)

The existing MSWLF units and lateral expansions are required to comply with requirements of part 814 by October 9, 1993, notwithstanding any delayed compliance requirement under the existing regulations.

Permit Requirements for Existing MSWLF Units and Lateral expansions (Sections 814.107 and 814.108)

The Board notes that a detailed discussion regarding the permitting requirements has been provided under the section addressing the regulatory framework in today's opinion.

Standards for Existing landfills that Remain Open for more than Seven Years (Section 814.Subpart C)

Applicable standards (Section 814.302)

The amendments at Section 814.302(c) prescribe additional requirements for existing MSWLF units. Section 814.302(c)(1) requires the owner or operator to comply with the location standard at Section 811.302(e), which deals with the airport restrictions. The existing MSWLF units are also subject to the foundation mass stability standards at Sections 811.304 and 811.305.

The amendments at Section 814.302(d) prescribe additional requirements for lateral expansions. The lateral expansions are subject to the airport restrictions (Section 811.302(e)), foundation mass stability standards (Sections 811.304 and 811.305), liner and leachate collection system (Sections 811.306 811.307, and 811.308), and groundwater impact assessment requirements (Section 811.317).

Standards for Existing landfills that must Initiate closure Within Seven Years (Section 814.Subpart D)

Applicable standards (Section 814.402)

The amendments at Section 814.402(c) prescribe additional

requirements for existing MSWLF units. Section 814.402(c)(1) requires the owner or operator to comply with the location standard at Section 811.302(e), which deals with the airport restrictions. The existing MSWLF units are also subject to the foundation mass stability standards at Sections 811.304 and 811.305.

The amendments at Section 814.402(d) prescribe additional requirements for lateral expansions. The lateral expansions are subject to the airport restrictions (Section 811.302(e)), foundation mass stability standards (Section 811.304 and 811.305), liner and leachate collection system (Sections 811.306, 811.307, and 811.308), and groundwater impact assessment requirements (811.317), groundwater monitoring system requirements (Section 811.318), and groundwater quality standards (Section 811.320).

#### Editorial Correction

The Board notes that an editorial correction has been made at Section 814.501(b), which specifies the closure requirement for landfills that cannot meet the applicable standards of Part 814. The Board notes that due to an oversight, Section 814.501(b) does not provide any reference to Subpart D landfills, which are also covered by this Section. The Board notes that Section 814.401 requires landfills that cannot comply with the applicable requirements of Section 814.Subpart D to close in accordance with Section 814.Subpart E. The Board is proposing to make this correction to avoid any confusion regarding the applicability of Subpart E requirements. In this regard the Board notes that it has received a number of calls from the regulated community requesting clarification regarding Section 814.510(b). In view of this, Section 814.501(b) has been corrected by including Subpart D landfills.

#### APPENDIX

##### AGENCY OR BOARD ACTION?

Section 7.2(a)(5) of the Act requires the Board to specify which decisions USEPA will retain. In addition, the Board is to specify which State agency is to make decisions, based on the general division of functions within the Act and other Illinois statutes.

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

In a few instances in identical in substance rules,

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

1. Is the person making the decision applying a Board regulation, or taking action contrary to ("waiving") a Board regulation? It generally takes some form of Board action to "waive" a Board regulation.
2. Is there a clear standard for action such that the Board can give meaningful review to an Agency decision?
3. Does the action result in exemption from the permit requirement itself? If so, Board action is generally required.
4. Does the decision amount to "determining, defining or implementing environmental control standards" within the meaning of Section 5(b) of the Act. If so, it must be made by the Board.

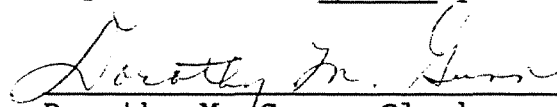
There are four common classes of Board decision: variance, adjusted standard, site specific rulemaking, and enforcement. The first three are methods by which a regulation can be temporarily postponed (variance) or adjusted to meet specific situations (adjusted standard or site specific rulemaking). Note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

#### EDITORIAL CONVENTIONS

As a final note, the federal rules have been edited to establish a uniform usage throughout the Board's regulations. For example, with respect to "shall", "will", and "may" - "shall" is used when the subject of a sentence has to do something. "Must" is used when someone has to do something, but that someone is not the subject of the sentence. "Will" is used when the Board obliges itself to do something. "May" is used when choice of a provision is optional. "Or" is used rather than "and/or", and denotes "one or both". "Either"... "or" denotes "one but not both". "And" denotes "both".

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 27<sup>th</sup> day of May, 1993, by a vote of 4-0.

  
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Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board