

ILLINOIS POLLUTION CONTROL BOARD  
February 5, 1998

IN THE MATTER OF: )  
)  
MUNICIPAL SOLID WASTE LANDFILL ) R98-9  
(MSWLF) RULES: AMENDMENTS TO 35 ) (Rulemaking - Land)  
ILL. ADM. CODE 811, 813, AND 848 )

Proposed Rule. First Notice.

OPINION AND ORDER OF THE BOARD (by G.T. Girard, C.A. Manning and Joseph Yi):

On August 11, 1997, the Board received a joint proposal for amendments (Prop.) to the Board's municipal solid waste landfill rules (35 Ill. Adm. Code 811 and 813) filed by the Illinois Environmental Protection Agency (Agency) and the National Solid Waste Management Association (NSWMA) (collectively, proponents). On August 21, 1997, the Board accepted the proposal for public comment and added 35 Ill. Adm. Code 848.104 to the proposal for public comment. Also on August 21, 1997, in response to proponent's motion the Board agreed to limit the scope of this proceeding by not entertaining requests from other parties to expand the list of sections proposed for amendment.

On October 27, 1997, and November 19, 1997, hearings were held before Board Hearing Officer Marie Tipsord. The Board has received one public comment in this proceeding.

Today, the Board sends this proposal to first notice pursuant to the Illinois Administrative Procedure Act (5 ILCS 100/1-1 *et seq.* 1996). Based on the two hearings and the public comment received, the Board finds that proceeding to first notice with the proposal is warranted. In the sections that follow, the Board will summarize the proposal and discuss the changes made to the proposal as a result of comments and testimony received thus far by the Board.

PROPOSAL FOR PUBLIC COMMENT

In general there are four reasons for the amendments as proposed by proponents: (1) to ease certain requirements that drive up costs without a commensurate environmental benefit; (2) to modify or eliminate requirements that the proponents believe are no longer technically defensible; (3) to ensure uniformity in the Board's rules; and (4) to remain consistent with the federal Resource Conservation and Recovery Act Subtitle D program. Prop. at 2-3. Proponents indicated that each of the proposed amendments are intended to serve one or more of the aforementioned purposes. Prop. at 2. The specific changes to the rules are indicated in the attached order.

Also in the proposal for public comment, the Board, on its own motion, opened 35 Ill. Adm. Code 848.104, Definitions, to propose adding three statutory definitions and amend four

definitions with the language from P.A. 89-200, effective January 1, 1996. This change is merely ministerial and is not intended to expand the scope of the rulemaking. Adding this mandatory language will eliminate the need to hold separate hearings concerning these legislatively-required changes.

### ISSUES RAISED

At the first hearing on October 27, 1997, (Tr.1) several issues were raised by Board members and staff. The proponents responded to those questions at that hearing and at the second hearing on November 19, 1997 (Tr.2). In addition proponents filed a public comment (PC) to address the remaining issues after the hearings. Following is a discussion of the issues and the suggested changes, if any, to the proposal.

#### Section 811.309

An issue was raised regarding Section 811.309(g)(1) which, as proposed, required sampling and testing to ensure compliance with the Act and 35 Ill. Adm. Code.Subtitle G. The proponents were asked to identify the specific requirements under the Act or Board regulations pertaining to leachate sampling from landfills. Tr.1 at 20. In response, Mr. Kenneth Liss, an Agency employee, testified and suggested changing subsection (g)(1) by deleting the reference to the Act and 35 Ill. Adm. Code.Subtitle G and adding references to Sections 811.309, 811.312, 811.317, and 811.319. Tr.2 at 7; Exh. 5 at 1.

The Board agrees that the changes suggested by the Agency will make the rule more specific. Therefore, the Board will make the suggested change.

#### Section 811.319

The next issue raised concerns the proposed changes to the quarterly groundwater monitoring program in Section 811.319(a)(1)(A). Proponents were asked whether the monitoring frequency would revert back to a quarterly interval if the groundwater monitoring results indicate that the monitored units constitute a threat to groundwater. Tr.1 at 39. Mr. Liss testified that if a source is determined to be a threat to groundwater, the operator must implement confirmation procedures in subsection (a)(4) and if increases are confirmed, the operator must file an assessment monitoring program pursuant to subsection (b)(2). Tr.2 at 7; Exh. 5 at 2. Under the proposed changes to subsection (b)(1) more frequent sampling can be proposed by the operator or required by the Agency as a permit condition. Tr.2 at 7; Exh. 5 at 2. The monitoring does not automatically revert back to quarterly monitoring. Tr.2 at 7; Exh. 5 at 2.

The Board does not believe that any changes need be made to the rule in response to this issue. The explanation by the Agency answers the question raised.

#### Section 811.312

Issues were also raised concerning the gas processing requirements at Section 811.312(g). Four specific questions were asked. The first two questions involved permitting of gas processing facilities: 1) under what conditions are permits required for gas processing facilities, and 2) whether landfill gas processing facilities are required to have a permit. Tr.1 at 28 and 29. The proponents responded in their public comment that if a landfill's gas constitutes more than 50% of the off-site handling facility's total volume, the off-site facility must be included in the landfill's permit. PC 1 at 2. For all other off-site handling arrangements there are no specific permit requirements. PC 1 at 2.

As there are no specific permit requirements, proponents believe that there only two circumstances in which an off-site facility could be required to have a permit of some kind or be subject to a specific permit requirements. PC 1 at 3. The first circumstance is where the off-site gas operation is so located and/or emits sufficient specified air contaminants as to constitute an emission source subject to permitting under 35 Ill. Adm. Code 201.141-201.146. PC 1 at 3. The second is when the gas processing operation is already embraced as a component of another landfill operator's permit. PC 1 at 3.

Proponents maintain that the instant proposal merely stands for the proposition that one permit is enough. PC 1 at 3. The proponent is not attempting to relieve gas processing facilities from permitting requirements but rather to avoid duplicative permit requirements. PC 1 at 3-4.

The third question raised was whether, in the case of a permitted off-site facility, would the operator of the landfill have any control over the processing system to ensure that an adequate system of gas disposal is always accessible and available. Tr.1 at 29. Proponents responded by stating that to answer the question what is meant by "control" in the context of the regulatory system must be understood. PC 1 at 4. If "control" means responsibility, nothing in this present proposal alters control so that the operator has the responsibility to control the flow rate from the landfill unit as necessary to meet all rules and regulations including migration. PC 1 at 4. The landfill operator is responsible for ensuring that the standards of Section 811.311(a) are not exceeded. PC 1 at 4.

If however, "control" means "power over" the proponents maintain that the real question is what "control" does a landfill operator have under the current rule. PC 1 at 4. The proponents assert that the only means of control is to incorporate the applicable regulatory standards in contractual provisions binding the gas handling facility. PC 1 at 4. Proponents maintain that the thrust of the proposal is much narrower. The thrust of the proposal is that requiring a second permit for an off-site gas processing facility which is already permitted will provide no additional control over the off-site gas processing facility. PC 1 at 4.

The final question asked of proponents regarding Section 811.312(g) was whether there is anything in the rules that would require the operator to be responsible for ensuring protection of the environment and public health and safety. Tr.1 at 31-32. The proponents respond that the proposal makes no changes to the *status quo* of the landfill operator's responsibility. The instant proposal adds a cross-reference to Section 811.704(g)(3) which requires cost estimates if landfill gas is transported to an off-site processing system. PC 1 at

4. The proposal thus would make the financial assurance requirement applicable to all landfills that convey gas to an off-site processing facility no matter how much of the overall gas processing capacity is contributed by the individual landfill. PC 1 at 4-5.

The Board does not believe that any changes need be made to the rule in response to this issue. The explanation by the Agency answers the questions raised.

#### Section 811.321

Regarding Section 811.321, the Board asked the proponents to define what a construction quality assurance (CQA) officer is and why the CQA officer is the appropriate person to do the certification in Section 811.321. Tr.1 at 14. Proponents point out that the duties and qualifications for a CQA officer are set forth in Section 811.502(b) of the Board rules. PC 1 at 1. A CQA officer is required go be present to provide supervision and assume responsibility for performing all inspections. PC 1 at 1. Thus, the regulations as currently written require the CQA officer to be responsible for inspection and to certify construction in accordance with the engineering design for the liner. PC 1 at 2. The proposal would make the person responsible for the original construction, testing and certification also responsible for the recertification and reconstruction of the liner. PC 1 at 2.

The Board does not believe that any changes need be made to the rule in response to this issue. The explanation by the Agency answers the question raised.

#### Section 813.103

An issue was raised concerning the proposed inclusion of changes at Section 813.103(d) Section 813.103(d) as proposed states:

The applicant may modify a permit application at any time prior to the Agency decision deadline date. Any modification of a permit application that would otherwise be considered a significant modification of an approved permit shall constitute a new application for the purposes of calculating the Agency decision deadline date. Receipt by the Agency, within 30 days of the Agency decision deadline date, of any permit application modification not meeting the definition of "significant modification" shall extend the Agency decision deadline to a date 30 days from the date of receipt of the modified application. The Agency shall notify the applicant in writing within 30 days after the filing of a proposed permit modification if it deems the modification to be a significant modification. A determination by the Agency as to whether a modification is a significant modification is a final determination, appealable in the manner provided for the review of permit decisions under Section 40 of the Act. The Agency's decision deadline date shall be stayed as of the date of such written notice of the Agency's determination during the pendency of any timely-filed appeal challenging such an Agency determination.

The proponents were asked if the proposed language would in effect extend a statutory decision deadline. Tr.1 at 40. Mr. Edwin Bakowski, an Agency employee, testified that the proponents have no intention of proposing anything going beyond any statutory deadline in the Act. Tr.2 at 7; Exh 5 at 4. The proponents believe the language as proposed is defensible. The proponents point out that the Board has in the landfill rules and other rules stated that modifications of application can be and are new applications for purposes of calculation the statutory decision deadline. Tr.2 at 7; Exh 5 at 4. According to proponents the Board has also adopted rules that make it clear that the permit applicant may waive the statutory decision deadline. Tr.2 at 7; Exh 5 at 4. Thus, the proponents suggest that the Board consider any modification to the application as a new application which restarts the statutory deadline and that the Board provide by rule that the original deadline apply to “minor” modifications submitted more than 30 days before the statutory deadline. Tr.2 at 7; Exh 5 at 4. Further, any “minor” modification submitted within 30 days of the original deadline will have a new regulatory deadline 30 days from the date of receipt by the Agency. Tr.2 at 7; Exh 5 at 4.

The proponents also provide language, “in case the previous discussion is not sufficient from the Board’s perspective to defend a challenge to the proposed decision deadlines.” Tr.2 at 7; Exh 5 at 5. The language would provided that a “minor” modification may only be submitted during the last 30 days of a statutory review period if the applicant also submits a waiver of the statutory decision deadline allowing the Agency 30 days from the receipt of the modification to review it and to take action on the original applications. Tr.2 at 7; Exh 5 at 5.

The Board will modify the rule as suggested by the Agency in its testimony. The change will alleviate potential confusion in the rule and make clear when a waiver of statutory decision deadlines is necessary.

#### Section 813.504

The Board expressed concern at hearing over the availability of an annual report if the report is not forwarded to the Agency. Tr.1 at 48-51. The proponents indicated that after reevaluating the proposed language, they recommend that the introductory paragraph of Section 813.504 be changed to require submission of the annual report to the Agency. Tr.2 at 7; Exh 5 at 8. Changes were also suggested to subsections (a). Tr.2 at 7; Exh 5 at 8-9. The proponents state that the changes preserve the requirement to submit an annual report but in an abbreviated form allowing the public to obtain information without having to go to the landfill. Tr.2 at 7; Exh 5 at 9.

The Board does not believe that any changes need be made to the rule in response to this issue. The explanation by the Agency answers the question raised.

#### CONCLUSION

The Board will proceed to first notice with most of the proposal as submitted for public comment. The Board will make changes to the proposal as discussed in this opinion, suggested by proponents including amending the language in Section 813.103(d). The proposed language at Section 813.103(d) could create confusion regarding statutory decision

deadlines and the amendment in this first notice opinion alleviates that confusion. As to the remaining issues raised at hearing, the Board finds that explanations provided by proponents sufficiently support the proposal to warrant proceeding to first notice. Therefore, the Board will adopt the following order for first notice.

### ORDER

The Board directs the Clerk to cause the filing of the following with the Secretary of State for first notice publication in the *Illinois Register*.

TITLE 35: ENVIRONMENTAL PROTECTION  
 SUBTITLE G: WASTE DISPOSAL  
 CHAPTER I: POLLUTION CONTROL BOARD  
 SUBCHAPTER i: SOLID WASTE AND SPECIAL WASTE HAULING

PART 811  
 STANDARDS FOR NEW SOLID WASTE LANDFILLS

SUBPART A: GENERAL STANDARDS FOR ALL LANDFILLS

Section	
811.101	Scope and Applicability
811.102	Location Standards
811.103	Surface Water Drainage
811.104	Survey Controls
811.105	Compaction
811.106	Daily Cover
811.107	Operating Standards
811.108	Salvaging
811.109	Boundary Control
811.110	Closure and Written Closure Plan
811.111	Postclosure Maintenance

SUBPART B: INERT WASTE LANDFILLS

Section	
811.201	Scope and Applicability
811.202	Determination of Contaminated Leachate
811.203	Design Period
811.204	Final Cover
811.205	Final Slope and Stabilization
811.206	Leachate Sampling
811.207	Load Checking

SUBPART C: PUTRESCIBLE AND CHEMICAL WASTE LANDFILLS

Section	
811.301	Scope and Applicability
811.302	Facility Location
811.303	Design Period
811.304	Foundation and Mass Stability Analysis
811.305	Foundation Construction
811.306	Liner Systems
811.307	Leachate Drainage System
811.308	Leachate Collection System
811.309	Leachate Treatment and Disposal System
811.310	Landfill Gas Monitoring
811.311	Landfill Gas Management System
811.312	Landfill Gas Processing and Disposal System
811.313	Intermediate Cover
811.314	Final Cover System
811.315	Hydrogeological Site Investigations
811.316	Plugging and Sealing of Drill Holes
811.317	Groundwater Impact Assessment
811.318	Design, Construction, and Operation of Groundwater Monitoring Systems
811.319	Groundwater Monitoring Programs
811.320	Groundwater Quality Standards
811.321	Waste Placement
811.322	Final Slope and Stabilization
811.323	Load Checking Program
811.324	Corrective Action Measures for MSWLF Units
811.325	Selection of remedy for MSWLF Units
811.326	Implementation of the corrective action program at MSWLF Units

#### SUBPART D: MANAGEMENT OF SPECIAL WASTES AT LANDFILLS

Section	
811.401	Scope and Applicability
811.402	Notice to Generators and Transporters
811.403	Special Waste Manifests
811.404	Identification Record
811.405	Recordkeeping Requirements
811.406	Procedures for Excluding Regulated Hazardous Wastes

#### SUBPART E: CONSTRUCTION QUALITY ASSURANCE PROGRAMS

Section	
811.501	Scope and Applicability
811.502	Duties and Qualifications of Key Personnel
811.503	Inspection Activities

811.504	Sampling Requirements
811.505	Documentation
811.506	Foundations and Subbases
811.507	Compacted Earth Liners
811.508	Geomembranes
811.509	Leachate Collection Systems

## SUBPART G: FINANCIAL ASSURANCE

Section	
811.700	Scope, Applicability and Definitions
811.701	Upgrading Financial Assurance
811.702	Release of Financial Institution
811.703	Application of Proceeds and Appeals
811.704	Closure and Postclosure Care Cost Estimates
811.705	Revision of Cost Estimate
811.706	Mechanisms for Financial Assurance
811.707	Use of Multiple Financial Mechanisms
811.708	Use of a Financial Mechanism for Multiple Sites
811.709	Trust Fund for Unrelated Sites
811.710	Trust Fund
811.711	Surety Bond Guaranteeing Payment
811.712	Surety Bond Guaranteeing Performance
811.713	Letter of Credit
811.714	Closure Insurance
811.715	Self-Insurance for Non-commercial Sites

### Appendix A Financial Assurance Forms

Illustration A	Trust Agreement
Illustration B	Certificate of Acknowledgment
Illustration C	Forfeiture Bond
Illustration D	Performance Bond
Illustration E	Irrevocable Standby Letter of Credit
Illustration F	Certificate of Insurance for Closure and/or Postclosure Care
Illustration G	Operator's Bond Without Surety
Illustration H	Operator's Bond With Parent Surety
Illustration I	Letter from Chief Financial Officer

### Appendix B Section-by-Section Correlation Between the Requirements of the Federal MSWLF Regulations at 40 CFR 258 (1992) and the Requirements of Parts 810 through 814

AUTHORITY: Implementing Sections 5, 21, 21.1, 22, 22.17, 22.40 and 28.1 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/5, 21, 21.1, 22, 22.17, 22.40, 28.1 and 27].

SOURCE: Adopted in R88-7 at 14 Ill. Reg. 15861, effective September 18, 1990; amended in R92-19 at 17 Ill. Reg. 12413, effective July 19, 1993; amended in R93-10 at 18 Ill. Reg. 1308, effective January 13, 1994; expedited correction at 18 Ill. Reg. 7504, effective July 19, 1993; amended in R90-26 at 18 Ill. Reg. 12481, effective August 1, 1994; amended in R95-13 at 19 Ill. Reg. 12257, effective August 15, 1995; amended in R98-9, at \_\_\_ Ill. Reg. , effective \_\_\_\_\_.

NOTE: CAPITALIZATION INDICATES STATUTORY LANGUAGE.

### Section 811.309 Leachate Treatment and Disposal Systems

- a) Leachate shall be allowed to flow freely from the drainage and collection system. The operator is responsible for the operation of a leachate management system designed to handle all leachate as it drains from the collection system. The leachate management system shall consist of any combination of storage, treatment, pretreatment, and disposal options designed and constructed in compliance with the requirements of this Section.
- b) The leachate management system shall consist of any combination of multiple treatment and storage structures, to allow the management and disposal of leachate during routine maintenance and repairs.
- c) Standards for Onsite Treatment and Pretreatment
  - 1) All onsite treatment or pretreatment systems shall be considered part of the facility.
  - 2) The onsite treatment or pretreatment system shall be designed in accordance with the expected characteristics of the leachate. The design may include modifications to the system necessary to accommodate changing leachate characteristics.
  - 3) The onsite treatment or pretreatment system shall be designed to function for the entire design period.
  - 4) All of the facility's unit operations, tanks, ponds, lagoons and basins shall be designed and constructed with liners or containment structures to control seepage to groundwater.
  - 5) All treated effluent discharged to waters of the State shall meet the requirements of 35 Ill. Adm. Code 309.
  - 6) The treatment system shall be operated by an operator certified under the requirements of 35 Ill. Adm. Code 312.

d) Standards for Leachate Storage Systems

- 1) Except as otherwise provided in paragraph (d)(6) of this section, The the leachate storage facility must be able to store a minimum of at least five days' worth of accumulated leachate at the maximum generation rate used in designing the leachate drainage system in accordance with Section 811.307. The minimum storage capacity may be built up over time and in stages, so long as the capacity for five consecutive days of accumulated leachate, ~~during extreme precipitation conditions,~~ is available at any time during the design period of the facility.
- 2) All leachate storage tanks shall be equipped with secondary containment systems equivalent to the protection provided by a clay liner 0.61 meter (2 feet thick) having a permeability no greater than 10<sup>-7</sup> centimeters per second.
- 3) Leachate storage systems shall be fabricated from material compatible with the leachate expected to be generated and resistant to temperature extremes.
- 4) The leachate storage system shall not cause or contribute to a malodor.
- 5) The leachate drainage and collection system shall not be used for the purpose of storing leachate.
- 6) A facility may have less than five days' worth of storage capacity for accumulated leachate as required by subparagraph (d)(1) of this Section, if the owner or operator of the facility demonstrates that multiple treatment, storage and disposal options in the facility's approved leachate management system developed in accordance with 811.309(b) will achieve equivalent performance. Such options shall consist of not less than one day's worth of storage capacity for accumulated leachate plus at least two alternative means of managing accumulated leachate through treatment or disposal, or both treatment and disposal, each of which means is capable of treating or disposing of all leachate generated at the maximum generation rate on a daily basis.

e) Standards for Discharge to an Offsite Treatment Works

- 1) Leachate may be discharged to an offsite treatment works that meets the following requirements:
  - A) All discharges of effluent from the treatment works shall meet the requirements of 35 Ill. Adm. Code 309.

- B) The treatment systems shall be operated by an operator certified under the requirements of 35 Ill. Adm. Code 312.
  - C) No more than 50 percent of the average daily influent flow can be attributable to leachate from the solid waste disposal facility. Otherwise, the treatment works shall be considered a part of the solid waste disposal facility.
- 2) The operator is responsible for securing permission from the offsite treatment works for authority to discharge to the treatment works.
  - 3) All discharges to a treatment works shall meet the requirements of 35 Ill. Adm. Code 310.
  - 4) Pumps, meters, valves and monitoring stations that control and monitor the flow of leachate from the unit and which are under the control of the operator shall be considered part of the facility and shall be accessible to the operator at all times.
  - 5) Leachate shall be allowed to flow into the sewage system at all times; however, if access to the treatment works is restricted or anticipated to be restricted for longer than five days, then an alternative leachate management system shall be constructed in accordance with subsection (c).
  - 6) Where leachate is not directly discharged into a sewerage system, the operator shall provide storage capacity sufficient to transfer all leachate to an offsite treatment works. The storage system shall meet the requirements of subsection (d).
- f) Standards for Leachate Recycling Systems
- 1) Leachate recycling systems may be utilized only at permitted waste disposal units that meet the following requirements:
    - A) The unit must have a liner designed, constructed and maintained to meet the minimum standards of Section 811.306.
    - B) The unit must have a leachate collection system in place and operating in accordance with Section 811.307.
    - C) A gas management system, equipped with a mechanical device such as a compressor to withdraw gas, must be implemented to

control odors and prevent migration of methane in accordance with Section 811.311.

- D) The topography must be such that any accidental leachate runoff can be controlled by ditches, berms or other equivalent control means.
- 2) Leachate shall not be recycled during precipitation events or in volumes large enough to cause runoff or surface seeps.
  - 3) The amount of leachate added to the unit shall not exceed the ability of the waste and cover soils to transmit leachate flow downward. All other leachate shall be considered excess leachate, and a leachate management system capable of disposing of all excess leachate must be available.
  - 4) The leachate storage and distribution system shall be designed to avoid exposure of leachate to air unless aeration or functionally equivalent devices are utilized.
  - 5) The distribution system shall be designed to allow leachate to be evenly distributed beneath the surface over the recycle area.
  - 6) Daily and intermediate cover shall be permeable to the extent necessary to prevent the accumulation of water and formation of perched watertables and gas buildup; alternatively cover shall be removed prior to additional waste placement.
  - 7) Daily and intermediate cover shall slope away from the perimeter of the site to minimize surface discharges.
- g) Leachate Monitoring
- 1) Representative samples of leachate shall be collected from each ~~unit~~ established leachate monitoring location and tested in accordance with subsections (g)(2)(G) and (g)(3)(D) at a frequency of once per quarter ~~while the leachate management system is in operation.~~ until such time as samples have been obtained and tested for at least eight quarters. If for any reason insufficient leachate is obtained to yield a sample for testing during a given quarterly monitoring attempt, such attempt shall not count toward the eight quarters' leachate monitoring requirement. Thereafter, the ~~The~~ frequency of testing may ~~shall~~ be changed to once per year semi-annual for any monitored constituent while the leachate management system is in operation. However, the Agency may, by permit condition, require additional leachate sampling and testing as necessary to ensure compliance with this section and 35 Ill. Adm. Code 811.312, 811.317,

~~and 811.319, if it is not detected in the leachate. However, if such a constituent is detected in the leachate, testing frequency shall return to a quarterly schedule.~~

- 2) Discharges of leachate from units that dispose of putrescible wastes shall be tested for the following constituents prior to treatment or pretreatment:
  - A) Five day biochemical oxygen demand (BOD<sub>5</sub>);
  - B) Chemical oxygen demand;
  - C) Total Suspended Solids;
  - D) Total Iron;
  - E) pH;
  - F) Any other constituents listed in the operator's National Pollution Discharge Elimination System (NPDES) discharge permit, pursuant to 35 Ill. Adm. Code 304, or required by a publicly owned treatment works, pursuant to 35 Ill. Adm. Code 310; and
  - G) All of the indicator constituents chosen in accordance with 35 Ill. Adm. Code 811.319(a)(2)(B) and used by the operator for groundwater monitoring.
  
- 3) Discharges of leachate from units which dispose only chemical wastes shall be monitored for constituents determined by the characteristics of the chemical waste to be disposed of in the unit. They shall include, as a minimum:
  - A) pH;
  - B) Total Dissolved Solids;
  - C) Any other constituents listed in the operator's NPDES discharge permit, pursuant to 35 Ill. Adm. Code 304, or required by a publicly owned treatment works, pursuant to 35 Ill. Adm. Code 310; and
  - D) All of the indicator constituents chosen in accordance with 35 Ill. Adm. Code 811.319(a)(2)(B) and used by the operator for groundwater monitoring.

- h) Time of Operation of the Leachate Management System
- 1) The operator shall collect and dispose of leachate for a minimum of five years after closure and thereafter until treatment is no longer necessary.
  - 2) Treatment is no longer necessary if the leachate constituents do not exceed the wastewater effluent standards in 35 Ill. Adm. Code 304.124, 304.125, 304.126 and do not contain a BOD[5] concentration greater than 30 mg/L for six consecutive months.
  - 3) Leachate collection at a MSWLF unit shall be continued for a minimum period of 30 years after closure, except as otherwise provided by subsections (h)(4) and (h)(5), below.
  - 4) The Agency may reduce the leachate collection period at a MSWLF unit upon a demonstration by the owner or operator that the reduced period is sufficient to protect human health and environment.
  - 5) The owner or operator of a MSWLF unit shall petition the Board for an adjusted standard in accordance with Section 811.303, if the owner or operator seeks a reduction of the postclosure care monitoring period for all of the following requirements:
    - i) Inspection and maintenance (Section 811.111);
    - ii) Leachate collection (Section 811.309);
    - iii) Gas monitoring (Section 811.130); and
    - iv) Groundwater monitoring (Section 811.319).

BOARD NOTE: Subsection (h) is derived from 40 CFR 258.61 (1992).

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

#### Section 811.310 Landfill Gas Monitoring

- a) This Section applies to all units that dispose putrescible wastes.
- b) Location and Design of Monitoring Wells
  - 1) Gas monitoring devices shall be placed at intervals and elevations within the waste to provide a representative sampling of the composition and buildup of gases within the unit.

- 2) Gas monitoring devices shall be placed around the unit at locations and elevations capable of detecting migrating gas from the ground surface to the lowest elevation of the liner system or the top elevation of the groundwater, whichever is higher.
  - 3) A predictive gas flow model may be utilized to determine the optimum placement of monitoring points required for making observations and tracing the movement of gas.
  - 4) Gas monitoring devices shall be constructed from materials that will not react with or be corroded by the landfill gas.
  - 5) Gas monitoring devices shall be designed and constructed to measure pressure and allow collection of a representative sample of gas.
  - 6) Gas monitoring devices shall be constructed and maintained to minimize gas leakage.
  - 7) The gas monitoring system shall not interfere with the operation of the liner, leachate collection system or delay the construction of the final cover system.
  - 8) At least three ambient air monitoring locations shall be chosen and samples shall be taken no higher than 0.025 meter (1 inch) above the ground and 30.49m (100 feet) downwind from the edge of the unit or at the property boundary, whichever is closer to the unit.
- c) Monitoring Frequency
- 1) All gas monitoring devices, including the ambient air monitors shall be operated to obtain samples on a monthly basis for the entire operating period and for a minimum of five years after closure.
  - 2) After a minimum of five years after closure, monitoring frequency may be reduced to quarterly sampling intervals.
  - 3) The sampling frequency may be reduced to yearly sampling intervals upon the installation and operation of a gas collection system equipped with a mechanical device such as a compressor to withdraw gas.
  - 4) Monitoring shall be continued for a minimum period of: thirty years after closure at MSWLF units, except as otherwise provided by subsections (c)(5) and (c)(6), below; five years after closure at landfills, other than MSWLF units, which are used exclusively for disposing of wastes generated at the site; or fifteen years after closure at all other

landfills regulated under this Part. Monitoring, beyond the minimum period, may be discontinued if the following conditions have been met for at least one year:

- A) The concentration of methane is less than five percent of the lower explosive limit in air for four consecutive quarters at all monitoring points outside the unit; and
  - B) Monitoring points within the unit indicate that methane is no longer being produced in quantities that would result in migration from the unit and exceed the standards of subsection (a)(1).
- 5) The Agency may reduce the gas monitoring period at a MSWLF unit upon a demonstration by the owner or operator that the reduced period is sufficient to protect human health and environment.
- 6) The owner or operator of a MSWLF unit shall petition the Board for an adjusted standard in accordance with Section 811.303, if the owner or operator seeks a reduction of the postclosure care monitoring period for all of the following requirements:
- A) Inspection and maintenance (Section 811.111);
  - B) Leachate collection (Section 811.309);
  - C) Gas monitoring (Section 811.310); and
  - D) Groundwater monitoring (Section 811.319).

BOARD NOTE: Changes to subsections (c) are derived from 40 CFR 258.61 (1992).

d) Parameters to be Monitored

- 1) All below ground monitoring devices shall be monitored for the following parameters at each sampling interval:
- A) Methane;
  - B) Pressure;
  - ~~C) Nitrogen;~~
  - C) Oxygen; and

D) Carbon dioxide.

- 2) Ambient air monitors shall be sampled for methane only when the average wind velocity is less than 8 kilometers (five miles) per hour at a minimum of three downwind locations 30.49 meters (100 feet) from the edge of the unit or the property boundary, whichever is closer to the unit.
- 3) All buildings within a facility shall be monitored for methane by utilizing continuous detection devices located at points where methane might enter the building.

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

#### Section 811.312 Landfill Gas Processing and Disposal System

- a) The processing of landfill gas for use is strongly encouraged but is not required.
- b) Except as allowed in subsection (g), the landfill gas processing and disposal system, including compressors, blowers, raw gas monitoring systems, devices used to control the flow of gas from the unit, flares, gas treatment devices, air pollution control devices and monitoring equipment must remain under the control of the operator and shall be considered part of the waste disposal facility.
- c) No gas may be discharged directly to the atmosphere unless treated or burned onsite prior to discharge in accordance with a permit issued by the Agency pursuant to 35 Ill. Adm. Code 200 through 245.
- d) Representative flow rate measurements shall be made of gas flow into treatment or combustion devices.
- e) When used for the onsite combustion of landfill gas, flares shall meet the general control device requirements of new source performance standards adopted pursuant to Section 9.1(b) of the Act.
- f) Standards for Onsite Combustion of Landfill Gas Using Devices Other Than Flares
  - 1) At a minimum, landfill gas shall be measure for flow rate, heat value, and moisture content along with combustion parameters including, but not limited to, oxygen and carbon dioxide prior to treatment or combustion. Constituents of the landfill gas and combustion byproducts shall be identified for inclusion in an Agency issued permit based on the type of waste streams that are or will be in the landfill, landfill gas

analysis and potential for being emitted into the air after treatment or combustion.

- 2) All constituents and parameters that must be measured before and after treatment or combustion shall be identified and included in a permit issued by the Agency pursuant to 35 Ill. Adm. Code 200 through 245. At a minimum, the following types of constituents must be considered for inclusion in the permit:
  - A) The six criteria air pollutants and the hazardous air pollutants subject to regulation under the Clean Air Act (42 U.S.C. 7401 et seq.);
  - B) Any list of toxic air contaminants, including carcinogens, mutagens and listed hazardous air pollutants adopted by the Board pursuant to Section 9.5 of the Act;
  - C) Volatile Organic Compounds;
  - D) Constituents present in the landfill gas; and
  - E) Combustion byproducts expected to be emitted from the combustion or treatment device.
  
- g) Landfill gas may be transported offsite to a gas processing facility in accordance with the following requirements:
  - 1) The solid waste disposal facility contributes less than 50 percent of the total volume of gas accepted by the gas processing facility or the gas processing facility is permitted to receive and process landfill gas under the Act and Board regulations. Otherwise, the processing facility must be considered a part of the solid waste management facility. In any event, no solid waste disposal facility shall transport landfill gas off-site under this Section unless it satisfies the financial assurance requirements of Section 811.704(h)(3).
  - 2) The landfill gas shall be monitored for the parameters listed in subsection (f)(1) as well as other constituents such as, ammonia (NH<sub>3</sub>), hydrogen sulfide (H<sub>2</sub>S) and hydrogen (H<sub>2</sub>) that are needed to operate the gas processing facility.
  - 3) The gas processing facility ~~is~~shall be sized to handle the expected volume of gas.

- 4) The transportation of gas to an offsite gas processing facility shall in no way relieve the operator of the requirements of Section 811.311(a).

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

#### Section 811.319 Groundwater Monitoring Programs

a) Detection Monitoring Program

Any use of the term maximum allowable predicted concentration in this Section is a reference to 35 Ill. Adm. Code 811.318(c). The operator shall implement a detection monitoring program in accordance with the following requirements:

1) Monitoring Schedule and Frequency

- A) The monitoring period shall begin as soon as waste is placed into the unit of a new landfill or within one year of the effective date of this Part for an existing landfill. Monitoring shall continue for a minimum period of fifteen years after closure, or in the case of MSWLF units, a minimum period of 30 years after closure, except as otherwise provided by subsection (a)(1)(C) of this Section. The operator shall sample all monitoring points for all potential sources of contamination on a quarterly basis except as specified in subsection (a)(3), for a period of five years from the date of issuance of the initial permit for significant modification under 35 Ill. Adm. Code 814.104 or a permit for a new unit pursuant to 35 Ill. Adm. Code 813.104. After the initial five-year period, the sampling frequency for each monitoring point shall be reduced to a semi-annual basis, provided the operator has submitted the certification described in 35 Ill. Adm. Code 813.304(b). Alternatively, after the initial five-year period, the Agency shall allow sampling on a semi-annual basis where the operator demonstrates that monitoring effectiveness has not been compromised, that sufficient quarterly data has been collected to characterize groundwater, and that leachate from the monitored unit does not constitute or may institute more frequent sampling throughout the time the source constitutes a threat to groundwater. For the purposes of this Section, the source shall be considered a threat to groundwater, if the results of the monitoring indicate either that the concentrations of any of the constituents monitored within the zone of attenuation are is above the maximum allowable predicted concentration for that constituent or, for existing landfills subject to 35 Ill. Adm. Code 814, subpart D, that the concentration of any constituent has

exceeded the applicable standard at the compliance boundary as defined in 35 Ill. Adm. Code 814.402(b)(3).

- B) Beginning fifteen years after closure of the unit, or five years after all other potential sources of discharge no longer constitute a threat to groundwater, as defined in subsection (a)(1)(A), the monitoring frequency may change on a well by well basis to an annual schedule if either of the following conditions exist. However, monitoring shall return to a quarterly schedule at any well where a statistically significant increase is determined to have occurred in accordance with Section 811.320(e), in the concentration of any constituent with respect to the previous sample.
- i) All constituents monitored within the zone of attenuation have returned to a concentration less than or equal to ten percent of the maximum allowable predicted concentration; or
  - ii) All constituents monitored within the zone of attenuation are less than or equal to their maximum allowable predicted concentration for eight consecutive quarters.
- C) Monitoring shall be continued for a minimum period of: thirty years after closure at MSWLF units, except as otherwise provided by subsections (a)(1)(D) and (a)(1)(E), below; five years after closure at landfills, other than MSWLF units, which are used exclusively for disposing waste generated at the site; or fifteen years after closure at all other landfills regulated under this Part. Monitoring, beyond the minimum period, may be discontinued under the following conditions:
- i) No statistically significant increase is detected in the concentration of any constituent above that measured and recorded during the immediately preceding scheduled sampling for three consecutive years, after changing to an annual monitoring frequency; or
  - ii) Immediately after contaminated leachate is no longer generated by the unit.
- D) The Agency may reduce the groundwater monitoring period at a MSWLF unit upon a demonstration by the owner or operator that the reduced period is sufficient to protect human health and environment.

- E) An owner or operator of a MSWLF unit shall petition the Board for an adjusted standard in accordance with Section 811.303, if the owner or operator seeks a reduction of the postclosure care monitoring period for all of the following requirements:
- i) Inspection and maintenance (Section 811.111);
  - ii) Leachate collection (Section 811.309);
  - iii) Gas monitoring (Section 811.310); and
  - iv) Groundwater monitoring (Section 811.319).

BOARD NOTE: Changes to subsections (a)(1)(A) and (a)(1)(C), and subsections (a)(1)(D) and (a)(1)(E) are derived from 40 CFR 258.61 (1992).

2) Criteria for Choosing Constituents to be Monitored

- A) The operator shall monitor each well for constituents that will provide a means for detecting groundwater contamination. Constituents shall be chosen for monitoring if they meet the following requirements:
- i) The constituent appears in, or is expected to be in, the leachate; and
  - ii) The Board has established for the constituent a public or food processing water supply standard, at 35 Ill. Adm. Code 302, the Board has established a groundwater quality standard under the Illinois Groundwater Protection Act (Ill. Rev. Stat. 1991, ch. 111 1/2, par. 7451 et seq. [415 ILCS 55/1 et seq.]), or the constituent may otherwise cause or contribute to groundwater contamination.
- B) One or more indicator constituents, representative of the transport processes of constituents in the leachate, may be chosen for monitoring in place of the constituents it represents. The use of such indicator constituents must be included in an Agency approved permit.

3) Organic Chemicals Monitoring

The operator shall monitor each existing well that is being used as a part of the monitoring well network at the facility within one year of the effective date of this Part, and monitor each new well within the three months of its establishment. The monitoring required by this subsection shall be for a broad range of organic chemical contaminants in accordance with the procedures described below:

- A) The analysis shall be at least as comprehensive and sensitive as the tests for;
  - i) The 51 organic chemicals in drinking water described at 40 CFR 141.40 (1988), incorporated by reference at 35 Ill. Adm. Code 810.104; and
  - ii) Any other organic chemical for which a groundwater quality standard or criterion has been adopted pursuant to Section 14.4 of the Act or Section 8 of the Illinois Groundwater Protection Act.
- B) At least once every two years, the operator shall monitor each well in accordance with subsection (a)(1)(A).
- C) The operator of a MSWLF unit shall monitor each well in accordance with subsection (a)(1)(A) on an annual basis.

BOARD NOTE: Subsection (a)(3)(C) is derived from 40 CFR 258.54(b) (1992).

- 4) Confirmation of Monitored Increase
  - A) The confirmation procedures of this subsection shall be used only if the concentrations of the constituents monitored can be measured at or above the practical quantitation limit (PQL). The PQL is defined as the lowest concentration that can be reliably measured within specified limits of precision and accuracy, under routine laboratory operating conditions. The operator shall institute the confirmation procedures of subsection (a)(4)(B) after notifying the Agency in writing, within ten days, of observed increases:
    - i) The concentration of any constituent monitored in accordance with subsection (a)(1) and (a)(2) shows a progressive increase over four consecutive quarters monitoring events;

- ii) The concentration of any constituent exceeds the maximum allowable predicted concentration at an established monitoring point within the zone of attenuation;
- iii) The concentration of any constituent monitored in accordance with subsection (a)(3) exceeds the preceding measured concentration at any established monitoring point; and
- iv) The concentration of any constituent monitored at or beyond the zone of attenuation exceeds the applicable groundwater quality standards of Section 811.320.

B) The confirmation procedures shall include the following:

- i) The operator shall verify any observed increase by taking additional samples within 45 days of the initial observation and ensure that the samples and sampling protocol used will detect any statistically significant increase in the concentration of the suspect constituent in accordance with subsection 811.320(e), so as to confirm the observed increase. The operator shall notify the Agency of any confirmed increase before the end of the next business day following the confirmation.
- ii) The operator shall determine the source of any confirmed increase, which may include, but shall not be limited to, natural phenomena, sampling or analysis errors, or an offsite source.
- iii) The operator shall notify the Agency in writing of any confirmed increase and state the source of the confirmed increase and provide the rationale used in such a determination within ten days of the determination.

b) Assessment Monitoring

The operator shall begin an assessment monitoring program in order to confirm that the solid waste disposal facility is the source of the contamination and to provide information needed to carry out a groundwater impact assessment in accordance with subsection (c). The assessment monitoring program shall be conducted in accordance with the following requirements:

- 1) The assessment monitoring shall be conducted in accordance with this subsection to collect information to assess the nature and extent of groundwater contamination. The owner or operator of a MSWLF unit

shall comply with the additional requirements prescribed in subsection (b)(5). The assessment monitoring shall consist of monitoring of additional constituents that might indicate the source and extent of contamination. In addition, assessment monitoring may include any other investigative techniques that will assist in determining the source, nature and extent of the contamination, which may consist of but need not be limited to, ~~but not be limited to, the following steps:~~

- A) More frequent sampling of the wells in which the observation occurred;
- B) More frequent sampling of any surrounding wells; and
- C) The placement of additional monitoring wells to determine the source and extent of the contamination.;
- ~~D) Monitoring of additional constituents that might indicate the source and extent of contamination; and~~
- ~~E) Any other investigative techniques that will assist in determining the nature and extent of the contamination.~~

- 2) The operator of the facility for which assessment monitoring is required shall file the plans for an assessment monitoring program with the Agency. If the facility is permitted by the Agency, then the plans shall be filed for review as a significant permit modification pursuant to 35 Ill. Adm. Code 813.Subpart B. The assessment monitoring program shall be implemented within 90 days of confirmation of any monitored increase in accordance with subsection (a)(4) or, in the case of permitted facilities, within 90 days of Agency approval.
- 3) If the analysis of the assessment monitoring data shows that the concentration of one or more constituents, monitored at or beyond the zone of attenuation is above the applicable groundwater quality standards of Section 811.320 and is attributable to the solid waste disposal facility, then the operator shall determine the nature and extent of the groundwater contamination including an assessment of the potential impact on the groundwater should waste continue to be accepted at the facility and shall implement the remedial action in accordance with subsection (d).
- 4) If the analysis of the assessment monitoring data shows that the concentration of one or more constituents is attributable to the solid waste disposal facility and exceeds the maximum allowable predicted concentration within the zone of attenuation, then the operator shall

conduct a groundwater impact assessment in accordance with the requirements of subsection (c).

- 5) In addition to the requirements of subsection (b)(1), to collect information to assess the nature and extent of groundwater contamination, the following requirements are applicable to MSWLF units:

A) The monitoring of additional constituents pursuant to (b)(1)(~~A~~) shall include, at a minimum (except as otherwise provided in subsection (b)(5)(E) of this Section), the constituents listed in 40 CFR 258. Appendix II, incorporated by reference at 35 Ill. Adm. Code 810.104.

BOARD NOTE: Subsection (b)(5)(A) is derived from 40 CFR 258.55(b) (1992).

- B) Within 14 days of obtaining the results of sampling required under subsection (b)(5)(A), the owner or operator shall:
- i) Place a notice in the operating record identifying the constituents that have been detected; and
  - ii) Notify the Agency that such a notice has been placed in the operating record.

BOARD NOTE: Subsection (b)(5)(B) is derived from 40 CFR 258.55(d)(1) (1992).

- C) The owner or operator shall establish background concentrations for any constituents detected pursuant to subsection (b)(5)(A) in accordance with Section 811.320(e).

BOARD NOTE: Subsection (b)(5)(C) is derived from 40 CFR 258.55(d)(3) (1992).

- D) Within 90 days of the initial monitoring in accordance with subsection (b)(5)(A), the owner or operator shall monitor for the constituents listed in 40 CFR 258. Appendix II on a semiannual basis during the assessment monitoring.

BOARD NOTE: Subsection (b)(5)(D) is derived from 40 CFR 258.55(d)(2) (1992).

- E) The owner or operator may request the Agency to delete any of the 40 CFR 258.Appendix II constituents by demonstrating to the Agency that the deleted constituents are not reasonably expected to be in or derived from the waste contained in the leachate.

BOARD NOTE: Subsection (b)(5)(E) is derived from 40 CFR 258.55(b) (1992).

- F) Within 14 days of finding an exceedance above the applicable groundwater quality standards in accordance with subsection (b)(3), the owner or operator shall:
- i) Place a notice in the operating record that identifies the constituents monitored under subsection (b)(1)(D) that have exceeded the groundwater quality standard;
  - ii) Notify the Agency and the appropriate officials of the local municipality or county within whose boundaries the site is located that such a notice has been placed in the operating record; and
  - iii) Notify all persons who own land or reside on land that directly overlies any part of the plume of contamination if contaminants have migrated off-site.

BOARD NOTE: Subsection (b)(5)(F) is derived from 40 CFR 258.55(g)(1)(i) through (iii) (1992).

- G) If the concentrations of all 40 CFR 258.Appendix II constituents are shown to be at or below background values, using the statistical procedures in Section 811.320(e), for two consecutive sampling events, the owner or operator shall notify the Agency of this finding and may stop monitoring the 40 CFR 258.Appendix II constituents. BOARD NOTE: Subsection (b)(5)(G) is derived from 40 CFR 258.55(e) (1992).
- c) Assessment of Potential Groundwater Impact An operator required to conduct a groundwater impact assessment in accordance with subsection (b)(4) shall assess the potential impacts outside the zone of attenuation that may result from confirmed increases above the maximum allowable predicted concentration within the zone of attenuation, attributable to the facility, in order to determine if there is need for remedial action. In addition to the requirements of Section 811.317, the following shall apply:

- 1) The operator shall utilize any new information developed since the initial assessment and information from the detection and assessment monitoring programs and such information may be used for the recalibration of the GCT model; and
  - 2) The operator shall submit the groundwater impact assessment and any proposed remedial action plans determined necessary pursuant to subsection (d) to the Agency within 180 days of the start of the assessment monitoring program.
- d) Remedial Action. The owner or operator of a MSWLF unit shall conduct corrective action in accordance with Sections 811.324, 811.325, and 811.326. The owner or operator of a landfill facility, other than a MSWLF unit, shall conduct remedial action in accordance with this subsection.
- 1) The operator shall submit plans for the remedial action to the Agency. Such plans and all supporting information including data collected during the assessment monitoring shall be submitted within 90 days of determination of either of the following:
    - A) the groundwater impact assessment, performed in accordance with subsection (c), indicates that remedial action is needed; or
    - B) Any confirmed increase above the applicable groundwater quality standards of Section 811.320 is determined to be attributable to the solid waste disposal facility in accordance with subsection (b).
  - 2) If the facility has been issued a permit by the Agency, then the operator shall submit this information as an application for significant modification to the permit;
  - 3) The operator shall implement the plan for remedial action program within 90 days of the following:
    - A) Completion of the groundwater impact that requires remedial action;
    - B) Establishing that a violation of an applicable groundwater quality standard of Section 811.320 is attributable to the solid waste disposal facility in accordance with subsection (b)(3); or
    - C) Agency approval of the remedial action plan, where the facility has been permitted by the Agency.

- 4) The remedial action program shall consist of one or a combination of one of more of the following solutions:
  - A) Retrofit additional groundwater protective measures within the unit;
  - B) Construct an additional hydraulic barrier, such as a cutoff wall or slurry wall system
  - C) Pump and treat the contaminated groundwater; or
  - D) Any other equivalent technique which will prevent further contamination of groundwater.
  
- 5) Termination of the Remedial Action Program
  - A) The remedial action program shall continue in accordance with the plan until monitoring shows that the concentrations of all monitored constituents are below the maximum allowable predicted concentration within the zone of attenuation, below the applicable groundwater quality standards of Section 811.320 at or beyond the zone of attenuation, over a period of four consecutive quarters no longer exist.
  - B) The operator shall submit to the Agency all information collected under subsection (d)(5)(A). If the facility is permitted then the operator shall submit this information as a significant modification of the permit.

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

#### Section 811.321 Waste Placement

- a) Phasing of Operations
  - 1) Waste disposal operations shall move from the lowest portions of the unit to the highest portions. Except as provided in subsection (a)(2), the placement of waste shall begin in the lowest part of the active face of the unit, located in the part of the facility most downgradient, with respect to groundwater flow.
  - 2) The operator may dispose of wastes in areas other than those specified in subsection (a)(1) only under any of the following conditions:

- A) Climatic conditions, such as wind and precipitation, are such that the placement of waste in the bottom of the unit would cause water pollution, litter or damage to any part of the liner;
  - B) The topography of the land surrounding the unit makes the procedure of subsection (a)(1) environmentally unsound, for example, because steep slopes surround the unit; or
  - C) When groundwater monitoring wells, constructed in accordance with the requirements of 811.319, are placed 50 feet, or less, downgradient from the filled portions of the unit.
- b) Initial Waste Placement
- 1) Construction, compaction and earth moving equipment shall be prohibited from operating directly on the leachate collection piping system until a minimum of five feet of waste has been mounded over the system.
  - 2) Construction, compaction and earth moving equipment shall be prohibited from operating directly on the leachate drainage blanket. Waste disposal operations shall begin at the edge of the drainage layer by carefully pushing waste out over the drainage layer.
  - 3) An initial layer of waste, a minimum of five feet thick, or, alternatively, a temporary protective layer of other material suitable to prevent the compacted earth liner from freezing shall be placed over the entire drainage blanket immediately after construction, but prior to the onset of weather conditions that may cause the compacted earth liner to freeze, except as provided in subsection (b)(4) of this Section.
  - 4) Waste shall not be placed over areas that are subject to freezing conditions until the liner has been certified or recertified by the CQA officer designated pursuant to Section 811.502 inspected, tested, and reconstructed (if necessary) to meet the requirements of Section 811.306.

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

TITLE 35: ENVIRONMENTAL PROTECTION  
 SUBTITLE G: WASTE DISPOSAL  
 CHAPTER I: POLLUTION CONTROL BOARD  
 SUBCHAPTER i: SOLID WASTE AND SPECIAL WASTE HAULING

## PROCEDURAL REQUIREMENTS FOR PERMITTED LANDFILLS

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813.503	Information to be Retained at or near the Waste Disposal Facility
<u>813.504</u>	<u>Annual Report</u>

AUTHORITY: Implementing Sections 5, 21, 21.1, 22, 22.17 and 28.1, and authorized by Section 27, of the Environmental Protection Act (Ill. Rev. Stat. 1991, ch. 111 1/2, pars. 1005, 1021, 1021.1, 1022, 1022.17, 1028.1 and 1027) [415 ILCS 5/5, 21, 21.1, 22, 22.17, 28.1 and 27].

SOURCE: Adopted in R88-7 at 14 Ill. Reg. 15814, effective September 18, 1990; amended in R92-19 at 17 Ill. Reg. 12409, effective July 19, 1993; expedited correction at 18 Ill. Reg. 7501, effective July 19, 1993; amended in R90-26 at 18 Ill. Reg. 12388, effective August 1, 1994; amended in R98-9, at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

NOTE: Capitalization indicates statutory language.

## Section 813.103 Agency Decision Deadlines

- a) IF THERE IS NO FINAL ACTION BY THE AGENCY WITHIN 90 DAYS AFTER THE FILING OF THE APPLICATION FOR PERMIT, THE APPLICANT MAY DEEM THE PERMIT ISSUED; EXCEPT THAT THIS TIME PERIOD SHALL BE EXTENDED TO 180 DAYS WHEN:
  - 1) NOTICE AND OPPORTUNITY FOR PUBLIC HEARING ARE REQUIRED BY STATE OR FEDERAL LAW OR REGULATION, OR
  - 2) THE APPLICATION WHICH WAS FILED IS FOR ANY PERMIT TO DEVELOP A LANDFILL. (Section 39 of the Act)
- b) An application for permit pursuant to this Subpart shall not be deemed to be filed until the Agency has received all information and documentation in the form and with the content required by this Part and 35 Ill. Adm. Code 811, 812, and 814. However, if, pursuant to the standards of Section 813.105, the Agency fails to notify the applicant within 30 days after the filing of a purported application that the application is incomplete and the reason the Agency deems it incomplete, the application shall be deemed to have been filed as of the date of such purported filing as calculated pursuant to Section 813.102. The applicant may treat the Agency's notification that an application is incomplete as a denial of the application for the purposes of review pursuant to Section 813.106.

- c) The applicant may waive the right to a final decision in writing prior to the applicable deadline in subsection (a).
- d) The applicant may modify a permit application at any time prior to the Agency decision deadline date, provided that, for any permit application modification received by the Agency within 30 days of the Agency decision deadline, the applicant waives the Agency decision deadline for 30 days from the date of receipt of the modification, to allow the Agency time to determine whether the modification meets the definition of significant modification and, for permit applications modifications not meeting the definition of significant modification, to take final action. Any modification of a permit application that would otherwise be considered a significant modification of an approved permit shall constitute a new application for the purposes of calculating the Agency decision deadline date. The Agency shall notify the applicant in writing within 30 days after the filing of a proposed permit modification if it deems the modification to be a significant modification. A determination by the Agency as to whether a modification is a significant modification is a final determination, appealable in the manner provided for the review of permit decisions under Section 40 of the Act. The Agency's decision deadline date shall be stayed as of the date of such written notice of the Agency's determination during the pendency of any timely-filed appeal challenging such an Agency determination.
- e) The Agency shall mail all notices of final action by registered or certified mail, post marked with a date stamp and with return receipt requested. Final action shall be deemed to have taken place on the post marked date that such notice is mailed.

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

## SUBPART E: REPORTS TO BE FILED WITH THE AGENCY

### Section 813.501 Annual Certification Reports

- a) ~~—~~ All permitted landfills shall submit an annual certification ~~annual reports~~ to the Agency during operation and for the entire postclosure monitoring period. Such certification shall be signed by the operator or duly authorized agent as specified in 35 Ill. Adm. Code 815.102, annual reports shall be filed each year by the first day of the month chosen and specified by the Agency in the facility permit, and shall state as follows:-
- a) All records required to be submitted to the Agency pursuant to 35 Ill. Adm. Code 858.207 and 858.308 have been timely and accurately submitted; and

~~b) Agency Review of the Report~~

- ~~1) The Agency shall conduct a review of the annual report to determine compliance with the requirements of subsection (c) and either accept the contents as complete or request additional information within 45 days of receipt of the report.~~
- ~~2) If the Agency fails to respond within the required time period then the report shall be considered acceptable.~~
- ~~3) The operator shall return the additional information to the Agency within 45 days of receipt of the request for additional information.~~
- ~~4) The operator may deem any Agency request for information pursuant to this Section as a permit denial for purposes of appeal pursuant to Section 40 of the Act.~~

b) All applicable fees required by the Act have been paid in full.

~~c) All annual reports shall contain the following information:~~

- ~~1) A waste volume summary which includes:
 
  - ~~A) Total volume of solid waste accepted at the facility in cubic meter (cubic yards) as measured at the gate;~~
  - ~~B) Remaining solid waste capacity in each unit in cubic meter (cubic yards) as measured at the gate; and~~
  - ~~C) A copy of all identification reports required under 35 Ill. Adm. Code 811.404.~~~~
- ~~2) Monitoring data from the leachate collection system, groundwater monitoring network, gas monitoring system, and any other monitoring data which was specified in the operator's permit, including:
 
  - ~~A) Graphical results of monitoring efforts;~~
  - ~~B) Statistical summaries and analysis of trends;~~
  - ~~C) Changes to the monitoring program; and~~
  - ~~D) Discussion of error analysis, detection limits, and observed trends.~~~~

- 3) ~~Proposed activities for the year~~
- A) ~~Amount of Waste expected in the next year;~~
- B) ~~Structures to be built within the next year; and~~
- C) ~~New monitoring stations to be installed within the next year.~~
- 4) ~~Any modification or significant modification affecting the operation of a facility shall be included.~~
- 5) ~~Signature of the operator or duly authorized agent as specified in 35 Ill. Adm. Code 815.102.~~

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

#### Section 813.502 ~~Quarterly~~ Groundwater Reports and Graphical Results of Monitoring Efforts

- a) All groundwater monitoring data shall be submitted to the Agency at the same frequency as established for groundwater detection monitoring pursuant to Section 811.319(a) on a quarterly basis, in a form prescribed by the Agency, and in accordance with a schedule approved in the permit.
- b) Upon written Agency request, monitoring data depicted in a graphical form prescribed by the Agency shall be submitted to the Agency. Such data shall be submitted within 45 days of the date of the Agency's written request.

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

#### Section 813.503 Information to be Retained at or near the Waste Disposal Facility

Information developed by the operator, including annual reports, but not yet forwarded to the Agency in a quarterly or annual report shall be kept at or near the facility for inspection by the Agency upon request during normal working hours. If there is no active office for maintenance of records at the facility during the postclosure care period, then an alternate active operation site in the state, owned or operated by the same facility operator, may be specified. The Agency must be notified of the address and telephone number of the operator at the alternative facility where the information will be retained. This information must be retained through the postclosure care period.

(Source: Amended at \_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

#### Section 813.504 Annual Report

An annual report shall be submitted to the Agency each calendar year, by the first date of the month chosen and specified by the Agency in the facility permit, containing the following materials:

- a) Information relating to monitoring data from the leachate collection system, groundwater monitoring network, gas monitoring system, and any other monitoring data which was specified in the operator's permit, including:
  - 1) Summary of monitoring data for the calendar year;
  - 2) Dates of submittal of comprehensive monitoring data to the Agency during the calendar year;
  - 3) Statistical summaries and analysis of trends;
  - 4) Changes to the monitoring program; and
  - 5) Discussion of error analysis, detection limits, and observed trends.
- b) Proposed activities for the year:
  - 1) Amount of Waste expected in the next year;
  - 2) Structures to be built within the next year; and
  - 3) New monitoring stations to be installed within the next year.
- c) Any modification or significant modification affecting the operation of a facility.
- d) The signature of the operator or duly authorized agent as specified in 35 Ill. Adm. Code 815.102.

(Source: Added at \_\_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.)

TITLE 35: ENVIRONMENTAL PROTECTION  
 SUBTITLE G: WASTE DISPOSAL  
 CHAPTER I: POLLUTION CONTROL BOARD  
 SUBCHAPTER m: USED AND WASTE TIRES

PART 848  
 MANAGEMENT OF USED AND WASTE TIRES

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848.102	Severability
848.103	Other Regulations
848.104	Definitions
848.105	Incorporation by Reference

#### SUBPART B: MANAGEMENT STANDARDS

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848.203	Contingency Plan
848.204	Storage of Used and Waste Tires Within Buildings
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#### SUBPART C: RECORDKEEPING AND REPORTING

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848.301	Applicability
848.302	Records
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848.400	Scope and Applicability
848.401	Upgrading Financial Assurance
848.402	Release of Financial Institution
848.403	Application of Proceeds and Appeal
848.404	Removal Cost Estimate
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## SUBPART E: TIRE REMOVAL AGREEMENTS

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## SUBPART F: TIRE TRANSPORTATION REQUIREMENTS

Section	
848.601	Tire Transportation Prohibitions
848.602	Tire Transportation Registrations
848.603	Agency Approval of Registrations
848.604	Registration No Defense
848.605	Duration and Renewal
848.606	Vehicle Placarding

Appendix A	Financial Assurance Forms
Illustration A	"Trust Agreement"
Illustration B	"Certification of Acknowledgement"
Illustration C	"Irrevocable Standby Letter of Credit"
Illustration D	"Owner or Operator's Bond Without Surety"
Illustration E	"Owner or Operator's Bond With Parent Surety"
Illustration F	"Letter from the Chief Financial Officer"

AUTHORITY: Implementing Section 55.2 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2, pars. 1055.2 and 1027).

SOURCE: Adopted in R90-9(A), at 15 Ill. Reg. 7959, effective May 10, 1991; amended in R90-9(B) at 16 Ill. Reg. 3114, effective February 14, 1992, amended in R 98-9 at 22 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

NOTE: Statutory language is denoted by capital letters.

## Section 848.104 Definitions

For the purposes of this Part, except as the context otherwise clearly requires, the words and terms defined in this Section shall have the meanings given herein. Words and terms not

defined shall have the meanings otherwise set forth in the Act and regulations adopted thereunder.

"Act" means the Illinois Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2, par. 1001 et seq.).

"Aisle" means an accessible clear space between storage piles or groups of piles suitable for housekeeping operations, visual inspection of piling areas and initial fire fighting operations.

"ALTERED TIRE" MEANS A USED TIRE WHICH HAS BEEN ALTERED SO THAT IT IS NO LONGER CAPABLE OF HOLDING ACCUMULATIONS OF WATER, INCLUDING, BUT NOT LIMITED TO, USED TIRES THAT HAVE BEEN SHREDDED, CHOPPED, DRILLED WITH HOLES SUFFICIENT TO ASSURE DRAINAGE, SLIT LONGITUDINALLY AND STACKED SO AS NOT TO COLLECT WATER, OR WHOLLY OR PARTIALLY FILLED WITH CEMENT OR OTHER MATERIAL TO PREVENT THE ACCUMULATION OF WATER. "ALTERATION" OR "ALTERING" MEANS ACTION WHICH PRODUCES AN ALTERED TIRE.  
(Section 54.01 of the Act)

"CONVERTED TIRE" MEANS A USED TIRE WHICH HAS BEEN MANUFACTURED INTO A USABLE COMMODITY OTHER THAN A TIRE. "CONVERSION" OR "CONVERTING" MEANS ACTION WHICH PRODUCES A CONVERTED TIRE. USABLE PRODUCTS MANUFACTURED FROM TIRES, WHICH PRODUCTS ARE THEMSELVES CAPABLE OF HOLDING ACCUMULATIONS OF WATER, SHALL BE DEEMED TO BE "CONVERTED" IF THEY ARE STACKED, PACKAGED, BOXED, CONTAINERIZED OR ENCLOSED IN SUCH A MANNER AS TO PRECLUDE EXPOSURE TO PRECIPITATION PRIOR TO SALE OR CONVEYANCE.  
(Section 54.02 of the Act)

"COVERED TIRE" MEANS A USED TIRE LOCATED IN A BUILDING, VEHICLE OR FACILITY WITH A ROOF EXTENDING OVER THE TIRE, OR SECURELY LOCATED UNDER A MATERIAL SO AS TO PRECLUDE EXPOSURE TO PRECIPITATION. (Section 54.03 of the Act)

"DISPOSAL" MEANS THE PLACEMENT OF USED TIRES INTO OR ON ANY LAND OR WATER EXCEPT AS AN INTEGRAL PART OF SYSTEMATIC REUSE OR CONVERSION IN THE REGULAR COURSE OF BUSINESS. (Section 54.04 of the Act)

"NEW TIRE" MEANS A TIRE WHICH HAS NEVER BEEN PLACED ON A VEHICLE WHEEL RIM. (Section 54.05 of the Act)

"PROCESSING" MEANS THE ALTERING, CONVERTING OR REPROCESSING OF USED OR WASTE TIRES. (Section 54.06 of the Act)

"RECYCLABLE TIRE" MEANS A USED TIRE WHICH IS FREE OF PERMANENT PHYSICAL DAMAGE AND MAINTAINS SUFFICIENT TREAD DEPTH TO ALLOW ITS USE THROUGH RESALE OR REPAIRING. (Section 54.06(a) of the Act)

"REPROCESSED TIRE" MEANS A USED TIRE WHICH HAS BEEN RECAPPED, RETREADED OR REGROOVED AND WHICH HAS NOT BEEN PLACED ON A VEHICLE WHEEL RIM. (Section 54.07 of the Act)

"Retread" or "Retreading" means the process of attaching tread to the casing of used tires.

"REUSED TIRE" MEANS A USED TIRE THAT IS USED AGAIN, IN PART OR AS A WHOLE, BY BEING EMPLOYED IN A PARTICULAR FUNCTION OR APPLICATION AS AN EFFECTIVE SUBSTITUTE FOR A COMMERCIAL PRODUCT OR FUEL WITHOUT HAVING BEEN CONVERTED. (Section 54.08 of the Act)

"STORAGE" MEANS ANY ACCUMULATION OF USED TIRES THAT DOES NOT CONSTITUTE DISPOSAL. AT A MINIMUM, SUCH AN ACCUMULATION MUST BE AN INTEGRAL PART OF THE SYSTEMATIC ALTERATION, REUSE, REPROCESSING OR CONVERSION OF THE TIRE IN THE REGULAR COURSE OF BUSINESS. (Section 54.09 of the Act)

"TIRE" MEANS A HOLLOW RING, MADE OF RUBBER OR SIMILAR MATERIALS, WHICH WAS MANUFACTURED FOR THE PURPOSE OF BEING PLACED ON THE WHEEL RIM OF A VEHICLE. (Section 54.10 of the Act)

"TIRE CARCASS" MEANS THE INTERNAL PART OF A USED TIRE CONTAINING THE PLYS, BEADS, AND BELTS SUITABLE FOR RETREAD OR REMANUFACTURE. (Section 54.10(a) of the Act)

"TIRE DERIVED FUEL" MEANS A PRODUCT MADE FROM USED TIRES TO EXACT SPECIFICATION OF A SYSTEM

DESIGNED TO ACCEPT A TIRE DERIVED FUEL AS A PRIMARY OR SUPPLEMENTAL FUEL SOURCE. (Section 54.10(b) of the Act)

"TIRE DISPOSAL SITE" MEANS A SITE WHERE USED TIRES HAVE BEEN DISPOSED OF OTHER THAN AT A LANDFILL PERMITTED BY THE AGENCY, OR OPERATED IN ACCORDANCE WITH SECTION 55(D) OF THE ACT. (Section 54.11 of the Act)

~~"Tire retreader" means a person who retreads used tires.~~ "TIRE RETREADER" MEANS A PERSON OR FIRM THAT RETREADS OR REMANUFACTURES TIRES. (Section 54.11(a) of the Act)

"TIRE STORAGE SITE" MEANS A SITE WHERE USED TIRES ARE STORED OR PROCESSED, OTHER THAN THE SITE AT WHICH THE TIRES WERE SEPARATED FROM THE VEHICLE WHEEL RIM, THE SITE WHERE THE USED TIRES WERE ACCEPTED IN TRADE AS PART OF A SALE OF NEW TIRES, OR A SITE AT WHICH BOTH NEW AND USED TIRES ARE SOLD AT RETAIL IN THE REGULAR COURSE OF BUSINESS, AND AT WHICH NOT MORE THAN 250 USED TIRES ARE KEPT AT ANY TIME OR A FACILITY AT WHICH TIRES ARE SOLD AT RETAIL PROVIDED THAT THE FACILITY MAINTAINS LESS THAN 1300 RECYCLABLE TIRES, 1300 TIRE CARCASSES, AND 1300 USED TIRES ON SITE AND THOSE TIRES ARE STORED INSIDE A BUILDING SO THAT THEY ARE PREVENTED FROM ACCUMULATING WATER. (Section 54.12 of the Act)

~~"Tire Storage Unit" means a pile of tires or a group of piles of tires at a tire storage site.~~ "TIRE STORAGE UNIT" MEANS A PILE OF TIRES OR A GROUP OF PILES OF TIRES AT A STORAGE SITE. (Section 54.12(a) of the Act)

~~"Tire Transporter" means a person who transports used or waste tires in a vehicle.~~ "TIRE TRANSPORTER" MEANS A PERSON WHO TRANSPORTS USED OR WASTE TIRES IN A VEHICLE. (Section 54.12(b) of the Act)

"USED TIRE" MEANS A WORN, DAMAGED OR DEFECTIVE TIRE WHICH IS NOT MOUNTED ON A VEHICLE WHEEL RIM. (Section 54.13 of the Act)

"VECTOR" MEANS ARTHROPODS, RATS, MICE, BIRDS OR OTHER ANIMALS CAPABLE OF CARRYING DISEASE-PRODUCING ORGANISMS TO A HUMAN OR ANIMAL HOST.

"VECTOR" DOES NOT INCLUDE ANIMALS THAT TRANSMIT DISEASE TO HUMANS ONLY WHEN USED AS HUMAN FOOD. (Section 54.14 of the Act)

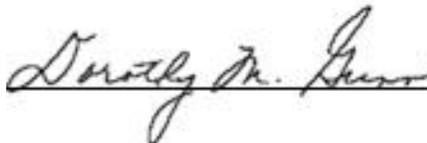
"VEHICLE" MEANS EVERY DEVICE IN, UPON OR BY WHICH ANY PERSON OR PROPERTY IS OR MAY BE TRANSPORTED OR DRAWN, EXCEPT DEVICES MOVED BY HUMAN POWER OR BY ANIMAL POWER, DEVICES USED EXCLUSIVELY UPON STATIONARY RAILS OR TRACKS, AND MOTORIZED WHEELCHAIRS. (Section 54.15 of the Act)

"WASTE TIRE" MEANS A USED TIRE THAT HAS BEEN DISPOSED OF. (Section 54.16 of the Act)

SOURCE: Amended in R98-9 at 22 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 5th day of February 1998, by a vote of 6-0.

A handwritten signature in cursive script that reads "Dorothy M. Gunn". The signature is written in black ink and is positioned above the printed name and title.

Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board