#### ILLINOIS POLLUTION CONTROL BOARD May 21, 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. Second 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. On March 25, 1998, a hearing was held pursuant to Public Act 90-489, which became effective on January 1, 1998. Public Act 90-489 requires the Board to request the Department of Commerce and Community Affairs (DCCA) to conduct an economic impact study (EcIS) on certain proposed rules prior to adoption of those rules. If DCCA chooses to conduct the EcIS, DCCA has 30 to 45 days after such request to produce a study of the economic impact of the proposed rules. The Board must then make the EcIS, or DCCA's explanation for not conducting the study, available to the public at least 20 days before a public hearing on the economic impact of the proposed rules. DCCA chooses not to conduct an EcIS on this matter. No testimony was presented at the EcIS hearing.

The Board has received three public comments in this proceeding: one comment from the Agency; a comment from the Joint Committee on Administrative Rules (JCAR); and a comment from Browning Ferris Industries (BFI).

Today, the Board sends this proposal to second notice pursuant to the Illinois Administrative Procedure Act (5 ILCS 100/1-1 *et seq.* 1996). The Board has made only non-substantive changes since first notice. Based on the three hearings and the public comments received, the Board finds that proceeding to second notice with the proposal is warranted.

## SUMMARY OF THE RULE

In general the purpose of the changes proposed at first notice are to ease requirements which drive up costs without a commensurate environmental benefit. Reasons at 2.<sup>1</sup> Also, the rule will eliminate or modify certain requirements that are no longer technically reasonable. Reasons at 2-3. These purposes must be served while ensuring uniformity among the Board's solid waste regulations and while maintaining consistency with the federal Resource Conservation and Recovery Act (RCRA) Subtitle D program. Reasons at 3.

The proponents were motivated by cost considerations in bringing the proposal to the Board. Reasons at 3. However, the proponents do not believe that the amendments represent a relaxation of requirements so much as a refinement of requirements. Reasons at 3.

#### Section 811.309(d)

In this section, the rulemaking deletes a reference to "extreme precipitation conditions" and adds a new subsection (d)(6). Section 811.309(d)(6) is added to clarify that the five-day minimum leachate storage capacity requirement can be achieved by a combination of relevant options. A specific standard to govern the design of leachate management alternatives is proposed.

#### Section 811.309(g)(1)

The rule amends the requirements for sampling leachate by changing the current quarterly monitoring throughout the operating life of the leachate management system. The rule proposes to require monitoring on a quarterly basis until the operator can obtain eight quarters of data from each monitoring location. After that point, leachate monitoring would occur at these points on a semi-annual basis unless the Agency determines additional sampling and testing is necessary. This change will focus on each monitoring location rather than the waste unit as a whole. Therefore, the rule will also limit the number of constituents tested for, to those chosen in accordance with 35 Ill. Adm. Code 811.319(a)(2)(B) and used by the operator for groundwater monitoring.

#### Section 811.310(d)(1)

The rule eliminates the requirement to monitor separately for nitrogen. The proponents have convinced the Board that monitoring separately for nitrogen is unnecessary as the amount of nitrogen can be inferred using a mass balance test. Reasons at 7.

#### Section 811.312(g)

The rule amends the permit requirements for off-site gas processing facilities which process 50% or more of the gas from a landfill. The amendment will exempt a facility which is already permitted under the Act and Board regulations from any additional permitting requirements.

#### Section 811.319(g)(a)(A)

<sup>&</sup>lt;sup>1</sup> The statement of reasons included with the proposal will be cited as "Reasons at \_\_\_."

The rule proposes amending the quarterly monitoring frequency of the groundwater monitoring wells to semi-annual monitoring under certain conditions. Quarterly monitoring would occur for a five-year minimum period to establish baseline information for each monitoring point and to assertion whether quarterly monitoring should continue. Quarterly monitoring would discontinue only upon an affirmative demonstration by the owner/operator that continued quarterly monitoring was not warranted. The owner/operator would make such a demonstration by either a certification described in 35 Ill. Adm. Code 813.304(b) or by a separate showing that:

- 1. monitoring effectiveness has not been compromised;
- 2. sufficient quarterly data has been obtained to characterize groundwater;
- 3. leachate from the monitored unit does not constitute a groundwater threat.

## Section 811.319(a)(4)

This subsection governs confirmation of monitored events and to ensure consistency with the changes to 811.319(a)(1) "quarters" is changed to "monitoring events" in the rulemaking.

## Section 811.319(b)(1)

This provision is reworded to make clear that assessment of groundwater always consists of monitoring for additional constituents and may include additional investigative techniques that will assist in determining the source, nature, and extent of contamination. The Agency in its oversight role can assure that any measures required to do the job are included in the assessment alternatives.

## Section 811.319(b)(5)(A)

This subsection as currently worded appears to require sampling for all 212 constituents listed at 40 CFR 258, Appendix II. However, subsection (b)(5)(E) allows for sampling of constituents actually present or reasonably expected to be present in the leachate. Therefore, subsection (b)(5)(A) is amended to specifically allow for a more focused sampling of constituents.

## Section 811.321(b)(3)

The amendment to this provision allows an owner/operator to use temporary material other than waste to protect an earthen liner from freezing. The rule as currently written only allows waste to be used as a protective layer and if there is not enough trash available alternatives are necessary.

## Section 811.321(b)(4)

The rule as previously adopted required that waste not be deposited over an area that had been subject to freezing until the liner has been inspected and tested. The rule previously did not specify who was to inspect or test the liner. The amendment in this proceeding replaces the inspection/tested requirement with a requirement for recertification by the applicable construction quality assurance officer pursuant to 35 Ill. Adm. Code 811.502.

#### Section 813.103(d)

This section is being amended to clarify that a modification to a permit which is submitted within 30 days of the Agency's decision deadline on the permit will extend the deadline for the Agency's decision by 30 days. The Agency will notify the applicant within 30 days of the receipt of the modification if the Agency believes the modification is significant.

#### Section 813.501

The only provision which remains in this section is that an operator file a certificate that the Quarterly Solid Waste Summary and fees have been submitted. The remainder of the section is stricken, although most of the provisions have been moved to new Section 813.504.

#### Section 813.502

This section is being amended for consistency with 35 Ill. Adm. Code 811.319 regarding monitoring reports and to add a Section allowing the Agency to require preparation of monitoring data in graphical form.

#### Section 813.503

Changes have been made to this section to assure consistency with the changes in Sections 813.501, 813.502 and 813.504.

#### Section 813.504

This is a new section which creates a new annual report requirement which replaces the provisions struck from Section 813.501.

#### Part 848

Part 848 is being amended to include changes to the Act adopted in P.A. 89-200.

#### DISCUSSION

As indicated above there have been only three public comments in this proceeding and only two comments after the first notice began. One comment was from JCAR requesting non-substantive changes in the rule which the Board has agreed to. The second comment was filed by BFI and the comment supports the rule as proposed at first notice.

The Board received no other comments and no additional testimony was heard at the hearing held after commencement of first notice. No economic impact study was performed.

Therefore, the Board will proceed to second notice with this rulemaking. The Board has made only the changes recommended by JCAR and a few non-substantive changes to correct typographical errors and to ensure compliance with codification requirements. Based on this record, the Board finds that proceeding to second notice is warranted.

#### ORDER

The Board directs the Clerk to cause the filing of the following proposal for Second Notice with the Joint Committee on Administrative Rules:

## 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
- 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 System
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#### 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
- 811.716 Local Government Financial Test
- 811.717 Local Government Guarantee
- 811.718 Discounting

811.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

811.Appendix B Section-by-Section <u>correlation</u> <u>between</u> <u>Between</u> the <u>Standards</u> of the RCRA Subtitle D Requirements of the Federal MSWLF Regulations at 40 CFR 258 and the <u>Board's nonhazardous waste landfill</u> regulationsRequirements of Parts 810 through 814.

AUTHORITY: Implementing Sections 5, 21, 21.1, 22, 22.17 and 28.1 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/5, 21, 21.1, 22, 22.17, 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 R96-1 at 20 Ill. Reg. 12000, effective August 15, 1996; amended in R97-20 at 21 Ill. Reg.15831, effective November 25, 1997; amended in R98-9 at \_\_\_\_\_.

NOTE: Capitalization indicates statutory language.

## SUBPART C: PUTRESCIBLE AND CHEMICAL WASTE LANDFILLS

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
  - Except as otherwise provided in subsection (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 10-7 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 subsection (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 subsection (b) of this Section 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.
- 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.
- 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, theThe frequency of testing mayshall be changed toonce per year semiannual 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 Sections 811.312, 811.317, and

<u>811.319</u>, 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 (BOD5);
  - 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 <u>Section35 Ill. Adm. Code</u> 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 <u>Section35 Ill. Adm. Code</u> 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); 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 operator shall include in the permit, a list of air toxics to be monitored in accordance with subsection (d). The Agency shall determine the monitoring frequency of the listed compounds based upon their emission rates and ambient levels in the atmosphere.
- 56) The Agency may reduce the gas monitoring period at an MSWLF unit upon a demonstration by the owner or operator that the reduced period is sufficient to protect human health and environment.
- $\underline{67}$ ) The owner or operator of an 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:
  - $\underline{Ai}$  Inspection and maintenance (Section 811.111);
  - <u>Bii</u>) Leachate collection (Section 811.309);
  - <u>Ciii</u>) Gas monitoring (Section 811.310); and
  - <u>Div</u>) Groundwater monitoring (Section 811.319).

BOARD NOTE: Changes to subsections (c) are derived from 40 CFR 258.61 (1996).

- 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;

- <u>C</u>D) Oxygen; and
- <u>D</u>E) Carbon dioxide; and.
- F) Any compound on the list of air toxics, adopted by the Board pursuant to Section 9.5 of the Act, which is expected to be produced in the landfill unit.
- 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 likely points where methane might enter the building.
- e) Any alternative frequencies for the monitoring requirement of subsection (c) for any owner or operator of an MSWLF that disposes of 20 tons of municipal solid waste per day or less, based on an annual average, must be established by an adjusted standard pursuant to Section 28.1 of the Act and 35 Ill. Adm. Code 106. Any alternative monitoring frequencies established under this subsection (e) will:
  - 1) Consider the unique characteristics of small communities;
  - 2) Take into account climatic and hydrogeologic conditions; and
  - 3) Be protective of human health and the environment.

BOARD NOTE: Subsection (d) is derived from 40 CFR 258.23(e), as added at 62 Fed. Reg. 40707 (July 29, 1997).

(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.

- 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 (fd)(1) as well as other constituents such as, ammonia (NH3), hydrogen sulfide (H2S) and hydrogen (H2) that are needed to operate the gas processing facility.
  - 3) The gas processing facility <u>isshall</u> 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 <u>Section35 Ill. Adm. Code</u> 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 fiveyear 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.
  - 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;
  - 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
  - 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:
    - The concentration of any constituent monitored in accordance with subsection (a)(1) and (a)(2) shows a progressive increase over four consecutive quartersmonitoring 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:
  - 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 <u>Sectionsubsection</u> 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)(<u>A</u>D) 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.
  - 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 groudwater 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 <u>Section 811.319</u>, 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.
  - 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, <u>or</u>, <u>alternatively</u>, <u>a temporary protective layer of other material suitable to prevent the</u> <u>compacted earth liner from freezing shall be placed over the entire</u>

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 <u>certified or recertified by the CQA</u> <u>officer designated pursuant to Section 811.502</u> 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

#### PART 813 PROCEDURAL REQUIREMENTS FOR PERMITTED LANDFILLS

## SUBPART A: GENERAL PROCEDURES

Section

- 813.101 Scope and Applicability
- 813.102 Delivery of Permit Application
- 813.103 Agency Decision Deadlines
- 813.104 Standards for Issuance of a Permit
- 813.105 Standards for Denial of a Permit
- 813.106 Permit Appeals
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## SUBPART B: ADDITIONAL PROCEDURES FOR MODIFICATION AND SIGNIFICANT MODIFICATION OF PERMITS

#### Section

- 813.201 Initiation of a Modification or Significant Modification
- 813.202 Information Required for a Significant Modification of an Approved Permit
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#### Section

- 813.301 Time of Filing
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#### SUBPART D: ADDITIONAL PROCEDURES FOR INITIATION AND TERMINATION OF TEMPORARY AND PERMANENT CLOSURE AND POSTCLOSURE CARE

Section

- 813.401 Agency Notification Requirements
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#### SUBPART E: CERTIFICATION AND REPORTS TO BE FILED WITH THE AGENCY

Section

- 813.501 Annual <u>Certification Reports</u>
  813.502 Quarterly Groundwater Reports and Graphical Results of Monitoring <u>Efforts</u>
  813.503 Information to be Retained at or near the Waste Disposal Facility
- 813.504 Annual Report

AUTHORITY: Implementing Sections 5, 21, 21.1, 22, 22.17 and 28.1, and authorized by Section 27 of the Environmental Protection Act [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 \_\_\_\_\_\_.

NOTE: Capitalization indicates statutory language.

#### SUBPART A: GENERAL PROCEDURES

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 after 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 timelyfiled 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: CERTIFICATION AND REPORTS TO BE FILED WITH THE AGENCY

## Section 813.501 Annual Certification Reports

- a) All permitted landfills shall submit <u>an annual certification</u> <del>annual reports</del> 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 <u>in 35 Ill. Adm. Code 815.102</u>, <del>annual reports</del> shall be <del>filled</del><u>filed</u> each year by the first day of the month chosen and specified by the Agency in the <u>facility</u> permit, and shall state as follows:<del>.</del>
- 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) Craphical 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

<u>a)</u> All groundwater monitoring data shall be submitted to the Agency <u>at the same</u> 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 after 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
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## SUBPART B: MANAGEMENT STANDARDS

Section

- 848.201 Applicability
- 848.202 Requirements
- 848.203 Contingency Plan
- 848.204 Storage of Used and Waste Tires Within Buildings
- 848.205 Pesticide Treatment
- 848.206 Exemptions for Tire Retreading Facilities
- 848.207 Exemptions for Tire Stamping & Die Cutting Facilities
- 848.208 Exemptions for Sites With a Tire Removal Agreement

## SUBPART C: RECORDKEEPING AND REPORTING

Section 848.301 Applicability

848.303 Daily Tire Record

- 848.304 Annual Tire Summary
- 848.305 Retention of Records
- 848.306 Certification

# SUBPART D: FINANCIAL ASSURANCE

## Section

- 848.400Scope 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
- 848.406 Mechanisms for Financial Assurance
- 848.407 Use of Multiple Financial Mechanisms
- 848.408 Use of a Financial Mechanism for Multiple Sites
- 848.410 Trust Fund
- 848.413 Letter of Credit
- 848.415 Self-Insurance for Non-commercial Sites

# SUBPART E: TIRE REMOVAL AGREEMENTS

## Section

- 848.501 Applicability
- 848.502 Removal Performance Standard
- 848.503 Contents of Proposed Tire Removal Agreements
- 848.504 Time Allowed for Tire Removal
- 848.505 Removal Plan
- 848.506 Initiation of Tire Removal
- 848.507 Certification of Removal Completion
- 848.508 Agency Approval
- 848.509 Board Review

## 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 [415 ILCS 5/55.2 and 27].

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 (<u>415 ILCS 5/1</u> et.seq.<u>Ill. Rev. Stat. 1989, ch. 111 1/2, par. 1001 et seq.</u>).

"Aisle" means an accessible clear space between storage piles or groups of piles suitable for housekeeping operations, visual inspection of piling areas and nitial 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)

<u>"TIRE CARCASS" MEANS THE INTERNAL PART OF A USED</u> <u>TIRE CONTAINING THE PLIES, BEADS, AND BELTS SUITABLE</u> <u>FOR RETREAD OR REMANUFACTURE.</u> (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 <u>OR A</u> <u>FACILITY AT WHICH TIRES ARE SOLD AT RETAIL PROVIDED</u> 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. <u>"TIRE STORAGE UNIT" MEANS A PILE OF TIRES</u> 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. "<u>TIRE TRANSPORTER</u>" MEANS A PERSON WHO <u>TRANSPORTS USED OR WASTE TIRES IN A VEHICLE. (Section</u> 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 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 21st day of May 1998 by a vote of 7-0.

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Dorothy M. Gunn, Clerk Illinois Pollution Control Board