ILLINOIS POLLUTION CONTROL BOARD
February 25, 1988

IN THE MATTER OF:	)	
	)	
DEVELOPMENT, OPERATING AND	)	R88-7
REPORTING REQUIREMENTS FOR	)	
NON-HAZARDOUS WASTE LANDFILLS	)	

PROPOSED RULE. FIRST NOTICE.

ORDER OF THE BOARD (by J. Anderson):

This docket, opened today, contains proposed rules adopted by the Board for first notice publication in the Illinois Register. The proposed rules are attached hereto. The proposed rules would establish comprehensive design, performance and reporting requirements for all landfills, including those on-site facilities exempt from the requirement to have a permit pursuant to Section 21(d) of the Act. The proposed rules amend two existing Parts and add six Parts. New language in existing Parts is underlined; new language in entirely new Parts is not. These are, specifically

1) Amendments to 35 Ill. Adm. Code 106.410, relating to procedures in adjusted standards proceedings;

2) Addition of Section 807.105 to existing Part 807, relating to interrelationship of existing Parts 700-749 and Part 807 to the new proposed Parts 810-815;

3) Addition of new Part 810 "General Provisions", providing definitions and other basic information applicable to Parts 811-815;

4) Addition of new Part 811 "Standards For New Solid Waste Landfills", establishing basic design and operating standards for permitted and unpermitted landfills;

5) Addition of new Part 812 "Information to be Submitted in a Permit Application";

6) Addition of new Part 813 "Procedural Requirements For Permitted Landfills";

7) Addition of new Part 814 "Interim Standards For Existing Landfills and Units", applicable to permitted and unpermitted landfills; and

8) Addition of new Part 815 "Procedural Requirements For All Landfills Exempt From Permits", applicable to new and existing landfills.

These proposed rules are explained and supported by a separate Opinion adopted by the Board today in this docket. The Opinion extensively references, and must be read together with, the proposed rules and support document submitted by the Board's Scientific and Technical Section (STS) in R84-17, Docket D entitled " Recommendations For A Nonhazardous Waste Disposal Program In Illinois And A Background Report To Accompany Proposed Regulations For Solid Waste Disposal Facilities".

The STS is hereby given leave, and directed to, file a revised and final copy of its Background Report which corrects typographical errors and omissions. The final Background Report will be entered as Exhibit 1 in this docket. The references listed therein and filed with the Clerk will be entered as Group Exhibit 2 in this docket.

The materials which comprise the rationale and results of the Board's action today total over 300 pages. To avoid dissemination of incomplete or inconsistent documents which could serve as a source of confusion to participants, the Board directs that distribution of all documents is to be delayed until after the STS files its final report, and the accuracy of all page and other references in the Board's Opinion to that final STS Background Report is verified by staff. Persons on the notice list shall be served, then, in one mailing, with the Board's Proposed Opinion, the Board's Proposed Order, and the STS Final Background Report.

The Board will accept written comments concerning this proposal for 45 days following the publication of the proposal in the Illinois Register. Decision on the number and scope of any additional hearings to be held in this docket will be deferred until after expiration of the 45 day first notice written comment period. Accordingly, in their comments participants should fully detail their questions and concerns, and should identify which issues and Parts, if any, they believe have not been covered in the 30-odd hearings held in Docket R84-17; the Board is not disposed, nor financially able, to allow for the complete "replowing of old ground" covered in R84-17. As in the R84-17 proceeding, hearing dates will be announced in, and any additional hearing procedures will be established by, hearing officer order, although hearing notices will additionally be published in the Illinois Register.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the 25th day of February, 1988, by a vote of 7-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE A: GENERAL PROVISIONS
CHAPTER I: POLLUTION CONTROL BOARD

PART 106
HEARINGS PURSUANT TO SPECIFIC RULES

SUBPART A: HEATED EFFLUENT DEMONSTRATIONS

SUBPART B: ARTIFICIAL COOLING LAKE DEMONSTRATIONS

SUBPART C: SULFUR DIOXIDE DEMONSTRATIONS

SUBPART D: RCRA AND SOLID WASTE DISPOSAL ADJUSTED STANDARD PROCEDURES

106.415 Notice and Conduct of Hearing
106.416 Opinions and Orders

Appendix Old Rule Numbers Referenced

AUTHORITY: Implementing Sections 5, 22.4, 27, 28 and 28.1 and authorized by Section 26 of the Environmental Protection Act (Ill. Rev. Stat. 1985, ch. 111½, pars. 1005, 1022.4, 1027, 1028, 1028.1 and 1026).

SOURCE: Filed with Secretary of State January 1, 1978; amended at 4 Ill. Reg. 2, page 186, effective December 27, 1979; codified at 6 Ill. Reg. 8357; amended in R85-22 at 10 Ill. Reg. 992, effective February 2, 1986; amended in R86-46 at 11 Ill. Reg.13457, effective August 4, 1987; amended in R84-17(E) at _____ Ill. Reg. _____, effective _____.

NOTE: Capitalization ~~denotes statutory language~~ is used to indicate that the language quotes or paraphrases a statute.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE A: GENERAL PROVISIONS
CHAPTER I: POLLUTION CONTROL BOARD

PART 106
HEARINGS PURSUANT TO SPECIFIC RULES

SUBPART D: RCRA AND SOLID WASTE DISPOSAL ADJUSTED STANDARD PROCEDURES

Section 106.410 Scope and Applicability

This Subpart applies only whenever provision for an adjusted standard, as provided in Section 28.1 of the Environmental Protection Act (Act), is contained in a regulation of general applicability in 35 Ill. Adm. Code 700 through 750 and in 35 Ill. Adm. Code 800 through 815.

(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 807
SOLID WASTE

SUBPART A: GENERAL PROVISIONS

SUBPART B: SOLID WASTE PERMITS

SUBPART C: SANITARY LANDFILLS

SUBPART E: CLOSURE AND POST-CLOSURE CARE

SUBPART F: FINANCIAL ASSURANCE FOR CLOSURE AND POST-CLOSURE CARE

Illustration E	Irrevocable Standby Letter of Credit
Illustration F	Certificate of Insurance for Closure and/or Post-Closure 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 Old Rule Numbers Referenced

AUTHORITY: Implementing Sections 5, 21.1 and 22 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1005, 1021.1, 1022 and 1027).

SOURCE: Adopted as an emergency rule and filed with the Secretary of State July 27, 1973; amended at 2 Ill. Reg. 16, p. 3, effective April 10, 1978; codified at 7 Ill. Reg. 13636; recodified from Subchapter h to Subchapter i at 8 Ill. Reg. 13198; emergency amendment in R84-22A at 9 Ill. Reg. 741, effective January 3, 1985 for a maximum of 150 days; amended in R84-22B at 9 Ill. Reg. 6722 , effective April 29, 1985; amended in R84-22C at 9 Ill. Reg. 18942, effective November 25, 1985; amended in R88-7 at __ Ill. Reg. _____, effective _____.

NOTE: Capitalization is used to indicate that the language quotes or paraphrases a statute.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER I: SOLID WASTE AND SPECIAL WASTE HAULING

PART 807
SOLID WASTE

SUBPART A: GENERAL PROVISIONS

Section 807.105 Relation to Other Rules

a) Unless otherwise expressly stated, persons and facilities regulated pursuant to 35 Ill. Adm. Code 700-749 are not subject to the requirements of this Part or of 35 Ill. Adm. Code 811, 812, 813, 814 or 815.

b) Unless otherwise expressly stated, persons and facilities subject to 35 Ill. Adm. Code 807, 809, 811, 812, 813, 814 and 815 may be subject to other Board regulations as explained at 35 Ill. Adm. Code 700.102.

c) The requirements of 35 Ill. Adm. Code 810-815 are intended to supersede the requirements of this Part. Persons and facilities regulated pursuant to 35 Ill. Adm. Code Parts 810-815 are not subject to the requirements of this Part. This Part does not apply to new units as defined in 35 Ill. Adm. Code 810.

(Source: Added at ___ Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: SOLID WASTE AND SPECIAL WASTE HAULING
PART 810
SOLID WASTE DISPOSAL: GENERAL PROVISIONS

Section
810.101 Scope and Applicability
810.102 Severability
810.103 Definitions
810.104 Incorporation by Reference

AUTHORITY: Implementing Sections 5, 21, 21.1, 22 and 22.17, and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1005, 1021, 1021.1, 1022, 1027 and 1022.17).

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

NOTE: Capitalization is used to indicate that the language quotes or paraphrases a statute.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: SOLID WASTE AND SPECIAL WASTE HAULING
PART 810
SOLID WASTE DISPOSAL: GENERAL PROVISIONS

Section 810.101 Scope and Applicability

This Part contains definitions which apply to all solid waste disposal facilities regulated pursuant to 35 Ill. Adm. Code 811-815. These definitions do not apply to hazardous waste management facilities regulated pursuant to 35 Ill. Adm. Code 700-750.

Section 810.102 Severability

If any provision of these regulations or the application of them to any person or in any circumstances is judged invalid, such adjudication shall not affect the validity of these regulations as a whole or of any part not adjudged invalid.

Section 810.103 Definitions

Except as stated in this section, and unless a different meaning of a word or term is clear from the context, the definition of words or terms in this Part shall be the same as those used in

the Environmental Protection Act (Act), Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1001 et. seq.

"Admixtures" are chemicals added to earth materials to improve for a specific application the physical or chemical properties of the earth materials. Admixtures include, but are not limited to: lime, cement, bentonite and sodium silicate.

"Applicant" is the "person", as defined in the Act, submitting an application to the Agency for a permit for a solid waste disposal facility.

"AQUIFER" MEANS SATURATED (WITH GROUNDWATER) SOILS AND GEOLOGIC MATERIALS WHICH ARE SUFFICIENTLY PERMEABLE TO READILY YIELD ECONOMICALLY USEFUL QUANTITIES OF WATER TO WELLS, SPRINGS, OR STREAMS UNDER ORDINARY HYDRAULIC GRADIENTS.

"Chemical waste" means a nonbiodegradable solid waste that will form a contaminated leachate only by chemical or physical processes. No gas is expected to be formed.

"Contaminated leachate" is leachate constituents of which violate the standards set forth in 35 Ill. Adm. Code 811.202.

"Disturbed areas" are areas that have been physically altered during waste disposal operations or during the construction of a structure related to the facility.

"Earth liners" are structures constructed from naturally occurring soil material compacted to achieve a low permeability.

"Existing" means of facility or unit which is not defined in this Section as new.

"Facility" consists of an entire solid waste disposal operation. All structures used in connection with or to facilitate the waste disposal operation shall be considered a part of the facility. A facility may contain, but is not limited to, one or more solid waste disposal units, buildings, treatment systems, processing works, and monitoring stations.

"Field capacity" is the moisture content of a waste above which moisture can be released by gravity drainage.

"Gas condensate" is liquid formed as a landfill gas is cooled or compressed.

"Gas collection system" is a system of wells, trenches, pipes and other related structures that collects and transports landfill gas produced in a putrescible waste disposal unit at a central point or points. Gas flow may be by produced by an

induced draft produced by mechanical means or naturally produced gas pressure gradients.

"Gas venting system" is a system of wells, trenches, pipes and other related structures that vents landfill gas produced in a putrescible waste disposal unit to the atmosphere.

"Geomembranes" are manufactured low permeability membrane liners and barriers used to control the migration of fluids or gases.

"Geotextiles" are permeable manufactured materials used to strengthen soil, provide a filter to prevent clogging of drains, collect and drain liquids and gases beneath the ground surface, and perform other functions requiring permeable materials.

"GROUNDWATER" MEANS UNDERGROUND WATER WHICH OCCURS WITHIN THE SATURATED ZONE AND WITHIN GEOLOGIC MATERIALS WHERE THE FLUID PRESSURE IN THE PORE SPACE IS EQUAL TO OR GREATER THAN ATMOSPHERIC PRESSURE.

"Hydraulic barriers" are structures designed to prevent or control the seepage of water. Hydraulic barriers include, but are not limited to: cutoff walls, slurry walls, grout curtains and liners.

"Inert waste" means nonbiodegradable, nonputrescible, nonwatersoluble solid waste that will not in any way form a contaminated leachate. Inert waste will not burn or serve as food for vectors. Inert waste includes, but is not limited to: bricks, masonry and concrete (cured for 60 days or more).

"Land treatment unit" means an area where wastes are applied onto or incorporated into the soil surface for disposal. Land treatment units may be subject to the permitting requirements of 35 Ill. Adm. Code 309.

"Landfill" means a unit or part of a facility where waste is placed in or on land for disposal and which is not a land treatment unit, surface impoundment or an underground injection well. For the purposes of this Part, waste piles used for disposal are considered landfills.

"Leachate" is liquid that has been or is in contact with solid waste.

"Malodorous odor" is an odor caused by contaminants in the atmosphere in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.

"New" means a facility or unit:

For landfills exempt from permit requirements pursuant to Section 21(d) of the Act, which has not yet accepted waste as of the effective date of these regulations; and

For permitted landfills; for which no development or operating permit has been issued by the Agency pursuant to 35 Ill. Adm. Code 807 as of the effective date of these regulations.

For all landfills, a unit whose maximum design capacity or if its lateral extent is to be increased after the date these regulations take effect.

"Operator" is the person, as defined in the Act, responsible for the operation and maintenance of a solid waste disposal facility.

"Permit area" is the entire surface area occupied by a permitted solid waste disposal facility.

"Putrescible waste" means a solid waste that contains organic matter capable of being decomposed by microorganisms with sufficient rapidity as to cause a malodorous odor, gases, or other offensive conditions, and capable of providing food for birds and vectors. Putrescible wastes may form a contaminated leachate from microbiological degradation, chemical processes, and physical processes. Putrescible waste includes, but is not limited to: garbage, offal, dead animals, general household waste, and commercial waste. All solid wastes which do not meet the definitions of inert or chemical wastes shall be considered putrescible wastes.

"Runoff" means water which flows overland as a result of precipitation before entering a defined stream channel or precipitation that falls directly in a stream channel.

"Seismic Slope Safety Factor" is the ratio between resisting forces or moments in a slope and the driving forces or moments that may cause a massive slope failure during an earthquake or other seismic event such as an explosion.

"Shredding" is the mechanical reduction in particle sizes of solid waste. Putrescible waste is considered shredded if 90 percent by dry weight passes a 3 inch sieve.

"Significant Modification" is a modification to an approved permit in which changes to one or more of the following are to occur:

The capacity of the waste disposal unit will be increased over the permitted capacity;

The placement of daily or intermediate cover will be changed;

The performance, efficiency or longevity of the liner system will be decreased;

The efficiency or performance of the leachate collection system will be decreased;

The configuration, performance, or efficiency of the leachate management system will be affected;

The final disposition of treated effluent or the quality of the discharge from the leachate treatment or pretreatment system will be affected;

A gas management system will be installed, or the efficiency or performance of an existing gas management system will be decreased;

The performance or operation of the surface water control system will be affected;

A decrease in the quality or quantity of data from any environmental monitoring system will occur;

A change in the applicable background concentrations or the maximum allowable concentrations will occur;

A change in the design or configuration of the regraded area will occur;

The amount or type of postclosure financial assurance will change;

The permit boundary will be changed;

The postclosure land use of the property will change;

A remedial action to protect groundwater is necessary;

The permit is to be transferred to a new operator; or

Operating authorization is being sought to place into service a structure constructed pursuant to a construction quality assurance program.

"Solid Waste" means waste defined at 35 Ill. Adm. Code 721.102, except that, for the purposes of 35 Ill. Adm. Code 811-815, hazardous wastes regulated pursuant to 35 Ill. Adm. Code 700-749 are excluded. Solid waste includes the subcategories of inert, putrescible and chemical wastes, as well as special waste as defined in the Act.

"Static Safety Factor" is the ratio between resisting forces or moments in a slope and the driving forces or moments that may cause a massive slope failure.

"Surface impoundment" means a natural topographic depression, man-made excavation, or diked area that is designed to hold liquid wastes or wastes containing free liquids for disposal. Surface impoundments may be subject to the permitting requirements of 35 Ill. Adm. Code 309.

"Unit" is a contiguous area used for solid waste disposal.

"Waste pile" means a noncontainerized mass of solid, non flowing waste placed on land for disposal.

Section 810.104 Incorporation by Reference

a) The Board incorporates the following material by reference: 40 CFR 141.40 (1987).

b) This incorporation includes no later amendments or editions.

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: SOLID WASTE AND SPECIAL WASTE HAULING
PART 811
STANDARDS FOR NEW SOLID WASTE LANDFILLS

SUBPART A: GENERAL STANDARDS FOR ALL LANDFILLS

SUBPART B: ADDITIONAL STANDARDS FOR INERT WASTE LANDFILLS

SUBPART C: ADDITIONAL STANDARDS FOR PUTRESCIBLE AND CHEMICAL WASTE LANDFILLS

SUBPART D: STANDARDS FOR IDENTIFICATION AND MANAGEMENT OF SPECIAL WASTES

SUBPART E: CONSTRUCTION QUALITY ASSURANCE PROGRAMS

SUBPART F: STANDARDS FOR SPECIFRIC WASTE STREAMS

SUBPART G: FINANCIAL ASSURANCE FOR CLOSURE AND AND POSTCLOSURE CARE

811.715 Self-Insurance for Non-commercial Sites
811.716 Letter of Credit

AUTHORITY: Implementing Sections 5, 21, 21.1, 22 and 22.17, and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1005, 1021, 1021.1, 1022, 1027 and 1022.17).

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

NOTE: Capitalization is used to indicate that the language quotes or paraphrases a statute.

TITLE 35: ENVIRONMENTAL PROTECTION
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CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: 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

The standards in this Subpart shall apply to all new landfills, except those regulated pursuant to 35 Ill. Adm. Code 700-749. This Subpart A contains general standards applicable to all landfills. Additional standards for landfills which dispose only inert waste are contained in Subpart B. Additional standards for landfills which dispose chemical and putrescible waste are contained in Subpart C.

Section 811.102 Location Standards

a) The facility shall not invade or diminish the scenic, recreational and fish and wildlife values for any river designated for protection under the Wild and Scenic Rivers Act, 16 USC 1271 et seq.

b) The facility shall not restrict the flow of a 100-year flood, result in washout of solid waste from the 100-year flood, or reduce the temporary water storage capacity of the 100-year floodplain, unless measures are undertaken to provide alternate storage capacity.

c) The facility shall not be located in areas where it may pose a threat of harm or destruction to the features for which an irreplaceable historic, or archaeological site was listed pursuant to the National Historic Preservation Act, 16 USC 470 et seq. or the Illinois Historic Preservation Act, Ill. Rev. Stat. 1985, ch.

127, par. 133(d)(1) et seq. for which a Natural Landmark was designated by the National Park Service or the Illinois State Historic Preservation Officer, or for which a natural area was designated as a Dedicated Illinois Nature Preserve pursuant to the Illinois Natural Areas Preservation Act, Ill. Rev. Stat. 1985, ch. 105 par. 701 et seq.

d) The facility shall not be located in areas where it may jeopardize the continued existence of any designated endangered species, result in the destruction or adverse modification of the critical habitat listed for such species, or cause or contribute to the taking of any endangered or threatened species of plant, fish or wildlife listed pursuant to the Endangered Species Act 16 USC 1531 et seq., or the Illinois Endangered Species Protection Act, Ill. Rev. Stat. 1985, ch. 8, par. 331 et seq.

e) The facility shall not cause a violation of Section 404 of the Clean Water Act, 33 USC 1342.

f) The facility shall not cause a nonpoint source of pollution that violates applicable legal requirements implementing an areawide or statewide water quality management plan that has been approved under Section 208 of the Clean Water Act, 33 USC 1288.

Section 811.103 Surface Water Drainage

a) Runoff From Disturbed Areas

1) Runoff from disturbed areas resulting from precipitation events less than or equal to the 25-year, 24-hour precipitation event that is discharged to waters of the State shall meet the requirements of 35 Ill. Adm. Code 304.

2) All discharges of runoff from disturbed areas to waters of the State shall be permitted by the Agency in accordance with 35 Ill. Adm. Code 309.

3) All treatment facilities shall be equipped with bypass outlets designed to pass the peak flow of runoff from the 100-year, 24-hour precipitation event without damage to the treatment facilities or surrounding structures.

4) All surface water control structures shall be operated until the final cover is placed and erosional stability is provided by the vegetative or other cover meeting the requirements of 811.205 or 811.321.

5) All discharge structures shall be designed to prevent erosion and scouring of the receiving stream channel.

b) Diversion of Runoff From Undisturbed Areas.

1) Runoff from undisturbed areas shall be diverted around disturbed areas to the maximum practical extent.

2) Diversion facilities shall be designed to prevent runoff from the 25-year, 24-hour precipitation event from entering disturbed areas.

3) Runoff from undisturbed areas which becomes commingled with runoff from disturbed areas shall be handled as runoff from disturbed areas and treated in accordance with subsection (a), above.

4) All diversion structures shall be designed to prevent erosion and scouring in the diversion channel and downstream channels.

5) All diversion structures shall be operated until the final cover is placed and erosional stability is provided by the vegetative or other cover meeting the requirements of 811.205 or 811.321.

Section 811.104 Survey Controls

a) The boundaries of all waste disposal units, property boundaries, disturbed areas, and (if applicable) the permit area shall be surveyed and marked by a professional land surveyor.

b) All stakes and monuments shall be clearly marked for identification.

c) All stakes and monuments shall be inspected and surveyed annually by a professional land surveyor. Missing stakes and monuments shall be replaced.

c) Control Monuments shall be established to check vertical elevations. The control monuments shall be established and maintained by a professional land surveyor.

Section 811.105 Compaction

All waste shall be deposited at the lowest part of the active face and compacted to the highest possible density necessary to minimize void space and settlement.

Section 811.106 Daily Cover

a) A uniform layer of at least six inches of clean soil material shall be placed on all exposed waste by the end of each day of operation.

b) Alternate materials or procedures, including the removal of daily cover prior to additional waste placement, may be used, provided that the alternate materials or procedures achieve equivalent or superior performance to the requirements of subsection (a) in the following areas:

1) Prevention of blowing debris;

2) Minimization of access to the waste by vectors;

3) Minimization of the threat of fires at the open face; and

4) Minimization of odors.

Section 811.107 Operating Standards

a) Phasing of Operations

1) The placement of waste shall begin in the lowest possible part of the unit. Waste disposal operations shall move from the lowest portions of the unit to the highest portions.

2) Waste shall be placed in a manner and at such a rate that mass stability is provided during all phases of operation.

3) The phasing of operations at the facility shall be designed in such a way as to allow the sequential construction, filling, and closure of discrete units or parts of units.

4) The operator shall dispose of wastes in a manner which will facilitate the filling to final grade and minimize the operational phase of each discrete unit or parts of units.

b) Size and Slope of Working Face

1) The working face of the unit shall be no larger than necessary to conduct operations in a safe and efficient manner.

2) The slopes of the working face area shall be no steeper than 2 to 1 (horizontal to vertical) unless the waste is stable at steeper slopes.

c) Equipment

Properly maintained equipment shall be available for use at the facility during all hours of operation in sufficient numbers and of such type as are necessary to achieve and maintain compliance with the requirements of this Part.

d) Utilities

All utilities necessary for the safe and efficient operation in compliance with the requirements of this Part shall be available at the facility at all times.

e) Maintenance

The operator shall maintain and operate all systems and related appurtenances and structures in a manner that facilitates proper operations and minimizes system downtime. Each system shall be maintained to operate at maximum efficiency throughout its operational life.

f) Open Burning

Open burning is prohibited except in accordance with 35 Ill. Adm. Code 200-245.

g) Dust Control

The operator shall implement methods of controlling dust in order to prevent wind dispersal of particulate matter.

h) Noise Control

The facility shall be designed, constructed and maintained to minimize the level of equipment noise audible outside the facility. The facility shall not cause or contribute to a violation of 35 Ill. Adm. Code 900-905.

i) Vector Control

The operator shall implement measures to control the population of disease and nuisance vectors.

j) Fire Protection

The operator shall take measures for fire protection.

k) Litter Control

1) The operator shall patrol the facility daily for litter. All litter shall be collected and placed

in the fill or a secure, covered container for later disposal.

2) The facility shall not accept solid waste from vehicles that do not utilize devices such as covers or tarpaulins to control litter.

Section 811.108 Salvaging

a) All salvaging operations in which solid waste is returned to a beneficial use shall in no way interfere with the operation of the waste disposal facility, result in a violation of any standard in these regulations, or delay the construction or interfere in the operation of the liner, leachate collection system, daily, intermediate or final cover and any monitoring devices.

b) All salvaging operations shall be performed in a safe and sanitary manner in compliance with the requirements of this Part.

c) All salvaged materials shall be removed from the site immediately or shall be stored so as not to create a nuisance, harbor vectors, cause odors, or create an unsightly appearance.

Section 811.109 Boundary Control

a) The open face area of the unit and all other areas that may cause a threat to public health and safety shall be secured against unauthorized entry at all times.

b) A permanent sign shall be posted at the entrance to the facility stating the following information:

1) Permit number (if applicable);

2) Hours of operation;

3) Penalty for unauthorized trespassing and dumping;

4) Name and telephone number of an authorized agent who shall be available to deal with emergencies and other problems, if different than the operator; and

5) The name, address and telephone number of the operator of the facility.

Section 811.110 Standards for Closure

a) The final slopes shall be designed to complement and blend with the surrounding topography.

b) All drainage ways and swales shall be designed to safely pass the runoff from the 100-year, 24-hour precipitation event without scouring or erosion.

c) The final contours shall be compatible with the proposed land use of the area.

d) The final configuration of the facility shall be designed in a manner that minimizes the need for further maintenance.

Section 811.111 Postclosure Maintenance Standards

a) The operator shall treat, remove from the site, or dispose of all wastes and waste residues within 30 days after receipt of the final volume of waste.

b) The operator shall decontaminate all facilities, equipment and structures and remove all equipment and structures not necessary for the postclosure land use.

c) Maintenance and Inspection of the Final Cover and Vegetation

1) Frequency of Inspections

A) The operator shall conduct a quarterly inspection of all vegetated surfaces for a minimum of five years after closure; and

B) After five years, the operator may reduce the frequency to to annual inspections until settling has stopped and there are no eroded or scoured areas.

2) All rills, gullies and crevices identified in the inspection shall be filled. Areas particularly susceptible to erosion shall be recontoured.

3) All eroded and scoured drainage channels shall be repaired and lining material shall be replaced, if necessary.

4) All holes and depressions created by settling shall be filled and recontoured so as to prevent standing water.

5) All reworked surfaces and areas with failed or eroded vegetation shall be revegetated.

SUBPART B: ADDITIONAL STANDARDS FOR INERT WASTE LANDFILLS

Section 811.201 Scope and Applicability

The standards of this Subpart, in addition to the requirements of Subpart A, shall apply to all new landfills in which only inert waste is to be placed.

Section 811.202 Determination of Contaminated Leachate

a) Leachate shall be considered contaminated if it contains concentrations of constituents greater than the standards for public water supplies, 35 Ill. Adm. Code 302.301, 302.304, and 302.305.

b) A representative sample of leachate extracted from the waste by a laboratory procedure may be used to model the expected constituents and concentrations of the leachate. The laboratory test shall meet the following standards:

1) The procedure shall be designed to closely reproduce expected field conditions; and

2) The test shall utilize an extraction fluid resembling the liquid expected to infiltrate through the waste.

c) Actual samples of leachate from an existing solid waste disposal unit may be utilized under the following conditions:

1) The waste in the existing unit is similar to the waste expected to be disposed;

2) The conditions under which the leachate was formed are similar to those expected to be encountered; and;

3) Leachate is sampled so as to be representative of undiluted and unattenuated leachate emanating from the unit.

Section 811.203 Design Period

The design period for all inert waste disposal units shall be the estimated life of the unit plus five years.

Section 811.204 Final Cover Requirements

A minimum of three feet of soil material of a quality sufficient to insure vegetation and provide erosional stability shall be applied over all disturbed areas unless no vegetation is required for the postclosure land use. In this case the requirements of

811.205 (b) will not apply; however, the final surface shall be erosionally stable.

Section 811.205 Final Slope and Stabilization Standards

a) The waste disposal unit shall achieve a minimum static slope safety factor of 1.5 and a minimum seismic safety factor of 1.3.

b) Standards for Vegetation

1) Vegetation shall be promoted on all reconstructed surfaces to minimize wind and water erosion;

2) Vegetation shall be compatible with the climactic conditions;

3) Vegetation shall require little maintenance;

4) Vegetation shall consist of a diverse mix of native and introduced species consistent with the postclosure land use; and

5) Temporary erosion control measures including, but not limited to, mulch, straw, netting, and chemical soil stabilizers, shall be undertaken while vegetation is being established.

SUBPART C: ADDITIONAL STANDARDS FOR PUTRESCIBLE AND CHEMICAL WASTE LANDFILLS

Section 811.301 Scope and Applicability

In addition to the requirements of Subpart A, the standards of this Subpart apply to all landfills in which chemical and putrescible wastes are to be placed.

Section 811.302 Location Standards

a) No part of a unit shall be located within a setback zone established pursuant to Section 14.2 or 14.3 of the Act;

b) No part of a unit shall be located within the recharge zone or within 1200 feet, vertically or horizontally, of a sole-source aquifer designated by the United States Environmental Protection Agency pursuant to Section 1424(e) of the Safe Drinking Water Act, 42 USC 300 (f) et seq. unless there is a stratum between the bottom of the waste disposal unit and the top of the aquifer that meets the following minimum requirements:

1) The stratum has a minimum thickness of 50 feet;

2) The maximum hydraulic conductivity in the horizontal and vertical direction is no greater than $1x10^{-7}$ cm/sec, as determined by in situ borehole or equivalent tests;

3) There is no indication of continuous sand or silt seams, faults, fractures, cracks, or slickensides within the stratum that may provide paths for migration; and

4) Age dating of extracted water samples from both the aquifer and the stratum indicates that the time of travel for water percolating downward through the relatively impermeable stratum is no faster than 50 feet in 100 years.

c) A facility located within 500 feet of the right of way of a state or interstate highway shall be screened from view by natural objects, fences, barricades, or plants.

d) No part of a unit shall be located closer than 500 feet from occupied dwellings, schools, and hospitals unless the owner provides permission to the operator, in writing, for a closer distance.

e) The facility shall not be located closer than 5000 feet of any runway used by piston type aircraft or within 10,000 feet of any airport runway used by turbojet aircraft.

Section 811.303 Design Period

a) The design period for putrescible and chemical waste disposal units shall be the estimated operating life plus 30 years unless measures are undertaken in compliance with subsections (b) and (c) to encourage stabilization of putrescible waste.

b) The design period for a disposal unit which accepts only putrescible waste in shredded form shall be the estimated operating life plus 20 years.

c) The design period for a permitted putrescible waste disposal unit that recycles leachate in accordance with Section 811.309 (e) shall be the estimated operating life plus 20 years.

Section 811.304 Foundation and Mass Stability Analysis

a) The material beneath the unit shall have sufficient strength to support the weight of the unit during all phases of construction and operation. The loads and loading rate shall not cause or contribute to the failure of the liner and leachate collection systems.

b) The total settlement or swell of the foundation shall not cause or contribute to the failure of the liner and leachate collection systems.

c) The solid waste disposal unit shall achieve a safety factor against bearing capacity failure of 2.0 under static conditions and 1.5 under seismic loadings.

d) The waste disposal unit shall achieve a factor of safety against slope failure of 1.5 for static conditions and 1.3 under seismic conditions.

e) In calculating factors of safety both long term and short term conditions shall be considered.

f) The potential for earthquake or blast induced liquefaction, and its effect on the stability and integrity of the unit shall be considered and taken into account in the design. The potential for landslides or earthquake induced liquefaction outside the unit shall be considered if such events could affect the unit.

Section 811.305 Standards for Foundation Construction

a) If the in situ material provides insufficient strength to meet the requirements of 811.304 then the insufficient material shall be removed and replaced with clean materials sufficient to meet the requirements of 811.304.

b) All trees, stumps, roots, boulders and debris shall be removed.

c) All material shall be compacted to achieve the required strength and density properties in conformance with a construction quality assurance plan.

d) Placement of frozen soil or soil onto frozen ground is prohibited.

e) The foundation shall be constructed and graded to provide a smooth, workable surface on which to construct the liner.

Section 811.306 Liner Systems

a) All units shall be equipped with a leachate drainage and collection system and a compacted earth liner designed as an integrated system in compliance with the requirements of this section and 811.307 and 811.308.

b) The liner and leachate collection system shall be stable during all phases of construction and operation. The side slopes shall achieve a minimum static safety factor

of 1.3 and a minimum seismic safety factor of 1.0 at all times.

c) The liner shall be designed to function for the entire design period.

d) Compacted Earth Liner Standards

1) The minimum allowable thickness shall be 3 feet.

2) The liner shall be compacted to achieve a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec.

3) The liner shall be compacted to minimize void spaces and support the loadings imposed by the waste disposal operation without settling so as to cause or contribute to the failure of the leachate collection system.

4) The liner shall be constructed from materials compatible with the constituents of the leachate expected to be produced.

5) Alternate specifications, using standard construction techniques, for hydraulic conductivity and liner thickness may be utilized, provided that:

A) In no case shall the liner thickness be less than 3 feet; and

B) The modified liner shall operate in conjunction with a leachate drainage and collection system to achieve equivalent or superior performance to the requirements of this subsection. Equivalent performance shall be evaluated at maximum annual leachate flow conditions.

e) Geomembrane Liners

1) Geomembranes may be used only in conjunction with a compacted earth liner system meeting the requirements of 811.306 (d) and a leachate drainage and collection system meeting the requirements of 811.307 and 811.308.

2) The geomembrane shall be supported by a compacted base free from sharp objects. The geomembrane shall be chemically compatible with the supporting soil materials.

3) The geomembrane material shall be compatible with the leachate expected to be generated.

4) Geomembranes shall have sufficient strength and durability to function at the site for the design period under the maximum expected loadings imposed by the waste and equipment and stresses imposed by settlement, temperature, construction and operation.

5) Seams shall be made in the field according to the manufacturer's specifications. All sections shall be arranged so that the use of field seams is minimized and seams are oriented in the direction subject to the least amount of stress.

6) The leachate collection system shall be designed to avoid, to the maximum extent possible, openings through the geomembrane.

f) Slurry Trenches and Cutoff Walls Used to Prevent Migration of Leachate

1) Slurry trenches and cutoff walls shall be used only in conjunction with a compacted earth liner and a leachate drainage system meeting the requirements of 811.306 (d) and 811.307 or as part of a remedial action required by 811.319.

2) Slurry trenches and cutoff walls shall extend into the bottom confining layer to a depth sufficient to establish and maintain a continuous hydraulic connection and prevent seepage.

3) Exploration borings shall be drilled along the route of the slurry trench or cutoff wall to confirm the depth to the confining layer. In situ tests shall be conducted to determine the hydraulic conductivity of the confining layer.

4) Slurry trenches and cutoff walls shall be stable under all conditions, including long term, short term and end of construction. They shall not be susceptible to displacement or erosion under stress or hydraulic gradient.

5) Slurry trenches and cutoff walls shall be constructed in conformance to a construction quality assurance plan which insures that all material and construction methods meet design specifications.

g) Liner configurations other than those specified in this section, special construction techniques, and admixtures may be utilized, provided that:

1) The alternate technology or material provides equivalent, or superior, performance to the requirements of this section;

2) The technology or material has been successfully utilized in at least one application similar to the proposed application; and

3) Methods for manufacturing quality control and construction quality assurance can be implemented.

Section 811.307 Standards for the Leachate Drainage System

a) The leachate drainage system shall be designed and constructed to operate for the entire design period.

b) The system shall be designed in conjunction with the leachate collection system required by Section 811.308 to maintain a maximum head of leachate one foot above the liner under the following conditions:

1) During the month having the highest average monthly precipitation,

2) Assuming the unit is at field capacity,

3) Assuming the final cover is in place, and

4) For units with the bottom of the liner located within the saturated zone, assuming the groundwater table is at its seasonal high level.

c) A drainage layer shall overlay the entire liner system. This drainage layer shall be no less than one foot thick and shall have a hydraulic conductivity equal to, or greater than 1×10^{-3} cm/sec.

d) The drainage layer shall be designed to maintain laminar flow throughout the drainage layer under the conditions described in subsection (b).

e) The drainage layer shall be designed with a graded filter or geotextile as necessary to minimize clogging and prevent intrusion of fine material.

f) Materials used in the leachate collection system shall be chemically resistant to the wastes and the leachate expected to be produced.

g) Units with the bottom of the liner located within the saturated zone shall be designed to maintain a minimum of one foot between the highest elevation of the liner and the seasonal low water table elevation.

Section 811.308 Standards for the Leachate Collection System

a) The leachate collection system shall be designed and constructed to function for the entire design period.

b) Collection pipes shall be designed as open channels to convey leachate under the conditions established in 811.307 (b).

c) Collection pipes shall be of sufficient cross sectional area to allow cleaning.

d) Materials used in the leachate collection system shall be chemically resistant to the leachate expected to be produced.

e) The collection pipe material shall possess sufficient structural strength to support the maximum loads imposed by the overlying materials and equipment used at the facility.

f) Collection pipes shall be constructed within a coarse gravel envelope using a graded filter or geotextile as necessary to minimize clogging.

g) The system shall be equipped with a sufficient number of manholes and cleanout risers to allow cleaning and maintenance of all pipes throughout the design period.

h) Leachate shall be able to drain freely from the collection pipes. If sumps are used then pumps shall remove the collected leachate before the level of leachate in the sumps rises above the invert of the collection pipes under the conditions established in 811.307 (b).

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 accepted engineering practice based upon 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 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) The leachate storage facility must be able to store at least five days' worth of accumulated leachate at the maximum generation rate.

2) All leachate storage tanks shall be equipped with secondary containment systems.

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 malodorous odor.

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 system 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 governing authority to discharge to the the treatment works.

3) All discharges to a treatment works shall meet the requirements of any applicable pretreatment ordinances.

4) Pumps, meters, valves and monitoring stations that control and monitor the flow of leachate from the unit shall be considered part of the facility and accessible to the operator at all times.

5) Leachate shall be allowed to flow freely into the sewage system at all times; however, if access to the treatment works is restricted then an alternate leachate management system shall be constructed in accordance with subsection (c).

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 811.306.

B) The unit must have a leachate collection stem in place and operating in accordance with 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 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 to dispose of 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 perched water conditions and gas buildup or 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 at a frequency of once per month while the leachate management system is in operation.

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_5);

B) Chemical oxygen demand;

C) Total Suspended Solids;

D) Total Iron;

E) pH;

F) Any other constituents listed on the approved NPDES discharge permit or required by an

offsite treatment works and present in the leachate;

G) Any other constituent of the leachate that may be present in the leachate and may cause groundwater contamination beyond the zone of attenuation; and

H) All of the indicator constituents used 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 constituents listed in the NPDES permit that are also constituents in the leachate;

D) Any other constituent of the leachate that may be present in the leachate and may cause groundwater contamination beyond the zone of attenuation; and

E) All of the indicator constituents used for groundwater monitoring.

g) 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 applicable wastewater effluent standards in 35 Ill. Adm. Code 304.124, 304.125, 304.126, and do not contain a BOD concentration greater than 30 mg/L for 6 consecutive months.

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 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.

4) Gas monitoring devices shall be constructed from material 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.

c) Monitoring Frequency

1) All gas monitoring devices and the ambient air shall be sampled 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 quarterly 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) After a minimum of five years after closure, monitoring may be discontinued if the following conditions have been met for at least one year:

A) The concentration of methane is less than 5 percent of the lower explosive limit in air for 4 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 likely to migrate from the unit and exceed the standards of 811.311 (a) (1) and (2).

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; and

D) Oxygen.

2) The ambient air at a minimum of three downwind points 100 feet from the edge of the unit or the property boundary, whichever is closer to the unit, shall be monitored for methane. Monitoring shall take place when the average wind velocity is less than 5 miles per hour.

3) All buildings within a facility shall be monitored for methane by utilizing continuous detection devices located at the most likely points for methane to enter.

Section 811.311 Standards for Landfill Gas Management Systems

a) The operator shall install a gas management system if any one of the following conditions are met:

1) Methane attributable to the unit is detected at any location at a concentration greater than 50 percent of the lower explosive limit in air, below the ground surface, at a point at or beyond the property boundary, or 100 feet from the edge of the unit, whichever is less;

2) Methane, attributable to the unit, is detected at any location at a concentration greater than 50 percent of the lower explosive limit in the ambient air at a point at or beyond the property boundary or 100 feet from the edge of the unit, whichever is less;

3) Methane attributable to the unit is detected at a concentration greater than 25 percent of the lower

explosive limit in air in any building on or near the facility;

4) Malodorous odors caused by the unit are detected beyond the property boundary; or

5) Leachate is recycled in accordance with 811.309 (e).

b) Standards for Gas Venting System

1) Gas venting systems shall be utilized only as, optional, temporary mitigation until the completion of an active system.

2) All materials shall be resistant to chemical reaction with the constituents of the gas.

3) The system shall be capable of venting all gas down to the water table or bottom of the liner, whichever is higher.

4) Gas venting systems shall be installed only outside the perimeter of the unit.

c) Standards for Gas Collection Systems

1) Gas collection systems may be installed either within the perimeter of the unit or outside the unit.

2) The operator shall design and operate the system so that the standards of subsections (a) (1), (2), (3) and (4) will not be exceeded.

3) The gas collection system shall transport gas to a central point or points for processing for beneficial uses or disposal in accordance with the requirements of 811.312.

4) The gas collection system shall be designed to function for the entire design period. The design may include changes in the system to accommodate changing gas flow rates or compositions.

5) All materials and equipment used in construction of the system shall be certified as safe for use in hazardous or explosive environments and shall be resistant to corrosion by constituents of the landfill gas.

6) The gas collection system shall be designed and constructed to withstand all normal landfill conditions, including settlement.

7) The gas collection system and all associated equipment including compressors, flares, monitoring installations, and manholes shall be considered part of the facility.

8) Provisions shall be made for collecting and draining gas condensate to a management system meeting the requirements of 811.309.

9) Under no circumstances shall the gas collection system compromise the integrity of the liner, leachate collection and cover systems.

10) The gas collection system shall be tested to be airtight to prevent the leaking of gas from the collection system or air into the system.

11) The gas collection system shall be operated until the waste is stabilized and no longer producing methane in quantities that may exceed the minimum allowable concentrations in 811.311 (a) (1), (2), (3) and (4).

12) The gas collection system shall be equipped with a mechanical device, such as a compressor, capable of withdrawing gas, or be designed so that a mechanical device can be easily installed at a later time, if necessary, to meet the requirements of 811.311 (a) (1), (2), (3) and (4).

Section 811.312 Landfill Gas Processing and Disposal Systems

a) The processing of landfill gas for beneficial uses 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. Gas shall be treated or burned onsite prior to discharge in accordance with a permit issued by the Agency pursuant to 35 Ill. Adm. Code 200-245.

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 35 Ill. Adm. Code 230.110.

f) Standards for Onsite Combustion of Landfill Gas Using Devices Other Than Flares

1) At a minimum, the following parameters shall be measured prior to treatment or combustion:

A) Volatile Organic Compounds;
B) Total Chlorine;
C) Total Sulfur;
D) Carbon dioxide;
E) Oxygen;
F) Moisture Content;
G) Heat Value; and
H) Flow rate.

2) At a minimum, the following parameters shall be measured after treatment or combustion:

A) Particulates;
B) Sulfur oxides;
C) Hydrochloric acid;
D) Carbon monoxide;
E) Nitrogen oxides;
F) Volatile organic compounds (VOC); and
G) Other constituents required by permit, based upon the type of waste streams accepted by the unit.

3) The Agency may specify alternate monitoring requirements instead of those in (1) and (2) in accordance with the following:

A) The alternate parameters provide an indication of the gas generation processes occurring in the unit;

B) The alternate parameters are indicative of the gas constituents expected from the waste; and

C) The monitoring program complies with the requirements of 35 Ill. Adm Code 200-245.

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. Otherwise, the

processing facility must be considered a part of the solid waste management facility.

2) The landfill gas shall be monitored for the parameters listed in subsection (d) (2).

3) The gas processing facility is 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 811.311 (a).

Section 811.313 Intermediate Cover Requirements

a) All waste which is not to be covered within 60 days of placement by another lift of waste or final cover in accordance with 811.311 shall have a cover totaling 1 foot of clean soil material.

b) All areas with intermediate cover shall be graded so as to facilitate drainage of runoff and minimize infiltration and standing water.

c) The grade and thickness of intermediate cover shall be maintained until the placement of additional wastes or the final cover. All cracks, rills, gullies and depressions shall be repaired to prevent access to the solid waste by vectors, to minimize infiltration and to prevent standing water.

Section 811.314 Standards for the Final Cover System

a) The unit shall be covered by a final cover consisting of a low permeability layer overlain by a final protective layer constructed in accordance with the requirements of this section.

b) Standards For The Low Permeability Layer

1) As soon as is reasonably possible, but not later than 60 days after placement of the final lift of solid waste, a low permeability layer shall be constructed.

2) The low permeability layer shall cover the entire unit and connect with the liner system.

3) The low permeability layer shall consist of any one of the following:

A) A compacted earth layer constructed in accordance with the following standards:

i) The minimum allowable thickness shall be 3 feet;

ii) The layer shall be compacted to achieve a permeability of $1x10^{-7}$ cm/sec. and minimize void spaces.

iii) Alternate specifications may be utilized provided that the performance of the low permeability layer is equal to or superior to the performance of a layer meeting the requirements of subsections (i) and (ii), above.

B) A geomembrane constructed in accordance with the following standards:

i) The geomembrane shall provide performance equal or superior to the compacted earth layer described in A, above.

ii) The geomembrane shall have sufficient strength to withstand the normal stresses imposed by the waste stabilization process.

iii) The geomembrane shall be placed over a prepared base free from sharp objects and other materials which may cause damage.

C) Any other low permeability layer construction techniques or materials, provided that they provide equivalent or superior performance to the requirements of this subsection.

d) Standards For The Final Protective Layer

1) The final protective layer shall cover the entire low permeability layer.

2) The thickness of the final layer shall be sufficient to protect the low permeability layer from freezing and minimize root penetration of the low permeability layer, but shall not be less than 3 feet.

3) The final layer shall consist of soil material capable of supporting vegetation.

4) The final layer shall be placed as soon as possible after placement of the low permeability layer to prevent desiccation, cracking, freezing, or other damage to the low permeability layer.

Section 811.315 Hydrogeologic Site Investigations

a) Purpose

The operator shall conduct a hydrogeologic investigation to develop hydrogeologic information for the following uses:

1) Provide information sufficient to perform a groundwater impact assessment; and

2) Provide information sufficient to establish a groundwater monitoring system.

b) General Requirements

1) The investigation shall be conducted in a minimum of three phases prior to any disposal related disturbance.

2) The study area shall consist of the entire area occupied by the facility and any adjacent related areas, to the extent necessary to characterize the hydrogeology.

3) Except as otherwise required, all borings shall be sampled at all recognizable points of geologic variation and at least every five feet in homogeneous strata.

c) Minimum Requirements For A Phase I Investigation

1) The operator shall conduct a Phase I Investigation to develop the following information:

A) Climatic aspects of the study area;

B) Regional and study area geologic setting;

C) Regional groundwater regime including water table depths and aquifer characteristics; and

D) Information for the purpose of designing a Phase II Hydrogeologic Investigation.

2) Specific Requirements

A) The regional setting of the unit shall be established by using material available from all possible sources, including, but not limited to, the Illinois Scientific Surveys, the Agency, other State and Federal organizations, water well drilling logs, and previous investigations.

B) A minimum of one boring shall be drilled on the site, as close as feasible to the geographic center, to confirm the the regional setting of the unit. The boring shall extend at least 50 feet below the bottom of the uppermost aquifer or through the confining layer below the uppermost aquifer, whichever elevation is higher. The boring shall be sampled continuously.

d) Minimum Requirements For A Phase II Investigation

1) Information to be developed

Using the information developed in the Phase I survey, a Phase II study shall be conducted. The purpose of the Phase II study is to collect the following site-specific information:

A) Structural attitude and distribution of bedrock and overlying strata;

B) Chemical and physical properties of underlying strata including, but not limited to, lithology, mineralogy, and hydraulic properties;

C) Soil characteristics, including soil types, distribution, geochemical and geophysical characteristics;

D) The hydraulic conductivities of all strata above the uppermost aquifer;

E) The vertical extent of the uppermost aquifer;

F) The physical and chemical properties of the confining layer below the uppermost aquifer

G) Direction of groundwater flow.

2) Specific Requirements

A) A boring shall be located as close as feasible to the topographical high point and the topographical low point of the study area.

B) At least one boring shall be at or near each corner of the site. Where the property is irregularly shaped the borings shall be located near the boundary in a pattern and spacing necessary to obtain data over the entire study area.

C) Additional borings may be located at intermediate points at locations and spacings necessary to establish the continuity of the stratigraphic units.

D) Piezometers and groundwater monitoring wells shall be established to determine the direction and flow characteristics of the groundwater and the background quality of the groundwater.

E) Other methods may be utilized to confirm or accumulate additional information. Such methods may be used only as a supplement to, not in lieu of, site-specific boring information. Other methods include, but are not limited to, geophysical well logs, geophysical surveys, aerial photography, age dating, and test pits.

e) Minimum Standards For A Phase III Investigation

1) Using the information developed in the Phase II Investigation, the operator shall conduct a Phase III Investigation. The investigation shall be conducted to collect the following information:

A) Verification and reconciliation of the information collected in the Phase I and II investigations;

B) Characterization of potential pathways for contaminant migration;

C) Correlation of stratigraphic units between borings.

D) Continuity of petrographic features including, but not limited to, sorting, grain size distribution, cementation and hydraulic conductivity.

E) Identification of zones of potentially high hydraulic conductivity.

F) Identification of the confining layer;

G) Background concentrations in the groundwater below the unit down to the bottom of the uppermost aquifer. Background concentrations shall be established for all constituents for which standards have been developed by the Board and any other constituent that is expected to appear in the leachate and may

cause groundwater contamination. In addition, a broad range chemical detection analysis, such as a gas chromatography, mass spectrometer scan, shall be performed;

H) Characterization of the seasonal and temporal, naturally and artificially induced, variations in groundwater quality and groundwater flow.

I) Indication of unusual or unpredicted geologic features, including: fault zones, fracture traces, facies changes, solution channels, buried stream deposits, cross cutting structures, slickensides and other geologic features that may affect the ability of the operator to monitor the groundwater or predict the impact of the disposal facility on groundwater.

2) Specific Requirements

In addition to the specific requirements applicable to Phase I and II investigations, the operator shall collect information in accordance with the following:

A) New boring locations shall be at intermediate points between the preliminary and Phase I borings and in other areas identified in the Phase I study as necessary to characterize the study area.

B) At least one test pit shall be excavated to the same elevation as the bottom of the proposed liner within the area of each unit.

C) All borings in the Phase II study shall be sampled at all recognized points of geologic variation and at least every five feet on homogenous strata.

f) The operator may conduct the hydrogeologic investigation in any number of alternate phases provided that the necessary information is collected in a systematic sequence that is equal to or superior to the investigation procedures of this section.

Section 811.316 Plugging and Sealing of Drill Holes

All drill holes, including exploration borings that are not converted into monitoring wells, monitoring wells that are no longer necessary to the operator, and other holes that may cause or facilitate contamination of groundwater shall be sealed in accordance with the following standards:

a) If not sealed or plugged immediately the drill hole shall be covered to prevent injury to people or animals.

b) All drill holes no longer intended for use shall be backfilled with materials such as drilling mud, bentonite or concrete in sufficient quantities and in such a way as to prevent the creation of a pathway for contaminants to migrate.

c) For drill holes in gravels and other permeable strata where a watertight seal is not necessary to prevent the creation of a pathway, drill cuttings and other earthen materials may be utilized as backfill.

d) All excess drilling mud, oil, drill cuttings, and any other contaminated materials uncovered during or created by drilling shall be disposed of in accordance with any applicable requirements.

e) The operator shall restore the area around the drill hole to its original condition.

Section 811.317 Groundwater Impact Assessment

The impacts of the seepage of leachate from the unit shall be assessed in a systematic fashion using the techniques described in this section.

a) Procedures for Performing the Groundwater Impact Assessment

1) Assumptions

A) The operator shall estimate the amount of seepage from the unit during normal operations;

B) At a minimum, the minimum standards for slope configurations, cover design, liner design and leachate collection system design and operation shall be considered in an estimate of the amount of leachate seepage from the unit. The design of the unit may be improved, as determined necessary by the operator to establish an acceptable groundwater impact assessment pursuant to subsection (b).

2) The concentration of constituents in the leachate shall be determined from actual leachate samples from the waste or similar waste, or laboratory derived extracts.

3) A contaminant transport model shall be utilized to estimate the space and time variability of concentrations of the leachate constituents.

b) Acceptable Groundwater Impact Assessment

The results of the assessment shall be considered acceptable if the operator predicts that the concentrations of all constituents of the leachate outside the zone of attenuation are less than the applicable water quality standard, as determined in Section 811.320, within 100 years of closure of the unit.

c) Standards for the Contaminant Transport Model

1) The model shall have a history that documents its ability to represent contaminant transport phenomenon.

2) The set of equations representing groundwater movement and contaminant transport must be theoretically sound and well documented.

3) The numerical solution methods must be based upon sound mathematical principles and be supported by verification and checking techniques.

4) The model must be calibrated against site specific field data.

5) A sensitivity analysis shall be conducted with the major input parameters, error tolerance and numerical space and time discretizations.

6) Mass balance calculations on selected elements in the model shall be performed to verify physical validity. Where the model does not prescribe the amount of mass entering the system as a boundary condition, this step may be ignored.

7) Site specific input parameters shall be based upon actual field or laboratory measurements.

8) Input parameters which are not site specific shall be supported by laboratory test results or equivalent methods.

Section 811.318 Standards for the Design, Construction, and Operation of a Groundwater Monitoring Program

a) Discharges to be Monitored

All potential sources of discharges to groundwater within the facility, including, but not limited to, all

waste disposal units and the leachate management system, shall be monitored by a network of monitoring wells during the active life of the unit and for the specified time after closure.

b) Standards for the Location of Monitoring Points

1) A network of monitoring points shall be established at sufficient locations downgradient, with respect to groundwater flow, to detect any discharge of contaminants from any part of a potential source of discharge.

2) Monitoring wells shall be located in stratigraphic horizons that could serve as contaminant migration pathways.

3) Monitoring wells shall be established as close to the source as possible without interfering with the waste disposal operations, and half the distance or less between the edge of the potential source of discharge and the limit of the zone of attenuation downgradient, with respect to groundwater, from the source.

4) The network of monitoring points of several potential sources of discharge within a single facility may be combined into a single monitoring network provided that discharges from any part of all potential sources can be detected.

5) At least one monitoring well shall be established at the edge of the zone of attenuation downgradient, with respect to groundwater flow, from the unit. Any statistically significant increase over background concentration of any constituent in a well located at this point shall constitute a violation of a water quality standard.

d) Maximum Allowable Concentrations

The operator shall use the same calculation methods, data, and assumptions as the groundwater impact assessment to predict the concentration over time of all constituents to be monitored at all monitoring points. The predicted values shall be used to establish the maximum allowable concentrations at the monitoring point. The maximum allowable concentrations calculated in this subsection shall be applicable within the zone of attenuation.

e) Standards for Monitoring Well Design and Construction

1) All monitoring wells shall be cased in a manner that maintains the integrity of the bore hole. The casing material shall be inert so as not to affect the water sample. Casing requiring solvent-cement type couplings shall not be used.

2) Wells shall be screened to allow sampling only at the desired interval. Annular space between the borehole wall and well screen section shall be packed with gravel sized to avoid clogging by the material in the zone being monitored, if necessary. The slot size of the screen shall be designed to minimize clogging. Screens shall be fabricated from material expected to be inert with respect to the constituents of the groundwater to be sampled.

3) Annular space above the well screen section shall be sealed with a relatively impermeable, expandable material such as a cement/bentonite grout to prevent contamination of samples and groundwater and avoid interconnections. The seal shall extend to the highest known seasonal groundwater level.

4) The annular space shall be backfilled with expanding cement grout from an elevation below the frost line and mounded above the surface and sloped away from the casing so as to divert surface water away.

5) The annular space between the upper and lower seals and in the unsaturated zone may be backfilled with uncontaminated cuttings.

6) All wells shall be covered with vented caps and equipped with devices to protect against tampering and damage.

7) All wells shall be developed to allow free entry of water, minimize turbidity of the sample, and minimize clogging.

8) The transmissivity of the zone surrounding all well screens should be established by field testing techniques.

9) Other sampling methods and well construction techniques may be utilized provided that they provide equal or superior performance to the requirements of this subsection.

h) Standards for Sample Collection and Analysis

1) The groundwater monitoring program shall include consistent sampling and analysis procedures to assure that monitoring results will provide a reliable indication of groundwater quality in the zone being monitored.

2) The operator shall utilize procedures and techniques to insure that collected samples are representative of the zone being monitored and that prevent cross contamination of samples from other monitoring wells or from other samples. At least 95 percent of a collected sample shall consist of groundwater from the zone being monitored.

3) The operator shall establish a quality assurance program that provides quantitative detection limits and the degree of error for analysis of each chemical constituent.

4) The operator shall establish a sample preservation and shipment procedure that maintains the reliability of the sample collected for analysis.

5) The operator shall institute a chain of custody procedure to prevent tampering and contamination of the collected samples prior to completion of analysis.

6) At a minimum, the operator shall sample the following parameters at all wells at the time of sample collection and immediately before filtering and preserving samples for shipment:

A) Elevation of water table

B) Depth of well below ground

C) pH

D) Temperature of sample

E) Specific Conductance

Section 811.319 Procedures for Groundwater Monitoring Programs

a) Detection Monitoring Program

The operator shall implement a detection monitoring program in accordance with the following requirements:

1) Monitoring Schedule and Frequency

A) The operator shall sample all monitoring points for all potential sources of contamination on a quarterly basis throughout the time the source constitutes a threat of contamination and for a minimum of 5 years thereafter. For waste disposal units, the monitoring period shall begin as soon as waste is placed into the unit and shall continue for a minimum of five years after closure.

B) Beginning five years after closure of the unit, or five years after all other potential sources of discharge no longer constitute a threat of contamination, the monitoring frequency may change on a well by well basis to an annual schedule if either of the following conditions exist:

i) All constituents have returned to a concentration less than or equal to 10 percent of the maximum observed concentration; or

ii) If all constituents are less than or equal to their maximum allowable concentration for 8 consecutive quarters.

iii) Monitoring shall return to a quarterly schedule at any well where a statistically significant increase in the concentration of any constituent greater than the previous sample is observed.

C) Monitoring may be discontinued under the following conditions:

i) After changing to an annual schedule, no statistically significant increase in the concentration of any constituent greater than the previous sample is detected for 3 consecutive years; or

ii) Immediately after contaminated leachate is no longer generated by the unit, but not less than 5 years after closure.

2) Constituents to be Monitored

The operator shall monitor each well for constituents that will provide an indication of groundwater contamination. Constituents chosen as indicators for monitoring for monitoring shall meet the following standards:

A) The constituent appears in, or is expected to be in, the leachate;

B) The Board has established a public water or food processing supply standard for the constituent in 35 Ill. Adm. Code 302 or the constituent may otherwise cause or contribute to groundwater contamination; and

C) Collection and laboratory procedures exist to allow the operator to determine statistically significant changes in concentration.

3) If the concentration of any constituent exceeds the maximum allowable concentration at an established monitoring point then the operator shall institute the following procedure:

A) The operator shall confirm the observation by taking additional samples and checking the statistical validity within 60 days of the initial observation.

B) The operator shall determine the source of the increase, which may include, but shall not be limited to: natural phenomena, sampling or analysis errors, or an offsite source.

4) Organic Chemicals Monitoring Program

Within one year of the effective date of these regulations and within one year of the establishment of any new monitoring well, the operator shall monitor each well 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 test for 51 organic chemicals in drinking water described at 40 CFR 141.40 (1987).

B) The results of the monitoring in subsection 1) above at any monitoring well or zone of attenuation shall be deemed the present water quality standards for purposes of 811.320(a) and 812.317(1). Any subsequent analysis which shows a statistically significant increase in the concentration of any constituent, as determined by 811.320(d) and (e), shall constitute a water quality violation under 811.320(a).

C) At least once every five years the operator shall monitor each well in accordance with subsection 1), to determine if the concentration of organic chemicals has changed.

b) Assessment Monitoring Program

If the observation is determined to be a statistically significant increase greater than the maximum allowable concentration and the source is the solid waste disposal facility or cannot be determined, then the operator shall begin an assessment monitoring program which shall be conducted in accordance with the following requirements:

1) The assessment monitoring program shall be conducted to assess the nature and extent of contamination. The assessment monitoring program may consist of any of the following steps necessary to determine the nature and extent of contamination:

A) More frequent sampling of the wells in which the observation occurred;

B) More frequent sampling of any surrounding wells;

C) The placement of additional monitoring wells to determine the source and extent of the contamination;

D) Monitoring of additional constituents; and

E) Any other investigative techniques that will assist in determining the nature and extent of the contamination.

2) The operator shall file the plans for an assessment monitoring program to the Agency. If the facility is permitted by the Agency, then the plans shall be filed for review as a significant permit modification. The assessment monitoring program shall be implemented within 90 days of of confirmation of detection of contamination or, in the case of permitted facilities, within 90 days of Agency approval.

3) If the assessment monitoring program shows that the concentration of one or more constituents, attributable to the solid waste disposal facility, exceeds the applicable water quality standards established in 811.320 beyond the zone of

attenuation, then the operator shall implement the remedial action requirements of subsection (d).

4) If the assessment monitoring program shows that the concentration of one or more constituents, attributable to the solid waste disposal facility, exceeds the maximum allowable concentration within the zone of attenuation, then the operator shall conduct a groundwater impact assessment in accordance with the requirements of subsection (c).

c) Groundwater Impact Assessment

An operator required to conduct a groundwater impact assessment by this section shall assess the potential impacts of the increased concentrations outside the zone of attenuation. In addition to the requirements of 811.317, the following standards shall apply:

1) The assessment shall utilize any new information developed since the initial assessment and information from the detection and assessment monitoring programs; and

2) The operator shall submit the groundwater impact assessment and any proposed remedial action, determined to be necessary pursuant to subsection (d), to the Agency within 180 days of the start of the assessment monitoring program. Permitted facilities shall submit this information as an application for significant permit modification.

d) Remedial Actions

If the groundwater impact assessment shows a potential for exceeding the groundwater standards beyond the zone of attenuation, then the operator shall institute a remedial action program in compliance with the following standards:

1) The plans for the remedial action program shall be submitted to the Agency within 90 days of the detection of a violation of a water quality standard pursuant to subsection (b) (3). If the facility has been issued a permit by the Agency, then the plans shall submit this information as an application for significant modification to the permit;

2) The remedial action program shall be implemented within:

A) 90 days of the completion of the groundwater impact assessment;

B) 90 days of detection of a violation of a water quality standard established in subsection (b)(3); or

C) Where the facility has been permitted by the Agency, within 90 days of Agency approval of the remedial action plan.

3) The remedial action program shall consist of one or a combination of one or more of the following solutions:

A) Retrofit additional protection 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.

4) Termination of the Remedial Action Program

A) The remedial action program shall continue until the threat of exceeding the maximum allowable concentration of any constituent no longer exists.

B) The operator shall submit to the Agency all information necessary to show that the threat of exceeding the maximum allowable concentration of any constituent no longer exists. Permitted facilities shall submit this information as a significant modification of the permit.

Section 811.320 Groundwater Quality Standards

a) All groundwater shall be maintained in its present quality, at each constituent's background concentration, beyond the zone of attenuation, unless the applicable groundwater standards have been adjusted by the Board in accordance with the justification procedure in subsection (b). In this case the adjusted standards shall apply. Any statistically significant increase above a water quality standard established by this section, attributable to the facility, and outside the zone of attenuation shall constitute a violation of the water quality standard.

b) Justification for Adjusted Groundwater Quality Standards

1) An operator may petition the Board for adjusted groundwater quality standards in accordance with the procedures specified in Section 28.1 of the Act and 35 Ill. Adm. Code 106.410-106.416.

2) For groundwater which contains naturally occurring constituents which meet the requirements of 35 Ill. Adm. Code 302.301, 302.304, and 302.305, the Board will specify adjusted groundwater quality standards no greater than those in 35 Ill. Adm. Code 302.301, 302.304, and 302.305 upon a demonstration by the operator that:

A) The change in standards will not interfere with, or become injurious to, any beneficial uses made of, or presently possible in, such waters;

B) The change in standards is necessary for economic or social development; and

C) All economically reasonable and technically feasible methods to prevent the degradation of the groundwater are being utilized.

3) For groundwater which contains naturally occurring constituents which exceed the requirements of 35 Ill. Adm. Code 302.301, 302.304, and 302.305, the Board will specify adjusted groundwater quality standards upon a demonstration by the operator that:

A) The groundwater does not presently serve as source of drinking water;

B) The change in standards will not interfere with, or become injurious to, any beneficial uses made of, or presently possible in, such waters;

C) The change is necessary for economic or social development; and

D) The groundwater can not presently, and will not in the future, serve as a source of drinking water because:

i) It is impossible to remove water in usable quantities;

ii) The groundwater is situated at a depth location which makes recovery of water

for drinking purposes economically or technologically impractical;

iii) The groundwater is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption;

iv) The total dissolved solids content of the groundwater is more than 3,000 mg/l and is not reasonably expected to serve a public water supply system; or

v) The total dissolved solids content of the groundwater exceeds 10,000 mg/l.

c) Determination of the Zone of Attenuation

1) The zone of attenuation, within which concentrations of constituents in leachate discharged from the unit may exceed the groundwater quality standards, is a volume bounded by a vertical plane at the property boundary or 100 feet from the edge of the unit, whichever is less, extending from the ground surface to the bottom of the uppermost aquifer.

2) Zones of attenuation shall not extend to the annual high water mark of navigable surface waters.

3) Overlapping zones of attenuation from units within a single facility may be combined into a single zone for the purposes of establishing a monitoring network.

d) Establishment of Background Concentrations

1) The initial background concentrations shall be established during the hydrogeological assessment. Background concentrations may be adjusted during the operation of a facility , as necessary, based upon statistically significant changes in the concentrations of constituents in the upgradient wells over time. Such values shall establish the background concentrations for the purposes of establishing groundwater standards.

2) A network of monitoring wells shall be established upgradient, with respect to groundwater flow, from the unit, in accordance with the following standards in order to determine the background concentrations of constituents in the groundwater:

A) The wells shall be located at a distance such that discharges of contaminants from the unit will not be detectable.

B) The wells shall be sampled at the same frequency as other monitoring points to provide continuous background concentration data throughout the monitoring period.

C) A sufficient number of wells shall be established at depths necessary to account for spatial variability.

e) Statistical Analysis of Groundwater Quality Data

The most scientifically valid of the following statistical procedures which will provide a 95 percent level of confidence shall be utilized when determining if a change in the concentration of a constituent has occurred or if groundwater quality standards have been exceeded:

1) Mann-Whitney U-test,

2) Student's T-test,

3) Temporal or Spatial Trend Analysis, or

4) Any other valid statistical analysis which is appropriate for the distribution of the data being considered and which provides a reasonable balance between the probability of falsely identifying a significant difference and the probability of failing to identify a significant difference.

Section 811.321 Standards for 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 (2), below, the placement of waste shall begin in the most downgradient, with respect to groundwater flow, part of the facility, in the lowest possible part of the unit.

2) The operator may dispose of wastes in areas other than those provided in (1) only under 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, damage to any part of the liner or litter; or

B) The topography of the land surrounding the unit makes this procedure environmentally unsound; for example, steep surrounding slopes;

C) When groundwater monitoring wells constructed in accordance with the requirements of 811.319 are placed 50 feet, or less, downgradient from the filled sections.

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 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, shall be placed over the entire drainage blanket as soon as possible after construction but prior to the onset of weather conditions that may cause the compacted earth liner to freeze.

4) Waste shall not be placed over areas that were subject to freezing conditions until the liner has been inspected, tested, and reconstructed, if necessary to meet the requirements of 811.306.

Section 811.322 Final Slope and Stabilization Standards

a) All final slopes shall be designed and constructed to a grade able to support vegetation and minimize erosion.

b) All slopes shall be designed to drain runoff away from the cover and prevent ponding. No standing water shall be allowed over the unit.

c) Standards for Vegetation

1) Vegetation shall be promoted on all reconstructed surfaces to minimize wind and water erosion of the final, protective cover.

2) Vegetation shall be compatible with the climactic conditions.

3) Vegetation shall require little maintenance;

4) Vegetation shall consist of a diverse mix of native and introduced species consistent with the postclosure land use;

5) Vegetation shall be tolerant of the landfill gas expected to be generated;

6) The root depth of the vegetation shall not exceed the depth of the final protective cover system.

7) Temporary erosion control measures including, but not limited to mulch straw, netting and chemicalsoil stabilizers, shall be undertaken while vegetation is being established.

d) Structures Constructed Over the Unit

1) Structures must be compatible with the land use;

2) Structures shall be designed to vent gases away from the interior; and

3) Structures shall in no way interfere with the operation of a cover system, gas collection system, leachate collection system or any monitoring system.

SUBPART D: STANDARDS FOR IDENTIFICATION AND MANAGEMENT OF SPECIAL WASTES

Section 811.401 Scope and Applicability

a) This Subpart applies to all landfills permitted by the Agency pursuant to Section 21 of the Act which accept special wastes.

b) The standards of this Subpart are in addition and supplemental to the standards of 35 Ill. Adm. Code 809.

c) Inspection, testing or acceptance of waste by a solid waste management facility shall not relieve the generator or transporter of such waste of responsibility for compliance with requirements the requirements of 35 Ill. Adm. Code 700-749 or 809.

Section 811.402 Notice to Generators and Transporters

A prominent sign at the entrance to each solid waste management facility shall state that disposal of hazardous waste is prohibited and that only special wastes permitted by the Agency and accompanied by a manifest and an identification record will be accepted.

Section 811.403 Special Waste Manifests

a) Each special waste received for disposal at a permitted solid waste management facility shall be accompanied by a manifest containing the following information:

1) The name of the generator of the special waste

2) When and where the special waste was generated;

3) The name of the special waste hauler;

4) The name of the final solid waste management facility;

5) The date of delivery;

6) The name and quantity of special waste delivered to the hauler;

7) The signature of the person who delivers special waste to a special waste hauler acknowledging such delivery;

8) The signature of the special waste hauler acknowledging receipt of the special wastes; and

9) The signature of the person who accepts the special waste at its final destination, acknowledging acceptance of the special waste.

b) A permitted facility which receives special waste must be designated on the manifest as the final destination point. Any subsequent delivery of the special waste or any portion or product thereof to a special waste hauler shall be conducted under a transportation record initiated by the permitted solid waste management facility.

c) Distribution of Manifests After Delivery

1) The special waste hauler shall retain one copy and deliver three copies of the manifest to the person who accepts delivery of special waste from the hauler.

2) The receiving solid waste management facility shall:

A) Send one copy of the completed transportation record to the person who delivered the special waste to the special waste hauler; and

B) Send one copy of each signed manifest received to the Agency at the end of each month.

d) Every person who delivers special waste to a special waste hauler, every person who accepts special waste from a special waste hauler and every special waste hauler shall retain a copy of the special waste transportation record as a record of all special waste transactions. These copies shall be retained for three years and shall be made available at reasonable times for inspection and photocopying by the Agency.

Section 811.404 Identification Record

a) Each special waste disposed of at a facility (including special wastes generated at the facility) shall be accompanied by a special waste profile identification sheet from the waste generator that certifies the following:

1) Generator's name and address;

2) Transporter's name and telephone number;

3) Name of waste;

4) Process generating waste;

5) Physical characteristics of waste (e.g., color, odor, solid or liquid, flash point);

6) Chemical composition;

7) Metals content;

8) Hazardous characteristics (including identification of wastes deemed hazardous by the United States Environmental Protection Agency or the state); and

9) Presence of PCBs or 2,3,7,8 TCDD

10) Any other information required to determine the following information:

A) Whether the waste is a regulated hazardous waste;

B) Whether the special waste is of a type permitted for storage, treatment, or disposal at the facility; and

C) The method of storage, treatment, or disposal that is appropriate for the waste.

b) Special waste recertification

Each subsequent shipment of a special waste from the same generator must be accompanied by a transportation record, a copy of the original special waste profile identification sheet, and either:

1) A special waste recertification by the generator describing whether there have been changes in the following:

A) Laboratory analysis (copies to be attached);

B) Raw material in the waste-generating process;

C) The waste-generating process itself;

D) The physical or hazardous characteristics of the waste; and

E) New information on the human health effects of exposure to the waste; or

2) Certification indicating that any change in the physical or hazardous characteristic of the waste is not sufficient to require a new special waste profile.

Section 811.405 Recordkeeping Requirements

The special waste profile identification sheet, special waste recertification, certification of representative sample (if applicable), special waste laboratory analysis (if applicable), special waste analysis plan (if applicable), and any emergency waivers of requirements (prohibitions, special waste management authorization, and operating requirements) must be retained at the solid waste management facility until the end of the postclosure care period.

Section 811.406 Procedures for Excluding Regulated Hazardous Wastes

a) The operator shall implement a load checking program that meets the requirements of this Section for detecting and discouraging attempts to dispose of regulated hazardous wastes at the facility.

b) The load checking program shall consist of, at a minimum, the following components:

1) Random inspection

A) An inspector designated by the facility shall examine at least three random loads of solid

waste delivered to the landfill on a random day each week. Selected drivers shall be directed to discharge their loads at a separate, designated location within the facility. The facility shall conduct a detailed inspection of the discharged material for any regulated hazardous or other unacceptable wastes that may be present. Cameras or other devices may be used to record the visible contents of solid waste shipments. Where such devices are employed, their use should be designated on a sign posted near the entrance to the facility.

B) If regulated hazardous wastes or other unacceptable wastes are suspected, the facility shall communicate with the generator, hauler or other party responsible for transporting the waste to determine the identity of the waste.

2) Recording of inspection results

Information and observations derived from each random inspection shall be recorded in writing and retained at the facility for at least three years. The recorded information shall include, at a minimum, the date and time of the inspection, the names of the hauling firm and the driver of the vehicle, the vehicle license plate number, the source of the waste as stated by the driver, and observations made by the inspector during the detailed inspection. The written record shall be signed by both the inspector and the driver.

3) Training

The solid waste management facility shall train designated inspectors, equipment operators, weigh station attendants, spotters at large facilities, and all other appropriate facility personnel in identification of potential sources of regulated hazardous wastes. The training program shall emphasize familiarity with containers typically used for hazardous wastes and with labels for hazardous waste and materials.

c) Procedures for Handling Regulated Hazardous Wastes

1) If any regulated hazardous wastes are identified by random load checking or are otherwise discovered to be improperly deposited at the facility, the facility shall promptly notify the Agency, the person responsible for transporting the wastes to

the landfill, and the generator of the wastes, if known. The area where the wastes are deposited shall immediately be cordoned off from public access by facility personnel not involved in handling the incident. The solid waste management facility shall assure proper cleanup, transport and disposal of the waste at a permitted hazardous waste management facility.

2) The party responsible for transporting the waste to the solid waste management facility shall be responsible for the costs of such proper cleanup, transportation and disposal.

3) Subsequent Shipments by Persons Subject to This Section

A) A solid waste management facility shall exercise special precautionary measures when accepting wastes from sources that previously have attempted to deliver regulated hazardous wastes to the facility.

B) Precautionary measures shall include questioning the driver concerning the waste contents prior to discharge and visual inspection during discharge of the load at the working face or elsewhere.

SUBPART E: CONSTRUCTION QUALITY ASSURANCE PROGRAMS

Section 811.501 Scope and Applicability

All structures necessary to comply with the requirements of this Part shall be constructed according to a construction quality assurance program meeting, at a minimum, the requirement of this Subpart.

Section 811.502 Duties and Qualifications of Key Personnel

a) Duties and Qualifications of the Operator

The operator shall designate a person other than the operator as the construction quality assurance (CQA) officer.

b) Duties and Qualifications of the CQA officer

1) The CQA officer shall supervise and be responsible for all inspection and testing activities.

2) The CQA officer shall be a professional engineer registered in the State of Illinois.

Section 811.503 Inspection Activities

The CQA officer shall be present to perform inspection of the following activities:

a) Compaction of subgrade and foundation to design parameters;

b) Installation of the compacted earth liner;

c) Installation of a geomembrane;

d) Installation of slurry trenches or cutoff walls;

e) Installation of the leachate drainage and collection system;

f) Application of final cover;

g) Installation of gas control facilities; and

h) Construction of ponds, ditches, lagoons and berms.

Section 811.504 Sampling Requirements

A sampling program shall be implemented as part of the CQA plan for all construction activities in order to insure that construction materials and operations meet, at a minimum, the following requirements:

a) The sampling program shall be designed prior to construction.

b) The sampling program shall be based upon statistical sampling techniques to yield a 95 percent level of confidence.

c) A criteria for acceptance or rejection of materials and operations shall be established. The criteria shall insure that at least 95 percent of the materials and operations meet the required properties or standards.

Section 811.505 Documentation

a) A daily summary report shall be prepared by the CQA officer during each day of activity. The report shall contain, at a minimum:

1) Date;

2) Summary of weather conditions;

3) Summary of locations where construction is occurring;

4) Equipment and personnel on the project;

5) Summary of any meetings held and attendees;

6) Description of offsite materials received and references or results of testing and documentation;

7) Calibration and recalibration of test equipment;

8) The daily inspection report from each inspector

b) Daily Inspection Reports

Each inspector shall complete a daily inspection report containing the following information:

1) Location;

2) Type of inspection;

3) Procedure used;

4) Test data;

5) Results of activity;

6) Personnel involved in inspection and sampling activities; and

7) Signature of the inspector.

c) Photographic Records

Photographs may be used as tools to document the progress and acceptability of the work and may be incorporated into the daily summary report, daily inspection report, and an acceptance report. Each photo shall be identified with the following information:

1) Date, time and location of photograph;

2) Name of photographer;

3) Signature of photographer.

d) Acceptance Reports

Upon completion of construction of each major phase the CQA officer shall submit an acceptance report to the Agency. The acceptance report shall be submitted before the structure is placed into service and shall contain the following:

1) Certification by the CQA officer that the construction has been prepared and constructed in accordance with the engineering design;

2) As-built drawings;

3) All daily summary reports.

Section 811.506 Additional Requirements for Foundations and Subbases

a) The CQA officer shall identify and confirm the results of the site investigation, identify unexpected conditions and record all modifications to the plans and construction procedures on the as-built drawings.

b) The CQA officer shall observe soil and rock surfaces for joints, fractures and depressions and document the filling of all joints and fractures and the removal and filling of local sand deposits on the as-built drawings.

c) The CQA officer shall insure that there are no moisture seeps and that all soft, organic or other undesirable materials are removed.

Section 811.507 Additional Requirements for Compacted Earth Liners

a) Requirements for a Test Liner

A test fill shall be constructed before construction of the actual, full-scale, compacted earth liner in accordance with the following requirements:

1) The test liner shall be constructed from the same soil material, design specifications, equipment and procedures proposed for the full-scale liner;

2) The test fill shall be at least four times the width of the widest piece of equipment to be used;

3) The test fill shall be long enough to allow the equipment to reach normal operating speed before reaching the test area;

4) At least three lifts shall be constructed;

5) The test fill shall be evaluated for the following physical properties:

A) Field testing techniques shall be used to determine the hydraulic conductivity. Enough tests shall be performed to provide a 95 percent confidence in the data;

B) Samples shall be tested in the laboratory for hydraulic conductivity. Enough tests shall be performed to provide a 95 percent confidence in the data. Laboratory results should show a statistical correlation to the field testing results.

C) Engineering parameters such as particle size distribution, Atterberg limits, water content, and in-place density that will be used to evaluate the full-scale liner, shall be determined by collecting enough samples to provide a 95 percent confidence in the data.

6) Additional test fills shall be constructed for each new borrow source, admixture, or change in equipment or procedures; and

7) Construction of a test fill or the requirements for an additional test fill may be omitted if a full-scale liner or a test fill has been previously constructed in compliance with this subsection and documentation is available to demonstrate that the previously constructed liner is meets the requirements of this subsection.

c) The CQA officer shall insure the following:

1) Use of same compaction equipment as used in test fill;

2) Use of same procedures, such as number of passes and speed;

3) Uniformity of coverage by compaction equipment;

4) Consistent achievement of density, water content and permeability of each successive lift;

5) Use of methods to bond successive lifts together;

6) Achievement of liner strength on sidewalls;

7) Contemporaneous placement of protective covering to prevent drying and desiccation, where necessary;

8) Prevention of placement of frozen material or placement of material on frozen ground;

9) Prevention of damage to completed liner sections; and

10) Construction proceeds only during favorable climatic conditions.

Section 811.508 Additional Requirements for Geomembranes

The CQA officer shall insure the following:

a) The bedding material contains no undesirable objects;

b) The placement plan has been followed;

c) The anchor trench and backfill are constructed to prevent damage to the geomembrane;

d) All tears, rips, punctures, and other damage are repaired; and

e) All geomembrane seams are properly constructed and tested.

Section 811.509 Additional Requirements for Leachate Collection Systems

a) The CQA officer shall insure that pipe sizes, material, perforations, placement and pipe grades are in accordance with the design.

b) The CQA officer shall insure that all soil materials used for the drainage blanket and graded filters meet the required size and gradation specifications and are placed in accordance with the design plans.

c) All prefabricated structures shall be inspected for conformity to specifications and for defective manufacturing.

SUBPART F: STANDARDS FOR SPECIFIC WASTE STREAMS

Section 811.600 (Reserved)

SUBPART G: FINANCIAL ASSURANCE FOR CLOSURE AND POSTCLOSURE CARE

Section 811.700 Scope and Applicability

a) This Subpart provides procedures by which the operator of a permitted waste disposal facility shall provide financial assurance satisfying the requirements of Section 21.1(a) of the Act.

b) Financial assurance may be provided through a combination of a trust agreement, bond guaranteeing payment, bond guaranteeing payment or performance, letter of credit, insurance or self-insurance in accordance with the standards of this Subpart.

c) This Subpart does not apply to the State of Illinois, its agencies and institutions, or to any unit of local government; provided, however, that any other persons who conduct such a waste disposal operation on a site which may be owned or operated by such a government entity must provide financial assurance for closure and postclosure care of the site.

d) The operator is not required to provide financial assurance pursuant to this Subpart if the operator demonstrates:

1) That closure and postclosure care plans filed pursuant to 35 Ill. Adm. Code 724 or 725 will result in closure and postclosure care of the site in accordance with the requirements of this Part; and

2) That the operator has provided financial assurance adequate to provide for such closure and postclosure care pursuant to 35 Ill. Adm. Code 724 or 725.

Section 811.701 Upgrading Financial Assurance

a) The operator must maintain financial assurance equal to or greater than the current cost estimate at all times except as provided in this Section.

b) The operator must increase the total amount of financial assurance so as to equal the current cost estimate within 90 days after any of the following:

1) An increase in the current cost estimate;

2) A decrease in the value of a trust fund;

3) A determination by the Agency that an operator no longer meets the gross revenue or financial test; or,

4) Notification by the operator that the operator intends to substitute alternate financial assurance for self-insurance.

c) The amount of financial assurance provided to the Agency shall always provide for at least five years of postclosure care.

Section 811.702 Release of Financial Institution

The Agency will agree to release a trustee, surety, insurer or other financial institution when:

a) An operator substitutes alternate financial assurance such that the total financial assurance for the site is equal to or greater than the current cost estimate without counting the amounts to be released; or,

b) The Agency releases the operator from the requirements of this Subpart.

Section 811.703 Application of Proceeds and Appeal

The Agency may sue in any court of competent jurisdiction to enforce its rights under financial instruments. The filing of an enforcement action before the Board is not a condition precedent except when this Subpart or the terms of the instrument so provide.

Section 811.704 Cost Estimate for Closure and Postclosure Care

a) The operator must have a written estimate of the current cost of closing all active parts of the facility in accordance with the requirements of this Part and a closure plan and for the current cost of postclosure monitoring and maintenance. The cost estimate is the total cost for closure and postclosure monitoring and maintenance.

b) The operator must revise the cost estimate whenever a change in the closure plan or postclosure care plan increases the cost estimate.

c) The cost estimate must be based on the steps necessary for the premature final closure of the facility at the time during the next term of permit when the cost of closure will be greatest.

d) The cost estimate must be based on the assumption that the Agency will contract with a third party to implement the closure plan.

e) The cost estimate may not be reduced by allowance for the salvage value of equipment or waste, for the resale value of land, or for the sale of landfill gas.

f) The cost estimate must, at a minimum, include all costs for all activities necessary to close the facility in accordance with all requirements of this Part.

g) The postclosure monitoring and maintenance cost estimate shall be prepared on the basis of the design period for each unit at a facility, assuming operations will cease at the time during the next term of permit when the cost of closure will be greatest.

h) The postclosure care cost estimate must, at a minimum, include the following elements, if required, for postclosure care:

1) Groundwater monitoring:

A) Number of monitoring points to be established in the term of the current permit;
B) Parameters to be monitored;

C) Quarterly sampling intervals;

D) Cost per parameter per sampling.

2) Cover Placement and Stabilization:

A) Estimate of the area to be disturbed during the next term of permit which is expected annually to require residual settlement or erosion control work;

B) Annual cost of residual settlement and erosion control work;

C) Annual cost of mowing and other management practices.

3) Alternate Landfill Gas Disposal

If landfill gas is transported to an offsite processing system, then the operator shall include in the cost estimate the costs necessary to operate an onsite gas disposal system should access to the offsite facility become unavailable. The cost estimate shall include the following information:

A) An estimate of the costs necessary to install an onsite gas disposal system such as a flare;

B) The annual costs of operation and maintenance of the gas disposal system; and

C) The annual costs to monitor the gas disposal system.

4) Cost Estimates Beyond the Design Period

When a facility must extend the postclosure care period beyond the applicable design period, the cost estimate shall be based upon five more years of postclosure care.

g) This Section does not grant authority to the Agency to require the operator to perform any of the indicated

activities; however, if the site permit requires a closure activity, the operator must include the cost in the cost estimate. Once the operator has completed an activity, the operator may file an application for significant permit modification indicating that the activity has been completed, and zeroing that element of the cost estimate.

Section 811.705 Revision of Cost Estimate

a) The operator shall revise the current cost estimates for closure and postclosure care at every permit renewal and where a modification results in an increase of the cost estimate.

b) The operator shall review the closure and postclosure care plans prior to filing a revised cost estimate in order to determine whether they are consistent with current operations and regulations. The operator must either certify that the plans are consistent, or must file an application reflecting new plans.

c) The operator must prepare new closure and postclosure cost estimates reflecting current prices for the items included in the estimates. The operator must file revised estimates even if the operator determines that there are no changes in the prices.

Section 811.706 Mechanisms for Financial Assurance

The operator of a waste disposal site may utilize any of the following mechanisms to give financial assurance for closure and postclosure care:

a) Trust Fund (Section 811.710);

b) Surety Bond Guaranteeing Payment (Section 811.711);

c) Surety Bond Guaranteeing Performance (Section 811.712);

d) Letter of Credit (Section 811.713);

e) Closure Insurance (Section 811.714); or,

f) Self-insurance (Section 811.715).

Section 811.707 Use of Multiple Financial Mechanisms

An operator may satisfy the requirements of this Subpart by establishing more than one financial mechanism per site. These mechanisms are limited to trust funds, surety bonds guaranteeing payment, letters of credit and insurance. The mechanisms must be as specified in 35 Ill. Adm. Code 807.661, 807.662, 807.664 and 807.665, respectively, except that it is the combination of

mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current cost estimate. The operator may use any or all of the mechanisms to provide for closure and postclosure care of the site.

Section 811.708 Use of a Financial Mechanism for Multiple Sites

An operator may use a financial assurance mechanism specified in this Subpart to meet the requirements of this Subpart for more than one site. Evidence of financial assurance submitted to the Agency must include a list showing, for each site, the name, address and the amount of funds assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each site. The amount of funds available to the Agency must be sufficient to close and provide postclosure care for all of the operator's sites. In directing funds available through the mechanism for closure and postclosure care for any of the sites covered by the mechanism, the Agency may direct only the amount of funds designated for that site, unless the operator agrees to the use of additional funds available under the mechanism.

Section 811.709 Trust Fund for Unrelated Sites

Any person may establish a trust fund for the benefit of the Agency which may receive funds from more than one operator for closure of different sites. Such a trust fund shall operate like the trust fund specified in 35 Ill. Adm. Code 807.661, except as follows:

a) The trustee shall maintain a separate account for each site and shall evaluate such annually as of the day of creation of the trust;

b) The trustee shall annually notify each operator and the Agency of the evaluation of each operator's account;

c) The trustee shall release excess funds as required from the account for each site;

d) The trustee shall reimburse the operator or other person authorized to perform closure or postclosure care only from the account for that site.

e) The Agency may direct the trustee to withhold payments only from the account for the site for which it has reason to believe the cost of closure and postclosure care will be significantly greater than the value of the account for that site.

Section 811.710 Trust Fund

a) An operator may satisfy the requirements of this Subpart by establishing a trust fund which conforms to the requirements of this Section and submitting an original, signed duplicate of the trust agreement to the Agency.

b) The trustee must be an entity which has the authority to act as a trustee and:

1) Whose trust operations are regulated by the Illinois Commissioner of Banks and Trust Companies; or,

2) Who complies with the Foreign Corporations as Fiduciaries Act, Ill. Rev. Stat. 1985, ch. 17, par. 2801 et seq..

c) The trust agreement must be on forms as specified by the Agency and the trust agreement must be accompanied by a formal certification of acknowledgment.

d) Payments into the trust:

1) The operator must make a payment into the trust fund each year during the pay-in period.

2) The pay-in period is the number of years remaining in the term of the current permit until the site reaches the stage at which the cost of premature closure would be the greatest, as indicated by its closure plan.

3) Annual payments are determined by the following formula:

Annual payment = (CE-CV)/Y

where:

CE= Current cost estimate
CV= Current value of the trust fund
Y= Number of years remaining in the pay in period.

4) The operator must make the first annual payment prior to the initial receipt of waste for disposal, or prior to March 1, 1985 for sites receiving waste for disposal prior to that date. The operator must also, prior to such initial receipt of waste, submit to the Agency a receipt from the trustee for the first annual payment.

5) Subsequent annual payments must be made no later than 30 days after each anniversary of the first payment.

6) The operator may accelerate payments into the trust fund, or may deposit the full amount of the current cost estimate at the time the fund is established.

e) The trustee must evaluate the trust fund annually as of the day the trust was created, or on such earlier date as may be provided in the agreement. The trustee must notify the operator and the Agency of the value within 30 days after the evaluation date.

f) Release of excess funds:

1) If the value of the financial assurance is greater than the total amount of the current cost estimate, the operator may submit a written request to the Agency for release from the trust fund of the amount in excess of the current cost estimate.

2) Within 60 days after receiving a request from the operator for release of funds, the Agency will instruct the trustee to release to the operator such funds as the Agency specifies in writing.

g) Reimbursement for closure and postclosure care expenses:

1) After initiating closure, an operator or any other person authorized to perform closure or postclosure care may request reimbursement for closure or postclosure care expenditures by submitting itemized bills to the Agency.

2) Within 60 days after receiving bills for closure or postclosure care activities, the Agency will determine whether the expenditures are in accordance with the closure or postclosure care plan and if so, it will instruct the trustee to make reimbursement in such amounts as the Agency specifies in writing.

3) If the Agency has reason to believe that the cost of closure and postclosure care will be significantly greater than the value of the trust fund, it may withhold reimbursement of such amounts as it deems prudent until it determines that the operator is no longer required to maintain financial assurance for closure and postclosure care.

Section 811.711 Surety Bond Guaranteeing Payment

a) An operator may satisfy the requirements of this Subpart by obtaining a surety bond which conforms to the requirements of this Section and submitting the bond to the Agency.

b) The surety company issuing the bond must be licensed by the Illinois Department of Insurance.

c) The surety bond must be on forms as specified by the Agency.

d) Any payments made under the bond will be placed in the landfill closure and postclosure fund within the State Treasury.

e) Conditions:

1) The bond must guarantee that the operator will provide closure and postclosure care in accordance with the approved closure and postclosure care plans.

2) The surety will become liable on the bond obligation when, during the term of the bond, the operator fails to perform as guaranteed by the bond. The operator fails to perform when the operator:

A) Abandons the site;

B) Is adjudicated bankrupt;

C) Fails to initiate closure of the site or postclosure care when ordered to do so by the Board or a court of competent jurisdiction; or,

D) Notifies the Agency that it has initiated closure, or initiates closure, but fails to close the site or provide postclosure care in accordance with the closure and postclosure care plans.

f) Penal sum:

1) The penal sum of the bond must be in an amount at least equal to the current cost estimate.

2) The Agency shall approve a reduction in the penal sum whenever the current cost estimate decreases.

g) Term:

1) The bond shall be issued for a term of at least five years and shall not be cancelable during that term.

2) If the operator fails to provide substitute financial assurance prior to expiration of a bond, the term of the bond shall be automatically extended for one twelve-month period starting with the date of expiration of the bond. During such extension the bond will not serve as financial assurance satisfying the requirements of this Part, and will not excuse the operator from the duty to provide substitute financial assurance.

h) Cure of default and refunds:

1) The Agency shall release the surety if, after the surety becomes liable on the bond, the operator or another person provides financial assurance for closure and postclosure care of the site, unless the Agency determines that a plan or the amount of substituted financial assurance is inadequate to provide closure and postclosure care as required by this Part.

2) After closure and postclosure care have been completed in accordance with the plans and requirements of this Part, the Agency shall refund any unspent money which was paid to the Agency by the surety.

Section 811.712 Surety Bond Guaranteeing Performance

a) An operator may satisfy the requirements of this Subpart by obtaining a surety bond which conforms to the requirements of this Section and submitting the bond to the Agency.

b) The surety company issuing the bond must be licensed by the Illinois Department of Insurance.

c) The surety bond must be on forms as specified by the Agency.

d) Any payments made under the bond will be placed in the landfill closure and postclosure fund within the State Treasury.

e) Conditions:

1) The bond must guarantee that the operator will provide closure and postclosure care in accordance with the closure and postclosure care plans in the permit. The surety shall have the option of

providing closure and postclosure care in accordance with the closure and postclosure care plans, or of paying the penal sum.

2) The surety will become liable on the bond obligation when, during the term of the bond, the operator fails to perform as guaranteed by the bond. The operator fails to perform when the operator:

A) Abandons the site;

B) Is adjudicated bankrupt;

C) Fails to initiate closure of the site or postclosure care when ordered to do so by the Board or a court of competent jurisdiction; or,

D) Notifies the Agency that it has initiated closure, or initiates closure, but fails to close the site or provide postclosure care in accordance with the closure and postclosure care plans.

f) Penal sum:

1) The penal sum of the bond must be in an amount at least equal to the current cost estimate.

2) The Agency shall approve a reduction in the penal sum whenever the current cost estimate decreases.

g) Term:

1) The bond shall be issued for a term of at least five years and shall not be cancelable during that term.

2) If the operator fails to provide substitute financial assurance prior to expiration of a bond, the term of the bond shall be automatically extended for one twelve-month period starting with the date of expiration of the bond. During such extension the bond will not serve as financial assurance satisfying the requirements of this Part, and will not excuse the operator from the duty to provide substitute financial assurance.

h) Cure of default and refunds:

1) The Agency shall release the surety if, after the surety becomes liable on the bond, the operator or another person provides financial assurance for closure and postclosure care of the site, unless

the Agency determines that a plan or the amount of substituted financial assurance is inadequate to provide closure and postclosure care as required by this Part.

2) After closure and postclosure care have been completed in accordance with the plans and requirements of this Part, the Agency shall refund any unspent money which was paid to the Agency by the surety.

i) The surety will not be liable for deficiencies in the performance of closure by the operator after the Agency releases the operator from the requirements of this Subpart.

Section 811.713 Letter of Credit

a) An operator may satisfy the requirements of this Subpart by obtaining an irrevocable standby letter of credit which conforms to the requirements of this Section and submitting the letter to the Agency.

b) The issuing institution must be an entity which has the authority to issue letters of credit and:

1) Whose letter-of-credit operations are regulated by the Illinois Commissioner of Banks and Trust Companies; or,

2) Whose deposits are insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation.

c) Forms:

1) The letter of credit must be on forms as specified by the Agency.

2) The letter of credit must be accompanied by a letter from the operator referring to the letter of credit by number, issuing institution and date and providing the following information: name and address of the site and the amount of funds assured for closure of the site by the letter of credit.

d) Any amounts drawn by the Agency pursuant to the letter of credit will be deposited in the landfill closure and postclosure fund within the State Treasury.

e) Conditions on which the Agency may draw on the letter of credit:

1) The Agency may draw on the letter of credit if the operator fails to perform closure or postclosure care in accordance with the closure and postclosure care plans.

2) The Agency may draw on the letter of credit when the operator:

A) Abandons the site;

B) Is adjudicated bankrupt;

C) Fails to initiate closure or postclosure care of the site when ordered to do so by the Board or a court of competent jurisdiction; or

D) Notifies the Agency that it has initiated closure, or initiates closure, but fails to provide closure and postclosure care in accordance with the closure and postclosure care plans.

f) Amount:

1) The letter of credit must be issued in an amount at least equal to the current cost estimate.

2) The Agency shall approve a reduction in the amount whenever the current cost estimate decreases.

g) Term:

1) The letter of credit shall be irrevocable and shall be issued for a term of at least five years.

2) If the operator fails to substitute alternate financial assurance prior to expiration of a letter of credit, the term of the letter of credit shall be automatically extended for one twelve-month period starting with the date of expiration. During such extension the letter of credit will not serve as financial assurance satisfying the requirements of this Part, and will not excuse the operator from the duty to provide substitute financial assurance.

h) Cure of default and refunds:

1) The Agency shall release the financial institution if, after the Agency is allowed to draw on the letter of credit, the operator or another person provides financial assurance for closure and postclosure care of the site, unless the Agency determines that a plan or the amount of substituted

financial assurance is inadequate to provide closure and postclosure care as required by this Part.

2) After closure and postclosure care have been completed in accordance with the plans and requirements of this Part, the Agency shall refund any unspent money which was paid to the Agency by the financial institution.

Section 811.714 Closure Insurance

a) An operator may satisfy the requirements of this Subpart by obtaining closure and postclosure care insurance which conforms to the requirements of this Section and submitting an executed duplicate original of such insurance policy to the Agency.

b) The insurer must be licensed to transact the business of insurance by the Illinois Department of Insurance.

c) The policy must be on forms approved by the Illinois Department of Insurance.

d) Face amount:

1) The closure and postclosure care insurance policy must be issued for a face amount at least equal to the current cost estimate. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

2) The Agency shall approve a reduction in the amount of the policy whenever the current cost estimate decreases.

e) The closure and postclosure care insurance policy must guarantee that funds will be available to close the site and to provide postclosure care thereafter. The policy must also guarantee that, once closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency to such party or parties as the Agency specifies. The insurer will be liable when:

1) The operator abandons the site;

2) The operator is adjudicated bankrupt;

3) The Board or a court of competent jurisdiction orders the site closed;

4) The operator notifies the Agency that it is initiating closure; or

5) Any person initiates closure with approval of the Agency.

f) After initiating closure, an operator or any other person authorized to perform closure or postclosure care may request reimbursement for closure and postclosure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for closure or postclosure care activities, the Agency will determine whether the expenditures are in accordance with the closure plan or postclosure care plan, and if so, will instruct the insurer to make reimbursement in such amounts as the Agency specifies in writing. If the Agency has reason to believe that the cost of closure and postclosure care will be significantly greater than the face amount of the policy, it may withhold reimbursement of such amounts as it deems prudent until it determines that the operator is no longer required to maintain financial assurance.

g) Cancellation:

1) The operator shall maintain the policy in full force and effect until the Agency consents to termination of the policy.

2) The policy must provide that the insurer may not cancel, terminate or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate or fail to renew the policy by sending notice by certified mail to the operator and the Agency. Cancellation, termination or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the operator, as evidenced by the return receipts. Cancellation, termination or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration the premium due is paid.

h) Each policy must contain a provision allowing assignment of the policy to a successor operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

Section 811.715 Self-insurance for Non-commercial Sites

a) Definitions

The following terms are used in this Section. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting principles.

"Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

"Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

"Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Generally accepted accounting principles" means Accounting Standards, Financial Accounting Standards Board, June 1984, which is hereby incorporated by reference. This incorporation includes no later amendments or editions.

"Gross Revenue" means total receipts less returns and allowances.

"Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current liabilities.

"Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

"Tangible net worth" means tangible assets less liabilities; tangible assets do not include

intangibles such as goodwill and rights t
or royalties.

b) Information to be Filed

An operator may satisfy the financial assurance requirements of this Part by providing the foll

1) Bond without surety promising to pay the c estimate (subsection (c)).

2) Proof that the operator meets the gross re test (subsection (d)).

3) Proof that the operator meets the financia (subsection (e)).

c) Bond Without Surety

An operator utilizing self-insurance must provi without surety on forms specified by the Agency operator must promise to pay the current cost e to the Agency unless the operator provides clos postclosure care in accordance with the closure postclosure care plans.

d) Gross Revenue Test

The operator must demonstrate that less than one its gross revenues are derived from waste dispos operations.

e) Financial Test

1) To pass the financial test the operator mus the criteria of either subsection (e) (1) ((e) (1) (B):

A) The operator must have:

i) Two of the following three ratios ratio of total liabilities to net less than 2.0; a ratio of the sum income plus depreciation, depleti amortization to total liabilities than 0.1; or a ratio of current a current liabilities greater than

ii) Net working capital and tangible worth each at least six times the cost estimate; and

iii) Tangible net worth of at least $1 million; and

iv) Assets in the United States amounting to at least 90 percent of the operator's total assets and at least six times the current cost estimate.

B) The operator must have:

i) A current rating for its most recent bond issuance of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and

ii Tanginle net worth at least six times the current cost estimate; and

iii) Tangible net worth of at least $10 million; and

iv) Assets located in the United States amounting to at least 90 percent of its total assets or at least six times the current cost estimate.

2) To demonstrate that it meets this test, the operator must submit the following items to the Agency:

A) A letter signed by the operator's chief financial officer and worded as specified by the Agency; and

B) A copy of the independent certified public accountant's report on examination of the operator's financial statements for the latest completed fiscal year; and

C) A special report from the operator's independent certified public accountant to the operator stating that:

i) The accountant has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii) In connection with that procedure, no matters came to the accountant's attention which caused the accountant to believe that the specified data should be adjusted.

f) Updated Information

1) After the initial submission of items specified in subsections (d) and (e), the operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year.

2) If the operator no longer meets the requirements of subsections (d) and (e), the operator must send notice to the Agency of intent to establish alternate financial assurance. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the operator no longer meets the requirements.

g) Qualified Opinions

If the opinion required in subsections (e) (2) (B) and (e) (2) (C) includes an adverse opinion or a disclaimer of opinion, the Agency shall disallow the use of self-insurance. If the opinion includes other qualifications, the Agency shall disallow the use of self-insurance if:

1) The qualifications relate to the numbers which are used in the gross revenue test or the financial test; and,

2) In light of the qualifications, the operator has failed to demonstrate that it meets the gross revenue test or financial test.

h) Parent Corporation

An operator may satisfy the financial assurance requirements of this Part by demonstrating that a corporation which owns an interest in the operator meet the gross revenue and financial tests. The operator must also provide a bond with the parent as surety (Appendix A).

Section 811.716 Letter of Credit

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: SOLID WASTE AND SPECIAL WASTE HAULING
PART 812
INFORMATION TO BE SUBMITTED IN A PERMIT APPLICATION

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812.101 Scope and Applicability
812.102 Certification by Professional Engineer
812.103 Application Fees
812.104 Required Signatures
812.105 Approval by Unit of Local Government
812.106 Site Location Map
812.107 Site Plan Map
812.108 Narrative Description of the Facility
812.109 Location Standards
812.110 Surface Water Control
812.111 Daily Cover
812.112 Legal Description
812.113 Proof of Property Ownership
812.114 Closure Plans
812.115 Postclosure Care Plans
812.116 Closure and Postclosure Cost Estimates

SUBPART B: ADDITIONAL INFORMATION REQUIRED FOR INERT WASTE LANDFILLS

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812.201 Scope and Applicability
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812.301 Scope and Applicability
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812.305 Foundation Analysis and Design
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812.308 Leachate Management System
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AUTHORITY: Implementing Sections 5, 21, 21.1, 22 and 22.17, and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1005, 1021, 1021.1, 1022, 1027 and 1022.17).

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

NOTE: Capitalization is used to indicate that the language quotes or paraphrases a statute.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: SOLID WASTE AND SPECIAL WASTE HAULING
PART 812
INFORMATION TO BE SUBMITTED IN A PERMIT APPLICATION

SUBPART A: GENERAL INFORMATION REQUIRED FOR ALL LANDFILLS

Section 812.101 Scope and Applicability

All persons, except those specifically exempted by Section 21(d) of the Environmental Protection Act (Act), Ill. Rev. Stat. 1985, ch. 111 1/2, par. 1021(d), shall submit to the Agency an application for a development permit to develop and operate a landfill. This Subpart A contains general standards applicable to all landfills. Additional standards applicable to landfills which accept only inert waste are contained in Subpart B. Additional standards applicable to landfills which accept chemical and putrescible waste are contained in Subpart C. The application must contain the information required in this Subpart as well as any information requested by the Agency to evaluate compliance with the requirements of this Part and the Act.

Section 812.102 Certification by Professional Engineer

All designs shall be prepared by or under the supervision of a professional engineer registered in the state of Illinois. The professional engineer shall affix certification to all designs showing the name of the engineer, date of certification, registration number, and a statement attesting to the accuracy of the information and design.

Section 812.103 Application Fees

The permit application must be accompanied by all filing fees required pursuant to the Act.

Section 812.104 Required Signatures

a) All permit applications shall contain the name, address, and telephone number of a duly authorized agent to whom all inquiries and correspondence shall be addressed.

b) All permit applications shall be signed by a duly authorized agent, shall be accompanied by evidence of authority to sign the application and shall be notarized. The following persons are considered duly authorized agents:

1) For Corporations, a principal executive officer of at least the level of vice president

2) For a sole proprietorship or partnership, a proprietor or general partner, respectively;

3) For a municipality, state, federal or other public agency, by the head of the agency or ranking elected official.

Section 812.105 Approval by Unit of Local Government

The applicant shall state whether the facility is a new regional pollution control facility as defined in Section 3.32 of the Act and which is subject to the site location suitability approval requirements of Sections 39(c) and 39.2 of the Act. If such approval by a unit of local government is required, the application shall identify the unit of local government with jurisdiction. The application shall contain any approval issued by that unit of local government. If no approval has been granted, the application shall describe the status of the approval request.

Section 812.106 Site Location Map

All permit applications shall contain a site location map on a USGS 7½ minute topographical quadrangle, showing the following information:

a) The permit area;

b) All surface waters;

c) The prevailing wind direction;

d) All rivers designated for protection under the Wild and Scenic Rivers Act, 16 USC 1271;

e) The limits of all 100-year floodplains;

f) All natural areas designated as a Dedicated Illinois Nature Preserve pursuant to the Illinois Natural Areas Preservation Act, Ill. Rev. Stat. 1985, ch. 105, par. 701 et seq.

g) All historic and archaeological sites designated by the National Historic Preservation Act 16 USC 470 et seq. and the Illinois Historic Areas Preservation Act Ill. Rev. Stat. ch. 127, par. 133(d)(1) et seq.

h) All areas identified as critical habitat pursuant to the Endangered Species Act 16 USC 1531 et seq. and the Illinois Endangered Species Protection Act, Ill. Rev. Stat. 19875, ch. 8, par. 331 et seq.; and

i) All main service corridors, transportation routes, and access roads to the facility.

Section 812.107 Site Plan Map

The application shall contain a site plan map, or maps, showing the location of the facility on a scale no smaller than 1 inch=200 feet containing a 2-foot contour interval. The following information shall be shown:

a) The entire permit area;

b) The boundaries of all units included in the facility;

c) Location of borrow areas;

d) Boundaries of all areas to be disturbed;

e) The proposed phasing of the facility, including a delineation of the approximate area to be disturbed each year and areas expected to be closed each year in compliance with 35 Ill. Adm. Code 811.107 (a);

f) All roads in and around the facility;

g) Devices for controlling access to the facility;

h) Devices for controlling litter;

i) Fire protection facilities; and

j) Utilities.

Section 812.108 Narrative Description of the Facility

The permit application shall contain a written description of the facility with supporting data and, if necessary, calculations describing the following information:

a) The type of waste disposal units and the types of wastes expected in each unit;

b) An estimate of the maximum capacity of each unit and the rate at which waste is to be placed;

c) The manner in which waste will be placed and compacted;

d) The estimated unit weight of the waste;

e) The length of time each unit will receive waste;

f) The design period to be used for each unit;

g) Size of the open face area, including all information showing that slopes steeper than 2 to 1 will be stable, and in compliance with 35 Ill. Adm. Code 811.107 (b);

h) A description of how units will be developed to allow contemporaneous closure and stabilization;

i) A description of all equipment to be used at the facility, the purpose each piece, and a demonstration that the equipment is adequate to operate the facility in compliance with all Board regulations and the Act;

j) A litter control plan;

k) A salvaging plan including a description of all salvage facilities and a plan for complying with 35 Ill. Adm. Code 811.108;

l) A description of all utilities necessary for operation in compliance with 35 Ill. Adm. Code 811.107 (d);

m) A boundary control plan describing how the operator will comply the requirements of 35 Ill. Adm. Code 811.109;

n) A maintenance plan describing how the operator will comply with 35 Ill. Adm. Code 811.107 (c) and (e);

o) An air quality plan describing the methods to be used for controlling dust in compliance with 35 Ill. Adm. Code 811.107 (g);

p) A noise control plan describing how the operator will control noise in compliance with 35 Ill. Adm. Code 811.107 (h);

q) An odor control plan;

r) A vector control plan; and

s) A firefighting and fire safety plan.

Section 812.109 Location Standards

The permit application shall contain:

a) Documentation from the applicable federal agency stating that the facility will operate in compliance with 35 Ill. Adm. Code 811.102 (a).

b) A floodplain determination containing:

1) Documentation that the facility is not located within the floodplain of the 100-year flood event; or

2) Plans demonstrating that the facility meets the requirements of 811.102 (b).

c) Documentation from the State Historic Preservation Officer that the facility will be in compliance with 35 Ill. Adm. Code 811.102 (c).

d) Documentation from the Illinois Nature Preserves Commission that the facility will be in compliance with 811.102(c) as it relates to Dedicated Illinois Nature Preserves.

e) Documentation that the facility will be in compliance with 35 Ill. Adm. Code 811.102 (d).

f) Documentation that a facility located within a wetland is in compliance with Section 404 of the Clean Water Act, 35 USC 1344.

g) Documentation that the facility is in compliance with 35 Ill. Adm. Code 811.102 (f).

Section 812.110 Surface Water Control

The permit application shall contain a plan for controlling surface water in accordance with 35 Ill. Adm. Code 811.103 which includes the following information:

a) A copy of the approved NPDES permit to discharge runoff from all disturbed areas;

b) A map showing the location of all structures;

c) Detailed designs of all structures to be constructed during development of the facility and during the first five year operating period; and

d) Estimated construction dates of all structures to be constructed beyond the first five year operating period.

Section 812.111 Daily Cover

The application shall contain a description of the material to be used as daily cover including:

a) A description of the soil to be used, including its classification and approximate hydraulic conductivity; or

b) A demonstration that any proposed alternate materials or procedures to substitute for daily cover meet the minimum requirements of 35 Ill. Adm. Code 811.106 (b).

Section 812.112 Legal Description

The permit application shall contain a legal description of the permit boundary and the boundaries of all units included in the facility. This legal description shall be prepared by or under the supervision of a professional surveyor, who shall certify the work.

Section 812.113 Proof of Property Ownership

The permit application shall contain a certificate of ownership of the permit area, or a copy of the lease. The lease should clearly specify that the owner authorizes the construction of a waste disposal facility on the property.

Section 812.114 Closure Plans

The permit application shall contain a written postclosure plan which contains, at a minimum, the following:

a) A map showing the configuration of the facility after closure of all units with the following:

1) A contour map showing the proposed final topography (after placement of the final cover) of all disturbed areas on a 1"=200' scale and a contour interval of 2 feet; and

2) The location of all facility related structures to remain as permanent features after closure.

b) Steps necessary for the premature final closure of the site at the time during the next term of permit when the cost of closure will be the greatest;

c) Steps necessary for the final closure of the site at the end of its intended operating life;

d) Steps necessary to prevent damage to the environment during temporary suspension of waste acceptance if the operator wants a permit which would allow temporary suspension of waste acceptance at the site without initiating final closure;

e) A description of the steps necessary to decontaminate equipment during closure;

f) An estimate of the expected year of closure;

g) Schedules for the premature and final closure which shall include at a minimum:

1) Total time required to close the site; and

2) Time required for closure activities which will allow tracking of the progress of closure; and

h) A description of methods for compliance with all closure requirements of 35 Ill. Adm. Code 811.

Section 812.115 Postclosure Care Plans

The application shall contain a postclosure care plan which includes a written description of the measures to be taken during the postclosure care period in compliance with the requirements of 35 Ill. Adm. Code 811.

Section 812.116 Closure and Postclosure Cost Estimates

The application shall contain an estimate of the costs necessary for closure and postclosure care and maintenance in accordance with the requirements of Subpart G of 35 Ill. Adm Code 811.

SUBPART B: ADDITIONAL INFORMATION REQUIRED FOR INERT WASTE LANDFILLS

Section 812.201 Scope and Applicability

In addition to the information required by Subpart A, an application for a permit to develop an inert waste disposal unit shall contain the information required in this subpart.

Section 812.202 Waste Stream Test Results

The application shall contain information describing the waste and valid test results of the waste when demonstrating to the Agency that all wastestreams entering the unit meet the definition of an inert waste.

Section 812.203 Final Cover

The permit application shall contain a description of the material to be used as the final cover, application and spreading techniques, and the types of vegetation to be planted.

Section 812.204 Closure Requirements

The permit application shall contain a description of how the applicant will comply with 35 Ill. Adm. Code 811.205 (a) and (b).

SUBPART C: ADDITIONAL INFORMATION REQUIRED FOR PUTRESCIBLE AND CHEMICAL WASTE LANDFILLS

Section 812.301 Scope and Applicability

In addition to the information required in Subpart A, an application for a permit to develop a putrescible or chemical landfill shall contain the information required in this Subpart.

Section 812.302 Wastestream Analysis

An application for a landfill that accepts only chemical wastes shall include the results of a wastestream analysis showing that the wastes to be accepted at the facility meet the definition of a chemical waste. The analysis shall show that all wastestreams entering the unit will be compatible and will not react to form a hazardous substance or gaseous products.

Section 812.303 Site Location Map

The permit application shall contain a map showing the location of the following structures or areas located within one mile of the facility:

a) All public water supply wells;

b) All setback zones established pursuant to Section 14.2 or 14.3 of the Act;

c) A Sole Source Aquifer Determination containing:

1) documentation demonstrating that no sole source aquifers are located beneath the facility; or

2) a demonstration that an impervious strata exists between the facility and the aquifer that meets the minimum requirements of 35 Ill. Adm. Code 811.302 (b).

d) Documentation that any units located within a setback zone established pursuant to Section 14.2 or 14.3 of the

Act meet the minimum requirements of 35 Ill. Adm. Code 811.302 (b).

e) All State and Federal Parks and recreational areas;

f) All State or Interstate highways and the location of any barriers necessary to comply with 35 Ill. Adm. Code 811.302 (c);

g) All occupied dwellings, hospitals and schools; and

h) All airports.

Section 812.304 Waste Shredding

If a waste shredding operation is planned for the facility, then the application shall contain all documentation necessary to demonstrate compliance with 35 Ill. Adm Code 811.303 (b), including a description of the mechanical shredder proposed for use.

Section 812.305 Foundation Analysis and Design

a) The permit application shall contain a foundation study and analysis showing that the unit demonstrates compliance with 35 Ill. Adm. Code 811.304 and 811.305.

b) The study shall be performed by or under the supervision of a registered professional engineer;

c) The following information shall be contained in the permit application:

1) Results of tests performed on foundation materials;

2) Estimated settlement of the unit;

3) Diagrams and cross sections of any proposed subbase or foundation construction;

4) Specifications for soil to be used for foundation construction; and

5) A construction quality assurance program for proper implementation of the foundation.

Section 812.306 Design of the Liner System

The application shall contain all information necessary to show that the design of the liner system meets the minimum requirements of 35 Ill. Adm. Code 811.306, including the following information:

a) For Compacted Clay Liners:

1) Cross sections and plan views of the liner system;

2) Results of any field or laboratory tests demonstrating that the necessary liner material is available;

3) A description of the test liner, including:

A) Diagrams and any supporting documentation showing that the test liner will be constructed and evaluated in accordance with 35 Ill. Adm. Code 811.507 (a); or

B) A detailed description of the results of the test liner constructed in accordance with 35 Ill. Adm Code 811.507 (a), if constructed prior to permit application;

4) A description of construction methods and equipment to be utilized; and

5) A construction quality assurance plan.

c) For geomembranes:

1) A description of the physical properties of the geomembrane;

2) All calculations and assumptions showing that the design of the geomembrane meets the minimum requirements of 35 Ill. Adm. Code 811.306 (e).

3) A description of the methods to seam the geomembrane in the field;

4) A plan view showing the proposed layout of the individual panels and the locations of all openings through the geomembrane;

5) A cross section and description of how openings in the membrane will be constructed to minimize leaks;

6) A construction quality assurance program for proper construction, seaming and inspection of the geomembrane.

d) For Slurry Trenches and Cutoff Walls:

1) A description of the slurry trench or cutoff wall, including cross sections, material specifications, methods of construction and supporting calculations and information to demonstrate compliance with 35 Ill. Adm. Code 811.306 (f);

2) Location and descriptions of the boreholes, including the results of any testing;

3) A construction quality assurance plan.

e) For Alternate Liner Technology:

A complete description of the technology, including information demonstrating that the technology will perform as required by 35 Ill. Adm. Code 811.306 (f).

Section 812.307 Leachate Drainage and Collection Systems

The permit application shall contain all information necessary to demonstrate that the proposed leachate drainage and collection system will be in compliance with 35 Ill. Adm. Code 811.307 and 811.308, including:

a) A plan view of the leachate collection system showing pipe locations, cleanouts, manholes, sumps, leachate storage structures and other related information;

b) Cross sections and descriptions of manholes, sumps, cleanouts, connections and other appurtenances;

c) The locations of all leachate level monitoring locations;

d) A stability analysis showing that the side slopes will maintain the necessary static and seismic safety factors during all phases of operation;

e) All calculations, assumptions and information used to design the leachate collection and drainage system;

f) A description of the methods to be used to clean and otherwise maintain the leachate collection and drainage system and a demonstration that the number of and location of access and cleanout points is sufficient.

g) A construction quality assurance program to insure proper construction of the systems.

Section 812.308 Leachate Management System

a) The application shall contain all information necessary to show how the applicant will comply with 35 Ill. Adm. Code 811.309, including the following information;

1) Leachate Disposal Methods including:

A) The approved NPDES permit;

B) A demonstration that the offsite treatment works meets the requirements of 35 Ill. Adm. Code 811.309 (e) (1); or

C) Pretreatment authorization, if necessary from the offsite POTW.

2) Design of tanks, lagoons, and all other treatment or storage units; and

3) A map showing the location of all units, piping and monitoring stations.

b) A request for authorization to recycle leachate, if desired. The request should be supported by sufficient information to demonstrate compliance with 35 Ill. Adm. Code 811.309 (f), including:

1) A demonstration that the unit satisfies the criteria in 35 Ill. Adm. Code 811.309 (f) (1);

2) Estimates of the volume of excess leachate expected;

3) An excess leachate disposal plan;

4) Layout and design of the leachate distribution system; and

5) A demonstration that the daily and intermediate cover is relatively permeable, or a plan to remove daily and intermediate cover prior to additional waste disposal.

c) A description of the leachate monitoring system including all parameters to be monitored and the location of the sampling points.

Section 812.309 Landfill Gas Monitoring Systems

The permit application shall contain a plan to monitor the buildup and composition of landfill gas in compliance with 35 Ill. Adm. Code 811.310, including:

a) A description of the most likely paths of migration of landfill gas expected to be generated by the unit and supported by the results of a predictive modeling study of gas flow through the strata surrounding the facility (if a model was used); and

b) The location and design of sampling points;

Section 812.310 Gas Collection Systems

The permit application shall contain, when a gas collection system is necessary, a plan for collecting landfill gas from the unit. The plan shall contain enough information to demonstrate compliance with 35 Ill. Adm. Code 811.311, including:

a) Location of the collection points;

b) Layout and design of the collection system;

c) A description and specifications for all machinery, compressors, flares, piping and other appurtenances necessary to the system;

d) A gas condensate disposal plan;

Section 812.311 Landfill Gas Disposal

When a permit application contains a plan for a gas collection system then a plan for landfill gas disposal shall be submitted. The plan shall contain enough information to demonstrate compliance with 35 Ill. Adm. Code 811.312, including:

a) The approved air discharge permit, if necessary;

b) A map showing the location of the gas processing facility;

c) Designs for the disposal system.

d) A gas processing plan which includes a description of the beneficial uses to be derived for the gas and the design of the processing system.

e) Where an offsite processing plant is utilized, the application shall contain documentation showing that the plant meets all requirements of 35 Ill. Adm. Code 811.312 (g).

Section 812.312 Intermediate Cover

The application shall contain a description of the material to be used as intermediate cover in accordance with 35 Ill. Adm. Code 811.313, including:

a) A description of the soil to be used, including its classification and approximate hydraulic conductivity; or

b) A demonstration that any proposed alternate materials or procedures to substitute for intermediate cover meet the minimum requirements of 35 Ill. Adm. Code 811.313.

Section 812.313 Design of the Final Cover System

The permit application shall contain all calculations, assumptions and designs for the final cover system to demonstrate compliance with 35 Ill. Adm. Code 811.314, including:

a) Material specifications;

b) Placement techniques;

c) Estimates of settling;

d) Adequacy of final protective cover, including a description of the soil and the depth necessary to maintain the proposed land use of the area;

e) A description showing how the low permeability layer will tie into the liner system; and

f) A construction quality assurance program to insure that the cover is constructed in compliance with all requirements.

Section 812.314 Description of the Hydrogeology

The permit application shall contain a description of the hydrogeologic system, which shall include the results of the investigation conducted in accordance with 35 Ill. Adm. Code 811.315 and which includes the following information:

a) A narrative description of the regional setting;

b) A narrative description characterizing the hydrogeological conditions within the permit area;

c) Geological cross sections of the permit area showing all water bearing strata, water elevations and all geological units;

d) Location of all bore holes and test pits;

e) All well and bore logs;

f) All relevant laboratory and field testing data;

g) A detailed description of each geological unit found within the study area including physical and geochemical properties; and

h) A description of all water bearing strata under the facility, including a potentiometric map, groundwater flow velocities and directions, and a description of the water quality.

Section 812.315 Plugging and Sealing of Drill Holes

The application shall contain a plan describing the techniques and materials to be utilized to plug and seal drill holes in accordance with 35 Ill. Adm. Code 811.316.

Section 812.316 Results of the Groundwater Impact Assessment

The application shall contain the results of a groundwater impact assessment showing that the proposed unit will not exceed the requirements of 35 Ill. Adm. Code 811.317. The assessment shall contain, at a minimum, the following information:

a) Complete documentation of the contaminant transport model used for the assessment;

b) All input data used to perform the analysis and modeling;

c) A sensitivity analysis of the model's predictions versus the magnitude of the input parameters;

d) Predicted concentration versus time profiles for several points within the zone of attenuation over a predicted time period of 100 years;

e) Predicted concentration versus distance profiles taken at 5 year increments for 100 years;

f) Documentation showing reliability of the model;

g) Documentation demonstrating validity of all input parameters and assumptions; and

h) A written evaluation of the groundwater impacts expected at the facility.

Section 812.317 Groundwater Monitoring Program

The permit application shall contain a groundwater monitoring plan which demonstrates compliance with 35 Ill. Adm. Code 811.318 and includes the following information:

a) A site plan map showing all zones of attenuation;

b) Distance to the bottom of the uppermost aquifer;

c) The location and depth of all groundwater monitoring points;

d) The design of the groundwater monitoring wells, with a description of the materials to be used in constructing each well;

e) A list of the parameters to be tested at each monitoring point;

f) A concentration versus time profile for each monitoring point showing the maximum allowable concentration at that monitoring point for the 100 years after the closure of the unit;

g) A description of the sampling procedure to be followed;

h) A description of the preservation techniques to be utilized;

i) A description of the chain of custody, packing and transportation plans for all samples to meet the requirements of 35 Ill. Adm. Code 811.318 (g);

j) A description of the laboratory analysis including laboratory procedures, quality control, and error detection;

k) A description of the statistical analysis techniques to be used for evaluating the monitoring data;

l) A description of the water quality standards applicable at the facility, including a specific numerical value for each constituent, and including an evaluation of the background concentrations of each constituent to be monitored; and

m) A description of the statistical method to be utilized when evaluating groundwater data.

Section 812.318 Operating Plans

a) The application shall contain all information necessary to demonstrate compliance with 35 Ill. Adm. Code 811.321 (a).

b) The application shall contain a narrative description of the initial waste placement plan to demonstrate compliance with 35 Ill. Adm. Code 811.321 (b).

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

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PART 813
PROCEDURAL REQUIREMENTS FOR PERMITTED LANDFILLS

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AUTHORITY: Implementing Sections 5, 21, 21.1, 22 and 22.17, and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1005, 1021, 1021.1, 1022, 1027 and 1022.17).

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PROCEDURAL REQUIREMENTS FOR PERMITTED LANDFILLS

SUBPART A: GENERAL PROCEDURES

Section 813.101 Scope and Applicability

This Subpart contains the procedures to be followed by all applicants and the Agency for applications for permits required by the Environmental Protection Act (Act), Ill. Rev. Stat. ch. 111 1/2, par. 1001 et seq. The procedures apply to applications to issue a permit to develop and operate a landfill, to modify a permit, to renew an expired permit, and to conduct an experimental practice.

Section 813.102 Delivery of Permit Application

All permit applications shall be made on such forms as are prescribed by the Agency, and shall be mailed or delivered to the address designated by the Agency. The Agency shall provide a dated, signed receipt upon request. The Agency's record of the date of filing shall be deemed conclusive unless a contrary date is proven by a dated, signed receipt.

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.

b) The applicant may waive the right to a final decision in writing prior to the applicable deadline.

c) 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.

d) The Agency shall send all notices of final action by registered or certified mail, return receipt requested. Final action shall be deemed to have taken place on the date that such notice is signed.

Section 813.104 Standards for Issuance of a Permit

a) THE AGENCY SHALL ISSUE A PERMIT UPON PROOF THAT THE FACILITY, UNIT, OR EQUIPMENT WILL NOT CAUSE A VIOLATION OF THIS ACT OR OF BOARD REGULATIONS.

b) IN GRANTING PERMITS, THE AGENCY MAY IMPOSE SUCH CONDITIONS AS MAY BE NECESSARY TO ACCOMPLISH THE PURPOSES OF THIS ACT, AND AS ARE NOT INCONSISTENT WITH BOARD REGULATIONS.

c) EXCEPT FOR THOSE FACILITIES OWNED OR OPERATED BY SANITARY DISTRICTS ORGANIZED UNDER "AN ACT TO CREATE SANITARY DISTRICTS AND TO REMOVE OBSTRUCTIONS IN THE DES PLAINES AND ILLINOIS RIVERS", APPROVED MAY 29, 1889, AS NOW OR HEREAFTER AMENDED, NO PERMIT FOR THE DEVELOPMENT OR CONSTRUCTION OF A NEW REGIONAL POLLUTION CONTROL FACILITY MAY BE GRANTED BY THE AGENCY UNLESS THE APPLICANT SUBMITS PROOF TO THE AGENCY THAT THE LOCATION OF SAID FACILITY HAS BEEN APPROVED BY THE COUNTY BOARD OF THE COUNTY IF IN AN UNINCORPORATED AREA, OR THE GOVERNING BODY OF THE MUNICIPALITY WHEN IN AN INCORPORATED AREA IN WHICH THE FACILITY IS TO BE LOCATED IN ACCORDANCE WITH SECTION 39.2 OF THIS ACT.

d) NO PERMIT SHALL BE ISSUED BY THE AGENCY FOR DEVELOPMENT OR OPERATION OF ANY FACILITY OR SITE LOCATED WITHIN THE BOUNDARIES OF ANY SETBACK ZONE ESTABLISHED PURSUANT TO THE ACT IN WHICH SUCH DEVELOPMENT OR OPERATOR IS PROHIBITED.

Section 813.105 Standards for Denial of a Permit

IF THE AGENCY DENIES ANY PERMIT UNDER THIS SECTION, THE AGENCY SHALL TRANSMIT TO THE APPLICANT WITHIN THE TIME LIMITATIONS OF SECTION 813.103 SPECIFIC, DETAILED STATEMENTS AS TO THE REASONS THE PERMIT APPLICATION WAS DENIED. SUCH A STATEMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

a) THE SECTIONS OF THE ACT WHICH MAY BE VIOLATED IF THE PERMIT WERE GRANTED;

b) THE PROVISION OF THE REGULATIONS, PROMULGATED UNDER THE ACT, WHICH MAY BE VIOLATED IF THE PERMIT WERE GRANTED;

c) THE SPECIFIC TYPE OF INFORMATION, IF ANY, WHICH THE AGENCY DEEMS THE APPLICANT DID NOT PROVIDE THE AGENCY; AND

d) A STATEMENT OF SPECIFIC REASONS WHY THE ACT AND BOARD REGULATIONS MIGHT NOT BE MET IF THE PERMIT WERE GRANTED.

Section 813.106 Permit Appeals

1. IF THE AGENCY REFUSES TO GRANT OR GRANTS WITH CONDITIONS A PERMIT THE APPLICANT MAY, WITHIN 35 DAYS, PETITION FOR A HEARING BEFORE THE BOARD TO CONTEST THE DECISION OF THE AGENCY. The petition shall be filed, and the proceeding conducted, pursuant to the procedures of Section 40 of the Act and 35 Ill. Adm. Code 105.

2. Preparation and distribution by the Agency of any draft permit is not a final decision for purposes of appeal.

Section 813.107 Permit No Defense

The issuance and possession of a permit shall not constitute a defense to a violation of the Act or any Board regulations, except for the development and operation of a landfill without a permit.

Section 813.108 Term of Permit

a) No permit issued pursuant to this Part shall have a term of more than five years.

b) A DEVELOPMENT PERMIT ISSUED UNDER SUBSECTION (A) OF SECTION 39 FOR ANY FACILITY OR SITE WHICH IS REQUIRED TO HAVE A PERMIT UNDER SUBSECTION (D) OF SECTION 21 SHALL EXPIRE AT THE END OF 2 CALENDAR YEARS FROM THE DATE UPON WHICH IT WAS ISSUED, UNLESS WITHIN THAT PERIOD THE APPLICANT HAS TAKEN ACTION TO DEVELOP THE FACILITY OR THE SITE. IN THE EVENT THAT REVIEW OF THE CONDITIONS OF THE DEVELOPMENT PERMIT IS SOUGHT PURSUANT TO SECTIONS 40 OR 41, OR THE PERMITTEE IS PREVENTED FROM COMMENCING

DEVELOPMENT OF THE FACILITY OR SITE BY ANY OTHER LITIGATION BEYOND THE PERMITTEE'S CONTROL, SUCH TWO-YEAR PERIOD SHALL BE DEEMED TO BEGIN ON THE DATE UPON WHICH SUCH REVIEW PROCESS OR LITIGATION IS CONCLUDED.

Section 813.109 Transfer of Permits

No permit is transferable from one person to another except as approved by the Agency. A new operator seeking transfer of a permit shall demonstrate compliance with all applicable financial assurance requirements.

Section 813.110 Adjusted Standards to Engage in Experimental Practices

a) Experimental practices may be implemented only at permitted landfills.

b) Pursuant to Section 28.1 of the Act and 35 Ill. Adm. Code 106.410-106.416, any person may, at any time, petition the Board for an adjusted standard to any standard in 35 Ill. Adm. Code 811 except 35 Ill. Adm Code 811.320 in order to engage in an experimental practice at a permitted landfill in accordance with the requirements of this section.

c) The petition for adjusted standard shall contain the following information:

1) A narrative description of the experiment, describing the necessity of this experiment and an assessment of the chances for success;

2) A list of all standards in 35 Ill. Adm. Code 811 that must be adjusted in order to conduct the experiment and a reason why each standard must be adjusted;

3) A description of the monitoring program to be implemented during the experiment;

4) Criteria for evaluating the success or failure of the experiment. The criteria shall be specific enough to allow the Agency to evaluate the success of the experiment from the monitoring results;

5) A description of the methods to be implemented and the total costs to restore the facility to compliance with all standards in 35 Ill. Adm. Code 811 if the experiment is determined to be a failure. The methods must be feasible with existing, acceptable methods; and

6) The time period necessary to conduct the experiment and sufficient documentation to show that this is the shortest practical time period. The time period to conduct the experiment may be extended only upon approval of the Board.

d) The Board will review all requests to conduct experimental practices in accordance with Section 28.1 of the Act and the following criteria:

1) There is no practical way to conduct the experiment in compliance with all requirements of 35 Ill. Adm. Code 811;

2) The experiment will be conducted in as short a time as possible;

3) It is possible to implement a monitoring plan to evaluate the experiment; and

4) It will be possible to restore the site of the experiment to meet all requirements of 35 Ill. Adm. Code 811, should the experiment fail.

e) Implementation of the Experimental Practice

Upon approval of the experimental practice by the Board, the operator shall file an application for significant modification of the permit with the Agency. The application shall contain the following information:

1) Detailed designs of all items to be constructed for use during the experiment;

2) The monitoring plan to be implemented during the experiment;

3) A plan for decommissioning and closing the experiment;

4) A time schedule for constructing the necessary items and closing, removing and stabilizing the area upon completion of the experiment;

5) An emergency cleanup plan describing the methods to be used to restore the facility to compliance with all standards in 35 Ill. Adm. Code 811 if the experiment is unsuccessful;

6) Cost estimates and financial assurance in an amount equal to the costs necessary to restore the facility to compliance with all regulations.

f) Evaluation of Experimental Practice

1) After completion of the experiment all monitoring data shall be submitted to the Agency to be compared with the criteria. The Agency shall determine the success or failure of the experiment by using the following criteria:

   A) An experiment is successful if the monitoring results meet or exceed the criteria for success set at the beginning of the experiment; and

   B) If the experiment does not cause or contribute to a violation of Board regulations or the Act.

2) Upon completion of the experiment the Agency shall return the financial assurance to the operator if the Agency determines that the experiment is a success. If the experiment is a failure, then the Agency shall return the instrument when the facility is restored to compliance with all regulations.

Section 813.111 Procedures for Contaminant Transport Models Used for Groundwater Impact Assessments

a) The Agency may designate groundwater contaminant models as acceptable for use by the applicant for a groundwater impact assessment. The applicant shall be relieved from demonstrating compliance with 35 Ill. Adm. Code 811.317 (c) 1, 2, and 3 in a permit application if a model accepted by the Agency has been used.

b) At the request of any person, the Agency may review a model. The person shall demonstrate that the model meets the minimum requirements of 35 Ill. Adm. Code 811.317 (c) 1, 2, and 3.

c) An applicant using a model accepted by the Agency shall submit documentation in a permit application showing that the code used in the groundwater impact assessment was the same code previously reviewed and accepted by the Agency.

d) The requirements of this Section shall in no way require an applicant to utilize a model accepted by the Agency. If a model is utilized that has not been reviewed and accepted by the Agency then the applicant shall include in the permit application all of the documentation necessary to demonstrate compliance with 35 Ill. Adm. Code 811.317 (c) (1), (2), and (3).

SUBPART B: ADDITIONAL PROCEDURES FOR SIGNIFICANT MODIFICATION OF PERMITS

Section 813.201 Initiation of a Significant Modification

a) Operator Initiated Modification

A significant modification to an approved permit may be initiated at the request of an operator at any time after the permit is approved. The operator initiates a significant modification by application to the Agency.

b) Agency Initiated Modifications

1) The Agency may modify a permit under the following conditions:

A) Correct a typographical or calculation error;

B) Correct a determination or condition based upon false or misleading information; or

C) Upon order of the Board.

2) Modifications initiated by the Agency shall not become effective until after 45 days of receipt by the operator, unless stayed during the pendency of an appeal to the Board. All other time periods and procedures in 813.203 shall apply.

Section 813.202 Information Required For a Significant Modification of an Approved Permit

The applicant shall submit all information required in 35 Ill. Adm. Code 812 that will be changed from that in the original approved permit.

Section 813.203 Specific Information Required for A Significant Modification To Obtain Operating Authorization

a) The operator shall not place any structure constructed at a landfill pursuant to a construction quality assurance program into service until an operating authorization has been issued by the Agency.

b) Prior to placing a structure into service, the applicant shall submit an acceptance report prepared in accordance with the requirements of 35 Ill. Adm. Code 811.605(d).

Section 813.204 Procedures For A Significant Modification of an Approved Permit

Applications for significant modifications shall be subject to all requirements and time schedules in Supart A.

SUBPART C: ADDITIONAL PROCEDURES FOR THE RENEWAL OF PERMITS

Section 813.301 Time of Filing

An application for renewal of a permit shall be filed with the Agency at least 90 or 180 days, depending upon which Agency final action deadline applies pursuant to Section 39(a) of the Act, prior to the expiration date of the existing permit.

Section 813.302 Effect of Timely Filing

WHEN A PERMITTEE HAS MADE TIMELY AND SUFFICIENT APPLICATION FOR THE RENEWAL OF A PERMIT, THE EXISTING PERMIT SHALL CONTINUE IN FULL FORCE AND EFFECT UNTIL THE FINAL AGENCY DECISION ON THE APPLICATION HAS BEEN MADE AND ANY FINAL BOARD DECISION ON ANY APPEAL PURSUANT TO SECTION 40 HAS BEEN MADE UNLESS A LATER DATE IS FIXED BY ORDER OF A REVIEWING COURT.

Section 813.303 Information Required For A Permit Renewal

a) The operator shall submit only that information required in 35 Ill. Adm. Code 812 that has changed since the last permit review by the Agency.

b) The operator shall update the groundwater impact assessment in accordance with 813.304; and

c) The operator shall provide a new cost estimate for closure and postclosure care based upon the operations expected to occur in the next permit term.

Section 813.304 Updated Groundwater Impact Assessment

a) The applicant shall conduct a new groundwater impact assessment in accordance with 35 Ill. Adm. Code 811.317 if any of the following changes in the facility or its operation will result in an increase in the probability of exceeding a groundwater standard beyond the zone of attenuation:

1) New or changed operating conditions;

2) Changes in the design and operation of the liner and leachate collection system;

3) Changes due to more accurate geological data;

4) Changes due to modified groundwater conditions due to offsite activity.

5) Changes due to leachate characteristics; or

b) If the operator certifies that the conditions applicable to the original assessment have not changed in such a way as to result in an unacceptable impact to groundwater outside the zone of attenuation and no monitoring well shows concentrations of constituents in groundwater greater than their maximum allowable concentrations, then a new groundwater impact assessment need not be performed.

Section 813.305 Procedures for Permit Renewal

Applications for permit renewal shall be subject to all requirements and time schedules in Subpart A.

SUBPART D: ADDITIONAL PROCEDURES FOR INITIATION AND TERMINATION OF TEMPORARY AND PERMANENT CLOSURE AND POSTCLOSURE CARE

Section 813.401 Agency Notification Requirements

a) The operator shall send to the Agency a notice of closure within 30 days after the date the final volume of waste is received.

b) The operator shall notify the Agency within 30 days after a temporary suspension of waste acceptance. The operator must comply with the requirements of the temporary suspension plan.

c) Until closure has been completed, the operator shall maintain a copy of the closure plan at the site or at a definite location, specified in the permit, so as to be available during inspection of the site.

Section 813.402 Certification of Closure

a) When closure of a unit is completed, the operator shall submit to the Agency:

1) Plan sheets for the closed unit; and

2) An affidavit by the operator and by a professional engineer that the unit has been closed in accordance with the closure plan and all requirements of 35 Ill. Adm. Code 811.

b) When the Agency finds that the unit has been closed in accordance with the specifications of the closure plan,

and the closure requirements of this Part, the Agency shall:

1) Issue a certificate of closure; and

2) Specify the date the postclosure care period begins.

Section 813.403 Termination of the Permit

a) At the end of the postclosure care period the operator and a professional engineer shall certify that postclosure care is no longer necessary. The certification shall include information demonstrating the following:

1) Leachate removal is no longer necessary;

2) Landfill gas collection is no longer necessary;

3) Gas monitoring is no longer necessary;

4) Groundwater monitoring is no longer necessary;

5) The surface has stabilized and is no longer subject to settling or erosion;

6) The facility does not constitute a threat of pollution to surface water; and

7) The operator has completed all requirements of the postclosure plan.

b) Within 60 days after receiving the certification required in subsection (a), the Agency shall notify the operator in writing that it is no longer required to maintain financial assurance for postclosure care of the site, unless the Agency has reason to believe that continued postclosure care is required pursuant to the postclosure care plan and this Part.

c) If the operator is not required to give financial assurance, then within 60 days after receiving the certification required in subsection (a), the Agency shall notify the operator in writing that the permit is terminated, unless the Agency has reason to believe that continued postclosure care is required pursuant to the postclosure care plan and this Part.

d) The operator may deem the Agency action pursuant to this section as a permit denial for purposes of appeal pursuant to Section 40 of the Act.

SUBPART E: REPORTS TO BE FILED WITH THE AGENCY

Section 813.501 Annual Reports

a) All permitted landfills shall submit annual reports to the Agency during operation and for the entire postclosure monitoring period.

b) Agency Review of The Report

1) The Agency shall conduct a review of the annual report 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.

c) All annual reports shall contain the following information:

1) A waste volume summary which includes:

A) Total amount of solid waste accepted at the facility; and

B) Remaining capacity in each unit;

2) Monitoring data from the leachate collection system, groundwater monitoring network, gas monitoring system, and other monitoring data required by the Agency, 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) Signature of the person in responsible charge of preparing the report.

Section 813.502 Quarterly Groundwater Reports

All groundwater monitoring data shall be submitted to the Agency on a quarterly basis, in accordance with a schedule approved in the permit.

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

Information developed by the operator 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.

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: SOLID WASTE AND SPECIAL WASTE HAULING
PART 814
INTERIM STANDARDS FOR EXISTING LANDFILLS AND UNITS

SUBPART A: GENERAL REQUIREMENTS

Section
814.101 Scope and Applicability
814.102 Compliance Date
814.103 Notification to Agency of Facilities Status
814.104 Applications For Significant Modification of Permits For Existing Facilities
814.105 Effect of Timely Filing of Notification of Facility Status and Application For Significant Modification
814.106 Agency Action On Applications For Significant Modifications to Existing Permits

SUBPART B: STANDARDS FOR UNITS ACCEPTING INERT WASTE

Section
814.201 Scope and Applicability
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SUBPART C: STANDARDS FOR EXISTING UNITS ACCEPTING CHEMICAL AND PUTRESCIBLE WASTES THAT MAY REMAIN OPEN FOR MORE THAN SEVEN YEARS

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814.301 Scope and Applicability
814.302 Applicable Standards

SUBPART D: STANDARDS FOR EXISTING UNITS ACCEPTING CHEMICAL AND PUTRESCIBLE WASTES THAT MUST INITIATE CLOSURE WITHIN SEVEN YEARS

Section
814.401 Scope and Applicability
814.402 Applicable Standards

SUBPART E: STANDARDS FOR EXISTING UNITS ACCEPTING INERT WASTE ONLY, OR ACCEPTING CHEMICAL AND PUTRESCIBLE WASTES THAT MUST INITIATE CLOSURE WITHIN TWO YEARS

Section
814.501 Scope and Applicability
814.502 Standards for Operation and Closure

AUTHORITY: Implementing Sections 5, 21, 21.1, 22 and 22.17, and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1005, 1021, 1021.1, 1022, 1027 and 1022.17).

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

NOTE: Capitalization is used to indicate that the language quotes or paraphrases a statute.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: SOLID WASTE AND SPECIAL WASTE HAULING
PART 814
INTERIM STANDARDS FOR EXISTING LANDFILLS AND UNITS

SUBPART A: GENERAL REQUIREMENTS

Section 814.101 Scope and Applicability

This Part establishes the standards applicable to landfills which are disposing of waste as of the effective date of this Part. This Part establishes different requirements for new disposal units and existing disposal units within such landfills. Landfill operators are required to determine the date on which their facilities must begin closure, which is dependent upon the ability of existing units to meet the design and performance standards contained in this Part.

Section 814.102 Compliance Date

Unless otherwise expressly provided, all landfills with existing units shall comply with the requirements of this Part within 6 months of the effective date of these regulations.

Section 814.103 Notification to Agency of Facilities Status

Six months after the effective date of these regulations, all operators shall send notification to the Agency describing status of the facility, estimated date of closure of pre-existing units, and whether the facility is subject to the requirements of Subpart B, Subpart C, Subpart D, or Subpart E.

Section 814.104 Applications For Significant Modification of Permits For Existing Facilities

a) All operators shall file an application for a significant modification to their permits for existing units, unless the units will be closed pursuant to Subpart E within two years of the effective date of these regulations.

b) The operator of an existing unit shall submit all information required in 35 Ill. Adm. Code 812 that is

necessary to demonstrate compliance with Subpart B, Subpart C or Subpart D, whichever is applicable.

c) The application shall be filed within 48 months of the effective date of these regulations, or at such earlier time as the Agency shall specify in writing.

d) The application shall be made pursuant to the procedures of 35 Ill. Adm. Code 813.

Section 814.105 Effect of Timely Filing of Notification of Facility Status and Application For Significant Modification

a) Permits issued pursuant to 35 Ill. Adm. Code 807 prior to the effective date of this Part remain in full force and effect until superseded by a permit issued pursuant to this Part or until revoked as a result of an enforcement action brought pursuant to Title VIII of the Environmental Protection Act (Act), Ill. Rev. Stat. 1985, ch. 111 1/2, par. 1001 et seq.

b) An operator who has timely filed a notification of facility status and an application for significant permit modification shall continue operation under the terms of its existing permits until final determination by the Agency on its application and any subsequent appeal to the Board pursuant to Section 40 of the Act. During this time, the operator will be deemed to be in compliance with all requirements of this Part.

Section 814.106 Agency Action On Applications For Significant Modifications to Existing Permits

The Agency shall review applications for significant modifications to existing permits in accordance with the requirements and procedures of 35 Ill. Adm. Code 813.

SUBPART B: STANDARDS FOR UNITS ACCEPTING INERT WASTE

Section 814.201 Scope and Applicability

a) The standards in this Subpart are applicable to all existing units of landfills, including those exempt from permit requirements in accordance with Section 21(d) of the Act, that accept only inert waste. Units that meet the requirements of this Subpart may remain open for an indefinite period of time after the effective date of these regulations.

b) Units which are unable to comply with the requirements of this Subpart are subject to the requirements of Subpart D.

Section 814.202 Applicable Standards

Units which accept only inert waste shall be subject to all of the requirements Subparts A and B of 35 Ill. Adm. Code 811.

SUBPART C: STANDARDS FOR EXISTING UNITS ACCEPTING CHEMICAL AND PUTRESCIBLE WASTES THAT MAY REMAIN OPEN FOR MORE THAN SEVEN YEARS

Section 814.301 Scope and Applicability

a) The standards in this Subpart are applicable to all existing units of landfills, including those exempt from permit requirements in accordance with Section 21 (d) of the Act, that accept chemical and putrescible wastes. Units that meet the requirements of this Subpart may remain open for an indefinite period of time after the effective date of these regulations.

b) Units which are unable to comply with the requirements of this Subpart are subject to the requirements of Subpart D or Subpart E.

Section 814.302 Applicable Standards

a) All of the requirements for new units described in 35 Ill. Adm. Code 811 shall apply to units regulated under this Subpart except the following:

1) The location standards in 35 Ill. Adm. Code 811.302 (a), (d), and (e);

2) The foundation and mass stability analysis standards in 35 Ill. Adm. Code 811.304 and 811.305;

3) The final cover requirements of 35 Ill. Adm Code 811.314 shall not apply to units or parts of units closed , covered and vegetated prior to the effective date of these regulations;

4) The liner and leachate drainage and collection requirements of 35 Ill. Adm. Code 811.306, 811.307, and 811.308; and

5) The hydrogeological site investigation requirements of 35 Ill. Adm. Code 811.315, except that enough information shall be collected to implement a groundwater monitoring program in accordance with 35 Ill. Adm. Code 811.318 and establish background concentrations for the purpose of establishing water quality standards pursuant to 35 Ill. Adm. Code 811.320; and

b) Units regulated under this Subpart shall be subject to the following standards:

1) The unit must be equipped with a system to drain and collect leachate and transport it to a leachate management system. The collection system need not be designed in compliance with the requirements of 35 Ill. Adm Code 811.307 and 811.308.

2) The completed unit shall achieve a long-term static safety factor against slope failure of 1.5;

3) Calculation of the Design Period

For the purposes of calculating financial assurance the design period shall be calculated as follows:

A) The design period shall be no less than five years;

B) The postclosure care period shall be extended by three years for each year the unit is expected to be in operation up to the applicable design period required in 35 Ill. Adm. Code 811 (For example, an existing unit with an expected life of 7 years after the effective date of these regulation would be required to provide financial assurance for 21 years of postclosure care, 21=7x3. For a unit expected to be in operation for 12 more years: 36=12x3, but 30 is less than 36 so the applicable design period is 30 years.); and

C) The design period may not be reduced as allowed by 35 Ill. Adm. Code 811.303.

SUBPART D: STANDARDS FOR EXISTING UNITS ACCEPTING CHEMICAL AND PUTRESCIBLE WASTES THAT MUST INITIATE CLOSURE WITHIN SEVEN YEARS

Section 814.401 Scope and Applicability

a) The standards in this Subpart are applicable to all existing units of landfills, including those exempt from permit requirements in accordance with Section 21 (d) of the Act, that accept chemical and putrescible wastes. Units that meet the requirements of this Subpart shall initiate closure within seven years after the effective date of these regulations.

b) Units which are unable to comply with the requirements of this section are subject to the requirements of Subpart E.

Section 814.402 Applicable Standards

a) All of the requirements for new units described in 35 Ill. Adm. Code 811 shall apply to units regulated under this Subpart except the following:

1) The location standards in 35 Ill. Adm. Code 811.302 (a), (c), (d), and (e);

2) The foundation and mass stability analysis standards in 35 Ill. Adm. Code 811.304 and 811.305;

3) The liner and leachate drainage and collection requirements of 35 Ill. Adm. Code 811.306, 811.307, and 811.308;

4) The final cover requirements of 35 Ill. Adm Code 811.314 shall not apply to units or parts of units closed , covered and vegetated prior to the effective date of these regulations;

5) The hydrogeological site investigation requirements of 35 Ill. Adm. Code 811.315;

6) The groundwater impact assessment standards of 35 Ill. Adm. Code 811.317;

7) The groundwater monitoring program requirements of 35 Ill. Adm. Code 811.318 (d); and

8) The groundwater quality standards of 35 Ill. Adm. Code 811.320 (a), (b) and (c); and

b) The following standards shall apply to units regulated under this Subpart:

1) The unit may not expand beyond the area disturbed prior to the effective date of these regulations;

2) After the effective date of these regulations, the unit may not apply for supplemental wastestream permits to accept new special wastes. However, the unit may continue to accept special waste under permits existing prior to the effective date of these regulations and may renew those permits as necessary.

3) Groundwater Standards

A) A unit shall not contaminate a source of drinking water at the compliance boundary defined as the edge of the unit. At any point on the compliance boundary, the concentration of constituents shall not exceed the water

quality standards specified in 35 Ill. Adm. Code 302.301, 302.303, 302.304, and 302.305 at the edge of the zone of compliance. The Board may adjust the zone of compliance in accordance with Section 28.1 and the procedures of 35 Ill. Adm. Code 106.410-106.416 of the Act upon demonstration by the operator that the alternative zone would not result in contamination of groundwater which may be needed or used for human consumption. The Board shall consider the following factors:

i) The hydrogeological characteristics of the unit and surrounding land, including any natural attenuation and dilution characteristics of the aquifer;

ii) The volume and physical and chemical characteristics of the leachate;

iii) The quantity, quality, and direction of flow of groundwater underlying the facility;

iv) The proximity and withdrawal rates of groundwater users;

v) The availability of alternative drinking water supplies;

vi) The existing quality of the groundwater, including other sources of contamination and their cumulative impacts on the groundwater;

vii) Public health, safety, and welfare effects; and

viii) In no case shall the zone of compliance extend beyond the property line or beyond the annual high water mark of any navigable surface water.

4) Calculation of the Design Period

For the purposes of calculating financial assurance the design period shall be calculated as follows:

A) The design period shall be no less than five years; and

B) The postclosure care period shall be extended by three years for each year the unit is

expected to be in operation up to the applicable design period required in 35 Ill. Adm. Code 811. (For example, an existing unit with an expected life of 3 years after the effective date of these regulation would be required to provide financial assurance for 9 years of postclosure care, 9=3x3.)

C) The design period may not be reduced as allowed by 35 Ill. Adm. Code 811.303.

SUBPART E: STANDARDS FOR EXISTING UNITS ACCEPTING INERT WASTE ONLY, OR ACCEPTING CHEMICAL AND PUTRESCIBLE WASTES THAT MUST INITIATE CLOSURE WITHIN TWO YEARS

Section 814.501 Scope and Applicability

a) The standards in this Subpart are applicable to all existing units of landfills, including those exempt from permit requirements in accordance with Section 21 (d) of the Act, that accept inert waste only, or which accept chemical and putrescible wastes.

b) All units that cannot demonstrate compliance with the requirements of Subpart B or Subpart C or are scheduled to begin closure within two years of the effective date of these regulations must begin closure within two years of the effective date of these regulations.

c) A new permit shall not be required for any facility at which all units will close within two years of the effective date of these regulations.

Section 814.502 Standards for Operation and Closure

a) All units regulated in this Subpart are subject to all requirements in 35 Ill. Adm. Code 807.

b) All units regulated under this Subpart are subject to all conditions of the existing permit.

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: SOLID WASTE AND SPECIAL WASTE HAULING
PART 815: PROCEDURAL REQUIREMENTS FOR ALL LANDFILLS EXEMPT FROM PERMITS

SUBPART A: GENERAL REQUIREMENTS

Section
815.101 Scope and Applicability
815.102 Required Signatures

SUBPART B: INITIAL FACILITY REPORT

Section
815.201 Scope and Applicability
815.202 Filing Deadline
815.203 Information to be Filed
815.204 Required Signatures

SUBPART C: ANNUAL REPORTS

815.301 Scope and Applicability
815.302 Reporting Period
815.303 Information to be Submitted

SUBPART D: QUARTERLY GROUNDWATER REPORTS

815.401 Scope and Applicability
815.402 Filing Schedule

SUBPART E: INFORMATION TO BE RETAINED ONSITE

815.501 Scope and Applicability
815.502 Acceptance Reports
815.503 Other Information

AUTHORITY: Implementing Sections 5 and 21, and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1005, 1021, and, 1027).

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER h: SOLID WASTE AND SPECIAL WASTE HAULING
PART 815: REPORTING REQUIREMENTS FOR ALL LANDFILLS EXEMPT FROM PERMITS

SUBPART A: GENERAL REQUIREMENTS

Section 815.101 Scope and Applicability

The requirements of this Part are applicable to all landfills exempt from permits pursuant to Section 21 (d) of the Environmental Protection (Act), Ill. Rev. Stat. 1985, ch. 111 1/2, par. 1021(d).

Section 815.102 Required Signatures

All reports shall be signed by a duly authorized agent. The following persons are considered duly authorized agents:

a) For Corporations, a principal executive officer of at least the level of vice president

b) For a sole proprietorship or partnership, a proprietor or general partner, respectively;

c) For a municipality, state, federal or other public agency, by the head of the agency or ranking elected official.

SUBPART B: INITIAL FACILITY REPORT

Section 815.201 Scope and Applicability

All landfills regulated under this Part shall file an initial facility report with the Agency.

Section 815.202 Filing Deadline

a) Existing Facilities

The initial facility report shall be filed with the Agency within two years of the effective date of these regulations.

b) New Facilities

The initial facility report shall be filed with the Agency before waste is accepted.

Section 815.203 Information to be Filed

a) New Units

All of the information required in 35 Ill. Adm. Code 812 except 35 Ill. Adm. Code 812.101, 812.103, 812.104, 812.105, and 812.116 shall be filed with the Agency.

b) Existing Units

All of the information required by 35 Ill. Adm. Code 812, except 35 Ill. Adm. Code 812.101, 812.103, 812.104, 812.105, and 812.116, that is applicable to an existing unit, as described in 35 Ill. Adm. Code 814, shall be filed with the Agency.

Section 815.204 Required Signatures

a) All initial facility reports shall contain the name, address, and telephone number of a duly authorized agent to whom all inquiries and correspondence shall be addressed.

b) All initial facility reports shall be signed by a duly authorized agent and shall be accompanied by evidence of authority to sign the report and shall be notarized.

SUBPART C: ANNUAL REPORTS

Section 815.301 Scope and Applicability

All landfills regulated under this Part shall file an annual report with the Agency.

Section 815.302 Reporting Period

Annual reports shall be filed during operation of the facility and for the entire postclosure monitoring period.

Section 815.303 Information to be Submitted

All annual reports shall contain the following information:

a) A waste volume summary which includes:

1) Total amount of solid waste accepted at the facility; and

2) Remaining Capacity in each unit;

b) Monitoring Data from the leachate collection system, groundwater monitoring network, gas monitoring system, and other monitoring data required by the Agency, including:

1) Graphical results of monitoring efforts;

2) Statistical summaries and analysis of trends;

3) Changes to the monitoring program; and

4) Discussion of error analysis, detection limits, observed trends.

c) 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.

d) A summary of all significant modifications made to the operation during the course of the year.

e) Signature of the person in responsible charge of preparing the report.

SUBPART D: QUARTERLY GROUNDWATER REPORTS

Section 815.401 Scope and Applicability

All landfills regulated under this Part shall file all groundwater monitoring data with the Agency containing the information required in this Subpart.

Section 815.402 Filing Schedule

The reports shall be submitted to the Agency on a quarterly basis, in accordance with the following schedule:

a) April 15 for activities in January, February and March;

b) July 15 for activities during April May and June;

c) October 15 for activities during July, August and September; and

d) January 15 for activities during October, November and December.

SUBPART E: INFORMATION TO BE RETAINED ONSITE

Section 815.501 Scope and Applicability

All facilities exempt from permits pursuant to Section 21 (d) of the Act shall retain the information required to be collected by the operator shall retain the information on the site for the entire postclosure care period.

Section 815.502 Acceptance Reports

At the end of each major phase of construction and prior to placing a structure into use, the CQA officer shall prepare an acceptance report in accordance with the requirements of 35 Ill. Adm. Code 811.605 (d). All acceptance reports shall be retained at the site in accordance with this subpart

Section 815.503 Other Information

Information developed by the operator but not yet filed with 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.

SOURCE: Adopted in R88-7 at _____ Ill. Reg. _____, effective _____