

ILLINOIS POLLUTION CONTROL BOARD
November 3, 1994

IN THE MATTER OF:)
)
REGULATION OF LANDSCAPE) R93-29
WASTE COMPOST FACILITIES) (Rulemaking)
35 ILL. ADM. CODE 830-832)

Proposed Rule. Final Order.

OPINION AND ORDER OF THE BOARD (by M. McFawn):

On November 30, 1993, the Illinois Environmental Protection Agency (Agency) filed with the Board a proposal for regulating landscape waste compost facilities in Illinois. The Agency filed its proposal in response to Section 22.33 of the Environmental Protection Act (Act) (415 ILCS 5/1 et seq.), which directed the Agency to develop and recommend to the Board by January 1, 1994 regulations establishing performance standards for landscape waste compost facilities, and testing procedures and standards for end-product compost produced by such facilities. Section 22.33 of the Act requires the Board to adopt performance standards for landscape waste compost facilities by December 1, 1994. Today the Board adopts such regulations, as modified through the public hearing process, as final rules.¹

DEVELOPMENT OF THE REGULATORY PROPOSAL

In order to assist the Agency in developing its proposal, Section 22.33 of the Act directed the Agency to appoint, in conjunction with the Department of Energy and Natural Resources (DENR), a compost advisory committee composed of a balanced representation of interest groups. In response, the Agency and DENR appointed the Compost Quality Standards Technical Advisory Committee (CQSTAC), which consisted of representatives of academia, environmental groups, the composting industry, the landscaping industry, municipalities, counties, and the Department of Agriculture. The CQSTAC met seven times between July 12, 1993 and November 23, 1993 to advise and assist the Agency in developing its proposal.

The regulatory proposal submitted by the Agency contained three parts: Parts 830 through 832. Part 830 of the proposal, which contained operating standards for compost facilities and quality standards for end-product compost, reflected the input

¹ The Board gratefully acknowledges the high quality assistance of the hearing officer, Kevin Desharnais, and the valuable technical assistance of Hiten Soni and Anand Rao, all of which contributed greatly to the successful development of these rules.

received by the Agency from the CQSTAC. Parts 831 and 832 of the regulations were proposed to the Board as an independent Agency effort to codify permitting procedures and requirements that are already largely in practice pursuant to the Agency's authority under Section 39(m). Part 831 sets forth the information required to be included in a permit application, while Part 832 sets forth procedural requirements for the issuance of permits.

PROCEDURAL HISTORY

The Board held hearings on April 15, 1994 in Chicago, and April 22, 1994 in Springfield, to discuss the merit and economic impact of the proposed rules. The April 15, 1994 hearing was reserved for the Agency's presentation of its proposal and response to questions. The April 22, 1994 hearing began with the Agency's response to additional questions, and continued with the testimony and response to questions of other interested parties. Additional testimony was presented by Joanna Hoelscher of Citizens for a Better Environment, Kevin Rogers of EMI Environmental Management, and Kristina Karr, the Resource Recovery Manager for the City of Naperville. The Board issued its first notice opinion and order on June 30, 1994, and the proposed regulations were published in the *Illinois Register* as follows: Part 831 appeared at 18 Ill. Reg. 11025, Part 832 appeared at 18 Ill. Reg. 11033, and Part 830 appeared at 18 Ill. Reg. 11040.

In response to the request of certain participants, and in order to allow the Agency to respond to questions posed by the Board in the first notice opinion, the Board held a third hearing during the first notice period on August 3, 1994. In addition to the Agency's response to Board questions, additional testimony was presented by Mr. Mark Heffernan of Convergent Biomass Technologies, Ms. Lisa Disbrow of Waste Management, Mr. Jerome Joyce, and Mr. David Albers. The Board sent the proposed rules to second notice on September 15, 1994, and the Joint Committee on Administrative Rules issued a notice of no objection on October 12, 1994.

During the rulemaking process, fourteen public comments were submitted to the Board. Comments were received from members of the CQSTAC, government agencies, the regulated community, and hearing participants. The Board has considered all testimony and exhibits, as well as these public comments, in reaching its decisions in this rulemaking.

REGULATORY FRAMEWORK

These regulations establish location and operation standards for landscape waste compost facilities, quality standards and testing procedures for all end-product compost offered by facilities for sale or use in Illinois, and permitting procedures

for certain landscape waste compost facilities. There are two types of facilities subject to these regulations: permitted facilities and permit-exempt facilities. As proposed, the regulations applicable to these facilities are divided into three parts: Part 830, which contains the location and operation standards for compost facilities, and the quality standards for end-product compost; Part 831, which sets forth the information which must be included in a permit application; and Part 832, which sets forth the procedural requirements for the permitting of compost facilities. Obviously, Parts 831 and 832 apply only to permitted facilities.

Part 830 of the regulations establishes several classes of facilities which are subject to different levels of regulation. Section 830.201 details the requirements applicable to each class of permit-exempt facility and to permitted facilities. However, before examining each, one exemption from these regulations as a whole must be recognized. The discussion pertaining to this exemption precedes the detailed discussion about each class and its respective requirements.

Gardeners' Exemption

An exemption, most readily referred to as the "gardeners' exemption," is set forth within the definition of "landscape waste compost facility" found at Section 830.102. For purposes of these regulations, landscape waste operations which have no more than 25 cubic yards of material on-site at one time, and which do not engage in commercial activity are *not* landscape waste compost facilities. Excluded from the definition of landscape waste facility, this type of facility is exempted entirely from these regulations. That exemption is spelled out at Section 830.201(a). Because of this exemption, very small composting operations such as those conducted in residential backyards, community gardens, or urban landscaping projects, are not subject to this regulatory scheme.

Permit-Exempt Facilities

There are three classes of regulated facilities which are exempt from the permitting requirements. Each class is permit-exempt by statute. The permit-exempt classes are: 1) on-site facilities which do not offer compost for off-site sale or use, exempted pursuant to Section 21(q)(1) of the Act; 2) commercial on-site facilities, also exempted pursuant to Section 21(q)(1) of the Act; and 3) on-farm facilities, exempted pursuant to Section 21(q)(3) of the Act. The following is a summary of the location, operation, and end-product quality standards applicable to each class of permit-exempt facility.

On-Site Facilities which do not offer compost for off-site sale or use. The first class of permit-exempt facility created

under the regulations is made up of on-site facilities which compost landscape waste generated on-site, and which do not offer end-product compost for off-site sale or use. Pursuant to Section 21(q)(1) of the Act, these facilities are exempted from any permitting requirements. Pursuant to Section 22.33 of the Act, these facilities are also exempted from any performance standards or end-product quality standards. However, these facilities are subject to the location standards set forth in Section 830.203.

On-Site Commercial Facilities. The second class of permit-exempt facility is on-site commercial facilities. These are on-site facilities which offer their end-product compost for off-site sale or use. Pursuant to Section 21(q)(1) of the Act, these facilities are also exempt from permitting requirements. However, these facilities must comply with the performance standards in Section 830.202 and the location standards in 830.203. Additionally, the end-product compost generated at these sites must comply with the standards set forth in Subpart E.

On-Farm Landscape Waste Compost Facilities. The third class of permit-exempt facility is on-farm landscape waste compost facilities. Pursuant to Section 21(q)(3) of the Act, on-farm facilities which meet certain detailed location, operation, and recordkeeping requirements are exempt from permitting requirements. The statutory location and operation requirements for such facilities are incorporated into the regulations at Section 830.106, and the recordkeeping requirements are incorporated into the regulations at Section 830.202(h)(3). In addition, operators of on-farm landscape waste compost facilities must comply with the general performance standards contained in Section 830.202.

Permitted Facilities

Permitted facilities consist of all facilities which are not on-site facilities or on-farm landscape waste compost facilities. These facilities must comply with all the requirements in Sections 830.202 through 830.213, and their end-product must meet the standards found in Subpart E. Additionally, these facilities must comply with the financial assurance requirements of Subpart F, and must submit a permit application which complies with the requirements outlined in Part 831.

Application of Location and Minimum Performance Standards

Throughout this proceeding, the most difficult issue was how to best regulate all landscape waste compost facilities given the statutory constraints pertaining to permitting and the applicability of performance standards. The Agency originally proposed that location standards be applicable only to on-site

commercial facilities and permitted facilities, and that only minimum performance standards be applicable to on-site commercial facilities. The Board found this scheme wanting since the environmental threat posed by landscape waste compost facilities is not dependent upon their permit status. To compensate, the Board originally sought to base applicability upon the size of a facility. The dilemma was then to ascertain the appropriate facility size to trigger applicability. In response to queries by the Board seeking an answer to that question, the Agency submitted an inventory of facilities in Illinois and testimony during first notice. Based upon that information, the Board determined that a size limitation was not the best approach for two reasons. First, the inventory was not accurate enough to identify what size of a facility would pose environmental consequences. Second, the Agency testimony indicated that the operation of a facility is the more critical element as to environmental consequences. Accordingly, the Board forewent the size approach to applicability and instead made the location standards and the minimum operational standards applicable to the maximum extent possible under the Act. All landscape waste compost facilities, but for the gardeners' exemption, are therefore subject to the location standards set forth at Section 830.203, and on-site commercial and permitted facilities are subject to enhanced minimum performance standards set forth at Section 830.202.

Since operation of the facility is a most critical element in protecting the environment, we examined the additional performance and operating standards proposed by the Agency for permitted facilities to determine which would be desirable for application to those landscape waste compost facilities which can be so regulated. While adoption of many of the operating standards found in Section 830.205 was attractive as a means of better regulating these facilities, the Board was persuaded by the Agency that absent a permit, implementation and enforcement on an individual basis would be difficult. However, the Agency had often cited the requirements contained therein as solutions to the problems raised at hearing regarding nuisance odor complaints and resolution of the same. Therefore, we grafted the odor control regulations for permitted facilities from Section 830.205 to Section 830.202 in large part. Now the minimum performance and operating standards require that all landscape waste compost facilities, but for the on-site facilities which are statutorily exempt from performance standards, i.e., on-site facilities, develop and adhere to facility-specific nuisance odor control plans. The Board also developed and adopted a public notice and self-reporting scheme concerning odor complaints at Section 830.202 to insure that the Agency is promptly and routinely advised when a facility's operation is giving rise to odor complaints. Given this information, the Agency or its delegated authority can promptly investigate the complaints as warranted based on the frequency and nature of the complaints.

Finally, for these reasons, we shortened the duration of permits from the proposed ten years to five years. This change will allow the Agency and the public more frequent opportunity to examine the on-going operations of a facility in a context other than enforcement proceedings.

SECTION-BY-SECTION SUMMARY

Part 830: Operating Standards for Compost Facilities and Standards for End-product Compost

Part 830 of the regulations establishes operating standard for landscape waste compost facilities offering compost for sale or use, and establishes testing procedures and quality standards for all end-product compost offered by a facility for sale or use in Illinois. As discussed below, these regulations apply to all composting facilities not specifically exempted. The exemptions are summarized at 35 Ill. Adm. Code 830.104.

Subpart A: General Provisions

Subpart A contains eight sections. The most general are Section 830.101: Purpose, Scope and Applicability; Section 830.103: Incorporations by Reference; Section 830.107: Compliance Timeframe; and Section 830.108: Severability. The sections more specific to this rulemaking are those containing the definitions at Section 830.102 and the exemptions to the rules and permit requirements. These are found at Sections 830.104, 830.105 and 830.106.

Gardeners' Exemption and Daily Cover Exemption. Section 830.102 sets forth the definitions of terms used in Parts 830 through 832. Several definitions are taken directly from the Act, while others were developed by the Agency in negotiations with the CQSTAC. Still others, e.g. "Garden Compost Operation" and "On-Site Commercial Facility," were developed during the hearing process in order to clarify the regulations.

Section 830.104 restates two exemptions from various requirements of the regulations. The first was proposed by the Agency in conjunction with the CQSTAC as a clarification of the intended scope of the regulations, while the second was contained in the Act.

The first exemption, set forth at Section 830.104, is based on the definition of landscape waste compost facility contained in Section 830.102, which excludes landscape waste composting operations which have no more than 25 cubic yards of yard waste, composting material, or end-product compost on-site at one time, and which do not engage in commercial activity, i.e, the gardeners' exemption. The definition of landscape waste facility thus excludes small, non-commercial landscape waste composting

operations entirely from the requirements of these regulations. For purposes of clarity and continuity, the gardeners' exemption is repeated at Section 830.104(a).

The second exemption, contained in Section 830.104(b), sets forth the statutory exemption from the testing requirements of Subpart E for end-product compost used as a daily cover or vegetative amendment in the final layer of a landfill. Section 22.33 of the Act exempts end-product compost from landscape waste facilities from these testing requirements. Section 830.104(c) clarifies that landfills must obtain Agency approval in order to use end-product compost for this purpose.

Permit-Exemption. Section 830.105 restates the three statutory exemptions from the requirement to have a permit found at Section 21(q) of the Act. First, at Section 830.105(a), on-site landscape waste composting facilities which produce end-product compost that will not be offered for off-site sale or use are explicitly exempted from the permitting requirements of these regulations. The language therein is taken directly from Section 21(q)(1) of the Act.

Second, Section 830.105(b), restates that the application of landscape waste or composted landscape waste at agronomic rates is also exempted from the requirement to have a permit. This exemption and the definition of agronomic rates are found at Section 21(q)(2) of the Act. The definition of agronomic rates is restated at Section 830.102 of these rules. Finally, Section 830.105(c) contains the permit-exemption for on-farm landscape waste compost facilities which meet the criteria specified in Section 830.106. These criteria are statutorily prescribed in detail at Section 21(q)(3) of the Act.

On-Farm Landscape Waste Compost Facilities. Section 830.106 sets forth the location and operating criteria applicable to on-farm landscape waste compost facilities as adopted almost verbatim from Section 21(q)(3) of the Act. If the on-farm composting operation satisfies all the criteria, the operation is exempt from the permit requirement. Of course, the owner or operator could choose to operate otherwise. If the operational criteria are not met, the operation might then become subject to permit requirements of the Act. Furthermore, the location, performance, and recordkeeping requirements of Sections 830.204 *et seq.* may also become applicable.

In order to qualify for this exemption, an on-farm landscape waste composting operation must be operated by the owner on the property on which the composting material is utilized. The property must be principally dedicated to production of agricultural crops, and the composting facility must constitute no more than two percent of the total acreage, unless otherwise allowed by the Agency. Finished compost may not be stored at the

site for longer than 18 months. The compost generated by an on-farm facility must be applied at "agronomic rates," which is statutorily defined as "application of not more than 20 tons per acre per year, unless the Agency determines that the owner or operator has demonstrated that a higher rate is required at a particular site, based on soil characteristics or crop needs." (Section 21(q) of the Act; restated at 35 Ill. Adm. Code 830.102.)

These regulations, which parallel the Act, also incorporate several restrictions on the relationships between the operators of on-farm facilities and waste haulers and generators. An on-farm facility may not be located on property owned, leased or controlled by a waste hauler or generator of non-agricultural compost materials, and the operator of such a facility may not be an employee, partner, shareholder or be otherwise connected with a waste hauler or generator.

These regulations, consistent with the Act, also establish restrictions on the application of compost generated at an on-farm facility, which are designed to protect groundwater and potable water supply resources. No composting material may be placed closer than 200 feet from the nearest potable water supply well. All composting material must be placed outside the boundary of the 10-year floodplain, or on a part of the site that has been floodproofed, and must be placed more than five feet above the water table. (Section 21(q)(3)(D) of the Act).

These regulations, in accordance with the Act, also incorporate several setback requirements for on-farm facilities designed to protect surrounding residences from being subjected to off-site impacts. All compost must be placed at least 1/4 mile from the nearest residence (other than a residence located on the same property as the facility), and there must not be more than 10 occupied non-farm residences within 1/2 mile of the boundaries of the site on the day the composting material is applied.

Owners and operators of on-farm operations must register the site with the Agency each year, obtain an Illinois Inventory Identification Number, and file a report certifying that the facility is operated in accordance with the requirements for an on-farm facility set forth in Section 21(q) of the Act, all of which are restated in this section. Finally, the on-farm facility is also subject to Section 830.202, which contains the minimum performance standards, and which is discussed in detail below.

Compliance Terms. Section 830.107 states that owners and operators of existing facilities must comply with the performance standards and recordkeeping requirements proposed in these regulations by their effective date, November 10, 1994. However,

a transitional period of one year is established for compliance with the testing, sampling, operating plan, personnel training, financial assurance, and recordkeeping requirements. This transitional period is intended to provide a reasonable time-frame for existing facilities to make the adjustments necessary to come into compliance with these requirements. Pursuant to Section 830.107(c), all existing permitted facilities must remain in compliance with their current permit conditions during the transitional period, until either the permit expires, or the permit is modified in a manner which authorizes construction, increases the facility's operating capacity, transfers ownership of the facility, or extends the permit term.

Subpart B: Regulation of Landscape Waste Compost Facilities

Subpart B of Part 830 establishes the operational standards applicable to landscape waste compost facilities². They consist of location standards, minimum performance standards, and the more detailed performance standards in Sections 830.204 through 830.213. More importantly, Section 830.201 contains the "road map" which helps the regulated facilities determine which requirements apply to the various classes of facilities.

Section 830.201. Scope and Applicability. This section serves as a guide for facility owners and operators as to which regulations apply to different types of facilities. Clearly stated therein:

- 1) garden compost operations are exempt from these regulations;
- 2) on-site facilities are subject to the location standards in Section 830.203;
- 3) on-site commercial facilities are subject to the minimum performance standards in Section 830.202, the location standards in 830.203, and the end-product quality standards in Subpart E;
- 4) on-farm landscape waste compost facilities which meet the requirements in Section 830.106(a) are subject to those and the other requirements set forth in Section

² Following Subpart B, Sections 830.300 et seq. and Sections 830.400 et seq. have been left vacant to accommodate operational standards for organic waste and mixed municipal waste compost facilities, respectively, when such regulations are proposed by the Agency. The Agency has indicated that these proposals will be referred to as Subparts C and D; therefore, these subparts are omitted from the current regulatory scheme.

830.106 and the minimum performance standards contained in Section 830.202; and finally,

- 5) permitted facilities are subject to the minimum performance standards in Section 830.202, the location standards in Section 830.203, the additional operating standards and requirements in Sections 830.204 through 830.213, the end-product quality standards in Subpart E, and the financial assurance requirements of Subpart F.

Section 830.201(b) specifies that on-site facilities are only subject to the location standards in Section 830.203. These facilities are defined as facilities which only compost landscape waste generated on-site and which do not offer end-product compost for off-site sale or use. Pursuant to Section 21(q)(1) of the Act, these facilities are exempted from any permitting requirements. Furthermore, pursuant to Section 22.33 of the Act, they are exempted from any performance standards or end-product quality standards. However, by these regulations they are subjected to the location standards in Section 830.203 to minimize any threat to groundwater they present. Nothing in the record distinguishes this class from the other two classes of permit-exempt facilities or from permitted facilities to justify their exemption from the location standards adopted herein, which parallel the location standards set forth in the Act.

In contrast, Section 830.201(c) specifies that on-site commercial facilities are subject to the minimum performance standards in Section 830.202 and the end-product quality standards in Subpart E, as well as the location standards in Section 830.203. While Section 21(q)(1) of the Act exempts these facilities from permitting requirements, they are not exempted from performance standards by Section 22.33(c) of the Act. Because these facilities potentially pose the same threat to the environment as permitted facilities, they are by regulation made subject to the minimum performance standards in Section 830.202. They are also subject to the end-product quality standards in Subpart E because they offer their end-product for off-site sale or use.

The location requirements applicable to on-farm facilities contained in Section 830.106(a)(4) parallel the location requirements applicable to on-site facilities, on-site commercial facilities, and permitted facilities contained in Section 830.203. However, because the requirements for on-farm facilities are set forth in detail in Section 21(q)(3) of the Act, they are set forth separately in the regulations.

Section 830.202. Minimum Performance Standards and Reporting Requirements. This section establishes the minimum operating standards and reporting requirements applicable to

on-site commercial facilities, on-farm landscape waste compost facilities, and permitted facilities. These generally applicable requirements include operational requirements, design requirements, recordkeeping requirements, and notification requirements. The operational requirements include:

- 1) a prohibition on composting domestic sewage, sewage sludge or septage;
- 2) a prohibition on the use of bulking agents which are otherwise wastes unless such use is authorized by the Agency;
- 3) specific measures to control odor and other sources of nuisance;
- 4) a requirement that all landscape waste be processed within five days of receipt into windrows or piles, with the exception of landscape waste being stored for use as bulking agents;
- 5) a requirement that all general use compost offered for sale or use meet the performance standards set forth in Section 830.503; and
- 6) procedures for the proper closure of a facility.

The recordkeeping and notification requirements include the following:

- 1) development of a plan for intended uses of end-product and a contingency plan for end-product compost which does not meet the general use compost standards;
- 2) a written annual statement by permitted facilities certifying the amount of material received and disposed of, and certifying compliance with the Facility Financial Assurance Plan; and
- 3) an annual report by permit-exempt facilities with over 100 cubic yards of material on-site at any one time, certifying the amount of material received, and the amount of material disposed of or still on-site.

Facilities subject to Section 830.202 must take the following steps to control odors, depending on the type of facility:

- 1) develop a plan for minimizing odors;
- 2) commercial on-site facilities and permitted facilities must post signs providing information concerning the

facility, including where complaints can be made; and

- 3) for any odor complaint received, the operator must record and report to the Agency information concerning the complaint, including a report of any response action taken.

The requirements that facilities post signs stating where complaints can be made, report any odor complaints, and report any response action taken were added in response to public testimony by Mr. David Albers regarding the difficulty persons neighboring compost facilities face in obtaining enforcement against possible odor violations. (See 2nd Hearing Tr. at 194-200.) Due to the difficulties involved in developing and enforcing objective standards for permissible levels of odors, these management standards have been developed to increase accountability and aid the control of odor nuisances. Additionally, the requirement that facilities develop odor control plans, which was originally applicable only to permitted facilities, is now applicable to on-site commercial facilities and on-farm facilities as well. A detailed odor control plan will help minimize the subjectivity in regulating odor problems.

The design requirements in Section 830.202 include the following:

- 1) the facility must be designed and constructed so as to divert runoff around the composting area and to control runoff from precipitation less than or equal to the 10 year, 24 hour precipitation event; and
- 2) the facility must be designed and constructed so as to maintain an accessible clear space between windrows.

Section 830.203. Location Standards. Section 830.203 sets forth location standards for on-site facilities, on-site commercial facilities, and permitted facilities which are intended to reduce or eliminate any adverse environmental impact through advance planning and the imposition of protective measures. Included are most of the groundwater protection measures mandated pursuant to Section 39(m) of the Act. Section 830.203(a) requires a setback of 200 feet from the nearest potable water supply well, while Section 830.203(e) mandates that no composting material may be placed within five feet of the water table, and that any landscape waste leachate must be collected and managed. The depth to groundwater can be established either through reliance on published data, or by actual measurement through field methods. Additionally, pursuant to Section 830.203(b), the composting area must be outside the boundary of the 10-year floodplain or the site must be floodproofed, and pursuant to Section 830.203(g), regulated facilities must not restrict the flow of a 100-year flood unless

alternative storage capacity is provided.

The location requirements in Section 830.203 are also designed to protect surrounding properties from off-site impacts. Section 830.203(c) mandates a setback of 200 feet from any residence, and for facilities developed or expanded after November 17, 1991, the composting area must be at least 1/8 mile from the nearest residence.

Section 830.203(d) establishes an additional standard applicable only to facilities located near residences, due to their higher potential for odor problems. If the composting area of a facility is located within 1/4 mile of the nearest off-site residence or within 1/2 mile of the nearest platted subdivision, or if more than ten residences are located within 1/2 mile of the facility, landscape waste must be processed by the end of the operating day.

Section 830.203(f), (h)-(i). Compliance with Other Statutes. Finally, Sections 830.203(f), (h)-(i) require that these regulated facilities comply with federal and state historic and environmental preservation statutes. For example, the operation of these facilities must be compatible with the requirements of the Wild and Scenic Rivers Act, the National Historic Preservation Act, and the Illinois Historic Preservation Act.

Standards Applicable to Permitted Facilities Only

In addition to the standards which are applicable to all regulated facilities, additional requirements are established by these regulations which are applicable only to permitted facilities. These requirements are set forth at Sections 830.204 through 830.213.

Section 830.204. Additional Stormwater and Landscape Waste Leachate Controls. In addition to meeting the leachate control requirement in Section 830.202(g) which is applicable to all regulated facilities, permitted landscape waste compost facilities must meet additional standards imposed at Section 830.204. Section 830.204(a) specifies that stormwater which comes into contact with landscape waste or which mixes with landscape waste leachate is considered landscape waste leachate, and must be managed to prevent any environmental impact. If the facility discharges landscape waste leachate from a point source it must obtain a National Pollution Discharge Elimination System (NPDES) permit in accordance with the requirements of 35 Ill. Adm. Code 309.

Section 830.204(b) requires permitted facilities to manage landscape waste leachate to prevent ponding. Leachate ponding has been a source of odor problems at Illinois facilities.

Section 830.204(c) requires operators to allow periodic drying of the composting surface. This practice controls leachate migration into the soil, promotes aerobic conditions in the subsoil, and enhances microbial degradation of leachate in the surface soil layer.

Section 830.205(a). Additional Operating Standards.

Section 830.205 establishes additional operating standards applicable to permitted facilities. Section 830.205(a)(1)(A) requires these facilities to process all landscape waste received within 24 hours of receipt. This requirement should serve as an odor prevention measure, since bagged, compressed landscape waste quickly becomes anaerobic. Leaves, brush, or woody landscape waste may alternatively be stored to be used as a carbon source or bulking agent, if this is provided for in a facility permit.

Section 830.205(a)(1)(B) specifies that the operator of all facilities using aerobic composting methods must adjust the oxygen level as necessary to promote aerobic composting, and to meet the needs of the particular process employed. The oxygen level is adjusted by shredding, turning, and/or mixing the material. Similarly, Section 830.205(a)(1)(C) requires operators to take measures to adjust the moisture level so it remains within the range of forty to sixty percent on a dry weight basis, in order to promote aerobic composting. The moisture level is adjusted by watering or mixing materials of various moisture levels.

Section 830.205(a)(1)(D) specifies that the staging area must be of adequate size and design to facilitate unloading of landscape material, and must be designed to allow unobstructed movement of vehicles and equipment. The staging area is used for load checking, initial mixing or blending, and odor control. It must be operable during inclement weather when waste is received, and must allow safe traffic flow. These requirements are designed to minimize delays in inspecting and processing incoming waste, which can lead to odor problems.

Section 830.205(a)(1)(E) prohibits mixing landscape waste or composting material with end-product compost which is sold or offered for use. This practice can introduce pathogens and viable weed seeds into end-product compost. This restriction does not apply to the use of end-product compost as an amendment to composting material.

Section 830.205(a)(1)(F) requires facility operators to have sufficient equipment and personnel to process incoming waste in accordance with the facility's operating plan.

Section 830.205(a)(1)(G) requires facility operators to obtain Agency authorization for any additive other than water prior to its use. Unless authorized in the facility permit, all

additives other than water shall not exceed ten percent by volume of the composting material. In deciding whether to approve the use of an additive, the Agency will evaluate the ability of the proposed additive to enhance the composting process without degrading the quality of the end-product compost. Thus operators will be allowed to use a variety of additives, while the Agency will be able to protect against the use of improper additives.

Section 830.205(a)(2) requires turning of windrows or piles for all facilities using an open composting process. Windrows or piles must be turned at least four times per year, and not less than once every six months. These requirements are intended to aerate the material for odor and leachate control, to break down the material, to distribute moisture, and to inoculate the material to promote rapid composting.

Section 830.205(a)(3) requires that facilities using contained processes implement mechanisms to control moisture content, air flow, and air emissions. Since contained processes tend to concentrate odors, they have a greater potential for odor problems. Control of air flow is typically accomplished by maintaining negative air pressure within the containment building and treating all exhaust air. Control of air emissions is generally accomplished through the use of scrubbers or filters.

Section 830.205(a)(4) specifies that the Agency may impose a permit condition requiring a facility to use thermal processing in order to reduce pathogens in its composting material. These thermal processing requirements are taken from the federal sludge regulations at 40 CFR 503 (adopted February 19, 1993) (See Exhibit 1-39). Separate methods are prescribed for windrow processing, aerated static pile processing, and in-vessel processing. The Agency only intends to require thermal processing if a facility proposes the use of an additive which may contain pathogens, in which case a thermal processing requirement will be imposed by a permit condition establishing recordkeeping and monitoring requirements.

Section 830.205(b). Composting Surface. Because landscape waste leachate can contain certain chemicals which can impact groundwater, Section 830.205(b) requires that the composting surface meet certain requirements designed to protect against groundwater contamination. Section 830.205(b) requires that the composting area be located on relatively impermeable soils, or located on a base with resistance to saturated flow equal to the resistance of relatively impermeable soils. Alternatively, the facility can choose to establish an early detection and groundwater monitoring program pursuant to Section 830.205(b)(1)(A)(iii).

Relatively impermeable soils are defined as soils having a

hydraulic conductivity no greater than 1×10^{-5} centimeters per second for a thickness of at least one foot. The permeability of the soils must be demonstrated by actual measurement.

Furthermore, the composting surface must be constructed and maintained to allow the diversion of runoff away from the landscape waste and compost, management of runoff and landscape waste leachate, and to allow facility operation during all weather conditions. The landscape waste composting surface must be sloped at two percent or greater unless an alternative water management system is approved in a permit.

The regulations also set forth requirements for contained composting systems, although there are no such systems used for composting landscape waste in the state at this time. Contained composting systems are more technologically advanced than open composting processes, and are also generally more costly. They are usually used for organic waste and mixed municipal waste composting. The additional requirements applicable to these facilities are designed to address the additional problems that may be caused by concentration of odors in a closed process.

The regulations specify that where composting material or leachate comes into contact with an open composting surface in a contained composting process, the surface must meet the same relatively impermeable standard applied to open composting processes in Section 830.205(b)(1). Section 830.205(b)(2)(B) specifies that the composting surface must be capable of supporting all necessary structures and equipment.

Section 830.205(c) through (l). These subsections address the requirements pertaining to utilities, facility maintenance, nuisances, and fire protection. Subsection (c) of this section requires a composting facility to have all utilities necessary for its safe operation, including lights, power, water supply, and communication equipment, and subsection (d) requires that the facility be properly maintained. The regulations at subsections (e) through (l) set forth limitations and requirements for open burning, dust control, noise control, vector control, fire protection, litter control, management of non-compostable wastes, and mud tracking. Additional requirements for preventing odor nuisance violations are contained in Section 830.202. (See discussion *supra* pp. 11-13.)

Section 830.205(m). Monitoring Requirements and Additional Operating Standards. This section requires operators of permitted facilities to monitor the temperature of each batch, windrow, or pile on a weekly basis, the moisture level in each batch windrow or pile on a bi-weekly basis, and for aerobic composting, the oxygen level of each batch, windrow, or pile on a weekly basis. Monitoring these parameters will enable the

operator to determine what adjustments are necessary, and provide documentation of compliance with other requirements pursuant to the regulations and facility permit.

Section 830.205(m)(2) sets forth alternative requirements for in-vessel continuous feed systems. Temperature, moisture level, and oxygen level (for aerobic processes) must be monitored daily due to the faster composting rate of these types of systems.

Section 830.205(m)(3) specifies that where early detection and groundwater monitoring are required pursuant to Section 830.205(b)(1)(A) or Section 830.205(b)(2)(A), they must be done in accordance with the method specified in Part 830.Appendix A.

Section 830.206. Operating Plan for Permitted Facilities. This section requires all permitted facilities to have an operating plan which details the methods by which the operator will meet the requirements of Section 830.205. This section sets forth in detail the type of information that must be included in the plan. The operating plan allows each facility to explain its individual approach, and allows for a wide variety of methods to be used. This information is incorporated by reference into the facility's permit, and must include a description of how the facility will produce general use compost while minimizing nuisance conditions.

Sections 830.207 through 830.213. Recordkeeping and Additional Operational Requirements. These rules contain additional operating and recordkeeping requirements for permitted facilities. These requirements are specific concerning salvaging, access control, load checking, and personnel training. Permitted facilities must maintain contingency plans, closure plan and other records. The facility must keep a copy of its permit at a definite site specified in that permit. All records must be available for inspection by the Agency during normal business hours and must be kept for a minimum period of three years.

Subpart E: Quality of End-Product Compost

This Subpart establishes standards for end-product compost which are designed to ensure that the compost is mature, of consistent quality and free of hazardous materials. Testing requirements are also set forth to ensure that those goals are met so that the end-product compost can compete effectively with other forms of soil amendments.

Section 830.502 establishes a classification scheme for end-product compost. The two main categories are: 1) general use compost, which is compost that meets the requirements set forth in Section 830.503, and 2) designated use compost, which is

compost that fails to meet those requirements. General use compost is deemed to meet standards that protect the public health, safety and environment, and is, therefore, suitable for distribution and use as a soil amendment. Designated use compost is that which fails to meet the criteria set forth in Section 830.503, and its use is therefore restricted to use as daily cover or vegetative amendment in the final layer of a landfill. Alternative uses for designated use compost are possible, but a permit for such use must be obtained from the Agency. Section 830.501(a) restates the statutory exemption from the testing requirements and quality standards for end-product compost used as daily cover or in the final layer of a landfill.

Section 830.503 imposes performance standards on general use compost which are designed to ensure that the compost does not pose a threat to human health and the environment when used as a soil amendment. General use compost must meet the standards discussed below.

The regulations include a performance standard for potentially injurious materials. The standard set forth in Section 830.503(a) does not specify what constitutes a hazard; rather, it is the responsibility of operators to recognize and remove any material which constitutes a hazard. This standard is intended to protect users of end-product compost from injury while avoiding the imposition of cumbersome constraints on facility operators. Operators are required to exercise good judgment in keeping their end-product free of potentially injurious materials.

Section 830.503(b) states that end-product compost cannot contain man-made materials over 4 millimeters in size in excess of one percent of the volume of the end-product compost. These man-made materials lower the quality of the end-product compost, can affect soil drainage, and can pose a hazard to small animals through direct ingestion. They are also a source of litter where end-product compost is unloaded or land-applied.

Section 830.503(c) states that general use compost must have a pH between 6.5 and 8.5. The pH of the end-product compost can affect the physical properties of the soil, the availability of certain minerals for use by plants, and the biological activity in the soil. The desired pH for end-product compost can vary based on the application, therefore a range between 6.5 and 8.5 is established.

Section 830.503(d) states that end-product compost must be stabilized, as demonstrated by one of the methods set forth in Part 830.Appendix B (discussed below). Stability is defined as a stage in the composting process characterized by nearly complete utilization of energy-bearing carbon compounds in the original waste and no inhibition of seed germination or plant growth.

Stability is characterized by low microbiological activity and low oxygen usage. Compost which has not reached stability may cause problems by inducing high microbial activity and resulting in oxygen deficiency in soils, and may indirectly cause toxicity to roots by removing nutrients or introducing pathogens.

Section 830.503(e) requires that all general use compost meet the standards for concentrations of inorganic constituents set forth in Part 830. Table A. Table A sets forth limits for nine heavy metals which may be found in end-product compost. These limits were derived from the Alternate Pollution Limits established by the U.S. EPA for beneficial use of sludge, which appear at 40 CFR 503 (adopted February 19, 1993) (See Exhibit 1-39). U.S. EPA has determined that these levels are protective of human health and the environment.

Finally, Section 830.503(f) states that general use compost shall not contain fecal coliform populations in excess of 1000 MPN per gram of total solids on a dry weight basis, or Salmonella species populations in excess of 3 MPN per 4 grams of total solids on a dry weight basis. This pathogen standard was derived from the United States Environmental Protection Agency (U.S. EPA) pathogen reduction standard for sewage sludge. U.S. EPA has determined that this standard adequately reduces any risks to public health and the environment. (Ex. 1-39.) Only facilities which use additives that may contain pathogens will be required to demonstrate compliance with the pathogen standard.

Several participants at hearing testified that the standards were insufficient, since the expected levels of toxic metals in end-product compost would not be expected to approach these numbers. However, no testimony was presented which contradicted the evidence that standards in Part 830. Table A would be protective of human health and the environment. The Agency admitted that the metals levels in end-product compost would not be expected to approach these numbers unless the waste stream had been adulterated in some way. However, the Agency further stated that establishing such limits is necessary to ensure that the compost is safe for distribution.

Based on the comments received, the regulations the Board is adopting today require that permitted facilities test for these constituents on the same routine basis as the other parameters in Section 830.503(a) through (d). The compost material at permitted facilities is more susceptible to alteration, since permitted facilities are the only facilities which accept composting material from off-site. Thus, routine monitoring is required to insure that the levels set forth at Table A are not exceeded.

Section 830.504. Testing Requirements. Operators must undertake testing of end-product compost to demonstrate compliance with the standards discussed above. Testing must be

done in accordance with the methods set forth in Part 830. Appendix B, unless an alternative method is approved in writing by the Agency. Testing to demonstrate compliance with the man-made materials, pH, stability standards, and inorganic concentrations must be conducted every 5,000 cubic yards or annually, if less than 5,000 cubic yards is transported off-site annually.

Appendix B contains two methods for demonstrating that end-product compost has reached stability. The first is a self-heating test in a Dewar flask, and the second method is a seed germination test. Again, compost which fails to meet the standards for general use compost must be further managed as landscape waste or as designated use compost.

Section 830.507. Sampling Methods. Section 830.507 sets forth two alternative sampling methods to be followed for obtaining a composite sample for testing compost. Section 830.507(a) sets forth a method which uses twelve grab samples. Part 830. Table B specifies the sample holding times, sample container types, and minimum sample size to be used with this method. Alternatively, sampling can be done following the Test Methods for Evaluating Soil Waste, Physical/Chemical Methods (SW-846), which has been incorporated by reference into the regulations in Section 830.103.

Subpart F: Financial Assurance

This Subpart applies to permitted facilities only. The owner or operator of such a facility is required to develop and have at the facility a financial assurance plan. This requirement is based on Section 22.33(a)(5), which states that the performance standards for landscape waste facilities must include "a financial assurance plan necessary to restore the site as specified in [an] Agency permit."

The regulations specify that the plan must contain, at a minimum, the following: a written cost estimate covering the maximum cost of premature final closure, and the financial mechanism chosen by the operator to maintain financial assurance equal to or greater than the amount provided as a written cost estimate in the financial assurance plan. The operator may utilize a cash reserve fund or self-insurance.

In the alternative, pursuant to Section 830.601(b), an operator is not required to comply with the requirements of this Subpart F if the operator demonstrates that closure and post closure plans filed will result in closure of the facility in accordance with the requirements of Part 830, and the operator has provided some other demonstration of financial assurance adequate to provide for such closure.

Part 831: Information In a Permit Application

This Part sets forth the information that must be included in a permit application for all facilities required to have a permit. This Part was submitted by the Agency in an effort to codify permitting procedures that are currently in use by the Agency. The Board proposes to adopt the Agency's proposal unmodified.

Section 831.101 specifies that all facilities required to have permits pursuant to Section 21(d) of the Act must follow the procedures outlined in this section in submitting a permit application. Some of the remaining regulations contain standard requirements about what must be contained in a permit application such as required signatures, permit fees, identification numbers, permit modification requirements, closure plans, and permit renewal requirements.

Other sections are more specific as to landscape waste compost facilities. Section 831.107 requires owners and operators to submit a site location map as part of the permit application, detailing information necessary to demonstrate compliance with the Act and Board regulations. For example, the site location map must include, among other things, the permitted area and all adjacent property within a 1/2 mile; the prevailing wind direction; and the limits of 10-year floodplains. Similarly, Section 831.109 requires a narrative description of the facility, with supporting documentation describing the procedures and plans that will be used at the facility, demonstrating compliance with the Act and these regulations. Finally, Section 831.110 requires a legal description of the facility boundaries.

Part 832: Procedural Requirements for Permitting Compost Facilities

This Part sets forth the procedural rules the Agency will follow in processing permit applications. As with Part 831, this Part was submitted by the Agency in an effort to codify permitting procedures that are currently in use by the Agency. The Board adopts the language proposed by the Agency without any modification.

For the most part, the requirements for processing permits for landscape waste compost facilities track the rules in place for permitting other land-based facilities. For example, Section 832.104 sets forth notifications required of a permit applicant, which is largely a restatement of the applicable language in the Act and in the Illinois Notice by Publication Act. The Agency shall not issue a development or construction permit for any composting facility unless the applicant has given notice thereof to: members of the General Assembly from the legislative district

in which the facility is to be located; the owner of all real property within 250 feet of the site of the proposed facility; and the general public by publication in a newspaper of general circulation in the county in which the facility is to be located.

Section 832.105 sets forth the Agency's decision deadlines, which are 90 days after the application is filed, and 180 days if a public hearing is required. Section 832.105(b) states that a permit application shall not be deemed complete until the Agency has received all required information and documentation. However, if the Agency fails to notify the applicant within 30 days that the application is incomplete, then the application shall be deemed to have been complete on the date it was filed. Furthermore, the applicant may deem a notification that the application is incomplete as a denial of the application for the purposes of a permit appeal. The remainder of Section 832.105(c) addresses the applicant's appeal rights. Section 832.105(e) states that final decisions shall be deemed to have taken place on the date that they are signed. This rule differs from the landfill rules which states that such decisions are effective as of the date postmarked.

The remaining six sections address the standards for issuing and denying a permit, the right to appeal under Section 40 of the Act, the term of the permit, and the transfer of a permit.

Subpart B contains the additional procedures for modifying a permit, and Subpart C contains the additional procedures for renewing permits. The Agency is allowed in specific situations to initiate modifications to an approved permit. Agency-initiated modifications shall not become effective until 45 days after receipt by the operator, unless enforcement is stayed during the pendency of an appeal before the Board. As for permit renewals, the requirements and time schedules for permit applications are simply cross-referenced.

CONCLUSION

The regulations adopted today are intended to provide the regulated community with clearly defined terms of applicability, location and operating requirements for all types of landscape waste compost facilities, and rules governing the permitting of the same. Collectively, these regulations are intended to allow for the competitive operation of landscape waste compost facilities which do not impact or threaten to adversely impact health or the environment in the State of Illinois.

ORDER

The Board hereby directs the Clerk to cause the filing of the following regulations for final notice with the Secretary of State Code Unit for publication in the *Illinois Register*:

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

**PART 830
 STANDARDS FOR COMPOST FACILITIES**

SUBPART A: GENERAL PROVISIONS

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830.101	Purpose, Scope and Applicability
830.102	Definitions
830.103	Incorporations by Reference
830.104	Exempt Operations and Activities
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830.106	On-Farm Landscape Waste Compost Facility
830.107	Compliance Dates
830.108	Severability

**SUBPART B: STANDARDS FOR OWNERS AND OPERATORS OF LANDSCAPE
 WASTE COMPOST FACILITIES**

Section	
830.201	Scope and Applicability
830.202	Minimum Performance Standards and Reporting Requirements for Landscape Waste Compost Facilities
830.203	Location Standards for Landscape Waste Compost Facilities
830.204	Additional Stormwater and Landscape Waste Leachate Controls at Permitted Landscape Waste Compost Facilities
830.205	Additional Operating Standards for Permitted Landscape Waste Compost Facilities
830.206	Operating Plan for Permitted Landscape Waste Compost Facilities
830.207	Salvaging at Permitted Landscape Waste Compost Facilities
830.208	Access Control at Permitted Landscape Waste Compost Facilities
830.209	Load Checking at Permitted Landscape Waste Compost Facilities
830.210	Personnel Training for Permitted Landscape Waste Compost Facilities
830.211	Recordkeeping for Permitted Landscape Waste Compost Facilities

- 830.212 Contingency Plan for Permitted Landscape Waste Compost Facilities
 830.213 Closure Plan for Permitted Landscape Waste Compost Facilities

SUBPART E: QUALITY OF END-PRODUCT COMPOST

Section

- 830.501 Scope and Applicability
 830.502 Compost Classes
 830.503 Performance Standards for General Use Compost
 830.504 Testing Requirements for End-Product Compost Derived from Landscape Waste
 830.507 Sampling Methods
 830.508 Off-Specification Compost

SUBPART F: FINANCIAL ASSURANCE

Section

- 830.601 Scope and Applicability
 830.602 Financial Assurance Plan
 830.603 Written Cost Estimate
 830.604 Financial Assurance Fund
 830.605 Financial Assurance Mechanism
 830.606 Financial Assurance Certification

- 830.APPENDIX A Early Detection and Groundwater Monitoring Program
 830.APPENDIX B Performance Test Methods

- 830.TABLE A Inorganic Concentration Limits for General Use Compost
 830.TABLE B Sampling and Handling Requirements
 830.TABLE C Seed Germination Record Sheet

AUTHORITY: Implementing Sections 5, 21, 22.33, 22.34, 22.35 and 39 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/5, 21, 22.33, 22.34, 22.35, 27 and 39].

SOURCE: Adopted at 18 Ill. Reg. _____, effective _____.

NOTE: Capitalization denotes statutory language.

SUBPART A: GENERAL PROVISIONS

Section 830.101 Purpose, Scope and Applicability

- a) The purpose of this Part is to establish:
- 1) Performance standards for landscape waste compost facilities operating in the State of Illinois; and
 - 2) Testing procedures and standards for end-product

compost offered, by a facility, for sale or use in the State of Illinois.

b) General applicability.

- 1) The provisions of this Part apply to all landscape waste compost facilities operating in the State of Illinois, except those expressly exempted pursuant to Section 830.104 and those regulated pursuant to 35 Ill. Adm. Code 391 and 40 CFR Part 503.
- 2) Facilities regulated pursuant to this Part are not subject to 35 Ill. Adm. Code 807 or 810 through 815, except that any accumulation of materials meeting the 35 Ill. Adm. Code 810 definition of a waste pile shall be subject to 35 Ill. Adm. Code 810 through 815.
- 3) Facilities regulated pursuant to Subpart B shall accept only landscape waste for composting.

c) Specific applicability.

- 1) The provisions of this Subpart apply to all facilities subject to this Part; the definitions set forth in Section 830.102 apply for purposes of this Part, 35 Ill. Adm. Code 831, and 35 Ill. Adm. Code 832.
- 2) The performance standards set forth in Subpart B are applicable to landscape waste composting facilities subject to this Part.
- 3) The performance standards set forth in Subpart E are applicable to all general use compost offered for sale or use in Illinois; the testing requirements set forth in Subpart E are applicable to facilities offering general use compost for sale or use in Illinois.
- 4) The financial assurance requirements set forth in Subpart F are applicable to all facilities subject to this Part that are required to have a permit pursuant to 35 Ill. Adm. Code 831.

Section 830.102 Definitions

Except as stated in this Section, the definition of each word or term used in this Part, 35 Ill. Adm. Code 831 and 35 Ill. Adm. Code 832 shall be the same as that applied to the same word or term in the Environmental Protection Act ("Act") [415 ILCS 5].

"Act" means the Environmental Protection Act [415 ILCS 5].

"Additive" means components, other than landscape waste, added to composting material to maximize the decomposition process by adjusting any of the following: moisture, temperature, oxygen transfer, pH, carbon to nitrogen ratio, biology or biochemistry of the composting material.

"Aerated static pile" means a composting system that uses a series of perforated pipes or equivalent air distribution systems running underneath a compost pile and connected to a blower that either draws or blows air through the piles. Little or no pile agitation or turning is performed.

"Aerobic" means done in the presence of free oxygen.

"Aerobic composting" means a process managed and maintained to promote maturation of organic materials by microbial action in the presence of free oxygen contained within the gas in the composting material.

"Agency" means the Illinois Environmental Protection Agency.

"AGRONOMIC RATES" MEANS THE APPLICATION OF NOT MORE THAN 20 TONS PER ACRE PER YEAR, EXCEPT THAT THE AGENCY MAY ALLOW A HIGHER RATE FOR INDIVIDUAL SITES WHERE THE OWNER OR OPERATOR HAS DEMONSTRATED TO THE AGENCY THAT THE SITE'S SOIL CHARACTERISTICS OR CROP NEEDS REQUIRE A HIGHER RATE. (Section 21(q) of the Act.)

"Anaerobic composting" means a process managed and maintained to promote maturation of organic materials by microbial action in the absence of free oxygen within the gas in the composting material.

"Bad Load" means a load of material that would, if accepted, cause or contribute to a violation of the Act, even if managed in accordance with these regulations and any facility permit conditions.

"Batch" means material used to fill the vessel of a contained composting system.

"Board" means the Illinois Pollution Control Board.

"Bulking agent" means a material used to increase porosity, to improve aeration, or to absorb moisture from decomposing waste.

"Closure" means the process of terminating composting facility operations pursuant to applicable Sections in this Part, 35 Ill. Adm. Code 831 and 35 Ill. Adm. Code 832, beginning upon permit expiration without filing for renewal, intentional cessation of waste acceptance or cessation of waste acceptance for greater than 180 consecutive days, unless an alternative time frame is approved in a closure plan.

"Commercial activity" means any activity involving the transfer of money.

"COMPOST" MEANS THE HUMUS-LIKE PRODUCT OF THE PROCESS OF COMPOSTING WASTE, WHICH MAY BE USED AS A SOIL CONDITIONER. (Section 3.70 of the Act.)

"COMPOSTING" MEANS THE BIOLOGICAL TREATMENT PROCESS BY WHICH MICROORGANISMS DECOMPOSE THE ORGANIC FRACTION OF THE WASTE, PRODUCING COMPOST. (Section 3.70 of the Act.) Land application is not composting.

"Composting area" means the area of a composting facility in which waste, composting material or undistributed end-product compost is unloaded, stored, staged, stockpiled, treated or otherwise managed.

"Composting material" means solid wastes that are in the process of being composted.

"Composting operation" means an enterprise engaged in the production and distribution of end-product compost.

"Contained composting process" means a method of producing compost in which the composting material is confined or contained in a vessel or structure which both protects the material from the elements and controls the moisture and air flow.

"Designated use compost" means end-product compost which does not meet the standards set forth in Section 830.503 of this Part.

"Dewar flask" means an insulated container used especially to store liquefied gases, having a double wall, an evacuated space between the walls and silvered surfaces.

"Domestic sewage" means waste water derived principally from dwellings, business or office buildings, institutions, food service establishments, and similar facilities.

"End-product compost" means organic material that has been processed to maturity and classified as general use compost or designated use compost in accordance with this Part.

"Facility" means any landscape waste compost facility.

"GARBAGE" IS WASTE RESULTING FROM THE HANDLING, PROCESSING, PREPARATION, COOKING, AND CONSUMPTION OF FOOD, AND WASTES FROM THE HANDLING, PROCESSING, STORAGE, AND SALE OF PRODUCE. (Section 3.11 of the Act.)

"Garden compost operation" means an operation which (1) has no more than 25 cubic yards of landscape waste, composting material or end-product compost on-site at any one time and (2) is not engaging in commercial activity.

"General use compost" means end-product compost which meets the standards set forth in Section 830.503 of this Part.

"GROUNDWATER" MEANS UNDERGROUND WATER WHICH OCCURS WITHIN THE SATURATED ZONE AND GEOLOGIC MATERIALS WHERE THE FLUID PRESSURE IN THE PORE SPACE IS EQUAL TO OR GREATER THAN ATMOSPHERIC PRESSURE. (Section 3(b) of the Groundwater Protection Act [415 ILCS 55].)

"In-vessel composting" means a diverse group of composting methods in which composting materials are contained in a building, reactor, or vessel.

"In-vessel continuous feed system" means a method of producing compost in which the raw composting material is delivered on a continuous basis to a reactor.

"Insulating material" means material used for the purpose of preventing the passage of heat out of a windrow or other pile. Insulating material includes, but is not limited to, end-product compost, foam, or soil. Insulating material does not include composting material that has not reached maturity.

"Land application" means the spreading of waste, at an agronomic rate, as a soil amendment to improve soil structure and crop productivity.

"LANDSCAPE WASTE" MEANS ALL ACCUMULATIONS OF GRASS OR SHRUBBERY CUTTINGS, LEAVES, TREE LIMBS AND OTHER MATERIALS ACCUMULATED AS THE RESULT OF THE CARE OF LAWNS, SHRUBBERY, VINES AND TREES. (Section 3.20 of

the Act.)

"Landscape waste compost facility" means an entire landscape waste composting operation, with the exception of a garden compost operation.

"Landscape waste leachate" means a liquid containing any of the following: waste constituents originating in landscape waste; landscape waste composting material; additives; and end-product compost.

"Maturity" means a state which is characteristically: generally dark in color; humus-like; crumbly in texture; not objectionable in odor; resembling rich topsoil; and bearing little resemblance in physical form to the waste from which it is derived.

"Modification" means a permit revision authorizing either an extension of the current permit term or a physical or operational change at a composting facility which involves different or additional processes, increases the capacity of the operation, requires construction, or alters a requirement set forth as a special condition in the existing permit.

"MPN" means most probable number, a mathematical inference of the viable count from the fraction of cultures that fail to show growth in a series of tubes containing a suitable medium.

"Nearest residence" means an occupied dwelling and adjacent property commonly used by inhabitants of the dwelling.

"Non-compostable material" means items not subject to microbial decomposition under conditions used to compost waste.

"Off-site" means not on-site.

"On-farm landscape waste compost facility" means a landscape compost facility which satisfies all of the criteria set forth in Section 830.106.

"On-site" means on the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a crossroads intersection and access is by crossing as opposed to going along the right-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way which the owner controls and to which the public does not have

access are also considered on-site property.

"On-site commercial facility" means a landscape waste compost facility at which the landscape waste composted is generated only on-site and the end-product is offered for off-site sale or use.

"On-site facility" means a landscape waste compost facility at which the landscape waste composted is generated only on-site and the end-product is not offered for off-site sale or use.

"Open composting process" means a method of producing compost without protecting the compost from weather conditions.

"Operator" means the individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, State agency, or any other legal entity that is responsible for the operation of the facility. The property owner, if different from the operator, shall be deemed the operator in the event that the operator abandons the facility.

"Origin" means the legal entity from which a substance has been obtained.

"Processing into windrows or other piles" means placement of waste materials into windrows or other piles of a size, structure, and mixture adequate to begin the composting process.

"Property owner" means the owner of the land on which the composting operation is located or proposed to be located, except that if the operator has obtained a lease for at least the duration of the proposed facility permit plus one year, then "property owner" shall mean the operator of the composting operation.

"Registered professional engineer" means a person registered under the Illinois Professional Engineering Practice Act [225 ILCS 325].

"Relatively impermeable soil" means a soil located above the water table that has a hydraulic conductivity no greater than 1×10^{-5} centimeters per second for a thickness of at least one foot.

"Runoff" means water resulting from precipitation that flows overland before it enters a defined stream

channel, excluding any portion of such overland flow that infiltrates into the ground before it reaches the stream channel, and any precipitation that falls directly into a stream channel.

"Runon" means any rainwater, leachate or other liquid that drains over land onto any part of a facility.

"Salvaging" means the return of waste materials to beneficial use.

"Salvaging operations" means those activities that recover waste for beneficial use, so long as the activity is done under the supervision of the compost facility's operator, does not interfere with or otherwise delay the operations of the compost facility, and results in the removal of all materials for salvaging from the compost facility daily or separation by type and storage in a manner that does not create a nuisance, harbor vectors, or cause an unsightly appearance.

"Septage" means the liquid portions and sludge residues removed from septic tanks.

"Sewage" means water-carried human and related waste from any source.

"SITE" MEANS ANY LOCATION, PLACE, TRACT OF LAND, AND FACILITIES, INCLUDING BUT NOT LIMITED TO BUILDINGS, AND IMPROVEMENTS USED FOR PURPOSES SUBJECT TO REGULATION OR CONTROL BY THE ACT and 35 Ill. Adm. Code 830, 831 & 832. (Section 3.43 of the Act.)

"SLUDGE" MEANS ANY SOLID, SEMISOLID, OR LIQUID WASTE GENERATED FROM A MUNICIPAL, COMMERCIAL, OR INDUSTRIAL WASTEWATER TREATMENT PLANT, WATER SUPPLY TREATMENT PLANT, OR AIR POLLUTION CONTROL FACILITY, OR ANY OTHER SUCH WASTE HAVING SIMILAR CHARACTERISTICS AND EFFECTS. (Section 3.44 of the Act.)

"SPECIAL WASTE" MEANS ANY INDUSTRIAL PROCESS WASTE, POLLUTION CONTROL WASTE OR HAZARDOUS WASTE, EXCEPT AS DETERMINED PURSUANT TO SECTION 22.9 OF THE ACT and 35 Ill. Adm. Code 808. (Section 3.45 of the Act.)

"Stability" means a state in which the compost decomposes slowly even under conditions favorable for microbial activity.

"Staging area" means an area within a facility where raw material for composting is processed, temporarily

stored in accordance with the standards set forth in 830.205(a)(1)(A), loaded or unloaded.

"Surface water" means all tributary streams and drainage basins, including natural lakes and artificial reservoirs, which may affect a specific water supply above the point of water supply intake. Such term does not include treatment works (such as a retention basin).

"Ten (10) year, 24 hour precipitation event" means a precipitation event of 24 hour duration with a probable recurrence interval of once in 10 years.

"20-20-20 NPK" means a fertilizer containing 20 percent total nitrogen (N), 20 percent available phosphoric acid (P_2O_5) and 20 percent soluble potash (K_2O).

"Unacceptable load" means a load containing waste a facility is not authorized to accept.

"Underground water" means all water beneath the land surface.

"Vector" means any living agent, other than human, capable of transmitting, directly or indirectly, an infectious disease.

"Water table" means the boundary between the unsaturated and saturated zones of geologic materials or the surface on which the fluid pressure in the pores of a porous medium is exactly at atmospheric pressure.

"Windrow" means an elongated pile of solid waste or composting material constructed to promote composting.

"Woody landscape waste" means plant material greater than two inches in diameter.

Section 830.103 Incorporations by Reference

The Board incorporates the following material by reference. These incorporations include no later amendments or editions.

- a) American Public Health Association et al., 1015 Fifteenth Street, N.W., Washington, D.C. 20005, "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992.
- b) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" Third Edition (September,

1986), as amended by Revision I (December, 1987), Final Update I (November, 1992) and Proposed Update II (July, 1992), United States Environmental Protection Agency, Washington, D.C., EPA Publication Number SW-846.

- c) North Dakota Agricultural Experiment Station, North Dakota State University, Fargo, North Dakota 58105, "Recommended Chemical Soil Test Procedures for the North Central Region," North Central Regional Publication No. 221 (Revised), Bulletin No. 499 (Revised), October, 1988.

Section 830.104 Exempt Operations and Activities

- a) The requirements of this Part shall not apply to a garden compost operation as defined at Section 830.102.
- b) The testing requirements set forth in Subpart E of this Part SHALL NOT APPLY TO END-PRODUCT COMPOST USED AS A DAILY COVER OR VEGETATIVE AMENDMENT IN THE FINAL LAYER of a landfill. (Section 22.33(c) of the Act.)
- c) Notwithstanding subsection (b) of this Section, end-product compost shall not be used as daily cover or vegetative amendments in the final layer of a landfill unless such use is approved in the landfill's permit.

Section 830.105 Permit-Exempt Facilities and Activities

The following types of facilities or activities are not required to have a permit pursuant to this Part:

- a) A LANDSCAPE WASTE COMPOSTING OPERATION FOR LANDSCAPE WASTES GENERATED BY SUCH facility's OWN ACTIVITIES WHICH ARE STORED, TREATED OR DISPOSED OF WITHIN THE SITE WHERE SUCH WASTES ARE GENERATED (Section 21(q)(1) of the Act);
- b) APPLYING LANDSCAPE WASTE OR COMPOSTED LANDSCAPE WASTE AT AGRONOMIC RATES (Section 21(q)(2) of the Act); OR
- c) A LANDSCAPE WASTE COMPOSTING FACILITY ON A FARM WHICH MEETS ALL OF the criteria set forth at Section 830.106 (Section 21(q)(3) of the Act).

Section 830.106 On-Farm Landscape Waste Compost Facility

- a) A landscape compost operation on a farm must satisfy all of the following criteria:
 - 1) THE COMPOSTING FACILITY IS OPERATED BY THE FARMER ON PROPERTY ON WHICH THE COMPOSTING MATERIAL IS

UTILIZED, AND THE COMPOSTING FACILITY CONSTITUTES NO MORE THAN 2% OF THE PROPERTY'S TOTAL ACREAGE, EXCEPT THAT THE AGENCY MAY ALLOW A HIGHER PERCENTAGE FOR INDIVIDUAL SITES WHERE THE OWNER OR OPERATOR HAS DEMONSTRATED TO THE AGENCY THAT THE SITE'S SOIL CHARACTERISTICS OR CROP NEEDS REQUIRE A HIGHER RATE;

- 2) THE PROPERTY ON WHICH THE COMPOSTING FACILITY IS LOCATED, AND ANY ASSOCIATED PROPERTY ON WHICH THE COMPOST IS USED, IS PRINCIPALLY AND DILIGENTLY DEVOTED TO THE PRODUCTION OF AGRICULTURAL CROPS AND IS NOT OWNED, LEASED OR OTHERWISE CONTROLLED BY ANY WASTE HAULER OR GENERATOR OF NONAGRICULTURAL COMPOST MATERIALS, AND THE OPERATOR OF THE COMPOSTING FACILITY IS NOT AN EMPLOYEE, PARTNER, SHAREHOLDER, OR IN ANY WAY CONNECTED WITH OR CONTROLLED BY ANY SUCH WASTE HAULER OR GENERATOR;
 - 3) ALL COMPOST GENERATED BY THE COMPOSTING FACILITY IS APPLIED AT AGRONOMIC RATES AND USED AS MULCH, FERTILIZER OR SOIL CONDITIONER ON LAND ACTUALLY FARMED BY THE PERSON OPERATING THE COMPOSTING FACILITY, AND THE FINISHED COMPOST IS NOT STORED AT THE COMPOSTING SITE FOR A PERIOD LONGER THAN 18 MONTHS PRIOR TO ITS APPLICATION AS MULCH, FERTILIZER, OR SOIL CONDITIONER; and
 - 4) ALL COMPOSTING MATERIAL WAS PLACED MORE THAN 200 FEET FROM THE NEAREST POTABLE WATER SUPPLY WELL, WAS PLACED OUTSIDE THE BOUNDARY OF THE 10-YEAR FLOODPLAIN OR ON A PART OF THE SITE THAT IS FLOODPROOFED, WAS PLACED AT LEAST 1/4 MILE FROM THE NEAREST RESIDENCE (OTHER THAN A RESIDENCE LOCATED ON THE SAME PROPERTY AS THE FACILITY) AND THERE ARE NOT MORE THAN 10 OCCUPIED NON-FARM RESIDENCES WITHIN 1/2 MILE OF THE BOUNDARIES OF THE SITE ON THE DATE OF APPLICATION, AND WAS PLACED MORE THAN 5 FEET ABOVE THE WATER TABLE.
- b) THE OWNER OR OPERATOR, BY JANUARY 1, 1991 (OR THE JANUARY 1 FOLLOWING COMMENCEMENT OF OPERATION, WHICHEVER IS LATER) AND JANUARY 1 OF EACH YEAR THEREAFTER shall:
- 1) REGISTER THE SITE WITH THE AGENCY, by obtaining an Illinois Inventory Identification Number from the Agency;
 - 2) File a report with the Agency, on a form provided by the Agency, certifying at a minimum:

- A) THE VOLUME OF COMPOSTING MATERIAL RECEIVED AND USED AT THE SITE during the previous calendar year;
- B) The volume of compost produced during the previous calendar year; and
- C) That the facility is in compliance with the requirements set forth in subsection (a) of this Section.

(Section 21(q) of the Act.)

Section 830.107 Compliance Dates

- a) All operators of existing facilities shall comply with the applicable minimum performance standards and recordkeeping requirements set forth in Section 830.202 of this Part by the effective date of these regulations.
- b) By November 10, 1995, all operators of existing permitted facilities shall certify compliance with the applicable provisions set forth in Sections 830.206, 830.210, 830.211, 830.504 and 830.507. Certification of compliance with Sections 830.206, 830.210, 830.211, 830.504 and 830.507 shall be done by completing and filing with the Agency a form provided by the Agency.
- c) By November 10, 1995, all operators of existing permitted facilities shall certify compliance with Subpart F of this Part. Such certification of compliance shall be done as specified in Section 830.606.
- d) Each existing permitted facility shall, in addition, remain in compliance with all conditions set forth in its current facility permit, pending permit expiration or modification authorizing construction, resulting in an increase in capacity, transferring ownership or extending the current permit term.
- e) Upon application either for permit renewal or for modification authorizing construction, resulting in an increase in capacity, extending the current permit term or initiated by the Agency pursuant to 35 Ill. Adm. Code 832.201, an existing permitted facility shall demonstrate, as part of the permit application, compliance with all provisions of this Part applicable to permitted facilities.

Section 830.108 Severability

If any provision of this Part is adjudged invalid, or if the application thereof to any person or in any circumstance is adjudged invalid, such invalidity shall not affect the validity of either this Part as a whole or any Subpart, Section, subsection, sentence or clause thereof not adjudged invalid.

SUBPART B: STANDARDS FOR OWNERS AND OPERATORS OF LANDSCAPE WASTE COMPOST FACILITIES

Section 830.201 Scope and Applicability

- a) Garden compost facilities are exempt from all the requirements of Part 830.
- b) On-site landscape waste compost facilities are subject to the location standards in Section 830.203.
- c) On-site commercial landscape waste compost facilities are subject to the minimum performance standards in Section 830.202, the location standards in Section 830.203, and the end-product quality standards in Subpart E of this Part.
- d) On-farm landscape waste compost facilities which satisfy all the requirements in Section 830.106(a) are subject to the minimum performance standards in Section 830.202.
- e) Permitted landscape waste compost facilities are subject to the minimum performance standards in Section 830.202, the location standards in Section 830.203, the additional operating standards and requirements in Sections 830.204 through 830.213, the end-product quality standards of Subpart E of this Part, and the financial assurance requirements of Subpart F of this Part.

Section 830.202 Minimum Performance Standards and Reporting Requirements for Landscape Waste Compost Facilities

With the exception of on-site landscape waste compost facilities, all landscape waste compost facilities subject to this Part shall comply with the following requirements:

- a) The composting material shall not contain any domestic sewage, sewage sludge or septage.
- b) Any bulking agent used which is otherwise a waste as defined at Section 3.53 of the Act, other than

landscape waste, may only be used as authorized by the Agency in writing or by permit.

- c) The operator shall take specific measures to control odors and other sources of nuisance so as not to cause or contribute to a violation of the Act. Specific measures an operator should take to control odor include but are not limited to adherence to the contents of the odor minimization plan required at subsection (e). Specific measures an operator should take to control other sources of nuisance include preventative measures to control litter, vectors, and dust and noise generated from truck or equipment operation.
- d) The operator shall have available for inspection a PLAN FOR INTENDED PURPOSES OF END-product compost and a contingency plan for handling end-product compost and composting material that does not meet the general use compost standards set forth in Section 830.503 of this Part. Such a plan may include, but is not limited to, consideration of the following: on-site usage; identification of potential buyers including but not limited to gardeners, landscapers, vegetable farmers, turf growers, operators of golf courses, and ornamental crop growers; maintaining consistent product quality for such factors as stability, color, texture, odor, pH, and man-made inerts; and removal of end-product compost that cannot be used in the expected manner because it does not meet the general use compost standards. (Section 22.33(a)(4) of the Act.)
- e) The operator shall have a plan for minimizing odors. The plan must include:
 - 1) Specification of a readily-available supply of bulking agents, additives or odor control agents;
 - 2) Procedures for avoiding delay in processing and managing landscape waste during all weather conditions;
 - 3) Methods for taking into consideration the following factors prior to turning or moving composting material:
 - A) Time of day;
 - B) Wind direction;
 - C) Percent moisture;

- D) Estimated odor potential; and
 - E) Degree of maturity.
- f) Landscape waste must be processed within five days after receipt into windrows or other piles which promote proper conditions for composting. Incoming leaves, brush or woody landscape waste may be stored in designated areas for use as a carbon source and bulking agent, rather than being processed into windrows or other piles.
- g) The facility must be designed and constructed so that runoff is diverted around the composting area. The runoff from the facility resulting from precipitation less than or equal to the 10 year, 24 hour precipitation event must be controlled so as not to cause or contribute to a violation of the Act.
- h) The facility must be constructed and maintained to have an accessible clear space between windrows or other piles, suitable for housekeeping operations, visual inspection of piling areas and fire fighting operations.
- i) Except for on-farm landscape waste compost facilities, the operator shall post permanent signs at each entrance, the text of which specifies in letters not less than three inches high:
- 1) The name and mailing address of the operation;
 - 2) The operating hours;
 - 3) Materials which can be accepted; and
 - 4) The statement, "COMPLAINTS CONCERNING THIS FACILITY CAN BE MADE TO THE FOLLOWING PERSONS," followed by the name and telephone number of the operator, and the name and telephone number of the Bureau of Land, Illinois Environmental Protection Agency, Springfield Illinois.
- j) General use compost, if offered for sale or use, must meet the performance standards set forth in Section 830.503.
- k) Reporting Requirements.
- 1) The operator of any facility required, pursuant to 35 Ill. Adm. Code 831, to have a permit SHALL SUBMIT A WRITTEN ANNUAL STATEMENT TO THE AGENCY,

on a form provided by the Agency, ON OR BEFORE APRIL 1 OF EACH YEAR THAT INCLUDES:

- A) AN ESTIMATE OF THE AMOUNT OF MATERIAL, IN TONS, RECEIVED FOR COMPOSTING in the previous calendar year (Section 39(m) of the Act);
 - B) An estimate of the amount and disposition of compost material (i.e., end-product compost, chipped/shredded brush) in the previous calendar year; and
 - C) A Composting Facility Financial Assurance Plan Compliance Certification in accordance with the requirements set forth in Section 830.606.
- 2) For any permit-exempt facility with over 100 cubic yards of composting material on-site at one time, a report must be filed by April 1 of each year with the Agency, on a form provided by the Agency, stating, at a minimum, the facility location, an estimate of the amount of material, in cubic yards or tons, received for composting in the previous calendar year, and the total amount of end-product compost still on-site, used or sold during the previous calendar year.
- 1) Closure.
- 1) Unless otherwise authorized in a facility permit, all landscape waste, composting material, end-product compost, and additives must be removed from the facility within 180 days following the beginning of closure.
 - 2) An operator of a facility regulated under this Subpart shall close the facility in a manner which:
 - A) Minimizes the need for further maintenance; and
 - B) Controls, minimizes or eliminates the release of landscape waste, landscape waste constituents, landscape waste leachate, and composting constituents to the groundwater or surface waters or to the atmosphere to the extent necessary to prevent threats to human health or the environment.

- 3) By April 1 of the year following completion of closure, the operator of a facility required to report pursuant to subsection (k)(2) of this Section shall file a report with the Agency verifying that closure was completed in accordance with this Section in the previous calendar year.
- m) Odor complaints.
- 1) Except for on-farm landscape waste compost facilities, for every odor complaint received, the operator shall:
 - A) Record and report to the Agency within 24 hours after receiving the complaint, the date and time received, the name of complainant, the address and phone number of complainant, if volunteered upon request, and the name of the personnel receiving the complaint.
 - B) Record the date, time, and nature of any action taken in response to an odor complaint, and report such information to the Agency within 7 days after the complaint.

Section 830.203 Location Standards for Landscape Waste
Compost Facilities

With the exception of on-farm landscape waste operations, all landscape waste compost facilities subject to this Part shall comply with the following:

- a) The composting area of the facility must include A SETBACK OF AT LEAST 200 FEET FROM THE NEAREST POTABLE WATER SUPPLY WELL. (Section 39(m) of the Act.)
- b) The composting area of the facility must be LOCATED OUTSIDE THE BOUNDARY OF THE 10-YEAR FLOODPLAIN OR THE SITE SHALL BE FLOODPROOFED. (Section 39(m) of the Act.)
- c) The composting area of the facility must be LOCATED SO AS TO MINIMIZE INCOMPATIBILITY WITH THE CHARACTER OF THE SURROUNDING AREA, INCLUDING AT LEAST A 200 FOOT SETBACK FROM ANY RESIDENCE, AND IN THE CASE OF A FACILITY THAT IS DEVELOPED OR THE PERMITTED COMPOSTING AREA OF WHICH IS EXPANDED AFTER NOVEMBER 17, 1991, THE COMPOSTING AREA must be LOCATED AT LEAST 1/8 MILE FROM THE NEAREST RESIDENCE (OTHER THAN A RESIDENCE LOCATED ON THE SAME PROPERTY AS THE FACILITY). (Section 39(m) of the Act.)

- d) If, at the time the facility permit application is deemed complete by the Agency pursuant to 35 Ill. Adm. Code 832, the composting area of the facility is located within 1/4 mile of the nearest off-site residence or within 1/2 mile of the nearest platted subdivision containing a residence, or if more than 10 residences are located within 1/2 mile of the boundaries of the facility, in order to minimize incompatibility with the character of the surrounding area, landscape waste must be processed by the end of the operating day on which the landscape waste is received into windrows, other piles or a contained composting system providing proper conditions for composting.
- e) The composting area of the facility must be designed to PREVENT ANY COMPOST MATERIAL FROM BEING PLACED WITHIN 5 FEET OF THE WATER TABLE, to ADEQUATELY CONTROL RUNOFF FROM THE SITE, AND to COLLECT AND MANAGE ANY landscape waste LEACHATE THAT IS GENERATED ON THE SITE. (Section 39(m) of the Act.) Compliance with the water table distance requirement may be demonstrated by either of the following means:
- 1) Using published water table maps or other published documentation to establish the location of the water table in relation to site elevation; or
 - 2) Actual measuring of the water table elevation at least once per month for three consecutive months.
- f) The facility must meet all requirements under the Wild and Scenic Rivers Act (16 U.S.C. 1271 *et seq.*).
- g) The facility must not restrict the flow of a 100-year flood, result in washout of landscape waste from a 100-year flood, or reduce the temporary water storage capacity of the 100-year floodplain, unless measures are undertaken to provide alternative storage capacity, such as lagoons, holding tanks, or provision of drainage around structures at the facility.
- h) The facility must not be located in any area where it may pose a threat of harm or destruction to the features for which:
- 1) An irreplaceable historic or archaeological site has been listed pursuant to the National Historic Preservation Act (16 U.S.C. 470 *et seq.*) or the Illinois Historic Preservation Act [20 ILCS 3410];

- 2) A natural landmark has been designated by the National Park Service or the Illinois State Historic Preservation Office; or
 - 3) A natural area has been designated as a Dedicated Illinois Nature Preserve pursuant to the Illinois Natural Areas Preservation Act [525 ILCS 30].
- i) The facility must not be located in any area where it may jeopardize the continued existence of any designated endangered species, result in the destruction or adverse modification of the critical habitat 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 U.S.C. 1531 et. seq.), or the Illinois Endangered Species Protection Act [520 ILCS 10].

Section 830.204 Additional Stormwater and Landscape Waste
Leachate Controls at Permitted Landscape
Waste Compost Facilities

In addition to the leachate control requirement set forth in Section 830.202(g), all permitted landscape waste compost facilities must comply with the following:

- a) Stormwater or other water which comes into contact with landscape waste received, stored, processed or composted, or which mixes with landscape waste leachate, must be considered landscape waste leachate and must be collected and reused in the process, properly disposed of off-site, or treated as necessary prior to discharge off-site to meet applicable standards of 35 Ill. Adm. Code Subtitle C.
- b) Ponding of landscape waste leachate within the facility must be prevented, except to the extent done by design and approved in the facility permit.
- c) Soil surfaces used for composting must be allowed to dry periodically in order to promote aerobic conditions in the soil subsurface.

Section 830.205 Additional Operating Standards for Permitted
Landscape Waste Compost Facilities

All permitted landscape waste compost facilities must comply with the following operating standards, in addition to those set forth in Sections 830.202 and 830.204:

a) Composting Process

- 1) All permitted landscape waste compost facilities must meet the following composting process standards:
 - A) Landscape waste must be processed within 24 hours after receipt at the facility into windrows, other piles or a contained composting system providing proper conditions for composting. Incoming leaves, and brush or woody landscape waste, may be stored in designated areas for use as a carbon source and bulking agent, if so provided as a permit condition, rather than being processed in windrows or other piles.
 - B) Unless the facility is designed for anaerobic composting, the operator shall take measures to adjust the oxygen level, as necessary, to promote aerobic composting. Aeration intensity must be altered to suit the varying oxygen requirements that different landscape wastes may have.
 - C) The operator shall take measures to maintain the moisture level of the composting material within a range of 40% to 60% on a dry weight basis.
 - D) The staging area must be adequate in size and design to facilitate the unloading of landscape waste from delivery vehicles and the unobstructed maneuvering of vehicles and other equipment.
 - E) Neither landscape waste nor composting material may be mixed with end-product compost ready to be sold or offered for use. This prohibition shall not apply to the use of end-product compost as an amendment to composting material.
 - F) The facility must have sufficient equipment and personnel to process incoming volumes of landscape waste accepted within the time frames required in this Section, and sufficient capacity to handle projected incoming volumes of landscape waste.
 - G) The operator shall obtain written authorization from the Agency to use any

additive, other than water, prior to its use. Unless otherwise authorized any additive, or combination of additives, other than water, must not exceed 10%, by volume, of the composting material.

- 2) An operator of a permitted landscape waste compost facility using an open composting process shall turn each windrow or other pile at least four times per year and not less than once every six months. This provision does not apply to composting systems designed for anaerobic conditions.
- 3) An operator of a permitted landscape waste compost facility using a contained composting process shall have mechanisms to control moisture, air flow and air emissions. These mechanisms must be operated and maintained throughout the landscape waste composting process as specified in any permit required pursuant to 35 Ill. Adm. Code 831.
- 4) Operators of permitted facilities required to process composting material to further reduce pathogens shall comply with the applicable thermal processing requirement among the following:
 - A) If the facility uses a windrow composting process, during a 15 consecutive day period the temperature throughout each windrow must be maintained at 55°C or greater and, during the same period, each windrow must be turned a minimum of 5 times;
 - B) If the facility uses an aerated static pile composting process, the composting material must be covered with 6 to 12 inches of insulating material, and the temperature throughout each pile material must be maintained at 55°C or greater for 3 consecutive days; and
 - C) If the facility uses an in-vessel composting process, the temperature of the composting material throughout the mixture must be maintained at 55°C or greater for 3 consecutive days.

b) Composting Surface

1) Open Composting Processes

- A) Composting areas must be:
 - i) Located on relatively impermeable soils, as demonstrated by actual measurement;
 - ii) Located on a base with resistance to saturated flow equivalent to the resistance of relatively impermeable soil; or
 - iii) Subject to an early detection and groundwater monitoring program, pursuant to subsection (m)(3) of this Section.
 - B) The composting surface must be constructed and maintained to allow:
 - i) Diversion of runoff waters away from the landscape waste and compost;
 - ii) Management of runoff waters and landscape waste leachate in accordance with Section 830.204; and
 - iii) Facility operation during all weather conditions.
 - C) The surface of the landscape waste composting area of the facility must be sloped at two percent or greater unless an alternative water management system to promote drainage and to prevent surface water ponding is approved in the facility permit.
- 2) Contained Composting Processes
- A) Composting areas at facilities at which composting material or leachate comes into contact with an open composting surface must be:
 - i) Located on relatively impermeable soils, as demonstrated by actual measurement;
 - ii) Located on a base with resistance to saturated flow equivalent to the resistance of relatively impermeable soil; or
 - iii) Subject to an early detection and groundwater monitoring program, pursuant to subsection (m)(3) of this Section.

- B) The composting surface must support all structures and equipment.
- c) Utilities. All utilities necessary for safe operation in compliance with the requirements of this Part, including, but not limited to, lights, power, water supply and communications equipment, must be available at the facility at all times.
- d) Maintenance. The operator shall maintain and operate all systems and related appurtenances and structures in a manner that facilitates proper operations in compliance with the requirements of this Part. If a breakdown of equipment occurs, standby equipment must be used or additional equipment brought on site as necessary to comply with the requirements of this Part and any pertinent permit conditions.
- e) Open Burning. Open burning is prohibited except in accordance with 35 Ill. Adm. Code 200 through 245.
- f) Dust Control. The operator shall implement methods for controlling dust in accordance with Subparts B and K of 35 Ill. Adm. Code 212.
- g) Noise Control. The facility must be designed, constructed, operated and maintained so as not to cause or contribute to a violation of 35 Ill. Adm. Code 900 through 905 or of Section 24 of the Act.
- h) Vector Control. Insects, rodents, and other vectors must be controlled so as not to cause or contribute to a violation of the Act.
- i) Fire Protection. The operator shall institute fire protection measures including, but not limited to, maintaining a supply of water and radio or telephone access to the nearest fire department. Fire extinguishers must be provided at two separate locations within the facility.
- j) Litter Control. The operator shall control litter at the facility. At a minimum:
- 1) The operator shall patrol the facility daily to check for litter accumulation. All litter must be collected in a secure container for later disposal; and
 - 2) Litter must be confined to the property on which the facility is located. At the conclusion of each day of operation, any litter strewn beyond

the confines of the facility must be collected and disposed of at a facility approved to receive such waste in accordance with the applicable Board regulations.

- k) Management of Non-compostable Wastes. The operator shall develop management procedures for collection, containment and disposal of non-compostable wastes received at the facility. Disposal must be at a facility approved to receive such waste in accordance with applicable Board regulations at 35 Ill. Adm. Code 810 through 815.
- l) Mud Tracking. The operator shall implement measures, such as the use of wheel washing units or rumble strips, to prevent tracking of mud by delivery vehicles onto public roadways.
- m) Monitoring
 - 1) At a minimum, for batch, windrow and pile systems:
 - A) The temperature of each batch, windrow or pile of composting material must be monitored on a weekly basis;
 - B) The moisture level in each batch, windrow or pile of composting material must be monitored once every two weeks; and
 - C) For aerobic composting, the oxygen level of each batch, windrow or pile of composting material must be monitored weekly.
 - 2) At a minimum, for in-vessel continuous feed systems:
 - A) The temperature of the composting material must be monitored daily;
 - B) The moisture of the composting material must be monitored daily, unless otherwise authorized by the Agency in a facility permit; and
 - C) For aerobic composting by means of an in-vessel continuous feed system, the oxygen level of the composting material must be monitored daily.
 - 3) Early detection and groundwater monitoring, if required pursuant to Section 830.205(b)(1)(A) or

Section 830.205(b)(2)(A), shall be done in accordance with 35 Ill. Adm. Code 830.Appendix A.

Section 830.206 Operating Plan for Permitted Landscape Waste Compost Facilities

All activities at a permitted facility associated with composting must be conducted in accordance with an operating plan containing, at a minimum, the following information:

- a) Designation of personnel, by title, responsible for operation, control and maintenance of the facility;
- b) A description of the anticipated quantity and variation throughout the year of waste to be received;
- c) Methods for measuring incoming waste;
- d) Methods to control the types of waste received, in accordance with Section 830.209, and methods for removing, recovering and disposing of non-compostables, in accordance with Sections 830.205(k), 830.207 and 830.209;
- e) Methods to control traffic and to expedite unloading in accordance with Section 830.205(a)(1)(D);
- f) Management procedures that will be used in composting, which must include:
 - 1) A description of any treatment the wastes will receive prior to windrowing (e.g., chipping, shredding) and the maximum length of time required to process each day's receipt of waste into windrows;
 - 2) The specifications to which the windrows will be constructed (width, height, and length) and calculation of the capacity of the facility;
 - 3) A list of additives, including the type, amount and origin, that will be used to adjust moisture, temperature, oxygen transfer, pH, carbon to nitrogen ratio, or biological characteristics of the composting material, and rates and methods of application of such additives; and
 - 4) An estimate of the length of time necessary to complete the composting process.
- g) Methods to minimize odors. In addition to the requirements specified in 830.202(e), the operating

plan must include:

- 1) A management plan for bad loads;
- 2) A demonstration that the processing and management of anticipated quantities of landscape waste can be accomplished during all weather conditions;
- 3) Procedures for receiving and recording odor complaints, investigating immediately in response to any odor complaints to determine the cause of odor emissions, and remedying promptly any odor problem at the facility;
- 4) Additional odor-minimizing measures, which may include the following:
 - A) Avoidance of anaerobic conditions in the composting material;
 - B) Use of mixing for favorable composting conditions;
 - C) Formation of windrow or other pile into a size and shape favorable to minimizing odors; and
 - D) Use of end-product compost as cover to act as a filter during early stages of composting.
- h) Methods to control stormwater and landscape waste leachate, in accordance with Section 830.204;
- i) Methods to control noise, vectors and litter, in accordance with Section 830.205;
- j) Methods to control dust emissions, in accordance with Section 830.205(f), which must include:
 - 1) Consideration of the following factors prior to turning or moving the composting material:
 - A) Time of day;
 - B) Wind direction;
 - C) Percent moisture;
 - D) Estimated emission potential; and
 - E) Degree of maturity; and

- 2) Maintenance of roads, wetting of roads, use of dust control agents, or any combination of these methods;
- k) Methods for monitoring temperature, oxygen level and moisture level of the composting material, in accordance with Section 830.205(m);
- l) Methods for adjusting temperature, oxygen level and moisture level of the composting material, in accordance with Section 830.205(a);
- m) Recordkeeping and reporting procedures required pursuant to Section 830.211; and
- n) Methods to obtain composite samples and test end-product compost to demonstrate compliance with Subpart E of this Part.

Section 830.207 Salvaging at Permitted Landscape Waste
Compost Facilities

- a) Salvaging operations at permitted landscape waste compost facilities must not interfere with the operation of the landscape waste facility or result in a violation of any standard in this Part.
- b) All salvaging operations must be performed in a safe and sanitary manner in compliance with the requirements of this Part.
- c) Salvageable materials:
 - 1) May be accumulated on-site by the operator, provided they are managed so as not to create a nuisance, harbor vectors, cause malodors, or create an unsightly appearance; and
 - 2) Must not be accumulated in a manner meeting the definition of a waste pile.

Section 830.208 Access Control at Permitted Landscape Waste
Compost Facilities

The operator of a permitted landscape waste compost facility shall implement controls to limit unauthorized access, in order to prevent random dumping and to ensure safety at the facility.

Section 830.209 Load Checking at Permitted Landscape Waste
Compost Facilities

- a) Each load received at a permitted landscape waste compost facility must be inspected, upon receipt, for its acceptability at the facility and must be visually checked, prior to processing, for noncompostable waste.
- b) The facility must reject unacceptable loads.

Section 830.210 Personnel Training for Permitted Landscape
Waste Compost Facilities

- a) The operator of a permitted landscape waste compost facility shall provide training to all personnel prior to initial operation of a composting facility. In addition, annual personnel training shall be provided, which must include, at a minimum, a thorough explanation of the operating procedures for both normal and emergency situations.
- b) New employees shall be trained, prior to participating in operations at the facility, in facility operations, maintenance procedures, and safety and emergency procedures relevant to their employment.
- c) The operator shall have personnel sign an acknowledgement stating that they have received the training required pursuant to this Section.
- d) The facility operating plan required pursuant to Section 830.206 must be made available and explained to all employees.

Section 830.211 Recordkeeping for Permitted Landscape Waste
Compost Facilities

- a) Copies of the facility permit, design plans, operating plan, and any required reports must be kept at the facility, or at a definite location specified in the operating plan or permit, so as to be available during inspection of the facility.
- b) The operator shall record the following information:
 - 1) The quantity of each load of landscape waste received;
 - 2) The origin, type and quantity of any additive accepted, when received at the facility;

- 3) The type and quantity of any additive used in the composting process (water added during composting need not be quantified), as quantified based on a monthly review of additives remaining;
 - 4) The dates of turning of each windrow or other pile;
 - 5) All monitoring data required pursuant to a facility permit;
 - 6) Conditions evaluated pursuant to Section 830.206;
 - 7) For any odor complaint received, the information collected pursuant to Section 830.202(m);
 - 8) Details of all incidents that require implementation of the facility's contingency plan, in accordance with Section 830.212, and methods used to resolve them;
 - 9) Records pertaining to sampling and testing, as follows:
 - A) Locations in the composting area from which samples are obtained;
 - B) Number of samples taken;
 - C) Volume of each sample taken;
 - D) Date and time of collection of samples;
 - E) Name and signature of person responsible for sampling;
 - F) Name and address of laboratory receiving samples, if applicable; and
 - G) Signature of person responsible for sample analysis.
 - 10) The daily quantity of each type of end-product compost removed from the facility, according to end-product compost classification provided in Subpart E of this Part; and
 - 11) Verification that requisite personnel training has been done, in accordance with Section 830.210.
- c) The operator shall keep dated copies of the end-product compost analyses required pursuant to Section 830.504.

- d) The records required pursuant to this Section must be made available during normal business hours for inspection and photocopying by the Agency. Such records must be kept for a period of three years, subject to extension upon written request by the Agency and automatic extension during the course of any enforcement action relating to the facility. Records must be sent to the Agency upon request.

Section 830.212 Contingency Plan for Permitted Landscape Waste Compost Facilities

- a) A contingency plan must be established, addressing the contingencies set forth in Section 830.202(c) and the following additional contingencies:
- 1) Equipment breakdown;
 - 2) Odors;
 - 3) Unacceptable waste delivered to the facility;
 - 4) Groundwater contamination;
 - 5) Any accidental release of special waste; and
 - 6) Conditions such as fires, dust, noise, vectors, power outages and unusual traffic conditions.
- b) The facility contingency plan must be available on-site and implemented as necessary.

Section 830.213 Closure Plan for Permitted Landscape Waste Compost Facilities

- a) A written closure plan must be developed which contains, at a minimum, the following:
- 1) Steps necessary for the premature final closure of the facility under circumstances during its intended operating permit term when the cost of closure would be the greatest;
 - 2) Steps necessary for, and a schedule for the completion of, the routine final closure of the facility at the end of its intended operating life; and
 - 3) Steps necessary to prevent damage to the environment during temporary suspension of landscape waste acceptance if the facility permit allows temporary suspension of landscape waste

acceptance at the facility without initiating final closure.

- b) Until completion of closure has been certified, the operator shall maintain a copy of the closure plan at the facility or at a definite location, specified in the facility permit, so as to be available during inspection of the facility.
- c) An operator of a facility shall develop and file a revised closure plan upon modification of the operations of the facility which affect the cost of closure of the facility or any portion thereof, which include, but are not limited to:
 - 1) A temporary suspension of landscape waste acceptance at the facility; or
 - 2) An increase in the design capacity at the facility to process landscape waste.
- d) The operator shall initiate implementation of the closure plan within 30 days following the beginning of closure.
- e) Not later than 30 days following the beginning of closure, the operator shall post signs, easily visible at all access gates leading into the facility. The text of such signs must read, in letters not less than three inches high: "This facility is closed for all composting activities and all receipt of landscape waste materials. No dumping allowed. Violators will be prosecuted." Such signs must be maintained in legible condition until certification of completion of closure is issued for the facility by the Agency.
- f) Notice of Closure. The operator shall send notice of closure to the Agency within 30 days following the beginning of closure. A compost closure report must be submitted to the Agency, on a form provided by the Agency, which must cover the time elapsed since the end of the last annual report period.
- g) Certificate of Completion of Closure.
 - 1) Upon completion of closure, the operator shall prepare and submit to the Agency an affidavit, on a form provided by the Agency, stating that the facility has been closed in accordance with the closure plan.

- 2) Upon finding that the facility has been closed in accordance with the closure plan, the Agency shall issue a certificate of completion of closure and shall terminate the facility permit.
- h) The operator of a permitted facility shall maintain financial assurance as provided in Subpart F.

SUBPART E: QUALITY OF END-PRODUCT COMPOST

Section 830.501 Scope and Applicability

- a) END-PRODUCT COMPOST USED AS DAILY COVER OR VEGETATIVE AMENDMENT IN THE FINAL LAYER of a landfill is exempt from the requirements set forth in this Subpart. (Section 22.33(c) of the Act.)
- b) The provisions set forth in Sections 830.502, 830.503, and 830.507 of this Subpart apply to all end-product compost subject to this Part.
- c) In addition, the provisions set forth in Sections 830.504 and 830.508 apply to all end-product compost derived from landscape waste and subject to this Part.

Section 830.502 Compost Classes

For the purpose of this Part, end-product compost must be classified in the following manner:

- a) General Use Compost: End-product compost which meets the standards set forth in Section 830.503.
- b) Designated Use Compost: End-product compost which does not qualify as general use end-product compost. Designated use compost must be used only AS DAILY COVER OR VEGETATIVE AMENDMENT IN THE FINAL LAYER at a landfill. (Section 22.33(c) of the Act.)

Section 830.503 Performance Standards for General Use Compost

General-use compost:

- a) Must be free of any materials which pose a definite hazard to human health due to physical characteristics, such as glass or metal shards;
- b) Must not contain man-made materials larger than four millimeters in size exceeding 1% of the end-product compost, on a dry weight basis;

- c) Must have a pH between 6.5 and 8.5;
- d) Must have reached stability, as demonstrated by one of the methods prescribed in Section 830.Appendix B;
- e) Must not exceed, on a dry weight basis, the inorganic concentrations set forth in Section 830.Table A; and
- f) Must not contain fecal coliform populations that exceed 1000 MPN per gram of total solids (dry weight basis), or Salmonella species populations that exceed 3 MPN per 4 grams of total solids (dry weight basis).

Section 830.504 Testing Requirements for End-Product Compost
Derived from Landscape Waste

- a) Operators shall perform testing to demonstrate compliance with the standards set forth in subsections (b) - (e) of Section 830.503. Such testing must be done in accordance with the methods set forth in Section 830.Appendix B, except that an alternative method or methods may be used to demonstrate compliance with any of these standards, if approved in writing by the Agency.
- b) Operators of facilities which are authorized to use an additive pursuant to Section 830.205(a)(1)(G) which may cause an exceedence of Section 830.503(f) shall test for pathogens using the method set forth in Section 830.Appendix B, except that an alternative method or methods may be used to demonstrate compliance with any of these standards, if approved in writing by the Agency.
- c) For any facility not required to have a permit, no testing need be done to demonstrate compliance with the inorganics standards set forth in Section 830.Table A for general use compost derived from landscape waste.
- d) End-product compost derived from landscape waste must be tested for the parameters set forth in Section 830.503 at a frequency of:
 - 1) Once every 5,000 cubic yards of end-product compost transported off-site; or
 - 2) Once per year, if less than 5,000 cubic yards of end-product compost are transported off-site per year.

Section 830.507 Sampling Methods

Sample collection, preservation, and analysis must be done in a manner which assures valid and representative results. A composite sample must be prepared by one of the following methods:

- a) Twelve grab samples, each 550 milliliters in size, must be taken from the end-product compost at the facility, in the following manner:
 - 1) Four grab samples from points both equidistant throughout the length and at the center of the windrow or other pile, at a depth not less than one meter from the surface of the windrow or other pile;
 - 2) Four grab samples from points both equidistant throughout the length and one quarter the width of windrow or other pile, at a depth not less than half the distance between the surface and the bottom of the windrow or other pile; and
 - 3) Four grab samples from points both equidistant throughout the length and one eighth the width of the windrow or other pile, at a depth not less than half the distance between the surface and the bottom of the windrow or other pile.
 - 4) The twelve grab samples must be thoroughly mixed to form a homogenous composite sample. Analyses must be of a representative subsample. The sample holding times, sample container types and minimum collection volumes listed in Section 830. Table B shall apply; or
- b) Sampling methods set forth in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), incorporated by reference at 35 Ill. Adm. Code 830.103.

Section 830.508 Off-Specification Compost

End-product compost derived from landscape waste which does not meet the standards for general use compost set forth in this Subpart must be further managed as landscape waste or as designated use compost.

SUBPART F: FINANCIAL ASSURANCE

Section 830.601 Scope and Applicability

- a) This Subpart provides procedures by which the operator of any composting facility required, pursuant to 35 Ill. Adm. Code 831, to have a permit shall demonstrate compliance with the financial assurance plan requirement set forth in Section 22.33 of the Act.
- b) The operator is not required to comply with the provisions of this Subpart if the operator demonstrates that:
 - 1) Closure and post-closure care plans filed pursuant to 35 Ill. Adm. Code 724, 725, 807 or 811 will result in closure of the facility in accordance with the requirements of this Part; and
 - 2) The operator has provided financial assurance adequate to provide for such closure and post-closure care pursuant to 35 Ill. Adm. Code 724, 725, 807 or 811.

Section 830.602 Financial Assurance Plan

The operator shall develop and have at the facility, and submit to the Agency in accordance with 35 Ill. Adm. Code 831.112, a financial assurance plan containing, at a minimum, the following information:

- a) A written cost estimate, determined pursuant to Section 830.603, covering the maximum cost of premature final closure; and
- b) The financial mechanism chosen by the operator to comply with the requirement set forth in Section 830.604(a).

Section 830.603 Written Cost Estimate

- a) The written cost estimate required pursuant to Section 830.602(a) must be based on the steps necessary to complete closure in accordance with Section 830.213, and must include an itemization of the cost to complete each step.
- b) The operator shall revise the current cost estimate whenever a change in the closure plan increases the cost estimate.

Section 830.604 Financial Assurance Fund

- a) The operator must maintain financial assurance equal to or greater than the amount provided as a written cost estimate in the financial assurance plan.
- b) The funds comprising financial assurance must be used to cover the cost of closure.
- c) Upon certification of completion of closure, any financial assurance funds remaining will be made available for unrestricted use.

Section 830.605 Financial Assurance Mechanism

- a) The operator may utilize either of the following mechanisms to comply with Section 830.604:
 - 1) A cash reserve fund; or
 - 2) Self-insurance.
- b) An operator choosing to use a cash reserve account as the mechanism by which to comply with Section 830.604 shall:
 - 1) Fully fund the account within one year after the initial receipt of waste, except that facilities in operation on November 10, 1994 of this Part shall fully fund the account by November 10, 1995; and
 - 2) Thereafter maintain full funding pending the expenditure of such funds to cover the costs of closure.
- c) An operator choosing to use self-insurance as the mechanism by which to comply with subsection (a) of this Section shall have:
 - 1) Net working capital and tangible net worth each at least six times the current cost estimate;
 - 2) Tangible net worth of at least \$10 million;
 - 3) 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; and

- 4) Either:
- A) Two of the following three ratios: a ratio of total liabilities to net worth of less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities of greater than 0.1; or a ratio of current assets to current liabilities of greater than 1.5; or
 - B) A current rating of AAA, AA, A or BBB for its most recent bond issuance, as issued by Standard and Poor, or a rating of Aaa, Aa, A or Bbb, as issued by Moody.

Section 830.606 Financial Assurance Certification

The operator shall submit to the Agency by November 10, 1995 and every year thereafter as part of the annual report, a Composting Facility Financial Assurance Plan Compliance Certification, so titled, which contains the following information:

- a) Operator name;
- b) Illinois Inventory Identification Number and Permit Number assigned by the Agency;
- c) Facility name;
- d) Address and county in which the facility is located;
and
- e) A statement certifying compliance with the provisions of this Subpart.

Section 830. Appendix A Early Detection and Groundwater Monitoring Program

The operator of a compost facility subject to the monitoring requirements of 35 Ill. Adm. Code 830.205(b)(1)(A) or 35 Ill. Adm. Code 830.205(b)(2)(A) shall implement an Agency-approved monitoring program using, at a minimum, the procedures and standards set forth in this Appendix.

a) Program.

- 1) The operator shall perform a hydrogeologic site investigation pursuant to subsection (b) of this Appendix to characterize the subsurface and determine the location and quality of groundwater beneath the facility.
- 2) An appropriate monitoring system must be designed, capable of determining the compost facility's impact or potential impact on the quality of groundwater beneath the facility.
- 3) If the water table is located greater than ten (10) feet below ground surface and the soil has been classified as a soil exhibiting moderate or poor drainage by the U.S. Department of Agriculture's Soil Conservation Service on a published county soil survey map, the owner or operator shall install either an early detection system, pursuant to subsection (d)(1) of this Section, or a groundwater monitoring system, pursuant to subsection (d)(2) of this Section. Otherwise, a groundwater monitoring system must be installed, pursuant to subsection (d)(2) of this Section.
- 4) If either early detection monitoring or groundwater monitoring indicates an impact on underground water beneath the facility, a site evaluation must be performed, using the procedures set forth in subsection (e) of this Section, and remedial action implemented, if appropriate.
- 5) The results of the hydrogeologic site investigation and the proposed monitoring system design must be submitted to the Agency as part of an application for a facility permit.

b) Hydrogeologic Site Investigation. The operator shall conduct a hydrogeologic site investigation to obtain the following information:

- 1) The regional hydrogeologic setting of the facility, using material available from Illinois scientific surveys, state and federal organizations, water well drilling logs and previous investigations. A complete list of references and any well logs utilized must be submitted to the Agency with the results of the hydrogeologic site investigation;
 - 2) The site-specific hydrogeologic setting of the facility, using continuously sampled borings of the site and information collected from on-site piezometers or monitoring wells. At a minimum, borings must be to a depth of ten (10) feet;
 - 3) Soil characteristics, including soil types and physical properties of the underlying strata, including the potential pathways for contaminant migration. Any confining unit relative to waste constituents expected to be present must be identified;
 - 4) Water-bearing sediments or geologic units beneath the facility, their classification pursuant to 35 Ill. Adm. Code 620 and the direction and rate of groundwater flow. Also, regional and local areas of groundwater discharge and recharge affecting groundwater at the facility must be identified; and
 - 5) Water quality beneath the facility, including any potential impact on groundwater. The groundwater quality analysis must take into account the type of compost facility and its expected leachate constituents.
- c) All drill holes, including exploration borings that are not converted into monitoring wells, monitoring wells that are no longer necessary to the operation of the facility, and other holes that may cause or facilitate contamination of groundwater, must be sealed in accordance with the standards of 35 Ill. Adm. Code 811.316.
- d) Monitoring System
- 1) Early Detection System
 - A) Monitoring device(s) must be installed:
 - i) Hydraulically upgradient from the facility or at sufficient distance from the composting area so as not to be affected by it, to establish representative background water quality in the waters beneath (or near) the facility; and

- ii) Beneath and around the composting area, sufficient to enable early detection of the downward migration of constituents related to the composting activities at the facility.
 - B) The parameters monitored must be those expected to be in the leachate, taking into consideration the type of compost facility.
 - C) If lysimeters are utilized, the following requirements must be used in designing an adequate monitoring system;
 - i) Lysimeters must be located, when possible, in a depression in the path of site runoff in each direction of flow and topographically low areas associated with the unit(s).
 - ii) At a minimum, each lysimeter must be sampled within 48 hours after each rain event exceeding 0.5 inches, provided that the rain event is not within two weeks after the date previous samples were successfully collected.
 - iii) Any lysimeter placed around the perimeter must be installed at an angle so that the cup of the lysimeter is beneath the unit(s).
- 2) Groundwater Monitoring System
- A) Monitoring well(s) must be installed:
 - i) Hydraulically upgradient from the facility, to establish representative background water quality in the groundwater beneath (or near) the facility; and
 - ii) Hydraulically downgradient (i.e., in the direction of decreasing static head) from the compost facility. Locations and depths of monitoring wells must ensure detection of waste constituents that migrate from the waste management unit to the groundwater.
 - B) The parameters monitored must be those expected to be in the leachate, taking into consideration the type of compost facility.
 - C) The groundwater monitoring system must be installed at the closest practicable distance from the composting area boundary, or at an alternative distance specified by permit.

- 3) Approval of any early detection monitoring system or groundwater monitoring system must be obtained from the Agency prior to operation.

e) Evaluation

- 1) Further evaluation of an impact to underground water must be required if:
 - A) An exceedence of the appropriate standard as stated in 35 Ill. Adm. Code 620 is confirmed;
 - B) A progressive increase in measured parameters other than pH is observed over two consecutive sampling events; or
 - C) Where groundwater monitoring wells are used, a statistical increase over background or upgradient concentrations, calculated in accordance with 35 Ill. Adm. Code 811.320(e), is observed.
- 2) An impact as described in subsection (e)(1)(A) or (e)(1)(C) of this Section must be confirmed by resampling the underground water within 30 days after the date on which the first sample analyses are received. The operator shall provide notification to the Agency of the results of the resampling analysis within 30 days after the date on which the sample analyses are received, but no later than 90 days after the first samples were taken.
- 3) Within 60 days after the confirmation of impact but no later than 120 days after the date on which the first sample was taken, the operator shall propose as a permit modification a plan to address the impact, which may include further evaluation of data, including the use of appropriate statistical methods, groundwater monitoring or remedial action.

Section 830.APPENDIX B Performance Test Methods

a) Man-made materials

- 1) Take four 250 gram samples.
- 2) Dry samples at 70° C for 24 hours. Let sample cool to room temperature (20 to 25° C).
- 3) Weigh each sample and pass through a four millimeter screen. Inspect material remaining on the screen, and separate and weigh man-made materials. Calculate percent man-made materials relative to the total dry weight of the sample prior to screening.

b) Pathogens

The end product compost must be tested to demonstrate compliance with one of the pathogen reduction standards set forth in Section 830.503(f). Such testing must be done in accordance with Standard Methods for the Examination of Water and Wastewater Part 9221 E or Part 9222 D, incorporated by reference at 35 Ill. Adm. Code 830.103, for fecal coliform, and Standard Methods for the Examination of Water and Wastewaters Part 9260 D incorporated by reference at 35 Ill. Adm. Code 830.103, for Salmonella sp. bacteria.

c) pH

The following protocol must be used to determine the pH of the compost:

North Central Regional Publication 221, Method 14; or EPA Method 9045 in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846), both incorporated by reference at 35 Ill. Adm. Code 830.103.

d) Stability

The operator shall demonstrate that the composite sample has reached stability by showing either:

- 1) That the compost does not reheat, upon standing, to greater than 20° C above room temperature (20 to 25° C). The degree of reheating must be measured using the following method:
 - A) Take 4 liters of composite sample and adjust the moisture of the end-product compost so it falls within the range of 45 to 55% water on a dry weight basis;

- B) Fill a 2 liter Dewar flask (100 millimeters, inside diameter) loosely with sample within acceptable moisture range and gently tap to simulate natural settling. Keep at room temperature (20 to 25° C).
- C) Insert thermometer into Dewar flask to a point 5 centimeters from bottom of flask. Do not push thermometer against bottom of flask.
- D) Record time and temperature each day for 15 days to determine when the highest point is reached. After each reading, shake down the thermometer; or
- 2) That the end-product compost supports a germination rate of 70% for annual ryegrass and radish using the following protocol:

- A) Mix 4 liters vermiculite with 4 grams of air-dried soil.
- B) Take 1 liter of the composite sample with a moisture level within the range of 45 to 55%, on a dry weight basis; if necessary, adjust the moisture level until within such range.
- C) In three 2-liter containers, combine the vermiculite-soil mix with the compost sample at the following ratios:

<u>Blend</u>	<u>Vermiculite-Soil Mix</u> (grams)	<u>Compost</u> (45 to 55% moisture) (dry weight basis) (grams)
A (75% compost, w/w)	320	960
B (50% compost, w/w)	640	640
C (Control)	1,280	0

- D) Break up lumps of compost with a spatula or trowel. Moisten the blend with water.
- E) Cover each container with plastic wrap and mix well by inverting each container 20 times.
- F) Transfer each blend into four 4-inch pots. Fill the pots to the brim and firm the surface by pressing down with the bottom of another 4-inch

pot. Leave about 2 to 5 centimeters of space between surface of the blend and the top of the pot.

- G) Add approximately 50 milliliters of water soluble fertilizer (e.g., 20-20-20 NPK, fish emulsion) diluted to half-strength to each pot.
- H) Place 10 seeds of annual ryegrass and 10 radish seeds onto the surface of the moistened blend. Cover the seeds with about 1 centimeter dry vermiculite.
- I) Set the pots in a tray of warm water and let them remain there until capillary action has drawn water up and moistened the surface of the blend. Remove the pots from the tray when moisture from the bottom-watering is observed.
- J) Put pots in an environment suitable for plant growth (e.g., 8 to 12 hours of light daily, 30 to 60% humidity, 20 to 25° C). Check pots daily to determine if watering is needed. Blends should be kept evenly moist. If necessary, cover each pot with plastic wrap until the seedlings emerge. Remove plastic wrap at the first sign of emergence.
- K) Seven days after planting the seeds, count emergent seedlings in each pot and record visual observations of relative plant conditions identified in Section 830. Table C.
- L) Calculate the percent germination of plants in each blend relative to the control pot, using the formula set forth in Section 830. Table C.

Section 830. Table A Inorganic Concentration Limits for General
Use Compost

	Maximum Concentration Limit (mg/kg dry weight basis)	Test Method (SW-846)
Arsenic	41	7060 or 7061
Cadmium	21	7130 or 7131 or 6010
Chromium	1,200	7190 or 7191 or 6010
Copper	1,500	7210 or 7211 or 6010
Lead	300	7420 or 7421 or 6010
Mercury	17	7471
Nickel	420	7520 or 6010
Selenium	36	7740 or 7741
Zinc	2,800	7950 or 7951 or 6010

Section 830. Table B Sampling and Handling Requirements

<u>Parameter</u>	<u>Container Type</u>	<u>Minimum Sample Size (ml)</u>	<u>Preservation</u>	<u>Maximum Storage Time</u>
Man-made materials	P, G	1,000	Do not freeze	28 days
pH	P, G	50	Analyze immediately	
Seed				
Germination	P, G	1,000	Analyze immediately	
Self-heating	P, G	4,000	Analyze immediately	
Pathogens	P, G	500	Cool to 4°C	2 weeks
Inorganic	P(A), G(A)	500	Cool to 4°C	6 months

P = plastic; G = glass; G(A), P(A) = rinsed with acid cleaning solution (1 part water to 1 part concentrated HNO₃)

Section 830. Table C Seed Germination Record Sheet

Date Test Initiated:

Date Test Read:

Person responsible for test:

% Germination

<u>Blend</u>	<u>Pot ID</u>	<u>Number of Annual Ryegrass Seedlings</u>	<u>Number of Radish Seedlings</u>
A	A ₁		
A	A ₂		
A	A ₃		
A	A ₄		
B	B ₁		
B	B ₂		
B	B ₃		
B	B ₄		
C	C ₁		
C	C ₂		
C	C ₃		
C	C ₄		

Annual Ryegrass

$$\text{Blend A} = \frac{(A_1 + A_2 + A_3 + A_4) / 4}{(C_1 + C_2 + C_3 + C_4) / 4} \times 100\% = \underline{\hspace{2cm}} \% \text{ Germination}$$

$$\text{Blend B} = \frac{(B_1 + B_2 + B_3 + B_4) / 4}{(C_1 + C_2 + C_3 + C_4) / 4} \times 100\% = \underline{\hspace{2cm}} \% \text{ Germination}$$

Radish

$$\text{Blend A} = \frac{(A_1 + A_2 + A_3 + A_4) / 4}{(C_1 + C_2 + C_3 + C_4) / 4} \times 100\% = \underline{\hspace{2cm}} \% \text{ Germination}$$

$$\text{Blend B} = \frac{(B_1 + B_2 + B_3 + B_4) / 4}{(C_1 + C_2 + C_3 + C_4) / 4} \times 100\% = \underline{\hspace{2cm}} \% \text{ Germination}$$

General Plant Conditions**BLEND A**
Condition

<u>Pots</u>	<u>Seedling</u>	<u>Parameter</u>	<u>None</u>	<u>Slight</u>	<u>Moderate</u>	<u>High</u>
A ₁ - A ₄	Ryegrass	Wilting				
A ₁ - A ₄	Ryegrass	Chlorosis				
A ₁ - A ₄	Ryegrass	Discoloration				
A ₁ - A ₄	Ryegrass	Malodorous				
A ₁ - A ₄	Ryegrass	Fungal Growth				

Other Comments:

BLEND B
Condition

<u>Pots</u>	<u>Seedling</u>	<u>Parameter</u>	<u>None</u>	<u>Slight</u>	<u>Moderate</u>	<u>High</u>
B ₁ - B ₄	Ryegrass	Wilting				
B ₁ - B ₄	Ryegrass	Chlorosis				
B ₁ - B ₄	Ryegrass	Discoloration				
B ₁ - B ₄	Ryegrass	Malodorous				
B ₁ - B ₄	Ryegrass	Fungal Growth				

Other Comments:

BLEND C
Condition

<u>Pots</u>	<u>Seedling</u>	<u>Parameter</u>	<u>None</u>	<u>Slight</u>	<u>Moderate</u>	<u>High</u>
C ₁ - C ₄	Ryegrass	Wilting				
C ₁ - C ₄	Ryegrass	Chlorosis				
C ₁ - C ₄	Ryegrass	Discoloration				
C ₁ - C ₄	Ryegrass	Malodorous				
C ₁ - C ₄	Ryegrass	Fungal Growth				

Other Comments:

General Conclusion on the Stability of the Compost tested:

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

PART 831
INFORMATION TO BE SUBMITTED IN A COMPOST FACILITY PERMIT
APPLICATION

SUBPART A: GENERAL INFORMATION REQUIRED FOR
ALL COMPOST FACILITIES

Section	
831.101	Scope and Applicability
831.102	Severability
831.103	Certification by Professional Engineer
831.104	Application Fees
831.105	Required Signatures
831.106	Site Identification
831.107	Site Location Map
831.108	Site Plan Map
831.109	Narrative Description of the Facility
831.110	Legal Description
831.111	Proof of Land Ownership and Certification
831.112	Closure Plan
831.113	Financial Assurance
831.114	Operator-Initiated Modification of an Approved Permit
831.115	Modification to Obtain Operating Authorization
831.116	Permit Renewal

AUTHORITY: Implementing Sections 5, 21, 22.33, 22.34, 22.35 and 39 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/5, 21, 22.33, 22.34, 22.35, 27 and 39].

SOURCE: Adopted at 18 Ill. Register_____, effective _____.

NOTE: Capitalization denotes statutory language.

**SUBPART A: GENERAL INFORMATION REQUIRED FOR
ALL COMPOST FACILITIES**

Section 831.101 Scope and Applicability

This Part contains the procedures to be followed by all applicants in applying for permits required pursuant to Section 21(d) of the Act. The definitions set forth in 35 Ill. Adm. Code 830.102 apply to this Part.

Section 831.102 Severability

If any provision of this Part is adjudged invalid, or if the application thereof to any person or in any circumstance is adjudged invalid, such invalidity shall not affect the validity of either this Part as a whole or any Subpart, Section, subsection, sentence or clause thereof not adjudged invalid.

Section 831.103 Certification by Professional Engineer

All designs presented in the application must be prepared by, or under the supervision of, a professional engineer if required by the Illinois Professional Engineering Practice Act [225 ILCS 325]. The professional engineer shall affix the name of the engineer, date of preparation, registration number, a statement attesting to the accuracy of the information and design and a professional seal to all designs.

Section 831.104 Application Fees

The permit application must be accompanied by all filing fees required pursuant to Section 5(f) of the Act.

Section 831.105 Required Signatures

- a) All permit applications must contain the full legal name, address and telephone number of the operator, the property owner, if different from the operator, and any duly authorized agent(s) of the operator or property owner to whom all inquiries and correspondence shall be addressed.
- b) All permit applications must be signed by the operator and the property owner, if different from the operator, or the duly authorized agent(s) of the operator or property owner, accompanied by an oath or affidavit attesting to the agent's authority to sign the application, if applicable, and notarized. The following persons are considered duly authorized agents of the operator and the property owner:

- 1) For corporations, a principal executive officer of at least the level of vice president;
- 2) For a sole proprietorship or partnership, the proprietor or a general partner, respectively; and
- 3) For a municipality, state, federal or other public agency, the head of the agency or ranking elected official.

Section 831.106 Site Identification

For existing permitted sites, the site name and the Illinois Inventory Identification Number previously assigned by the Agency shall be used in correspondence with the Agency regarding the facility. Permit applications for new facilities must include the proposed facility name, the latitude and longitude of the site, if available, the legal description of the site, if available, and the physical location, including at a minimum the city or township, county, state and zip code. An Illinois Inventory Identification Number will be assigned by the Agency.

Section 831.107 Site Location Map

All permit applications must contain a site location map on the most recent United States Geological Survey ("USGS") quadrangle of the area from the 7 1/2 minute series (topographic), or on such other map whose scale clearly shows the following information:

- a) The permit area and all adjacent property, extending at least 1/2 mile beyond the boundary of the facility;
- b) The prevailing wind direction;
- c) All rivers designated for protection under the Wild and Scenic Rivers Act (16 U.S.C. 127 *et seq.*);
- d) The limits of all 10-year floodplains;
- e) All natural areas designated as a Dedicated Illinois Nature Preserve pursuant to the Illinois Natural Areas Preservation Act [525 ILCS 30];
- f) All historic and archaeological sites designated by the National Historic Preservation Act (16 U.S.C. 470 *et seq.*) and the Illinois Historic Preservation Act [20 ILCS 3410];

- g) All areas identified as a critical habitat pursuant to the Endangered Species Act (16 U.S.C. 1531 et seq.) and the Illinois Endangered Species Protection Act [520 ILCS 10];
- h) All main service corridors, transportation routes, and access roads to the facility;
- i) All residences and areas in which people congregate within 1/2 mile of the facility boundaries;
- j) The locations of all on-site potable water supply wells and all potable water supply wells within 1/8 mile of the boundaries of the facility; and
- k) The types of land use for the properties immediately adjacent to the facility (i.e., residential, commercial, industrial, agricultural, etc.). This must include any zoning classifications of these properties and the location (and function) of all buildings within 1/2 mile of the facility.

Section 831.108 Site Plan Map

The application must contain maps or plan sheets showing the location of the facility, on a scale no smaller than one inch equals 200 feet, containing five-foot contour intervals where the relief exceeds 20 feet and a two-foot contour interval where the relief is 20 feet or less, and referenced to a USGS datum. The following information must be provided:

- a) The boundaries of the facility;
- b) The boundaries of the composting area(s);
- c) The property boundaries, if different;
- d) The location of all buildings on the property and any other pertinent location data with respect to the operation of the proposed facility (i.e., utilities, water supply, fencing, access roads, paved areas, etc.);
- e) The location of all staging and stockpiling areas for landscape waste, end-product compost, windrow bulking agents or additives;
- f) The drainage patterns of the composting facility and surrounding areas. At a minimum, the direction of both on-site and off-site drainage, as well as the location of any ditches, swales, berms or other structures that exist or will be constructed to

control runoff and leachate generated by the facility's operation must be identified; and

- g) Proof that all authorizations, permits, and approvals required from each Bureau of the Agency have been applied for or obtained.

Section 831.109 Narrative Description of the Facility

The permit application must contain a written description of the facility with supporting documentation describing the procedures and plans that will be used at the facility to comply with the requirements of this Part and any other applicable Parts of 35 Ill. Adm. Code: Chapter I. Such description must include, but not be limited to, the following information:

- a) An estimate of the maximum annual volume and peak daily volume of landscape waste the facility will be able to process;
- b) Proof of the following:
 - 1) THE FACILITY INCLUDES A SETBACK OF AT LEAST 200 FEET FROM THE NEAREST POTABLE WATER SUPPLY WELL;
 - 2) THE FACILITY IS LOCATED OUTSIDE THE BOUNDARY OF THE 10-YEAR FLOODPLAIN OR THE SITE WILL BE FLOODPROOFED;
 - 3) THE FACILITY IS LOCATED SO AS TO MINIMIZE INCOMPATIBILITY WITH THE CHARACTER OF THE SURROUNDING AREA, INCLUDING AT LEAST A 200 FOOT SETBACK FROM ANY RESIDENCE AND IN THE CASE OF A FACILITY THAT IS DEVELOPED OR THE PERMITTED COMPOSTING AREA OF WHICH IS EXPANDED AFTER NOVEMBER 17, 1991 THE COMPOSTING AREA IS LOCATED AT LEAST 1/8 MILE FROM THE NEAREST RESIDENCE (OTHER THAN A RESIDENCE LOCATED ON THE SAME PROPERTY AS THE FACILITY).
 - 4) THE DESIGN OF THE FACILITY WILL PREVENT ANY COMPOST MATERIAL FROM BEING PLACED WITHIN 5 FEET OF THE WATER TABLE, WILL ADEQUATELY CONTROL RUNOFF FROM THE SITE, AND WILL COLLECT AND MANAGE ANY LEACHATE THAT IS GENERATED ON THE SITE (Section 39(m) of the Act);
- c) An operating plan, satisfying the requirements set forth in 35 Ill. Adm. Code 830.206;

- d) An early detection or groundwater monitoring system design, in accordance with 35 Ill. Adm. Code 830.205(b)(1)(A)(iii) or 830.205(b)(2)(A)(iii);
- e) A contingency plan, satisfying the requirements set forth in 35 Ill. Adm. Code 830.212;
- f) Specification of the operating hours of the facility;
- g) The types of landscape waste that are proposed to be received by the facility;
- h) Descriptions of the storage areas (including their capacities) that will be used to stage the waste before windrowing, to store bulking agent(s) or additives and to store the end-product compost; and
- i) Description of personnel training procedures, satisfying the requirements of 35 Ill. Adm. Code 830.210.

Section 831.110 Legal Description

The permit application must contain a legal description of the facility boundary. Data supplied by any registered land surveyor contained in the permit application must bear the signature or seal of that registered land surveyor. References are to be included when such data are obtained from published sources.

Section 831.111 Proof of Land Ownership and Certification

The permit application must contain a certificate of ownership of the land on which the facility is located or a copy of the lease and its duration. The lease must clearly specify that the property owner authorizes the construction of a composting facility on the leased premises. The operator or property owner shall certify that the Agency will be notified 30 days prior to any changes in property ownership or conditions in the lease affecting the permit area.

Section 831.112 Closure Plan

The permit application must contain a written closure plan which contains a description of methods for compliance with all closure requirements in 35 Ill. Adm. Code 830.

Section 831.113 Financial Assurance

The permit application must contain methods to ensure financial assurance satisfying the requirements in 35 Ill. Adm. Code 830. Subpart F.

Section 831.114 Operator-Initiated Modification of an Approved Permit

- a) To initiate a permit modification authorizing construction, resulting in an increase in capacity or extending the term of the existing permit, the operator shall file a complete permit application, on a form provided by the Agency, demonstrating compliance with all applicable requirements set forth in 35 Ill. Adm. Code 830.
- b) To initiate any other permit modification, the operator shall submit, on a form provided by the Agency, a request for the desired modification. The applicant shall submit all information required pursuant to this Part which pertains to the desired modification.

Section 831.115 Modification to Obtain Operating Authorization

Unless otherwise authorized in the facility permit, prior to placing into service any structure constructed at a facility, the applicant shall obtain an operating authorization as a permit condition. In order to obtain such an operating authorization, the operator shall submit a report documenting that construction has been completed in accordance with the engineering design.

Section 831.116 Permit Renewal

- a) The operator shall submit only that information required pursuant to this Part that has changed since the last permit review by the Agency.
- b) The operator shall update any groundwater impact assessment, in accordance with 35 Ill. Adm. Code 830. Appendix A.
- c) The operator shall provide a new cost estimate for closure pursuant to 35 Ill. Adm. Code 830.213 and 35 Ill. Adm. Code 830. Subpart F, based upon the maximum cost of premature final closure in the next permit term.

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

PART 832
 PROCEDURAL REQUIREMENTS FOR PERMITTING COMPOST FACILITIES

SUBPART A: GENERAL PROVISIONS

Section

- 832.101 Scope and Applicability
- 832.102 Severability
- 832.103 Form and Delivery of Permit Application
- 832.104 Required Notifications
- 832.105 Agency Decision Deadlines
- 832.106 Standards for Issuance of a Permit
- 832.107 Standards for Denial of a Permit
- 832.108 Permit Appeals
- 832.109 Permit No Defense
- 832.110 Term of Permit
- 832.111 Transfer of Permit

SUBPART B: ADDITIONAL PROCEDURES FOR MODIFICATION OF PERMITS

Section

- 832.201 Agency-Initiated Modification of an Approved Permit
- 832.202 Procedures for a Modification of an Approved Permit

SUBPART C: ADDITIONAL PROCEDURES FOR THE RENEWAL OF PERMITS

Section

- 832.301 Time of Filing
- 832.302 Effect of Timely Filing
- 832.303 Procedures for Permit Renewal

AUTHORITY: Implementing Sections 5, 21, 22.26, 22.33, 22.34, 22.35, 39 and 40 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/5, 21, 22.26, 22.33, 22.34, 22.35, 39, 40 and 27].

SOURCE: Adopted at 18 Ill. Register____, effective _____.

NOTE: Capitalization denotes statutory language.

SUBPART A: GENERAL PROVISIONS

Section 832.101 Scope and Applicability

This Part contains the procedures to be followed by the Agency in processing permits required pursuant to Section 21(d) of the Act and 35 Ill. Adm. Code 831. The definitions set forth in 35 Ill. Adm. Code 830.102 apply to this Part.

Section 832.102 Severability

If any provision of this Rule is adjudged invalid, or if the application thereof to any person or in any circumstance is adjudged invalid, such invalidity shall not affect the validity of either this Part as a whole or any Subpart, Section, subsection, sentence or clause thereof not adjudged invalid.

Section 832.103 Form and Delivery of Permit Application

All permit applications must be made on forms prescribed by the Agency, and must be mailed or delivered to the address designated by the Agency on the forms. 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 proved by a dated, signed receipt. Permit applications which are hand-delivered must be delivered during the Agency's normal business hours.

Section 832.104 Required Notifications

THE AGENCY SHALL NOT ISSUE A DEVELOPMENT OR CONSTRUCTION PERMIT AFTER DECEMBER 31, 1990 FOR ANY COMPOSTING FACILITY, UNLESS THE APPLICANT HAS GIVEN NOTICE THEREOF:

- a) IN PERSON OR BY MAIL TO THE MEMBERS OF THE GENERAL ASSEMBLY FROM THE LEGISLATIVE DISTRICT IN WHICH THE PROPOSED FACILITY IS TO BE LOCATED;
- b) BY REGISTERED OR CERTIFIED MAIL TO THE OWNERS OF ALL REAL PROPERTY LOCATED WITHIN 250 FEET OF THE SITE OF THE PROPOSED FACILITY (DETERMINED AS PROVIDED IN SUBSECTION (b) OF SECTION 39.2 of the Act); AND
- c) TO THE GENERAL PUBLIC BY PUBLICATION IN A NEWSPAPER OF GENERAL CIRCULATION IN THE COUNTY IN WHICH THE PROPOSED FACILITY IS TO BE LOCATED. (Section 22.26 of the Act.)

- 1) At a minimum, the newspaper notification must meet the following requirements:
 - A) Publication in the legal notice section of a daily newspaper in circulation within the city or area in which the facility is proposed to be located;
 - B) Published once a week for three successive weeks, pursuant to Section 3 of the Illinois Notice by Publication Act [715 ILCS 5/3].
- 2) The newspaper notification should contain:
 - A) A description of the type of facility being proposed;
 - B) The location of the proposed facility;
 - C) The name of the person or corporation proposing the facility with a contact person and phone number; and
 - D) Instructions to direct comments to the Agency in writing within twenty-one (21) days after the date of last publication. The Agency address and the phone number(s) of the bureau(s) and section(s) reviewing the permit must be provided.
- 3) The notification must not be published more than 3 months before filing the application and must commence no later than the filing date. Copies of the newspaper notification must either accompany the application or be sent to the Agency within 30 days after filing the application.

Section 832.105 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 NOTICE AND OPPORTUNITY FOR PUBLIC HEARING ARE REQUIRED BY STATE OR FEDERAL LAW OR REGULATION. (Section 39(a) of the Act.)
- b) An application for permit pursuant to this Part shall not be deemed filed until the Agency has received all information and documentation in the

form and with the content required pursuant to this Part, 35 Ill. Adm. Code 830 and 35 Ill. Adm. Code 831. However, if, pursuant to the standards for the denial of a permit, the Agency fails to notify the applicant within 30 days following the filing of a purported application that the application is incomplete and the reason the Agency deems it incomplete, the application shall be deemed to have been filed as of the date of such purported filing as calculated pursuant to Section 832.103. The applicant may treat the Agency's notification that an application is incomplete as a denial of the application for the purpose of permit appeal.

- c) The applicant may waive the right to a final decision within the decision deadline. Such waiver must be submitted in writing to the Agency prior to the applicable deadline in subsection (a) of this Section.
- d) The applicant may modify a permit application at any time prior to the Agency decision deadline date. Any modification of a permit application must constitute a new application for the purposes of calculating the Agency decision deadline date.
- e) Final action must be deemed to have taken place on the date that such final action is signed.
- f) The Agency shall mail all notices of final action by registered or certified mail, postmarked with a date stamp and accompanied by a return receipt request.

Section 832.106 Standards for Issuance of a Permit

- a) WHEN THE BOARD HAS BY REGULATION REQUIRED A PERMIT FOR THE CONSTRUCTION, INSTALLATION, OR OPERATION OF ANY TYPE OF FACILITY, EQUIPMENT, VEHICLE, VESSEL, OR AIRCRAFT, THE APPLICANT SHALL APPLY TO THE AGENCY FOR SUCH PERMIT AND IT SHALL BE THE DUTY OF THE AGENCY TO ISSUE SUCH PERMIT UPON PROOF BY THE APPLICANT THAT THE FACILITY, EQUIPMENT, VEHICLE, VESSEL, OR AIRCRAFT WILL NOT CAUSE A VIOLATION OF the ACT OR OF REGULATIONS set forth in 35 Ill. Adm. Code: Chapter I.
- b) IN GRANTING PERMITS, THE AGENCY MAY IMPOSE SUCH CONDITIONS AS MAY BE NECESSARY TO ACCOMPLISH THE PURPOSES OF the ACT, AND AS ARE NOT INCONSISTENT WITH THE REGULATIONS PROMULGATED BY THE BOARD.

- c) NO PERMIT SHALL BE ISSUED BY THE AGENCY UNDER the ACT FOR CONSTRUCTION OR OPERATION OF ANY FACILITY OR SITE LOCATED WITHIN THE BOUNDARIES OF ANY SETBACK ZONE ESTABLISHED PURSUANT TO the ACT, WHERE SUCH CONSTRUCTION OR OPERATION IS PROHIBITED. (Section 39 of the Act.)

Section 832.107 Standards for Denial of a Permit

IF THE AGENCY DENIES ANY PERMIT PURSUANT TO THIS Section, THE AGENCY SHALL TRANSMIT TO THE APPLICANT, WITHIN THE TIME LIMITATIONS for Agency decision deadlines, SPECIFIC, DETAILED STATEMENTS AS TO THE REASONS THE PERMIT APPLICATION WAS DENIED. SUCH STATEMENTS SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

- a) THE SECTIONS OF the ACT THAT MAY BE VIOLATED IF THE PERMIT WERE GRANTED;
- b) THE PROVISION OF THE REGULATIONS set forth in 35 Ill. Adm. Code: Chapter I, PROMULGATED PURSUANT TO the ACT, THAT MAY BE VIOLATED IF THE PERMIT WERE GRANTED;
- c) THE SPECIFIC INFORMATION, IF ANY, THE AGENCY DEEMS THE APPLICANT DID NOT PROVIDE IN ITS APPLICATION TO THE AGENCY; AND
- d) A STATEMENT OF SPECIFIC REASONS WHY THE ACT AND THE REGULATIONS set forth in 35 Ill. Adm. Code: Chapter I MIGHT BE VIOLATED IF THE PERMIT WERE GRANTED. (Section 39(m) of the Act.)

Section 832.108 Permit Appeals

IF THE AGENCY REFUSES TO GRANT OR GRANTS WITH CONDITIONS A PERMIT UNDER SECTION 39 OF the ACT, THE APPLICANT MAY, WITHIN 35 DAYS, PETITION FOR A HEARING BEFORE THE BOARD TO CONTEST THE DECISION OF THE AGENCY. (Section 40(a)(1) of the Act.) The petition shall be filed, and the proceeding conducted, pursuant to the procedures of Section 40 of the Act and 35 Ill. Adm. Code 101 and 105.

Section 832.109 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 facility without a permit.

Section 832.110 Term of Permit

No permit issued pursuant to this Part shall have a term of more than 5 years.

Section 832.111 Transfer of Permit

A permit may be transferred to a new operator only upon permit modification, pursuant to this Part, to identify the new permittee and incorporate other requirements necessary under the Act. The application must be signed by the existing owner or duly authorized agent of the owner and the new owner and operator or duly authorized agents. The new operator to whom the permit is transferred shall comply with all terms and conditions specified in such permit.

SUBPART B: ADDITIONAL PROCEDURES FOR MODIFICATION OF PERMITS

Section 832.201 Agency-Initiated Modification of an
Approved Permit

- a) The Agency may modify a permit under the following circumstances:
- 1) Discovery of a typographical, administrative, or calculation error;
 - 2) Discovery that a determination or condition was based upon false or misleading information;
 - 3) An order of the Board issued in an action brought pursuant to Title VII, IX or X of the Act; or
 - 4) Promulgation of new statutes or regulations affecting the permit.
- b) Modifications initiated by the Agency shall not become effective until 45 days after receipt by the operator, unless stayed during the pendency of an appeal to the Board. The operator may request that the Agency reconsider the modification, or may file a petition for hearing with the Board pursuant to Section 832.108. All other time periods and procedures in 832.202 shall apply.

Section 832.202 Procedures for a Modification of an
Approved Permit

Applications for modification of an approved permit shall be subject to all requirements and time schedules set forth in this Part.

SUBPART C: ADDITIONAL PROCEDURES FOR THE RENEWAL OF PERMITS

Section 832.301 Time of Filing

An application for renewal of a permit must be filed with the Agency at least 90 days prior to the expiration date of the existing permit.

Section 832.302 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 and any final Board decision on any appeal pursuant to Section 40 have been made, unless a later date is fixed by order of a reviewing court.

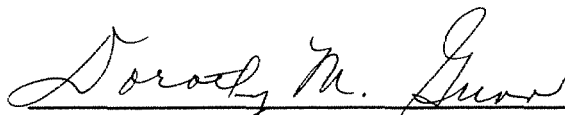
Section 832.303 Procedures for Permit Renewal

Applications for permit renewal are to be subject to the requirements and time schedules set forth in Subpart A of this Part.

IT IS SO ORDERED.

J. Theodore Meyer dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 3rd day of November, 1994, by a vote of 5-1.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board