

# PROPOSED RULEMAKING

## ENVIRONMENTAL QUALITY BOARD

[ 25 PA. CODE CHS. 271—273 AND 277—285 ]

### Municipal Waste

The Environmental Quality Board (Board) proposes to amend Chapters 271—273 and 277—285. The proposed amendments are the result of the Department evaluating the municipal waste regulations promulgated in 1988, 1991 and 1992 in accordance with the Regulatory Basics Initiative (RBI).

This proposal was adopted by the Board at its meeting of June 16, 1998.

#### A. Effective Date

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

#### B. Contact Persons

For further information contact William F. Pounds, Chief of the Division of Municipal and Residual Waste, P. O. Box 8472, Rachel Carson State Office Building, Harrisburg, PA 17105-8472, (717) 787-7564, or Kristen M. Campfield, Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposal appears in Section J of this preamble. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposal is available electronically through the Department of Environmental Protection's (Department) Web site (<http://www.dep.state.pa.us>).

#### C. Statutory Authority

The proposed rulemaking is being made under the authority of the following:

The Solid Waste Management Act (SWMA) (35 P. S. §§ 6018.101—6018.1003), as amended, which in section 105(a) of the SWMA (35 P. S. § 6018.105(a)) grants the Board the power and the duty to adopt the rules and regulations of the Department to carry out the provisions of the SWMA.

The Clean Streams Law (CSL) (35 P. S. §§ 691.1—691.1001), which in section 5(b) of the CSL (35 P. S. § 691.5(b)) grants the Board the authority to formulate, adopt, promulgate and repeal the rules and regulations as are necessary to implement the provisions of the CSL and which in section 402 of the CSL (35 P. S. § 691.402) grants the Board the authority to adopt rules and regulations requiring permits or establishing conditions under which an activity shall be conducted for any activity that creates a danger of pollution of the waters of this Commonwealth or that regulation of the activity is necessary to avoid such pollution.

The Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101) (53 P. S. §§ 4000.101—4000.1904), which in section 302 of Act 101 (35 P. S. § 4000.302) gives the Board the power and duty to adopt the regulations of the Department to accomplish the purposes and carry out the provisions of this act.

The Land Recycling and Environmental Remediation Standards Act (Act 2) (35 P. S. §§ 6026.101—6026.909),

which in section 104(a) of Act 2 (35 P. S. § 6026.104(a)) authorizes the Board to adopt Statewide health standards, appropriate mathematically valid statistical tests to define compliance with Act 2 and other regulations that may be needed to implement the provisions of Act 2. Section 301(c) of Act 2 (35 P. S. § 6026.301(c)) authorizes the Department to establish by regulation procedures for determining attainment of remediation standards when practical quantification limits set by the United States Environmental Protection Agency (EPA) have a health risk that is greater than the risk levels established in Act 2. Section 303(a) of Act 2 (35 P. S. § 6026.303(a)) authorizes the Board to promulgate Statewide health standards for regulated substances for each environmental medium and the methods used to calculate the Statewide health standards.

The Infectious and Chemotherapeutic Wastes Law (ICWL) (35 P. S. §§ 6019.1—6019.6), which in sections 2(b) and 4(b) of the ICWL (35 P. S. §§ 6019.2(b) and 6019.4(b)) grants the Department the authority to propose regulations as may be necessary or appropriate to accomplish the purposes of the IWCL and grants the Board the authority to adopt rules and regulations of the Department to accomplish the purposes and to carry out the provisions of the IWCL.

The Administrative Code of 1929 (AC) (71 P. S. §§ 510-5, 510-17 and 510-20), which in section 1905-A of the AC authorizes the Department to require applicants for permits and permit revisions to provide written notice to municipalities, in section 1917-A of the AC authorizes and requires the Department to protect the people of this Commonwealth from unsanitary conditions and other nuisances, including any condition which is declared to be a nuisance by any law administered by the Department, in section 1920-A of the AC grants the Board the power and the duty to formulate, adopt and promulgate the rules and regulations as may be determined by the Board for the proper performance of the work of the Department and in section 1937-A of the AC (71 P. S. § 510-37) revises the requirements for grant applications for development and implementation of municipal recycling programs.

The Small Business and Household Pollution Prevention Program Act (SBHPPP) (35 P. S. §§ 6029.201—6029.209), which in section 207 of the SBHPPP (35 P. S. § 6029.207) grants the Board the power to promulgate regulations as needed to implement the SBHPPP.

Section 15(a) of the act of November 26, 1997 (P. L. 530, No. 57) (Act 57), repeals section 512(b) of Act 101 pertaining to permit review periods.

The proposed revisions to § 285.219 (relating to transporting foodstuffs and feedstuffs in vehicles used to transport waste) are made under the previously cited authorities and also under the authority of 75 Pa.C.S.A. §§ 101—9805 (relating to Vehicle Code) (code), which in section 4909(e) of the code (relating to transporting foodstuff in vehicles used to transport waste) grants the Board the power and duty to adopt regulations, if necessary, to carry out the requirements of section 4909.

#### D. Background and Purpose

The municipal waste program in this Commonwealth was developed under the Pennsylvania SWMA and Act 101. The SWMA authorizes the Department to develop and promulgate regulations to manage municipal waste. Act 101 authorizes the Department to regulate municipal

waste planning, which includes the development and implementation of county municipal waste management plans, and to administer the planning, recycling and waste reduction programs under Act 101 and the regulations promulgated under it. Under these acts, municipal waste generally consists of waste resulting from operation of residential, municipal, commercial or institutional establishments and from community activities, and includes nonresidual and nonhazardous waste sludge from a municipal, commercial or institutional water supply treatment plant, wastewater treatment plant or air pollution control facility. Municipal waste does not include source-separated recyclable materials. The municipal waste program also includes the management of infectious and chemotherapeutic waste.

On April 8, 1988, the Department promulgated a comprehensive set of regulations for the management of municipal waste. On August 7, 1992, the Department promulgated revisions to these regulations to address infectious and chemotherapeutic waste management. On September 14, 1991, the Department promulgated revisions concerning financial assurances for municipal waste management. Regulations for municipal waste planning, recycling and waste reduction were promulgated on October 10, 1992. Regulations concerning general permits for the beneficial use of municipal waste and the land application of sewage sludge, as well as other regulatory changes, were promulgated January 25, 1997. Today's comprehensive proposed rulemaking includes revisions to regulations promulgated under each of these rulemakings.

The Commonwealth's municipal waste landfill program is a Federally authorized program under the EPA "Subtitle D" Criteria for Municipal Solid Waste Landfills (40 CFR Part 258) (Subtitle D criteria), which became effective October 9, 1993. The EPA Subtitle D criteria contain minimum National criteria for the location, design, operation, cleanup and closure of municipal waste landfills. The Subtitle D criteria give a state flexibility in implementing the criteria if the state runs the program, as the Commonwealth does, as long as the state's regulations are at least as stringent as the Subtitle D criteria. The Commonwealth's regulations are at least as stringent as the Subtitle D criteria. In several instances in this proposed rulemaking, revisions are proposed to regulations that are more stringent than the Subtitle standards. Where this occurs, a justification for the regulation's stringency is provided in the "Summary of Regulatory Requirements." The following is a list of proposed revisions to regulations that include requirements that are more stringent than the Subtitle D criteria:

- Subchapter B of Chapter 273 (relating to municipal waste landfills—application requirements)
- § 273.202 (relating to areas where municipal waste landfills are prohibited)
- § 273.203 (relating to certification)
- § 273.211 (relating to signs and markers)
- § 273.213 (relating to access roads)
- § 273.214 (relating to measurement and inspection of waste)
- § 273.218 (relating to nuisance minimization and control)
- § 273.221 (relating to daily volume)
- § 273.232 (relating to daily cover)
- § 273.233 (relating to intermediate cover and slopes)
- § 273.234 (relating to final cover and grading)
- § 273.251 (relating to scope and requirements)
- § 273.252 (relating to general limitations)
- § 273.253 (relating to subbase)

- § 273.255 (relating to leachate detection zone)
- § 273.258 (relating to leachate collection system within protective cover)
- § 273.275 (relating to leachate collection and storage)
- § 273.276 (relating to leachate analysis and sludge handling)
- § 273.283 (relating to standards for wells and casing of wells)
- § 273.284 (relating to sampling and analysis)
- § 273.286 (relating to groundwater assessment plan)
- § 273.291 (relating to mineral resources)
- § 273.292 (relating to gas control and monitoring)
- § 273.302 (relating to emergency equipment)
- § 273.311 (relating to daily operational records).

This proposed rulemaking was developed in response to the Secretary of the Department's RBI and the Governor's Executive Order 1996-1 which required all departments to reevaluate existing regulations. The RBI requires evaluation of regulations based on the following criteria: agency requirements are no more stringent than standards imposed by Federal law unless justified by a compelling and articulable Commonwealth interest or authorized by State law; requirements are eliminated which are no longer necessary or redundant; performance-based requirements are encouraged; new green technologies are encouraged; a pollution prevention approach is supported; and information is prepared in plain, simple, clear and concise language.

The RBI review process invited the regulated community, local governments, environmental interests and the general public to help the Department identify specific regulations which should be changed based on the RBI criteria. Input was solicited from the Solid Waste Advisory Committee (SWAC), the Pennsylvania Chamber of Business and Industry, the Pennsylvania Waste Industries Association, the Solid Waste Association of North America, and numerous other groups, individual companies and the public. The opportunity for involvement in this process was noticed in the *Pennsylvania Bulletin* with a 90-day comment period. Evaluation of the municipal waste regulations under the RBI criteria resulted in the Department's preparation of eight separate reports. These reports were made available to the general public, the regulated community, local governments and environmental interest groups. In addition, the Department prepared a Comment and Response Document to address the comments received during the RBI evaluation and to identify which regulations would be revised in response to the comments.

The proposed regulatory amendments reflect the changes identified as a result of the RBI process and changes identified as a result of nearly 10 years of experience in implementing the regulations. The proposed amendments also reflect several of the recommendations made in 1996 by the Municipal Waste Stakeholders Group, a 28-member group of recyclers, haulers, landfill operators, county waste authorities, municipal and county government representatives, and environmental and public interest groups, formed to discuss municipal waste issues and cosponsored by the Department and the County Commissioners Association of Pennsylvania. In addition, the proposed regulations clarify the application of the Act 2 remediation standards, which became effective on August 16, 1997, to municipal waste facilities that ceased accepting waste prior to the effective date of the Federal Subtitle D criteria and the application of the Subtitle D standards for facilities that cease accepting waste after that date. The Department met with SWAC to

discuss changes to the regulations on September 11, 1997, at which time SWAC approved the proposed changes.

#### *E. Summary of Regulatory Requirements*

##### *Introductory Note on Infectious and Chemotherapeutic Waste (In Chapters 271, 273, 283 and 285)*

During the preparation of this regulatory package, the Department considered whether to consolidate the infectious and chemotherapeutic waste regulations into one chapter. The Department is seeking comments on the concept of consolidation of those regulations.

##### *Summary of Entire Proposed Rulemaking*

A description of the proposed amendments to the municipal waste regulations is as follows:

#### *Chapter 271. Municipal Waste Management—General Provisions*

##### *General*

##### *Section 271.1. Definitions.*

Several terms were added, modified or deleted that relate to groundwater abatement and remediation. The Department is proposing to add the following terms to clarify what standards apply to a release that occurs during the operational phase of a facility and that occurs during the closure phase: "abatement standards," "alternative groundwater protection standard," "background standard," "remediation standards" and "risk-based standard." In addition, a minor change was made to the term "groundwater degradation" by changing the phrase: "The unnatural" to: "A measurable" in order to read the same as the definition in the proposed residual waste amendments published at 28 Pa.B. 4073 (August 15, 1998).

The proposed regulations differentiate between abatement standards and remediation standards. The "abatement standards" serve as performance standards during operations. If, during operations, groundwater degradation is detected at monitoring points as a result of failed liner or leachate collection systems, groundwater assessment and abatement must be conducted to meet abatement standards. If a liner or leachate collection system fails, the system design must be repaired to prevent future releases and, in addition, performance standards to contain or mitigate the leak must be implemented in order to allow further operation of the facility. The abatement standards serve as the performance standards that must be met if the facility continues to operate. If groundwater degradation exists after the facility ceases to accept waste, the release must be remediated to meet one of the "remediation standards."

The primary difference between the abatement and the remediation standards is the application of a risk assessment when selecting either the "risk-based standard" for abatement or the "alternative groundwater protection standard" for remediation. During abatement a risk assessment must include fixed exposure assumptions, such as an assumption that human receptors exist at the property boundary. Fixed assumptions are necessary during the operational phase of the facility because the particular conditions of the site will continue to change, due to continued operations. After the facility ceases to accept waste, the risk assessment may consider the actual risks that exist at the time the remediation is implemented. The risk-based standard and the alternative groundwater protection standard are consistent with the Federal assessment monitoring and corrective action programs under the Federal Subtitle D criteria.

The term "asbestos containing waste" has been deleted. This change, along with the proposed revision to § 271.2(d) (relating to scope) stating that "friable" asbestos containing waste will be managed as a residual waste, clarify that nonfriable asbestos containing waste may be managed as municipal waste. Waste such as shingles or floor tiles from the demolition of homes is commonly managed as construction/demolition waste under the municipal waste program.

Several changes have been proposed to this section with regard to infectious and chemotherapeutic waste. A new definition of "autoclave" was added for purposes of clarification. The term is defined as a pressure vessel in which infectious waste is disinfected using high temperature steam, directly or indirectly, to maintain specified temperatures for retention times consistent with the waste being processed. Other definitions that have been added or changed regarding infectious and chemotherapeutic waste are "highly virulent diseases," "home self-care," "infectious waste" and "unrecognizable infectious waste."

The definition of "clean fill" has been modified to identify more clearly those uncontaminated materials that qualify as clean fill, and to allow the material to be placed into waters of this Commonwealth if approved by the Department. Soil and other materials managed as clean fill are not waste; however, a person using the material as clean fill has the burden of proof to demonstrate that the material is clean fill. The burden of proof is added to be consistent with the existing and proposed residual waste regulations. The term "clean fill" is defined to allow soil and other materials to qualify as clean fill with de minimis levels of contamination and criteria for the unrestricted management of clean fill.

The term "closure certification" has been added to define the term which is used elsewhere in the municipal waste regulations. The definition will apply to closure certification by the facility operator or by the Department, both of which are required in the regulations.

The term "construction/demolition waste" has been amended to exclude "dredging waste" because dredging waste is proposed to be managed as residual waste due to its physical and chemical characteristics. The term has also been amended to reflect certain revisions to the definition of "clean fill" because, as in the current regulations, certain materials that are separate from other waste and used as clean fill are not considered "construction/demolition waste."

The term "dredged material" is proposed to be added to clarify that uncontaminated dredged material can be used as clean fill. This material will be managed as residual waste.

The term "facility" is proposed to be modified to include land, structures and other appurtenances or improvements where "beneficial use" is permitted or takes place.

The term "general composting facility" has been revised to exclude individual backyard composting facilities and yard waste composting facilities operating under permit by rule. This change is proposed to be consistent with January 25, 1997, revisions to the municipal waste regulations pertaining to permit by rule.

The term "groundwater degradation" has been amended to shift the determination from whether an "unnatural" increase in the concentration of a contaminant occurs to whether a "measurable" increase occurs. The change is proposed to be consistent with the proposed residual waste regulations, § 287.1 (relating to definitions).

A typographical error in the term "highly virulent disease" has been corrected.

A new definition for "home self-care" has been added to clarify an exemption that exists to the "infectious waste" definition. The existing regulations exempt waste generated in individual residences from being considered "infectious waste." The "home self-care" definition clarifies this exemption by referring to medical care in the home setting.

Proposed changes to the definition of "infectious waste" have been made for purposes of clarification. Subparagraph (i)(C)(VII) has been amended to delete the reference to "contaminated" and replace it with "saturated or dripping with body fluids or caked with dried body fluids" to be consistent with other references to blood and body fluid waste. In clause (i)(F), the proposed regulations include deletions to examples of "sharps" in the description of "used sharps." The examples have been added to the definition of "sharps." Subparagraph (iii)(A) has been amended to include a reference to the new proposed term "home self-care" and to delete a reference to "individual residences." Subparagraph (iii)(G) includes a new reference to Federal regulations that apply to the disinfection of laundry and medical equipment.

The term "municipal-like residual waste" was added to identify a class of waste that qualifies for a streamlined approval process for disposal or processing. The waste must have the same physical and chemical characteristics as residential municipal waste.

A definition of the "Small Business and Household Pollution Prevention Program Act" has been added because that new act is referenced in this proposed regulation.

The term "special handling waste" has been modified to exclude asbestos-containing waste that is not friable, to delete the word "oil" when referring to hazardous waste and to delete fuel contaminated soil, waste tires and water supply treatment plant sludges from the definition.

A new definition has been included for "unrecognizable infectious waste" for purposes of clarification. The existing regulations have a reference to this term and these proposed regulations now provide specific meaning to the term. The term includes a size limitation for processed pieces and sharps. The term does not include compaction or encapsulation except through: 1) thermal treatment or melting during which disinfection takes place; 2) shredding, grinding, tearing or breaking during or after disinfection occurs; and 3) melting plastics and fully encapsulating metallic or other sharps and sealing waste so that it cannot be penetrated by untreated sharps.

#### *Section 271.2. Scope.*

A revision is proposed to subsection (b)(1) exempting construction/demolition waste with greater than 4 ppm of PCBs from management under Article VIII because, in accordance with a change made in the January 25, 1997, rulemaking (relating to sewage sludge; municipal waste; and residual waste), a waste exceeding 4 ppm of PCBs is a "PCB containing waste" and is to be managed as a residual waste.

Subsection (b)(3) has been changed to delete the reference to "other" residual waste and to clarify that sewage sludge mixed with a small quantity of residual waste will be managed under the municipal waste regulations. In subsection (c), the reference to hazardous waste "oil" has been removed because that term is no longer used in the hazardous waste program. Autofluff and dredged material

have been added for management under the residual waste regulations. In addition, the term "fuel" has been deleted and the regulations clarify that any contaminated soil must be managed under the residual waste regulations. In subsection (d), the word "friable" has been added to indicate that only friable asbestos containing waste is a special handling waste that is managed under the residual waste regulations.

#### *Section 271.3. Environmental protection.*

Two minor corrections are proposed to subsection (b) for sentence structure purposes.

#### *Section 271.5. Public records and confidential information.*

This section is proposed to be added in order to be consistent with the existing residual waste regulations (§ 287.5 relating to public records and confidential information). As in the residual waste regulations, subsections (a)—(c) contain the statutory requirements found in section 1713 of Act 101 (53 P. S. § 4000.1713), with minor additions, and subsections (d)—(f) provide additional direction that will be useful to the public and the regulated community.

#### *General Requirements for Permits and Permit Applications*

##### *Section 271.101. Permit requirement.*

Subsection (b)(3), the permit exemption for clean fill, has been deleted. The management of uncontaminated soil and other materials will continue to be subject to the Department's published "Policy and Procedure Establishing Criteria for Use of Uncontaminated Soils, Rock, Stone, Unused Brick and Block, Concrete and Used Asphalt as Clean Fill." This policy is being updated, with consideration to the final land recycling regulations.

New subsection (b)(3) is proposed to be added because it was inadvertently deleted in the January 25, 1997, rulemaking. Prior to that rulemaking, it could be found in § 271.101(b)(8). This paragraph provides that a person or municipality is not required to obtain a permit for temporary storage, which facilitates the transportation or transfer of infectious or chemotherapeutic waste, that does not exceed 24 hours. The stored waste shall remain in its original packaging, as received for storage.

##### *Section 271.102. Permit by rule for infectious or chemotherapeutic waste processing facilities; qualifying facilities; general requirements.*

Subsection (a)(1) has been amended to allow onsite autoclave facilities to receive waste from small quantity generators that generate less than 220 pounds per month. This change was made to be consistent with the requirements for onsite incinerators. In addition, new performance standards have been proposed for autoclaves to ensure that bulk fluids are properly treated and to clarify that autoclaving is not appropriate for pathological waste. A new subsection (a)(3) has been added to incorporate technology similar to autoclaving that disinfects infectious waste. This technology requires the use of steam and superheated water for disinfection. In subsection (b)(1), new language has been added to allow processed waste to be incinerated. The existing requirements allow the waste only to be disposed at a landfill. In subsection (c)(11), a parallel change has been made to allow processed waste to be sent to an incinerator.

##### *Section 271.111. Permit application filing deadline.*

This section is proposed to be deleted because the deadlines in it have passed, rendering it obsolete.

*Section 271.112. Continued operation under prior permits.*

This section is proposed to be deleted because the deadlines in it have passed, rendering it obsolete.

*Section 271.113. Closure plan.*

The structure of this section is proposed to be modified, along with several additions and deletions. Existing subsection (f) is proposed to become subsection (a) and will be identical to the existing language except that an end date of April 9, 1988 (the effective date of this section in the existing municipal waste regulations) is added. Existing subsection (a), proposed as subsection (b), has been revised to delete a cross reference to a section that is being deleted. The same deletion is made in subsection (c). A new subsection (d) is proposed to authorize the Department to waive or modify applicable regulations for closure, other than bonding and insurance requirements, if the operator can demonstrate that an existing system or design performs at a level that is equivalent to the applicable regulations. Subsection (c) is renumbered as subsection (e). Subsection (d) is renumbered as subsection (f) and improved upon structurally. Subsection (e) is deleted because it has become obsolete. Subsection (g) has been added to identify the remediation standards that apply to solid waste facilities that ceased receiving waste between September 7, 1980, and October 9, 1993, the effective date of the Federal Subtitle D regulations.

*Section 271.122. Form of application.*

Several proposed changes to subsection (d) are intended to improve the sentence structure. In addition, the proposed revisions require that the geology and groundwater sections of a permit application shall be completed under the supervision of a registered professional geologist licensed in this Commonwealth. As in the existing regulation, the entire application shall be prepared by or under the supervision of a registered professional engineer.

*Section 271.123. Right of entry.*

This section is proposed to be modified to indicate that consent shall be applicable for "up to" 10 years after final closure of a facility, consistent with the existing residual waste regulations.

*Section 271.124. Identification of interests.*

Minor structural revisions are proposed to clarify this section.

*Section 271.125. Compliance information.*

Minor structural revisions are proposed to clarify this section.

*Section 271.126. Requirement for environmental assessment.*

Revisions are proposed to subsection (b) to clarify the requirements of this section and to update the section in accordance with the new regulatory authority in the January 25, 1997, rulemaking to issue general permits for the beneficial use and processing for beneficial use of municipal waste under Subchapter I.

*Section 271.127. Environmental assessment.*

Changes have been proposed to this section to clarify the permit application requirements for an environmental assessment and to add a balancing test which identifies how the Department will evaluate the benefits and harms of a facility. These proposed amendments are consistent with recent changes that were made in the municipal waste program. The environmental assessment carries out the Department's obligation under section 102(10) of SWMA to implement PA.CONST. Art. I, § 27 (relating to

natural resources and the public estate) which mandates that the Commonwealth protect public resources. This mandate is viewed as requiring a balancing of interests and was further developed in *Payne v. Kassab*, 312 A.2d 86 (Pa. Cmwlth. 1973), aff'd, 361 A.2d 263 (Pa. 1976); *P.E.M.S. v. DER*, 503 A.2d 477 (Pa. Cmwlth. 1986) and various later cases.

This section applies to all municipal waste permit applications described in § 271.126. In subsection (a), the existing regulations identify factors, such as traffic, air quality, water quality, wildlife and land use, that must be analyzed in the environmental assessment for potential impacts on the environment, public health and public safety. The proposed regulations include three new factors that must be considered: scenic rivers, municipal waste management plans and National landmarks. In subsection (b), the proposed amendments specify that the environmental assessment submitted by the applicant must describe the known and potential environmental harms of the proposed project and must include a mitigation plan for each harm. The Department will assess whether all harms will be mitigated, and the effect of the mitigation measures collectively. This will include evaluating harm that is created in the process of mitigation and harm that is the direct result of the location of the proposed facility.

Proposed subsections (c) and (d) set forth the test that the Department will use to evaluate the information provided in the environmental assessment. The test requires the applicant to demonstrate that the benefits of the project to the public clearly outweigh the known and potential environmental harms that will remain after mitigation. The benefits that will be considered are any social and economic benefits that remain after taking into consideration the known and potential social and economic harms of the project, and any environmental benefits of the project.

Under to subsection (c), the test described above is required for every application for a municipal waste landfill, construction/demolition waste landfill or resource recovery facility because these facilities present a greater threat of long-term harm. Under subsection (d), the test is required of other facilities only if the other facility has not demonstrated that it will mitigate all environmental harms.

Proposed subsection (e) allows the Department or any other person or municipality to identify potential harms and benefits.

Under new subsection (f), the environmental assessment, including the Department's evaluation under subsections (c) and (d), will occur in Phase I of the permit review. New subsection (g) allows the Department to require submission of a revised environmental assessment if additional harms or potential harms are discovered at a later time in the permit review process.

The reference to the "need" for the facility in existing subsections (f)—(h) has been deleted as "need" is considered one type of "benefit" and, therefore, already covered by subsections (c)—(e). Reference to county plans has been deleted because county plans are covered by subsections (a)—(e).

*Section 271.128. Permit application fee.*

Recalculated permit fees have been proposed to reflect current reasonable costs to the Department for providing technical review of applications. The cross reference in subsection (a) to § 271.111 is deleted as that section is proposed to be deleted in this rulemaking.

The proposed revisions to subsection (a) would result in the following fee changes for permit applications for new facilities.

A municipal waste landfill permit application fee will be increased from \$11,400 to \$18,500.

A construction/demolition waste landfill permit application fee will be increased from \$6,000 to \$19,250.

A transfer facility permit application fee will be increased from \$1,400 to \$4,400.

An incinerator or resource recovery facility permit application fee will be decreased from \$3,000 to \$1,900.

Other municipal waste processing facility permit application fees will be increased from \$2,400 to \$4,000.

A demonstration facility permit application fee will be increased from \$10,300 to \$17,300.

The proposed revisions to subsection (b) would result in the following fee changes for "major" permit modification, namely applications made under § 271.144 (relating to public notice and public hearings for permit modifications):

An application for the addition of types of waste not approved in the permit will be decreased from \$600 to \$300.

An application for a modification to a municipal waste landfill or construction/demolition waste landfill will increase from \$4,600 to \$7,800.

An application for a modification to a transfer facility will increase from \$400 to \$700.

An application for a modification to an incinerator or resource recovery facility will increase from \$900 to \$1,500.

An application for a modification to another municipal waste processing facility will increase from \$400 to \$700.

An application for a modification to a demonstration facility permit will increase from \$4,000 to \$6,700.

Under subsection (b)(8), an application for a minor permit modification will increase from \$200 to \$300.

Under subsection (d), an applicant for permit renewal under § 271.223 (relating to permit renewal) will be increased from \$200 to \$300.

*Section 271.141. Public notice by applicant.*

Additional notice requirements have been proposed for subsections (a) and (d) to include information in a public notice by the applicant for submission or modification of a closure plan. The following information must be included in a public notice if groundwater degradation exists at closure or occurs after closure: a list of contaminants; identification of abatement measures taken prior to closure, if any; proposed remediation measures and proposed remediation standards to be met. Under this proposed rulemaking package, the operator will have the option of selecting one of three remediation standards to address releases that are present after a facility ceases accepting waste. The changes in this notice section inform the public of the option chosen. If the alternative groundwater protection standard is chosen to remediate a release, a 30-day public and municipal comment period must be included in the notice. During this period, a municipality may request to be involved in the development of the remediation and reuse plans for the site.

*Section 271.142. Public notice by Department.*

Additional notice requirements have been proposed for subsections (a) and (b) to include information in a public notice by the Department for a submission or modification of a closure plan. The following information must be included in a public notice if contamination exists at closure or occurs during postclosure: a list of contaminants; identification of ongoing abatement measures; proposed remediation measures and the proposed abatement or remediation standards to be met. Under this proposed rulemaking package, the operator will have the option of selecting one of three standards for remediating releases that are present after a facility ceases accepting waste. The changes in this notice section inform the public of the option chosen. If the alternative groundwater protection standard is chosen to remediate a release, a 30-day public and municipal comment period must be included in the notice. During this period, a municipality may request to be involved in the development of the remediation and reuse plans for the site.

*Section 271.144. Public notice and public hearings for permit modifications.*

This section has been amended to revise those activities that necessitate a major permit modification. A major permit modification is necessary where there will be a significant change to the design or operation of a disposal or processing facility. Several proposed changes have been made to this section.

Existing subsection (a)(2) identifies an application for any change in daily waste volume as a major permit modification. This paragraph is proposed to be revised to clarify that a "change in daily waste volume" refers to a change in the average or maximum daily volume. This clarification is intended to address questions that have arisen in implementation of this paragraph.

In subsection (a)(3), the current regulation requires a major modification when there are changes proposed to the design contours. In many instances minor changes to facility contours are necessary during construction of the facility. The proposed amendments modify this requirement to require a major modification for contour changes when the redesign will result in increased capacity or impact to groundwater.

In subsections (a)(5) and (7) and (b)(2), the replacement of groundwater monitoring wells and the addition of gas monitoring wells will no longer require major permit modifications since these measures will improve the existing design or operation of the facility. In proposed subsection (a)(6), minor changes to the design and operation of the leachate collection and treatment plan will no longer be considered major permit modifications. An example of a minor change to the design and operation is a change to the leachate collection piping configuration. Changes to the leachate treatment method, however, will be major permit modifications since they represent significant changes.

Existing subsection (a)(8), requiring a major modification for changes to daily, intermediate or final cover, has been deleted because in many instances changes in cover are necessary due to economic considerations or design and material availability considerations and do not affect the operation of the facility.

Under proposed revisions to subsection (a)(12) (renumbered as (a)(11)) and (b)(6), changes to a design that have been approved through a major permit modification for an equivalency review will no longer require additional major modifications for use at other facilities. This change

will streamline the approval process for commonly used alternative materials, as long as the operator demonstrates that the alternative design will work at a particular facility.

A new subsection (a)(12) has been added that requires a major permit modification for the submission of an abatement plan. These plans will require detailed review by the Department. Input from the public is necessary since the public may be directly affected by the abatement standard chosen.

In subsection (b)(1), the requirement has been modified to require a major permit modification for a change in specifications or dimensions of waste storage areas if the change results in an increase in processing or storage capacity. A new subsection (b)(7) is proposed to require a major permit modification for a change in average or maximum daily volume at a processing facility. This change is designed to allow greater input and scrutiny of increased volumes by the Department and the local municipalities given the potential for environmental impacts.

Subsection (c) is deleted because modifications are no longer authorized for Chapter 275 (relating to land application of sewage sludge).

#### *Permit Review Procedures and Standards*

##### *Section 271.201. Criteria for permit issuance or denial.*

Paragraph (1) is proposed to be revised to indicate the entities to which a disposal or processing permit will be issued.

A proposed change to paragraph (3) deletes reference to "the act" (in other words, SWMA) because the next phrase, "environmental protection acts," is defined in § 271.1 to include "the act."

Another proposed change to paragraph (3) deletes the requirement to balance harms and needs of a proposed facility. The new test, found in proposed revisions to § 271.127(c) and (d), requires that for a permit application for a municipal waste landfill, construction/demolition waste landfill or resources recovery facility, or another facility if the other facility has not demonstrated that it will mitigate all environmental harms, a demonstration be made that the benefits of the project to the public clearly outweigh the known and potential environmental harms. The benefits to be considered will be any social and economic benefits that remain after taking into consideration the known and potential social and economic harms of the project and will also include any environmental benefits of the project.

A new subsection (a)(4) is proposed to require that mitigation plans required by § 271.127 be implemented prior to obtaining a permit if required by the Department. This requirement is designed to help ensure proper and effective mitigation of harms and potential harms that can and should be mitigated prior to permitting.

Existing subsection (a)(6), concerning a proposed facility being expressly provided for in an approved municipal waste management plan, is proposed to be deleted. This paragraph was originally designed to help ascertain the "need" for a facility whereas under the proposed regulations the applicant may show "need" as one aspect of the "benefits" of the facility and there is no longer a prescriptive requirement stating how to do it.

Much of subsection (b) is proposed to be deleted because under the proposed regulations the suitability analysis will be satisfied by the environmental assess-

ment performed under § 271.127 (relating to environmental assessment). Subsections (c)(2)(i) and (b)(2)(ii) remain, renumbered as subsection (a)(7) and (8), because they are still relevant and are not part of the suitability analysis.

##### *Section 271.202. Completeness review.*

Subsection (a) is proposed to be restructured into two paragraphs. Subsection (a)(1) explains when an application will be considered administratively complete. Language is added to require that an "alternative project timeline" be established for a municipal waste landfill or construction/demolition waste landfill before an application will be administratively complete. Subsection (a)(2) explains how the alternative project timeline will be established. The explanation reflects current practice of the Department as set forth in the "Money-Back Guarantee Permit Review Program Expansion" published in 26 Pa.B. 3038 (June 29, 1996).

A new subsection (d) is proposed which would preclude the Department from accepting a permit application for expansion of a landfill if more than 5 years of disposal capacity remains at the landfill. Capacity is to be measured at the rate of disposal at the time of submission of the application. This provision provides consistency with other existing requirements promoting technologically current permits. Specifically, a permit becomes void if no municipal waste is processed or disposed within 5 years under § 271.211(e) (relating to term of permits). Similarly, under § 271.211(d), the Department reviews municipal waste permits every 5 years to determine whether they reflect current operating, technological and management practices and may modify, suspend or revoke a permit when necessary. In addition, this provision is added in order to make more efficient use of the time of Department staff who review permit applications by stemming the practice of some operators to submit applications frequently for expansions.

##### *Section 271.203. Review period.*

Subsection (a) is proposed to be revised to delete the 9-month limit on the Department's review time for municipal waste and construction/demolition waste landfill permit applications in accordance with section 15(a) of Act 57, which repealed the statutory 9-month limit that existed in section 512(b) of Act 101. The 9-month time limit will be replaced in these regulations with reference to the time period established in the alternative project timeline under the Department's Money Back Guarantee program. The 6-month review period for other facility applications was also repealed by Act 57, and consequently subsection (a)(2) is proposed to be deleted. Review times for these other permit applications will continue to be subject to the Department's Money Back Guarantee Program. Subsection (b) is revised to refer to calculation of the alternative project timeline.

##### *Section 271.211. Term of permits.*

Proposed changes to subsection (c) clarify that a permit term, which is specified as a condition in a permit, is that period of time when disposal, processing or beneficial use activities are authorized. The permit continues to exist after expiration of the permit term for purposes of completing closure and postclosure activities and all other requirements under SWMA and the other environmental protection acts.

Proposed changes to subsection (e) clarify that if no municipal waste is processed or disposed under a permit within 5 years of the date of issuance by the Department, the permit is void. For example, if an operator has both a disposal and a processing permit for one facility, but has

only operated under the processing permit (that is, has not received waste for disposal), the disposal permit will become void.

*Section 271.212. Conditions of permits.*

A new paragraph (4) has been added to this section that requires, as a condition of a permit, that a permittee notify the Department of the transfer of a controlling interest in the permittee. The notice will alert the Department to potential compliance history problems. By including this permit condition, the Department will be kept apprised of changes of parties in control of facility operations.

*Section 271.221. Permit reissuance.*

Subsection (a) is proposed to be revised to clarify that a transfer, assignment or sale of rights granted under a permit may not be made without obtaining permit reissuance. Subsection (b)(3) is proposed to be deleted because it has become obsolete.

*Section 271.222. Permit modification.*

Subsection (a)(3) is proposed to be deleted because it has become obsolete. A new subsection (c) has been proposed to allow the Department to make timely decisions in the field regarding modifications to the construction of liner systems or of erosion and sedimentation control devices. These decisions on minor permit modifications may only be made if it is impracticable to comply with subsections (a) and (b) and if the modification will improve the permitted design.

*Section 271.231. Equivalency review procedure.*

Proposed subsection (e) will allow an alternative design that is approved once through a major permit modification for one applicant to be applied to another applicant through a minor permit modification. This change was made because the first equivalency review demonstrates that the design meets the performance standards of the regulations. Subsequent reviews are limited to the application of that design to a particular facility and can adequately be accomplished through a minor permit modification.

*Financial Assurances Requirements*

*Section 271.312. Existing facilities.*

Subsection (b) is proposed to be revised by deleting the now obsolete reference to § 271.111, which is proposed to be deleted in this rulemaking.

*Section 271.341. Release of bonds.*

Several changes have been proposed for subsection (g). In paragraph (1), the phrase "including long-term maintenance of remediation measures" has been added to clarify that a bond will not be released if the remediation measure chosen when a release exists at closure will require ongoing maintenance. For example, a bond amount must be maintained that covers the maintenance costs of an ongoing pump and treat system for contaminated water. Subsection (g)(2) has been revised to state that release of a bond does not discharge an owner or operator from liability to restore groundwater to remediation standards or from monitoring groundwater quality, at a minimum.

*Section 271.342. Final closure certification.*

Proposed changes in subsection (b) identify the new demonstration that must be made by an applicant to receive final closure certification. This new demonstration is consistent with the Federal Subtitle D criteria. If groundwater degradation exists at closure or occurs after

closure, compliance with one of the remediation standards must be demonstrated for final closure certification.

Subsection (e) contains changes to the conditions of an owner or operator's liability to restore groundwater to reflect consistency with the land recycling program. The operator has the obligation to restore the groundwater to remediation standards and to maintain groundwater quality, at a minimum, at those levels.

Proposed subsection (g) has been added to address when additional remediation must be performed after a final closure certification has been issued. The circumstances are limited to an increase in the risk level beyond the acceptable range due to substantial changes in exposure conditions, such as a change in land use from a nonresidential to a residential use, or the existence of new information about a substance associated with the facility which revises the exposure assumptions beyond the acceptable range. The conditions of this reopener are consistent with the land recycling program.

*Civil Penalties and Enforcement*

*Section 271.413. Assessment of penalties—minimum penalties.*

Subsection (j) is proposed to be added to this section because it was inadvertently deleted in the January 25, 1997, rulemaking. At that time, it was labeled subsection (g). This subsection concerns civil penalties for unabated violations that were included as a basis for an administrative order. The word "shall" is changed to "will" for stylistic reasons, but the substance is not altered: the penalty remains mandatory.

*Section 271.421. Administrative inspections.*

Subsection (b) is proposed to be revised to indicate that inspections will be routine, and to delete the reference to land disposal of sewage sludge because this waste management practice was eliminated in the January 25, 1997, rulemaking. The requirement in existing subsection (b)(1)(iv) that the Department conduct inspections of facilities for the utilization of sewage sludge for land reclamation at least twice per year is proposed to be deleted. Under proposed subsection (c)(1), the Department and its agents intend to conduct inspections of all facilities at which sewage sludge is land applied under an existing Chapter 275 permit or an existing beneficial use order (no longer issued) at least twice a year. Similarly, proposed subsection (c)(7), which is consistent with the proposed residual waste regulations (§ 287.421(b)(5) (relating to administrative inspections)) states that the Department and its agents intend to conduct inspections of all facilities and beneficial use areas subject to a permit, including a general permit, for the land application of sewage sludge under Subchapter J (relating to beneficial use of sewage sludge by land application) at least once a year. More frequent inspections may be made. Subsection (c)(7) also states that the Department intends to conduct inspections of facilities and beneficial use areas subject to permit by rule (other than for infectious or chemotherapeutic waste) or a general permit for beneficial use or processing, or both, of municipal waste under Subchapter I (relating to beneficial use) at least once per year.

*Demonstration Facilities*

*Section 271.501. Scope.*

Proposed changes to this section authorize the approval of a demonstration project for processing or disposal of municipal waste at a permitted processing or disposal

facility under a permit modification, rather than under an application for a new permit.

*Section 271.502. Relationship to other requirements.*

Changes have been proposed to the application and operating requirements that apply to demonstration projects. Under the proposed amendments, the Department has greater flexibility to decide when to waive or modify the application or operating requirements under this article. Deletion of the existing regulation has been proposed because it does not allow any exceptions or variances from the requirements.

*Section 271.504. Operating requirements.*

Proposed changes to paragraph (1) delete the requirement that a demonstration facility may not exceed 1 acre in size. This change has been proposed because in many instances larger acreage is necessary to demonstrate the technology. The word "annual" has been deleted in paragraph (6) to eliminate redundancy.

*Section 271.505. Public notice of analysis.*

Minor revisions to this section restructure it to read the same as the existing residual waste regulations, § 287.505 (relating to public notice of analysis).

*Residual Waste*

*Section 271.611. Chemical analysis of waste.*

Proposed changes to subsection (a) allow a waiver or modification of the chemical analysis for municipal-like residual waste received at a permitted facility. Other modifications to this section expand the opportunity for the Department to waive or modify chemical analysis requirements for municipal-like residual waste that is received at a permitted facility (such as, waste used as cover material).

*Section 271.612. Source reduction strategy.*

The requirement that an applicant for a processing or disposal facility obtain a copy of a source reduction strategy from each residual waste generator has been clarified by referring to waste "received," to clarify, for example, that waste used at the facility as cover material falls within this requirement.

*Section 271.613. Waste analysis plan.*

Subsection (a) has been modified to clarify that a waste analysis plan is required for waste proposed to be received at a permitted facility. The existing regulations only refer to a waste analysis plan requirement for waste that is disposed. Subsection (b) has been modified to clarify that the management of waste must be consistent with Article VIII.

*General Permits*

*Section 271.711. Authorization for general permits.*

A new subsection (c) has been added to allow the issuance of general permits for the mixing of disinfection products with infectious waste to perform processing. For example, a person who proposes to distribute disinfection products, such as a chlorine-based polymer for the solidification and disinfection of body fluids, may apply for a general permit.

A new subsection (d) has been added to allow certain mixtures of residual waste and infectious waste to be covered under one general permit. For infectious and residual wastes that are similar except for the infectious nature of part of the waste, a general permit may be issued that includes mixtures of these wastes.

*Section 271.712. Nature of a general permit; substitution for individual applications and permits.*

In subsection (b)(2), language was added to state that a person may be authorized to operate under a general permit at the time that the Department issued the general permit or under a registration or determination of applicability. Operation at the time the permit is issued, by the original applicant, was inadvertently omitted from the existing regulations.

*Section 271.721. Application for general permit.*

Subsection (d) has been added to provide flexibility in the application requirements for a general permit for the mixing of disinfection products with infectious waste to perform processing.

*Section 271.731. Contents of general permits.*

The proposed amendments include a new paragraph (18) that identifies performance standards for autoclaves to ensure that bulk fluids are properly treated and to clarify that autoclaving is not appropriate for pathological waste.

*Section 271.732. Waiver or modification of certain requirements.*

This section has been revised to provide greater flexibility in determining how to apply the right of entry provisions. The right of entry provisions currently require landowner consent forms to be filed with each application and require the recording of all landowner consent forms. This requirement has been difficult to implement in cases where mobile facilities are widely used. Therefore, the Department is proposing a regulation that allows a waiver or modification of the provisions contained in § 271.123 (relating to right of entry). The changes proposed in this section are consistent with the current requirements in both the municipal and residual waste general permit regulations.

*Section 271.741. Authorization for persons or municipalities to be included in a general permit.*

The proposed amendments include a deletion of subsection (a)(3) because it references a section that is proposed to be deleted.

*Section 271.742. Determination of applicability.*

An increased fee for an application for a determination of applicability has been proposed. The proposed fee of \$500 reflects the current costs of reviewing an application in conjunction with inspections conducted at approved facilities.

*Section 271.743. Registration.*

An increased fee for an application for a registration has been proposed. The proposed fee of \$250 reflects the current costs of reviewing an application in conjunction with inspections conducted at approved facilities.

*Section 271.744. Waiver of registration or determination of applicability requirements.*

The proposed amendments delete this section and the "me too" process from the general permits program. The "me too" process was originally intended for use by a person who has a similar operation as another person who has applied for a general permit. In that situation, the person with the similar operation could apply to be covered under the other person's general permit if the person notified the Department during the public comment period of the proposed general permit. Although it was intended to streamline the general permit process, experience with the "me too" process has shown that the

time period for issuance of a general permit for the original applicant has actually been lengthened. The registration and determination of applicability processes are more efficient, since the "me too" process generally results in one company's incomplete application holding up another company's complete application.

#### *Beneficial Use*

##### *Section 271.811. Authorization for general permit.*

In subsection (g)(5) a new category of unauthorized activity has been proposed under the general permit program: the use of waste for construction or operations at a resource recovery facility or a disposal facility. Instead, such an approval must be obtained as part of an equivalency demonstration under § 271.231 (relating to equivalency review procedure). This change was made because the use of waste at landfills and resource recovery facilities requires a site-specific determination and should be approved under a mechanism such as equivalency demonstration that allows for a site-specific analysis. A site-specific analysis is appropriate because waste used for construction or operations at a resource recovery facility or landfill is waste when it is received and remains waste when it is used. Like other waste at the facility, it is subject to the waste acceptance plan. It is also subject to the host municipality benefit fee of Act 101, section 1301 and the recycling fee of Act 101, section 701. In an effort to encourage use of waste materials at landfills, the Department does not currently seek payment of the recycling fee for waste used in construction activities or operation of a facility if the use is approved under a § 271.231 equivalency approval.

##### *Section 271.832. Waiver and modification of requirements.*

This section is proposed to be revised to correct a cross reference.

#### *Beneficial Use of Sewage Sludge by Land Application*

##### *Section 271.915. Management practices.*

The reference to the annual whole sludge application rate is proposed to be deleted from subsection (h). This phrase was inadvertently included in the existing section because it is in the Federal standards for land application of sewage sludge (40 CFR Part 503) and those standards formed the framework of this subchapter in the January 25, 1997, rulemaking. Due to a variation of those standards adopted by the Board in the January rulemaking, the annual whole sludge application rate is irrelevant.

#### *Chapter 272. Municipal Waste Planning, Recycling and Waste Reduction*

#### *Host Counties*

##### *Section 272.101. Site-specific postclosure fund.*

Several revisions are proposed to this section. For clarity, subsection (a) includes new language indicating that a trust fund established under this section must comply with all of the requirements of the subchapter. Subsection (b) is obsolete and is therefore deleted. Similarly, obsolete language is deleted from subsection (c), which is now renumbered as subsection (b).

##### *Section 272.104. Withdrawals from trust fund.*

Subsection (a) of this section is corrected to cross reference § 272.105 (relating to county withdrawals from trust fund) instead of § 272.104. An additional cross reference is added to subsection (a) to bolster the requirement that withdrawals may not be made prior to certification by the Department of closure of the landfill. (This is a statutory requirement of Act 101, section 1108(f).)

The new cross reference is to § 273.203(d), which is, itself, new language stating that closure activities will not be deemed complete until the Department has certified completion of closure.

A new subsection (f) is proposed to address a situation currently existing in a number of locations in this Commonwealth. Proposed subsection (f) would authorize release of moneys from a site-specific postclosure trust fund for municipal waste landfills that have little or no bond in place and that were operating prior to 1988, which is when the municipal waste regulations added the requirement that operators of municipal waste landfills submit a bond or an updated bond to the Department. Some facilities chose to close instead of meeting this requirement, leaving no bond or an insufficient bond in place. Some closed immediately; and others continued to operate for a short time before closing. Those that continued operating for a short time began contributing 25¢ per ton of waste disposed to a site-specific postclosure fund required by Act 101 and the 1988 regulations and closed with only a small corpus in that fund.

Today, these facilities are in postclosure. Their postclosure trust funds, designed for "remedial measures and emergency actions," often contain too little money to be useful for remedial measures or emergency actions. Their bonds, if they have them, are likewise insufficient. Specifically, of the 17 inactive trusts containing less than \$10,000, 8 have no closure bond, 8 have insufficient closure bonds, and 1 has no closure bond due to its release. Therefore, to facilitate proper closure of these sites, the proposed revision authorizes the trustee to release the trust funds for specified postclosure activities. While this may deplete the fund of any surplus that may have remained after final closure certification and which would have been divided equally between the host county and host municipality, the amounts are de minimis and are intended to stave off environmental problems which may cost the county and municipality far more money in the long run.

Subsection (f) is renumbered subsection (g).

##### *Section 272.105. County withdrawals from trust fund.*

Currently, administration fees for site-specific postclosure trust funds exceed the earning power of 88% of inactive trusts. When this happens, either the county pays the difference or the payment from the trust fund depletes the corpus of the fund, neither of which scenario was envisioned by the Legislature. To remedy this situation, new language is proposed to be added to subsection (c) which will prohibit the payment to a county for trust fund administration fees from being withdrawn from the trust corpus once the facility is in postclosure. Under the proposed language, payments may not exceed earnings and profits credited during the billing period. This revision is likely to have practical effect only upon the very small trust funds (that is, those described under § 272.104) and is designed to prevent the corpus of those trusts from being diminished for administrative reasons during the time period in which the funds are intended to be available for use at the site. It is hoped that this revision will also encourage counties to negotiate affordable trust administration fees and consider low maintenance investment instruments.

Subsection (d) is proposed to be revised to delete the requirement that calculation of the 0.5% reimbursement authorized for the county for trust administration (at any time, not just in postclosure) be based only upon the trust corpus. Under the proposed revision, it will be based on

all of the funds in the trust. The proposed revision interprets section 1108(b) of Act 101 (53 P. S. § 4000.1108(b)), which refers to "moneys deposited in the fund," as including all moneys in the fund. This revision reflects current practice of many fund trustees. When a trustee does this under the current regulations, the difference is paid either by the county or out of the corpus of the fund, both of which situations are inappropriate.

*Section 272.106. Termination of trust.*

This section is proposed to be renamed "termination of trust" instead of "final closure of the facility" to reflect more accurately the contents of the section.

Subsection (a) is proposed to be revised to distinguish more clearly between the release of a bond (for any facility) and the termination of a trust (for a municipally operated landfill). This revision implements the current intent of the regulation.

Subsection (b) is proposed to be revised to clarify that the trustee will take steps necessary to terminate the trust when the trustee receives not only notice of the certification of final closure but also notification of the release of bond or termination of trust. This revision also implements the current intent of the regulation. In addition, new language is proposed to be added to subsection (b) to authorize a trustee to terminate a trust when all of the money in it has been withdrawn. Without this authorization, counties continue to pay trust administration fees even after the trust is depleted. There is no need to continue the trust once the corpus is depleted, since no more money is added to the trust corpus when the trust moneys are available for use (that is, after certification of closure).

The language in subsection (b) relating to distribution of the trust property after termination of the trust has been relabelled as subsection (c) for clarity.

*Municipal Waste Planning*

*Section 272.211. General requirement.*

This section contains the requirement that counties submit municipal waste management plans to the Department. The obsolete deadlines in both subsections are proposed to be deleted, and the reference to a county plan is revised to plan "revision," since all counties have submitted an original plan and future submissions will be of plan revisions.

*Section 272.223. Description of waste.*

This section addresses the information that should be included in a plan revision concerning the waste generated by the county. Added to the express list of waste types in subsection (b) is "construction/demolition waste other than waste from demolition of an industrial site." This phrase is added to resolve confusion expressed by some counties in the past as to whether information about construction/demolition waste was to be included in the plan. This phrase is also added to encourage counties to maximize the proper management of the waste and to encourage counties to maximize alternatives to disposal of the waste. The Board is specifically seeking comments on the potential impact of this revision on counties and municipalities.

*Section 272.224. Description of facilities.*

Several revisions are proposed to this section. The requirement in subsection (a)(1) that the plan identify facilities located within the county is deleted as unnecessary. The description of an "existing facility" in subsection (d) is revised to delete reference to a "planning area,"

which is not a defined term, and to delete obsolete deadlines. Proposed language describes an "existing facility" as one which was designated to receive waste in the existing county plan or which has submitted a complete permit application as of the date of the notice of plan revision. The purpose of this proposed revision is to make the term "existing facility" relevant to plan revisions.

*Section 272.225. Estimated future capacity.*

This section is proposed to be revised to make it relevant to the development of plan revisions.

*Section 272.226. Description of recyclable materials.*

The requirement that the plan consider the results of a 1989 market development study is proposed to be deleted from subsection (a)(7) because market conditions have changed since the study was performed. In addition, there are now many other sources of information available to the counties. An obsolete date in subsection (a)(11) is proposed to be deleted and replaced by the date that the county issues its notice of plan revision. Reference to a "plan" is updated in subsection (c) to be reference to a "plan revision."

*Section 272.227. Selection and justification of municipal waste management program.*

This section is proposed to be revised in accordance with a recommendation of the Municipal Waste Stakeholders Committee. The revision confirms that these regulations do not require a county to select the lowest bid when selecting facilities for the county's municipal waste management plan. The requirement that a county use a fair, open and competitive process to select facilities remains, however.

*Section 272.228. Location.*

Proposed revisions to this section are intended to simplify it and remove overly prescriptive and unnecessary requirements. The revised section requires the plan to indicate the location of the facilities selected for the plan and, for facilities not yet selected, an explanation of how they will be selected. Detailed criteria and cross references are removed. Additionally, the requirement to give a detailed explanation for selecting a facility outside the county is deleted as unnecessary.

*Section 272.233. Facilities developed pursuant to sub-county plans.*

Subsection (a) of this section is proposed to be deleted as being an unnecessary introduction to subsection (b). Subsection (b) is refined by deleting many references to obsolete deadlines, thereby simplifying the description of a municipal processing or disposal facility with which the plan is not to interfere. Under the proposal, a plan is to explain how it will not interfere with a municipal facility that is part of an approved plan that was submitted by a municipality prior to the effective date of Act 101. The intent of this revision is to clarify the protection of a municipality plan. Existing facilities that receive protection under the existing version of this regulation will receive protection under the proposed revision to § 272.224.

*Section 272.245. Submission of implementing documents.*

This section is revised to remove a cross reference to a subsection which is proposed to be deleted by this rulemaking.

*Section 272.251. Submission of revisions.*

The lead-in language to this subsection (a) is modified to reflect that a plan revision will be due when the earliest of the plan revision requirements stated in this subsection is triggered.

The trigger in paragraph (1) relates to the capacity assurance mechanisms. Paragraph (1) is clarified to reflect the meaning of the term "remaining available permitted capacity" in accordance with the definition of that phrase in § 271.1. The clarification provides that a county will be required to submit a revised plan to the Department at least 3 years prior to the expiration of the capacity assurances that the county relied upon to implement its approved plan during the term of the plan. The expiration of capacity assurance will ordinarily coincide with the expiration of the planning term. But where, for unforeseen reasons, the capacity assurances will expire early, a plan revision will be required. An example would be the early closure of a facility relied upon by the county for capacity assurance.

The trigger in paragraph (2) to submit a revised plan to the Department by September 26, 1990, is proposed to be deleted because it is obsolete.

The trigger in new paragraph (2) relates to the expiration of the planning term. Most approved county plans have a term of 10 years and most counties are submitting plan revisions approximately 3 years prior to the expiration of that 10-year period. Revising a plan when its expiration is approaching makes good sense, allows for a fair, open and competitive reconsideration and selection of facilities to occur and generally provides for orderly extension of the plan. This proposed regulatory revision is authorized by section 501(c)(3) of Act 101 (53 P. S. § 4000.501(c)(3)), which states that a county must submit a plan revision when required by the Department.

*Section 272.252. Development of plan revisions.*

Cross reference to § 272.202 is added to subsection (c)(2) to clarify that a solid waste advisory committee must be involved in the preparation of a nonsubstantial plan revision. This requirement is indicated by section 501(d) of Act 101 and helps to clarify the existing requirement in subsection (c)(3) that the county submit a copy of a proposed nonsubstantial plan revision to its advisory committee before submitting it to the Department. A requirement that a county include comments received from the municipalities and the county's solid waste advisory committee in its submission to the Department of a nonsubstantial plan revision is proposed to be added to subsection (c)(3) in order to increase the level of input to and accountability by counties for nonsubstantial plan revisions. The statement in subsection (c)(3) that a nonsubstantial plan revision will be deemed approved within 30 days of receipt by the Department, unless the Department responds in writing, is proposed to be moved into new subsection (g) in order to improve the structure of the section. Subsection (d) is revised to reflect that even if the Department does not consider a plan revision to be substantial, the county may independently determine that it is substantial and will be processed as such; however, if the Department determines that a revision is substantial, the county may not override that determination. A new subsection (f) restates the statutory requirement that the Department review a substantial plan revision within 30 days unless the Department requests in writing 30 additional days. Subsection (f) is added to point out the distinction between review of substantial and nonsubstantial revisions.

*Section 272.261. Annual report by county.*

Fundamental to county plans is the statutory requirement that counties assure the availability of adequate processing and disposal capacity for the waste generated within their boundaries. (Act 101, section 303(a)). To help

the counties and the Department to ensure that this statutory mandate is met and that necessary revisions are made in a timely manner, subsection (b)(4) is proposed to be added to require that the county include in its annual report documentation that the assumptions the county made in developing capacity assurance in the plan remain valid.

*Grants*

*Section 272.311. Financial management.*

Section 272.311 is proposed to be revised to reflect and clarify the authority granted to the Department in Act 101 and in sections 204 and 208 of the SBHPPP (35 P. S. §§ 6029.204 and 6029.208) to approve grants for educational programs on pollution prevention and household hazardous waste and for other technical assistance to small businesses for pollution prevention.

*Section 272.313. General requirements for grant applications.*

A new subsection (d) is proposed to require an applicant for a planning grant or a recycling program grant to participate in a pre-application conference with the Department prior to development of the grant application. Experience has shown that grant applications submitted after a pre-application conference are superior in quality and result in significant savings to the Department and the applicant.

*Section 272.314. Limits on Department's authority to award grants.*

Changes are proposed to subsection (b) to restructure the language to accommodate a new limitation on the Department's authority to award a grant under this section. The new limitation requires the applicant to demonstrate that it has not previously been reimbursed under Act 101 for the same expenses. This provision is based on information learned in audits conducted under this program. A new subsection (c) precludes activities reimbursed under one Act 101 grant program from being eligible as a match under any other Act 101 grant program.

Existing subsection (c) requires the Department to withhold grant funds in certain specified situations. The proposed changes relabel it as subsection (d), add three items to the list of grounds for withholding funds and change the mandatory nature of the subsection to a discretionary one to account for the new items and for variations in the nature and degree of violations. The first new item, in paragraph (2), applies when an applicant has abused past grant moneys by using equipment purchased with previous grant funds in a manner not in compliance with program requirements. The second, in paragraph (3), authorizes the Department to withhold grant money if a community which is required to implement a source separated recycling program fails to meet the regulatory requirements of that program. And the third, in paragraph (4), authorizes withholding the money if the applicant's documentation of the use of past grant money is inadequate.

A new subsection (f) is proposed to limit the Department's authority to award a grant if the pre-application conference required under the previous section is not held.

*Section 272.316. Performance audit.*

A proposed revision to this section states that the Department's review of a disbursement request will satisfy the obligation of the applicant to have an indepen-

dent performance audit conducted on the disbursement, unless the Department notifies the applicant to the contrary in writing due to improper or inadequate documentation of grant expenditures. This revision is proposed to make the audit program more effective in reducing costs to the counties and the Department and in obtaining accurate results.

*Section 272.321. Scope of grant.*

The authority in paragraph (1) to issue grants for plan implementation is deleted under *City of Harrisburg v. Department of Environmental Resources*, 1994 EHB 1309. Paragraph (5) is added to clarify that grants may be issued to a county in accordance with Act 101 and sections 204 and 208 of the SBHPPP for educational programs on pollution prevention and household hazardous waste and for other technical assistance to small business for pollution prevention.

*Section 272.322. Eligible costs.*

This section is proposed to be amended to state that "indirect costs," as defined in Office of Management and Budget Circular A-87, as amended, are not subject to approval for a grant issued under § 272.321. This restriction is intended to reduce or eliminate requests for duplicate reimbursements for costs and implements a recommendation of the Department's Comptroller's Office based on past audits.

*Section 272.323. Grant application.*

This section is proposed to be revised to reflect the new opportunity to obtain grants under the SBHPPP. If a grant is sought under that act, the grant application must describe how the proposed project will further the purposes of that act.

*Section 272.332. Eligible costs.*

A new subsection is proposed to be added as subsection (f), with existing subsection (f) being revised and renumbered (g). The new subsection (f) is proposed to increase accountability on the part of municipalities using the equipment or property.

Subsection (g) is revised to require a municipality to notify the Department in writing if it no longer uses the equipment or property for the intended purposes. This will help facilitate the pro rata reimbursement of the value of the equipment or property.

*Section 272.333. Grant application.*

A revision to subsection (c) is proposed to delete the \$200 trigger for newspaper notification and other application requirements for a recycling grant application for mechanical processing equipment because the \$200 figure has become obsolete. The requirements in subsection (c) will now apply to all grant applications for mechanical processing equipment. A revision to subsection (c)(1)(i) is proposed to require a municipality seeking a grant for mechanical processing equipment to include in its newspaper notice reference to the fact that funding is sought from the Recycling Fund to assist with the purchase of mechanical processing equipment. This is intended to strengthen the public notice requirements.

*Section 272.341. Scope of grant.*

This section is proposed to be revised to specify in greater detail the activities for which a county recycling coordinator grant may be used. This list replaces a shorter, more general, list, and is not exclusive. The detailed list is added based on the Department's experience running this program and on concern expressed by some members of the Department's Recycling Fund Advi-

sory Committee that the standards for providing reimbursement for county coordinators should be clearer. This revision also provides a clearer understanding to the counties of the duties of the recycling coordinator.

*Section 272.342. Eligible costs.*

Subsection (b)(2), which prohibits costs for administrative, management or clerical activities of a county recycling coordinator from being approved for a grant, is proposed to be deleted. The Department's experience has shown that it is not necessary or practicable to distinguish these responsibilities from other responsibilities of county recycling coordinators and that payment for them is appropriate. Under the proposal, however, as under the existing regulations, only activities of the recycling coordinator are reimbursable and activities of clerical staff are not.

*Section 272.353. Grant application.*

The requirement that an application for a recycling performance grant contain the name and mailing address of each market for recycled materials is proposed to be deleted because the submittal of this information with each grant application is not necessary. The Department will request this information on an as-needed basis to implement its audit plan.

*Section 272.362. Eligible costs.*

The time limit in subsection (a) for the duration of a grant for a host municipality inspector is proposed to be deleted in accordance with Act 105 of 1996. Subsection (b)(7) is proposed to be revised to indicate that the Department will not approve for a grant costs incurred by the municipality or the inspector after decertification of the inspector, if decertification occurs. This statement is added because a new section is proposed in the regulations authorizing the Department to decertify host municipality inspectors. See § 272.364.

*Section 272.364. Maintaining certification; decertification; recertification.*

This section is proposed to be added to strengthen the existing host municipality inspector program which has been in existence for nearly 10 years and is authorized under section 1102 of Act 101 (53 P. S. § 4000.1102).

Subsection (a) will require a certified host inspector to complete advanced training once every 3 years and to conduct a facility inspection at least once a year to remain certified.

Subsection (b) will authorize the Department to decertify a host municipality inspector who violates a condition of certification, violates the law or an order of the Department, endangers the health and safety of a resident of the host municipality or of a person connected with the facility, distributes confidential business information without prior written approval, submits false information to the Department or its agent, exceeds the scope of authority or fails to complete successfully the training or annual inspection required in subsection (a).

Subsection (c) explains that when the Department decertifies a host municipality inspector, the Department will notify the host municipality and the facility of the effective date of the decertification, the reason for decertification, and the date (if any) upon which the inspector will be eligible for recertification.

Subsection (d) explains that to become recertified a host municipality inspector must go through the training process established in Act 101 to become an inspector for the first time. (Act 101, section 1102(a)). An inspector will

become eligible for recertification 2 years after being decertified. He may not qualify for recertification if the nature and gravity of his misconduct are too severe.

*Municipal Recycling Programs*

*Section 272.411. Affected municipalities.*

Subsection (d) is revised to reference the 2000 census instead of the 1990 census.

*Section 272.426. Alternative to curbside program.*

A typographical error is corrected in subsection (e).

*Chapter 273. Municipal Waste Landfills*

*Application Requirements*

The application requirements in these regulations are more stringent than the Federal Subtitle D criteria in the sense that the Subtitle D criteria identify mainly the operating, not the application, requirements for municipal waste landfills. While Subtitle D gives occasional guidance to the Director of an approved State, such as Pennsylvania, for approving a design, the application requirements in Pennsylvania's Chapter 273 are more specific to assure the Department of receiving sufficient information in a permit application to demonstrate the manner in which the operator plans to comply with SWMA and all other applicable laws and regulations, in accordance with PA. CONST. Art. I, § 27 and sections 502(d) and 503(c) of the SWMA.

*Section 273.112. Facility plan.*

Amendments have been proposed to this section to reduce unnecessary and redundant information. Paragraph (2) will now focus on the amount of soil needed to construct and operate the facility because this information is important for purposes of calculating the bond.

*Section 273.113. Maps and related information.*

A requirement is added to subsection (a)(1) that the boundaries of the land within the proposed permit area be identified in the application. A new subsection (b) is proposed to allow an applicant to use a different scale for the topographic map if approved by the Department. In addition, deletion of subsection (c), the requirement for a map or aerial photograph of the soil types, test pits and excavations taken under § 273.117 (relating to soil description) on the proposed permit area and adjacent area, has been proposed because the information has not proven useful for purposes of making a permit decision.

*Section 273.115. Geology and groundwater description.*

New subsection (a)(8) and (9) have been proposed to require the identification of wellhead protection areas that may be impacted by the facility and to require the submission of a groundwater contour map to describe the groundwater flow patterns. These provisions have been added to address wellhead protection regulations in Chapter 109 (relating to safe drinking water), promulgated since the municipal waste regulations were promulgated, and to address questions frequently raised by applicants and operators on background hydrogeologic information.

*Section 273.116. Groundwater quality description.*

Revisions are proposed to subsections (a) and (b) to make them similar to their existing residual waste counterparts (§ 288.123(a) and (b) relating to groundwater quality description). Included in this revision is the change from requiring 1 full year of groundwater monitoring data to requiring two quarters of data, one of which must include the season of the highest local groundwater

levels. Requiring two quarters of data has proven acceptable in the residual waste program and should prove acceptable in the municipal waste program because two quarters provide sufficient data to design a facility. Subsection (b) still requires the applicant to submit 1 full year of background monitoring data prior to the storage or disposal of waste to account for seasonal variability.

In addition, subsection (b) is proposed to be updated to delete obsolete date references. Subsection (c) is deleted because it has become obsolete.

*Section 273.117. Soil description.*

Subsection (a) has been revised to replace the requirement to provide a description of the soils in the permit application with the requirement for applications to describe the depth to the seasonal high water table to demonstrate that it will not be in contact with the liner system. The soil information currently required is not necessary for municipal waste landfills because lined landfills do not rely on soil attenuation. In subsection (a)(1), the demonstration that there is no contact with water is necessary to preserve the integrity of the liner system.

*Section 273.120. Mineral deposits information.*

Subsection (a) addresses the potential for mine subsidence. The proposed revisions modify it to read the same as its counterpart in the existing residual waste program (§ 288.127 relating to mineral deposits information). Subsection (b) currently requires a permit applicant to demonstrate that it owns the recoverable or mineable coals underlying the permit area and to warrant that the applicant will not mine the coal as long as waste remains on the site. Subsection (b) has been revised to expand the coverage to adjacent areas and to include all mineable minerals to protect landfills from potential instability problems associated with mining activities.

*Section 273.121. Notification of proximity to airport.*

This proposed rulemaking includes a new section to require that a municipal waste landfill permit applicant notify the Federal Aviation Administration, the Department and the airport if the proposed facility is within 5 miles of an airport runway end. This proposed regulation is added to be consistent with the Federal Subtitle D criteria for municipal waste disposal facilities (40 CFR Pt. 258) and to facilitate greater input on the feasibility of the location of the landfill.

*Section 273.132. Operation plan.*

Proposed changes to paragraph (1) require the applicant to include a plan for the inspection and monitoring of incoming waste to help ensure that waste not approved for receipt by the facility is not received and that waste will be rejected or specially addressed if it poses a problem. Paragraphs (3) and (4), which are the requirements to describe the type and size of equipment to be used at the facility and the plan for hiring and training personnel, have been deleted in this proposed rulemaking. Proposed changes to paragraph (6) clarify that the operating hours of the facility include time during which construction and operation activities will occur. This requirement will help the operator and the Department to minimize noise complaints.

*Section 273.134. Plan for access roads.*

Amendments to this section have been proposed to require that access roads be designed and constructed to handle truck traffic adequately. This requirement sets a performance standard by which to gauge the adequacy of proposed access roads.

*Section 273.136. Nuisance minimization and control plan.*

Several proposed changes have been made to this section. The title of this section has been amended to reflect the need to minimize nuisances during the facility planning stages. Subsection (a) has been modified to require that a plan be submitted that describes how nuisances will be minimized and controlled. By planning to control and minimize all nuisances, the expectation is that conditions that give rise to public nuisances will be abated. The Department's focus will be on ensuring the effectiveness of the operator's plan to minimize and control nuisances. Subsection (b) has been added to identify specific items that must be addressed in the plan. The plan must include the following: routine assessment and control of vector infestations; methods to minimize and control nuisances from odors, dustfall and noise levels off the property boundary from the facility; and for odors, a determination of normal and adverse weather conditions, based on site-specific meteorological data. The plan continues to allow the inclusion of contractual arrangements for the services of nuisance control professionals.

*Section 273.139. Relationship to county plans.*

The phrase "expressly provided for" is proposed to be revised to "provided for" in subsection (b). This is consistent with section 507(a)(1) of Act 101 (53 P. S. § 4000.507(a)(11)). Language is proposed to be added to subsection (b) to clarify what is meant by "provided for." A new subsection (b)(2)(iii) is proposed to require that an application for a facility not provided for in the host county plan include a detailed written response to objections that may have been filed by the host county. This is consistent with section 507(a)(2)(iv) of Act 101 and section 504 of SWMA. Subsections (c)—(f) are proposed to be deleted. Under the proposed regulations, the suitability analysis will be satisfied by the environmental assessment performed under §§ 271.127 and 271.201(a)(4).

*Section 273.140. Daily volume.*

Minor structural changes are proposed to subsection (a). Several changes are proposed to subsection (c) to clarify the subsection to reflect current practice. In the first change, the words "for disposal" are proposed to be deleted to remove any confusion about whether waste which is used at a facility under an equivalency approval is to be included in the calculation of daily volume. The waste is currently required to be included, because it is being disposed, and under the revision it will continue to be required to be included. In addition, this revision is consistent with section 1112(a) of Act 101 (53 P. S. § 4000.1112(a)), which bases daily volume on solid waste received. In the second change, the words "quarterly" and "quarter" are added to indicate that daily volume will be computed quarterly based upon waste received during the quarter. Calculating volume on a quarterly basis helps the operator and the Department to identify and prevent exceedances in the permitted waste volumes in a timely manner. Section 1112(f) of Act 101 requires the Department to assess a civil penalty of at least \$100 per ton for each ton of waste received by a landfill in excess of the maximum or average daily volume limits in the permit. Experience has shown that quarterly calculations help prevent large penalties.

Calculating volume on a quarterly basis has been Department policy for many years. This is reflected in the quarterly report which a municipal waste landfill operator must submit to the Department under § 273.213 (relating to quarterly operation report). The quarterly

report requires the operator to report the type and weight or volume of solid waste received in each month of the reported quarter. Quarterly calculations are required independently under Act 101 for inclusion in quarterly reports sent to the host municipalities of municipal waste landfills for purposes of calculating and paying the host municipality benefit fees.

*Section 273.141. Compaction and cover plan.*

Revisions are proposed to this section to make it consistent with its counterpart in the residual waste program (§ 288.141 relating to compaction and cover plan). In addition, revisions are proposed to paragraph (3) that reflect changes being made in the operating requirements for cover materials that largely eliminate design requirements in favor of performance standards. Specifically, this section will now require that an applicant specify the materials that will be used as cover and demonstrate that the materials and procedures for applying them will meet the performance standards in §§ 273.232—273.234 (relating to daily cover; intermediate cover and slopes; and final cover and grading). A cross reference to the operating requirements is amended to reflect the deletion of an existing section in the operating requirements. Additionally, in paragraph (5), the requirement that an applicant provide copies of contracts for the cover materials that will be used at the landfill is eliminated.

*Section 273.152. Water quality monitoring plan.*

Subsection (a)(2) is proposed to be changed to refer to existing groundwater quality to avoid confusion with the term "background standard," which is now a defined term.

*Section 273.161. Liner system and leachate control plan.*

In subsection (c), the requirement that the leachate demonstration be based on the EPA Method 9090 compatibility test has been replaced with language that allows the demonstration to be based on EPA or ASTM guidelines approved by the Department. This change will allow applicants to keep up with changing standards and technology. A change is proposed to the language of subsection (d)(13) to require the applicant to provide information on the friction angle for any component that may be in contact with the liner. Also, in subsection (d)(19), a requirement has been added to identify in the permit application the percent of recycled material in the proposed primary and secondary liners.

*Section 273.163. Modifications of leachate treatment plan.*

The cross reference to § 273.277 (relating to departmental notice and remedial action) is proposed to be revised to reflect the proposed revision to the title of § 273.277.

*Section 273.192. Closure plan.*

This section requires that a closure plan describe measures that will be taken toward and after closure. In subsection (a), the proposed regulations delete the reference to a postclosure period and clarify that the plan includes activities that occur toward and after closure. Subsection (b)(3) has been deleted because activities such as capping of cells in stages are considered activities that occur toward closure. Closure occurs only once at a landfill, the date the facility permanently ceases to accept waste. Subsection (b)(4) has been similarly revised to refer to activities that occur toward and after closure. A correlating change has been made to § 273.322(b) (relating to closure).

In subsection (b)(5)(vi), renumbered as (b)(4)(vi), additional language has been proposed to specify that the plan include a description of maintenance of access control after closure. This amendment addresses questions concerning maintenance that have been raised in the field.

*Section 273.196. Recycling plan.*

An obsolete date reference is proposed to be deleted from this section. The analysis requirements in paragraph (1) are proposed to be deleted because they are redundant since to prepare a plan under paragraph (2) an applicant has to conduct an analysis.

*Section 273.197. Plan for recycled materials collection center.*

An obsolete date reference is proposed to be deleted from this section.

*Operating Requirements*

*Section 273.201. Basic limitations.*

Subsection (b) is proposed to be revised to clarify that information obtained by a person or municipality monitoring groundwater quality under § 273.116 (relating to groundwater quality description) without a permit may be used for a permit application for the proposed facility.

In subsection (i), the phrase “generated outside the host county for a facility” is proposed to be deleted because the origin of the waste is not relevant to this prohibition. Subsection (j) is also proposed to be deleted. An obsolete date has been deleted from subsection (k), which is also renumbered as subsection (j).

A new subsection (k) has been added that requires all approved mitigation measures identified in the application to be completed before waste may be accepted, unless a later date is authorized in writing by the Department for technical reasons. This requirement bolsters the importance of effective mitigation, which is stressed in the environmental assessment of § 271.127.

*Section 273.202. Areas where municipal waste landfills are prohibited.*

Several changes are proposed to this section to modify certain isolation distances for municipal waste landfills and to clarify existing language. Landfills permitted prior to the date of publication of this regulation as final in the *Pennsylvania Bulletin* are not intended to be affected by the more stringent isolation distances proposed in this section when reissuance or renewal of the permit, or expansion of the permit area, is sought.

The lead-in language in subsection (a) is revised to clarify that the areas exempted from this regulation are those that were permitted as a municipal waste landfill prior to 1988. Subsection (a)(1) is given the title “Floodplain.”

Subsection (a)(2) is given the title “Wetland.” It is proposed to be divided into two subparagraphs, the first containing the current 300 foot setback from an exceptional value wetland and the second adding a 100 foot setback from a wetland other than an exceptional value wetland. The 100 foot setback is applicable to landfills permitted on or after the date of publication of this regulation as final in the *Pennsylvania Bulletin*, but is not applicable to permit modifications for expansions issued after that date if the permit being modified was issued before that date. The 100 foot setback is added to protect valuable wetland resources and makes the municipal waste regulations consistent with the existing residual waste regulations (§ 288.422 relating to areas

where Class I residual waste landfills are prohibited). As in the existing residual waste regulations, the 100 foot setback will not apply if storage, processing and disposal will not occur within that distance from the wetland and if either the operator has received the necessary permit under Chapter 105 (relating to dam safety and waterway management) to operate in or along the wetland or, for an operation not in or along a wetland, no adverse hydrologic or water quality impact will result from the landfill operation. The isolation distances to wetlands are more stringent than the Federal Subtitle D criteria, which prohibit the operation of the landfill from degrading a wetland. (40 CFR 258.12 (relating to wetlands)). The isolation distances to wetlands in this proposed rulemaking are necessary and have proven effective in preventing impacts such as dust, litter and vectors that occur during the operation of landfills.

Subsection (a)(3) is given the title “Minerals,” because it now applies to more minerals than just coal. It is proposed to be divided into two subparagraphs. Subparagraph (i) will retain the current prohibition against operating a landfill in coal bearing areas underlain by recoverable or mineable coals unless the operator does not own the coal nor have an agreement with the coal owner to provide support. A revision to subparagraph (i) indicates that this prohibition will have applied to landfill permits issued prior to the date of publication of this final regulation in the *Pennsylvania Bulletin* and will apply to expansions of facilities already permitted as of that date. Proposed subparagraph (ii), which will apply to landfill permits issued on or after publication of the final regulation, will prohibit operation of a landfill in areas underlain by mineable minerals, unless the operator owns the underlying minerals. The expanded coverage from coal to all mineable minerals will better protect landfills from potential instability problems associated with mining activities. Requiring the operator to own the underlying minerals is more stringent than the Federal Subtitle D criteria, which require the applicant to identify unstable areas. (40 CFR 258.15 (relating to unstable areas)). By owning the underlying minerals the operator can eliminate the potential for unstable areas to be created by mining activities after the landfill is operating. This will significantly reduce the potential for liner system failure due to unstable subgrade conditions.

Subsection (a)(4) is proposed to be revised by the insertion of the title “Valley, ravine or head of hollow,” and subsection (a)(5) is given the title “Limestone or carbonate formation.” No changes are proposed to the text of these two paragraphs.

A substantive change is proposed to subsection (a)(6), which will now be entitled “Occupied dwelling.” This subsection is proposed to be divided into two subparagraphs. Subparagraph (i) will retain the current prohibitions against operating a landfill within 300 feet of an occupied dwelling unless the owner of the dwelling provides written consent, and against having the disposal area of a landfill within 500 feet of an occupied dwelling unless the owner of the dwelling provides written consent. A revision to subparagraph (i) indicates that this prohibition will have applied to landfill permits issued prior to the date of publication of this final regulation in the *Pennsylvania Bulletin* and will apply to expansions of facilities already permitted as of that date. Proposed subparagraph (ii), which will apply to landfill permits issued on or after publication of the final regulation, will prohibit operation of a landfill within 300 yards of an occupied dwelling unless the owner of the dwelling provides written consent. While the Federal Subtitle D

criteria do not include an isolation distance from occupied dwellings, the Department is proposing this revision to reduce complaints that currently are received from nearby dwellings concerning noise, odors and nuisances despite the current 300-foot setback. The 300-yard requirement is drawn from the isolation distance in section 511 of Act 101 (53 P. S. § 4000.511), of 300 yards from a school, park or playground for municipal waste landfills, resource recovery facilities and commercial residual waste treatment facilities. Section 511 of Act 101, in subsection (c), expressly authorizes the Department to establish site limitations in addition to or more stringent than the 300-yard distance from schools, parks and playgrounds.

Subsection (a)(7) is proposed to be revised by the insertion of the title "Perennial stream," and subsection (a)(8) is given the title "Property line." No changes are proposed to the text of these two paragraphs.

Several changes are proposed to the portions of this regulation concerning isolation distances from airports to conform the regulation to the Federal Subtitle D standards. (40 CFR Part 258, at 258.10.) Subsection (a)(9), which will now be entitled "Airport," will contain three subparagraphs. Proposed subparagraph (i) will contain the text of existing subsection (a)(9), modified to reflect Subtitle D as follows: the isolation distance will be measured from a runway end, not from a runway; the phrase "or will be" will be deleted; the phrase "turbine-powered" aircraft will be replaced with "turbojet" aircraft; the phrase "Federal Aviation Administration (FAA) certified airport" will be deleted; the phrase "term of the permit" will be replaced by "life of disposal operations under the permit"; and an exception will be added for situations in which the operator can demonstrate that the landfill is designed and operated so that the landfill does not pose a bird hazard to aircraft. Proposed subparagraph (ii) will contain the text of existing subsection (a)(10) with similar revisions to those proposed for subparagraph (i), which are also consistent with Subtitle D. A new subparagraph (iii) is proposed, which will contain language from Subtitle D defining "airport" and "bird hazard" for purposes of this subsection.

The existing prohibition in subsection (a)(11) against operating a landfill within "the conical area at 14 CFR Part 77 (relating to objects affecting navigable airspace) . . ." is proposed to be deleted because it is more stringent than the Subtitle D requirements and has not proven useful in practice. Subsection (c), which currently applies to landfills other than those in areas permitted prior to January 25, 1997, is proposed to be deleted. It is replaced by the new proposed subsection (a)(9).

Existing subsection (a)(12), which prohibits operation of a landfill within 25 feet of a coal seam, a coal outcrop or coal refuse, is proposed to be deleted because its purpose—adequate protection from fires—can be adequately addressed in the design of a facility. To address fire protection in the facility design, the Department proposes in § 273.291 (relating to mineral resources) to require a landfill operator to isolate coal seams, coal outcrops and coal refuse from waste deposits in a manner that prevents combustion of the waste.

Existing subsection (a)(13), which is renumbered as subsection (a)(10) and entitled "Water source," is modified to be consistent with its existing residual waste corollary (§ 288.422(a)(11)) by adding subparagraphs (i)—(iii), which currently exist in subsection (e). Requiring the quarter-mile upgradient and 300 feet downgradient isolation distances from water sources is more stringent than the Federal Subtitle D criteria. These isolation distances

are necessary to provide a distance between the detection monitoring wells and water supplies to allow the operator to take corrective action prior to affecting offsite wells.

Two existing subsections of the regulation relating to schools, parks and playgrounds are combined in this proposal. Subsection (b) is renumbered as subsection (a)(11) and is entitled "School, park, playground." It clarifies in subparagraph (i) that it applies to a municipal waste landfill permit issued on or after September 26, 1988, except an expansion of a municipal waste landfill permitted prior to September 26, 1988, by deleting the language "Except for areas that were permitted prior to." The isolation distance from schools, parks and playgrounds is more stringent than the Federal Subtitle D criteria, which do not contain an isolation distance from schools, parks or playgrounds, but is necessary to be consistent with section 511 of Act 101. The remaining revisions to this paragraph are structural. Subparagraph (ii) is a modification of existing subsection (d), which includes the waiver language. This language is proposed to be revised to eliminate the cross reference to subsection (b), to replace it with: "school building, park or playground," and to indicate that the Department will waive the 300-yard prohibition upon "receipt of" the waiver.

Subsection (e) is deleted because it has been incorporated into subsection (a)(10). Subsections (f) and (g) have been renumbered and a cross reference has been corrected.

#### *Section 273.203. Certification.*

The proposed change to this section adds one item to the list of major construction activities for which the operator must submit a certification by a professional engineer upon completion. The item, in subsection (a)(9), is the construction of the landfill gas extraction system. This is being added because this is a major construction activity. Subsection (a)(9) and (10) are renumbered accordingly. The certification of each major construction activity is not required under the Federal Subtitle D criteria. The certification of each major construction activity is necessary because the incorrect construction of one component in many instances will adversely affect the performance of the other components associated with the landfill design and operation. Section 502 of the SWMA (35 P. S. § 6018.502) requires that plans, designs and data be prepared by a registered professional engineer.

A new subsection (d) is proposed to clarify that closure and final closure activities will not be deemed complete until the Department has certified completion of closure and final closure of a landfill.

#### *Section 273.211. Signs and markers.*

In subsection (a), proposed changes eliminate the prescriptive language about the size and content of signs and replace the requirement with a performance standard that the sign can be easily seen and read. The signage requirement is also applied to recycling drop-off centers. Subsection (b) is modified slightly to comport with its existing residual waste counterpart (§ 288.211(a) relating to signs and markers). The Federal Subtitle D criteria do not contain a signage requirement. This requirement is necessary to provide information and directions to persons using the landfill. It also facilitates recycling and provides information to persons who would like to contact the Department concerning the operation of the facility.

*Section 273.212. Access control.*

The requirement for an operator to construct a fence or other barrier around the site is proposed to be deleted as being redundant. The requirement is expressed in the remaining requirement that the operator "maintain" a fence or other barrier.

*Section 273.213. Access roads.*

Protection of wetlands is proposed to be added to subsection (b). The proposed language is taken from the existing residual waste regulations, at § 288.213(b) (relating to access roads). Deletion of the phrase "sediment control" from subsection (c) is proposed because not all of the measures to be considered concern sediment control.

Proposed changes to subsections (e) and (f) differentiate between access roads leading to the disposal area and those leading to ancillary structures. Subsection (e) has been changed to apply to access roads leading to the disposal area. As a result, there will be no specified minimum cartway width for access roads not leading to the disposal area. Subsection (f) has been changed to remove the requirement that an access road to a treatment facility, impoundment or groundwater monitoring point be negotiable by loaded collection vehicles.

Subsection (g), which requires that an access road be constructed on a dry and stable area, has been deleted. The performance standards in this section are sufficient to direct the safe construction of access roads. Subsection (h), which contains the prescriptive requirements that any topsoil be removed prior to construction of an access road and be immediately used as final cover or stored, has been deleted. The landfill operator may determine the best use for the soil.

The Federal Subtitle D criteria do not include specific standards for the design and construction of access roads. There is significant traffic associated with the operation of a municipal waste landfill, however, and the access road requirements in this section provide minimum design criteria necessary to prevent unsafe or unstable conditions.

*Section 273.214. Measurement and inspection of waste.*

This section is proposed to be changed to require inspection of waste in addition to measurement of waste. The title is changed and a new subsection (c) is proposed to require inspection to insure that disposal of the waste is consistent with Article VIII—particularly the waste analysis plan—including screening of waste for radioactive isotopes. The allowable level of radioactive isotopes should be addressed in the waste acceptance plan. The requirement to screen for radioactive isotopes has been added to address questions that have arisen during the operation of existing facilities.

The inspection of incoming waste for PCBs and hazardous materials is required by the Federal Subtitle D criteria. (40 CFR 258.20 (relating to procedures for excluding the receipt of hazardous waste)). In the Subtitle D criteria, and largely in this proposed rulemaking, the design of the facility is based upon the volume and the physical and chemical characteristics of the waste to be received. By measuring and inspecting incoming waste, the operator can make sure that the facility is being operated as designed.

*Section 273.215. Equipment.*

In subsection (b), the requirement that standby equipment must be located on the site or at a place where it can be available within 24 hours has been deleted. This

requirement is redundant of the requirement in subsection (a) that the operator maintain on the site equipment necessary for the operation of the facility in accordance with the permit.

*Section 273.216. Unloading and compaction.*

The requirement that waste be spread and compacted in layers not to exceed 2 feet is proposed to be deleted. The requirement is not necessary because of improvements in unloading and compacting methods and equipment.

*Section 273.217. Air resources protection.*

Proposed changes to this section clarify the requirements that currently exist in this section. In subsection (a), the changes include cross referencing Article III (relating to air resources) and the nuisance minimization and control requirements of § 273.218 (relating to nuisance minimization and control). In subsection (a)(3), a requirement to minimize the generation of fugitive dust emissions from the facility has been added. In subsection (b), new language has been added requiring that the operator comply with the terms and conditions of any air quality plan approval and air quality operating permit issued to the facility.

*Section 273.218. Nuisance minimization and control.*

Several proposed changes have been made to this section. The title of this section has been amended to reflect the need to minimize nuisances during the operational phase of the facility. The nuisance minimization and control plan approved under § 271.136 (relating to nuisance minimization and control plan) should be implemented to control and minimize all nuisances such that conditions that give rise to public nuisances will be abated. Subsection (b) has been modified to require that an operator minimize and control public nuisances. The Department's focus will be on ensuring that the operator implement its nuisance minimization and control plan effectively. The operator will be responsible for minimizing and controlling nuisances as they arise during operations. A new subsection (c) has been added to specifically address the minimization and control of odors. In addition to implementing the nuisance minimization and control plan, the operator must perform site inspections to evaluate the effectiveness of its waste management practices in reducing the potential for offsite odor creation. Also, the operator must promptly address any problems or deficiencies discovered in the course of the site inspections.

The Federal Subtitle D criteria include standards for disease vector control which are similar to those in the existing and proposed Chapter 273 regulations. (40 CFR 258.22 (relating to disease vector control)). Subtitle D also provides for air quality protection under the State Implementation Plan (SIP) approved or promulgated under section 110 of the Clean Air Act, as amended. (40 CFR 258.24 (relating to air criteria)). The proposed revisions to Chapter 273 of Pennsylvania's regulations provide more specificity than the Federal criteria but offer protection against odors in a manner that is generally consistent with existing requirements. The site inspections and prompt correction of problems or deficiencies discovered during the inspections are designed in response to the frequent odor complaints received by the Department.

*Section 273.221. Daily volume.*

This section is proposed to be revised to be consistent with the proposed revisions to the application requirements in § 273.140, and for the same reasons. Although the Federal Subtitle D criteria do not specifically require

the landfill to identify or keep records of the incoming waste volumes, this information is necessary during the permit application phase to ensure that the landfill is designed appropriately for the anticipated waste volumes and during the landfill operation phase to ensure that the landfill is operating in compliance with the permit upon which the design is based.

*Section 273.231. Topsoil storage.*

This section has been deleted in this proposed rulemaking because the volume of topsoil at these sites is inadequate or, in some cases, nonexistent for use as final cover. The operator is required upon closure to supply the necessary soil. The bond calculations include the price of purchasing acceptable soil, if necessary.

*Section 273.232. Daily cover.*

The requirement that daily cover be placed on exposed waste at the completion of every lift is proposed to be deleted from subsection (a) because it is redundant, since the regulation also requires placement of daily cover each working day.

The design requirements in subsection (c) have been deleted and replaced with performance standards. The detailed soil requirements are no longer necessary for purposes of daily cover, especially because the proposed regulations allow for alternatives to soil to be used for daily cover, consistent with the Subtitle D criteria. (40 CFR 258.21 (relating to cover material requirements)). In addition, a new performance standard, paragraph (5), has been added to require that the cover material be consistent with the waste acceptance plan for the facility. While no Federal counterpart to the requirement for consistency with the waste acceptance plan exists, the requirement takes into consideration the use of wastes as cover materials.

Subsection (d) is renumbered as subsection (c). Subsection (e) is proposed to be deleted because the requirement relates to intermediate cover, not daily cover. Subsection (f) is renumbered as subsection (d) and the requirement that intermediate slopes constructed during daily landfilling activities be covered, compacted with 1 foot of intermediate cover material and revegetated is proposed to be deleted because it relates to intermediate cover, which is addressed in § 273.233 (relating to intermediate cover).

*Section 273.233. Intermediate cover and slopes.*

The requirement that intermediate cover be at least 12 inches in thickness is proposed to be moved from subsection (a) to subsection (c) to allow other materials and methods to be used under the equivalency review process. Revision of this section is intended to provide for the use of soil and materials other than soil as intermediate cover. The requirement in subsection (a)(3) that intermediate cover be placed on each completed lift is proposed to be deleted because it is unnecessary and, in many cases, obsolete. A performance standard is proposed to be added to subsection (b)(5) requiring that intermediate cover control infiltration of precipitation and erosion and sedimentation. A proposed revision to subsection (b)(6) indicates that germination and propagation of vegetative cover will only be required if necessary to control infiltration of precipitation and erosion and sedimentation. Subsection (b)(7) is proposed to be added to require that the cover material be consistent with the waste acceptance plan for the facility. This takes into account, among other things, the use of waste as cover material.

Changes are also proposed to the design standards in subsection (c) by deleting most of the design standards for

soil and replacing them with the performance standards. The detailed soil requirements are no longer necessary for purposes of intermediate cover, especially because the proposed amendments allow for alternatives to soil to be used for intermediate cover. This proposed revision only maintains two design requirements for intermediate cover that are applicable to soil and soil-like materials: the requirements that the soil or soil-like material be at least 12 inches in thickness and uniformly graded. Changes in subsection (e) clarify that if vegetation is to be used it must be established within 30 days. Changes in subsection (f) require that slopes constructed during intermediate cover activities (not just during landfilling) may not exceed 50%.

The Federal Subtitle D criteria do not require any intermediate cover, although they do require a daily cover. (40 CFR 258.21 (relating to cover material requirements)). This proposed rulemaking requires intermediate cover to prevent the exposure of waste in areas where the daily cover will be subject to rain, wind and erosion for extended periods of time. The requirement to have intermediate cover has proven beneficial under the existing regulations.

*Section 273.234. Final cover and grading.*

In subsection (a), the prescriptive design standards for the cap have been reduced and performance standards have been added to provide greater flexibility. A new subsection (c) enables an operator to obtain an equivalency review for alternative cap designs. In subsection (d), the layer of material placed over the drainage layer will now have to be capable of controlling fires and will have to ensure slope stability, in addition to the other requirements. The requirements that the layer cover solid waste without change in its properties and without regard to weather, and that it compact well and not crack excessively when dry, are deleted because they have not proven necessary. Subsection (e) is revised to read the same as its residual waste counterpart, § 288.234 (relating to final cover and grading), including proposed revisions thereto.

The Federal Subtitle D criteria require an operator to install a final cover system that is designed to minimize infiltration and erosion, and that meets certain design requirements. (40 CFR 258.60 (relating to closure criteria)). The proposed final cover and grading requirements in this rulemaking are more stringent than the Subtitle D criteria to account for weather conditions unique to this Commonwealth. A drainage layer is required above the cap to remove the precipitation that will occur and at least 2 feet of final cover above the drainage layer is required to prevent frost damage to the cap.

*Section 273.241. General requirements.*

Subsection (c) is proposed to be revised to protect all waters, not just groundwater, from pollution and to read consistently with its existing residual waste counterpart, § 288.241(c) (relating to general requirements).

*Section 273.245. Water supply replacement.*

Revisions are proposed to subsections (a)—(c) to clarify that this section applies to activities that “adversely” affect the water supply. This is consistent with the existing and proposed residual waste regulations, § 288.245 (relating to water supply replacement).

*Section 273.251. Scope and requirements.*

Revisions are proposed to subsections (b)(3) and (b)(5) to allow the use of materials other than soil or earthen materials in the landfill liner’s leachate detection zone,

protective cover and leachate collection zone within the protective cover. Subsection (b) will now be consistent with its existing residual waste counterparts in §§ 288.431 and 288.531 (relating to scope and requirements; and scope and requirements).

A new subsection (c) is proposed which would add the requirement that either the primary or secondary liner of a municipal waste landfill be constructed as a composite liner. The composite liner provides extraordinary protection against leaks at a reasonable cost. Many landfills already install a composite component in their liner system. In addition, having a composite component in the liner system will enable a facility to recirculate leachate under Subtitle D.

The Federal Subtitle D criteria require that the operator install a single composite liner (a synthetic "plastic" membrane directly underlain by a layer of clay). (40 CFR 258.40 (relating to design criteria)). The liner system proposed in this rulemaking will require a double liner system, with at least one of the liners constructed as a composite liner. The liner system design, including the subbase, secondary liner and leachate detection zone, in this proposed rulemaking will be more stringent than the Federal Subtitle D criteria. These components of the liner system are necessary to prevent leachate from leaking from the facility. The EPA single composite liner has a much greater potential to leak. The double liner system (one composite) design included in this proposed rulemaking is best available technology and is commonly used by many landfills currently operating in this Commonwealth.

*Section 273.252. General limitations.*

In subsection (a), a change has been proposed to the requirement that 4 feet exist between the top of the subbase of the liner system and the seasonal high water table. The revision requires that the bottom of the subbase cannot be in contact with the seasonal high water table or perched water table. The prescriptive buffer between the liner system and the seasonal high water table has been replaced with a performance standard to prevent contact between the two. In subsection (a)(2), the drainage systems may now be used to prevent contact between the bottom of the subbase and the water tables rather than to maintain the 4-foot isolation distance. This change is consistent with the other changes in subsection (a). Subsection (b) is adjusted to indicate that the regional groundwater table may not be artificially lowered. Subsection (c) is added to be consistent with the proposed residual waste regulations. It requires an 8-foot isolation distance for confined aquifers from the top of the subbase to the top of the confining layer or the shallowest level below the bottom of the subbase where groundwater occurs.

The 8 foot isolation distance proposed in subsection (c) is not required by the Federal Subtitle D criteria, but is necessary to account for fluctuations that may occur in the groundwater table, thus preventing contact with the liner system. It is best engineering practice to prevent contact between the liner system and the groundwater table. This prevents the rapid dispersion of leaks and prevents unstable conditions from affecting the performance of the liner system. This isolation distance also provides some level of attenuation should a small leak occur.

*Section 273.253. Subbase.*

The design requirements in subsection (b) are proposed to be revised. Subsection (b)(2) is proposed to be deleted

because the necessary minimum bearing capacity of the subbase is determined by the design of the facility. Subsection (b)(5) is proposed to be revised to increase the permissible subbase slopes from 25% to 33% because construction on steeper slopes has proven to be effective. A maximum percentage is not identified in the Federal Subtitle D criteria, but is necessary to prevent liner system construction and operating stability problems. The design requirement in subsection (b)(3), now subsection (b)(2), is revised to exempt from its applicability situations in which the clay component of a composite liner is designed and constructed directly above the subbase because the clay component will provide sufficient protection.

*Section 273.254. Secondary liner.*

The heading "Performance standards" is proposed to be added to subsection (a).

In subsection (b), the words "at a minimum" were added to allow for the use of liners that meet or exceed the design requirements in Table I of § 273.256 (relating to primary liner) without an equivalency demonstration.

Changes in subsections (c), (f) and (g) are proposed to make them read the same as their existing residual waste counterparts in § 288.434 (relating to secondary liner). The changes in subsection (c) are only structural. The changes in subsection (f) describe the necessary components of a composite secondary liner and other requirements for a composite secondary liner. The prohibition in existing subsection (f), that no facility or component of it that is subject to this chapter may have a secondary liner based upon natural attenuation of leachate, is moved into new subsection (g).

Subsection (d) is proposed to be revised to authorize, upon proper demonstration, a secondary liner made of clay, bentonite or bentonite-like material to be constructed in lifts not exceeding 6 inches in depth. This change is proposed because of improvements in methods and equipment.

*Section 273.255. Leachate detection zone.*

The design requirement in subsection (b)(2) is proposed to be revised to allow materials up to 0.5 inch in particle size to be contained in the leachate detection zone of a liner system, from the current limit of 0.25 inch. The revision would correlate with the 0.5 inch restriction in the residual waste program, which has proven successful. A maximum size for aggregates in the protective cover is not included in the Federal Subtitle D criteria. This maximum size is included in this proposed rulemaking based upon industry practice and the potential for larger particles to cause damage to the liners. Alternatives can be proposed through the equivalency review process.

The design requirement in subsection (b)(5)(ii), prohibiting the distance between pipes from exceeding 100 feet, is proposed to be deleted because it has not proven necessary for an effective system. A minimum postsettlement grade of 2% is proposed to be added to new subsection (b)(5)(ii) to be consistent with the existing residual waste regulations. Additionally, the requirement in subsection (b)(5)(v) that rounded noncarbonate stones or aggregates be placed around the piping system is proposed to be revised and moved to subsection (b)(7) to indicate that noncarbonate stone or aggregates without sharp edges are to be used.

Subsection (d) is proposed to be modified to indicate that the operator shall take steps when average flow of liquid in the leachate detection zone exceeds 10 gallons

per acre per day. This modification is proposed because liquid in an amount less than this may be present due to minor imperfections in the liner installation, but does not indicate a threat to the performance of the liner system.

Subsection (d)(3) is proposed to be revised to indicate that the Department may require sampling and analysis for constituents other than those indicated in this section, and to require sampling and analysis of the total alkalinity, ammonia-nitrogen and chemical oxygen demand in the liquid. These have been added as common indicators of the presence of leachate.

Subsection (e) is proposed to be revised to state that the operator shall take certain steps when the volume of leachate in the leachate detection zone exceeds 100 gallons per acre per day or more than 10% of leachate generation. These are generally accepted levels based upon historic liner installation and operation experience.

Subsections (d) and (e) are more stringent than the Federal Subtitle D criteria, but are based upon EPA guidance and the Department's experience with operating facilities.

*Section 273.256. Primary liner.*

Most of the changes in this section are proposed to restructure the section to be consistent with its residual waste counterpart, § 288.436 (relating to primary liner), as revised. In subsection (b), the words "at a minimum" were added to allow for the use of liners that meet or exceed the design requirements in Table I without an equivalency demonstration.

In subsection (d), components of a composite primary liner are identified. These are the same as the residual waste requirements, except for the addition of the requirement that the municipal waste liner's lower component must also meet the requirements of Table 1. Subsection (e) has been revised to prohibit the use of a primary liner based upon natural attenuation of leachate. This revision is proposed to eliminate the risk of failure of a natural attenuation "liner" for municipal waste.

*Section 273.257. Protective cover.*

A performance standard is proposed to be added to subsection (a) to indicate that the protective cover shall cover the bottom and sidewalls of the disposal area. This change is proposed to clarify the area where protective cover is required, and is consistent with the existing residual waste counterpart, § 288.437 (relating to protective cover).

The design requirements in subsection (b) are proposed to be revised to increase the allowable diameter of solid material from one quarter inch to one half inch, based on acceptable industry practices that have been approved through the equivalency review process, and to delete the requirement that the protective cover be uniformly compacted and smooth because in some instances compacting protective cover may reduce desired infiltration and may damage the leachate detection zone within the protective cover.

*Section 273.258. Leachate collection system within protective cover.*

The proposed regulations amend subsection (a)(2) to authorize the Department to condition a permit to allow the depth of leachate on or above the primary liner to exceed 1 foot for sump areas because a sump area is used for collection of leachate and frequently exceeds one foot of head. An exceedance may also occur for a 25-year, 24-hour precipitation event where the 1 foot of head will

be exceeded for less than 3 days to address exceptional precipitation events. This revision is intended to address two situations in which exceedance of the 1-foot limit should not pose a problem.

In addition, subsections (b)(4) and (5) are proposed to be revised to be consistent with the existing requirements in the residual waste regulations concerning pipes and noncarbonate stones or aggregates. These requirements for municipal waste landfills are more stringent than the Federal Subtitle D criteria at 40 CFR 258.40(a)(2) (relating to design criteria) and are necessary to ensure the long term performance of the leachate collection system within the protective cover. The noncarbonate aggregates are required to prevent the dissolution of the drainage media and the minimum grade is necessary to make sure that leachate can flow out of the collection system to the treatment system.

*Section 273.272. Basic treatment methods.*

Subsection (a) is proposed to be revised to clarify the pretreatment condition so as to read consistently with the existing residual waste regulation, § 288.452 (relating to basic treatment methods).

*Section 273.274. Leachate recirculation.*

Subsection (a) is slightly restructured and a prohibition against recirculating leachate which is a hazardous waste is proposed to be added to comport with the existing residual waste counterpart, § 288.454 (relating to leachate recirculation). Subsection (b) is proposed to be added to allow the Department to authorize an alternative leachate recirculation method for a facility. This proposed revision will allow, for example, an alternative design where intermediate cover may not be necessary or a piping system is not used.

*Section 273.275. Leachate collection and storage.*

Subsection (b), concerning the onsite leachate storage system, is proposed to be revised to be consistent with its existing residual waste counterpart for Class I residual waste landfills, § 288.455 (relating to leachate collection and storage). This proposed revision requires that sufficient storage exist for the maximum volume of leachate to be produced for any 30-day period for the life of the facility. This applies to the storage system for leachate prior to and after treatment. Revisions to subsections (c) and (d) authorize changes in the size of the leachate storage impoundments and tanks if approved or required by the Department. A new subsection (g) has been added to require secondary containment for pipes that are located outside the lined areas of the facility. This requirement has been added to reduce the likelihood of leaks or releases from the pipes. The sizing of leachate storage facilities is not specified in the Federal Subtitle D criteria. The 30-day storage capacity has proven to be a very effective number based upon experience at existing facilities. The requirement in the proposed rulemaking that no more than 25% of this storage capacity be used for flow equalization on a regular basis ensures that sufficient storage is available in case of an unusual precipitation event.

*Section 273.276. Leachate analysis and sludge handling.*

Subsection (a) is proposed to be revised to be consistent with its residual waste counterpart, § 288.456 (relating to leachate analysis and sludge handling). This shifts the quarterly leachate analysis requirement predominantly to a performance standard. In addition, proposed changes in subsection (a)(2) allow the Department to modify the frequency or chemical constituents of leachate testing if

the facility operator demonstrates after four quarters of testing that this will not compromise groundwater protection. While the Federal Subtitle D criteria require the chemical characterization of the leachate to be considered, specific sampling frequencies are not specified. (40 CFR 258.40 (relating to design criteria)). The testing required in the proposed rulemaking is necessary to ensure that the treatment facility is capable of processing the leachate and will ensure that the leachate is compatible with the liner.

*Section 273.277. Departmental notice and remedial action.*

The title and paragraph (1) are proposed to be revised to be consistent with the existing residual waste counterpart, § 288.457 (relating to departmental notice and remedial action). This does not involve substantive changes.

*Section 273.281. General requirements.*

This section is proposed to be revised to be consistent with the existing residual waste counterpart, § 288.251 (relating to general requirements) by adding the word "contaminants" and "groundwater" to subsection (a) and by restructuring subsection (b).

*Section 273.282. Number, location and depth of monitoring points.*

Subsections (a) and (e) are proposed to be revised to be consistent with the existing residual waste counterpart, § 288.252 (relating to number, location and depth of monitoring points).

Subsection (b)(3) has been modified to require that additional wells be located at the compliance points, which are different from the existing monitoring points. Existing subsection (e) has been deleted because it is no longer necessary to require that monitoring and compliance wells be drilled by drillers licensed under the Water Well Drillers License Act. Section 273.152 (relating to water quality monitoring plan) requires that an applicant demonstrate that the monitoring wells will accurately measure groundwater quality. The details of well construction are included in this demonstration. Without specifying who must drill the wells, the Department has maintained the design and performance standards that must be met.

*Section 273.283. Standards for wells and casing of wells.*

This section is proposed to be revised to reflect improvements in technology and to be consistent with its existing residual waste counterpart, § 288.253 (relating to standards for casing of wells), as revised, although it is structured somewhat differently. The revisions involve adding requirements in subsection (a) for the monitoring well screen, adding a requirement in subsection (b) that a monitoring well be filter-packed, adding a requirement in subsection (c)(1) that the casing material not react with groundwater, deleting the requirement in subsection (c)(3) that the casing be screened or perforated, adding a requirement to subsection (d)(2) that the protective casing have a maximum stick up of 3 feet unless otherwise approved, and adding a performance standard to subsection (d)(4) that the protective casing be numbered for identification with a label capable of withstanding field conditions.

In addition, several changes are proposed which are also being proposed in the residual waste regulations. Specifically, subsection (c)(4) is proposed to be revised by adding that the monitoring well casing be clearly visible, subsection (c)(5) is proposed to be revised to prevent cross

contamination between surface water and groundwater, and subsection (d)(5) is proposed to be revised to delete the prescriptive requirement that the protective casing protrude 1 inch higher than the monitoring well casing.

Some of the well construction and design standards identified in this section are in addition to those required by the Federal Subtitle D criteria. (40 CFR 258.51 (relating to groundwater monitoring systems)). These proposed requirements are necessary to ensure that the wells are capable of detecting groundwater degradation and will not be damaged or contaminated during the operation of the facility.

*Section 273.284. Sampling and analysis.*

Several changes to the quarterly and annual sampling analysis requirements for each monitoring point are proposed in paragraphs (1) and (3) to make this regulation consistent with the existing residual waste counterpart, § 288.254 (relating to sampling and analysis). The Federal Subtitle D criteria require groundwater sampling and analysis to be done on a less frequent basis, but for more parameters than specified in this proposed rulemaking. (40 CFR 258.53(f) and 258.54(b) (relating to groundwater sampling and analysis requirements; and detection monitoring program)). The quarterly analyses required in this section are necessary to adequately monitor groundwater. Action can quickly be taken to modify operations should degradation be detected. This in many instances may remedy the problem before more serious remediation is necessary.

*Section 273.286. Groundwater assessment plan.*

In subsection (a), the time available to prepare and submit a groundwater assessment plan has been extended from 30 to 60 days. The Federal Subtitle D criteria, which allow for a period of 90 days, is unnecessarily long and will not provide the necessary information to make a timely decision. The proposed revision was made because field experience has demonstrated that more than 30 days is necessary to evaluate the causes of degradation and to prepare a report explaining exceedances at the monitoring points. Also, a fate and transport analysis must be performed to determine the rate and direction of migration of contaminants in the groundwater. In subsection (a)(2), the requirement that the water supply degradation that could trigger assessment be contiguous is deleted because assessment should occur if the landfill affects a water supply, regardless of its location. This is the approach currently taken in the residual waste regulations, § 288.256 (relating to groundwater assessment plan).

Subsection (b) is revised to be consistent with § 288.256(b) of the existing residual waste regulations through minor revisions to paragraph (1) and through addition of paragraph (2) concerning degradation from facility construction or seasonal variations.

A new subsection (c)(5) has been added to require the identification in the assessment plan of the abatement standard that will be met. By requiring this information in an assessment plan, the operator must plan for the likelihood of implementing abatement where the fate and transport analysis indicates there will be a problem.

Language is proposed to be added to subsection (d) requiring the landfill operator to notify in writing each water supply owner located within 1/2 mile downgradient when an assessment has been initiated. This requirement is added to provide adequate notification to water supply owners whose water supply may be affected in the future by contamination. This requirement currently exists in

the residual waste regulations, § 288.256, but is not required by the Federal Subtitle D criteria.

*Section 273.287. Abatement plan.*

In subsection (a)(1), the triggers for requiring abatement have been revised. Abatement is required when one of the following occurs: 1) the groundwater assessment plan shows the presence of groundwater degradation at the monitoring points (within 200' of the permitted disposal area) and the fate and transport analysis indicates that an abatement standard will not be met; or 2) monitoring by the Department or the operator shows the presence of an abatement standard exceedance from one or more compliance points.

A new subsection (c) is proposed to establish a deadline for submittal of an abatement plan to the Department. This is consistent with the existing residual waste requirement in existing § 288.257(d) (relating to abatement plan).

The proposed regulations include a new subsection (d) which establishes the abatement standards that must be met. The point of compliance for the abatement standards is 150 meters or the property boundary, whichever is closer. The abatement standards are identified as follows: 1) the Federal or State MCL for a constituent; 2) the background standard for a constituent for which no MCL has been promulgated; 3) the background standard for constituents for which that standard is higher than the MCL or a risk-based standard; and 4) the risk-based standard for constituents for which there are no MCLs.

The risk-based standard has been developed to be consistent with 40 CFR 258.55(i) (relating to assessment monitoring program). The proposed regulations include several factors that must be considered when using a risk-based standard for abatement. The factors identified are as follows: 1) the risk assessment used to establish the standard must assume that human receptors exist at the property boundary; 2) the level must be derived in a manner consistent with Department guidelines for assessing the health risks of environmental pollution; 3) the level must be based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act Good Laboratory Practice Standards or other scientifically valid studies approved by the Department; and 4) for carcinogens, the level must represent a concentration associated with an excess lifetime cancer risk of  $1 \times 10^{-5}$  at the property boundary. The risk-based standard may not be used if a State or Federal MCL exists for the contaminant in question.

*Section 273.291. Mineral resources.*

Proposed changes to subsection (a) delete the prescriptive 25-foot coal seam and coal outcrop isolation distance, replacing it with a requirement that the operator isolate a coal seam, coal outcrop and coal refuse in a manner that prevents combustion of the waste and damage to the liner system. The requirement that the liner system be isolated from coal seams is not required by the Federal Subtitle D criteria, but is necessary to address conditions unique to the Commonwealth.

*Section 273.292. Gas control and monitoring.*

Proposed deletion of subsection (e)(3) deletes the standard for gas monitoring in areas adjacent to the permit area. The regulation continues to require the operator to control decomposition gases onsite to prevent danger to occupants of adjacent properties. The onsite monitoring serves as an early warning indicator of potential offsite migration.

Proposed changes in subsection (f) would require vents to be located at least 3 feet above the landfill surface if active forced ventilation is required. In addition, the two situations which trigger active forced ventilation are proposed to be stated in the alternative, a correction of the existing regulation. The Federal Subtitle D criteria include extensive requirements for explosive gas control, but do not include specific vent criteria. (40 CFR 258.23 (relating to explosive gases control)). This minimal criterion is necessary to vent the gas effectively without causing damage during landfill operations.

*Section 273.293. Gas recovery.*

The vent height for active forced ventilation is proposed to be deleted from subsection (a)(3) because it is redundant of proposed § 273.292(f). The requirement that gas, condensates or other residues that are hazardous must be managed under Chapters 260—265 and 270 is added to clarify questions that have arisen concerning management of residues that have resulted from the recovery of gas at operating facilities, and is the same as the existing residual waste regulations, § 288.263 (relating to gas recovery).

*Section 273.301. Hazard prevention.*

The emergency procedures in this section have been modified to delete information already required in the Preparedness, Prevention and Contingency (PPC) Plan.

*Section 273.302. Emergency equipment.*

Subsection (a)(3) has been amended to require that an adequate water supply be available for fire fighting equipment. The Federal Subtitle D criteria do not specify the type of emergency equipment that must be maintained at the site. The requirements in this proposed rulemaking are added to address concerns voiced by the Pennsylvania Fire Institute in discussions about the potential for fire with alternative daily cover.

*Section 273.303. Implementation of contingency plan.*

Subsections (b) and (c) are proposed to be restructured slightly to read the same as their existing residual waste counterparts in § 288.273 (relating to implementation of contingency plan). In addition, new language is proposed to be added to subsection (c)(2) to require Department approval of the resumption of operation after cleanup of an area affected by an emergency.

*Section 273.311. Daily operational records.*

Language is proposed to be added to subsection (b) requiring that the daily operational record include a record of rejected waste loads and the reasons for rejecting the loads. This requirement is not a requirement of the Federal Subtitle D recordkeeping requirements, 40 CFR 258.29 (relating to recordkeeping requirements), but has been added to help identify and track problem wastes that are rejected at municipal waste landfills.

*Section 273.313. Annual operation report.*

The proposed addition of language to subsection (b)(1) would authorize the Department to require an operator to include in its annual operation report plans showing cross-sections of the permit area every 100 feet showing the permitted elevations and the actual elevations. This authorization is proposed to assist the Department in verifying, among other things, that waste volumes reported are accurate and to help assure that capacity will not run out unexpectedly at the landfill. A proposed change in subsection (c) increases the fee that accompanies the annual operation report from \$1,800 to \$2,800 to cover increases in administrative costs.

*Section 273.315. Recycling fee.*

The termination date in subsection (a) for payment of the \$2 per ton recycling fee has been revised to extend the fee for an additional 5 years, in accordance with a recent Administrative Code revision made in the act of November 26, 1997 (P. L. 530, No. 57). The fee will now terminate on October 25, 2003.

Language from section 701(a) of Act 101 (53 P. S. § 4000.701(a)), is proposed to be added to subsection (b) concerning the exception for payment of the fee on process residue and nonprocessable waste from a resource recovery facility. Subsection (d), concerning payment of the fee for certain process residues, is proposed to be deleted in accordance with the Environmental Hearing Board's decision in *Mountain View Reclamation and Geological Reclamation Operations Waste Systems, Inc. v. Commonwealth of Pennsylvania, Department of Environmental Resources*, 1994 EHB 1790, striking it down.

*Section 273.322. Closure.*

In subsection (b), the reference to "partial closure" has been deleted and the language has been conformed to be consistent with the changes made to § 273.192 (relating to closure plan).

A new subsection (c) has been added to the proposed rulemaking that gives a person the option to continue to implement an approved abatement plan or modify a closure plan to address groundwater degradation that exists at closure or occurs after closure. If a person chooses to submit an application for a permit modification, the application must identify the remediation standards that will be met in accordance with the final closure certification requirements in § 271.342 (relating to final closure certification). The Department will accept the selection of remediation standards if the requirements of new subsection (d) are met, namely that: (1) technical information and supporting documentation of the remediation activities demonstrate that the standards will be met and maintained; and (2) if documentation of cooperation or an agreement is in place with a third party where a remedy relies on access to or use of a third party's property for remediation or monitoring.

*Additional Operating Requirements for Special Handling and Residual Wastes**Section 273.501. Scope.*

Subsections (a) and (c) are proposed to be revised to clarify that all special handling or residual waste "received" at a landfill must comply with the subchapter to clarify, for example, that waste used at the facility as cover material falls within this requirement. Additionally, subsection (c)(3)—(6) are proposed to be added as good management practices and are consistent with the existing and proposed residual waste regulations at § 288.423 (relating to minimum requirements for acceptable waste).

*Section 273.513. Sewage sludge.*

This section is proposed to be deleted and replaced with the requirement that sewage sludge received at a municipal waste landfill must first be stabilized.

*Chapter 277. Construction/Demolition Waste Landfills Application Requirements**Section 277.102. Modification to expand existing landfill.*

This new section is proposed to be added to the municipal waste regulations to authorize the expansion of construction/demolition waste landfills constructed with attenuating soil in limited situations. Other construction/

demolition waste landfills, both new landfills and expansions, will be required under this proposed rulemaking to be constructed with a liner.

*Section 277.112. Facility plan.*

The reference to an optional liner system is proposed to be deleted from paragraph (1) because this proposed rulemaking will eliminate the option to construct a construction/demolition waste landfill without a liner. In addition, paragraph (2) is proposed to be revised to focus on the amount of soil needed to construct and operate the facility because this information is important for purposes of calculating the bond.

*Section 277.113. Maps and related information.*

A requirement is added to subsection (a)(1) that the boundaries of the land within the proposed permit area be identified in the application. The proposed addition of a new subsection (b) would allow an applicant to use a different scale for the topographic map if approved by the Department. In addition, deletion of subsection (c), the requirement for a map or aerial photograph of the soil types, test pits and excavations taken under § 277.117 (relating to soils description) on the proposed permit area and adjacent area, has been proposed because the information has not proven useful for purposes of making a permit decision.

*Section 277.115. Geology and groundwater description.*

New subsections (a)(8) and (9) have been proposed to require the identification of wellhead protection areas that may be impacted by the facility and to require the submission of a groundwater contour map to describe the groundwater flow patterns. These provisions have been added to address wellhead protection regulations in Chapter 109 (relating to safe drinking water), promulgated since the municipal waste regulations were promulgated, and to address questions frequently raised by applicants and operators on background hydrogeologic information.

*Section 277.116. Groundwater quality description.*

Subsection (d) is revised to reflect a change in the title of § 277.283 (relating to standards for wells and casing of wells).

*Section 277.117. Soils description.*

Subsection (a)(1) has been revised to replace the requirement to provide a description of the soils in the permit application with the requirement for the application to describe the depth to the seasonal high water table to demonstrate that the seasonal high water table will not be in contact with the liner system. The soil information currently required is not necessary for new construction/demolition waste landfills because new facilities will require liners and lined landfills do not rely on soil attenuation. The demonstration that there is no contact with water is necessary to preserve the integrity of the liner system. The soils description is moved to proposed subsection (a)(3), where it is applied to an application for an expansion of an existing facility. Subsection (c) is revised to reflect that it applies only to expansions of facilities constructed with natural attenuation which meet the requirements of § 277.102 (relating to modification to expand existing landfill).

*Section 277.120. Mineral deposits information.*

Subsection (a) addresses the potential for mine subsidence. The proposed revisions modify it to read the same as § 273.120 (relating to mineral deposits information). Subsection (b) currently requires a permit applicant to

demonstrate that it owns the recoverable or mineable coals underlying the permit area and to warrant that the applicant will not mine the coal as long as waste remains on the site. Subsection (b) has been revised to expand the coverage to include the adjacent area and to include all mineable minerals to protect landfills from potential instability problems associated with mining activities.

*Section 277.121. Notification of proximity to airport.*

This proposed rulemaking includes a new section to require that a construction/demolition waste landfill permit applicant notify the Federal Aviation Administration, the Department and the airport if the proposed facility is within 5 miles of an airport runway end. This proposed regulation is added to be consistent with the Federal Subtitle D criteria for municipal waste disposal facilities (40 CFR Part 258) and to facilitate greater input on the feasibility of the location of the landfill.

*Section 277.131. Basic requirements.*

Subsection (c) is proposed to be revised to reflect the proposed deletion of § 277.164 (relating to application requirements for noncoal mine disposal).

*Section 277.132. Operation plan.*

Proposed changes to paragraph (1) require the applicant to include a plan for the inspection and monitoring of incoming waste to help ensure that waste not approved for receipt by the facility is not received and that waste will be rejected or specially addressed if it poses a problem. Paragraphs (3) and (4), which are the requirements to describe the type and size of equipment to be used at the facility and the plan for hiring and training personnel, have been deleted in this proposed rulemaking. Proposed changes to paragraph (6) clarify that the operating hours of the facility include time during which construction and operation activities will occur. This requirement will help the operator and the Department to minimize noise complaints.

*Section 277.134. Plan for access roads.*

Amendments to this section have been proposed to require that access roads be designed and constructed to handle truck traffic adequately. This requirement sets a performance standard by which to gauge the adequacy of proposed access roads.

*Section 277.136. Nuisance minimization and control plan.*

Several proposed changes have been made to this section. The title of this section has been amended to reflect the need to minimize nuisances during the facility planning stages. Subsection (a) has been modified to require that a plan be submitted that describes how nuisances will be minimized and controlled. By planning to control and minimize all nuisances, the expectation is that conditions that give rise to public nuisances will be abated. The Department's focus will be on ensuring the effectiveness of the operator's plan to minimize and control nuisances. Subsection (b) has been added to identify specific items that must be addressed in the plan. The plan must include the following: routine assessment and control of vector infestations; methods to minimize and control nuisances from odors, dustfall and noise levels off the property boundary from the facility; and for odors, a determination of normal and adverse weather conditions, based on site-specific meteorological data. The plan continues to allow the inclusion of contractual arrangements for the services of nuisance control professionals.

*Section 277.138. Recycling plan.*

An obsolete date reference is proposed to be deleted from this section. The analysis requirements in paragraph (1) are proposed to be deleted because they are redundant since to prepare a plan under paragraph (2) an applicant has to conduct an analysis.

*Section 277.139. Daily volume.*

This section is proposed to be added to codify a practice already in place, which is the setting of a limit on the amount of waste that may be received at a construction/demolition waste landfill on a daily basis. The proposed section requires the setting of a maximum and average daily volume, consistent with the requirements of § 273.140 (relating to daily volume) for municipal waste landfills. Establishing daily volumes involves, in part, analyzing odors, facility traffic and other factors under the environmental assessment of § 271.127 (relating to environmental assessment).

*Section 277.141. Compaction and cover plan.*

Revisions are proposed to this section to make it consistent with its counterpart governing municipal waste landfills, § 273.141 (relating to compaction and cover plan). This includes proposed revisions to paragraph (3) that reflect changes being made in the operating requirements for cover materials that largely eliminate design requirements in favor of performance standards. Specifically, this section will now require that an applicant specify the materials that will be used as cover and demonstrate that the materials and procedures for applying them will meet the performance standards in §§ 277.232 and 277.233 (relating to intermediate cover and slopes; and final cover and grading). A cross reference to the operating requirements is amended to reflect the deletion of an existing section in the operating requirements. Additionally, in paragraph (5), the requirement that an applicant provide copies of contracts for the cover materials that will be used at the landfill is eliminated.

*Section 277.152. Water quality monitoring plan.*

Subsection (a)(2) is proposed to be changed to refer to existing groundwater quality to avoid confusion with the term "background standard," which is now a defined term.

*Section 277.161. Liner system and leachate control plan.*

Subsection (a) is proposed to be revised to remove the precondition of a potential for water pollution because it relates to natural attenuation landfills which will not be authorized under this rulemaking. In subsection (c), the requirement that the leachate demonstration be based on the EPA Method 9090 compatibility test has been replaced with language that allows the demonstration to be based on EPA or ASTM guidelines approved by the Department. This change will allow applicants to keep up with changing standards and technology. A change is proposed to the language of subsection (d)(13) to require the applicant to provide information on the friction angle for any component that may be in contact with the liner. Also, in subsection (d)(19), a requirement has been added to identify in the permit application the percent of recycled material in the proposed liner.

*Section 277.162. Leachate treatment plan.*

Subsection (a) is proposed to be revised to remove the precondition of a potential for water pollution because it relates to natural attenuation landfills which will not be authorized under this rulemaking.

*Section 277.163. Modifications in leachate treatment plan.*

The cross reference to § 277.277 (relating to departmental notice and remedial action) is proposed to be revised to reflect the proposed revision to the title of § 277.277.

*Section 277.164. Application requirements for noncoal mine disposal.*

This section has been revised to apply only to existing facilities and expansions of existing facilities because new natural attenuation facilities will not be authorized under this rulemaking.

*Section 277.192. Closure plan.*

This section requires that a closure plan describe measures that will be taken toward and after closure. In subsection (a), the proposed regulations delete the reference to a postclosure period and clarify that the plan includes activities that occur toward and after closure. Subsection (b)(3) has been deleted because activities such as capping of cells in stages are considered activities that occur toward closure. Closure occurs only once at a landfill, the date the facility permanently ceases to accept waste. Subsection (b)(4) has been similarly revised to refer to activities that occur toward and after closure. A correlating change has been made to § 277.322(b) (relating to closure).

In subsection (b)(5)(vi), additional language has been proposed to specify that the plan include a description of maintenance of access control after closure. This amendment addresses questions concerning maintenance that have been raised in the field.

*Operating Requirements*

*Section 277.201. Basic limitations.*

Subsection (b) is proposed to be revised to clarify that information obtained by a person or municipality monitoring groundwater quality under § 277.116 (relating to groundwater quality description) without a permit may be used for a permit application for the proposed facility. An obsolete date has been deleted from subsection (j). In subsection (k), the phrase "generated outside the host county for a facility" is proposed to be deleted because the origin of the waste is not relevant to this prohibition. A new subsection (l) has been added that requires all approved mitigation measures identified in the application to be completed before waste may be accepted, unless a later date is authorized in writing by the Department for technical reasons. This requirement bolsters the importance of effective mitigation, which is stressed in the environmental assessment of § 271.127 (relating to environmental assessment).

*Section 277.202. Areas where construction/demolition waste landfills are prohibited.*

Several changes are proposed to this section to modify certain isolation distances for construction/demolition waste landfills and to clarify existing language. Landfills permitted prior to the date of publication of this regulation as final in the *Pennsylvania Bulletin* are not intended to be affected by the more stringent isolation distances proposed in this section when reissuance or renewal of the permit, or expansion of the permit area, is sought.

The lead-in language in subsection (a) is revised to clarify that the areas exempted from this regulation are those that were permitted as a construction/demolition waste landfill prior to 1988. Subsection (a)(1) is given the title "Floodplain."

Subsection (a)(2) is given the title "Wetland." It is proposed to be divided into two subparagraphs, the first containing the current 300-foot setback from an exceptional value wetland and the second adding a 100-foot setback from a wetland other than an exceptional value wetland. The 100-foot setback is applicable to construction/demolition waste landfills permitted on or after the date of publication of this regulation as final in the *Pennsylvania Bulletin*, but is not applicable to permit modifications for expansions issued after that date if the permit being modified was issued before that date. The 100-foot setback is added to protect valuable wetland resources and makes this isolation distance for construction/demolition waste landfills consistent with the proposed isolation distance for other municipal waste facilities. As in the proposed municipal waste landfill regulation, the 100-foot setback would not apply if storage, processing and disposal would not occur within 100 feet from the wetland and if either the operator has received the necessary permit under Chapter 105 to operate in or along the wetland or, for an operation not in or along a wetland, no adverse hydrologic or water quality impact will result from the landfill operation.

Subsection (a)(3) is given the title "Minerals," because it now applies to more minerals than just coal. It is proposed to be divided into two subparagraphs. Subparagraph (i) will retain the current prohibition against operating a construction/demolition waste landfill in coal bearing areas underlain by recoverable or mineable coals unless the operator does not own the coal nor have an agreement with the coal owner to provide support. A revision to subparagraph (i) indicates that this prohibition will have applied to landfill permits issued prior to the date of publication of this final regulation in the *Pennsylvania Bulletin* and will apply to expansions of facilities already permitted as of that date. Proposed subparagraph (ii), which will apply to landfill permits issued on or after publication of the final regulation, will prohibit operation of a landfill in areas underlain by mineable minerals, unless the operator owns the underlying minerals. The expanded coverage from coal to all mineable minerals will better protect landfills from potential instability problems associated with mining activities.

Subsection (a)(4) is proposed to be revised by the insertion of the title "Valley, ravine or head of hollow," and subsection (a)(5) is given the title "Limestone or carbonate formation." No changes are proposed to the text of these two paragraphs.

A substantive change is proposed to subsection (a)(6), which will now be entitled "Occupied dwelling." This paragraph is proposed to be divided into two subparagraphs. Subparagraph (i) will retain the current prohibition against operating a construction/demolition waste landfill within 300 feet of an occupied dwelling unless the owner of the dwelling provides written consent and against having the disposal area of a landfill within 500 feet of an occupied dwelling unless the owner of the dwelling provides written consent. A revision to subparagraph (i) indicates that this prohibition will have applied to landfill permits issued prior to the date of publication of this final regulation in the *Pennsylvania Bulletin* and will apply to expansions of facilities already permitted as of that date. Proposed subparagraph (ii), which will apply to landfill permits issued on or after publication of the final regulation, will prohibit operation of a landfill within 300 yards of an occupied dwelling unless the owner of the dwelling provides written consent. This proposed revision will help to reduce complaints from nearby dwellings concerning noise, odors and nuisances.

It is drawn from the isolation distance in section 511 of Act 101, of 300 yards from a school, park or playground for municipal waste landfills, resource recovery facilities and commercial residual waste treatment facilities.

Subsection (a)(7) is proposed to be revised by the insertion of the title "Perennial stream," and subsection (a)(8) is given the title "Property line." No changes are proposed to the text of these two paragraphs.

Subsection (a)(9) is entitled "Water source," and is modified to be consistent with the water source isolation distance proposed for municipal waste landfills in § 273.202 by adding subparagraphs (i)—(iii). (Subparagraphs (i)—(iii) currently exist in subsection (b)).

Subsection (a)(10), which prohibits operation of a landfill within 25 feet of a coal seam, a coal outcrop or coal refuse, is proposed to be deleted because its purpose—adequate protection from fires—can be adequately addressed in the design of a facility. To address fire protection in the facility design, the Department proposes in § 277.291 (relating to mineral resources) to require a landfill operator to isolate coal seams, coal outcrops and coal refuse from waste deposits in a manner that prevents combustion of the waste.

A new subsection (a)(10) is proposed to be added to the regulation relating to schools, parks and playgrounds. It is entitled "School, park, playground." It prohibits operation of a new construction/demolition waste landfill permitted on or after the date of publication of this final rulemaking in the *Pennsylvania Bulletin* within 300 yards of a school, park or playground. The property owner of the park, playground or school may provide a written waiver consenting to the facility being closer than 300 yards. This requirement is drawn from the isolation distance in Act 101 of 300 yards from a school, park or playground for municipal waste landfills, resource recovery facilities and commercial residual waste treatment facilities.

Subsection (b) is deleted because it has been incorporated into subsection (a)(9). Subsections (c) and (d) are renumbered and a cross reference corrected. A correction of the word "municipal" to "construction/demolition" is made in subsection (c).

#### *Section 277.203. Certification.*

Subsection (a)(6) is revised to indicate that natural attenuation is only available at existing permitted landfills and expansions thereto. Another proposed revision to this section adds "construction of the landfill gas extraction system" to the list of major construction activities for which the operator must submit a certification by a professional engineer upon completion, in subsection (a)(11). A new subsection (d) is proposed to clarify that closure and final closure activities will not be deemed complete until the Department has certified completion of closure and final closure of a landfill.

#### *Section 277.211. Signs and markers.*

In subsection (a), proposed changes eliminate the prescriptive language about the size and content of signs and replace the requirement with a performance standard that the sign can be easily seen and read.

#### *Section 277.212. Access control.*

The requirement in subsection (b) for an operator to construct a fence or other barrier around the site is proposed to be deleted as being redundant. The requirement is expressed in the remaining requirement that the operator "maintain" a fence or other barrier.

#### *Section 277.213. Access roads.*

Protection of wetlands is proposed to be added to subsection (b). This change is consistent with a proposed change in the other chapters in Article VIII. Deletion of the phrase "sediment control" from subsection (c) is proposed because not all of the measures to be considered concern sediment control.

Proposed changes to subsections (e) and (g) differentiate between access roads leading to the disposal area and those leading to ancillary structures. Subsection (e) has been changed to apply to access roads leading to the disposal area. As a result, there will be no specified minimum cartway width for access roads not leading to the disposal area. Subsection (g) has been changed to remove the requirement that an access road to a treatment facility, impoundment or groundwater monitoring point be negotiable by loaded collection vehicles.

Subsection (h), which requires that an access road be constructed on a dry and stable area, has been deleted. The performance standards in this section are sufficient to direct the safe construction of access roads. Subsection (i), which contains the prescriptive requirements that any topsoil be removed prior to construction of an access road and be immediately used as final cover or stored, has been deleted. The landfill operator may determine the best use for the soil.

#### *Section 277.214. Measurement and inspection of waste.*

This section is proposed to be changed to require inspection of waste in addition to measurement of waste. The title is changed to reflect this.

#### *Section 277.215. Equipment.*

In subsection (b), the requirement that standby equipment must be located on the site or at a place where it can be available within 24 hours has been deleted. This requirement is redundant of the requirement in subsection (a) that the operator maintain on the site equipment necessary for the operation of the facility in accordance with the permit.

#### *Section 277.216. Unloading and compaction.*

The 8-foot depth of each lift is proposed to be deleted from subsection (c) as an unnecessarily prescriptive regulation. Subsection (e) is proposed to be deleted because the requirement is addressed in § 277.246 (relating to attenuating soil base).

#### *Section 277.217. Air resources protection.*

Proposed changes to this section clarify the requirements that currently exist in this section. In subsection (a), the changes include cross referencing Article III (relating to air resources) and the nuisance minimization and control requirements of § 277.218 (relating to nuisance minimization and control). In subsection (a)(3), a requirement to minimize the generation of fugitive dust emissions from the facility has been added. In subsection (b), new language has been added requiring that the operator comply with the terms and conditions of any air quality plan approval and air quality operating permit issued to the facility.

#### *Section 277.218. Nuisance minimization and control.*

Several proposed changes have been made to this section. The title of this section has been amended to reflect the need to minimize nuisances during the operational phase of the facility. The nuisance minimization and control plan approved under § 271.136 should be implemented to control and minimize all nuisances such that conditions that give rise to public nuisances will be

abated. Subsection (b) has been modified to require that an operator minimize and control public nuisances. The Department's focus will be on ensuring that the operator implement its nuisance minimization and control plan effectively. The operator will be responsible for minimizing and controlling public nuisances as they arise during operations. A new subsection (c) has been added to specifically address the minimization and control of odors. In addition to implementing the nuisance minimization and control plan, the operator must perform site inspections to evaluate the effectiveness of its waste management practices in reducing the potential for offsite odor creation. Also, the operator must promptly address any problems or deficiencies discovered in the course of the site inspections.

*Section 277.221. Daily volume.*

This section is proposed to be added to be consistent with the proposed addition to the application requirements of § 277.139 (relating to daily volume).

*Section 277.231. Topsoil storage.*

This section has been deleted in this proposed rulemaking because the volume of topsoil at these sites is inadequate or, in some cases, nonexistent for use as final cover. The operator is required upon closure to supply the necessary soil. The bond calculations include the price of purchasing acceptable soil, if necessary.

*Section 277.232. Intermediate cover and slopes.*

The requirement that intermediate cover be at least 1 foot in thickness is proposed to be moved from subsection (a) to subsection (c) to allow other materials and methods to be used under the equivalency review process. The performance standard in subsection (b)(3), that intermediate cover be noncombustible and prevent the spread of combustion, is proposed to be revised to require that cover be capable of controlling fires. This is consistent with existing requirements for daily cover at municipal waste landfills and with proposed revisions to intermediate and final cover requirements for municipal waste landfills. Subsection (b)(4) is proposed to be added to require that the cover material be consistent with the waste acceptance plan for the facility. This takes into account, among other things, the use of waste as cover material. Subsection (b)(6) is proposed to be added to require that intermediate cover control infiltration of precipitation and erosion and sedimentation. Proposed subsection (b)(7) indicates that germination and propagation of vegetative cover will be required if necessary to control infiltration of precipitation and erosion and sedimentation.

Changes are also proposed to the design standards in subsection (c) by deleting most of the design standards for soil and replacing them with the performance standards. The detailed soil requirements are no longer necessary for purposes of intermediate cover, especially because the proposed regulations allow for alternatives to soil to be used for intermediate cover. This proposed revision only maintains two design requirements for intermediate cover that are applicable to soil and soil-like materials. Changes in subsection (e) clarify that if vegetation is to be used it must be established within 30 days. Changes in subsection (f) require that slopes constructed during intermediate cover activities (not just during landfilling) may not exceed 50%.

*Section 277.233. Final cover and grading.*

In subsection (a), the prescriptive design standards for the cap have been reduced and performance standards

have been added to provide greater flexibility. Subsection (a)(3) is modified to indicate that a layer of soil shall be placed over the drainage layer. This is consistent with the municipal waste landfill requirements. Authority in subsection (b) for the Department to waive the cap and drainage layer requirements is proposed to be revised to apply only to existing facilities and expansions of existing facilities based on natural attenuation. A new subsection (c) enables an operator to obtain an equivalency review for alternative cap designs. In subsection (d), the layer of material placed over the drainage layer will now have to be capable of controlling fires and will have to ensure slope stability, in addition to the other requirements. The requirements that the layer cover waste without change in its properties and without regard to weather, and that it compact well and not crack excessively when dry, are deleted because they have not proven necessary. Subsection (e) is revised to read the same as the proposed revision to the municipal waste landfill requirements found in § 273.234(d) (relating to final cover and grading).

*Section 277.241. General requirements.*

Subsection (c) is proposed to be revised to protect all waters, not just groundwater, from pollution and to read consistently with the proposed revision for the other municipal waste facilities.

*Section 277.245. Water supply replacement.*

Revisions are proposed to subsections (a)—(c) to clarify that this section applies to activities that "adversely" affect the water supply. This is consistent with the proposed revisions for the other municipal waste facilities.

*Section 277.251. Scope and requirements.*

Subsection (a) is revised to indicate that a liner is required for all construction/demolition waste landfills other than an existing landfill based on natural attenuation or an expansion thereof.

Revisions are proposed to subsections (b)(2) and (4) to allow the use of materials other than soil or earthen materials in the landfill liner's leachate detection zone, protective cover and leachate collection zone.

*Section 277.252. General limitations.*

In subsection (a), a change has been proposed to the requirement that 4 feet exist between the top of the subbase of the liner system and the seasonal high water table. The revision requires that the bottom of the subbase cannot be in contact with the seasonal high water table or perched water table. The prescriptive buffer between the liner system and the seasonal high water table has been replaced with a performance standard to prevent contact between the two. In subsection (a)(2), the drainage systems may now be used to prevent contact between the bottom of the subbase and the water tables rather than to maintain the 4-foot isolation distance. This change is consistent with the other changes in subsection (a). Subsection (b) is adjusted to indicate that the regional groundwater table may not be artificially lowered. Subsection (c) is added to be consistent with the proposed revision to the municipal waste landfill regulations, § 273.252 (relating to general limitations). It requires an 8-foot isolation distance for confined aquifers from the top of the subbase to the top of the confining layer or the shallowest level below the bottom of the subbase where groundwater occurs.

*Section 277.253. Subbase.*

The design requirements in subsection (b) are proposed to be deleted. Existing subsection (b)(2) is proposed to be deleted because the necessary minimum bearing capacity of the subbase is determined by the design of the facility. The design requirement in subsection (b)(3), now subsection (b)(2), is revised to exempt from its applicability situations in which the clay component of a composite liner is designed and constructed directly above the subbase because the clay component will provide sufficient protection. Subsection (b)(5), renumbered as (b)(4), is proposed to be revised to increase the permissible subbase slopes from 25% to 33% because construction on steeper slopes has proven to be effective.

*Section 277.254. Leachate detection zone.*

The design requirement in subsection (b)(2) is proposed to be revised to allow materials up to 0.5 inch in particle size to be contained in the leachate detection zone of a liner system, from the current limit of 0.25 inch. The revision would correlate with the 0.5 inch restriction in the residual waste program, which has proven successful. The design requirement in subsection (b)(4)(ii), prohibiting the distance between pipes from exceeding 100 feet, is proposed to be deleted because it has not proven necessary for an effective system. A minimum postsettlement grade of 2% is proposed to be added to new subsection (b)(4)(ii) to be consistent with the proposed revisions to the municipal waste landfill regulations, at § 273.255 (relating to leachate detection zone). Additionally, the requirement in subsection (b)(4)(v) that rounded noncarbonate stones or aggregates be placed around the piping system is proposed to be revised and moved to subsection (b)(6) to indicate that noncarbonate stone or aggregates without sharp edges are to be used.

Subsection (d) is proposed to be modified to indicate that the operator shall take steps when average flow of liquid in the leachate detection zone exceeds 10 gallons per acre per day. This modification is proposed because liquid in an amount less than this may be present due to minor imperfections in the liner installation, but does not indicate a threat to the performance of the liner system. Subsection (d)(3) is proposed to be revised to indicate that the Department may require sampling and analysis for constituents other than those indicated in this section depending upon the specific characteristics of waste approved for disposal at the facility.

Subsection (e) is proposed to be revised to state that the operator shall take certain steps when the volume of leachate in the leachate detection zone exceeds 100 gallons per acre per day or more than 10% of leachate generation. These are generally accepted levels based upon historic liner installation and operation experience. Subsection (f) is proposed to be revised to change "pollution" to "degradation" of groundwater, consistent with the rest of this proposed rulemaking.

*Section 277.255. Liner.*

In subsection (b), the words "at a minimum" were added to allow for the use of liner that meet or exceed the design requirements in Table I without an equivalency demonstration. Subsection (f) is added to state that a construction/demolition waste landfill or a component thereof may not have a liner based upon natural attenuation of leachate. This change is proposed to eliminate the risk of failure of a natural attenuation "liner" for construction/demolition waste. Note that for existing facilities constructed with attenuating soil and expansions of

those facilities, this requirement may be waived under proposed § 277.102 (relating to modification to expand existing landfill).

*Section 277.256. Protective cover.*

The design requirements in subsection (b) are proposed to be revised to increase the allowable diameter of solid material from one quarter inch to one half inch, based on acceptable industry practices that have been approved through the equivalency review process, and to delete the requirement that the protective cover be uniformly compacted and smooth because in some instances compacting protective cover may reduce desired infiltration and may damage the leachate detection zone within the protective cover.

*Section 277.257. Leachate collection system within protective cover.*

The proposed rulemaking amends subsection (a)(2) to authorize the Department to condition a permit to allow the depth of leachate on or above the primary liner to exceed 1 foot for sump areas because a sump area is used for collection of leachate and frequently exceeds 1 foot of head. An exceedance may also occur for a 25-year, 24-hour precipitation event where the 1 foot of head will be exceeded for less than 3 days to address exceptional precipitation events. This revision is intended to address two situations in which exceedance of the 1-foot limit should not pose a problem.

*Section 277.259. Noncoal mine disposal.*

This section has been revised to apply only to existing facilities and expansions of existing facilities because new natural attenuation facilities will not be authorized under this rulemaking.

*Section 277.272. Basic treatment methods.*

Subsection (a) is proposed to be revised to clarify the pretreatment condition so as to read consistently with the proposed revision to the municipal waste landfill regulation, § 273.272 (relating to basic treatment methods).

*Section 277.274. Leachate recirculation.*

Subsection (a) is slightly restructured and a prohibition against recirculating leachate which is a hazardous waste is proposed to be added to comport with proposed revisions to the municipal waste landfill regulation, § 273.274 (relating to leachate recirculation).

*Section 277.275. Leachate collection and storage.*

Subsection (b), concerning the onsite leachate storage system, is proposed to be revised to be consistent with the proposed revision to the municipal waste landfill regulation, § 273.275 (relating to leachate collection and storage).

*Section 277.276. Leachate analysis and sludge handling.*

Subsection (a) is proposed to be revised to be consistent with the proposed revision to the municipal waste landfill regulation, § 273.276 (relating to leachate analysis and sludge handling). This shifts the quarterly leachate analysis requirement predominantly to a performance standard. In addition, proposed changes in subsection (a)(2) allow the Department to modify the frequency or chemical constituents of leachate testing if the facility operator demonstrates after four quarters of testing that this will not compromise groundwater protection.

*Section 277.277. Departmental notice and remedial action.*

The title and paragraph (1) are proposed to be revised to be consistent with the proposed revision to the municipal waste landfill regulation, § 273.277 (relating to departmental notice and remedial action). This does not involve substantive changes.

*Section 277.281. General requirements.*

This section is proposed to be revised to be consistent with the proposed revisions to the municipal waste landfill regulation, § 273.281 (relating to general requirements) by adding the word "contaminants" and "groundwater" to subsection (a) and by restructuring subsection (b).

*Section 277.282. Number, location and depth of monitoring points.*

Subsections (a) and (e) are proposed to be revised to be consistent with the proposed revisions to the municipal waste landfill regulation, § 273.282 (relating to number, location and depth of monitoring points).

Subsection (b)(3) has been modified to require that additional wells be located at the compliance points, which are different from the existing monitoring points. Existing subsection (e) has been deleted because it is no longer necessary to require that monitoring and compliance wells be drilled by drillers licensed under the Water Well Drillers License Act. Section 277.152 (relating to water quality monitoring plan) requires that an applicant demonstrate that the monitoring wells will accurately measure groundwater quality. The details of well construction are included in this demonstration. Without specifying who must drill the wells, the Department has maintained the design and performance standards that must be met.

*Section 277.283. Standards for wells and casing of wells.*

This section is proposed to be revised to reflect improvements in technology and to be consistent with the proposed revisions to the municipal waste landfill regulation, § 273.283 (relating to standards for wells and casing of wells). The revisions involve adding requirements in subsection (a) for the monitoring well screen; adding a requirement in subsection (b) that a monitoring well be filter-packed; adding a requirement in subsection (c)(1) that the casing material not react with groundwater; deleting the requirement in subsection (c)(3) that the casing be screened or perforated and adding a requirement that the monitoring well casing be clearly visible; adding a requirement in subsection (c)(4) to prevent cross contamination between surface water and groundwater; adding a requirement to subsection (d)(2) that the protective casing have a maximum stick up of 3 feet unless otherwise approved; adding a performance standard to subsection (d)(4) that the protective casing be numbered for identification with a label capable of withstanding field conditions; and deleting the prescriptive requirement in subsection (d)(5) that the protective casing protrude 1 inch higher than the monitoring well casing.

*Section 277.284. Sampling and analysis.*

Several changes to the quarterly and annual sampling analysis requirements for each monitoring point are proposed in paragraphs (1) and (3) to make this regulation consistent with the proposed revisions to the municipal waste landfill regulation, § 273.284 (relating to sampling and analysis).

*Section 277.286. Groundwater assessment plan.*

In subsection (a), the time available to prepare and submit a groundwater assessment plan has been extended from 30 to 60 days because field experience has demonstrated that more than 30 days is necessary to evaluate the causes of degradation and to prepare a report explaining exceedances at the monitoring points. Also, a fate and transport analysis must be performed to determine the rate and direction of migration of contaminants in the groundwater. In subsection (a)(2), the requirement that the water supply degradation that could trigger assessment be contiguous is deleted because assessment should occur if the landfill affects a water supply, regardless of its location. This is the approach currently taken in the residual waste regulations, § 288.256 (relating to groundwater assessment plan).

Subsection (b) is revised to be consistent with § 288.256(b) of the residual waste regulations through minor revisions to paragraph (1) and through addition of paragraph (2) concerning degradation from facility construction or seasonal variations.

A new subsection (c)(5) has been added to require the identification in the assessment plan of the abatement standard that will be met. By requiring this information in an assessment plan, the operator must plan for the likelihood of implementing abatement where the fate and transport analysis indicates there will be a problem.

Language is proposed to be added to subsection (d) requiring the landfill operator to notify in writing each water supply owner located within 1/2 mile downgradient when an assessment has been initiated. This requirement is added to provide adequate notification to water supply owners whose water supply may be affected in the future by contamination. This requirement currently exists in the residual waste regulations, § 288.256.

*Section 277.287. Abatement plan.*

In subsection (a)(1), the triggers for requiring abatement have been revised. Abatement is required when one of the following occurs: 1) the groundwater assessment plan shows the presence of groundwater degradation at the monitoring points (within 200' of the permitted disposal area) and the fate and transport analysis indicates that an abatement standard will not be met; or 2) monitoring by the Department or the operator shows the presence of an abatement standard exceedance from one or more compliance points.

A new subsection (c) is proposed to establish a deadline for submittal of an abatement plan to the Department. This is consistent with the residual waste requirement in existing § 288.257(d) (relating to abatement plan).

The proposed amendments include a new subsection (d) which establishes the abatement standards that must be met. The point of compliance for the abatement standards is 150 meters or the property boundary, whichever is closer. The abatement standards are identified as follows: 1) the Federal or State MCL for a constituent; 2) the background standard for a constituent for which no MCL has been promulgated; 3) the background standard for constituents for which that standard is higher than the MCL or a risk-based standard; and 4) the risk-based standard for constituents for which there are no MCLs.

The risk-based standard has been developed to be consistent with 40 CFR 258.55(i) (relating to assessment monitoring program). The proposed amendments include several factors that must be considered when using a risk-based standard for abatement. The factors identified

are as follows: 1) the risk assessment used to establish the standard must assume that human receptors exist at the property boundary; 2) the level must be derived in a manner consistent with Department guidelines for assessing the health risks of environmental pollution; 3) the level must be based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act Good Laboratory Practice Standards or other scientifically valid studies approved by the Department; and 4) for carcinogens, the level must represent a concentration associated with an excess lifetime cancer risk of  $1 \times 10^{-5}$  at the property boundary. The risk-based standard may not be used if a State or Federal MCL exists for the contaminant in question.

*Section 277.291. Mineral resources.*

Proposed changes to subsection (a) delete the prescriptive 25-foot coal seam and coal outcrop isolation distance, replacing it with a requirement that the operator isolate a coal seam, a coal outcrop and coal refuse in a manner that prevents combustion of the waste and damage to the liner system.

*Section 277.292. Gas control and monitoring.*

This section is proposed to be revised to state the standard by which the need to implement a gas control and monitoring program is triggered. The trigger is if waste disposed at the facility generates, or is likely to generate, gas.

*Section 277.301. Hazard prevention.*

The emergency procedures in this section have been modified to delete information already required in the PPC Plan.

*Section 277.302. Emergency equipment.*

Subsection (a)(3) has been amended to require that an adequate water supply be available for fire fighting equipment.

*Section 277.303. Implementation of contingency plan.*

Subsections (b) and (c) are proposed to be restructured slightly to read the same as the proposed revisions to § 273.303 (relating to implementation of contingency plan). In addition, new language is proposed to be added to subsection (c)(2) to require Department approval of the resumption of operation after cleanup of an area affected by an emergency.

*Section 277.311. Daily operational records.*

Language is proposed to be added to subsection (b) requiring that the daily operation record include a record of rejected waste loads and the reasons for rejecting the loads. This requirement has been proposed to help identify and track problem wastes that are rejected at construction/demolition waste landfills.

*Section 277.312. Annual operation report.*

A proposed change in subsection (c) increases the fee that accompanies the annual operation report from \$1,100 to \$2,800 to cover increases in administrative costs.

*Section 277.322. Closure.*

In subsection (b), the reference to "partial closure" has been deleted and the language has been conformed to be consistent with the changes made to § 277.192 (relating to closure plan).

A new subsection (c) has been added to the proposed rulemaking that gives a person the option to continue to implement an approved abatement plan or modify a

closure plan to address groundwater degradation that exists at closure or occurs after closure. If a person chooses to submit an application for a permit modification, the application must identify the remediation standards that will be met in accordance with the final closure certification requirements in § 271.342 (relating to final closure certification). The Department will accept the selection of remediation standards if the requirements of new subsection (d) are met, namely that: (1) technical information and supporting documentation of the remediation activities demonstrate that the standards will be met and maintained; and (2) if documentation of cooperation or an agreement is in place with a third party where a remedy relies on access to or use of a third party's property for remediation or monitoring.

*Chapter 279. Transfer Facilities*

*General*

*Section 279.1. Scope.*

The proposed amendments include a new subsection (b) that allows the Department to waive or modify a requirement of this chapter for permitted transfer facilities at which no actual loading, unloading or transferring of waste occurs, if the absence of the loading, unloading or transferring activity renders the requirement unnecessary.

*Application Requirements*

*Section 279.101. General requirements.*

The proposed revision to subsection (b) would allow an applicant to use a different scale for the maps, plans and cross sections submitted in the application, if approved by the Department.

*Section 279.102. Operating plan.*

The proposed revision to subsection (c) deletes the requirement that an application contain a plan for hiring certain personnel. As revised, the regulation requires an application to contain a plan for training the personnel and comports with the existing residual waste transfer facility counterpart, § 293.102(c) (relating to operating plan).

*Section 279.103. Maps and related information.*

Several changes are proposed to subsection (a). Subsection (a)(4) is proposed to be revised to require the application to identify water sources located on or within 1/4 mile of the proposed facility instead of identifying those located on the proposed permit area and adjacent area. This revision describes the "adjacent area" for purposes of this subsection as 1/4 mile beyond the permit area. Given the limited potential of transfer facilities to affect local water supplies and based on experience in the municipal and residual waste programs, a 1/4 mile radius calls for sufficient permit information to determine the suitability of the site location. Subsection (a)(4) also has provisions to limit the number of wells specifically identified when a large number of wells exists. Language is proposed to be added to subsection (a)(7) to indicate that anticipated locations of water quality monitoring points must only be identified in the application if the Department requires monitoring. Subsection (a)(14) is amended to clarify that the application needs to show proposed "unloading" areas. Subsection (a)(16) is amended to require the horizontal and vertical dimensions of buildings and related facilities to be stated in the application.

Deletion of subsection (b), the requirement for a map or aerial photograph of the site boundaries and soil types,

has been proposed because the information has not proven useful for purposes of making a permit decision.

*Section 279.104. Plan for access roads.*

Amendments to this section have been proposed to require that access roads be designed and constructed to handle truck traffic adequately. This requirement sets a performance standard by which to gauge the adequacy of proposed access roads.

*Section 279.105. Soil erosion and sedimentation control plan.*

The title of this section is proposed to be changed to make it the same as that in the other chapters in Article VIII.

*Section 279.106. Soil and groundwater monitoring plan.*

In subsection (a), the word "pollution" has been changed to "groundwater degradation" to provide clarity to the monitoring program. "Groundwater degradation" is a defined term in § 271.1.

*Section 279.109. Contingency plan.*

A typographical error is proposed to be corrected in this section.

*Section 279.121. Recycling plan.*

An obsolete date reference is proposed to be deleted from this section. The analysis requirements in paragraph (1) are proposed to be deleted because they are redundant since to prepare a plan under paragraph (2) an applicant has to conduct an analysis.

*Operating requirements*

*Section 279.201. Basic limitations.*

Subsection (d) is proposed to be revised to prohibit storage and processing of explosive waste at a transfer facility. In subsection (f), the phrase "generated outside the host county for a facility" is proposed to be deleted because the origin of the waste is not relevant to this prohibition. A new subsection (h) has been added that requires all approved mitigation measures identified in the application to be completed before waste may be accepted, unless a later date is authorized in writing by the Department for technical reasons. This requirement bolsters the importance of effective mitigation, which is stressed in the environmental assessment of § 271.127 (relating to environmental assessment).

*Section 279.202. Areas where transfer facilities are prohibited.*

Several changes are proposed to this section to modify certain isolation distances for transfer facilities and to clarify existing language. Transfer facilities permitted prior to the date of publication of this regulation as final in the *Pennsylvania Bulletin* are not intended to be affected by the more stringent isolation distances proposed in this section when reissuance or renewal of the permit, or expansion of the permit area, is sought.

The lead-in language in subsection (a) is revised to clarify that the areas exempted from this regulation are those that were permitted as a transfer facility prior to 1988. Subsection (a)(1) is given the title "Floodplain."

Subsection (a)(2) is given the title "Wetland." It is proposed to be divided into two paragraphs, the first containing the current 300-foot setback from an exceptional value wetland and the second adding a 100-foot setback from a wetland other than an exceptional value wetland. The 100-foot setback is applicable to transfer facilities permitted on or after the date of publication of

this regulation as final in the *Pennsylvania Bulletin*, but is not applicable to permit modifications for expansions issued after that date if the permit being modified was issued before that date. The 100-foot setback is added to protect valuable wetland resources and makes this isolation distance for transfer facilities consistent with the proposed isolation distance for other municipal waste facilities. The 100-foot setback would not apply if storage and processing would not occur within 100 feet from the wetland and if either the operator has received the necessary permit under Chapter 105 to operate in or along the wetland or, for an operation not in or along a wetland, no adverse hydrologic or water quality impact will result from the landfill operation.

Subsection (a)(3), which will now be entitled "Occupied dwelling," is clarified to read that a waiver of the 300-foot isolation distance from an occupied dwelling may be obtained from the property owner, as opposed to the "current" property owner. This revision is consistent with the existing residual waste transfer facility regulation, § 293.202 (relating to areas where transfer facilities are prohibited).

Subsection (a)(4) is proposed to be revised by the insertion of the title "Perennial stream." As in subsection (a)(2)(ii), an exception to this isolation distance is added to cover situations in which the storage and processing take place in an enclosed facility and no adverse impacts to the perennial stream will result. A proposed alternative exception is available if the facility transfers wastes to barges at the transfer facility location.

Subsection (a)(5) is given the title "Property line." This subsection, as it currently exists, establishes a 50-foot setback from a property line and allows an exception if actual processing of waste is not occurring within 50 feet. This exception is proposed to be replaced by an exception that applies if storage and processing take place in an enclosed facility or if the adjacent property owner has consented in writing to the facility being closer to reflect current industry practice. In addition, the exception for processing in an enclosed facility is proposed because the adverse impacts which this subsection is designed to prevent—for example, noise, dust, odors—should not occur if storage and processing are fully enclosed. The exception for adjacent property owner consent is proposed because adjacent property owners are the intended beneficiaries of this subsection and should be able to waive the protection if they wish. The adjacent property owner consent is also proposed in response to the Petition for Rulemaking submitted by Waste Management East, Inc., December 12, 1995, under § 23.6 (relating to Department report), and ruled on by the Board on August 20, 1996.

A new buffer requirement has been added to the proposed rulemaking. Under subsection (a)(6), a facility may not be located within 300 yards of a park, school or playground. The property owner of the park, playground or school may provide a written waiver consenting to the facility being closer than 300 yards. This requirement is drawn from the isolation distance in Act 101 of 300 yards from a school, park or playground for municipal waste landfills, resource recovery facilities and commercial residual waste facilities.

*Section 279.211. Signs and markers.*

In subsection (a), proposed changes eliminate the prescriptive language about the size and content of signs and replace the requirement with a performance standard that the sign can be easily seen and read. The signage requirement is also applied to recycling drop-off centers.

Proposed structural modifications to subsection (b) make it read the same as its corollaries in other chapters of this Article.

*Section 279.212. Access control.*

The requirement for an operator to construct a fence or other barrier around the site is proposed to be deleted as being redundant. The requirement is expressed in the remaining requirement that the operator "maintain" a fence or other barrier.

*Section 279.213. Access roads.*

Protection of wetlands is proposed to be added to subsection (b). This proposed revision is consistent with the revisions proposed for other municipal waste facilities. The specific requirements in subsection (c) for construction of the drainage systems for access roads are proposed to be deleted because the performance standards in subsection (c) and the proposed requirement that the drainage system comply with Chapter 102 offer sufficient guidance.

In subsection (d), language has been added that requires Departmental approval in a permit for the use of materials equivalent to asphalt, gravel or cinders in paving access roads. This requirement was added to allow the Department to review materials proposed for use prior to their application to the site. A requirement has also been added to subsection (d) to require an access road to be capable of withstanding the load limits of the vehicles that will be using it. This is consistent with the existing residual waste transfer facility requirements in § 293.213 (relating to access roads).

A new performance standard, subsection (h), has been added to require that an access road be maintained to control dust and to prevent and control the tracking of mud on and off site.

*Section 279.215. Operations and equipment.*

In subsection (c), the requirement that standby equipment be located on the site or at the place where it can be available within 24 hours has been deleted. This requirement is redundant of the requirement in subsection (b) that the operator maintain on the site equipment necessary for the operation of the facility in accordance with the permit. In subsection (e), a separate frequency for cleaning equipment used to handle putrescible waste has been eliminated to allow for flexibility in the cleaning frequency based on the specific waste type. The proposed regulations include a new subsection (f) that requires an operator of a transfer facility to inspect and monitor incoming waste for consistency with this article and the permit and to monitor for radioactive isotopes. This new requirement was added to address problems that have occurred at landfills that receive problem wastes from transfer facilities.

*Section 279.216. Unloading area.*

A proposed change to subsection (b) authorizes drains or treatment systems to be connected to a sanitary sewer system if certain conditions are met. This is consistent with the existing residual waste regulations, § 293.216 (relating to unloading area). For areas where a facility cannot be feasibly connected to a sanitary sewer system, additional language authorizes leachate to be collected in holding tanks prior to its transport to a sewage treatment plant.

*Section 279.217. Cleaning and maintenance.*

A proposed change to subsection (d) authorizes drains or treatment systems to be connected to a sanitary sewer

system if the same conditions proposed in § 279.216(b) are met. This is consistent with the existing residual waste regulations, § 293.217 (relating to cleaning and maintenance).

*Section 279.218. Air resources protection.*

Proposed revisions to this section are intended to clarify it.

*Section 279.219. Nuisance control.*

The performance standard in subsection (a) of the proposed regulations has been changed from a prohibition against causing or allowing vectors to an affirmative requirement that vectors be controlled and minimized. In subsection (b), the performance standard prohibiting an operator from causing or allowing conditions that are harmful or that create nuisances has been changed to a performance standard requiring the control and minimization of the conditions which could give rise to a nuisance. The level of protection the public will receive is the same under the existing and the proposed requirements. This proposed regulation more accurately reflects standard practices for nuisance control.

*Section 279.221. Litter.*

A minor revision to this section is intended to clarify it.

*Section 279.231. General requirements.*

Proposed revisions clarify this section and are consistent with the existing and proposed revisions to this section in the residual waste regulation, § 293.231 (relating to general requirements).

*Section 279.232. Soil erosion and sedimentation control.*

A cross reference to Chapter 102 has been added to paragraph (1) to indicate that compliance with that chapter is required.

*Section 279.233. Soil and groundwater monitoring.*

A minor revision to this section is intended to clarify it.

*Section 279.234. Water supply replacement.*

This section is proposed to be added to be consistent with existing requirements for municipal waste landfills and construction/demolition waste landfills and revisions thereto, as well as proposed revisions applicable to other municipal and residual waste facilities. Subsection (a) requires an operator adversely affecting a water supply to restore or replace it at no cost to the owner. Subsections (b) and (c) state time restrictions for providing temporary and permanent water supplies. Subsection (d) explains what qualifies as a permanent water supply for purposes of water supply replacement. Permanent water supplies include development of a new well with a distribution system, interconnection with a public water supply or extension of a private water supply. A permanent water supply does not include provision of bottled water or a water tank supplied by a bulk water hauling system.

*Section 279.242. Emergency equipment.*

The proposed revision to subsection (a)(3) deletes the requirement that a transfer facility have self-contained breathing apparatus because this level of protection may not be necessary for all transfer facilities. If it is necessary, the operator may make it available or use equipment supplied by emergency response crews.

*Section 279.243. Implementation of contingency plan.*

Subsections (b) and (c) are proposed to be restructured slightly to read the same as their existing residual waste counterparts in § 293.243 (relating to implementation of

contingency plan). In addition, new language is proposed to be added to subsection (c)(2) to require Department approval of the resumption of operation after cleanup of an area affected by an emergency.

*Section 279.251. Daily operational records.*

Language is proposed to be added to subsection (b) requiring that the daily operational record include a record of rejected waste loads and the reasons for rejecting the loads. This requirement has been added to help identify and track problem wastes that are rejected at municipal waste landfills.

*Section 279.252. Annual operation report.*

A proposed change in subsection (c) increases the fee that accompanies the annual operation report from \$600 to \$700 to cover increases in administrative costs.

*Section 279.262. Cessation of operations.*

Standards for determining whether to allow discontinuance of monitoring are proposed to be added to subsection (b) to guide the Department in its decisions. The proposed language is consistent with existing language in the residual waste regulations, § 293.262 (relating to cessation of operations).

*Chapter 281. Composting Facilities*

*Application requirements for general composting facilities*

*Section 281.101. General requirements.*

The proposed revision to subsection (b) would allow an applicant to use a different scale for the maps, plans and cross-sections submitted in the application, if approved by the Department.

*Section 281.111. Operating plan.*

The proposed revision to paragraph (9) deletes the requirement that an application contain a plan for hiring certain personnel. As revised, the regulation requires an application to contain a plan for training the personnel and comports with the existing residual waste transfer facility counterpart, § 293.102(c) (relating to operating plan).

*Section 281.112. Maps and related information.*

Subsection (a) is proposed to be restructured slightly to comport with its existing and proposed residual waste counterpart, § 295.112 (relating to maps and related information). A requirement is added to subsection (a)(1) that the boundaries of the land within the proposed permit area be identified in the application. In subsection (a)(4), the word "sources" has been substituted for "supplies" because not all water supplies are readily available by mapping or by field survey. In subsection (a)(14), the proposed regulations require loading and unloading areas to be identified on maps. Deletion of subsection (b), the requirement for a map or aerial photograph of the site boundaries and soil types, is proposed to be deleted because the information has not proven useful for purposes of making a permit decision.

*Section 281.115. Plan for access roads.*

Amendments to this section have been proposed to require that access roads be designed and constructed to handle truck traffic adequately. This requirement sets a performance standard by which to gauge the adequacy of proposed access roads.

*Section 281.121. Composting pad and vessel design.*

The proposed regulations allow for the use of vessels for composting. The changes in this section (including the title) incorporate existing performance and design standards for vessels.

*Section 281.132. Soil erosion and sedimentation control plan.*

Language is proposed to be added to subsection (a) to authorize the Department to impose more stringent design standards based on the most recent edition of the United States Department of Agriculture Soil Conservation Service's "Engineering Field Manual For Conservation Practices." This authorization currently exists in the residual waste management regulations for composting facilities, § 295.132 (relating to soil erosion and sedimentation control plan).

*Section 281.134. Soil and groundwater monitoring plan.*

In subsection (a), the word "pollution" has been changed to "groundwater degradation" to provide clarity to the monitoring program. "Groundwater degradation" is a defined term in § 271.1.

*Operating requirements for general composting facilities*

*Section 281.201. Basic limitations.*

A new subsection (f) has been added that requires all approved mitigation measures identified in the application to be completed before waste may be accepted, unless a later date is authorized in writing by the Department for technical reasons. This requirement bolsters the importance of effective mitigation, which is stressed in the environmental assessment of § 271.127.

*Section 281.202. Areas where general composting facilities are prohibited.*

Several changes are proposed to this section to modify certain isolation distances for general composting facilities and to clarify existing language. Landfills permitted prior to the date of publication of this regulation as final in the *Pennsylvania Bulletin* are not intended to be affected by the more stringent isolation distances proposed in this section when reissuance or renewal of the permit, or expansion of the permit area, is sought.

The lead-in language in subsection (a) is revised to clarify that the areas exempted from this regulation are those that were permitted prior to 1988. Subsection (a)(1), proposed to be entitled "Floodplain," is modified to add an exception to the prohibition against operating a general composting facility in a 100-year floodplain. The exception would apply if the operator demonstrates that the compost facility can be protected during flooding. A composting facility does not provide for permanent placement of waste and measures can easily be undertaken to prevent impacts from flooding.

Subsection (a)(2) is given the title "Wetland." It is proposed to be divided into two paragraphs, the first containing the current 300-foot setback from an exceptional value wetland and the second adding a 100-foot setback from a wetland other than an exceptional value wetland. The 100-foot setback is applicable to general composting facilities permitted on or after the date of publication of this regulation as final in the *Pennsylvania Bulletin*, but is not applicable to permit modifications for expansions issued after that date if the permit being modified was issued before that date. The 100-foot setback is added to protect valuable wetland resources and makes this isolation distance for general composting facilities consistent with the proposed isolation distance for other municipal waste facilities. The 100-foot setback would not apply if storage and processing would not occur within 100 feet from the wetland and if either the operator has received the necessary permit under Chapter 105 to operate in or along the wetland or, for an

operation not in or along a wetland, no adverse hydrologic or water quality impact will result from the composting operation.

Subsection (a)(3), which contains a 100-foot setback requirement from a sinkhole or area draining into a sinkhole, is proposed to be deleted because all water collected on the pad or in the vessel is contained and managed to prevent surface water contamination.

Newly renumbered subsection (a)(3) is entitled "Occupied dwelling" and is clarified to provide that a waiver of the 300-foot isolation distance from an occupied dwelling may be obtained from the property owner, as opposed to the "current" property owner. This revision is consistent with the existing residual waste composting facility regulation, § 295.202 (relating to areas where composting facilities are prohibited). Subsection (a)(5) is renumbered to subsection (a)(4) and is entitled "Perennial stream." The buffer in subsection (a)(4) between a composting facility and a perennial stream has been revised to allow a smaller buffer if the storage and processing take place in an enclosed facility.

In newly renumbered subsection (a)(5), entitled "property line," the buffer between a property line and a general composting facility has been revised to allow storage and processing closer than 50 feet from the property line if the activities take place in an enclosed facility. In newly renumbered subsection (a)(7), entitled "water table," the prohibition for siting a facility in an area that has a seasonal high water table less than 4 feet from the surface has been replaced with a requirement that the pad or vessel not be in contact with the seasonal high water table. This change was made because all water collected on the pad or vessel will be contained and managed to prevent contamination.

A new buffer requirement has been added to the proposed rulemaking. Under subsection (a)(8), a facility may not be located within 300 yards of a park, school or playground. The property owner of the park, playground or school may provide a written waiver consenting to the facility being closer than 300 yards. This requirement is drawn from the isolation distance in Act 101 of 300 yards from a school, park or playground for municipal waste landfills, resource recovery landfills and commercial residual waste facilities.

*Section 281.211. Signs and markers.*

Proposed changes in subsection (a) eliminate the prescriptive language about the size and content of signs and replace the requirement with a performance standard that the sign can be easily seen and read.

*Section 281.212. Access roads.*

Protection of wetlands is proposed to be added to subsection (b). This change is consistent with a proposed change in the other chapters of Article VIII.

The specific requirements in subsection (c) for construction of the drainage systems for access roads are proposed to be deleted because the performance standards in subsection (c) and the proposed requirement that the drainage system comply with Chapter 102 offer sufficient guidance. In subsection (d), language has been added that requires Departmental approval in a permit for the use of materials equivalent to asphalt, gravel or cinders in paving access roads. This requirement was added to allow the Department to review materials proposed for use prior to their application to the site. A requirement has also been added to subsection (d) to require an access road to be capable of withstanding the load limits of the

vehicles that will be using it. This is consistent with the existing residual waste composting facility requirements in § 295.212 (relating to access roads).

*Section 281.214. Measuring and inspection of waste.*

The title of this section is proposed to be changed to reflect the new language requiring inspection of waste. A revision is proposed to subsection (a) to clarify that all solid waste, not just municipal waste, received at the facility is to be measured. A new subsection (c) has been added that requires an operator to inspect incoming waste to ensure that the waste received is consistent with this article and the permit and to monitor for radioactive isotopes to prevent problems from occurring.

*Section 281.215. Equipment.*

In subsection (b), the requirement that standby equipment be located on the site or at the place where it can be available within 24 hours has been deleted. This requirement is redundant of the requirement in subsection (a) that the operator maintain on the site equipment necessary for the operation of the facility in accordance with the permit. In subsection (d), a separate frequency for cleaning equipment used to handle putrescible waste has been eliminated to allow for flexibility in the cleaning frequency based on the specific waste type.

*Section 281.217. Air resources protection.*

Proposed revisions to the section are intended to clarify it. An amendment to subsection (a) includes a new cross reference to § 281.218 (relating to nuisance control).

*Section 281.218. Nuisance control.*

The performance standard in subsection (a) of the proposed amendments has been changed from a prohibition against causing or allowing vectors to an affirmative requirement that vectors be controlled and minimized. In subsection (b), the performance standard prohibiting an operator from causing or allowing conditions that are harmful or that create nuisances has been changed to a performance standard requiring the control and minimization of the conditions which could give rise to a nuisance. The level of protection the public will receive is the same under the existing and the proposed requirements. This proposed amendment more accurately reflects standard practices for nuisance control.

*Section 281.220. Litter.*

A new subsection (c) is proposed to require collection of blown off and intercepted litter at least weekly.

*Section 281.231. Composting pad or vessel.*

This section has been modified throughout (including the title) to allow for the use of a vessel for composting. In subsection (c)(1), the permeability standard has been deleted and replaced with a requirement that the pad or vessel be capable of preventing the migration of waste or leachate generated from the composting process. This change was made because materials used for a pad or vessel may not meet the existing permeability standard but may prevent contamination.

*Section 281.234. Sale or utilization of compost.*

This section is proposed to be revised to reflect the January 25, 1997, rulemaking authorizing the Department to issue general permits for beneficial use of municipal waste.

*Section 281.251. General requirements.*

Proposed revisions clarify this section and are consistent with the existing requirements in the residual waste regulations, § 295.251 (relating to general requirements).

*Section 281.253. Sedimentation ponds.*

Subsection (b) has been amended to include a requirement that sedimentation ponds be operated and maintained in accordance with this section, Chapters 102 and 105 and the minimum criteria in the United States Soil Conservation Service's Engineering Standard, 378, "Pond" Pa., as amended.

*Section 281.255. Water supply replacement.*

This section is proposed to be added to be consistent with existing requirements for municipal waste landfills and construction/demolition waste landfills and revisions thereto, as well as proposed revisions applicable to other municipal and residual waste facilities. Subsection (a) requires an operator adversely affecting a water supply to restore or replace it at no cost to the owner. Subsections (b) and (c) state time restrictions for providing temporary and permanent water supplies. Subsection (d) explains what qualifies as a permanent water supply for purposes of water supply replacement. Permanent water supplies include development of a new well with a distribution system, interconnection with a public water supply or extension of a private water supply. A permanent water supply does not include provision of bottled water or a water tank supplied by a bulk water hauling system.

*Section 281.263. Implementation of contingency plan.*

Subsections (b) and (c) are proposed to be restructured slightly to read the same as their existing residual waste counterparts in § 295.263 (relating to implementation of contingency plan).

*Section 281.271. Daily operational records.*

Language is proposed to be added to subsection (b) requiring that the daily operational record include a record of rejected waste loads and the reasons for rejecting the loads. This requirement has been added to help identify and track problem wastes that are rejected at municipal waste landfills.

*Section 281.272. Annual operation report.*

A proposed change in subsection (c) increases the fee that accompanies the annual operation report from \$600 to \$700 to cover increases in administrative costs.

*Section 281.282. Cessation of operations.*

Standards for determining whether to allow discontinuance of monitoring are proposed to be added to subsection (c) to guide the Department in its decisions. The proposed language is consistent with existing and proposed language in the residual waste regulations, § 295.282 (relating to cessation of operations).

*Chapter 283. Resource Recovery and Other Processing Facilities**Application requirements**Section 283.102. Operating plan.*

The proposed revision to paragraph (5) deletes the requirement that an application contain a plan for hiring certain personnel. As revised, the regulation requires an application to contain a plan for training the personnel and comports with the existing residual waste processing facility requirement, § 297.102 (relating to operating plan). A revision to paragraph (8) reflects a revision to a title of a cross referenced regulation.

*Section 283.103. Maps and related information.*

Several changes are proposed to this section, which is clarified to apply to the proposed permit area and adjacent area. A requirement is added to paragraph (1) that

the boundaries of the land within the proposed permit area be identified in the permit application. Paragraph (4) is proposed to be revised to require the application to identify water sources located on or within 1/4 mile of the proposed facility instead of identifying only those located on the proposed permit area. This revision describes the adjacent area and has provisions to limit the number of wells specifically identified when a large number of wells exists. Language is proposed to be added to paragraph (7) to indicate that anticipated locations of water quality monitoring points must only be identified in the application if the Department requires monitoring. Paragraph (15) is amended to clarify that the application needs to show proposed "unloading" areas.

*Section 283.105. Plan for access roads.*

Amendments to this section have been proposed to require that access roads be designed and constructed to handle truck traffic adequately. This requirement sets a performance standard by which to gauge the adequacy of proposed access roads.

*Section 283.107. Soil and groundwater monitoring plan.*

In subsection (a), the word "pollution" has been deleted to provide clarity to the monitoring program. "Groundwater degradation" is a defined term in § 271.1.

*Section 283.112. Relationship to county plans.*

The phrase "expressly provided for" is proposed to be revised to "provided for" in subsection (b). This is consistent with section 507(a)(1) of Act 101. Language is proposed to be added to subsection (b) to clarify what is meant by "provided for." A new subsection (b)(2)(iii) is proposed to require that an application for a facility not provided for in the host county plan include a detailed written response to objections that may have been filed by the host county. This is consistent with section 507(a)(2)(iv) of Act 101 and section 504 of SWMA. Subsections (c)—(g) are proposed to be deleted. Under the proposed amendments, the suitability analysis will be satisfied by the environmental assessment performed under §§ 271.127 and 271.201(a)(4).

*Section 283.121. Recycling plan.*

An obsolete date reference is proposed to be deleted from this section. The analysis requirements in paragraph (1) are proposed to be deleted because they are redundant since to prepare a plan under paragraph (2) an applicant has to conduct an analysis.

*Operating requirements**Section 283.201. Basic limitations.*

Subsection (d) is revised to prohibit explosive waste from being stored, processed or disposed at a processing facility. A new subsection (j) has been added that requires all approved mitigation measures identified in the application to be completed before waste may be accepted, unless a later date is authorized in writing by the Department for technical reasons. This requirement bolsters the importance of effective mitigation, which is stressed in the environmental assessment of § 271.127.

*Section 283.202. Areas where resource recovery facilities and other processing facilities are prohibited.*

Several changes are proposed to this section to modify certain isolation distances for municipal waste landfills and to clarify existing language. Landfills permitted prior to the date of publication of the regulation as final in the *Pennsylvania Bulletin* are not intended to be affected by the more stringent isolation distances proposed in this

section when reissuance or renewal of the permit, or expansion of the permit area, is sought.

The lead-in language in subsection (a) is revised to clarify that the areas exempted from this regulation are those that were permitted prior to 1988. Subsection (a)(1) is given the title "Floodplain."

Subsection (a)(2) is given the title "Wetland." It is proposed to be divided into two paragraphs, the first containing the current 300-foot setback from an exceptional value wetland and the second adding a 100-foot setback from a wetland other than an exceptional value wetland. The 100-foot setback is applicable to landfills permitted on or after the date of publication of this regulation as final in the *Pennsylvania Bulletin*, but is not applicable to permit modifications for expansions issued after that date if the permit being modified was issued before that date. The 100-foot setback is added to protect valuable wetland resources and makes the processing facility regulations consistent with the existing residual waste regulations in § 297.202 (relating to areas where incinerators and other processing facilities are prohibited). The 100-foot setback will not apply if storage and processing will not occur within that distance from the wetland and if either the operator has received the necessary permit under Chapter 105 to operate in or along the wetland or, for an operation not in or along a wetland, no adverse hydrologic or water quality impact will result from the facility operation.

A substantive change is proposed to subsection (a)(3), which will now be entitled "Occupied dwelling." This subsection is proposed to be divided into two paragraphs. Subparagraph (i) will retain the current prohibitions against operating a processing facility within 300 feet of an occupied dwelling unless the owner of the dwelling provides written consent. A revision to subparagraph (i) indicates that this prohibition will have applied to resource recovery and other processing facility permits issued prior to the date of publication of this final regulation in the *Pennsylvania Bulletin* and will apply to expansions of facilities already permitted as of that date. Proposed subparagraph (ii), which will apply to permits issued on or after publication of the final regulation, will prohibit operation of a facility within 300 yards of an occupied dwelling unless the owner of the dwelling provides written consent. This proposed revision will help to reduce complaints from nearby dwellings concerning noise, odors and nuisances. The requirement is drawn from the isolation distance in section 511 of Act 101, of 300 yards from a school, park or playground for municipal waste landfills, resource recovery facilities and commercial residual waste treatment facilities.

Subsection (a)(4) is proposed to be revised by the insertion of the title "Perennial stream." An exception is added allowing the buffer between a processing facility and a perennial stream to be smaller if the storage and processing take place in an enclosed facility. In subsection (a)(5), entitled "Property line," the buffer between a property line and a processing facility has been revised to allow storage and processing closer than 50 feet from the property line if the activities take place in an enclosed facility, unless the operator obtains written consent. The consent provision is carried over from the existing residual waste regulations in § 297.202.

Two existing subsections of the regulation relating to schools, parks and playgrounds are combined in this proposal. Subsection (b) is renumbered as subsection (a)(6) and is entitled "School, park, playground." It clarifies in subparagraph (i) that it applies to a resource

recovery facility permit issued on or after September 26, 1988, except an expansion of a resource recovery facility permitted prior to September 26, 1988, by deleting the language "Except for areas that were permitted prior to." This is consistent with section 511 of Act 101. The remaining revisions to this subsection are structural. Subparagraph (ii) is a modification of existing subsection (c), which includes the waiver language. This language is proposed to be revised to eliminate the cross reference to subsection (b), to replace it with "school building, park or playground," and to indicate that the Department will waive the 300-yard prohibition upon "receipt of" the waiver.

Subsections (d) and (e) have been renumbered and a cross reference has been corrected.

#### *Section 283.211. Signs and markers.*

In subsection (a), proposed changes eliminate the prescriptive language about the size and content of signs and replace the requirement with a performance standard that the sign can be easily seen and read. The signage requirement is also applied to recycling drop-off centers. Proposed structural modifications to subsection (b) make it read the same as its corollaries in other chapters of this article.

#### *Section 283.212. Access control.*

The requirement for an operator to construct a fence or other barrier around the site is proposed to be deleted as being redundant. The requirement is expressed in the remaining requirement that the operator "maintain" a fence or other barrier.

#### *Section 283.213. Access roads.*

Protection of wetlands is proposed to be added to subsection (b). This proposed revision is consistent with the revisions proposed for other municipal waste facilities. The specific requirements in subsection (c) for construction of the drainage systems for access roads are proposed to be deleted because the performance standards in subsection (c) and the proposed requirement that the drainage system comply with Chapter 102 offer sufficient guidance.

In subsection (d), language has been added that requires Departmental approval in a permit for the use of materials equivalent to asphalt, gravel or cinders in paving access roads. This requirement was added to allow the Department to review materials proposed for use prior to their application to the site. A requirement has also been added to subsection (d) to require an access road to be capable of withstanding the load limits of the vehicles that will be using it. This is consistent with the existing residual waste processing facility requirements in § 297.213 (relating to access roads).

A new performance standard, subsection (h), has been added to require that an access road be maintained to control dust and to prevent and control the tracking of mud on and off site.

#### *Section 283.214. Measuring and inspection of waste.*

The title of this section is proposed to be changed to reflect the new language requiring inspection of waste. A revision is proposed to subsection (a) to clarify that all solid waste, not just municipal waste, received at the facility is to be measured. A new subsection (c) has been added that requires an operator to inspect and monitor incoming waste for consistency with this article and the permit and to monitor for radioactive isotopes. This new

requirement was added to address problems that have occurred at processing facilities.

*Section 283.215. Equipment.*

In subsection (b), the requirement that standby equipment be located on the site or at the place where it can be available within 24 hours has been deleted. This requirement is redundant of the requirement in subsection (a) that the operator maintain on the site equipment necessary for the operation of the facility in accordance with the permit.

*Section 283.216. Unloading area.*

Subsection (b) has been amended to allow drains or treatment systems to be connected to sanitary sewer systems if a waste characterization is submitted to the sewage treatment plant operator and the treatment plant operator can completely treat the waste stream. This change is consistent with the existing requirements for unloading areas for transfer facilities. Also, a proposed change to subsection (b) allows leachate to be collected in holding tanks prior to its transport to the sewage treatment plant. This requirement was added to provide for more flexibility in managing the leachate in areas where a facility cannot be feasibly connected to a sanitary sewer system.

*Section 283.217. Cleaning and maintenance.*

A proposed change to subsection (b) allows for an extension of time for storage of putrescible waste up to 72 hours over a weekend or 3-day weekend if the processing facility permit so provides. A proposed change to subsection (d) authorizes drains or treatment systems to be connected to a sanitary sewer system if the same conditions proposed in § 283.216(b) are met. Similarly, the proposed change allows the collection of leachate in holding tanks to be transported to a treatment facility.

*Section 283.218. Air resources protection.*

Proposed revisions to this section are intended to clarify it. In addition, the most recent edition of the Department's criteria for best available technology is referenced in subsection (a).

*Section 283.219. Nuisance control.*

The performance standard in subsection (a) of the proposed amendments has been changed from a prohibition against causing or allowing vectors to an affirmative requirement that vectors be controlled and minimized. In subsection (b), the performance standard prohibiting an operator from causing or allowing conditions that are harmful or that create nuisances has been changed to a performance standard requiring the control and minimization of the conditions. The level of protection the public will receive is the same under the existing and the proposed requirements. These proposed amendments more accurately reflects standard practices for nuisance control.

*Section 283.231. General requirements.*

Proposed revisions clarify this section and are consistent with the existing requirements in the residual waste regulations, § 297.231 (relating to general requirements).

*Section 283.232. Soil erosion and sedimentation control.*

A cross reference to Chapter 102 has been added to paragraph (1) to indicate that compliance with that chapter is required.

*Section 283.234. Water supply replacement.*

This section is proposed to be added to be consistent with existing requirements for municipal waste landfills and construction/demolition waste landfills and revisions thereto, as well as proposed revisions applicable to other municipal and residual waste facilities. Subsection (a) requires an operator adversely affecting a water supply to restore or replace it at no cost to the owner. Subsections (b) and (c) state time restrictions for providing temporary and permanent water supplies. Subsection (d) explains what qualifies as a permanent water supply for purposes of water supply replacement. Permanent water supplies include development of a new well with a distribution system, interconnection with a public water supply or extension of a private water supply. A permanent water supply does not include provision of bottled water or a water tank supplied by a bulk water hauling system.

*Section 283.253. Implementation of contingency plan.*

Subsections (b) and (c) are proposed to be restructured slightly to read the same as their residual waste counterpart, § 297.253 (relating to implementation of contingency plan), as revised. In addition, new language is proposed to be added to subsection (c)(2) to require Department approval of the resumption of operation after cleanup of an area affected by an emergency.

*Section 283.261. Daily operational records.*

Language is proposed to be added to subsection (b) requiring that the daily operational record include a record of rejected waste loads and the reasons for rejecting the loads. This requirement has been added to help identify and track problem wastes that are rejected at municipal waste landfills.

*Section 283.262. Annual operation report.*

Proposed changes in subsection (c) reduce the fee that accompanies the annual operation report. For a facility that incinerates municipal waste, the fee will change from \$1,400 to \$700 to reflect current costs of reviewing the annual report in conjunction with inspections conducted at these facilities. For other municipal waste processing facilities subject to this chapter, the fee will increase from \$600 to \$700, likewise to reflect current costs.

*Section 283.272. Cessation of operations.*

A minor clarification is proposed to subsection (a).

*Section 283.281. Salvaging of materials.*

An obsolete date is proposed to be deleted from subsection (a). Two additional changes are proposed to subsection (a): deletion of the specific types of recyclable materials, and deletion of the requirement to salvage and recycle materials from ash generated by operation of the facility. These requirements are redundant of the requirement in this subsection requiring implementation of the plan developed under § 283.121 (relating to recycling plan).

*Section 283.402. Infectious waste monitoring requirements.*

The monitoring requirements have been changed for disinfection processes other than thermal processing or incineration. In subsection (a)(2), the monitoring is required that demonstrates the following: 1) the process shall be capable of inactivating vegetative bacteria, fungi, lipophilic/hydrophilic viruses, parasites and mycobacteria at a 6 log<sub>10</sub> reduction or greater; and 2) shall be capable of inactivating *B. stearothermophilus* spores, *B. pumilus* spores or *B. subtilis* spores at a 4 log<sub>10</sub> reduction or greater. The monitoring requirements have changed be-

cause the current standard was more appropriate for sterilization, and disinfection does not require total kill of the indicators. The proposed monitoring requirements were recommended by the Medical Waste Institute of the Environmental Industry Associations and were endorsed in a report of the State and Territorial Association on Alternate Treatment Technologies titled "Technical Assistance Manual: State Regulatory Oversight of Medical Waste Treatment Technologies." In subsection (d), flexibility has been added to the monitoring frequency, allowing a frequency other than every 40 hours to be approved by the Department in a permit.

The proposed amendments include a new subsection (m) that identifies performance standards for autoclaves to ensure that bulk fluids are properly treated and to clarify that autoclaving is not appropriate for pathological waste.

*Chapter 285. Storage, Collection and Transportation of Municipal Waste*

*Storage of Municipal Waste*

*Section 285.111. General requirements.*

This section is proposed to be clarified to state that a person or municipality that stores municipal waste may not allow waste or constituents of waste to be blown or otherwise deposited outside of the storage area. This is intended to clarify that wastes in addition to those typically thought of as "litter" may not leave the storage area.

*Section 285.115. Nuisance control.*

The performance standard in subsection (a)(2) of the proposed amendments has been changed from requiring that vectors be prevented to requiring that vectors be controlled and minimized. In subsection (b), the performance standard requiring the prevention and elimination of conditions that are harmful or that create nuisances has been changed to a performance standard requiring the control and minimization of the conditions. The level of protection the public will receive is the same under the existing and the proposed requirements. This proposed amendment more accurately reflects standard practices for nuisance control.

*Section 285.116. Surface and groundwater protection.*

This proposed section protects surface and groundwater by regulating surface water runoff from and run-on to storage areas and by stating a performance standard prohibiting groundwater degradation. This section is consistent with the existing residual waste regulations (§ 299.116 (relating to surface and groundwater protection)).

*Section 285.117. Emergency storage.*

This proposed section provides for the emergency storage of municipal waste at a permitted facility if certain conditions are met. This section is consistent with the existing residual waste regulations (§ 299.117 (relating to emergency storage)).

*Section 285.121. Containers.*

In subsection (a), a new performance standard requiring the prevention of leaks has been added. Subsection (c) is proposed to be modified to delete reference to "putrescible" municipal waste because the requirements applicable to putrescible municipal waste should apply to all municipal waste. A requirement has been added to subsection (b) requiring that all containers be clearly labeled as "municipal waste" or as a specific type of municipal waste. This requirement will improve the

management of municipal waste by providing clear identification of the type of material being handled.

*Section 285.124. Impoundments—failure.*

This section is proposed to be revised to require that a storage impoundment that fails and cannot be cleaned up properly must submit a closure plan to the Department, obtain Department approval of the plan and implement the plan.

*Section 285.147. Marking of containers.*

A proposed change to subsection (a) has been added to allow for greater flexibility in the size of labels that are clearly printed, rather than handwritten. Subsection (d) has been modified to clarify that the words "infectious waste" and "chemotherapeutic waste" do not require multicolor printing.

*Collection and Transportation of Municipal Waste*

*Section 285.211. General requirements.*

Subsection (a) is proposed to be revised to require that the cover over municipal waste, including ash residue from municipal waste incineration and ICW incineration, being transported must be water resistant instead of waterproof. This satisfies the intent of the regulations to prevent water from reaching the waste and reflects the performance of commonly used tarps.

*Section 285.212. Collection and transportation.*

The title of this section is proposed to be enlarged from "collection" to "collection and transportation" to indicate the proper scope of the section.

*Section 285.214. Transportation equipment cleaning areas and securing loads in vehicles.*

The title of this section and subsection (a) are proposed to be revised by adding the word "transportation" to clarify that the requirements in this section apply to transportation equipment cleaning areas.

*Section 285.216. Wastes from accidents and spills.*

A statement is proposed to be added to subsection (b), consistent with the existing residual waste regulations, that storage of waste from an accident or spill may occur at a permitted processing or disposal facility under § 285.117 or a site approved by the Department. This is consistent with the proposed addition of § 285.117 in this rulemaking.

*Section 285.217. Recordkeeping and reporting.*

Subsection (a) is proposed to be revised to clarify that daily operational records shall include the name, mailing address and telephone number of the person or municipality collecting or transporting the waste.

*Section 285.219. Transporting foodstuffs and feedstuffs in vehicles used to transport waste.*

This section is being revised to conform more closely to the Vehicle Code provision under which it is authorized by adding the requirement in subsection (b) that accepting or providing food or a food product in contravention of this section be done "knowingly," 75 Pa.C.S. § 4909. In addition, a definition of the term "chemical or liquid," as used in this section, is provided to eliminate confusion which may have existed regarding the meaning of that term. The term is now proposed to include any pesticide or herbicide. The term will also include any other chemical or liquid, except one intended to be used in a normal farming operation.

*Section 285.311. General application requirements.*

In subsection (b), the application requirements have been changed to eliminate the two-part application process. The proposed process requires all requested information to be submitted at the same time. This change was made because the two-part process unnecessarily prolonged the license application review period.

*Section 285.432. Use of manifest.*

Subsection (a) has been modified to clarify that infectious and chemotherapeutic waste processors may accept waste from infectious and chemotherapeutic waste generators who are not required to manifest their waste.

*F. Benefits, Costs and Compliance*

Executive Order 1996-1 requires a cost/benefit analysis of the proposed amendments.

*Benefits*

The proposed amendments to the municipal waste regulations clarify existing regulations; eliminate many requirements that are more stringent than standards imposed by Federal law; eliminate requirements which are no longer necessary or are redundant; encourage performance based requirements; encourage green technologies; and support a pollution prevention approach.

Numerous changes are proposed to encourage flexibility and innovation by facility operators. The proposed amendments to the technical standards for municipal waste facilities, for example daily cover requirements, focus on providing performance standards instead of design standards wherever appropriate. Where a design standard is stated and an equivalent method or technology is available if demonstrated by the applicant/operator to be adequate, the equivalency approval process has been simplified. Similarly, the proposed amendments limit the types of permit modifications which must go through a major modification process (including public notice and comment).

The proposed amendments may result in lower costs for municipal waste disposal because the proposed amendments incorporate Act 2 remediation standards for facilities that ceased accepting waste prior to the effective date of the Federal Subtitle D criteria (October 9, 1993) and are consistent with the Subtitle D standards for facilities that cease accepting waste after October 9, 1993.

To promote green technologies, the proposed amendments allow for the demonstration of new technology at existing facilities to be done through a permit modification process.

The proposed amendments clarify and simplify the requirements for revising a county municipal waste management plan while focusing on the county's requirement to assure adequate disposal and processing capacity for waste generated within the county. Counties should benefit from these revisions when they prepare their plan revisions.

The proposed amendments facilitate easier access to moneys in the site-specific postclosure trust funds established under section 1108 of Act 101 for conducting postclosure activities at municipal waste landfills that operated prior to the 1988 municipal waste regulations and closed with little or no bond in place. This will provide greater protection of the environment and of persons living near these facilities. The proposed amendments also protect the corpus of small site-specific postclosure trust funds from being depleted by administrative costs. This will help ensure availability of the

corpus if and when the money is needed for emergency actions or remedial measures during postclosure, as envisioned under Act 101.

*Compliance Costs*

Although this is a large comprehensive rulemaking, it should not result in overall increased costs to the regulated community (including industry and local government). On balance, the regulated community may realize savings of approximately \$314,000 per year.

Increased costs to industry will largely be reflected in the requirements of installing a composite component in a landfill liner system. Industry will also experience minor cost increases as a result of increases in permit application fees and annual report fees. Increased costs to local governments, small by comparison, will be reflected in the costs of placing signs on equipment purchased with Recycling Fund money.

Savings are projected to be greater than costs. Savings to municipal waste facility operators will be enjoyed largely as a result of the reduced costs associated with preparation of permit modifications and as a result of the increased use of performance based standards such as those for landfill daily cover materials. Local governments will particularly enjoy savings as a result of the opportunity to avoid having an independent audit performed in many cases in which a grant is sought under Chapter 272.

*Compliance Assistance*

The Department will assist the regulated community by developing fact sheets where they would be helpful. In addition, the Department will continue to work with the Pennsylvania Waste Industries Association, the Solid Waste Association of North America (Pennsylvania Chapter), the Public Recycling Officials of Pennsylvania, the Pennsylvania Resources Council and other industry and government groups. The Department's field staff will provide compliance assistance during routine facility permitting and inspections, and in assisting counties with the county planning and recycling requirements.

*Paperwork Requirements*

The proposed amendments will not increase paperwork requirements on the part of the regulated community.

*G. Pollution Prevention*

The proposed amendments will encourage pollution prevention by authorizing grants under the SBHPPP for educational programs on pollution prevention and household hazardous waste and for other technical assistance to small business for pollution prevention. The proposed amendments retain the requirement for generators of residual waste disposed in municipal waste landfills to have a source reduction strategy and requires landfills to provide a plan for recycling and salvaging wastes.

*H. Sunset Review*

These proposed amendments will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

*I. Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), the Department submitted a copy of the proposed rulemaking on August 11, 1998, to the Independent Regulatory Review Commission (IRRC), and the Chairpersons of the Senate and House Environmental Resources and Energy Committees. In addition to submit-

ting the proposed amendments, the Department has provided IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

If IRRC has objections to any portion of the proposed amendments, it will notify the Department within 10 days of the close of the Committees' comment period. The notification shall specify the regulatory review criteria which have not been met by that portion. The Regulatory Review Act specifies detailed procedures for the Department, the Governor and the General Assembly to review these objections before final publication of the regulations.

*J. Public Comments*

*General*—Interested persons are invited to submit comments, suggestions or objections regarding the proposed amendments. The Department is specifically requesting comments on two sections of the proposal.

First, the Department specifically seeks comment on whether to consolidate the infectious and chemotherapeutic waste regulations. In the current regulations and the proposed rulemaking, provisions concerning infectious and chemotherapeutic waste exist in several chapters. The provisions are found in Chapters 271, 273, 283 and 285.

Second, the Department specifically requests comment on § 272.223. This section requires every plan revision to describe and explain the origin, content and weight or volume of municipal waste currently generated within the county and that will be generated within the county during the next 10 years. This section specifically requires the plan to address sewage sludge (including septage), infectious and chemotherapeutic waste, ash from resource recovery facilities and other municipal waste. The proposed revision adds construction/demolition waste to this list to resolve existing confusion and to encourage counties to maximize proper management and alternatives to disposal of this waste.

*Written Comments*—Interested persons are invited to submit comments, suggestions or objections regarding the proposed amendments to the Environmental Quality Board, P. O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 15th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by October 28, 1998 (within 60 days of publication in the *Pennsylvania Bulletin*). Interested persons may also submit a summary of their comments to the Board. The summary shall not exceed one page in length and must also be received by October 28, 1998 (within 60 days following publication in the *Pennsylvania Bulletin*). The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulations will be considered.

*Electronic Comments*—Comments may be submitted electronically to the Board at RegComments@A1.dep.state.pa.us and must also be received by the Board by October 28, 1998. A subject heading of the proposal and a return name and address must be included in each transmission. If an acknowledgment of electronic comments is not received by the sender within 2 working days, the comments should be retransmitted to ensure receipt.

*K. Public Hearings*

The Board will hold three public hearings for the purpose of accepting comments on this proposal. Each of the hearings will include an afternoon session beginning at 3 p.m. and an evening session beginning at 7 p.m. The dates and locations are listed as follows:

- October 1, 1998 Department of Environmental Protection  
Southeast Regional Office  
Suite 6010, Lee Park  
555 North Lane  
Conshohocken, PA.
- October 5, 1998 Department of Environmental Protection  
Southcentral Regional Office  
Susquehanna River Conference Room  
909 Elmerton Avenue  
Harrisburg, PA.
- October 6, 1998 Sheraton Inn—Pittsburgh North  
910 Sheraton Drive  
Mars, PA.

Persons wishing to present testimony at a hearing are requested to contact Sharon Freeman at the Environmental Quality Board, P. O. Box 8477, Harrisburg, PA 17105-8477, (717) 787-4526, at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony is limited to 10 minutes for each witness. Witnesses are requested to submit three written copies of their oral testimony to the hearing chairperson at the hearing. Organizations are limited to designating one witness to present testimony on their behalf at each hearing.

Persons in need of accommodations as provided for in the Americans With Disabilities Act of 1990 should contact Sharon Freeman directly at (717) 787-4526 or through the Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD) to discuss how the Department may accommodate their needs.

JAMES M. SEIF,  
*Chairperson*

**Fiscal Note:** 7-340. (1) General Fund; (2) Implementing year 1998-99 is \$Minimal; (3) 1st Succeeding Year 1999-00 is \$Minimal; 2nd Succeeding Year 2000-01 is \$Minimal; 3rd Succeeding Year 2001-02 is \$Minimal; 4th Succeeding Year 2002-03 is \$Minimal; 5th Succeeding Year 2003-04 is \$Minimal; (4) FY 1997-98 \$31,139,000; FY 1996-97 \$30,403,000; FY 1995-96 \$30,999,000; (7) Department of Environmental Protection Subtotal. Licenses, Fees and Miscellaneous; (8) recommends adoption.

**Annex A**

**TITLE 25. ENVIRONMENTAL PROTECTION**  
**Subpart D. ENVIRONMENTAL HEALTH AND SAFETY**

**ARTICLE VIII. MUNICIPAL WASTE**

**CHAPTER 271. MUNICIPAL WASTE MANAGEMENT—GENERAL PROVISIONS**

**Subchapter A. GENERAL**

**§ 271.1. Definitions.**

The following words and terms, when used in this article, have the following meanings unless the context clearly indicates otherwise:

\* \* \* \* \*

**Abatement standards**—Background, MCLs and risk-based standards as those terms are defined under this article.

\* \* \* \* \*

**Alternative groundwater protection standard**—A risk-based remediation standard for substances that have no primary MCLs under the Federal and State Safe Drinking Water Acts (42 U.S.C.A §§ 300f—300j-18; and 35 P.S. §§ 721.1—721.17). For carcinogens, the standard represents a concentration associated with an excess lifetime cancer risk level between  $1 \times 10^{-4}$  and  $1 \times 10^{-6}$ , including the cumulative risk of all contaminants. For systemic toxicants, the standard represents a concentration to which the human population, including sensitive subgroups, could be exposed on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime. When several systemic toxicants affect the same target organ or act by the same method of toxicity, the hazard index may not exceed one.

\* \* \* \* \*

**Asbestos containing waste**—Waste that contains asbestos extracted from asbestos ore. As applied to demolition and renovation operations, the term includes friable asbestos, and nonfriable asbestos from Asbestos Hazard Emergency Response Act (AHERA) (15 U.S.C.A. §§ 2601 note, 2614, 2618, 2619, 2641—2654; and 20 U.S.C.A. §§ 4014, 4014 note, 4021 and 4022) (AHERA) regulated removals. The term also includes asbestos waste collected from pollution control devices. ]

\* \* \* \* \*

**Autoclave**—A pressure vessel in which infectious waste is disinfected using high temperature steam, directly or indirectly, to maintain specified temperatures for retention times consistent with the waste being processed.

**Background standard**—A numerical value as determined under section 302 of the Land Recycling and Environmental Remediation Standards Act (35 P.S. § 6026.302) and § 250.202 (relating to establishing background concentrations).

\* \* \* \* \*

**Clean fill**—Uncontaminated, nonwater-soluble, [nondecomposable inert solid material used to level an area or bring the area to grade ] brick and block concrete, used asphalt, dredged material that has been sampled and analyzed in accordance with Department approved tests, soils, stone, rock, gravel and waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material. The term includes de minimis levels of contamination. The term does not include material placed into or on waters of this Commonwealth unless approved by the Department. A person using the material as clean fill has the burden of proof to demonstrate that the material is clean fill.

\* \* \* \* \*

**Closure certification**—A written document attested to by a corporate official that states that a landfill has permanently ceased accepting waste

and access has been limited to activities necessary for postclosure care maintenance and monitoring.

\* \* \* \* \*

**Construction/demolition waste**—Solid waste resulting from the construction or demolition of buildings and other structures, including, but not limited to, wood, plaster, metals, asphaltic substances, bricks, block and unsegregated concrete. [ The term also includes dredging waste. ] The term does not include the following if they are separate from other waste and are used as clean fill:

- (i) Uncontaminated soil, rock, stone, gravel, [ unused ] brick and block [ and ], concrete and used asphalt.

\* \* \* \* \*

**Dredged material**—Material dredged or excavated from waters for the direct or indirect purpose of establishing or increasing water depth, or increasing the surface or cross-sectional area of a waterway and which includes sediment, soil, mud, shells, gravel or other aggregate.

\* \* \* \* \*

**Facility**—Land, structures and other appurtenances or improvements where municipal waste disposal [ or ], processing or beneficial use is permitted or takes place.

\* \* \* \* \*

**General composting facility**—A composting facility other than [ a leaf ] an individual backyard composting facility or yard waste composting facility operating under § 271.103(h) (relating to permit-by-rule for municipal waste processing facilities other than for infectious or chemotherapeutic waste; qualifying facilities; general requirements).

\* \* \* \* \*

**Groundwater degradation**—[ The unnatural ] A measurable increase in the concentration of one or more contaminants in [ the ] groundwater above background concentrations for those [ same ] contaminants.

\* \* \* \* \*

**Highly virulent diseases**—Diseases derived from Class IV etiologic agents, as defined by the Centers for Disease Control, United States Department of Health and Human Services. Information about Class IV etiologic agents may be obtained from C [ P ] DC-NIH Biosafety, Microbiological and Biomedical Laboratories Centers for Disease Control, 1600 Clifton Road, N.E., Atlanta, GA 30333.

**Home self-care**—The provision of medical care in the home setting (for example, private residents) through either self-administration practices or by a family member or other person.

\* \* \* \* \*

**Infectious waste**—

- (i) **General.** [ The term means municipal ] Municipal and residual waste which is generated in the diagnosis, treatment, immunization or autopsy of human beings or animals, in research pertaining thereto, in the preparation of human or animal remains for interment or cremation, or in the production or testing of biologicals, and which falls under one or more of the following categories:

\* \* \* \* \*

- (C) Human blood and body fluid waste.

\* \* \* \* \*

\* \* \* \* \*

(VII) Items [contaminated by] saturated or dripping with body fluids or caked with dried body fluids from persons during surgery, autopsy, other medical procedures or laboratory procedures.

\* \* \* \* \*

(F) Used sharps. Sharps that have been in contact with infectious agents or that have been used in animal or human patient care or treatment, at medical, research or industrial laboratories[, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, culture dishes, suture needles, slides, cover slips and other broken or unbroken glass or plasticware ].

\* \* \* \* \*

(iii) Exceptions. The term does not include the following:

(A) Wastes generated [in individual residences] as a result of home self-care.

\* \* \* \* \*

(G) Reusable or recyclable containers or other nondisposable materials, if they are cleaned and disinfected, or if there has been no direct contact between the surface of the container and materials identified in subparagraph (i). Laundry or medical equipment shall be cleaned and disinfected in accordance with the United States Occupational Safety and Health Administration requirements in 29 CFR 1910.1030 (relating to bloodborne pathogens).

\* \* \* \* \*

MCL—Maximum contaminant levels.

\* \* \* \* \*

Municipal-like residual waste—Residual waste that has the same physical and chemical characteristics as residential municipal waste.

\* \* \* \* \*

Remediation standards—Background, MCLs and alternative groundwater protection standards as those terms are defined under this article.

\* \* \* \* \*

Risk-based standard—A risk-based abatement standard for substances that have no primary MCLs under the Federal and State Safe Drinking Water Acts for carcinogens:

(i) The standard represents a concentration associated with an excess lifetime cancer risk level between 1 x 10^-4 and 1 x 10^-6, including the cumulative risk of all contaminants and represents a concentration associated with an excess cancer risk level of 1 x 10^-5 at the property boundary of a municipal waste facility.

(ii) For systemic toxicants, the standard represents a concentration to which the human population, including sensitive subgroups, could be exposed on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime.

(iii) When several systemic toxicants affect the same target organ or act by the same method of toxicity, the hazard index may not exceed one.

Sharps—Broken glass that has been in contact with pathogenic organisms, hypodermic needles and syringes to which a needle can be attached, with or without the attached needle, suture needles, disposable razors, pasteur pipettes [and], scalpel blades, blood vials, needles with attached tubing, culture dishes, suture needles, slides, cover slips and other broken or unbroken glass or plasticware.

\* \* \* \* \*

Small Business and Household Pollution Prevention Program Act—35 P. S. §§ 6029.201—6029.209.

\* \* \* \* \*

Special handling waste—Solid waste that requires the application of special storage, collection, transportation, processing or disposal techniques due to the quantity of material generated or its unique physical, chemical or biological characteristics. The term includes sewage sludge, infectious waste, chemotherapeutic waste, ash residue from a solid waste incineration facility, friable asbestos containing waste, PCB containing waste, waste oil that is not hazardous waste [oil, fuel contaminated soil, waste tires and water supply treatment plant sludge].

\* \* \* \* \*

Unrecognizable infectious waste—All components of the waste have been processed to produce indistinguishable and unusable pieces smaller than 3/4 of an inch, except that all sharps must be smaller than 1/2 inch. The term does not mean compaction or encapsulation except through:

(i) Processes such as thermal treatment or melting, during which disinfection and destruction occur.

(ii) Processes such as shredding, grinding, tearing or breaking, during or after disinfection occurs.

(iii) Processes that melt plastics and fully encapsulate metallic or other sharps and seals waste completely in a container that will not be penetrated by untreated sharps.

\* \* \* \* \*

§ 271.2. Scope.

\* \* \* \* \*

(b) Management of the following types of residual waste is subject to this article instead of Article IX (relating to residual waste management), and shall be regulated as if the waste is municipal waste, regardless of whether the waste is a municipal waste or residual waste.

(1) Construction/demolition waste, except construction/demolition waste with greater than 4 PPM PCBs.

\* \* \* \* \*

(3) Sewage sludge, including sewage sludge that is mixed with [other] a small quantity of residual waste.

\* \* \* \* \*

(c) Management of the following types of waste is subject to Article IX instead of this article, and shall be regulated as if the waste is residual waste, regardless of whether the waste is municipal waste or residual waste:

\* \* \* \* \*

- (2) Waste oil that is not hazardous waste [ oil ].
- (3) Waste tires and auto fluff.
- (4) [ Fuel contaminated ] Contaminated soil.

\* \* \* \* \*

**(6) Dredged material.**

(d) The disposal, processing, storage and transportation at a municipal waste management facility of the following types of special handling waste is subject to the applicable additional requirements for the disposal, processing, storage and transportation of these wastes in Article IX, and shall be regulated as if the waste is residual waste, regardless of whether the waste is municipal waste or residual waste:

- (1) [ Asbestos ] Friable asbestos containing waste.

\* \* \* \* \*

**§ 271.3. Environmental protection.**

\* \* \* \* \*

(b) The Department may, in issuing a permit under this article, impose terms and conditions the Department deems necessary to implement the provisions and purposes of [ this ] the act, the environmental protection acts and the regulations promulgated thereunder, including [ a provision of ] this article.

**§ 271.5. Public records and confidential information.**

(a) Except as provided in subsection (b), records, reports or other information submitted to the Department under this article shall be available to the public for inspection or copying during regular business hours.

(b) The Department may, upon request, designate records, reports or other information as confidential when the person or municipality providing the information demonstrates the following:

(1) The information contains trade secrets, processes, operations, style of work or apparatus of a person or municipality or is otherwise confidential business information.

(2) The information is not emission or discharge data or other information that relates to public health, safety, welfare or the environment.

(c) When submitting information under this article, a person or municipality shall designate the information which the person or municipality believes is confidential or shall submit that information separately from other information being submitted.

(d) Information which the Department determines to be confidential under this section will not be made available to the public.

(e) This section does not prevent the disclosure of information to the Federal government or other State agencies as may be necessary for purposes of administration of Federal or State law.

(f) This section does not prevent the disclosure of information submitted to the Department as part of a general permit application under § 271.821 (relating to the application for general permit) which meets one of the following:

(1) The Department is required to make the information available to the public as part of the general permit.

(2) The Department determines that it is necessary to disclose the information during the comment period for the general permit to obtain informed public comment on the general permit.

**Subchapter B. GENERAL REQUIREMENTS FOR PERMITS AND PERMIT APPLICATIONS REQUIREMENT**

**§ 271.101. Permit requirement.**

\* \* \* \* \*

(b) A person or municipality is not required to obtain a permit:

\* \* \* \* \*

[ (3) For the use as clean fill of the following materials if they are separate from other waste:

(i) Uncontaminated soil, rock, stone, gravel, unused brick and block and concrete.

(ii) Waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material. ]

(3) For temporary storage, which facilitates the transportation or transfer of infectious or chemotherapeutic waste, that does not exceed 24 hours. The stored waste shall remain in its original packaging, as received for storage.

\* \* \* \* \*

**§ 271.102. [ Permit-by-rule ] Permit by rule for infectious or chemotherapeutic waste processing facilities; qualifying facilities; general requirements.**

(a) If the requirements of this section are met, the following onsite processing facilities for infectious or chemotherapeutic waste shall be deemed to have a municipal waste processing permit under this article:

(1) An onsite autoclave facility, including one which renders waste unrecognizable, which processes at least 50% of its own infectious waste[ , including one which renders waste unrecognizable. ] generated onsite and accepts offsite waste for disinfection only from small quantity generators that generate less than 220 pounds per month of infectious waste if the following conditions are met:

(i) Processing of pathological waste is prohibited.

(ii) The retention time for processing bulk fluids (greater than 500 ml) allows for the complete vaporization of fluids.

\* \* \* \* \*

(3) An onsite steam and superheated water disinfection facility which processes infectious waste, including one which renders waste unrecognizable, which processes at least 50% of its own infectious waste generated onsite and accepts offsite waste for disinfection only from small quantity generators that generate less than 220 pounds per month of infectious waste. Processing of pathological waste is prohibited.

\* \* \* \* \*

(b) Generators that process and disinfect less than 220 pounds per month of infectious waste onsite and render

the waste unrecognizable will be deemed to have municipal waste processing permits under this article if the requirements under subsections (c)—(g) are met. Generators that process and disinfect less than 220 pounds per month of infectious waste onsite without rendering the waste unrecognizable will be deemed to have municipal waste processing permits under this article if the requirements under subsections (c)—(g) are met and if the following requirements are met:

(1) The generator may [ **only** ] dispose of the processed waste in a landfill **or have the waste incinerated in a facility** that has obtained written approval from the Department to accept the waste.

\* \* \* \* \*

(c) The following requirements shall be met by facilities identified in subsections (a) and (b) to operate under a permit by rule:

\* \* \* \* \*

(11) For facilities identified in subsection (a), the processed waste is disposed of in a landfill **or processed in an incinerator** that has obtained written approval from the Department to dispose [ **of** ] **or process** the waste.

\* \* \* \* \*

**EXISTING FACILITIES**

§ 271.111. [ **Permit application filing deadline** ] (Reserved).

[ (a) A person or municipality possessing a permit for a municipal waste landfill or construction/demolition waste landfill under the act or a permit for an impoundment used for municipal waste disposal issued under The Clean Streams Law (35 P. S. §§ 691.1—691.1001), which was issued by the Department prior to April 9, 1988 shall file with the Department, by October 11, 1988, one of the following:

(1) A preliminary application for permit modification under subsection (b).

(2) A closure plan under § 271.113 (relating to closure plan).

(b) The preliminary application for permit modification for a municipal waste landfill shall describe differences between the existing permit and the requirements of this chapter, including, but not limited to, the following:

(1) Surface water drainage design requirements in §§ 273.213 and 273.242 (relating to access roads; and soil erosion and sedimentation control).

(2) Cap and drainage layer requirements for final cover in § 273.234 (relating to final cover and grading).

(3) Sedimentation pond design requirements in § 273.243 (relating to sedimentation ponds).

(4) Liner system requirements in §§ 273.251—273.260 (relating to liner system).

(5) Leachate treatment requirements in §§ 273.271—273.277 (relating to leachate treatment).

(6) Requirements concerning the number of monitoring points in § 273.282 (relating to number, location and depth of monitoring points).

(7) Monitoring well casing standards in § 273.283 (relating to standards for casing of wells).

(8) Financial assurances requirements in Subchapter D (relating to financial assurances requirements).

(c) The preliminary application for permit modification for a demolition waste landfill shall describe differences between the existing permit and the requirements of this chapter, including, but not limited to, the following:

(1) Surface water drainage design requirements in §§ 277.213 and 277.242.

(2) Cap and drainage layer requirements for final cover in § 277.233 (relating to final cover and grading).

(3) Sedimentation pond design requirements in § 277.243 (relating to sedimentation ponds).

(4) Liner system requirements in §§ 277.251—277.260 (relating to liner system).

(5) Leachate treatment requirements in §§ 277.271—277.277 (relating to leachate treatment).

(6) Requirements concerning the number of monitoring points in § 277.282 (relating to number, location and depth of monitoring points).

(7) Monitoring well casing standards in § 277.283 (relating to standards for casing of wells).

(8) Financial assurances requirements in Subchapter D.

(d) Within 6 months after receiving notice from the Department, a person or municipality that filed a preliminary application for permit modification shall file with the Department a complete application for permit modification to correct differences between the existing permit and the requirements of this chapter. ]

§ 271.112. [ **Continued operation under prior permits** ] (Reserved).

[ (a) By October 11, 1988, no person or municipality that possesses a municipal waste landfill or construction/demolition waste landfill permit under the act or a permit for an impoundment for municipal waste disposal under The Clean Streams Law (35 P. S. §§ 691.1—691.1001) which was issued prior to April 9, 1988, may dispose or process waste under the permit, unless a preliminary application for permit modification or a closure plan is filed under § 271.111 (relating to permit application filing deadline).

(b) By April 9, 1990, no person or municipality that possesses a municipal waste landfill or construction/demolition waste landfill permit under the act or a permit for an impoundment for municipal waste disposal under The Clean Streams Law which was issued prior to April 9, 1988, may dispose or process waste under the permit, unless one of the following applies:

(1) A complete application for permit modification is filed under § 271.111, and the Department has not yet rendered a decision with respect to the application.

(2) The person or municipality possesses a permit for the facility issued under this chapter.

(c) An operator may continue to dispose of waste, up to final permitted elevations as of December 15, 1987, on permitted disposal areas where waste was disposed as of April 9, 1988 if the operator complies with this section and § 271.111. The Department may take action it deems necessary at the facilities to enforce the act, the environmental protection acts and the regulations promulgated thereunder.

(d) An operator may not dispose of waste on permitted disposal areas where waste was not disposed on April 9, 1988, unless one of the following applies:

(1) The area is subject to a Department-issued permit that is consistent with the requirements of this article for facilities permitted after April 9, 1988.

(2) The Department approves the continued disposal of waste on the area, based on a written request from the operator filed with the Department by July 11, 1988. Approval will be subject to the following:

(i) The approval will be limited to the minimum lateral area that would be filled in 2 years to final permitted elevations as of December 15, 1987, based on daily waste volumes received at the facility on July 1, 1987.

(ii) The approval will not be granted unless the operator requires the additional lateral capacity in order to operate for 2 years at the daily volumes received at the facility on July 1, 1987, pending Department review of preliminary and complete applications for permit modification submitted under § 271.111.

(iii) The approval will be void if the operator fails to comply with § 271.111 and this section.

(iv) The approval will terminate April 9, 1990, or when the Department approves or denies a complete application for permit modification under § 271.111, whichever is earlier. ]

§ 271.113. Closure plan.

(a) The Department may require a person or municipality that closed a municipal waste landfill, construction/demolition waste landfill or municipal waste disposal impoundment after September 7, 1980, and before April 9, 1988, to submit a closure plan to the Department under this section. The person or municipality shall submit the closure plan to the Department within 6 months after receiving written notice.

(b) A closure plan for municipal waste landfills or municipal waste disposal impoundments [submitted under § 271.111 (relating to permit application filing deadline) ] shall show how the operator plans to close in a manner that will protect public health, safety and the environment. At a minimum, the closure plan shall be consistent with the following:

\* \* \* \* \*

[ (b) ] (c) A closure plan for construction/demolition waste landfills [submitted under § 271.111 ] shall show how the operator plans to close in a manner that will protect public health, safety and the environment. At a minimum, the closure plan shall be consistent with the following:

\* \* \* \* \*

(d) The Department may waive or modify the applicable regulations concerning subsection (b)(1)—(6) or subsection (c)(1)—(5) if a person or municipality can demonstrate that an existing system or design performs at a level that is equivalent to the applicable regulations.

[ (c) ] (e) \* \* \*

[ (d) No ] (f) A person or municipality may not implement a closure plan submitted under this subchapter until the Department has approved the closure plan.

[ (e) A person or municipality that submitted a closure plan to the Department under § 271.111(a) shall cease receiving waste at the facility and begin implementation of the closure plan on the earliest of the following dates:

(1) The date stated in the closure plan approved by the Department under this section.

(2) April 9, 1990.

(3) When the operator reaches final permitted capacity.

(f) The Department may require a person or municipality that closed a municipal waste landfill, construction/demolition waste landfill or municipal waste disposal impoundment after July 7, 1980, to submit a closure plan to the Department under this section. The person or municipality shall submit the closure plan to the Department within 6 months after receiving written notice. ]

(g) Groundwater degradation at a solid waste facility which ceased receiving waste between September 7, 1980, and October 9, 1993, shall be remediated in accordance with one of the following:

(1) An approved closure plan, permit or any prior administrative consent order, consent adjudication, judicially approved consent order or other settlement agreement entered into with the Department.

(2) Remediation standards under Chapter 250 (relating to administration of land recycling program), except for § 250.304(d) (relating to MSCs for groundwater), and the Land Recycling and Environmental Remediation Standards Act (35 P. S. §§ 6026.101—6026.907), if paragraph (1) does not apply or if a remediation is conducted under a document in paragraph (1) that has been so modified and approved.

(h) Groundwater degradation at a solid waste facility that received waste on or after October 9, 1993, shall be remediated in accordance with § 271.342(b) (relating to final closure certification).

GENERAL APPLICATION REQUIREMENTS

§ 271.122. Form of application.

\* \* \* \* \*

(d) An application for a permit shall be prepared by or under the supervision of a registered professional engineer. The design section of the application shall bear the seal of a registered professional engineer. The soils, geology and groundwater sections of a permit application shall be completed by experts in the fields of soil science [ and ], soil engineering, geology and groundwater [ ,

respectively, ]. The geology and groundwater sections of a permit application also shall be completed under the supervision of a registered professional [engineer] geologist licensed in this Commonwealth.

\* \* \* \* \*

§ 271.123. Right of entry.

\* \* \* \* \*

(c) An application shall include, upon a form prepared and furnished by the Department, the irrevocable written consent of the landowner to the Commonwealth and its authorized agents to enter the proposed permit area. The consent shall be applicable prior to the initiation of operations, for the duration of operations at the facility, and for up to 10 years after final closure for the purpose of inspection and monitoring, maintenance or abatement measures deemed necessary by the Department to carry out the purposes of the act and the environmental protection acts.

\* \* \* \* \*

§ 271.124. Identification of interests.

(a) An application for a municipal waste processing or disposal permit shall contain the following information on a form provided by the Department:

(1) The names, addresses and telephone numbers of:

\* \* \* \* \*

(ii) [A] Any contractor, including a contractor for gas or energy recovery from the proposed operation, if the contractor is a person other than the applicant.

\* \* \* \* \*

(b) An application shall contain a statement of whether the applicant is an individual, corporation, partnership, limited partnership, government agency, proprietorship, municipality, syndicate, joint venture or other entity. For applicants other than sole proprietorships, the application shall contain the following information, if applicable:

(1) [Names] The names and addresses of every officer, general and limited partner, director and other persons performing a function similar to a director of the applicant.

\* \* \* \* \*

(4) [Names] The names and addresses of other persons or entities having or exercising control over any aspect of the proposed facility that is regulated by the Department, including, but not limited to, associates and agents.

\* \* \* \* \*

§ 271.125. Compliance information.

(a) An application shall contain the following information for the 10-year period prior to the date on which the application is filed:

\* \* \* \* \*

(3) A description of [a] summary, misdemeanor or felony [conviction, a plea] convictions, pleas of guilty or [plea] pleas of no contest that [has] have been obtained in this Commonwealth against the applicant or a related party under the act and the environmental protection acts, or under other acts in this Commonwealth concerning the storage, collection, treatment,

transportation, processing or disposal of solid waste. The description shall include the date, location, nature and disposition of the actions.

(4) A description of [a] court [proceeding] proceedings concerning the act or the environmental protection acts that [was] were not described under paragraph (3), in which the applicant or a related party has been a party. The description shall include the date, location, nature and disposition of the proceedings.

(5) A description of [a] consent [order] orders, consent [adjudication] adjudications, consent [decree] decrees or settlement [agreement] agreements in this Commonwealth entered by the applicant or a related party concerning the act, the environmental protection acts or an environmental protection ordinance, in which the Department, the EPA or a county health Department was a party. The description shall include the date, location, nature and disposition of the action. In lieu of a description, the applicant may provide a copy of the order, adjudication, decree or agreement.

\* \* \* \* \*

(8) A description of [a] misdemeanor or felony [conviction, a plea] convictions, pleas of guilty and [a plea] pleas of no contest, by the applicant or a related party for violations outside of this Commonwealth of the environmental protection acts. The description shall include the date of the convictions or pleas, and the date, location and nature of the offense.

\* \* \* \* \*

§ 271.126. Requirement for environmental assessment.

\* \* \* \* \*

(b) The following permit applications do not require an environmental assessment unless the Department determines that the facility may have a significant effect on the environment:

(1) Permit applications for [agricultural utilization of sewage sludge] the beneficial use of municipal waste.

(2) Permit applications for [land reclamation facilities for sewage sludge] the processing of municipal waste under Subchapter I (relating to beneficial use).

\* \* \* \* \*

§ 271.127. Environmental assessment.

(a) Impacts. Each environmental assessment in a permit application shall include at a minimum a detailed analysis of the potential impact of the proposed facility on the environment, public health and public safety, including traffic, aesthetics, air quality, water quality, stream flow, fish and wildlife, plants, aquatic habitat, threatened or endangered species, water uses [and], land use and municipal waste plans. The applicant shall consider features such as scenic rivers, recreational river corridors, State and Federal forests and parks, the Appalachian Trail, historic and archaeological sites, National wildlife refuges, State natural areas, [prime] National landmarks, farmland, wetland, special protection watersheds designated under Chapter 93 (relating to water quality standards), public water supplies and other features deemed appropriate by the Department or the applicant.

(b) [ The Department, after consultation with appropriate governmental agencies and potentially affected persons, will evaluate the assessment provided under subsection (a) to determine whether the proposed operation has the potential to cause environmental harm. In determining whether the proposed operation has the potential to cause environmental harm, the Department will consider its experience with a variety of factors, including, but not limited to, engineering design, construction and operational deviances at comparable facilities; with inherent limitations and imperfections in similar designs and materials employed at comparable facilities; and with the limitations on future productive use of the land after closure of the facility. If the Department determines that the proposed operation has this potential, it will notify the applicant in writing. ] *Harms.* The environmental assessment shall describe the known and potential environmental harms of the proposed project. The applicant shall provide the Department with a written mitigation plan which explains how the applicant plans to mitigate each known or potential environmental harm identified and which describes any known and potential environmental harms not mitigated. The Department will review the assessment and mitigation plans to determine whether there are additional harms and whether all known and potential environmental harms will be mitigated. In conducting its review, the Department will evaluate each mitigation measure and will collectively review mitigation measures to ensure that individually and collectively they adequately protect the environment and the public health, safety and welfare.

(c) [ If the Department or the applicant determines that the proposed operation may cause environmental harm, the applicant shall provide the Department with a written explanation of how it plans to mitigate the potential harm, through alternatives to the proposed facility or portions thereof, including alternative locations, traffic routes or designs or other appropriate mitigation measures. ] *Municipal waste landfills, construction/demolition waste landfills and resource recovery facilities.* If the application is for the proposed operation of a municipal waste landfill, construction/demolition waste landfill or resource recovery facility, the applicant shall demonstrate that the benefits of the project to the public clearly outweigh the known and potential environmental harms. In making this demonstration, the applicant shall describe in detail the benefits relied upon. The benefits of the project shall consist of social and economic benefits that remain after taking into consideration the known and potential social and economic harms of the project and shall also consist of the environmental benefits of the project, if any.

(d) *Other facilities.* If the application is for the proposed operation of [ a municipal waste landfill or resource recovery facility, the applicant shall describe in writing the social and economic benefits of the project to the public ] another type of facility and the applicant or the Department upon review determines that known or potential environmental harm remains despite the mitigation measures described in the mitigation plans, the applicant shall demonstrate that the benefits of the project to the

public clearly outweigh the remaining known and potential environmental harms. In making this demonstration, the applicant shall describe in detail the benefits relied upon. The benefits of the project shall consist of social and economic benefits that remain after taking into consideration the known and potential social and economic harms of the project and shall also consist of the environmental benefits of the project, if any.

(e) [ If the application is for the proposed operation of another type of facility and the Department determines, under subsection (b), that the proposed operation has the potential to cause environmental harm and that the potential for environmental harm remains despite the mitigation measures described in subsection (c), the applicant shall describe in writing the social and economic benefits of the project to the public. ] *Identification of harms and benefits.* Known and potential harms and benefits of a proposed project may also be identified by the Department or any other person or municipality.

(f) [ The description required by subsections (d) and (e) shall include a detailed explanation of the need for the facility and the consistency of the facility with municipal, county, State or regional solid waste plans in effect where the waste is generated. ] *Evaluation.* After consultation with other appropriate agencies and potentially affected persons, the Department will evaluate the environmental assessment in Phase 1 of permit review or otherwise prior to technical review.

(g) [ The Department may consider a proposed municipal waste landfill or resource recovery facility, or proposed expansion thereof, to be needed for municipal waste disposal or processing if the following are met:

(1) The proposed facility or expansion is provided for in an approved county plan.

(2) The proposed facility will actually be used to implement an approved county plan based on implementing documents submitted under § 272.245 (relating to submission of implementing documents) or other clear and convincing evidence acceptable to the Department. ] *Revision.* The Department may require submission of a revised environmental assessment if additional harms or potential harms are discovered during any phase of permit application review.

[ (h) Meeting the requirements of this section does not, by itself, mean that the proposed facility or expansion is actually needed. ]

#### § 271.128. Permit application fee.

(a) An application for a new permit [ and an application for permit modification under § 271.111 (relating to permit application filing deadline) ] shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for the following amount:

(1) [ Eleven ] Eighteen thousand [ four ] five hundred dollars for a municipal waste landfill.

(2) [ Six ] Nineteen thousand two hundred fifty dollars for a construction/demolition waste landfill.

\* \* \* \* \*

(5) [ One ] Four thousand four hundred dollars for a transfer facility.

(6) For municipal waste processing facilities other than transfer facilities:

(i) [ Three ] One thousand nine hundred dollars for incinerators or resource recovery facilities.

(ii) [ Two ] Four thousand [ four hundred ] dollars for other municipal waste processing facilities.

(7) [ Ten ] Seventeen thousand three hundred dollars for demonstration facilities.

(b) An application for a permit modification under § 271.144 (relating to public notice and public hearings for permit modifications) shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for the following amount:

(1) [ Six ] Three hundred dollars for the addition of types of waste not approved in the permit.

(2) [ Four ] Seven thousand [ six ] eight hundred dollars for municipal waste landfills and construction/demolition waste landfills.

\* \* \* \* \*

(5) [ Four ] Seven hundred dollars for transfer facilities.

(6) For municipal waste processing facilities other than transfer facilities:

(i) [ Nine ] One thousand five hundred dollars for incinerators or resource recovery facilities.

(ii) [ Four ] Seven hundred dollars for other municipal waste processing facilities.

(7) [ Four ] Six thousand seven hundred dollars for demonstration facilities.

(8) [ Two ] Three hundred dollars for a minor permit modification.

\* \* \* \* \*

(d) An application for a permit renewal under § 271.223 (relating to permit renewal) shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for § [ 200 ] 300.

**PUBLIC NOTICE AND COMMENTS**

**§ 271.141. Public notice by applicant.**

(a) An applicant for a new permit, major permit modification, permit renewal[, ] or permit reissuance and a person or municipality submitting a closure plan shall publish once a week for 3 consecutive weeks a notice in a newspaper of general circulation in the area where the facility or proposed facility is located. The notice shall meet the following requirements:

(1) Include a brief description of the location and proposed operation or closure of the facility, and indicate where copies of the application or closure plan will be filed. **If groundwater degradation exists at closure or occurs after closure, the notice shall include a list of contaminants, abatement measures taken prior to closure, if applicable, proposed remediation measures and proposed remediation standards**

**to be met. If the permittee proposes to utilize the alternative groundwater protection standard, the notice shall include a 30-day public and municipal comment period during which the municipality can request to be involved in the development of the remediation and reuse plans for the site.**

\* \* \* \* \*

(d) An applicant for a new permit, permit reissuance, permit renewal or major permit modification, and a person or municipality submitting a closure plan shall, immediately before the application or plan is filed with the Department, give written notice to each municipality in which the site or proposed permit area is located. **If groundwater degradation exists at closure or occurs after closure, the notice shall include a list of contaminants, abatement measures taken prior to closure, if applicable, proposed remediation measures and proposed remediation standards to be met. If the permittee proposes to utilize the alternative groundwater protection standard, the notice shall include a 30-day public and municipal comment period during which the municipality can request to be involved in the development of the remediation and reuse plans for the site.** If the applicant proposes a design alternative under § 271.231, the notice shall so state and briefly describe the alternative design. The applicant shall file with the Department a copy of the notice as part of the application or plan. The Department will not issue a permit for [ a period of ] 60 days from the date of [ this ] the notice unless each municipality to which [ this ] the notice is sent submits a written statement to the Department expressly waiving the 60-day period.

\* \* \* \* \*

**§ 271.142. Public notice by Department.**

(a) The Department will publish a notice in the *Pennsylvania Bulletin* of the following:

\* \* \* \* \*

(2) Receipt of a closure plan **and if groundwater degradation exists at closure or occurs after closure, the notice shall include a list of contaminants. Abatement measures taken prior to closure, if applicable, proposed remediation measures and proposed remediation standards to be met. If the permittee proposes to utilize the alternative groundwater protection standard, the notice shall include a 30-day public and municipal comment period during which the municipality can request to be involved in the development of the remediation and reuse plans for the site.**

\* \* \* \* \*

(b) The Department will submit a copy of an application for a new permit, permit reissuance, permit renewal, major permit modification or closure plan to the host municipality and the appropriate county, county planning agency and county health department, if one exists. **If groundwater degradation exists at closure or occurs after closure, the Department will include a copy of the applicant's list of contaminants, identification of abatement measures taken prior to closure, if applicable, proposed remediation measures and proposed remediation standards to be met.**

\* \* \* \* \*

**§ 271.144. Public notice and public hearings for permit modifications.**

(a) An application for a permit modification for municipal waste landfills or construction/demolition waste landfills shall be considered an application for a major permit modification under §§ 271.141—271.143 (relating to public notice by applicant; public notice by Department; and public comments) if the application involves the following:

\* \* \* \* \*

(2) Change in the **average or maximum** daily waste volume.

(3) Change in excavation contours or final contours, including final elevations and slopes, **if the change results in increased disposal capacity or impacts groundwater isolation distance or groundwater quality.**

\* \* \* \* \*

(5) Change in the approved groundwater monitoring plan, except for the addition **or replacement** of wells or parameters.

(6) Change in approved leachate collection and treatment **[ plan ] method.**

(7) Change in gas monitoring or management plan, or both, **except when installation of additional wells or improvements to the collection systems are proposed.**

**[ (8) Change in the approved type, amount, origin or application of daily, intermediate and final cover materials.**

**(9) ] (8) \* \* \***

**[ (10) ] (9) \* \* \***

**[ (11) ] (10) \* \* \***

**[ (12) ] (11) Change in approved design under § 271.231 (relating to equivalency review procedure) if the design has not been previously approved through an equivalency review.**

**(12) The submission of an abatement plan.**

(b) An application for a permit modification for a municipal waste processing facility shall be considered an application for a major permit modification under §§ 271.141—271.143, if the application involves the following:

(1) Changes in specifications or dimensions of waste storage or residue storage areas **if the change results in increased processing or storage capacity.**

(2) Change in the approved groundwater monitoring plan, except for the addition **or replacement** of wells or parameters.

(3) Change in approved closure plan **[ , if applicable ]**.

\* \* \* \* \*

(6) Change in approved design under § 271.231 **[ (relating to equivalency review procedure) ] if the design has not been previously approved through an equivalency review.**

(7) **Change in the average or maximum daily waste volume.**

(c) **[ An application for a permit modification for the surface land application of sewage sludge shall be considered an application for a major permit modification under §§ 271.141—271.143 if the application involves the following:**

**(1) Change in approved sludge application areas.**

**(2) Acceptance of sludge from generators not approved in the permit.**

**(3) Change in the approved groundwater monitoring plan, if groundwater monitoring is required, except for the addition of wells or parameters.**

**(d) ] \* \* \***

**[ (e) ] (d) \* \* \***

**Subchapter C. PERMIT REVIEW PROCEDURES AND STANDARDS  
PERMIT REVIEW**

**§ 271.201. Criteria for permit issuance or denial.**

**[ (a) ]** A permit application will not be approved unless the applicant affirmatively demonstrates that the following conditions are met:

(1) **[ Each ]** For a disposal or processing permit, each of the entities that are the permit applicant, **[ the owners ]** an owner of the facility or a part thereof, **[ the operators ]** an operator of the facility, or a related party to one or more of the foregoing entities, **[ are ]** is one of the following: a natural person; a partnership; a corporation; a municipality of this Commonwealth; a municipal authority or joint municipal authority established under the laws of the Commonwealth; an agency of the Commonwealth; the Commonwealth; an agency of the Federal Government; or the Federal Government.

\* \* \* \* \*

(3) The requirements of **[ the act, ]** the environmental protection acts, this title and PA. CONST. art. I, § 27 have been complied with. **[ If the application is for a municipal waste landfill, construction/demolition waste landfill or resource recovery facility, the need for the facility shall clearly outweigh the potential harm posed by operation of the facility, based on the factors described in § 271.127 (relating to environmental assessment). ]**

(4) **Mitigation plans required by § 271.127 are implemented if required by the Department.**

**(5) \* \* \***

**[ (5) ] (6) \* \* \***

**[ (6) If an application for a permit for a municipal waste landfill or a resource recovery facility includes approval for the disposal or processing of municipal waste generated in county, municipality or state that has an approved municipal waste management plan under applicable law, the facility is expressly provided for in the approved plan, and the approved plan designates the proposed facility to receive that waste volume under §§ 272.227, 272.231 and 272.245 (relating to selection and justification of municipal waste management program; implementing documents; and submission of implementing documents).**

(b) **In addition to the provisions of subsection (a), a permit application for a municipal waste landfill or resource recovery facility will not be approved unless the applicant affirmatively demonstrates to the Department's satisfaction that the following conditions are met:**

(1) The facility is expressly provided for in the approved host county plan, and the approved plan designates that facility to receive that waste volume, if the facility would receive waste that is included in the approved plan for the host county.

(2) The facility meets the following if the facility would receive waste that is not provided for in the approved plan for the host county:

(i) ] (7) \* \* \*

[ (ii) ] (8) \* \* \*

[ (iii) No site in a county where the waste was generated is more suitable for a municipal waste disposal facility or resource recovery facility than the proposed location of the facility. ]

§ 271.202. Completeness review.

(a) *Determining completeness.*

(1) After receipt of a permit application, the Department will determine whether the application is administratively complete. For purposes of this section, an application is administratively complete if it contains necessary information, maps, fees and other documents, regardless of whether the information, maps, fees and documents would be sufficient for issuance of the permit and, in the case of an application for a municipal waste landfill or a construction/demolition waste landfill, an alternative project timeline is established under paragraph (2). If the Phase I and Phase II parts of the application for a landfill are submitted separately, the application will not be considered to be administratively complete until both parts are determined to be administratively complete.

(2) An alternative project timeline shall be established for a municipal waste landfill or construction/demolition waste landfill application through negotiation among the Department, the applicant and representatives of the host community. If the parties are unable to reach agreement, the Department will determine an appropriate timeline, taking into consideration the level of public interest and incorporating into the timeline sufficient opportunity for meaningful public participation. Public notice of a negotiated timeline will be made in the *Pennsylvania Bulletin* as part of the permit application acceptance announcement.

\* \* \* \* \*

(d) The Department will not accept a permit application for expansion of a landfill if more than 5 years of disposal capacity remains at the landfill, at the rate of disposal at the time of submission of the application.

§ 271.203. Review period.

(a) The Department will issue or deny permit applications [ under this article within the following periods of time:

(1) For ] for municipal waste and construction/demolition waste landfills[ , ] within [ 9 months from the date of the Department's determination ] the time period established in the alternative project timeline developed under § 271.202 (relating to completeness review) [ that the application is administratively complete.

(2) For all other permits, within 6 months from the date of the Department's determination under § 271.202 that the application is administratively complete. ]

(b) The time [ periods ] period in subsection (a) [ do ] does not include a period beginning with the date that the Department in writing has requested the applicant to make substantive corrections or changes to the application and ending with the date that the applicant submits the corrections or changes to the Department's satisfaction.

GENERAL PERMIT RESTRICTIONS

§ 271.211. Term of permits.

\* \* \* \* \*

(c) [ No municipal ] municipal waste may be disposed [ or ] , processed [ at a facility ] or beneficially used under a permit after the expiration of [ its ] the permit term for disposal, processing or beneficial use. Expiration of the permit term does not limit the operator's responsibility for complying with closure and postclosure requirements and all other requirements under the act, the environmental protection acts, regulations thereunder or the terms or conditions of its permit.

\* \* \* \* \*

(e) If no municipal waste is processed or disposed [ at a facility ] under a permit within 5 years of the date of issuance by the Department of a permit for the facility, the permit is void.

\* \* \* \* \*

§ 271.212. Conditions of permits.

A permit issued by the Department will, at a minimum, ensure and contain the following conditions:

\* \* \* \* \*

(4) The permittee shall notify the Department within the time stated in the permit and if no time is stated within 45 days, on a form prepared by the Department, after the transfer has occurred of a controlling interest in the permittee. The notification shall contain the same information about the person who obtained the controlling interest in the permittee as is required of a permit applicant under §§ 271.124 and 271.125 (relating to identification of interests; and compliance information). A "controlling interest" means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract or otherwise.

PERMIT REISSUANCE, MODIFICATION AND RENEWAL

§ 271.221. Permit reissuance.

(a) A transfer, assignment or sale of rights granted under a permit may not be made [ except as provided in this section ] without obtaining permit reissuance.

(b) An application for permit reissuance shall be made on forms provided by the Department and shall contain the following:

\* \* \* \* \*

(3) [ For an application for the reissuance of a permit that was issued prior to April 9, 1988, a complete application for permit modification to correct deficiencies identified under § 271.111 (relating to permit application filing deadline).

(4) ] \* \* \*

\* \* \* \* \*

§ 271.222. Permit modification.

(a) A permittee shall file with the Department an application for permit modification:

\* \* \* \* \*

(3) [ If required under § 271.111(d) (relating to permit application filing deadline).

(4) ] \* \* \*

[ (5) ] (4) \* \* \*

\* \* \* \* \*

(c) The Department may approve onsite a minor modification for the construction of liner systems or of erosion and sedimentation control devices if impracticable to comply with subsections (a) and (b) and the modification will improve the permitted design.

OTHER PERMITTING PROVISIONS

§ 271.231. Equivalency review procedure.

\* \* \* \* \*

(e) If an alternative design is approved through a major permit modification, the Department may approve the applicability of the alternative design to another applicant through a minor permit modification.

Subchapter D. FINANCIAL ASSURANCES REQUIREMENTS

BOND AND TRUST REQUIREMENTS—GENERAL

§ 271.312. Existing facilities.

\* \* \* \* \*

(b) A person or municipality that possesses a municipal waste landfill permit or a demolition waste landfill permit under the act, or a permit for an impoundment used for municipal waste disposal issued under The Clean Streams Law (35 P. S. §§ 691.1—691.1001), which permit was issued by the Department prior to April 9, 1988, shall submit an updated bond in an approved bond amount as required by the Department, prior to Departmental approval of a closure plan submitted under § 271.113 (relating to closure plan) [or issuance of an approval of a complete application for permit modification submitted under § 271.111 (relating to permit application filing deadline)]. Nothing in this section prevents the Department from requiring a bond to be an updated bond under this chapter for another facility operating after April 9, 1988.

\* \* \* \* \*

BOND AND TRUST REQUIREMENTS—RELEASE

§ 271.341. Release of bonds.

\* \* \* \* \*

(g) The following apply with regard to [ a ] bond release:

(1) The Department will not release a bond amount deposited for a facility if the release would reduce the total remaining amount of bond to an amount which would be insufficient for the Department to complete closure and postclosure care, including long term maintenance of remediation measures, and to take measures that are necessary to prevent adverse effects upon the environment or public health, safety or welfare under the act, the environmental protection acts, this title, the terms and conditions of the permits and orders of the Department.

(2) The release of a bond by the Department does not constitute a waiver or release of other liability provided in law, nor does it abridge or alter rights of action or remedies of a person or municipality presently or prospectively existing in equity or under criminal and civil common or statutory law. The release of a bond does not discharge an owner or an operator from liability to restore the groundwater to remediation standards or monitoring groundwater quality, at a minimum, at those levels.

\* \* \* \* \*

§ 271.342. Final closure certification.

\* \* \* \* \*

(b) The Department will not issue a final closure certification unless the operator demonstrates that:

\* \* \* \* \*

(2) One of the following remediation standards is met and maintained at and beyond 150 meters of the perimeter of the permitted disposal area or at and beyond the property boundary, whichever is closer:

(i) For constituents for which an MCL has been promulgated under the Federal or State Safe Drinking Water Acts (42 U.S.C.A. §§ 300f—300j-18; and 35 P. S. §§ 721.1—721.21), the MCL for that constituent.

(ii) For constituents for which MCLs have not been promulgated, the background standard for the constituent.

(iii) For constituents for which the background standard is higher than the MCL or alternative groundwater protection standard identified under subparagraph (iv), the background standard.

(iv) For constituents for which MCLs have not been established, an alternative groundwater protection standard that satisfies the following criteria:

(A) The level is derived in a manner consistent with Federal guidelines for assessing the health risks of environmental pollutants (51 FR 33992, 34006, 34014, 34028, Sept. 24, 1986).

(B) The level is based on scientifically valid studies conducted in accordance with good laboratory practice standards (40 CFR Part 792) promulgated under the Toxic Substances Control Act (15 U.S.C.A. §§ 2601—2692) or equivalent.

(C) For carcinogens, the level represents a concentration associated with an excess lifetime cancer risk level (due to continuous lifetime exposure) within the 1 × 10<sup>-4</sup> to 1 × 10<sup>-6</sup> range.

(D) For systemic toxicants, the level represents a concentration to which the human population (including sensitive subgroups) could be exposed on a daily basis that is likely to be without appreciable

risk of deleterious effects during a lifetime. For purposes of this clause, systemic toxicants include toxic chemicals that cause effects other than cancer or mutation.

(3) \* \* \*

[ (3) ] (4) \* \* \*

\* \* \* \* \*

(e) The final closure certification is not a guarantee of future performance nor does it constitute a waiver or release of bond liability or other liability existing in law or equity for adverse environmental effects or conditions of noncompliance existing at the time of the notice or which might occur at a future time, for which the operator remains expressly liable. The issuance of a final closure certification does not discharge an owner or operator from liability to restore the groundwater to remediation standards or maintain groundwater quality, at a minimum, at those levels.

\* \* \* \* \*

(g) If, after the issuance of a certification of final closure, the Department determines that the level of risk is increased beyond the acceptable range at a facility due to substantial changes in exposure conditions, such as in a change in land use from a nonresidential to a residential use, or new information is obtained about a substance associated with the facility which revises exposure assumptions beyond the acceptable range, additional remediation shall be required.

Subchapter E. CIVIL PENALTIES AND ENFORCEMENT

CIVIL PENALTIES

§ 271.413. Assessment of penalties—minimum penalties.

\* \* \* \* \*

(j) If a violation is included as a basis for an administrative order requiring cessation of solid waste management operations, or for another abatement order, and if the violation has not been abated within the abatement period set in the order, a minimum civil penalty of at least \$1,000 will be assessed for each day during which the failure continues. Nothing in this subsection limits the Department's authority to assess an appropriate civil penalty for violations that formed the basis for issuing an order, and that occurred prior to the issuance of the order or prior to a date for compliance in the order.

ENFORCEMENT

§ 271.421. Administrative inspections.

\* \* \* \* \*

(b) The Department, its employes and agents will conduct routine inspections [ .

(1) Inspections will be made ] as follows:

[ (i) ] (1) For municipal waste landfills [ , ] and construction/demolition waste landfills [ and facilities for the land disposal of sewage sludge ], at least 12 times per year.

[ (ii) ] (2) \* \* \*

[ (iii) ] (3) \* \* \*

[ (iv) ] For facilities for the utilization of sewage sludge for land reclamation, at least twice per year.

(2) ] (c) The Department, its employes and agents intend to conduct inspections under the act of:

[ (i) ] (1) Facilities [ for the agricultural utilization of sewage sludge ] operating under a permit issued under Chapter 275 (relating to land application of sewage sludge) or a beneficial use order issued prior to January 25, 1997, at least 2 times per year.

[ (ii) ] (2) \* \* \*

[ (iii) ] (3) \* \* \*

[ (iv) ] (4) \* \* \*

[ (v) ] (5) \* \* \*

[ (vi) ] (6) \* \* \*

(7) Facilities and beneficial use areas subject to permit by rule under § 271.103 (relating to permit by rule for municipal waste processing facilities other than for infectious or chemotherapeutic waste; qualifying facilities; general requirements), a general permit for beneficial use or processing, or both, under Subchapter I (relating to beneficial use), or a permit for the land application of sewage sludge under Subchapter J (relating to beneficial use of sewage sludge by land application), at least once per year.

[ (c) ] (d) \* \* \*

[ (d) ] (e) \* \* \*

\* \* \* \* \*

Subchapter F. DEMONSTRATION FACILITIES

§ 271.501. Scope.

This subchapter applies to municipal waste processing or disposal facilities, or parts of these facilities, that are based on a new or unique technology for processing or disposing of municipal waste. For purposes of this subchapter, a technology is considered new or unique if it has not previously been demonstrated in this Commonwealth or another comparable area. The Department may approve in writing, as a permit modification, the demonstration of new or unique technology for the processing or disposal of municipal waste at permitted municipal waste processing or disposal facilities if the requirements of this subchapter are met.

§ 271.502. Relationship to other requirements.

[ Nothing in this subchapter creates exceptions to, or authorizes the Department to grant variances from, other provisions of this article. ]

(a) An operation that is approved under this subchapter is subject to the requirements of this article.

(b) For an operation that is approved under this subchapter, the Department may waive or modify any application and operating requirements in this article. The Department may not waive or modify Subchapter A, §§ 271.124, 271.125 and 271.129, and Subchapter D, E or H.

§ 271.504. Operating requirements.

In addition to applicable operating requirements in this article, a person or municipality that operates a demonstration facility shall comply with the following:

(1) [The facility may not exceed 1 acre in size, unless the applicant demonstrates, and the Department finds, that a larger area is needed to adequately test the technology. In that case, the ] The facility may not be larger than the area needed to adequately test the new or unique technology.

\* \* \* \* \*

(6) If one of Chapter 273, 275, 277, 279, 281 or 283 is not clearly applicable to the facility, the permittee shall annually submit to the Department a nonrefundable [annual] permit administration fee of an amount set forth in the approved permit, but not more than \$1,800, in the form of a check payable to the "Commonwealth of Pennsylvania."

§ 271.505. Public notice of analysis.

[ (a) ] The Department will publish in the *Pennsylvania Bulletin* notice of the availability of the analysis submitted under § 271.504(5) (relating to operating requirements).

[ (b) ] The notice [required by this section] will request public comment on the analysis and the utility of the analysis in permitting future facilities using the same or similar technology. The Department will also provide written notice of the availability of the analysis to the municipalities in which the facility is located.

Subchapter G. RESIDUAL WASTE SPECIAL HANDLING WASTE; BENEFICIAL USE OF MUNICIPAL WASTE

ADDITIONAL APPLICATION REQUIREMENTS

§ 271.611. Chemical analysis of waste.

(a) *Application form.*

(1) Except as provided in subsection (f), an application for the processing or disposal of residual waste or special handling waste, an application for a general permit for the beneficial use or processing of municipal waste under Subchapter I (relating to beneficial use), or an application or registration under § 271.831 (relating to inclusion in a general permits) for inclusion in a general permit issued under Subchapter I, shall contain the following information for each waste on a form provided by the Department:

\* \* \* \* \*

(4) The Department may, in writing, waive or modify the evaluation required by this subsection for waste to be [disposed] received at [lined] permitted disposal facilities if the following conditions are met:

\* \* \* \* \*

(ii) The waste [has the same characteristics as municipal waste that does not contain hazardous waste] is municipal-like residual waste and no changes in operation or management of the permitted facility are required to accept the waste.

(iii) The applicant has demonstrated to the Department's satisfaction that additional analysis is not necessary to determine that waste can be [disposed of] received at the facility without adversely affecting the effectiveness of the liner or leachate treatment systems.

(b) *Waste generation.* Except as provided in subsection (e), an application [ for the processing or disposal of residual waste or special handling waste ] shall also include a description of the waste generation process, including a description of the raw materials used in the process, the primary chemical reactions which occur during the process, the sequence of events which occur during the process, the points of waste generation in the process and the manner in which each of the wastes is managed subsequent to its generation. A schematic drawing of the process shall be included.

\* \* \* \* \*

§ 271.612. Source reduction strategy.

An application for the processing or disposal of residual waste shall contain a copy of the source reduction strategy required by § 287.53 (relating to source reduction strategy) for each residual waste to be [disposed of or processed] received at the facility.

§ 271.613. Waste analysis plan.

(a) The application shall include a waste analysis plan for each type of waste proposed to be [disposed] received at the permitted facility. The plan shall take into account the waste analysis required by § 271.611 (relating to chemical analysis of waste). The plan shall include:

\* \* \* \* \*

(b) The application shall also include a plan for screening and managing incoming waste to ensure that the [disposal or processing] management of the waste is consistent with the permit and this [chapter] article. Except as otherwise required by the Department, the application shall include at a minimum a plan for checking each load of waste received at the facility for color, odor, texture, physical state and phases of waste.

\* \* \* \* \*

Subchapter H. GENERAL PERMITS—INFECTIOUS AND CHEMOTHERAPEUTIC WASTE  
GENERAL PROVISIONS

§ 271.711. Authorization for general permits.

\* \* \* \* \*

(c) The Department may issue a general permit for the mixing of disinfection products with infectious waste to perform processing.

(d) The Department may issue a general permit for the processing of mixtures of the same types of waste that are infectious or residual wastes.

[ (c) ] (e) \* \* \*

[ (d) ] (f) \* \* \*

§ 271.712. Nature of a general permit; substitution for individual applications and permits.

\* \* \* \* \*

(b) The use of an applicable general permit shall satisfy the requirement to obtain a permit [set forth] in § 271.101 (relating to permit requirement) if the following conditions are met:

\* \* \* \* \*

(2) The person or municipality conducting the processing activities is authorized to operate under the general permit at the time that the Department issued the

general permit or under the applicable general permit in accordance with § 271.742 or § 271.743 (relating to determination of applicability; and registration).

\* \* \* \* \*

**ISSUANCE OF A GENERAL PERMIT**

**§ 271.721. Application for general permit.**

\* \* \* \* \*

(d) The application requirements in subsection (b) may be waived or modified for the mixing of disinfection products with infectious waste to perform processing.

**CONTENT OF GENERAL PERMITS AND WAIVERS**

**§ 271.731. Contents of general permits.**

Each general permit issued by the Department will include, at a minimum:

\* \* \* \* \*

(18) A requirement that autoclaves meet the following:

(i) Processing of pathological waste is prohibited.

(ii) The retention time for processing bulk fluids (greater than 500 ml) allows for the complete vaporization of fluids.

**§ 271.732. Waiver or modification of certain requirements.**

[In issuing a general permit or in making a determination of applicability regarding a general permit, the Department may waive or modify one or more of the following procedural requirements as applied to a particular category of processing covered by the general permit:

(1) Subchapter B (relating to general requirements for permits and permit applications), except for the following sections: §§ 271.123—271.125 and 271.129.

(2) Subchapter C (relating to permit review procedures and standards).

(3) Subchapter D (relating to financial assurances requirements). ]

(a) An operation that is approved under this subchapter does not require an individual processing or disposal permit under this article.

(b) For an operation that is approved under this subchapter, the Department may waive or modify any application and operating requirements in this article, except the Department may not waive or modify Subchapter A, §§ 271.124, 271.125 and 271.129, and Subchapters D and E.

**REGISTRATION AND DETERMINATION OF APPLICABILITY**

**§ 271.741. Authorization for persons or municipalities to be included in a general permit.**

(a) A person or municipality is authorized to operate under a general permit if one of the following occurs:

\* \* \* \* \*

[ (3) The Department has authorized the person or municipality to operate under the general permit at the time the Department issued the general

permit, in accordance with § 271.744 (relating to waiver of registration or determination of applicability requirements). ]

\* \* \* \* \*

**§ 271.742. Determination of applicability.**

If a general permit specifies that potential users of the permit shall obtain a determination of applicability from the Department prior to conducting the activity authorized by the general permit, the procedures in this section shall be followed in addition to those stated in § 271.741 (relating to authorization for persons or municipalities to be included in a general permit):

(1) An application for a determination of applicability shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for \$[ 200 ] 500.

\* \* \* \* \*

**§ 271.743. Registration.**

(a) When a general permit specifies that potential users are required to register with the Department prior to operating under the general permit, the procedures in this section shall be followed in addition to those in § 271.741 (relating to authorization for persons or municipalities to be included in a general permit).

(1) A registration to operate under a general permit shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for \$[ 100 ] 250.

\* \* \* \* \*

**§ 271.744. [ Waiver of registration or determination of applicability requirements ] (Reserved).**

[ (a) When the Department issues a general permit in response to an application filed under § 271.721 (relating to application for general permit) or on its own motion under § 271.725 (relating to Department initiated general permits), the Department may waive the registration or determination of applicability requirements in §§ 271.741—271.743 (relating to authorization for persons or municipalities to be included in a general permit; determination of applicability; and registration) and may authorize the applicant to operate under the general permit immediately upon the effective date of the general permit if the following are met:

(1) The person or municipality notifies the Department, within the 60-day comment period for the proposed general permit established by § 271.723 (relating to public notice and review period), that it intends to immediately operate under the approved general permit if the permit is issued.

(2) The person or municipality submits to the Department the information required by § 271.741 and the fee required by § 271.742 or § 271.743, whichever is applicable, within the 60-day comment period for the proposed general permit established by § 271.723. If it is not evident which fee will apply by the notice published acknowledging the receipt of an application for a general permit, the person or municipality shall submit the fee required for a registration. If the general permit, when issued, requires a determination of applicability, the person or municipality shall submit an additional fee equal to the difference between the fee required for

a determination of applicability and the fee required for a registration, prior to operating under the general permit.

(3) The person or municipality applying for coverage under a general permit shall provide written notice within the 60-day comment period established by § 271.725 to each municipality in which the person or municipality intends to operate under the general permit.

(b) The Department may amend, suspend or revoke coverage under a general permit if the waste or the activity is not consistent with the terms and conditions of the general permit. ]

Subchapter I. BENEFICIAL USE

GENERAL PERMIT FOR PROCESSING OR BENEFICIAL USE, OR BOTH, OF MUNICIPAL WASTE AUTHORIZATION AND LIMITATIONS

§ 271.811. Authorization for general permit.

\* \* \* \* \*

(g) The Department will not issue a general permit under this subchapter for the following:

\* \* \* \* \*

(5) The use of a waste for construction or operations at a resource recovery facility or disposal facility.

CONTENT OF GENERAL PERMITS AND WAIVERS

§ 271.832. Waiver and modification of requirements.

\* \* \* \* \*

(b) For an operation that is approved under this subchapter, the Department may waive or modify any application and operating requirements in this article, except the Department may not waive or modify Subchapter A, §§ 271.124, 271.125 and 271.129, Subchapter D in accordance with § [ 271.811(d) ] 271.821(d), Subchapter E or Subchapter H.

Subchapter J. BENEFICIAL USE OF SEWAGE SLUDGE BY LAND APPLICATION

OPERATING REQUIREMENTS

§ 271.915. Management practices

\* \* \* \* \*

(h) A person that operates under an individual or general land application of sewage sludge permit issued under this subchapter shall comply with the EPA and the Department guidance documents on the land application of sewage sludge pertaining to conducting sampling and analyses, and calculating the agronomic rate [ , ] and the cumulative pollutant loading rate [ and the annual whole sludge application rate ].

\* \* \* \* \*

CHAPTER 272. MUNICIPAL WASTE PLANNING, RECYCLING AND WASTE REDUCTION

Subchapter B. HOST COUNTIES

§ 272.101. Site-specific postclosure fund.

(a) Counties in this Commonwealth within whose boundaries there are or may be operating municipal waste landfills are required to establish a trust fund for each landfill for the purpose of providing for remedial measures and emergency actions to prevent or abate

adverse effects on the environment after the closure of the landfills. A trust fund established under this section shall comply with §§ 272.102—272.107.

(b) [ For a landfill which has been issued a permit by the Department prior to September 26, 1988, the county shall have established a trust fund by November 25, 1988.

(c) For a landfill which may be issued a permit by the Department after September 26, 1988, the ] A county shall establish a trust fund prior to the operation of [ the ] a landfill. [ The ] A landfill may not accept [ wastes ] waste or initiate operation prior to the establishment of the required trust fund.

§ 272.104. Withdrawals from trust fund.

(a) Except as provided in [ this section, ] § 272.105 (relating to county withdrawals from trust fund) and for purposes of investing and reinvesting the moneys in the trust fund by the trustee, withdrawals may not be made from the trust fund prior to certification by the Department of the closure of the landfill under § 273.203(d) (relating to certification). The Department will provide the trustee with a copy of the certification of closure.

\* \* \* \* \*

(f) After the trustee receives notification of certification of closure from the Department, the trustee may release moneys from a trust for a municipal waste landfill that operated prior to April 9, 1988, and which has no closure bond or an insufficient closure bond, for the following postclosure activities upon written request by the landfill operator and written approval by the Department:

- (1) Placement of wells for water quality monitoring.
- (2) Placement of gas control devices for gas monitoring.
- (3) Placement of leachate collection and treatment system.
- (4) Erosion and sedimentation control.
- (5) Revegetation and regrading including maintenance of final cover.
- (6) Access control.
- (7) Other postclosure activities.

[ (f) ] (g) \* \* \*

§ 272.105. County withdrawals from trust fund.

\* \* \* \* \*

(c) Payments to the county for costs incurred in establishing and administering the trust fund may not exceed the lesser of the county's actual costs, or 0.5% of the moneys deposited in the trust fund to the date of the county's request for payment. In addition, after the trustee receives notification of certification of closure by the Department, payments to the county may not exceed the earnings and profits from the trust corpus credited during the billing period.

(d) The trustee shall, prior to making payments to the county, assure that the payments will not exceed 0.5% of the moneys deposited in the trust fund. [ In computing the 0.5%, the trustee may not include earnings or profits of the trust fund. ]

§ 272.106. [ Final closure of the facility ] Termination of trust.

(a) The Department will notify the trustee, in writing, of the Department's certification of final closure of the landfill under § 271.342 (relating to final closure certification) and [ the ] one of the following:

(i) The release of the bond [ or trust for municipally operated landfills thereon ].

(ii) The termination of a trust provided for a landfill operated by a municipality solely for municipal waste not classified hazardous, if the municipality has provided the trust in lieu of a bond under § 271.301 (relating to scope).

(b) Upon receipt of the notification [ of the certification of final closure ] required in subsection (a), the trustee shall take the necessary steps to terminate the trust fund. The trustee may also terminate a trust fund when all of the fund monies have been withdrawn.

(c) Upon termination of the trust fund, the remaining trust property, less final trust administration expenses of the trustee, shall be divided equally between the county and the municipality in which the municipal waste landfill is located.

Subchapter C. MUNICIPAL WASTE PLANNING PLANNING

§ 272.211. General requirement.

[ (a) Except as provided in subsection (b), a ] A county shall submit to the Department [ , by March 26, 1991, an officially adopted ] a municipal waste plan revision [ for municipal waste generated within its boundaries ] under this subchapter. [ The plan shall be consistent with the requirements of this subchapter. ] For purposes of this subchapter, the term "county" includes cities of the first class, but does not include counties of the first class.

[ (b) A county that has submitted a complete municipal waste management plan to the Department for approval on or before October 26, 1988, shall be deemed to have a plan approved under § 272.244 (relating to Departmental review of plans) if:

(1) For plans that were given preliminary approval by the Department under former §§ 75.11 and 75.13 (Pennsylvania Code serial pages (145124) to (145133)) before September 26, 1988, more than one-half of the municipalities within the county, representing more than one-half of the county's population as determined by the 1980 census of the United States Bureau of the Census, adopted resolutions approving the plan by March 25, 1989.

(2) For plans that were not given preliminary approval by the Department before September 26, 1988:

(i) On or before January 24, 1989, the Department granted preliminary approval of the plan.

(ii) On or before April 24, 1989, more than one-half of the municipalities within the county, representing more than one-half of the county's population as determined by the 1980 census of the United

States Bureau of the Census, adopted resolutions approving the plan. ]

PLAN CONTENT

§ 272.223. Description of waste.

\* \* \* \* \*

(b) In describing the content of waste, the plan shall specifically address sewage sludge (including septage), infectious and chemotherapeutic waste, ash from resource recovery facilities, construction/demolition waste other than waste from demolition of an industrial site and other municipal waste.

\* \* \* \* \*

§ 272.224. Description of facilities.

(a) The plan shall identify and describe the following:

(1) The facilities where the county's municipal waste is currently being disposed or processed [ and facilities located within the county ].

\* \* \* \* \*

(d) For purposes of this section, an "existing facility" is a municipal waste processing or disposal facility [ located within the planning area which, on or before July 26, 1989, notified the county of its existence, and ] which meets [ one or more ] either of the following conditions:

(1) The facility was designated to receive waste in the existing county plan.

(2) The facility has submitted a complete permit application as of the date of the notice of plan revision.

[ (1) A facility located in the county which had a permit under the act on September 26, 1988, and which received waste for processing or disposal in September of 1988.

(2) A facility for which a complete permit application under the act in accordance with § 271.202 (relating to completeness review) was filed with the Department by the latest of the following dates:

(i) September 26, 1989.

(ii) Within 1 year after written notice of plan development is given to municipalities under § 272.203 (relating to notice to municipalities).

(iii) For substantial plan revisions, within 6 months after written notice of proposed plan revision is given to municipalities under § 272.203.

(3) A resource recovery facility for which, on or before September 26, 1988, the owner or operator did one or more of the following:

(i) Deposited funds into escrow for financing of the facility.

(ii) Signed an electric power contract with a public utility that was approved by the Pennsylvania Public Utility Commission on or before September 26, 1988.

(iii) Has secured permanent bond financing for the facility.

(4) A facility that meets the following:

(i) The applicant acquired fee simple title to the property covering the permit area on or before September 26, 1988.

(ii) On or before September 26, 1988, the applicant had contractual agreements that specifically designate the facility for disposal of waste.

(iii) The applicant meets one of the following:

(A) The applicant had a permit from the Department under the act on September 26, 1988.

(B) The applicant received a permit under the act from the Department within 1 year from the date written notice of plan development was given to municipalities under § 272.203.

(C) The applicant submitted a complete application to the Department under the act by September 26, 1989.

(D) For plan revisions, the applicant received a permit under the act from the Department within 1 year from the date written notice of a plan revision was given to municipalities under § 272.203. ]

\* \* \* \* \*

§ 272.225. Estimated future capacity.

\* \* \* \* \*

(d) If [the plan indicates] during the development of a plan revision, the county determines that additional processing or disposal capacity is needed by the county, the county shall give public notice of the determination and solicit proposals and recommendations regarding facilities and programs to provide the capacity. The county shall provide a copy of the notice to the Department, which will submit a copy of the notice to be published in the *Pennsylvania Bulletin*.

§ 272.226. Description of recyclable materials.

(a) The plan shall describe and evaluate:

\* \* \* \* \*

(7) Options for the processing, storage and sale of recyclable materials, including market commitments. [The plan shall consider the results of the market development study completed for the Department in 1989. ]

\* \* \* \* \*

(11) What consideration for the collection, marketing and disposition of recyclable materials will be accorded to persons engaged in the business of recycling on [September 26, 1988,] the date that the county issued its notice of plan revision under § 272.203 (relating to notice of municipalities) whether or not the persons are operating for profit.

\* \* \* \* \*

(c) Nothing in this subchapter prohibits the preparation of a county municipal waste management plan revision prior to developing and implementing a recycling program required by Subchapter E, nor does this subchapter prohibit the preparation or implementation of a municipal recycling or waste reduction plan prior to the approval of the county plan revision.

§ 272.227. Selection and justification of municipal waste management program.

\* \* \* \* \*

(c) For every proposed facility, recycling program or waste reduction program, the plan shall [do the following]:

\* \* \* \* \*

(2) Describe alternative facilities or programs, including, but not limited to, waste reduction, recycling or resource recovery facilities, municipal waste landfills, or other programs, that were considered. The plan shall provide reasonable assurances that the county utilized a fair, open and competitive process for selecting the facilities or programs from among alternatives which were suggested to the county. Nothing in this section requires the county to utilize a request for proposals or a bidding process to identify or select alternatives, nor does it require a county to choose the lowest bid.

\* \* \* \* \*

§ 272.228. Location.

[ (a) ] The plan shall identify the [general] location [within a county where] of each municipal waste processing or disposal facility and each recycling program identified in § 272.227 (relating to selection and justification of municipal waste management program) [will be located. The plan shall do one of the following: ]. For a site not yet chosen, the plan shall explain how the site will be chosen.

[ (1) Identify the specific location of the sites for sites that are chosen.

(2) Explain in detail the methodology that will be used to choose the sites, including, but not limited to, inclusionary criteria, exclusionary criteria, a timetable by month and year for selecting the sites, and a justification of the methodology for sites that are not yet chosen. Exclusionary criteria shall include the applicable provisions of §§ 273.202 and 283.202 (relating to areas where municipal waste landfills are prohibited; and areas where resource recovery facilities and other processing facilities are prohibited) and section 511 of the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. § 4000.511).

(b) Explain in detail the reasons for selecting the facility, for a municipal waste processing or disposal facility that is proposed to be located outside the county. If a new municipal waste processing or disposal facility is proposed to be located outside the county, the plan shall explain how the generating county gave first choice to new facilities located within its boundaries. The explanation shall be based on a siting analysis for potential locations in the generating and host counties that includes inclusionary criteria, exclusionary criteria and a justification of the methodology. Exclusionary criteria shall include the applicable provisions of §§ 273.202 and 283.202 and section 511 of the Municipal Waste Planning, Recycling and Waste Reduction Act. ]

§ 272.233. Facilities developed pursuant to sub-county plans.

[ (a) The plan shall state if it will affect the design, construction, operation, financing or contractual obligations of a municipal processing or disposal facility described in subsection (b).

(b) ] The plan shall explain how it will not interfere with the design, construction, operation, financing or contractual obligations of a municipal processing or disposal facility, including a reasonable expansion of an existing facility, which [meets one or more of the following]:

(1) A facility that meets the following:

(i) The facility ] is part of a complete municipal waste management plan submitted to the Department by a municipality or organization of municipalities under the act prior to September 26, 1988, and approved by the Department.

[ (ii) A complete permit application for the facility was submitted to the Department by September 26, 1989.

(2) A facility is a project that is planned or operated by an entity that meets the following:

(i) The entity is a municipal authority created under the Municipal Authorities Act of 1945 (53 P. S. §§ 301—401) or an organization of municipalities.

(ii) The entity was created by two or more municipalities prior to September 26, 1988, for the purpose of providing for collection, storage, transportation, processing or disposal of solid waste generated within the municipalities.

(iii) The entity submitted a plan to the Department by September 26, 1989, in accordance with this subchapter, which included and was adopted by each member municipality, and obtained Departmental approval for the plan. Within 30 days after receiving the plan, the Department will approve or disapprove the plan, unless the Department gives written notice that additional time is necessary to complete its review. If the Department gives notice, the Department will have 30 additional days to render a decision.

(3) A facility that meets the following:

(i) On or before September 26, 1988, the facility was operating, possessed a permit from the Department under the act and was designated in a plan that meets the requirements of § 272.211(b) (relating to general requirement).

(ii) The facility is owned by a local public agency other than the county in which the facility is located.

(4) A facility that is described in § 272.224(d)(3) or (4) (relating to description of facilities). ]

PLAN REVIEW PROCEDURES

§ 272.245. Submission of implementing documents.

(a) Within 1 year following approval of a plan by the Department, [including plans approved under § 272.211(b) (relating to general requirement), ] the county shall submit to the Department copies of executed ordinances, contracts or other requirements to implement its approved plan and that will be used to ensure sufficient available capacity to properly dispose or process municipal waste that is expected to be generated within the county for the next 10 years.

\* \* \* \* \*

PLAN REVISIONS

§ 272.251. Submission of revisions.

(a) A county with an approved municipal waste management plan shall submit a revised plan to the Department in accordance with this subchapter [ as follows ] at the earliest of the following events:

(1) At least 3 years prior to the [ time that the remaining available permitted capacity for the

county will be exhausted ] expiration of the capacity assurances necessary to dispose or process the municipal waste generated in the county.

[ (2) By September 26, 1990, for plans approved under § 272.211(b) (relating to general requirement). The plan revisions shall be consistent with the requirements of this subchapter except to the extent that the county demonstrates to the Department's satisfaction that irrevocable contracts made by or under the approved plan preclude compliance with this subchapter. ] At least 3 years prior to the expiration of the term of the county's approved plan.

\* \* \* \* \*

§ 272.252. Development of plan revisions.

\* \* \* \* \*

(c) A county submitting a plan revision shall comply with:

\* \* \* \* \*

(2) Sections 272.201, 272.202 and 272.204 (relating to purposes; completeness review and format of plans).

(3) Section 272.203 (relating to notice to municipalities). At least 30 days before submitting a proposed, nonsubstantial plan revision to the Department, the county shall submit a copy of the proposed revision to the advisory committee and each municipality within the county. [Nonsubstantial plan revisions will be deemed approved within 30 days of receipt by the Department unless the Department responds in writing.] A summary of any comments received from the advisory committee and municipalities shall be included with the submission of a nonsubstantial revision to the Department.

(d) If the [ Department determines that the plan revision is substantial, ] plan revision is determined to be substantial the county shall also:

\* \* \* \* \*

(f) Within 30 days after receiving a complete plan revision, including a plan revision submitted under § 272.243(d) (relating to failure to ratify plan), the Department will approve, conditionally approve or disapprove it. If the Department gives written notice to the county that additional time is necessary to complete its review, the Department will have 30 additional days to render a decision.

(g) A nonsubstantial plan revision will be deemed approved within 30 days of receipt by the Department unless the Department responds in writing.

OTHER PLANNING PROVISIONS

§ 272.261. Annual report by county.

\* \* \* \* \*

(b) The annual report, which shall be submitted on a form supplied by the Department, shall include the following:

\* \* \* \* \*

(4) Documentation that the assumptions the county made in developing capacity assurance in the plan remain valid.

**Subchapter D. GRANTS**

**GENERAL PROVISIONS FOR AWARDING GRANTS**

**§ 272.311. Financial management.**

\* \* \* \* \*

(b) For a grant under this subchapter, if the Department receives grant requests for which approved costs exceed available funds for that type of grant, the Department may determine grant awards based on population of the area for which the grant is requested, the extent to which the grant is based on cooperation among several municipalities and the extent to which the grant award will further the purposes of the Municipal Waste Planning, Recycling and Waste Reduction Act and section 208 of the Small Business and Household Pollution Prevention Program Act (35 P. S. § 6029.208).

**§ 272.313. General requirements for grant applications.**

\* \* \* \* \*

(d) Prior to development of a grant application under § 272.321 or § 272.331 (relating to planning grants; and grants for development and implementation of municipal recycling programs), the applicant shall participate in a preapplication conference with the Department.

**§ 272.314. Limits on Department's authority to award grants.**

\* \* \* \* \*

(b) The Department [ may ] will not award a grant under this subchapter to a municipality unless the applicant demonstrates to the Department's satisfaction that [ it has complied with the following ]:

(1) The applicant has complied with the conditions in previously awarded grants under this subchapter or conditions in previously awarded grants under the act or the Pennsylvania Solid Waste-Resource Recovery Development Act (35 P. S. §§ 755.1—755.14).

(2) The applicant has complied with the requirements of the Municipal Waste Planning, Recycling and Waste Reduction Act, § 272.261 (relating to annual report by county) and this subchapter.

(3) The applicant has not previously been reimbursed under the Municipal Waste Planning, Recycling and Waste Reduction Act for expenses requested.

(c) Activities reimbursed under one grant program under the Municipal Waste Planning, Recycling and Waste Reduction Act will not be eligible as a match under any other grant program under that act.

[ (c) ] (d) The Department [ will ] may withhold funds for grants under this subchapter if any of the following occurs:

(1) [ the ] The application has failed to provide material information concerning the grant, or has provided false information concerning the grant.

(2) Equipment purchased with previous grant funds has not been utilized in compliance with program requirements.

(3) The grantee has not met the requirements of § 272.421 (relating to program elements).

(4) The grantee maintains improper or inadequate documentation to demonstrate proper grant expenditures in administering any grant under the Municipal Waste Planning, Recycling and Waste Reduction Act.

[ (d) ] (e) \* \* \*

(f) The Department may not award a grant under § 272.321 or § 272.331 (relating to planning grants; and grants for development and implementation of municipal recycling programs) unless a pre-application conference is held between the applicant and the Department prior to development of the grant application.

**§ 272.316. Performance audit.**

A grant application under this subchapter shall include provisions for an independent performance audit, which shall be completed within 6 months after reimbursable work under the grant has been completed. This audit may be performed as part of another independent audit conducted for the municipality. A grant under this subchapter may not be used to pay for this audit. The Department's review of a disbursement request will be deemed to meet this requirement unless the grantee is notified in writing by the Department to perform the audit because of improper or inadequate documentation of grant expenditures.

**PLANNING GRANTS**

**§ 272.321. Scope of grant.**

The Department will, upon application from a county, award grants for one or more of the following:

(1) The cost of preparing [ and implementing ] municipal waste management plans in accordance with Subchapter C (relating to municipal waste planning).

\* \* \* \* \*

(5) Educational programs on pollution prevention, other technical assistance to small business for pollution prevention and educational programs on household hazardous waste.

**§ 272.322. Eligible costs.**

\* \* \* \* \*

(b) Costs not approved for a grant under § 272.321 include, but are not limited to:

\* \* \* \* \*

(4) Indirect costs as defined in Office of Management and Budget Circular A-87, as amended.

**§ 272.323. Grant application.**

The application shall contain a detailed description of the proposed project, the proposed duration of the project, source of the fundings match for the project and an explanation of how the project will further the purposes of the Municipal Waste Planning, Recycling and Waste Reduction Act and the Small Business and Household Pollution Prevention Program Act (35 P. S. §§ 6029.201—6029.209).

**GRANTS FOR DEVELOPMENT AND IMPLEMENTATION OF MUNICIPAL RECYCLING PROGRAMS**

**§ 272.332. Eligible costs.**

\* \* \* \* \*

(f) Equipment and property purchased with funds from a grant and with a purchase price of \$1,000 or

greater shall be clearly identified by the grantee, through a sign or lettering permanently affixed to the equipment or property as being funded by a Department of Environmental Protection Act 101 Section 902 Recycling Grant.

**[ (f) ] (g)** If equipment or property purchased with funds from a grant is no longer used for the intended purposes under the grant, the grantee shall notify the Department in writing. The Department shall be reimbursed for the value of the equipment or property in the same proportion that funding for the equipment or property was originally granted, unless the equipment or property is sold to another municipality for waste reduction or recycling purposes. The reimbursement shall be based either on the sale price of the equipment or property if applicable or its depreciated market value.

**§ 272.333. Grant application.**

\* \* \* \* \*

(c) If the municipality proposes to use some or all of the grant funds to purchase mechanical processing equipment **[ with a retail value of more than \$200 ]**, the application shall also contain the following:

(1) A dated copy of a public notice that was published once a week for 2 consecutive weeks in a newspaper of general circulation in the municipality. The notice shall:

(i) **State that funding is being sought from the Commonwealth's recycling fund, under the Municipal Waste Planning, Recycling and Waste Reduction Act, to assist with the purchase of the mechanical processing equipment.**

(ii) \* \* \*

**[ (ii) ] (iii)** \* \* \*

**[ (iii) ] (iv)** \* \* \*

**[ (iv) ] (v)** \* \* \*

\* \* \* \* \*

**GRANTS FOR COUNTY RECYCLING COORDINATORS**

**§ 272.341. Scope of grant.**

The Department will award grants for authorized salary and expenses for county recycling coordinators, upon application from a county. The activities for which a grant may be used **[ for one or more of the following ]** include:

(1) **[ Development of recycling and waste reduction public education programs.**

(2) **Assistance to municipalities and the private sector in development of recycling programs.**

(3) **Assistance in selection of materials to be recycled and market identification.**

(4) **Identification of and coordination of opportunities for inter-municipal cooperation.**

(5) **County and municipal recycling and waste reduction program data management with reporting to the Department.**

(6) **Identification of sources of recyclable products and products made of recycled materials which encourage the use of these items. ]**

**Assisting the county in developing and implementing the waste reduction, recycling, leaf and**

**yard waste, and household hazardous waste components of its solid waste management plan.**

(2) **Identifying and encouraging opportunities for intermunicipal cooperation and cooperative efforts with other organizations to further waste reduction, recycling, leaf and yard waste composting, and household hazardous waste programs.**

(3) **Providing technical assistance to municipalities on developing and implementing waste reduction, recycling, leaf and yard waste composting, and household hazardous waste programs.**

(4) **Developing educational programs and materials on waste reduction, recycling, leaf and yard waste composting, and household hazardous waste programs.**

(5) **Serving as a contact for waste reduction, recycling, leaf and yard waste composting, and household hazardous waste program questions from within the county.**

(6) **Participating in, and coordinating when appropriate, waste reduction, recycling, leaf and yard waste composting, and household hazardous waste meetings, training programs, workshops and conferences.**

(7) **Speaking to schools and community, business and government organizations about waste reduction, recycling, leaf and yard waste composting, and household hazardous waste programs.**

(8) **Assisting municipalities in identifying recyclable materials capable of being marketed and locating markets.**

(9) **Assisting municipalities with developing and coordinating leaf and yard waste collection and composting programs and identifying markets for compost.**

(10) **Assisting municipalities in preparing recycling and household hazardous waste program grant applications.**

(11) **Collecting data on municipal recycling programs within the county and on commercial, institutional and municipal establishment recycling, and recycling at community activities and reporting the data annually to the Department.**

(12) **Identifying sources of recyclable products and products made of recycled materials and encouraging the use of those items to support county and municipal recycling programs.**

(13) **Developing recycling programs for special materials such as used oil, tires, household hazardous waste and white goods.**

(14) **Administration and management of county recycling programs.**

**§ 272.342. Eligible costs.**

\* \* \* \* \*

(b) **Costs not approved for a grant include, but are not limited to:**

(1) **Activities and expenses incurred by the recycling coordinator that are not related to recycling.**

(2) **[ Administrative, management or clerical activities.**

**(3) ] \* \* \***

- [ (4) ] (3) \* \* \*
- [ (5) ] (4) \* \* \*
- [ (6) ] (5) \* \* \*

**PERFORMANCE GRANTS FOR RECYCLING PROGRAMS**

**§ 272.353. Grant application.**

(a) The application shall contain a description of the weight of each material recycled and marketed [ , and the name and mailing address of each market ]. The weight shall be reduced for any residue materials.

\* \* \* \* \*

**GRANTS FOR HOST MUNICIPALITY INSPECTORS**

**§ 272.362. Eligible costs.**

(a) The grant shall be 50% of the approved cost of the salaries and expenses of up to two certified host municipality inspectors [ for a period not to exceed 5 years from the date of certification of the first inspector ].

(b) Costs not approved for a grant include, but are not limited to:

\* \* \* \* \*

(7) Costs incurred by the municipality or the inspector prior to certification or after decertification of the inspector by the Department.

**§ 272.364. Maintaining certification; decertification; recertification.**

(a) *Maintaining certification.* To maintain certification, a host municipality inspector shall:

(1) Complete a Department sponsored advanced training course once every 3 years and perform satisfactorily on a written examination.

(2) Demonstrate that the inspector is an active inspector by conducting at least one inspection per calendar year, as indicated on the annual reimbursement application.

(b) *Decertification.* Acts of a host municipality inspector which may be grounds for decertification include:

(1) Violating a condition of certification.

(2) Violating a provision of the Municipal Waste Planning, Recycling and Waste Reduction Act, this title, or an order of the Department or its agent.

(3) Endangering the health or safety of a resident of the host municipality, or of an owner, employe, customer or visitor of a municipal waste landfill or resource recovery facility.

(4) Distributing business information of a municipal waste landfill or resource recovery facility deemed confidential by the Department under section 1713 of the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. § 4000.1713) without prior written approval of the owner or chief operating manager of the facility.

(5) Submitting false information to the Department or its agent.

(6) Exceeding the scope of authority granted to a host municipality inspector under section 1102 of the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. § 4000.1102).

(7) Failing to complete successfully the requirements of subsection (a).

(c) Upon decertification, the Department will notify in writing the host municipality inspector, the host municipality and the affected municipal waste landfill or resource recovery facility of the following:

(1) The name of the decertified inspector and the related host municipality.

(2) The effective date of the decertification.

(3) If and when the inspector will be eligible for recertification.

(4) The reason for the decertification.

(d) *Recertification.* A decertified host municipality inspector is not eligible to serve as a host municipality inspector for any municipality for 2 years from the date of decertification. After this 2-year period, a decertified inspector may be retrained and recertified by the Department in accordance with section 1102 of the Municipal Waste Planning, Recycling and Waste Reduction Act. In deciding whether a decertified host municipality inspector may qualify for recertification, the Department will consider the nature and gravity of the misconduct which resulted in the previous revocation.

**Subchapter E. MUNICIPAL RECYCLING PROGRAMS**

**REQUIRED RECYCLING PROGRAMS**

**§ 272.411. Affected municipalities.**

\* \* \* \* \*

(d) The results of the [ 1990 ] 2000 census, or a subsequent decennial census, shall affect a municipality's obligation to establish and implement a recycling program under this subchapter only as follows:

(1) A municipality that meets requirements of subsection (a) or (b) but which was not required by the previous decennial census to conduct a recycling program, shall establish and implement a source separation and collection program in accordance with this subchapter within 2 years after the census data becomes official. For the [ 1990 ] 2000 decennial census, this date shall be July 15, [ 1993 ] 2003.

\* \* \* \* \*

**PROGRAM ELEMENTS**

**§ 272.426. Alternative to curbside program.**

\* \* \* \* \*

(e) The Department may revoke approval granted under this section if the alternative recycling program is not meeting the requirements of this section or is not operating in accordance with the terms of the [ municipality's ] municipality's request to the Department under this section.

**CHAPTER 273. MUNICIPAL WASTE LANDFILLS**

**Subchapter B. APPLICATION REQUIREMENTS**

**PHASE I APPLICATION REQUIREMENTS**

**§ 273.112. Facility plan.**

An application to operate a municipal waste landfill shall contain a narrative describing the following:

\* \* \* \* \*

(2) [ The quantity, quality and availability of acceptable cover material and liner system construction material, including calculations and cross sections of the borrow areas, both on and off the proposed permit area. ] A detailed description of the volume of soil needed to construct and operate the facility.

§ 273.113. Maps and related information.

(a) An application shall contain a topographic map, on a scale of 1 inch equals no more than 200 feet with 10-foot maximum contour intervals, including necessary narrative descriptions, which shows the following:

(1) [ Boundaries ] The boundaries and names of present owners of record of land, both surface and subsurface, and including easements, rights-of-way and other property interests, for the proposed permit area and adjacent area; the boundaries of the land within the proposed permit area; and a description of title, deed or usage restrictions affecting the proposed permit area.

\* \* \* \* \*

(b) A different scale for the topographic map required in subsection (a) may be used if approved in writing by the Department.

(c) \* \* \*

[ (c) An application shall also contain a United States Department of Agriculture Soil Conservation Service soil map, or aerial photographs when current soils maps are unavailable, for the proposed permit area and adjacent area showing the site boundaries, soil types and the location of test pits of excavations taken under § 273.116 (relating to groundwater quality description). ]

§ 273.115. Geology and groundwater description.

(a) An application shall contain a description of the geology and groundwater in the proposed permit area and adjacent areas down to and including the lowest aquifer that may be affected by the facility, including the following:

\* \* \* \* \*

(8) The well head protection areas in accordance with § 109.1 (relating to definitions) that may be impacted by the facility.

(9) A groundwater contour map based upon the highest groundwater level recorded monthly in each boring for the previous year.

\* \* \* \* \*

§ 273.116. Groundwater quality description.

(a) An application shall contain a description of the chemical characteristics of each aquifer in the proposed permit area and adjacent area, based on at least [ 1 full year of monitoring data ] two quarters of monitoring data, one of which shall include the season of the highest local groundwater levels. This description shall be based on quarterly sampling and analysis from each monitoring well for the following parameters:

(1) Ammonia-nitrogen, chloride, chemical oxygen demand, nitrate-nitrogen, pH, specific conductance, total organic carbon, total phenolics, [ turbidity, ] iron, manganese and sodium.

\* \* \* \* \*

(4) Total alkalinity, fluoride[ , ] and sulfate[ , ] and total and dissolved concentrations of each of the following: arsenic, barium, cadmium, chromium, copper, lead, magnesium, mercury, potassium, selenium, silver and zinc.

\* \* \* \* \*

(b) [ For municipal waste landfills permitted by the Department after April 9, 1988, the 1 ] One year of data [ required by ] consistent with this section shall be taken prior to the disposal or storage of waste at the facility.

(c) [ For municipal waste landfills permitted by the Department before April 9, 1988, the 1 year of data required by this section shall be taken beginning with the first anniversary date of the issuance of the permit after April 9, 1988.

(d) [ Monitoring wells under this section shall be designed, constructed and maintained under §§ 273.281—273.283 (relating to general requirements; number, location and depth of monitoring points; and standards for wells and casing of wells). Sampling and analysis shall be conducted in accordance with a plan approved by the Department under § 273.152(b) (relating to water quality monitoring plan).

§ 273.117. Soil description.

(a) An application shall contain:

(1) [ A description of the soils within the proposed permit area and adjacent area down to the bedrock, including, for each soil horizon, depth, matrix color, texture, structure, consistency, degree of mottling, mottling colors and laboratory particle size analyses. ] The depth to the seasonal high water table within the proposed permit area and adjacent area to demonstrate that seasonal high water table will not contact the liner system.

(2) A description of soils to be used for daily, intermediate and final cover, and facility construction, including [ for each onsite or offsite borrow area ] texture, chemical [ analysis, structure, ] description, laboratory particle size analysis[ , ] and quantity [ and ]. A cross section of the borrow pits within the proposed permit area shall be included.

\* \* \* \* \*

§ 273.120. Mineral deposits information.

(a) If the proposed permit area and adjacent area [ overlies previous or current coal or noncoal mining operations ] overlies existing workings of an underground mine, the applicant shall submit sufficient information to evaluate the potential for mine subsidence damage to the facility, including the following:

\* \* \* \* \*

(2) [ A subsurface survey, with supporting documentation, by a registered professional engineer with geotechnical expertise. The study shall allow the Department to assess the probability and degree of surface subsidence and the methods which have been used or are proposed to stabilize the surface.

(b) If the proposed permit area overlies extractable mineral deposits and the applicant does not own or lease the mineral deposits, the applicant

shall submit a written plan showing that the minerals providing support will not be mined as long as municipal waste remains on the site. ]

An investigation, with supporting documentation, by a registered professional engineer with geotechnical expertise addressing the probability and potential impacts of future subsidence. The investigation shall address the potential for additional mining beneath the permit and adjacent area, the stability of the final underground workings, the maximum subsidence likely to occur in the future and the effect of that subsidence on the integrity of the facility, and any measures which have been or will be taken to stabilize the surface.

(b) If the proposed permit area or adjacent area overlies recoverable or mineable mineral deposits, the applicant shall demonstrate that the owner warrants that the minerals will not be mined as long as municipal waste remains on the site.

§ 273.121. Notification of proximity to airport.

An applicant shall notify the Federal Aviation Administration, the Department and the airport if a proposed landfill or lateral expansion is within a 5-mile radius of an airport runway end used by turbojet or piston-type aircraft.

PHASE II APPLICATION REQUIREMENTS—GENERAL PROVISIONS

§ 273.132. Operation plan.

An application shall contain a description of the municipal waste landfill operations proposed during the life of the facility within the proposed permit area, including, at a minimum, the following:

(1) A narrative describing the type and method of municipal waste landfill procedures, inspection and monitoring of incoming waste, sequence of landfilling activity, type of landfilling activity, proposed engineering techniques and the major equipment to be used under § 273.215 (relating to equipment), using the maps and grids required by § 273.133 (relating to map and grid requirements) as a basis for the description.

\* \* \* \* \*

(3) [ A narrative describing the type and size of equipment that is proposed to be used at the facility, as well as a description of the availability of standby equipment in the event of breakdown or maintenance.

(4) A narrative describing a plan for hiring and training facility operators and other personnel concerning the operation and approved design of the facility.

(5) ] \* \* \*

[ (6) ] (4) An explanation of how the applicant intends to comply with § 273.214 (relating to measurement and inspection of waste).

[ (7) ] (5) \* \* \*

[ (8) ] (6) The proposed operating hours of the proposed facility. The operating hours include those hours related to construction and other activities related to operation of the facility.

§ 273.134. Plan for access roads.

The application shall contain designs, cross sections and specifications for access roads, including load limits,

under § 273.213 (relating to access roads). Access roads shall be designed and constructed to handle adequately the truck traffic expected at the facility.

§ 273.136. Nuisance minimization and control plan.

(a) The application shall contain a plan in accordance with § 273.218 (relating to nuisance minimize and control) to [ prevent ] minimize and control hazards or nuisances from vectors, odors, noise, dust and other nuisances not otherwise provided for in the permit application. [ The plan shall provide for the routine assessment of vector infestation and shall also provide for countermeasures. The plan may include a control program involving a contractual arrangement for services with an exterminator. ]

(b) The plan shall include the following:

(1) Provisions for the routine assessment and control of vector infestation.

(2) Methods to minimize and control nuisances from odors, dustfall and noise off the property boundary from the facility.

(3) For odors, the determination of normal and adverse weather conditions based on site-specific meteorological data. Prior to the installation of equipment and collection of meteorological data, a protocol for the installation and data collection shall be approved by the Department.

(c) The plan required in subsection (a) may include a contractual arrangement for services of an exterminator or an air quality, noise, dust control or other professional.

§ 273.139. Relationship to county plans.

\* \* \* \* \*

(b) An application shall contain the following:

(1) An explanation of whether the proposed facility is [ expressly ] provided for in the approved plan for the host county. [ A facility will be considered expressly provided for in the host county plan only to the extent that implementing documents submitted by the county under § 272.245 designate the facility to receive a specified volume of waste pursuant to the host county plan. ] A facility is "provided for" if it is designated by the host county to provide capacity assurance in the approved host county plan. A facility analyzed as part of a planning process, but not designated, will not be considered "provided for."

(2) If the proposed facility is not [ expressly ] provided for in the approved host county plan:

\* \* \* \* \*

(iii) A detailed response to objection, if any, filed by the governing body of the host county within 60 days of the written notice under section 504 of the act (35 P.S. § 6018.504).

[ (c) If the application is for a facility that is not expressly provided for in the host county plan, an application for a proposed facility or a reasonable expansion of an existing facility shall contain an environmental siting analysis for each county generating municipal waste that will be disposed at the facility, demonstrating that the proposed location of the facility is at least as suitable as alternative locations within the generating county, giving con-

sideration to environmental and economic factors. The environmental siting analysis shall include a discussion and analysis of each of the following:

- (1) Transportation distances and associated impacts.
- (2) The environmental assessment criteria in § 271.127(a) (relating to environmental assessment).
- (3) The siting criteria and technical standards of 40 CFR Part 257 (relating to classification of solid waste disposal facilities) and 40 CFR Part 258 (relating to municipal solid waste landfills).
- (d) The location of an existing permitted facility, including the reasonable expansion of the facility, that is not expressly provided for in the host county plan will be considered at least as suitable as alternative locations within the generating county to the extent that the implementing documents submitted by the county under § 272.245 designate the facility to receive waste under one or more county plans.
- (e) The location of a proposed facility that is expressly provided for under subsection (b)(1) will be considered at least as suitable as alternative locations within the generating county to the extent that implementing documents submitted by the county under § 272.245 designate the facility to receive waste under one or more county plans.
- (f) The Department will require an applicant with a pending application to submit the information required under this section if, before the Department takes final action on the application, the Department receives from the county the legal documents necessary to implement the plan under § 272.245. ]

§ 273.140. Daily volume.

(a) The application [will] shall contain proposed average and maximum daily volumes for the facility, and a detailed justification for these volumes, based on §§ 271.126 and 271.127 (relating to requirement for environmental assessment; and environmental assessment), as well as [ , ] section 1112 of the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. § 4000.1112).

\* \* \* \* \*

(c) The average daily volume is a limit on the volume of solid waste that is permitted to be received [for disposal] at the facility, and shall be computed quarterly by averaging the total volume received over the [periods of time stated in the facility permit] quarter.

PHASE II APPLICATION REQUIREMENTS—COVER AND REVEGETATION

§ 273.141. Compaction and cover plan.

An application shall contain a plan for compaction and cover at the proposed facility under § 273.216 (relating to unloading and compaction) and §§ [273.231] 273.232—273.234 (relating to [topsoil storage;] daily cover; intermediate cover and slopes; and final cover and grading), including, at a minimum, the following information:

(1) [Procedures] The procedures for [ , ] placement and [degree of] compaction of [ , ] solid waste and the degree of compaction of waste.

- (2) [Number] The number and thickness of lifts.
- (3) [Procedures] The materials and procedures for application of daily, intermediate and final cover material, that meet the standards of §§ 273.232—273.234.
- (4) [Procedures] The procedures to establish elevation and final grade of final cover.
- [ (5) If cover material will be obtained from an offsite area not owned by the applicant, copies of contracts or other binding agreements showing that the applicant is authorized to obtain cover material from the offsite area for as long as waste is disposed at the proposed facility. ]

PHASE II APPLICATION REQUIREMENTS—WATER QUALITY PROTECTION AND MONITORING

§ 273.152. Water quality monitoring plan.

(a) An application shall contain a water quality monitoring plan showing how the operator intends to comply with §§ 273.281—273.288 (relating to water quality monitoring). The plan shall include, at a minimum, the following:

\* \* \* \* \*

(2) Preoperational data showing existing groundwater quality, as required by § 273.116 (relating to groundwater quality description), and a procedure to establish [back-ground water] this groundwater quality.

\* \* \* \* \*

PHASE II APPLICATION REQUIREMENTS—LINERS AND LEACHATE MANAGEMENT

§ 273.161. Liner system and leachate control plan.

\* \* \* \* \*

(c) The application shall demonstrate that leachate will not adversely affect the physical or chemical characteristics of the proposed liner system, or inhibit the liner's ability to restrict the flow of solid waste, solid waste constituents or leachate, based on [the most recent edition of] EPA [Method 9090 (Compatibility Test for Wastes and Membrane Liners), or other documented data] or ASTM guidelines approved by the Department.

(d) The application shall include a complete description of the physical, chemical, mechanical and thermal properties for the proposed primary and secondary liners, based on ASTM methods when appropriate. Except to the extent that the Department waives in writing any of the following for nonsynthetic secondary liners, these properties shall include, at a minimum:

\* \* \* \* \*

(13) [Soil-to-liner] Liner friction [( )angle in degrees ]].

\* \* \* \* \*

(19) Percent recycled materials.

§ 273.163. Modifications of leachate treatment plan.

(a) If a problem identified in § 273.277 (relating to Departmental notice and remedial action) occurs, the operator shall submit to the Department, within 60 days, a permit modification application under § 271.222 (relat-

ing to permit modification), with plans, designs and cross sections to modify its leachate treatment plan.

\* \* \* \* \*

**PHASE II APPLICATION REQUIREMENTS—CLOSURE PROVISIONS**

**§ 273.192. Closure plan.**

(a) The application shall contain a plan describing the activities that are proposed to occur [ **during the post-closure period** ] toward and after closure to ensure compliance with this chapter.

(b) The closure plan shall include:

\* \* \* \* \*

(3) [ **If the facility will close in stages, a description of how and when the facility will begin and implement partial closure.**

(4) ] \* \* \*

[ (5) ] (4) A narrative description, including a schedule, of measures that are proposed to be carried out toward and after closure at the facility, including measures relating to:

\* \* \* \* \*

(vi) Access control, **including maintenance of access control.**

[ (6) ] (5) \* \* \*

[ (7) ] (6) \* \* \*

**§ 273.196. Recycling plan.**

An application [ **for a facility that will be receiving waste after September 26, 1990,** ] shall contain [ **the following information in accordance with § 273.331 (relating to salvaging of materials):**

(1) **A detailed analysis of the potential for salvaging and recycling waste materials received at the facility, including the type of materials that will be received, the likelihood of receiving unmixed loads of waste materials and the markets for the materials.**

(2) **A ] a plan for salvaging and recycling waste materials received at the facility for which recycling is cost effective, including proposed salvage areas, salvaging methods and anticipated markets for salvaged materials under § 273.331 (relating to salvaging of materials).**

**§ 273.197. Plan for recycled materials collection center.**

An application [ **for a facility that will be receiving waste after September 26, 1990, including the expansion of an existing facility,** ] shall include a plan consistent with § 273.332 (relating to recycled materials collection center).

**Subchapter C. OPERATING REQUIREMENTS GENERAL PROVISIONS**

**§ 273.201. Basic limitations.**

\* \* \* \* \*

(b) A person or municipality may conduct monitoring under § 273.116 (relating to groundwater quality description) without a permit from the Department if the Department has given written approval for the monitor-

ing based on written plans that are consistent with this chapter. **The monitoring information may be used for a permit application for the proposed facility.**

\* \* \* \* \*

(i) A person or municipality may not allow solid waste [ **generated outside the host county for a facility** ] to be received, disposed or otherwise managed at the facility if the transportation to, or processing or management at, the facility would violate applicable laws in effect in the county or state in which the waste was generated, or state or local solid waste management plans in effect where the waste was generated.

(j) [ **After September 26, 1990, a facility may not receive ash residue from a resource recovery facility that is not complying with one of the following:**

(1) **The requirements of §§ 283.281 and 283.283 (relating to salvaging of materials; and removal of hazardous materials), if the resource recovery facility is in this Commonwealth.**

(2) **Requirements that the Department has determined to be at least as stringent as §§ 283.281 and 283.283, if the resource recovery facility is in another state.**

(k) **After September 26, 1990, loads ] Loads** composed primarily of leaf waste may not be disposed at the facility.

(k) **The approved mitigation measures identified in the permit application shall be completed before a facility may accept waste unless a later date is authorized in writing by the Department for technical reasons.**

**§ 273.202. Areas where municipal waste landfills are prohibited.**

(a) Except for areas that were permitted as a **municipal waste landfill** prior to April 9, 1988, a municipal waste landfill may not be operated as follows:

(1) **Floodplain.** In the 100-year floodplain of waters of this Commonwealth.

(2) **Wetland.**

(i) \* \* \*

(ii) **For a municipal waste landfill permit issued on or after \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), other than an expansion of a municipal waste landfill that was permitted prior to (Editor's Note: The blank refers to the effective date of adoption of this proposal.), in or within 100 feet of a wetland other than an exceptional value wetland, unless storage, processing and disposal will not occur within that distance and one of the following applies:**

(A) **If the operation is in or along the wetland, the operator has received a permit from the Department under Chapter 105 (relating to dam safety and waterway management).**

(B) **If the operation is not in or along the wetland, no adverse hydrologic or water quality impacts will result.**

(3) [ **In ] Minerals.**

(i) **For a municipal waste landfill permit issued prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.)**

or for an expansion of a municipal waste landfill that was permitted prior to \_\_\_\_\_(Editor's Note: The blank refers to the effective date of adoption of this proposal.) in coal bearing areas underlain by recoverable or mineable coals, unless the operator of the facility demonstrates and the Department finds, in writing, that the operator owns the underlying coal or has entered an agreement with the owner of the coal to provide support.

(ii) For a municipal waste landfill permit issued on or after \_\_\_\_\_(Editor's Note: The blank refers to the effective date of adoption of this proposal.), in areas underlain by mineable minerals, unless the operator owns the underlying minerals.

- (4) *Valley, ravine or head of hollow.* \* \* \*
- (5) *Limestone or carbonate formation.* \* \* \*
- (6) [ Within ] *Occupied dwelling.*

(i) For a municipal waste landfill permit issued prior to \_\_\_\_\_(Editor's Note: The blank refers to the effective date of adoption of this proposal.) or for an expansion of a municipal waste landfill that was permitted prior to \_\_\_\_\_(Editor's Note: The blank refers to the effective date of adoption of this proposal.), within 300 feet measured horizontally from an occupied dwelling, unless the current owner of the dwelling has provided a written waiver consenting to the facility being closer than 300 feet. [ Except for facilities permitted prior to April 9, 1988, the ] The disposal area of a municipal waste landfill may not be within 500 feet measured horizontally from an occupied dwelling unless the current owner of the dwelling has provided a written waiver consenting to the disposal area being closer than 500 feet. A waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the current owner.

(ii) For a municipal waste landfill permit issued on or after \_\_\_\_\_(Editor's Note: The blank refers to the effective date of adoption of this proposal.), within 300 yards measured horizontally from an occupied dwelling, unless the owner of the dwelling has provided a written waiver consenting to the facility being closer than 300 yards. A waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the owner.

- (7) *Perennial stream.* \* \* \*
- (8) *Property line.* \* \* \*
- \* \* \* \* \*
- (9) *Airport.*

(i) Within 10,000 feet—or 3,048 meters—of [ a ] an airport runway [ that is or will be ] end used by [ turbine-powered ] turbojet aircraft [ at a Federal Aviation Administration (FAA) certified airport ] during the [ term of the permit ] life of disposal operations under the permit unless the operator can demonstrate that the landfill is designed and operated so that the landfill does not pose a bird hazard to aircraft.

[ (10) ] (ii) Within 5,000 feet—or 1,524 meters—of [ a ] an airport runway [ that is or will be ] end used by piston-type aircraft [ at an FAA-certified airport ] during the life of disposal operations under the permit unless the operator can demonstrate that the land-

fill is designed and operated so that the landfill does not pose a bird hazard to aircraft.

(iii) For purposes of this subsection:

(A) *Airport* means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(B) *Bird hazard* means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

[ (11) Within the conical area at 14 CFR Part 77 (relating to objects affecting navigable airspace) for runway flight paths that are or will be used by turbine-powered or piston-type aircraft during the life of disposal operations under the permit.

(12) Within 25 feet of a coal seam, coal outcrop or coal refuse.

(13) ] (10) *Water source.* Within 1/4-mile upgradient, and within 300 feet or 91.4 meters downgradient, of a private or public water source [ . ] for disposal, processing and storage areas, except that the Department may waive or modify these isolation distances if the operator demonstrates and the Department finds, in writing, that the following conditions have been met:

(i) The owners of the public and private water sources in the isolation area have consented, in writing, to the location of the proposed facility.

(ii) The operator and each water source owner have agreed, in writing, that the applicant will construct and maintain at the operator's expense a permanent alternative water supply of like quantity and quality at no additional cost to the water source owner if the existing source is adversely affected by the facility.

(iii) The applicant has demonstrated that a replacement water source is technically and economically feasible and readily available for every public or private water source in the isolation area.

[ (b) Except for areas that were permitted prior to ] (11) *School park playground.*

(i) For a municipal waste landfill permit issued on or after September 26, 1998, [ a municipal waste landfill may not be operated ] except an expansion of municipal waste landfill permitted prior to September 26, 1998, within 300 yards of the following:

[ (1) Within 300 yards of a ] (A) A building which is owned by a school district or school and used for instructional purposes.

[ (2) Within 300 yards of a ] (B) A park.

[ (3) Within 300 yards of a ] (C) A playground.

[ (c) Except for areas that were permitted prior to January 25, 1997, a municipal waste landfill may not be operated as follows:

(1) Within 10,000 feet—or 3,048 meters—of an airport runway that is or will be used by turbine-powered aircraft during the life of disposal operations under the permit.

(2) Within 5,000 feet—or 1,524 meters—of an airport runway that is or will be used by piston-type aircraft during the life of disposal operations under the permit.

(d) (ii) The current property owner [ under subsection (b) in which a new facility is proposed ] of a school building, park or playground may waive the 300-yard prohibition by signing a written waiver. Upon receipt of the waiver, the Department will waive the 300-yard prohibition and will not use the prohibition as the basis for the denial of a new permit.

[ (e) The Department may waive or modify the isolation distance in subsection (a)(13) if the operator demonstrates and the Department finds, in writing, that:

(1) The owners of the public and private water sources in the isolation area have consented, in writing, to the location of the proposed facility.

(2) The operator and each water source owner have agreed, in writing, that the applicant will construct and maintain at the operator's expense a permanent alternative water supply of like quantity and quality at no additional cost to the water source owner if the existing source becomes polluted or degraded.

(3) The applicant has demonstrated that a replacement water source is technically and economically feasible and readily available for public or private water sources in the isolation area.

(f) (b) Except as provided in subsection [ (e) ] (c), this section does not apply to features that may come into existence after the date of the first newspaper notice of the filing of a permit application under § 271.141 (relating to public notice by applicant).

[ (g) ] (c) \* \* \*  
\* \* \* \* \*

§ 273.203. Certification.

(a) The operator shall submit a certification by a registered professional engineer on forms provided by the Department upon completion of each major construction activity identified in the permit for each phase or sequence of construction at the facility. Major construction activities include:

\* \* \* \* \*

(9) Construction of the landfill gas extraction system.

(10) \* \* \*

[ (10) ] (11) \* \* \*  
\* \* \* \* \*

(d) The closure and final closure activities will not be deemed complete until the Department has certified completion of closure and final closure activities.

DAILY OPERATIONS

§ 273.211. Signs and markers.

(a) A person or municipality that operates a municipal waste landfill shall identify the facility and the recycling drop-off center required under § 273.332 (relating to recycled materials collection center) for the duration of operations by posting and maintaining a sign which is clearly visible and can be easily seen and read at the junction of each access road and public road. The sign shall be constructed of a durable, weather-resistant material [ and shall be of a minimum size of 3 feet by 4 feet with a light background and

contrasting letters and numbers of a minimum height of 3 inches that can be easily seen and read. The sign shall show the name, business address and telephone number of the person or municipality that operates the facility, the operating hours of the facility and the number of the current permit authorizing operation of the facility ].

(b) Permanent physical markers for the grid coordinate system and permit area markers shall be:

(1) [ Be posted ] Posted and maintained for the duration of the operations to which they pertain.

(2) [ Be clearly ] Clearly visible, readable and uniform throughout the operation.

(3) [ Be permanently ] Permanently fixed and made of a durable material.

\* \* \* \* \*

§ 273.212. Access control.

\* \* \* \* \*

(b) The operator shall [ construct and ] maintain a fence or other suitable barrier around the site, including impoundments, leachate collection and treatment systems and gas processing facilities, sufficient to prevent unauthorized access.

\* \* \* \* \*

§ 273.213. Access roads.

\* \* \* \* \*

(b) [ Crossing ] A crossing of a perennial or intermittent stream or a wetland shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachments or water obstructions shall meet the requirements of Chapter 105 (relating to dam safety and waterway management).

(c) An access road shall have a drainage system that is compatible with the natural drainage system, structurally stable and which will pass safely the peak flow from a 25-year, 24-hour precipitation event. For roads that are used or in existence for more than 30 days, the drainage system shall include sloped or crowned road surfaces, cross drains or culverts, stabilized ditches, erosion resistant surfacing, sediment traps and other appropriate [ sediment control ] measures as required by § 273.242 (relating to soil erosion and sedimentation control).

\* \* \* \* \*

(e) [ A ] For roads leading to the waste disposal area, a landfill shall maintain a minimum cartway width of one of the following:

\* \* \* \* \*

(f) An access road negotiable by loaded collection vehicles shall be provided from the entrance gate of the facility to each unloading area[ , ] . An access road shall also be provided to each treatment facility [ or ], impoundment [ located on the site. An access road shall also be provided to ] and groundwater monitoring [ points ] point. Other monitoring points shall be readily accessible.

(g) [ An access road shall be constructed on a dry and stable area.

(h) Prior to the construction of a road, topsoil shall be removed and immediately used as final

cover or stored on a stable site and protected against erosion and compaction.

- (i) \* \* \*
- [ (j) ] (h) \* \* \*
- [ (k) ] (i) \* \* \*

§ 273.214. Measurement and inspection of waste.

\* \* \* \* \*

(c) The operator of a facility shall inspect and monitor incoming waste to insure that the disposal of waste is consistent with this article. Unless otherwise required by the Department, the monitoring and inspection shall include screening of waste for radioactive isotopes and be consistent with § 271.613 (relating to waste analysis plan).

§ 273.215. Equipment.

\* \* \* \* \*

(b) [ Standby equipment shall be located on the site or at a place where it can be available within 24 hours. ] If a breakdown of the operator's equipment occurs, the operator shall utilize standby equipment as necessary to comply with the act, the environmental protection acts, this subchapter and permit conditions.

§ 273.216. Unloading and compaction.

\* \* \* \* \*

(c) Solid waste shall be spread and compacted [ in layers not to exceed 2 feet in depth unless an alternative depth is ] as approved by the Department as part of the permit.

[ (d) The working face shall be kept to a size which can be easily compacted and covered daily with available equipment. ]

§ 273.217. Air resources protection.

(a) The operator shall implement fugitive [ dust ] air contaminant control measures and otherwise prevent and control air pollution in accordance with the Air Pollution Control Act (35 P. S. §§ 4001[—4015] and regulations thereunder ]—4014), Article III (relating to air resources) and § 273.218 (relating to nuisance minimization and control). Minimization and control measures shall include the following:

[ (b) The operator may ] (1) Ensuring that operation of the facility will not cause or contribute to exceeding ambient air quality standards under § 131.3 (relating to ambient air quality standards).

[ (c) No person or municipality may cause or allow ] (2) Ensuring that no open burning occurs at the facility.

(3) Minimizing the generation of fugitive dust emissions from the facility.

(b) The operator shall comply with the terms and conditions of an air quality plan approval and air quality operating permit issued to the facility.

§ 273.218. Nuisance minimization and control.

(a) [ The ] Vectors. An operator may not cause or allow the attraction, harborage or breeding of vectors.

(b) [ The ] Other harmful conditions. An operator shall [ also prevent and eliminate ] minimize and

control other conditions [ not otherwise prohibited by this subchapter ] that are harmful to the environment or public health, or which create safety hazards, odors, dust, noise, unsightliness and other public nuisances.

(c) Odors.

(1) An operator shall implement the plan approved under § 273.136 (relating to nuisance minimization and control plan) to minimize and control nuisances from odors. If the Department determines during operation of the facility that the plan is inadequate to minimize or control nuisance, the Department may modify the plan or require the operation to modify the plan and obtain Department approval.

(2) An operator shall perform regular, frequent and comprehensive site inspections to evaluate the effectiveness of cover, capping, gas collection and destruction, waste acceptance and all other waste management practices in reducing the potential for offsite odor creation.

(3) An operator shall promptly address and correct problems and deficiencies discovered in the course of inspections performed under paragraph (2).

§ 273.221. Daily volume.

\* \* \* \* \*

(b) The average daily volume is a limit on the volume of solid waste that is permitted to be received [ for disposal ] at the facility, and shall be computed quarterly by averaging the total volume received over the [ periods stated in the facility permit ] quarter.

COVER AND REVEGETATION

§ 273.231. [ Topsoil storage ] (Reserved).

[ (a) Topsoil shall be removed in a separate layer prior to preparation of an area for disposal or other surface disturbances.

(b) If topsoil is less than 12 inches, a 12-inch layer which includes the topsoil and the unconsolidated materials immediately below the topsoil shall be removed, segregated, conserved and replaced as the upper layer of final cover.

(c) If topsoil or other materials removed under subsections (a) and (b) are not promptly redistributed as cover, they shall be stockpiled, temporarily vegetated and otherwise protected from wind and water erosion, unnecessary compaction and contaminants which lessen the capability of materials to support vegetation when redistributed on the site. Topsoil and other material removed under this section may not be removed from the site. ]

§ 273.232. Daily cover.

(a) Except as provided in subsection (b), a uniform cover of the approved daily cover material shall be placed on exposed solid waste at the end of each working day [ , ] or at the end of every 24 hours [ or at the completion of every lift ], whichever interval is less.

(b) The composition of the daily cover material shall meet the following performance standards. The daily cover shall:

\* \* \* \* \*

(5) Be consistent with the waste acceptance plan for the facility.

(c) [ Unless alternative design requirements to meet the performance standards in subsection (b) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), daily cover shall meet the following design requirements:

(1) The cover shall fall within the United States Department of Agriculture textural classes of sandy loam, loam, sandy clay loam, silty clay loam, loamy sand and silt loam, as defined in the Soil Survey Manual published by the United States Department of Agriculture, Soil Conservation Service (available from the Department of the Northeast National Technical Center of the Soil Conservation Service, 160 E. 7th Street, Chester, Pennsylvania 19013-6092).

(2) At least 40% by weight of the cover soil shall be capable of passing through a 2 millimeter, No. 10 mesh sieve.

(3) The combustible or coal content of the cover may not exceed 12% by weight.

(4) The cover may not include rock fragments that are greater than 6 inches in diameter.

(5) The layer of cover soil shall be a minimum of 6 inches thick.

(6) The layer of cover soil shall be compacted.

(d) ] \* \* \*

[ (e) Areas on which intermediate cover has been placed, and on which neither waste nor final cover is placed within 30 days thereafter, shall be temporarily revegetated and otherwise protected against erosion and sedimentation under § 273.235 and other applicable requirements.

(f) ] (d) Intermediate slopes constructed during daily landfilling activities may not exceed 50%. [ Intermediate slopes shall be covered, compacted with 1 foot of intermediate cover material and revegetated to control erosion. ]

§ 273.233. Intermediate cover and slopes.

(a) A uniform and compacted intermediate cover [ of at least 12 inches in thickness ] shall be placed within 7 days of waste disposal on the following:

\* \* \* \* \*

[ (3) Each completed lift. ]

(b) The composition of the intermediate cover material shall meet the following performance standards. The intermediate cover shall:

\* \* \* \* \*

(5) [ Be capable of supporting ] Control infiltration of precipitation and erosion and sedimentation.

(6) Support the germination and propagation of vegetative cover as required by §§ 273.235 and 273.236 (relating to revegetation; and standards for successful revegetation) unless vegetative cover is not necessary to control infiltration of precipitation and erosion and sedimentation.

(7) Be consistent with the waste acceptance plan for the facility.

(c) Unless alternative design requirements to meet the performance standards in subsection (b) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), intermediate cover shall meet the following design requirements:

(1) [ The cover shall fall within the United States Department of Agriculture textural classes of sandy loam, loam, sandy clay loam, silty clay loam, loamy sand and silt loam ] If soil or soil-like material is used, the layer shall be at least 12 inches in thickness.

(2) [ At least 40% by weight of the fragments in the soil shall be capable of passing through a 2 millimeter, No. 10 mesh sieve ] If soil or soil-like material is used, the layer shall be uniformly graded.

[ (3) The combustible or coal content of the cover may not exceed 12% by weight.

(4) The cover may not include rock fragments that are greater than 6 inches in diameter. ]

\* \* \* \* \*

(e) [ Areas on which intermediate cover has been placed, and on which neither waste nor final cover is placed within 30 days thereafter, shall be temporarily revegetated and otherwise protected against erosion and sedimentation under § 273.235 and other applicable requirements. ] If intermediate cover requires vegetation it shall be established within 30 days.

(f) [ Intermediate slopes ] Slopes constructed during daily landfilling and intermediate cover activities may not exceed 50%. [ Intermediate slopes shall be covered, compacted with 1 foot of intermediate cover material and revegetated to control erosion. ]

§ 273.234. Final cover and grading.

(a) The operator shall provide final cover in the following manner:

(1) A cap [ consisting of a uniform and compacted 1-foot layer of clay ] shall be placed and graded over the entire surface of each final lift. [ The Department may approve, in the permit, synthetic material of the type and specifications set forth for primary liners in § 273.256 (relating to primary liner) and for caps in Table I of § 273.256 in lieu of the 1 foot layer of clay. ] The cap may be no more permeable than 1.0 × 10<sup>-7</sup> cm/sec. The following performance standards for the cap shall be met:

(i) The cap shall limit the migration of precipitation into the landfill to the greatest degree that is technologically possible.

(ii) The cap shall be resistant to physical and chemical failure.

(iii) The cap shall cover all areas where waste is disposed.

\* \* \* \* \*

(c) [ Final cover ] Unless alternative design requirements to meet the performance standards in subsection (a)(1)(i)—(iii) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the cap shall meet the design

requirements set forth for caps in Table 1 in § 273.256(e) (relating to primary liner).

(d) The layer of material described in subsection (a)(3) shall meet the following performance standards. [ Final cover ] The layer shall:

\* \* \* \* \*

(2) [ Cover solid waste after it is placed without change in its properties and without regard to weather.

(3) ] \* \* \*

[ (4) ] (3) Be [ noncombustible ] capable of controlling fires.

[ (5) ] (4) \* \* \*

[ (6) Compact well and not crack excessively when dry ] (5) Ensure slope stability.

[ (d) ] (e) Unless alternative design requirements to meet the performance standards in subsection [ (c) ] (d) are approved as part of the permit under § 271.231 (relating to equivalency review procedure) [ , final cover shall meet the same design requirements as are required of intermediate cover in § 273.233(c) (relating to intermediate cover and slopes). ] The layer of material described in subsection (a)(3) shall meet the following design requirements:

(1) The cover soil shall fall within the United States Department of Agriculture textural classes of sandy loam, loam, sandy clay loam, silty clay loam, loamy sand and silt loam as defined in the Soil Survey Manual published by the United States Department of Agriculture, Soil Conservation Service (available from the Department or the Northeast National Technical Center of the Soil Conservation Service, 160 E. 7th Street, Chester, Pennsylvania 19103-6092).

(2) At least 40% by weight of the cover soil shall be capable of passing through a 2 millimeter, No. 10 mesh sieve.

\* \* \* \* \*

[ (e) ] (f) \* \* \*

\* \* \* \* \*

[ (f) ] (g) Unless the Department authorizes a different slope design in the permit based on a demonstration that the different design can meet the requirements of subsection [ (e) ] (f), slopes shall be designed, installed and maintained as follows:

\* \* \* \* \*

WATER QUALITY PROTECTION

§ 273.241. General requirements.

\* \* \* \* \*

(c) The operator may not cause or allow [ pollution of ground ] water pollution within or outside the site. [ The operator may not cause or allow a discharge of contaminants into groundwater except as authorized by a permit from the Department. ]

§ 273.245. Water supply replacement.

(a) A person or municipality operating a municipal waste landfill which adversely affects a water supply by

degradation, pollution or other means shall restore or replace the affected water supply with an alternate source that is of like quantity and quality to the original supply at no additional cost to the owner. For purposes of this section, the term "water supply" includes existing or currently designated or currently planned sources of water or facilities or systems for the supply of water for human consumption or for agricultural, commercial, industrial or other legitimate use, including the uses protected by Chapter 93 (relating to water quality standards).

(b) A temporary water supply shall be provided as soon as practicable but not later than 48 hours after one of the following:

(1) Receipt of information showing that the operator is responsible for adversely affecting the water supply.

(2) Receipt of notice from the Department that the operator is responsible for adversely affecting the water supply.

(c) A permanent water supply shall be provided as soon as practicable but not later than 90 days after one of the following:

(1) Receipt of information showing that the operator is responsible for adversely affecting the water supply.

(2) Receipt of notice from the Department that the operator is responsible for adversely affecting the water supply.

\* \* \* \* \*

LINER SYSTEM

§ 273.251. Scope and requirements.

\* \* \* \* \*

(b) A liner system shall consist of the following elements:

\* \* \* \* \*

(3) Leachate detection zone, which is the prepared layer [ of soil or earthen material ] placed on top of the secondary liner and upon which the primary liner is placed, and in which a leachate detection system is located.

\* \* \* \* \*

(5) Protective cover and leachate collection zone, which is a prepared layer [ of soil or earthen material ] placed over the primary liner in which a leachate collection system is located.

(c) Either the primary or the secondary liner shall be constructed as a composite liner.

§ 273.252. General limitations.

(a) [ No person or municipality may construct a liner system for a facility unless there is at least 4 feet maintained between the ] The bottom of the subbase of the liner system [ and ] cannot be in contact with the seasonal high water table or perched water table without the use of groundwater pumping systems.

\* \* \* \* \*

(2) Drainage systems may be utilized to [ maintain a 4-foot isolation distance ] prevent contact between the bottom of the subbase of the liner system and the seasonal high water table or perched water table. The operator may not use a drainage system if the system is

likely to adversely affect the quality or quantity of water provided by a public or private water supply, even if a replacement supply is available under § 273.245 (relating to water supply replacement). The drainage system shall be limited to drain tile, piping, french drains or equivalent methods.

(b) [No person or municipality may construct a liner system for a facility unless at ] At least 8 feet [ can ] shall be maintained between the bottom of the subbase of the liner system and the regional groundwater table in an unconfined aquifer. The regional groundwater table may not be artificially [ manipulated ] lowered.

(c) In a confined aquifer, at least 8 feet shall be maintained between the bottom of the subbase of the liner system and the top of the confining layer or the shallowest level below the bottom of the subbase where groundwater occurs as a result of leakage from natural or preexisting causes. The integrity of the confining layer may not be compromised by excavation.

[ (c) ] \*\*\*

\* \* \* \* \*

[ (d) ] (e) \*\*\*

[ (e) ] (f) \*\*\*

[ (f) ] (g) \*\*\*

§ 273.253. Subbase.

\* \* \* \* \*

(b) Unless alternative design requirements to meet the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the subbase shall meet the following design requirements. The subbase shall:

\* \* \* \* \*

(2) [ Have a minimum bearing capacity of 4,500 pounds per square foot plus the total applied load in pounds per square foot.

(3) ] Be no more permeable than  $1 \times 10^{-5}$  cm./sec., based on laboratory and field testing unless the clay component of a composite liner is designed and constructed directly above the subbase.

[ (4) ] (3) \*\*\*

[ (5) ] (4) Have a postsettlement slope of at least 2% and no more than [ 25% ] 33%.

§ 273.254. Secondary liner.

(a) Performance standards. \*\*\*

\* \* \* \* \*

(b) Alternative design requirements. Unless alternative design requirements to meet the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the secondary liner shall meet, at a minimum, the requirements of [ Table I ] the table in § 273.256(e) (relating to primary liner).

(c) Requirements. A secondary liner shall:

\* \* \* \* \*

(2) [ For synthetic liners, be ] Be installed according to manufacturer's specifications under the supervision of

an authorized representative of the manufacturer if the liner is synthetic. An approved quality assurance and quality control plan shall be implemented in the field during the installation of the liner.

(3) [ For remolded clay liners, be ] Be designed, installed and maintained according to a quality assurance and quality control plan approved by the Department if the liner is remolded clay.

\* \* \* \* \*

(d) Compacted lifts. Secondary liners made of clay, bentonite and bentonite-like materials shall be constructed in compacted lifts not exceeding 6 inches in depth unless the operator submits a field demonstration validating the stability of compacted lifts greater than 6 inches. A lift shall be scarified before placement of the next lift.

\* \* \* \* \*

(f) [ No facility or component of it that is subject to this section may have a secondary liner based upon natural attenuation of leachate. ] Composite secondary liner.

(1) If the operator does not design, construct, operate and maintain a composite primary liner, the operator shall design, construct, operate and maintain a composite secondary liner which has the following components:

(i) An upper component made of a manufactured liner that meets the requirements of this section independently of the lower component.

(ii) A lower component made of earthen material that meets the requirements of this section independently of the upper component, except that the lower component may be no more permeable than  $1.0 \times 10^{-7}$  cm/sec. based on laboratory and field testing and, at a minimum, meets the requirements of the table in § 273.256(e) (relating to primary liner).

(2) The two components of the composite liner shall be designed, constructed and maintained to provide a compression connection, or direct, continuous, and uniform contact, between them.

(3) The use of a composite secondary liner does not relieve the operator of responsibility for a separate primary liner under § 273.256.

(g) Natural attenuation of leachate prohibited. A facility or a component thereof that is subject to this chapter may not have a secondary liner based upon natural attenuation of leachate.

§ 273.255. Leachate detection zone.

\* \* \* \* \*

(b) Unless alternative design requirements to meet the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the leachate detection zone of a liner system shall meet the following design requirements:

\* \* \* \* \*

(2) Contain no material exceeding [ .25 ] 0.5 inches in particle size.

\* \* \* \* \*

(5) The piping system shall also meet the following:

\* \* \* \* \*

(ii) [ The distance between pipes in the piping system may not exceed 100 feet on center.

(iii) ] The pipes shall be installed primarily perpendicular to the flow and shall have a minimum postsettlement grade of at least 2%.

[ (iv) ] (iii) \* \* \*

[ (v) Rounded noncarbonate stones or aggregates shall be placed around the piping system. ]

[ (vi) ] (iv) \* \* \*

[ (vii) ] (6) \* \* \*

(7) Contain noncarbonate stone or aggregates without sharp edges.

\* \* \* \* \*

(d) If liquid is flowing from the leachate detection zone and the average flow exceeds 10 gallons per acre per day (weekly average), the operator shall:

\* \* \* \* \*

(3) Sample and analyze the liquid, on a quarterly basis, for pH, specific conductivity, total organic carbon [ and chlorides ], chloride, total alkalinity, ammonia-nitrogen and chemical oxygen demand. The Department may also require sampling and analysis for other constituents expected to be found in the waste.

\* \* \* \* \*

(e) If [ sampling results indicate that ] leachate [ has penetrated the liner, ] flow is greater than 100 gallons per acre of lined area per day or more than 10% of leachate generation, the operator shall:

\* \* \* \* \*

§ 273.256. Primary liner.

(a) *General.* The primary liner shall meet the following requirements:

\* \* \* \* \*

(b) *Alternative design standards.* Unless alternative design standards to meet the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the

primary liner shall meet, at a minimum, the requirements of [ Table I ] the table in subsection (e).

(c) *Requirements.* A primary liner shall:

\* \* \* \* \*

(d) [ The operator may design, construct, operate and maintain a composite primary liner which has an upper component made of a manufactured liner that meets the requirements of this section independently of the lower component and a lower component made of earthen material that meets the requirements of § 273.254 (relating to secondary liner) independently of the upper component. ] *Composite primary liner:*

(1) [ The two components of the composite liner shall be designed, constructed and maintained to provide a compression connection, or direct continuous contact between them. ] If the operator does not design, construct, operate and maintain a composite secondary liner, the operator shall design, construct, operate and maintain a composite primary liner which has the following components:

(i) An upper component made of a manufactured liner that meets the requirements of this section independently of the lower component.

(ii) A lower component made of earthen material that meets the requirements of this section independently of the upper component, except that the lower component shall be no more permeable than  $1.0 \times 10^{-7}$  cm/sec. based on laboratory and field testing and, at a minimum, meets the requirements of the table in subsection (e).

(2) The two components of the composite liner shall be designed, constructed and maintained to provide a compression connection, or direct, continuous, and uniform contact between them.

[ (2) ] (3) \* \* \*

(e) [ Except as provided in subsection (d), no ] *Natural attenuation of leachate prohibited.* A facility or component thereof that is subject to this [ section ] chapter may not have a primary liner [ made of clay or earthen material or a primary liner ] based upon natural attenuation of leachate.

TABLE I

MINIMUM LINER DESIGN STANDARDS

LINER MATERIAL	FUNCTION	MINIMUM FIELD THICKNESS (UNITS AS SPECIFIED)	LINER DENSITY (TESTS AS SPECIFIED)	REMARKS
Geomembranes	Primary or Secondary Liner	[ 50 ] 30 mil	NA	1. A greater thickness may be required depending upon the recommendations of the manufacturer. 2. HDPE liners shall be at least 60 mil.
Geomembranes	[ Secondary Liner, ] Cap	30 mil [ 30 mil ]	NA	1. A greater thickness may be required depending upon the recommendations of the manufacturer.

<i>LINER MATERIAL</i>	<i>FUNCTION</i>	<i>MINIMUM FIELD THICKNESS (UNITS AS SPECIFIED)</i>	<i>LINER DENSITY (TESTS AS SPECIFIED)</i>	<i>REMARKS</i>
Natural & Remolded Clay	Secondary Liner, Cap	2 feet 1 foot	≥90%* ≥90%*	1. [ <b>Proctor Density Test.</b> 2. <b>Minimum 25% clay by weight less than .002 mm particle size.</b> ] <b>Minimum of 30% fines by weight less than 0.074 mm particle size (#200 sieve).</b> 2. <b>Plasticity index ≥ 10.</b> 3. No coarse fragments greater than 3/4 inch in diameter.
<b>Sodium Bentonite &amp; Bentonite-like materials</b>	Secondary Liner, Cap, <b>Composite Component</b>	1 foot 1 foot <b>1 foot</b>	≥90%* ≥90%*	1. [ <b>Proctor Density Test.</b> 2. <b>Sodium bentonite treated with polymers unless otherwise approved.</b> 3. <b>Soil-Bentonite mixtures shall have a combined clay content of 25% clay by weight less than .002 mm particle size. Soil material used in the mixtures shall contain no more than 50% sand by weight with particle size of .5 to 2 mm. ]</b> <b>Minimum of 8% powdered sodium bentonite or manufacturer's recommendations, whichever is greater.</b> 2. <b>No coarse fragments greater than 3/4 inch in diameter.</b> 3. <b>No organic matter.</b>
<b>Geosynthetic Clay Liner (GCL)</b>	<b>Composite Component</b>	N/A	N/A	<b>Minimum of 3/4 pound of powdered or granular sodium bentonite per square foot.</b>

\* Percentage is of maximum theoretical density when using Marshall method of design, and percentage of maximum when using Standard Proctor method of design (Pa. PTM No. 106, Method B).

**§ 273.257. Protective cover.**

(a) The protective cover shall meet the following performance standards. The protective cover shall:

\* \* \* \* \*

**(4) Cover the bottom and sidewalls of the disposal area.**

(b) Unless alternative design requirements to meet the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the protective cover shall meet the following design requirements. The protective cover shall be:

(1) Comprised of clean earth material that contains no aggregate, rocks, debris, plant material or other solid material larger than [ 1/4 ] 1/2 inch in diameter, and no material with sharp edges.

(2) Graded [ , uniformly compacted and smooth ].

\* \* \* \* \*

**§ 273.258. Leachate collection system within protective cover.**

(a) The leachate collection system within the protective cover shall meet the following performance standards. The leachate collection system shall:

\* \* \* \* \*

(2) Ensure that the depth of leachate on or above the primary liner does not exceed 1 foot, **unless a greater depth is approved by the Department in the permit for sump areas or for a 25-year, 24-hour precipitation event where the 1-foot head will be exceeded for less than 3 days.**

\* \* \* \* \*

(b) Unless alternative design requirements to the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the leachate collection system [ **with** ] **within** the protective cover shall comply with the following design requirements:

\* \* \* \* \*

(4) [ **Rounded,** ] **The leachate collection system shall contain noncarbonate stones or aggregates [ shall be placed around the pipes of the piping system ].**

(5) The pipes shall be installed primarily perpendicular to the flow **and shall have a minimum postsettlement grade of at least 2%.**

\* \* \* \* \*

**LEACHATE TREATMENT**

**§ 273.272. Basic treatment methods.**

(a) Except as otherwise provided in this section, leachate shall be collected and handled by direct dis-

charge into a permitted publicly-owned treatment works, following pretreatment, [ or other ] if pretreatment is required by Federal, State or local law or by discharge into another permitted treatment facility.

\* \* \* \* \*

§ 273.274. Leachate recirculation.

(a) In conjunction with the treatment methods in §§ 273.272 and 273.273 (relating to basic treatment methods; and leachate transportation), recirculation of leachate may be utilized if the following exist:

\* \* \* \* \*

(4) [ Leachate ] The leachate recirculation is conducted with an approved piping system located under the intermediate cover, and causes no odors, runoff or ponding.

(5) The leachate is not a hazardous waste.

(b) An alternate leachate recirculation method may be used if approved by the Department, if one of the liner systems installed at the facility is a composite liner.

§ 273.275. Leachate collection and storage.

\* \* \* \* \*

(b) An onsite leachate storage system shall be part of each leachate treatment method used by the operator. The storage system shall contain [ :

(1) Impoundments ] impoundments or tanks for storage of leachate [ prior to treatment ]. The tanks or impoundments shall have [ a flow equalization and surge ] sufficient storage capacity at least equal to the maximum expected production of leachate for any 30-day period for the life of the facility estimated under § 273.162 (relating to leachate treatment plan), or 250,000 gallons, whichever is greater. No more than 25% of the total leachate storage capacity may be used for flow equalization on a regular basis.

[ (2) Impoundments or tanks for storage of treated leachate. The tanks or impoundments shall have a capacity at least equal to that in subsection (b)(1). ]

(c) The impoundments or tanks shall be aerated as necessary to prevent and control odors. Impoundments or tanks shall each have a capacity of at least 250,000 gallons, unless otherwise approved by the Department.

(d) The storage capacity of impoundments and tanks at a site shall be increased if additional storage is required prior to each major phase of construction and as otherwise necessary.

\* \* \* \* \*

(g) Underground pipes used for the transport of leachate from the liner system to the leachate storage impoundments or tanks shall be equipped with secondary containment. The secondary containment shall be designed, constructed and installed to direct any release to an area that can be inspected for leaks.

§ 273.276. Leachate analysis and sludge handling.

(a) Upon commencement of leachate flow from the facility, the operator shall sample and analyze the following:

\* \* \* \* \*

(2) On a quarterly basis, unless otherwise specified in the permit, the chemical composition of leachate flowing into the leachate treatment system [ , including total alkalinity, specific conductance, chlorides, sulfates, total dissolved solids, chemical oxygen demand, metals and volatile organic analysis ]. The analysis shall be sufficient to determine the impact of leachate on the liner system, the effectiveness of the leachate treatment system, the need for modification of the groundwater monitoring system or the effluent limitations in an NPDES permit, and the actual characteristics of leachate from the waste disposed at the facility. For the purpose of this quarterly analysis, the leachate sample shall be collected from the influent storage tank or impoundment and shall be representative of the average mixed influent leachate quality. The Department may modify the frequency of chemical analysis or not require certain constituents to be tested following four consecutive quarters of analysis if the operator demonstrates that modifying the frequency of chemical analysis will not compromise groundwater protection.

\* \* \* \* \*

§ 273.277. [ Remedial ] Departmental notice and remedial action.

The operator shall immediately notify the Department and describe remedial steps to be taken if:

(1) Operation of the treatment facilities [ under ] in accordance with the approved plan cannot prevent [ any of the following:

(i) Violating ] violation of the terms of its permits, The Clean Streams Law (35 P. S. §§ 691.1—691.1001) [ and ] or regulations thereunder.

[ (ii) Surface water pollution or groundwater pollution. ]

\* \* \* \* \*

WATER QUALITY MONITORING

§ 273.281. General requirements.

(a) A person or municipality that operates a municipal waste landfill shall install, operate and maintain a monitoring system that can detect the entry of solid waste, solid waste constituents, leachate, contaminants or constituents of decomposition into the [ ground ] groundwater or surface water. The monitoring system shall comply with this section and §§ 273.282—273.288.

(b) [ No ] A person may not construct, install or use a monitoring system for a municipal waste landfill until that system has first been approved by the Department in writing.

§ 273.282. Number, location and depth of monitoring points.

(a) The water quality monitoring system shall accurately characterize groundwater flow, groundwater chemistry and flow systems on the site and adjacent area. The system shall consist, at a minimum, of the following:

(1) At least one monitoring well at a point hydraulically upgradient from the disposal area in the direction of increasing static head that is capable of providing representative data of groundwater not affected by the facility, except when the facility occupies the most upgradient

position in the flow system. In that case, sufficient downgradient monitoring wells shall be placed to determine the extent of **adverse effects on groundwater [ degradation or pollution ]** from the facility.

\* \* \* \* \*

(b) The upgradient and downgradient monitoring wells shall be:

(1) Sufficient in number, location and depth to be representative of water **[ qualilty ] quality.**

\* \* \* \* \*

(3) Located within 200 feet of the permitted disposal area **and located at the points of compliance.**

(c) In addition to the requirements of subsection (b), upgradient monitoring wells shall be located so that they will not be affected by **adverse effects on groundwater [ degradation or pollution ]** from the disposal area.

(d) In addition to the requirements of subsection (b), downgradient monitoring wells shall be located so that they will provide early detection of **adverse effects on groundwater [ degradation or pollution ]** from the disposal area.

(e) **[ A well drilled under this section shall be drilled by drillers licensed under the Water Well Drillers License Act (32 P. S. §§ 645.1—645.13). ]** The well materials shall be decontaminated prior to installation.

§ 273.283. Standards for wells and casing of wells.

(a) **[ Monitoring wells ]** A monitoring well shall be constructed with a screen that meets the following requirements:

- (1) **The screen shall be factory made.**
- (2) **The screen may not react with the groundwater being monitored.**
- (3) **The screen may maximize open area to minimize entrance velocities and allow rapid sample recovery.**
- (b) **A monitoring well shall be filter-packed with chemically inert clean quartz sand, silica or glass beads. The material shall be well-rounded and dimensionally stable.**

(c) A monitoring well shall be cased as follows:

(1) The casing shall maintain the integrity of the monitoring well borehole **and shall be constructed of material that will not react with the groundwater being monitored.**

\* \* \* \* \*

(3) **[ The casing shall be screened or perforated, and packed with gravel or sand where necessary, to enable collection of samples at depths where appropriate aquifer flow zones exist.**

(4) **[ ]** The casing shall protrude at least 1 foot aboveground, **unless otherwise approved by the Department, and shall be clearly visible.**

(4) **The casing shall be designed and constructed to prevent cross contamination between surface water and groundwater.**

\* \* \* \* \*

**[ (b) Monitoring ] (d) A monitoring well [ casings ] casing shall be enclosed in a protective casing that shall:**

\* \* \* \* \*

(2) Be installed for at least the upper 10 feet of the monitoring well, as measured from the well cap, **with a maximum stick up of 3 feet**, unless otherwise approved by the Department in writing.

\* \* \* \* \*

(4) Be numbered **for identification with a label capable of withstanding field conditions** and painted in a highly visible color.

(5) Protrude **[ at least 1 inch higher ]** above **[ grade than ]** the monitoring well casing.

\* \* \* \* \*

§ 273.284. Sampling and analysis.

A person or municipality operating a municipal waste landfill shall conduct sampling and analysis from each monitoring **[ well ] point** for the following parameters at the following frequencies:

(1) Quarterly, for ammonia-nitrogen, **bicarbonate, calcium, chloride, fluoride,** chemical oxygen demand, nitrate-nitrogen, pH, specific conductance, **sulfate, total alkalinity,** total organic carbon, total phenolics, **[ turbidity, ] total dissolved solids,** iron, manganese, **potassium** and sodium.

\* \* \* \* \*

(4) Annually, for total **[ alkalinity, fluoride, sulfate, ] and dissolved concentrations of the following:** arsenic, barium, cadmium, chromium, copper, lead, magnesium, mercury, **[ potassium, ]** selenium, silver and zinc.

(5) Annually, for the following volatile organic compounds: 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,2,3-trichloropropane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 2-dichloropropane, 3-chloro-1-propene, 4-methyl-2-pentanone, bromomethane, carbon tetrachloride, chlorobenzene, chlorodibromomethane, chloroethane, chloromethane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, dichlorodifluoromethane, methyl ethyl **[ , ]** ketone, tribromomethane and trichlorofluoromethane.

\* \* \* \* \*

§ 273.286. Groundwater assessment plan.

(a) **Requirement.** A person or municipality operating a municipal waste landfill shall prepare and submit to the Department a groundwater assessment plan within **[ 30 ] 60** days after one of the following occurs:

\* \* \* \* \*

(2) Laboratory **[ analyses ] analysis** of one or more **[ contiguous ]** public or private water supplies shows the presence of degradation that could reasonably be attributed to the facility.

(b) **Exceptions.** The operator is not required to conduct an assessment under this section if **one of** the following **[ conditions are met ]** applies:

(1) Within 10 **working** days after receipt of sample results showing groundwater degradation $[ , ]$  the operator resamples the affected wells $[ .$

(2) **Analysis ] and analysis** from resampling shows, to the Department's satisfaction, that groundwater degradation has not occurred.

(2) **Within 20 working days after receipt of sample results indicating groundwater degradation, the operator demonstrates that the degradation was caused entirely by earth moving and other activities related to facility construction, or by seasonal variations.**

(c) The groundwater assessment plan shall specify the manner in which the operator will determine the existence, quality, quantity, areal extent and depth of groundwater degradation, and the rate and direction of migration of contaminants in the groundwater. A groundwater assessment plan shall be prepared by an expert in the field of hydrogeology. The plan shall contain, at a minimum, the following information:

\* \* \* \* \*

(3) Evaluation procedures, including the use of previously gathered groundwater quality information, to determine the concentration, rate and extent of groundwater degradation [ or pollution ] from the facility.

\* \* \* \* \*

(5) **Identification of the abatement standard that will be met.**

(d) The groundwater assessment plan shall be implemented upon approval by the Department in accordance with the approved implementation schedule, and shall be completed in a reasonable time not to exceed 6 months unless otherwise approved by the Department. If the Department determines that the proposed plan is inadequate, it may modify the plan and approve the plan as modified. **The operator shall notify in writing, each owner of a private or public water supply located within 1/2-mile downgradient of the disposal area that an assessment has been initiated.**

\* \* \* \* \*

(g) This section does not prevent the Department from requiring, or the operator from conducting, [ abatement of ] groundwater [ pollution ] abatement or water supply replacement concurrently with or prior to implementation of the assessment.

**§ 273.287. Abatement plan.**

(a) The operator of a municipal waste landfill shall prepare and submit to the Department an abatement plan whenever one of the following occurs:

(1) The groundwater assessment plan prepared and implemented under § 273.286 (relating to groundwater assessment plan) shows the presence of groundwater [ pollution ] degradation at one or more monitoring wells and the analysis under § 273.286(c) indicates that an abatement standard under subsection (d) will not be met.

(2) Monitoring by the Department or operator shows the presence of [ groundwater pollution ] an abatement standard exceedance from one or more [ monitoring wells ] compliance points as indicated in subsection (d), even if a groundwater assessment plan has not been completed. The operator is not required to implement an abatement plan under this paragraph if the following conditions are met:

(i) Within 10 days after receipt of sample results showing [ groundwater pollution ] an exceedance of an abatement standard at a point of compliance described in subsection (d), the operator resamples the affected wells.

(ii) Analysis from resampling shows to the Department's satisfaction that [ groundwater pollution ] an exceedance of an abatement standard has not occurred.

(b) An abatement plan shall be prepared by an expert hydrogeologist and submitted to the Department. The plan shall contain [ , at a minimum, ] the following information:

\* \* \* \* \*

(c) **The abatement plan shall be completed and submitted to the Department for approval within 90 days of the time the obligation arises under this section unless the date is otherwise modified, in writing, by the Department.**

(d) **If abatement is required in accordance with subsection (a), the operator shall demonstrate compliance with one or more of the following abatement standards at and beyond 150 meters of the perimeter of the permitted disposal area or at and beyond the property boundary, whichever is closer:**

(1) **For constituents for which a MCL has been promulgated under the Federal Safe Drinking Water Act or the Pennsylvania Safe Drinking Water Act (42 U.S.C.A. §§ 300f–300j-18; and 35 P. S. §§ 721.1–721.17), the MCL for that constituent.**

(2) **For constituents for which MCLs have not been promulgated, the background standard for the constituent.**

(3) **For constituents for which the background standard is higher than the MCL or risk-based standard identified under paragraph (4), the background standard.**

(4) **For constituents for which no primary MCLs under the Federal and State Safe Drinking Water Acts (42 U.S.C.A. §§ 300f–300j-18; and 35 P. S. §§ 721.1–721.17) exist, the risk-based standard if the following conditions are met:**

(i) **The risk assessment used to establish the standard assumes that human receptors exist at the property boundary.**

(ii) **The level is derived in a manner consistent with Department guidelines for assessing the health risks of environmental pollution.**

(iii) **The level is based on scientifically valid studies conducted in accordance with the good laboratory practice standards (40 CFR Part 792), promulgated under the Toxic Substances Control Act (15 U.S.C.A. §§ 2601–2692), or other scientifically valid studies approved by the Department.**

(iv) **For carcinogens, the level represents a concentration associated with an excess lifetime cancer risk level of 1.0 x 10<sup>-5</sup> at the property boundary.**

(e) \*\*\*

[ (d) ] (f) \*\*\*

**MINERALS AND GAS**

**§ 273.291. Mineral resources.**

(a) The operator shall isolate coal seams [ and ], coal outcrops and coal refuse from waste deposits [ by barriers of natural and compacted soil that are at least 25 feet in thickness ] in a manner that prevents combustion of the waste and that prevents damage to the liner system.

\* \* \* \* \*

§ 273.292. Gas control and monitoring.

\* \* \* \* \*

(e) Combustible gas levels may not equal or exceed:

\* \* \* \* \*

[ (3) Twenty-five percent of the lower explosive limit in an adjacent area, including buildings or structures on adjacent areas. ]

(f) The operator shall conduct active forced ventilation of the facility, using vents located at least [ 1 foot ] 3 feet above the landfill surface if one of the following applies:

\* \* \* \* \*

§ 273.293. Gas recovery.

(a) Gas recovery shall be conducted as follows:

\* \* \* \* \*

(3) [ With active forced ventilation, using vents located at least 1 foot above the landfill surface.

(4) ] \*\*\*

(b) The operator shall, on an annual basis, physically and chemically characterize recovered gas, condensates or other residues which are generated. Users of the recovered gas shall be informed of the chemical quality of the gas. If the gas, condensates or other residues are hazardous, they shall be managed under Chapters 260—265 and 270.

EMERGENCY PROCEDURES

§ 273.301. Hazard prevention.

[ (a) ] \*\*\*

[ (b) First aid facilities shall be available and job safety shall be practiced. ]

§ 273.302. Emergency equipment.

(a) Except as provided in subsection (b), the operator shall have available in proper working condition the following equipment at the immediate operating area of the facility:

\* \* \* \* \*

(3) Portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment. For fire control equipment requiring water, the facility shall have a water supply of adequate quantity and pressure to supply the equipment.

\* \* \* \* \*

(d) Adequate space shall be maintained to allow the unobstructed movement of emergency personnel and equipment to [ any ] operating [ area ] areas of the facility.

§ 273.303. Implementation of contingency plan.

\* \* \* \* \*

(b) During an emergency, the operator shall:

\* \* \* \* \*

(3) Immediately telephone the Department and county emergency management agency and report the following information:

(i) [ Name ] The name of the person reporting the incident and telephone number where that person can be reached.

(ii) [ Name ] The name, address and permit number of the facility.

(iii) [ Date ] The date, time and location of the emergency.

\* \* \* \* \*

(vi) [ Parts ] The parts of the contingency plan being implemented to alleviate the emergency.

(c) After an emergency, the operator of the facility shall do the following:

\* \* \* \* \*

(2) Prevent disposal, processing, storage or treatment of solid waste in the area affected by the emergency until the operator has cleaned up the area, and the Department has inspected and approved the resumption of operation after the cleanup.

RECORDKEEPING AND REPORTING

§ 273.311. Daily operational records.

\* \* \* \* \*

(b) The daily operational record shall include the following:

\* \* \* \* \*

(9) A record of rejected waste loads and the reasons for rejecting the loads.

\* \* \* \* \*

§ 273.313. Annual operation report.

\* \* \* \* \*

(b) The annual operation report, which shall be submitted on a form supplied by the Department, shall include the following:

(1) A topographic survey map of the same scale, contour interval and grid system as the original site plans showing the following:

(i) The contours at the beginning and the end of the year. The Department may also require the report to include plans showing cross-sections of the permit area every 100 feet showing the permitted elevations and the actual elevations if deemed necessary by the Department to verify waste receipt, capacity or other information.

\* \* \* \* \*

(c) The annual operation report shall be accompanied by a nonrefundable annual permit administration fee of \$ [ 1,800 ] 2,800 in the form of a check payable to the "Commonwealth of Pennsylvania."

\* \* \* \* \*

§ 273.315. Recycling fee.

(a) On and after October 26, 1988, the operator of a municipal waste landfill shall pay a recycling fee in the form of a check payable to the "Commonwealth of Pennsylvania, Recycling Fund," in accordance with Chapter 7 of the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. §§ 4000.701—4000.706). This fee shall terminate on [ October 25, 1998 ] October 25, 2003.

\* \* \* \* \*

(b) The fee shall be paid for all solid waste, except process residue and nonprocessable waste from a resource recovery facility, that is received at the facility on and after October 26, 1988, including, but not limited to, residual waste, special handling wastes, waste tires and other solid wastes received at the landfill. The recycling fee does not apply to recyclable or reusable materials that are received or separated from other waste at a transfer, composting or processing facility associated with the landfill, and which are marketed in accordance with subsection (d).

\* \* \* \* \*

(d) [ The recycling fee is not applicable to process residues from resource recovery facilities which have paid or will pay, in the next calendar quarter, the recycling fee on the waste from which that process residue is derived. The recycling fee is not applicable to nonprocessable waste from a resource recovery facility that is disposed in a landfill within this Commonwealth.

(e) ] \*\*\*

CLOSURE PROVISIONS

§ 273.322. Closure.

\* \* \* \* \*

(b) At least 180 days before implementation of a closure [ or partial closure ] plan, the operator shall review its approved closure plan to determine whether the plan requires modification, and shall submit proposed changes to the Department for approval under § 271.222 (relating to permit modification).

(c) If groundwater degradation exists at closure or occurs after closure, a person shall meet one of the following:

(1) Continue to implement an approved abatement plan.

(2) Submit an application for a closure plan modification in accordance with the procedures for a major permit modification. The operator shall select one or more remediation standards that will be met in accordance with the final closure certification requirements in § 271.342 (relating to final closure certification). The Department will accept the operator's selection of remediation standards if the requirements of subsection (d) are met.

(d) An application for a closure plan modification shall include the following:

(1) Technical information and supporting documentation identifying the remediation activities that will be conducted to meet and maintain the remediation standards.

(2) If a remedy relies on access to or use of properties owned by third parties, for remediation or monitoring, documentation of cooperation or agreement.

Subchapter E. ADDITIONAL OPERATING REQUIREMENTS FOR SPECIAL HANDLING AND RESIDUAL WASTES

GENERAL

§ 273.501. Scope.

(a) A person or municipality that operates a municipal waste landfill shall comply with the applicable require-

ments of this subchapter if the person or municipality [ disposes of ] receives special handling or residual waste at the facility.

\* \* \* \* \*

(c) Special handling and residual waste may not be [ disposed ] received at a municipal waste landfill unless:

\* \* \* \* \*

(2) The waste is [ disposed ] received in accordance with the terms and conditions of the permit, the requirements of this chapter, the act and the environmental protection acts.

(3) The waste is compatible with the liner system.

(4) The waste is compatible with other wastes disposed at the facility.

(5) The leachate generated by the disposed waste can be adequately treated by the leachate treatment facility.

(6) The physical characteristics of the waste will not cause or contribute to structural instability or other operation problems at the site.

SPECIFIC WASTES

§ 273.513. Sewage sludge.

[ (a) If a facility receives solid waste other than sewage sludge, the total amount of sewage sludge disposed at the facility may not exceed 25% by weight of the total weight of waste disposed on a working day. For purposes of this measurement, a cubic yard of sewage sludge at 20% solids shall be deemed to weigh 1,700 pounds, unless the sewage sludge is weighed.

(b) If a facility receives only sewage sludge, sewage sludge disposed at the facility shall contain at least 40 solids by weight. This requirement may be met by adding or blending fly ash, foundry sand, sawdust, lime, leaves, soil or other materials that have been approved by the Department prior to disposal as part of the permit.

(c) The operator of a municipal waste landfill that receives sewage sludge shall also comply with the sampling requirements of § 273.521 (Reserved). ]

Prior to receipt at a landfill, sewage sludge shall be stabilized to meet processes to significantly reduce pathogens or processes to further reduce pathogens. The Department may approve as part of a permit another stabilization method if the operator demonstrates that the stabilization method will control pathogens, vectors and odors.

CHAPTER 277. CONSTRUCTION/DEMOLITION WASTE LANDFILLS

Subchapter B. APPLICATION REQUIREMENTS PHASE I APPLICATION REQUIREMENTS

§ 277.110. Modification to expand existing landfill.

For a construction/demolition waste landfill constructed with attenuating soil and permitted by the Department prior to \_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), the Department may waive or modify the liner system and leachate treatment requirements in this chapter in the approval of a complete

application for permit modification for expansion of the landfill if the operator demonstrates the following:

(1) No groundwater degradation has occurred from the existing operation.

(2) The physical properties and chemical composition of the waste that will be received under the permit modification will not change from that approved under the existing permit.

§ 277.112. Facility plan.

An application to operate a construction/demolition waste landfill shall contain a narrative describing the following:

(1) The general operational concept for the proposed facility, including the origin, composition and weight or volume of solid waste that is proposed to be disposed of at the facility, type of liner system [ if a liner system is proposed ], the proposed capacity of the facility, the expected life of the facility and the size, sequence and timing of solid waste disposal operations at the facility.

(2) [ The quantity, quality and availability of acceptable cover material and liner system construction material, including calculations and cross sections of the borrow areas, both on and off the proposed permit area. ] A detailed description of the volume of soil needed to construct and operate the facility.

§ 277.113. Maps and related information.

(a) An application shall contain a topographic map on a scale in which 1 inch equals no more than 200 feet with 10-foot maximum contour intervals, including necessary narrative descriptions, which shows the following:

(1) Boundaries and names of present owners of record of land, both surface and subsurface, and including easements, rights-of-way and other property interests, for the proposed permit area and adjacent area; the boundaries of the land within the proposed permit area; and a description of title, deed or usage restrictions affecting the proposed permit area.

\* \* \* \* \*

(b) A different scale for the topographic map required in subsection (a) may be used if approved in writing by the Department.

(c) \*\*\*

[ (c) An application shall also contain a United States Department of Agriculture Soil Conservation Service soils map, or aerial photographs when current soil maps are unavailable, for the proposed permit area and adjacent area showing the site boundaries, soil types and the location of test pits or excavations taken under § 277.117. ]

§ 277.115. Geology and groundwater description.

(a) An application shall contain a description of the geology and groundwater in the proposed permit area and adjacent area down to and including the lowest aquifer that may be affected by the facility, including the following:

\* \* \* \* \*

(8) The well head protection areas in accordance with § 109.1 (relating to definitions) that may be impacted by the facility.

(9) A groundwater contour map based upon the highest groundwater level recorded monthly in each boring for the previous year.

\* \* \* \* \*

§ 277.116. Groundwater quality description.

\* \* \* \* \*

(d) Monitoring wells under this section shall be designed, constructed and maintained under §§ 277.281—277.283 (relating to general requirements; number, location and depth of monitoring points; and standards for wells and casing of wells).

§ 277.117. Soils description.

(a) An application shall contain the following:

(1) [ A description of the soils within the proposed permit area and adjacent area down to the bedrock, including, for each soil horizon, depth, matrix, color, texture, structure, consistency, degree of mottling, mottling colors and laboratory particle size analyses. ] A description of the depth to the seasonal high water table within the proposed permit area and adjacent area to demonstrate that the seasonal high water table will not contact the liner system.

(2) A description of the soils to be used for intermediate cover, final cover and facility construction, including, [ for each borrow area, whether onsite or offsite, ] texture, [ structure ] chemical description, laboratory particle size [ analyses ] analysis is and quantity [ and ]. A cross section of the borrow pits within the proposed permit area shall be included.

(3) For an expansion of a facility under § 277.102 (relating to 277.110 (relating to modifications to expand existing landfill)), a description of the soils within the proposed permit area and adjacent area down to the bedrock, including, for each soil horizon, depth, matrix, color, texture, structure, consistency, degree of mottling, mottling colors and laboratory particle size analysis.

\* \* \* \* \*

(c) [ If natural attenuation of leachate instead of a liner system and leachate controls is proposed, ] For an expansion of a facility under § 277.110, the application shall contain an explanation, based on the soils described in this section, of how the facility would comply with § 277.246 (relating to attenuating soil base).

§ 277.120. Mineral deposits information.

(a) If the proposed permit area and adjacent area overlies [ previous or current coal or noncoal mining operations ] existing workings of an underground mine, the applicant shall submit sufficient information to evaluate the potential for mine subsidence damage to the facility, including the following:

\* \* \* \* \*

(2) [ A subsurface survey, with supporting documentation, by a registered professional engineer with geotechnical expertise. The study shall allow the Department to assess the probability and degree of surface subsidence and the methods which have been used or are proposed to stabilize the surface. ] An investigation, with supporting documentation, by a registered professional engineer

with geotechnical expertise addressing the probability and potential impacts of future subsidence. The investigation shall address the potential for additional mining beneath the permit and adjacent area, the stability of the final underground workings, the maximum subsidence likely to occur in the future and the effect of that subsidence on the integrity of the facility and any measures which have been or will be taken to stabilize the surface.

(b) If the proposed permit area [overlies extractable mineral deposits and the applicant does not own or lease the mineral deposits, the applicant shall submit a written plan showing that the minerals providing support] or adjacent area overlies recoverable or mineable mineral deposits, the applicant shall demonstrate that the owner warrants that the minerals will not be mined as long as construction/demolition waste remains on the site.

§ 277.121. Notification of proximity to airport.

An applicant shall notify the Federal Aviation Administration, the Department and the airport if a proposed landfill or lateral expansion is within a 5-mile radius of an airport runway end used by turbojet or piston-type aircraft.

PHASE II APPLICATION REQUIREMENTS—  
GENERAL PROVISIONS

§ 277.131. Basic requirements.

\* \* \* \* \*

(c) The plans, designs, cross sections and maps required by this section and §§ 277.132—277.137, 277.141, 277.142, 277.151, 277.152, 277.161—[277.164] 277.163, 277.171, 277.181, 277.191 and 277.192 shall be on a scale in which 1 inch equals no more than 200 feet with 10-foot maximum contour intervals.

\* \* \* \* \*

§ 277.132. Operation plan.

An application shall contain a description of the construction/demolition waste landfill operations proposed during the life of the facility within the proposed permit area, including, at a minimum, the following:

(1) A narrative describing the type and method of construction/demolition waste landfill procedures, inspection and monitoring of incoming waste, sequence of land filling activity, type of landfilling activity, proposed engineering techniques and the major equipment to be used under § 277.215 (relating to equipment), using the maps and grids required by § 277.133 (relating to map and grid requirements) as a basis for description.

\* \* \* \* \*

[ (3) A narrative describing the type and size of equipment that is proposed to be used at the facility, as well as a description of the availability of standby equipment in the event of breakdown or maintenance.

(4) A narrative describing a plan for hiring and training facility operators and other personnel concerning the operation and approved design of the facility.

(5) ](3) \*\*\*

[ (6) ] (4) An explanation of how the applicant intends to comply with § 277.214 (relating to measurement and inspection of waste).

[ (7) ] (5) \*\*\*

[ (8) ] (6) The proposed operating hours of the proposed facility. The operating hours include those hours related to construction and other activities related to operation of the facility.

§ 277.134. Plan for access roads.

The application shall contain designs, cross sections and specifications for access roads, including load limits, under § 277.213 (relating to access roads). Access roads shall be designed and constructed to handle adequately the truck traffic expected at the facility.

§ 277.136. Nuisance minimization and control plan.

(a) The application shall contain a plan [under] in accordance with § 277.218 (relating to nuisance minimization and control) to [prevent] minimize and control hazards or nuisances from vectors, odors, noise, dust and other nuisances not otherwise provided for in the permit application. [The plan shall provide for the routine assessment of vector infestation and shall also provide for countermeasures. The plan may include a control program involving a contractual arrangement for services with an exterminator.]

(b) The plan shall include the following:

(1) Provisions for the routine assessment and control of vector infestation.

(2) Methods to minimize and control nuisances from odors, dustfall and noise off the property boundary from the facility.

(3) For odors, the determination of normal and adverse weather conditions based on site-specific meteorological data. Prior to the installation of equipment and collection of meteorological data, a protocol for the installation and data collection shall be approved by the Department.

(c) The plan required in subsection (a) may include a contractual arrangement for services of an exterminator or an air quality, noise, dust control or other professional.

§ 277.138. Recycling plan.

The application shall contain [the following information in accordance with § 277.219 (relating to recycling):

(1) A detailed analysis of the potential for salvaging and recycling waste materials received at the facility, including the type of materials that will be received, the likelihood of receiving unmixed loads of waste materials and the markets for the materials.

(2) A ] a plan for salvaging and recycling waste materials received at the facility for which recycling is cost effective, including proposed salvage areas, salvaging methods and anticipated markets for salvaged materials, in accordance with § 277.219 (relating to recycling).

§ 277.139. Daily volume.

(a) The application shall contain proposed average and maximum daily volumes for the facility, and a detailed justification for volumes, based on §§ 271.126 and 271.127 (relating to requirement for environmental assessment; and environmental assessment).

(b) The average daily volume is a limit on the volume of solid waste that is permitted to be received at the facility, and shall be computed quarterly by averaging the total volume received over the quarter.

PHASE II APPLICATION REQUIREMENTS—  
COVER AND REVEGETATION

§ 277.141. Compaction and cover plan.

An application shall contain a plan for compaction and cover at the proposed landfill under §§ 277.216 [ and 277.231— ], 277.232 and 277.233 (relating to [ unloading and compaction; topsoil storage; ] intermediate cover and slopes; and final cover and grading), including, at a minimum, the following information:

- (1) [ Procedures ] The procedures for, and degree of, compaction of [ , ] solid waste.
- (2) [ Number ] The number and thickness of lifts.
- (3) [ Procedures ] The materials and procedures for application of intermediate cover and final cover material that meet, the standards in §§ 277.232 and 277.233.
- (4) [ Procedures ] The procedures to establish elevation and final grade of final cover.

[ (5) If cover material will be obtained from an offsite area not owned by the applicant, copies of contracts or other binding agreements showing that the applicant is authorized to obtain cover material from the offsite area for as long as waste is disposed at the proposed facility. ]

PHASE II APPLICATION  
REQUIREMENTS—WATER QUALITY PROTECTION  
AND MONITORING

§ 277.152. Water quality monitoring plan.

(a) An application shall contain a water quality monitoring plan showing how the operator intends to comply with §§ 277.281—277.288 (relating to water quality monitoring). The plan shall include, at a minimum, the following:

\* \* \* \* \*

(2) Preoperational data showing existing groundwater quality as required by § 277.116 (relating to groundwater quality description), and a procedure to establish [ background water ] this groundwater quality.

\* \* \* \* \*

PHASE II APPLICATION REQUIREMENTS—  
LINERS AND LEACHATE MANAGEMENT

§ 277.161. Liner system and leachate control plan.

(a) [ If the composition of the construction/demolition waste to be disposed at the site or other factors indicates a potential for surface water pollution or groundwater pollution, the ] The application shall contain plans, drawings, cross sections and specifications for a liner system to demonstrate compliance with §§ 277.251—277.260 (relating to liner system) including:

\* \* \* \* \*

(c) The application shall demonstrate that leachate will not adversely affect the physical or chemical characteris-

tics of the proposed liner, or inhibit the liner's ability to restrict the flow of solid waste, solid waste constituents or leachate, based on [ the most recent edition of ] EPA [ Method 9090 (Compatibility Test for Wastes and Membrane Liners), or other documented data ] or ASTM guidelines approved by the Department.

(d) The application shall include a complete description of the physical, chemical, mechanical and thermal properties for the proposed liner, based on ASTM methods when appropriate. Except to the extent that the Department waives in writing any of the following for nonsynthetic liners, these properties shall include, at a minimum:

\* \* \* \* \*

(13) Soil-to-liner friction [ ( ) angle in degrees ( ) ].

\* \* \* \* \*

(19) Percent recycled materials.

§ 277.162. Leachate treatment plan.

(a) [ If the composition of the construction/demolition waste to be disposed at the site or other factors indicate a potential for surface water or groundwater pollution, the ] The application shall contain a plan for treating leachate from the proposed facility in a manner that complies with §§ 277.271—277.276. The plan shall include:

\* \* \* \* \*

§ 277.163. Modifications in leachate treatment plan.

(a) If a problem identified in § 277.277 (relating to Departmental notice and remedial action) occurs, the operator shall submit to the Department, within 60 days, a permit modification application under § 271.222 (relating to permit modification), with plans, designs and cross sections to modify its leachate treatment plan.

\* \* \* \* \*

§ 277.164. Application requirements for noncoal mine disposal.

(a) In addition to the other requirements of this subchapter, a person or municipality that applies for an expansion of a construction/demolition waste landfill permit in a noncoal mine permitted prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.) shall submit a plan, including necessary drawings, designs and specifications, to show how the applicant will comply with § 277.259 (relating to noncoal mine disposal).

\* \* \* \* \*

PHASE II APPLICATION REQUIREMENTS—  
CLOSURE PROVISIONS

§ 277.192. Closure plan.

(a) The application shall contain a plan describing the activities that are proposed to occur [ during the postclosure period ] toward and after closure to ensure compliance with this chapter.

(b) The closure plan shall include:

\* \* \* \* \*

(3) [ If the facility will close in stages, a description of how and when the facility will begin and implement partial closure.

(4) ] \*\*\*

[ (5) ] (4) A narrative description, including a schedule, of measures that are proposed to be carried out toward and after closure at the facility, including measures relating to:

\* \* \* \* \*

(vi) Access control, including maintenance of access control.

[ (6) ] (5) \*\*\*

[ (7) ] (6) \*\*\*

Subchapter C. OPERATING REQUIREMENTS
GENERAL PROVISIONS

§ 277.201. Basic limitations.

\* \* \* \* \*

(b) A person or municipality may conduct monitoring under § [ 273.116 ] 277.116 (relating to groundwater quality description) without a permit if the Department has given written approval for the monitoring based on written plans that are consistent with this chapter. The monitoring information may be used for a permit application for the proposed facility.

\* \* \* \* \*

(j) [ On and after September 26, 1990, loads ] Loads composed mostly of leaf waste may not be disposed at the facility.

(k) A person or municipality may not allow solid waste [ generated outside the host county of a facility ] to be received, disposed or otherwise managed at the facility if the transportation to, or processing or management at, the facility would violate applicable laws in effect in the county or state in which the waste was generated, or [ state ] State or local solid waste management plans in effect where the waste was generated.

(l) The approved mitigation measures identified in the permit application shall be completed before a facility may accept waste unless a later date is authorized in writing by the Department for technical reasons.

§ 277.202. Areas where construction/demolition waste landfills are prohibited.

(a) Except for areas that were permitted as a construction/demolition waste landfill prior to April 9, 1988, [ no ] a construction/demolition waste landfill may not be operated as follows:

- (1) Floodplain. \* \* \*
(2) Wetland.
(i) \*\*\*

(ii) For a construction/demolition waste landfill permitted on or after \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.) other than an expansion of a construction/demolition waste landfill that was permitted prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), in or within 100 feet of a wetland other than an exceptional value wetland, unless storage, processing and disposal will not occur within that distance and one of the following applies:

(A) If the operation is in or along the wetland, the operator has received a permit from the De-

partment under Chapter 105 (relating to dam safety and waterway management).

(B) If the operation is not in or along the wetland, no adverse hydrologic or water quality impacts will result.

(3) Minerals.

(i) [ In ] For a construction/demolition waste landfill permit issued prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.) or for an expansion of a construction/demolition waste landfill that was permitted prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), in coal bearing areas underlain by recoverable or mineable coals, unless the operator of the facility demonstrates and the Department finds, in writing, that the operator owns the underlying coal, or has entered an agreement with the owner of the coal to provide support.

(ii) For a construction/demolition waste landfill permit issued on or after \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), in areas underlain by mineable minerals, unless the operator owns the underlying minerals.

- (4) Valley, ravine or head of hollow. \* \* \*
(5) Limestone or carbonate formation. \* \* \*
(6) Occupied dwelling.

(i) [ Within ] For a construction/demolition waste landfill permit issued prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.) or for an expansion of a construction/demolition waste landfill that was permitted prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), [ Within ] within 300 feet measured horizontally from an occupied dwelling, unless the current owner of the dwelling has provided a written waiver consenting to the facilities being closer than 300 feet. [ Except for facilities permitted prior to April 9, 1988, the ] The disposal area of a construction/demolition waste landfill may not be within 500 feet measured horizontally from an occupied dwelling, unless the current owner has provided a written waiver consenting to the disposal area being closer than 500 feet. A waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the current owner.

(ii) For a construction/demolition waste landfill permit issued on or after \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), within 300 yards measured horizontally from an occupied dwelling, unless the owner of the dwelling has provided a written waiver consenting to the facility being closer than 300 yards. A waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the owner.

- (7) Perennial stream. \* \* \*
(8) Property line. \* \* \*

\* \* \* \* \*

(9) Water source. Within 1/4 mile upgradient, and within 300 feet downgradient, of a public or private water source [ . ] For disposal, processing and storage

areas, except that the Department may waive or modify these isolation distances if the operator demonstrates and the Department finds, in writing, that the following conditions have been met:

(i) The owners of the public and private water sources in the isolation area have consented, in writing, to the location of the proposed facility.

(ii) The operator and each water source owner have agreed, in writing, that the applicant will construct and maintain at the operator's expense a permanent alternative water supply of like quantity and quality at no additional cost to the water source owner if the existing source is adversely affected by the facility.

(iii) The applicant has demonstrated that a replacement water source is technically and economically feasible and readily available for every public or private water source in the isolation area.

(10) [ Within 25 feet of a coal seam, coal outcrop or coal refuse, unless the Department finds, in writing, that the wastes to be disposed are totally noncombustible. ] *School, park, playground.*

(i) For a construction/demolition waste landfill permit issued on or after \_\_\_\_\_ (*Editor's Note: The blank refers to the effective date of adoption of this proposal.*) other than an expansion of a construction/demolition waste landfill that was permitted prior to \_\_\_\_\_ (*Editor's Note: The blank refers to the effective date of adoption of this proposal.*), within 300 yards of:

(A) A building which is owned by a school district or school and used for instructional purposes.

(B) A park.

(C) A playground.

(ii) The current property owner of a school, park or playground may waive the 300-yard prohibition by signing a written waiver. Upon receipt of the waiver, the Department will waive the 300-yard prohibition.

(b) [ The Department may waive or modify the isolation distance in subsection (a)(9), if the operator demonstrates and the Department finds, in writing, that:

(1) The owners of public and private water sources in the isolation area have consented, in writing, to the location of the proposed facility.

(2) The operator and each water source owner have agreed, in writing, that the applicant will construct and maintain at the operator's expense a permanent alternative water supply of like quantity and quality if the existing source becomes polluted or degraded.

(3) The applicant has demonstrated that a replacement water source is technically and economically feasible and readily available for every public or private water source in the isolation area.

(c) ] Except as provided in subsection [ (d) ] (c), this section does not apply to features that may come into existence after the date of the first newspaper notice of the filing of a permit application under § 271.141 (relating to public notice by applicant).

[ (d) ] (c) This section does not apply to features that may come into existence after the date of the first newspaper notice under this subsection if the following apply:

(1) The person or municipality publishes a notice of intent to file an application for a [ municipal ] construction/demolition waste landfill permit. The notice, which is separate from the newspaper notice required by § 271.141, shall be published once a week for 3 consecutive weeks in a newspaper of general circulation in the area where the facility is proposed to be located. The notice shall include a brief description of the location and proposed operation of the facility.

\* \* \* \* \*

§ 277.203. Certification.

(a) The operator shall submit a certification by a registered professional engineer on forms provided by the Department upon completion of each major construction activity identified in the permit for each phase or sequence of construction at the facility. Major construction activities include:

\* \* \* \* \*

(6) Placement of attenuating soil at [ natural attenuation facilities ] an expansion of a construction/demolition waste landfill permitted prior to \_\_\_\_\_ (*Editor's Note: The blank refers to the effective date of adoption of this proposal.*).

\* \* \* \* \*

(11) Construction of the landfill gas extraction system.

\* \* \* \* \*

(d) The closure and final closure activities will not be deemed complete until the Department has certified completion of closure and final closure activities.

DAILY OPERATIONS

§ 277.211. Signs and markers.

(a) A person or municipality that operates a construction/demolition waste landfill shall identify the facility for the duration of operations by posting and maintaining a sign which is clearly visible and can be easily seen and read at the junction of each access road and public road. The sign shall be constructed of a durable, weather-resistant material [ and shall be of a minimum size of 3 feet by 4 feet with a light background and contrasting letters and numbers of a minimum height of 3 inches that can be easily seen and read. The sign shall show the name, business address and telephone number of the person who operates the facility, the operating hours of the facility and the number of the current permit authorizing operation of the facility ].

\* \* \* \* \*

§ 277.212. Access control.

\* \* \* \* \*

(b) The operator shall [ construct and ] maintain a fence or other suitable barrier around the site, including impoundments, and leachate collection and treatment systems, sufficient to prevent unauthorized access.

\* \* \* \* \*

§ 277.213. Access roads.

\* \* \* \* \*

(b) A crossing of a perennial or intermittent stream or a wetland shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachments or water obstructions shall meet the requirements of Chapter 105 (relating to dam safety and waterway management).

(c) An access road shall have a drainage system that is compatible with the natural drainage system, structurally stable and which will pass safely the peak flow from a 25-year, 24-hour precipitation event. For roads that are used or in existence for more than 30 days, the drainage system shall include sloped or crowned road surfaces, cross drains or culverts, stabilized ditches, erosion resistant surfacing, sediment traps and other appropriate [ sediment control ] measures as required by § 277.242 (relating to soil erosion and sedimentation control).

\* \* \* \* \*

(e) [ A ] For roads leading to the waste disposal area, a landfill shall maintain a minimum cartway width of one of the following:

\* \* \* \* \*

(g) An access road negotiable by loaded collection vehicles shall be provided from the entrance gate of the facility to unloading areas [ , ] . An access road shall be provided to each treatment [ facilities or impoundments located on the site. An access road shall also be provided to ] facility impoundment and groundwater monitoring [ points ] point. Other monitoring points shall be readily accessible.

(h) [ Access roads shall be constructed on dry and stable areas.

(i) Prior to the construction of a road, topsoil shall be removed and used immediately as final cover, or stored on a stable site and protected against erosion. ]

[ (j) ] (h) \*\*\*

[ (k) ] (i) \*\*\*

§ 277.214. Measurement and inspection of waste.

An operator of a construction/demolition waste landfill shall inspect incoming waste and shall accurately measure waste by volume or weight prior to unloading.

§ 277.215. Equipment.

\* \* \* \* \*

(b) [ Standby equipment shall be located on the site or at a place where it can be available within 24 hours. ] If a breakdown of the operator's equipment occurs, the operator shall utilize standby equipment as necessary to comply with the act, the environmental protection acts, this subchapter and its permit conditions.

§ 277.216. Unloading and compaction.

\* \* \* \* \*

(c) Construction/demolition waste shall be spread and compacted in shallow layers sufficient to minimize void spaces during placement of lifts. [ No lift may be greater than 8 feet in depth at natural attenuation facilities. ]

\* \* \* \* \*

[ (e) Construction/demolition waste may not be unloaded or disposed in areas where continuous or intermittent contact would occur between waste and the groundwater table. ]

§ 277.217. Air resources protection.

(a) The operator shall implement fugitive [ dust ] air contaminant control measures and otherwise prevent and control air pollution under the Air Pollution Control Act (35 P. S. §§ 4001—4014) [ and regulations thereunder ] Article III (relating to air resources) and § 277.218 (relating to nuisance minimization and control). Minimization and control measures shall include the following:

[ (b) The operator may ] (1) Ensuring that operation of the facility will not cause or contribute to the exceeding of ambient air quality standards under § 131.3 (relating to ambient air quality standards).

[ (c) No person or municipality may cause or allow ] (2) Ensuring that no open burning occurs at the facility.

(3) Minimizing the generation of fugitive dust emissions from the facility.

(b) The operator shall comply with the terms and conditions of an air quality plan approval and air quality operating permit issued to the facility.

§ 277.218. Nuisance minimization and control.

(a) [ The ] Vectors. An operator may not cause or allow the attraction, harborage or breeding of vectors.

(b) [ The ] Other: An operator shall [ also prevent and eliminate ] minimize and control other conditions [ not otherwise prohibited by this subchapter ] that are harmful to the environment or public health, or which create safety hazards, odors, dust, noise, unsightliness and other public nuisances.

(c) Odors.

(1) An operator shall implement the plan approved under § 277.136 (relating to nuisance minimization and control plan) to minimize and control nuisances from odors. If the Department determines during operation of the facility that the plan is inadequate to minimize or control nuisance, the Department may modify the plan or require the operator to modify the plan and obtain Department approval.

(2) An operator shall perform regular, frequent and comprehensive site inspections to evaluate the effectiveness of cover, capping, gas collection and destruction, waste acceptance and all other waste management practices in reducing the potential for offsite odor creation.

(3) An operator shall promptly address and correct problems and deficiencies discovered in the course of inspections performed under paragraph (2).

§ 277.221. Daily volume.

(a) A person or municipality operating a construction/demolition waste landfill may not receive solid waste at the landfill in excess of the maximum or average daily volume approved in the permit.

(b) The average daily volume is a limit on the volume of solid waste that is permitted to be received at the facility, and shall be computed quarterly by averaging the total volume received over the quarter.

**COVER AND REVEGETATION**

§ 277.231. [Topsoil storage ] (Reserved).

[ (a) Topsoil shall be removed in a separate layer prior to preparation of the area for disposal or other surface disturbances.

(b) If topsoil is less than 12 inches, a 12-inch layer which includes the topsoil and the unconsolidated materials immediately below the topsoil shall be removed, segregated, conserved and replaced as the upper layer of final cover.

(c) If topsoil or other materials removed under subsections (a) and (b) are not promptly redistributed as cover, they shall be stockpiled, temporarily vegetated and otherwise protected from wind and water erosion, unnecessary compaction and contaminants which lessen the capability of materials to support vegetation when redistributed on the site. Topsoil and other material removed under this section may not be removed from the site. ]

§ 277.232. Intermediate cover and slopes.

(a) The operator shall provide intermediate cover on lifts every 50 feet horizontally or at the end of each working week, whichever comes first, by placing a compact and uniform cover [ of at least 1 foot of soil ] on the working face and on the side slopes.

(b) The composition of the intermediate cover material shall meet the following performance standards. The intermediate cover shall:

\* \* \* \* \*

(3) Be [ noncombustible and prevent the spread of combustion ] capable of controlling fires.

(4) Be consistent with the waste acceptance plan for the facility.

(5) \*\*\*

(6) Control infiltration of precipitation and erosion and sedimentation.

(7) Be capable of supporting the germination and propagation of vegetative cover as required by §§ 277.234 and 277.235 (relating to vegetation; and standards for successful revegetation) unless vegetative cover is not necessary to control infiltration of precipitation and erosion and sedimentation.

(c) Unless alternative design requirements to the performance standards in subsection (b) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), intermediate cover shall meet the following design requirements:

(1) [ The cover shall fall within the United States Department of Agricultural textural classes of sandy loam, loam, sandy clay loam, silty clay loam, loamy sand and silt loam. ] If soil or soil-like, be at least 12 inches in thickness.

(2) [ At least 40% by weight of the fragments in the soil shall be capable of passing through a 2

millimeter, No. 10 mesh sieve. ] If soil or soil-like material is used, the layer shall be uniformly graded.

[ (3) The combustible or coal content of the cover may not exceed 12% by weight.

(4) The cover may not include rock fragments that are greater than 6 inches in diameter. ]

\* \* \* \* \*

(e) [ Areas on which intermediate cover is placed, and on which neither waste nor final cover is placed within 30 days thereafter, shall be temporarily revegetated and otherwise protected against erosion and sedimentation in accordance with § 277.234 (relating to revegetation) and other applicable requirements. ] If intermediate cover requires vegetation, it shall be established within 30 days.

(f) [ Intermediate slopes ] Slopes constructed during daily landfilling activities may not exceed 50%. [ Intermediate slopes shall be covered, compacted with 1 foot of intermediate cover material and revegetated to control erosion. ]

§ 277.233. Final cover and grading.

(a) The operator shall provide final cover in the following manner:

(1) For construction/demolition waste landfills which require a [ bottom ] liner, a cap [ consisting of a uniform and compacted 1 foot layer of clay ] shall be placed and graded over the entire surface of each final lift. [ The Department may approve, in the permit, synthetic material of the type and specifications set forth for primary liners in § 277.255 (relating to liner) and for caps in Table I of § 277.255, in lieu of the 1-foot layer of clay. ] The cap may be no more permeable than 1.0 x 10<sup>-7</sup> cm/sec. The following performance standards for the cap shall be met:

(i) The cap shall limit the migration of precipitation into the landfill to the greatest degree that is technologically possible.

(ii) The cap shall be resistant to physical and chemical failure.

(iii) The cap shall cover all areas where waste is disposed.

(2) For construction/demolition waste landfills which require a [ bottom ] liner, a drainage layer capable of transmitting flow and preventing erosion of the soil layer shall be placed over the cap.

(3) A uniform and compacted layer of soil at least [ an additional ] 2 feet in thickness shall be placed over the [ entire surface of each final lift within 2 weeks after disposal of solid waste in the lift ceases or as soon thereafter as weather permits. This final cover shall be in addition to the intermediate cover required by § 277.232 (relating to intermediate cover and slopes) ] drainage layer.

(b) The operator shall place final cover within 1 year after disposal in the final lift ceases or as soon thereafter as weather permits, unless the Department, in the permit, allows a later period based on a demonstration that a later period is necessary to protect the cap and drainage layer from differential settlement of waste at the facility. The Department will not allow a later period unless, at a

minimum, delayed installation will not cause or allow a violation of this article, the act or the environmental protection acts. [ The ] For a construction/demolition waste landfill constructed with attenuating soil and permitted prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), or for an expansion of a landfill under § 277.102, the Department may waive the cap and drainage layer requirement in subsection (a) when the approved postclosure land use makes a cap and drainage layer unnecessary.

(c) [ Final cover ] Unless alternative design requirements to meet the performance standards in subsection (a)(1)(i)–(iii) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the cap shall meet the design requirements set forth for caps in Table I in § 277.255 (relating to liners).

(d) The layer of material described in subsection (a)(3) shall meet the following performance standards. [ Final cover ] The layer shall:

(1) [ Cover solid waste after it is placed without change in its properties and without regard to weather.

(2) ] \*\*\*

[ (3) ] (2) Be [ noncombustible and prevent the spread of combustion ] capable of controlling fires.

[ (4) ] (3) \*\*\*

[ (5) ] (4) [ Compact well and not crack excessively when dry ] Ensure slope stability.

[ (d) ] (e) Unless alternative design requirements to meet performance standards in subsection [ (c) ] (d) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), final cover shall meet the same design requirements as are required of intermediate cover in § 277.232(c). The layer of material described in subsection (a)(3) shall meet the following design requirements:

(1) The cover soil shall fall within the United States Department of Agriculture textural classes of sandy loam, loam, sandy clay loam, silty clay loam, loamy sand and silt loam as defined in the Soil Survey Manual published by the United States Department of Agriculture, Soil Conservation Service (available from the Department or the Northeast National Technical Center of the Soil Conservation Service, 160 E. 7th Street, Chester, Pennsylvania 19103-6092).

(2) At least 40% by weight of the cover soil shall be capable of passing through a 2 millimeter, No. 10 mesh sieve.

[ (e) ] (f) \*\*\*

\* \* \* \* \*

[ (f) ] (g) Unless the Department authorizes a different slope design in the permit based on a demonstration that the different design can meet the requirements of subsection [ (e) ] (f), slopes shall be designed, installed and maintained as follows:

\* \* \* \* \*

WATER QUALITY PROTECTION

§ 277.241. General requirements.

\* \* \* \* \*

(c) The operator may not cause or allow [ pollution of groundwater ] water pollution within or outside of the site. [ The operator may not cause or allow a discharge of a pollutant or contaminant into groundwater except as authorized by permit from the Department. ]

§ 277.245. Water supply replacement.

(a) A person or municipality operating a construction/demolition waste landfill which adversely affects a water supply by degradation, pollution or other means shall restore or replace the affected water supply with an alternate source that is of like quantity and quality to the original supply at no additional cost to the owner. For purposes of this section, the term "water supply" includes existing, currently designated or currently planned sources of water or facilities or systems for the supply of water for human consumption or for agricultural, commercial, industrial or other legitimate use, including the uses protected by the applicable provisions of Chapter 93 (relating to water quality standards).

(b) A temporary water supply shall be provided as soon as practicable but not later than 48 hours after one of the following:

(1) Receipt of information showing that the operator is responsible for adversely affecting the water supply.

(2) Receipt of notice from the Department that the operator is responsible for adversely affecting the water supply.

(c) A permanent water supply shall be provided as soon as practicable but not later than 90 days after one of the following:

(1) Receipt of information showing that the operator is responsible for adversely affecting the water supply.

(2) Receipt of notice from the Department that the operator is responsible for adversely affecting the water supply.

\* \* \* \* \*

LINER SYSTEM

§ 277.251. Scope and requirements.

(a) A person or municipality operating a construction/demolition waste landfill, other than a construction/demolition waste landfill constructed with attenuating soil and permitted prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), or for an expansion of a landfill under § 277.102, shall design, construct, operate and maintain a liner system for disposal areas of the facility or components thereof under this section and §§ 277.252–277.260 (relating to liner system) [ if the composition of the construction/demolition waste to be disposed at the site or other factors indicate a potential for surface or groundwater pollution, and one of the following applies:

(1) The person or municipality receives a permit to operate a construction/demolition waste landfill after April 9, 1988, including a permit that results in an expansion of a facility permitted prior to April 9, 1988.

(2) **The person or municipality disposes of waste on a permitted or unpermitted component thereof where waste was not disposed prior to April 9, 1988 ]**.

(b) **[ If the operator is required to design, construct and maintain a ]** The liner system **[ , it ]** shall consist of the following elements:

\* \* \* \* \*

(2) Leachate detection zone, which is the prepared layer **[ of soil or earthen material ]** placed on top of the subbase and upon which the liner is placed, and in which a leachate detection system is located.

\* \* \* \* \*

(4) Protective cover and leachate collection zone, which is a prepared layer **[ of soil or earthen material ]** placed over the liner in which a leachate collection system is located.

**§ 277.252. General limitations.**

(a) **[ No person or municipality may construct a liner system for a facility, unless at least 4 feet is maintained between the ]** The bottom of the subbase of the liner system **[ and ]** cannot be in contact with the seasonal high water table or perched water table without the use of groundwater pumping systems.

\* \* \* \* \*

(2) Drainage systems may be utilized to **[ maintain a 4-foot isolation distance ]** prevent contact between the bottom of the subbase of the liner system and the seasonal high water table or perched water table. The operator may not use a drainage system if the system is likely to adversely affect the quality or quantity of water provided by public or private water supply, even if a replacement supply is available under § 277.245 (relating to water supply replacement). The drainage system shall be limited to drain tile, piping and french drains.

(b) **[ No person or municipality may construct a liner system for a facility, unless at ]** At least 8 feet **[ can ]** shall be maintained between the bottom of the subbase of the liner system and the regional groundwater table **in an unconfined aquifer**. The regional groundwater table may not be artificially **[ manipulated ]** lowered.

(c) **In a confined aquifer, at least 8 feet shall be maintained between the bottom of the subbase of the liner system and the top of the confining layer or the shallowest level below the bottom of the subbase where groundwater occurs as a result of leakage from natural or preexisting causes. The integrity of the confining layer shall not be compromised by excavation.**

(d) \*\*\*

\* \* \* \* \*

**[ (d) ] (e) \*\*\***

**[ (e) ] (f) \*\*\***

**[ (f) ] (g) \*\*\***

**§ 277.253. Subbase.**

\* \* \* \* \*

(b) Unless alternative design requirements to meet the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the subbase shall meet the following design requirements. The subbase shall:

\* \* \* \* \*

(2) **[ Have a minimum bearing capacity of 4500 pounds per square foot plus the total applied load in pounds per square foot.**

(3) **[ Be no more permeable than 1 x 10<sup>-5</sup> cm./sec., based on laboratory and field testing unless the clay component of a composite liner is designed and constructed directly above the subbase.**

**[ (4) ] (3) \*\*\***

**[ (5) ] (4)** Have a slope of at least 2% and no more than **[ 25 ] 33%.**

**§ 277.254. Leachate detection zone.**

\* \* \* \* \*

(b) Unless alternative design requirements to meet the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the leachate detection zone of a liner system shall meet the following design requirements:

\* \* \* \* \*

(2) Contain no material exceeding **[ .25 ] 0.5** inches in particle size.

\* \* \* \* \*

(4) Contain a perforated piping system capable of detecting and intercepting liquid within the leachate detection zone and conveying the liquid to a collection sump for storage, processing or disposal. The sump shall be separate from the leachate collection sump and shall be of a sufficient size to transmit leachate that is generated. The piping system shall also meet the following:

\* \* \* \* \*

(ii) **[ The distance between pipes in the piping system may not exceed 100 feet on center.**

(iii) **[ The pipes shall be installed primarily perpendicular to the flow and shall have a minimum postsettlement grade of at least 2%.**

**[ (iv) ] (iii) \*\*\***

**[ (v) Rounded noncarbonate stones or aggregates shall be placed around the pipes of the piping system.**

**(vi) ] (iv) \*\*\***

\* \* \* \* \*

**(6) Contain noncarbonate stone or aggregates without sharp edges.**

\* \* \* \* \*

(d) If liquid is flowing from the leachate detection zone and the average flow exceeds 10 gallons per acre per day (weekly average), the operator shall:

\* \* \* \* \*

(3) Sample and analyze the liquid, on a quarterly basis, for pH, specific conductivity, total organic carbon and

chlorides. The Department may also require sampling and analyses for other constituents expected to be found in the waste.

\* \* \* \* \*

(e) If [sampling results indicate that] leachate [has penetrated the liner,] flow is greater than 100 gallons per acre of lined area per day or more than 10% of leachate generation, the operator shall:

\* \* \* \* \*

(f) If sampling results indicate the presence of constituents at concentrations that could result in [pollution] degradation of groundwater, the operator shall:

\* \* \* \* \*

§ 277.255. Liner.

\* \* \* \* \*

(b) Unless alternative design requirements to meet the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the liner shall meet, at a minimum, the requirements of [Table I] the table in subsection (e).

\* \* \* \* \*

(f) A facility or a component thereof that is subject to this Chapter may not have a liner based upon natural attenuation of leachate.

TABLE I

MINIMUM LINER DESIGN STANDARDS

LINER MATERIAL	FUNCTION	MINIMUM FIELD THICKNESS (UNITS AS SPECIFIED)		LINER DENSITY (TESTS AS SPECIFIED)	REMARKS
Geomembranes	Liner,	30 mil		NA	1. A greater thickness may be required depending upon the recommendations of the manufacturer. 2. HDPE liners shall be at least 60 mil.
	Cap	30 mil			
Natural & Remolded Clay	Liner,	2 feet	≥90%*	≥90%*	[ 1. Proctor Density Test. 2. Minimum 25% clay by weight less than .002 mm particle size. ] 1. Minimum of 30% fines by weight less than 0.074 mm particle size (#200 sieve). 2. Plasticity index. 3. No coarse fragments greater than 3/4 inch in diameter.
	Cap	1 foot	≥90%*		
Bentonite & Bentonite-like materials	Liner,	1 foot	≥90%*	≥90%*	[ 1. Proctor Density Test. 2. Sodium bentonite treated with polymers unless otherwise approved. 3. Soil-bentonite mixtures shall have a combined clay content of 25% clay by weight less than .002 mm particle size. Soil material used in the mixtures shall contain no more than 50% sand by weight with particle size of .5 to 2 mm. ] 1. Minimum of 8% powdered sodium bentonite or manufacturer's recommendations, whichever is greater. 2. No coarse fragments greater than 3/4 inch in diameter. 3. No organic matter.
	Cap	1 foot	≥90%*		

\* Percentage is of maximum theoretical density when using Marshall method of design, and percentage of maximum when using Standard Proctor method of design (Pa. PTM No. 106, Method B).

§ 277.256. Protective cover.

\* \* \* \* \*

(b) Unless alternative design requirements to meet the performance standards in subsection (a) are approved as part of the permit under § 271.231 (relating to equivalency review procedure), the protective cover shall meet

the following design requirements. The protective cover shall be:

- (1) Comprised of clean earth material that contains no aggregate, rocks, debris, plant material or other solid material larger than [ 1/4 ] 1/2 inch in diameter, and no material with sharp edges.

(2) Graded [ , uniformly compacted and smooth ].

\* \* \* \* \*

§ 277.257. Leachate collection system within protective cover.

(a) The leachate collection system within the protective cover shall meet the following performance standards. The leachate collection system shall:

\* \* \* \* \*

(2) Ensure that the depth of leachate on or above the primary liner does not exceed 1 foot, unless a greater depth is approved by the Department in the permit for sump areas or for unanticipated precipitation events where the 1 foot of head will be exceeded for less than 3 days.

\* \* \* \* \*

§ 277.259. Noncoal mine disposal.

(a) Notwithstanding the provisions of § 277.252 (relating to general limitations) relating to disposal above the seasonal highwater table, perched water table and regional groundwater table, the Department may issue a permit for an expansion of a construction/demolition waste landfill in an abandoned noncoal mine permitted prior to \_\_\_\_\_. (Editor's note: The blank refers to the effective date of adoption of this proposal).

\* \* \* \* \*

LEACHATE TREATMENT

§ 277.272. Basic treatment methods.

(a) Except as otherwise provided in this section, leachate shall be collected and handled by direct discharge into a permitted publicly owned treatment works, following pretreatment [ or other ], if pretreatment is required by Federal, State or local law or by discharge into another permitted treatment facility.

\* \* \* \* \*

§ 277.274. Leachate recirculation.

In conjunction with the treatment methods in §§ 277.272 and 277.273 (relating to basic treatment methods; and leachate transportation) recirculation of leachate may be utilized if the following conditions exist:

\* \* \* \* \*

(4) [ Leachate ] The leachate recirculation is conducted with an approved piping system located under the intermediate cover, and causes no odors, runoff or ponding.

(5) The leachate is not a hazardous waste.

§ 277.275. Leachate collection and storage.

\* \* \* \* \*

(b) An onsite leachate storage system shall be part of each leachate treatment method used by the operator. The storage system shall contain [ :

(1) Impoundments ] impoundments or tanks for storage of leachate [ prior to treatment ]. The tanks or impoundments shall have [ a flow equalization and surge ] sufficient storage capacity at least equal to the maximum expected production of leachate for any 30-day period for the life of the facility estimated under § 277.162 (relating to leachate treatment plan) or 250,000 gallons, whichever is greater. No more than

25% of the total leachate storage capacity may be used for flow equalization on a regular basis.

[ (2) Impoundments or tanks for storage of treated leachate. The tanks or impoundments shall have a capacity at least equal to that in subsection (b)(1). ]

(c) The impoundments or tanks shall be aerated as necessary to prevent and control odors. Impoundments or tanks shall each have a capacity of at least 250,000 gallons, unless otherwise approved by the Department.

(d) The storage capacity of impoundments and tanks at a site shall be increased if additional storage is required prior to each major phase of construction and as otherwise necessary.

\* \* \* \* \*

(g) Underground pipes used for the transport of leachate from the liner system to the leachate storage impoundments or tanks shall be equipped with secondary containment. The secondary containment shall be designed, constructed and installed to direct any release to an area that can be inspected for leaks.

§ 277.276. Leachate analysis and sludge handling.

(a) Upon commencement of leachate flow from the facility, the operator shall sample and analyze the following:

\* \* \* \* \*

(2) On a quarterly basis, unless otherwise specified in the permit, the chemical composition of leachate flowing into the leachate treatment system [ , including total alkalinity, specific conductance, chlorides, sulfates, total dissolved solids, chemical oxygen demand, metals and volatile organic analysis ]. The analysis shall be sufficient to determine the impact of leachate on the liner system, the effectiveness of the leachate treatment system, the need for modification of the groundwater monitoring system or the effluent limitations in an NPDES permit, and the actual characteristics of leachate from the waste disposed at the facility. For the purpose of this quarterly analysis, the leachate sample shall be collected from the influent storage tank or impoundment and shall be representative of the average mixed influent quality. The Department may modify the frequency of chemical analysis or not require certain constituents to be tested following four consecutive quarters of analysis if the operator demonstrates that modifying the frequency of chemical analysis will not compromise groundwater protection.

\* \* \* \* \*

§ 277.277. [ Remedial ] Departmental notice and remedial action.

The operator shall immediately notify the Department and describe remedial steps to be taken whenever:

(1) Operation of the treatment facility [ under ] in accordance with the approved plan cannot prevent [ one of the following:

(i) Violating ] violation of the terms of its permits, The Clean Streams Law (35 P. S. §§ 691.1—691.1001) [ and ] or the regulations thereunder.

[ (ii) Causing surface water pollution or ground-water pollution. ]

\* \* \* \* \*

WATER QUALITY MONITORING

§ 277.281. General requirements.

(a) A person or municipality that operates a construction/demolition waste landfill shall install, operate and maintain a monitoring system that can detect the entry of solid waste, solid waste constituents, leachate, contaminants or constituents of decomposition into the groundwater or surface water. The monitoring system shall comply with this section and §§ 277.282—277.288.

(b) [ No ] A person or municipality may not construct, install or use a monitoring system for a construction/demolition waste landfill until that system has first been approved by the Department, in writing.

§ 277.282. Number, location and depth of monitoring points.

(a) The water quality monitoring system shall accurately characterize groundwater flows, groundwater chemistry and flow systems on the site and adjacent area. The system shall consist, at a minimum, of the following:

(1) At least one monitoring well at a point hydraulically upgradient from the disposal area in the direction of increasing static head that is capable of providing representative data of groundwater not affected by the facility, except when the facility occupies the most upgradient position in the flow system. In that case, sufficient downgradient monitoring wells shall be placed to determine the extent of adverse effects on groundwater [ degradation or pollution ] from the facility.

\* \* \* \* \*

(b) The upgradient and downgradient monitoring wells shall be:

\* \* \* \* \*

(3) Located within 200 feet of the permitted disposal area and located at the points of compliance.

(c) In addition to the requirements of subsection (b), upgradient monitoring wells shall be located so that they will not be affected by adverse effect on groundwater [ degradation or pollution ] from the disposal area.

(d) In addition to the requirements of subsection (b), downgradient monitoring wells shall be located so that they will provide early detection of adverse effect on groundwater [ degradation or pollution ] from the disposal area.

(e) [ Wells drilled under this section shall be drilled by drillers licensed under the Water Well Drillers License Act (32 P. S. §§ 645.1—645.13). ] The well materials shall be decontaminated prior to installation.

§ 277.283. Standards for wells and casing of wells.

(a) [ Monitoring wells ] A monitoring well shall be constructed with a screen that meets the following requirements:

- (1) The screen shall be factory-made.
(2) The screen may not react with the groundwater being monitored.

(3) The screen shall maximize open area to minimize entrance velocities and allow rapid sample recovery.

(b) A monitoring well shall be filter-packed with chemically inert clean quartz sand, silica or glass beads. The material shall be well-rounded and dimensionally stable.

(c) A monitoring well shall be cased as follows:

(1) The casing shall maintain the integrity of the monitoring well borehole and shall be constructed of material that will not react with the groundwater being monitored.

\* \* \* \* \*

(3) [ The casing shall be screened or perforated, and packed with gravel or sand where necessary, to enable collection of samples at depths where appropriate aquifer flow zones exist.

(4) ] The casing shall protrude at least 1 foot aboveground, unless otherwise approved by the Department, and shall be clearly visible.

(4) The casing shall be designed and constructed in a manner that prevents cross contamination between surface water and groundwater.

\* \* \* \* \*

[ (b) Monitoring ] (d) A monitoring well [ casings ] casing shall be enclosed in a protective casing that shall:

\* \* \* \* \*

(2) Be installed for at least the upper 10 feet of the monitoring well, as measured from the well cap with a maximum stick up of 3 feet, unless otherwise approved by the Department in writing.

\* \* \* \* \*

(4) Be numbered for identification with a label capable of withstanding field conditions and painted in a highly visible color.

(5) Protrude [ at least 1 inch higher ] above [ grade than ] the monitoring well casing.

\* \* \* \* \*

§ 277.284. Sampling and analysis.

A person or municipality operating a construction/demolition waste landfill shall conduct sampling and analysis from each monitoring [ well ] point for the following parameters at the following frequencies:

(1) Quarterly, for chloride, sulfate, chemical oxygen demand, pH, specific conductance, total organic carbon, total organic halogen, iron and sodium, and, if required by the Department, for other constituents found in the waste received at the facility.

\* \* \* \* \*

§ 277.286. Groundwater assessment plan.

(a) Requirement. A person or municipality operating a construction/demolition waste landfill shall prepare and submit to the Department a groundwater assessment plan within [ 30 ] 60 days after one of the following occurs:

\* \* \* \* \*

(2) Laboratory [ **analyses** ] **analysis** of one or more [ **contiguous** ] public or private water supplies shows the presence of degradation that could reasonably be attributed to the facility.

(b) **Exceptions.** The operator is not required to conduct an assessment under this section if **one of** the following [ **apply** ] **applies**:

(1) Within 10 **working** days after receipt of sample results showing groundwater degradation [ , ] the operator resamples the affected wells [ .

(2) **Analysis ] and analysis** from resampling shows to the Department's satisfaction that groundwater degradation has not occurred.

(2) **Within 20 working days after receipt of sample results indicating groundwater degradation, the operator demonstrates that the degradation was caused entirely by earthmoving and other activities related to facility construction, or by seasonal variations.**

(c) The groundwater assessment plan shall specify the manner in which the operator will determine the existence, quality, quantity, aerial extent and depth of groundwater degradation, and the rate and direction of migration of contaminants in the groundwater. A groundwater assessment plan shall be prepared by an expert in the field of hydrogeology. The plan shall contain, at a minimum, the following information:

\* \* \* \* \*

(3) Evaluation procedures, including the use of previously gathered groundwater quality information, to determine the concentration, rate and extent of groundwater degradation [ **or pollution** ] from the facility.

\* \* \* \* \*

(5) **Identification of the abatement standard that will be met.**

(d) The groundwater assessment plan shall be implemented upon approval by the Department under the approved implementation schedule, and shall be completed in a reasonable time not to exceed 6 months unless otherwise approved by the Department. If the Department determines that the proposed plan is inadequate, it may modify the plan and approve the plan as modified. **The operator shall notify, in writing, each owner of a private or public water supply located within 1/2-mile downgradient of the disposal area that an assessment has been initiated.**

\* \* \* \* \*

(g) This section does not prevent the Department from requiring, or the operator from conducting, [ **abatement of** ] groundwater [ **pollution** ] **abatement or water supply replacement** concurrently with, or prior to, implementation of the assessment.

**§ 277.287. Abatement plan.**

(a) The operator of a construction/demolition waste landfill shall prepare and submit to the Department an abatement plan whenever one of the following occurs:

(1) The groundwater assessment plan prepared and implemented under § 277.286 (relating to groundwater assessment plan) shows the presence of groundwater [ **pollution** ] **degradation** at one or more monitoring

wells **and the analysis under § 277.286(c) indicates that an abatement standard under subsection (d) will not be met.**

(2) Monitoring by the Department or operator shows the presence of [ **groundwater pollution at** ] **an abatement standard exceedance** from one or more [ **monitoring wells** ] **compliance points as indicated in subsection (d),** even if a groundwater assessment plan has not been completed. The operator is not required to implement an abatement plan under this paragraph if the following apply:

(i) Within 10 days after receipt of sample results showing [ **groundwater pollution** ] **an exceedance of an abatement standard, at a point of compliance described in subsection (d),** the operator resamples the affected wells.

(ii) Analysis from resampling shows to the Department's satisfaction that [ **groundwater pollution** ] **an exceedance of an abatement standard** has not occurred.

(b) An abatement plan shall be prepared by an expert hydrogeologist and submitted to the Department. The plan shall contain [ , **at a minimum,** ] the following information:

\* \* \* \* \*

[ (3) **A schedule for implementation.** ]

(c) **The abatement plan shall be completed and submitted to the Department for approval within 90 days of the time the obligation arises under this section unless the date is otherwise modified, in writing, by the Department.**

(d) **If abatement is required in accordance with subsection (a), the operator shall demonstrate compliance with one of the following abatement standards at and beyond 150 meters of the perimeter of the permitted disposal area or at and beyond the property boundary, whichever is closer:**

(1) **For constituents for which an MCL has been promulgated under the Federal Safe Drinking Water Act or the Pennsylvania Safe Drinking Water Act (42 U.S.C.A. §§ 300f—300j-18; and 35 P. S. §§ 721.1—721.17), the MCL for that constituent.**

(2) **For constituents for which MCLs have not been promulgated, the background standard for the constituent.**

(3) **For constituents for which the background standard is higher than the MCL or risk-based standard identified under paragraph (4), the background standard.**

(4) **The risk-based standard if the following conditions are met:**

(i) **The risk assessment used to establish the standard assumes that human receptors exist at the property boundary.**

(ii) **The level is derived in a manner consistent with Department guidelines for assessing the health risks of environmental pollution.**

(iii) **The level is based on scientifically valid studies conducted in accordance with good laboratory practice standards (40 CFR Part 792) promulgated under the Toxic Substances Control Act (15 U.S.C.A.**

§§ 2601—2692) or other scientifically valid studies approved by the Department.

(iv) For carcinogens, the level represents a concentration associated with an excess lifetime cancer risk level of 1.0 x 10<sup>-5</sup> at the property boundary.

(e) \* \* \*

[(d)] (f) \* \* \*

MINERALS AND GAS

§ 277.291. Mineral resources.

(a) The operator shall isolate coal seams [and], coal outcrops and coal refuse from waste deposits [by barriers of natural and compacted soil that are at least 25 feet in thickness] in a manner that prevents the combustion of the waste and that prevents damage to the liner system.

\* \* \* \* \*

§ 277.292. Gas control and monitoring.

If the waste disposed at the facility generates or is likely to generate gas, the operator shall establish and implement a gas control and monitoring [is required by the Department] program approved under § 277.171 (relating to gas monitoring and recovery plan) [, the operator shall comply with the approved gas control and monitoring plan].

EMERGENCY PROCEDURES

§ 277.301. Hazard prevention.

[(a)] \* \* \*

[(b) First aid facilities shall be available and job safety shall be practiced.]

§ 277.302. Emergency equipment.

(a) Except as provided in subsection (b), the operator shall have available in proper working condition, the following equipment at the immediate operating area of the facility:

\* \* \* \* \*

(3) Portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment. For fire control equipment requiring water, the facility shall have a water supply of adequate quantity and pressure to supply the equipment.

\* \* \* \* \*

§ 277.303. Implementation of contingency plan.

\* \* \* \* \*

(b) During an emergency, the operator shall:

\* \* \* \* \*

(3) Immediately telephone the Department and county emergency management agency, and report the following information:

(i) [Name] The name of the person reporting the incident and telephone number where that person can be reached.

(ii) [Name] The name, address and permit number of the facility.

(iii) [Date] The date, time and location of the emergency.

\* \* \* \* \*

(vi) [Parts] The parts of the contingency plan being implemented to alleviate the emergency.

(c) After an emergency, the operator of the facility shall do the following:

\* \* \* \* \*

(2) Prevent disposal, processing, storage or treatment of solid waste in the area affected by the emergency until the operator has cleaned up the area, and the Department has inspected and approved the resumption of operation after the cleanup.

RECORDKEEPING AND REPORTING

§ 277.311. Daily operational records.

\* \* \* \* \*

(b) The daily operational record shall include the following:

\* \* \* \* \*

(9) A record of the rejected waste loads and the reasons for rejecting the loads.

\* \* \* \* \*

§ 277.312. Annual operation report.

\* \* \* \* \*

(c) The annual operation report shall be accompanied by a nonrefundable annual permit administration fee of \$ [1,100] 2,800 in the form of a check payable to the "Commonwealth of Pennsylvania."

\* \* \* \* \*

CLOSURE PROVISIONS

§ 277.322. Closure.

\* \* \* \* \*

(b) At least 180 days before implementation of a closure [or partial closure,] plan the operator shall review its approved closure plan to determine whether the plan requires modification, and shall submit proposed changes to the Department for approval under § 271.222 (relating to permit modification).

(c) If groundwater degradation exists at closure or occurs after closure, a person shall meet one of the following:

(1) Continue to implement an approved abatement plan.

(2) Submit an application for a closure plan modification in accordance with the procedures for a major permit modification. The operator shall select one or more remediation standards that will be met in accordance with the final closure certification requirements in § 271.342 (relating to final closure certification). The Department will accept the operator's selection of remediation standards if the requirements of subsection (d) are met.

(d) An application for a closure plan modification shall include the following:

(1) Technical information and supporting documentation identifying the remediation activities that will be conducted to meet and maintain the remediation standards.

(2) If a remedy relies on access to or use of properties owned by third parties, for remediation or monitoring, documentation of cooperation or agreement.

CHAPTER 279. TRANSFER FACILITIES

Subchapter A. General

§ 279.1. Scope.

(a) \* \* \*

(b) The Department may waive or modify a requirement of this chapter for permitted transfer facilities at which no actual loading, unloading or transferring of municipal waste occurs, if the absence of loading, unloading or transferring activity renders the requirement unnecessary.

Subchapter B. APPLICATION REQUIREMENTS FOR TRANSFER FACILITIES

GENERAL

§ 279.101. General requirements.

\* \* \* \* \*

(b) Maps, plans and cross sections submitted to comply with this subchapter shall be on a scale in which 1 inch equals no more than 50 feet with 2-foot maximum contour intervals unless otherwise approved by the Department.

§ 279.102. Operating plan.

\* \* \* \* \*

(c) An application shall contain a plan for [ hiring and ] training equipment operators and other personnel concerning the operation and approved design of the facility.

\* \* \* \* \*

§ 279.103. Maps and related information.

(a) An application shall contain a topographic map of the proposed permit area and adjacent area, including necessary narrative descriptions, which shows the following:

(1) [ Boundaries ] The boundaries and names of present owners of record of land, both surface and subsurface, and including easements, rights-of-way and other property interests, for the proposed permit area and adjacent area; the boundaries of the land within the proposed permit area; and a description of title, deed or usage restrictions affecting the proposed permit area.

\* \* \* \* \*

(4) The location and name of public and private water [ supplies ] sources that are located on or within 1/4 mile of the proposed [ permit area and adjacent area ] facility. If more than 50 wells are located within the 1/4-mile radius, the applicant may identify only the closest wells in each direction and generally describe the location and number of wells within the 1/4-mile radius.

\* \* \* \* \*

(7) The anticipated location of water quality monitoring points if monitoring is required by the Department.

\* \* \* \* \*

(14) The solid waste storage or loading/unloading areas.

\* \* \* \* \*

(16) The location and use of buildings and related facilities which will be used in the operation, including their horizontal and vertical dimensions.

\* \* \* \* \*

(b) [ An application shall also contain a United States Department of Agriculture Soil Conservation Service soils map, for aerial photographs where current soils maps are unavailable, for the proposed permit area and adjacent area showing the site boundaries and soil types.

(c) \* \* \*

§ 279.104. Plan for access roads.

The application shall contain designs, cross sections and specifications for access roads, including load limits, under § 279.213 (relating to access roads). Access roads shall be designed and constructed to handle adequately the truck traffic expected at the facility.

§ 279.105. Soil erosion and sedimentation control plan.

\* \* \* \* \*

§ 279.106. Soil and groundwater monitoring plan.

(a) If required by the Department, the applicant shall submit a groundwater monitoring plan to detect groundwater degradation [ or pollution of groundwater ] from the facility.

\* \* \* \* \*

§ 279.109. Contingency plan.

An application shall contain a contingency plan consistent with §§ 279.241—279.243 (relating to emergency procedures). The plan shall include a Preparedness, Prevention and Contingency (PPC) Plan that is consistent with the Department's most recent guidelines for the development and implementation of [ PPCs ] PPC plans.

RECYCLING

§ 279.121. Recycling plan.

An application [ for a facility that will be receiving waste after September 26, 1990, ] shall contain the following information in accordance with § 279.271 (relating to salvaging of materials):

[ (1) A detailed analysis of the potential for salvaging and recycling waste materials received at the facility, including the type of materials that will be received, the likelihood of receiving unmixed loads of waste materials and the markets for the materials.

(2) A plan for salvaging and recycling waste materials received at the facility for which recycling is cost effective, including proposed salvage areas, salvaging methods and anticipated markets for salvaged materials, in accordance with § 279.271.

Subchapter C. OPERATING REQUIREMENTS FOR TRANSFER FACILITIES

GENERAL PROVISIONS

§ 279.201. Basic limitations.

\* \* \* \* \*

(d) A person or municipality that operates a transfer facility may not:

\* \* \* \* \*

(2) Allow explosive [ wastes ] waste to be stored or processed at the facility.

\* \* \* \* \*

(f) A person or municipality may not allow solid waste [ generated outside the host county for a facility ] to be received, disposed or otherwise managed at the facility if the transportation to, or processing or management at, the facility would violate applicable laws in effect in the county or state in which the waste was generated, or state or local solid waste management plans in effect where the waste was generated.

\* \* \* \* \*

(h) The approved mitigation measures identified in the permit application shall be completed before a facility may accept waste unless a later date is authorized in writing by the Department for technical reasons.

**§ 279.202. Areas where transfer facilities are prohibited.**

(a) Except for areas that were permitted prior to April 9, 1988, [ no ] a transfer facility may not be operated as follows:

(1) **Floodplain.** In the 100-year floodplain of waters in this Commonwealth, unless the Department approves in the permit a method of protecting the facility from a 100-year flood consistent with the Flood Plain Management Act (32 P. S. §§ 679.101—679.601) and the Dam Safety and Encroachments Act (32 P. S. §§ 693.1—693.27).

(2) **Wetland.**

(i) \* \* \*

(ii) For a transfer facility permitted on or after \_\_\_\_\_ (*Editor's Note:* The blank refers to the effective date of adoption of this proposal.) other than an expansion of a transfer facility that was permitted prior to \_\_\_\_\_ (*Editor's Note:* The blank refers to the effective date of adoption of this proposal.), in or within 100 feet of a wetland other than an exceptional value wetland, unless storage and processing will not occur within that distance or storage and processing take place in an enclosed facility and one of the following applies:

(A) If the operation is in or along the wetland, the operator has received a permit from the Department under Chapter 105 (relating to dam safety and waterway management).

(B) If the operation is not in or along the wetland, no adverse hydrologic or water quality impacts will result.

(3) **Occupied dwelling.** Within 300 feet measured horizontally from an occupied dwelling, unless the [ current ] owner has provided a written waiver consenting to the facility being closer than 300 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the [ current ] owner.

(4) **Perennial stream.** Within 100 feet of a perennial stream, unless one of the following applies:

(i) The storage and processing take place in an enclosed facility and no adverse impacts to the perennial stream will result.

(ii) The facility transfers wastes to barges at the transfer facility location.

(5) **Property line.** Within 50 feet of a property line unless the [ operator demonstrates that actual pro-

cessing of waste is not occurring within that distance ] storage and processing take place in an enclosed facility or the owner of the adjacent property has provided a written waiver consenting to the facility being closer than 50 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the owner.

(6) **School, park, playground.**

(i) For a municipal waste transfer facility permit issued on or after \_\_\_\_\_ (*Editor's Note:* The blank refers to the effective date of adoption of this proposal.), except an expansion of a municipal waste transfer facility permitted prior to \_\_\_\_\_ (*Editor's Note:* The blank refers to the effective date of adoption of this proposal.), within 300 yards of the following:

(A) A building which is owned by a school district or school and used for instructional purposes.

(B) A park.

(C) A playground.

(ii) The current property owner of a school building, park or playground may waive the 300 yard prohibition by signing a written waiver. Upon receipt of the waiver, the Department will waive the 300-yard prohibition and will not use the prohibition as the basis for the denial of a new permit.

\* \* \* \* \*

**DAILY OPERATIONS**

**§ 279.211. Signs and markers.**

(a) A person or municipality that operates a transfer facility shall identify the facility and the recycling drop-off center required under § 279.272 (relating to recycled materials collection center) for the duration of operations by posting and maintaining a sign which will be clearly visible and can be easily seen and read at the junction of each access road and public road unless otherwise approved by the Department. The sign shall be constructed of a durable, weather-resistant material [ and shall be of a minimum size of 3 feet by 4 feet with a light background and contrasting letters and numbers of a minimum height of 3 inches that can be easily seen and read. The sign shall show the name, business address and telephone number of the person or municipality that operates the facility, the operating hours of the facility and the number of the current permit authorizing operations at the facility ].

(b) Permit area markers and the benchmark for horizontal and vertical control shall be:

(1) [ Be posted ] Posted and maintained for the duration of the operation to which they pertain.

(2) [ Be clearly ] Clearly visible, readable and uniform throughout the operation.

(3) [ Be permanently ] Permanently fixed and made of a durable material.

**§ 279.212. Access control.**

\* \* \* \* \*

(b) The operator shall [ construct and ] maintain a fence or other suitable barrier around the site sufficient to prevent unauthorized access.

\* \* \* \* \*

§ 279.213. Access roads.

\* \* \* \* \*

(b) A crossing of a perennial or intermittent stream or a wetland shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachments or water obstructions shall meet the requirements of Chapter 105 (relating to dam safety and waterway management).

(c) An access road shall have a drainage system that is compatible with the natural drainage system, structurally stable and which will pass safely the peak flow from a 25-year, 24-hour precipitation event. The drainage system shall [include sloped or crowned road surfaces, cross drains or culverts, stabilized ditches, erosion resistant surfacing, sediment traps and other appropriate sediment control measures as required by § 279.232 (relating to soil erosion and sedimentation control) ] also comply with Chapter 102 (relating to erosion control).

(d) An access road shall be paved or surfaced with asphalt, gravel, cinders or other equivalent material approved by the Department in the permit. An access road shall be capable of withstanding the load limits projected by the applicant under § 279.104 (relating to plan for access roads). The maximum sustained grade of an access road may not exceed 12%.

\* \* \* \* \*

(h) An access road shall be maintained to control dust and to prevent and control the tracking of mud on and off the site.

§ 279.215. Operations and equipment.

\* \* \* \* \*

(c) [ Standby equipment shall be located on the site or at a place where it can be available within 24 hours. ] If a breakdown of the operator's equipment occurs, the operator shall utilize standby equipment as necessary to comply with the act, the environmental protection acts, this subchapter and its permit conditions.

\* \* \* \* \*

(e) Equipment [used to handle putrescible solid waste with which operations personnel are in direct contact shall be cleaned at the end of each working day or every 24 hours. Other equipment ] shall be cleaned at frequencies specified in the permit based on scheduled or emergency maintenance periods.

(f) The operator of a transfer facility shall inspect and monitor incoming waste to ensure that the waste received is consistent with this article and the permit, unless otherwise approved by the Department. Monitoring and inspection shall include screening of waste for radioactive isotopes and be consistent with § 271.613 (relating to waste analysis plan).

§ 279.216. Unloading area.

\* \* \* \* \*

(b) The loading areas and unloading areas shall be constructed of impervious material which is capable of being cleaned by high pressure water spray and shall be equipped with drains or sumps connected to a sanitary sewer system or treatment facility to facilitate the re-

moval of water. Drains or treatment systems may be connected to a sanitary sewer system if a waste characterization is submitted to the sewage treatment plant operator and the operator finds that the treatment plant can fully treat the waste stream. Leachate may be collected in holding tanks prior to its transport to the sewage treatment plant.

\* \* \* \* \*

§ 279.217. Cleaning and maintenance.

\* \* \* \* \*

(d) Macerators, hammer mills and grinders shall be cleanable and shall be equipped with drains that connect to a sanitary sewer system or treatment facility. Drains or treatment systems may be connected to a sanitary sewer system if a waste characterization is submitted to the sewage treatment plant operator and the operator finds that the treatment plant can fully treat the waste stream.

\* \* \* \* \*

§ 279.218. Air resources protection.

(a) The operator shall implement fugitive [ dust ] air contaminant control measures, and shall otherwise prevent and control air pollution [ under ] in accordance with the Air Pollution Control Act (35 P. S. §§ 4001— [4015 and regulations thereunder] 4014), Article III (relating to air resources) and § 279.219 (relating to nuisance control).

(b) [ No ] A person or municipality may not cause or allow open burning at the facility.

§ 279.219. Nuisance control.

(a) The operator [ may not cause or allow ] shall control and minimize the attraction, harborage or breeding of vectors.

(b) The operator [ may not cause or allow ] also shall control and minimize conditions not otherwise prohibited by this subchapter that are harmful to the environment or public health, or which create safety hazards, odors, dust, noise, unsightliness and other public nuisances.

§ 279.221. Litter.

\* \* \* \* \*

(c) Litter shall be collected at least weekly from fences, roadways, tree line barriers and other barriers and disposed or stored [ under ] in accordance with the act and regulations thereunder, unless a greater frequency is set forth in the permit.

SOIL AND WATER PROTECTION

§ 279.231. General requirements.

(a) The operator may not cause or allow a point or nonpoint source discharge [ of pollution ] in violation of The Clean Streams Law (35 P. S. §§ 691.1— 691.1001) from or on the facility to [ the ] surface waters of this Commonwealth.

(b) A transfer facility shall be operated to prevent and control water pollution. An operator shall operate and maintain necessary [ surface ] water [ and groundwater ] pollution treatment facilities until [ surface ] water [ or groundwater ] pollution from or on the facility has been permanently abated.

(c) The operator may not cause water pollution [ of groundwater ] on or off the site. [ The operator may not cause or allow a discharge of a contaminant into groundwater except as authorized by a permit from the Department. ]

\* \* \* \* \*

§ 279.232. Soil erosion and sedimentation control.

The operator shall manage surface water and control erosion and sedimentation to [ accomplish the following ]:

(1) Divert surface water away from the storage area with measures and structures necessary to handle surface water flows based on a 25-year, 24-hour precipitation event, [ and ] supported by written calculations and also comply with Chapter 102 (relating to erosion control).

\* \* \* \* \*

§ 279.233. Soil and groundwater monitoring.

If required by the Department as part of the permit, the operator shall conduct soil or groundwater monitoring, or both. The monitoring shall be [ under ] in accordance with the terms and conditions of the permit, and shall continue for the period specified in § 279.262 (relating to cessation of operations).

§ 279.234. Water supply replacement.

(a) A person or municipality operating a transfer facility which adversely affects a water supply by degradation, pollution or other means shall restore or replace the affected water supply with an alternate source that is of like quantity and quality to the original supply at no additional cost to the owner.

(b) A temporary water supply shall be provided as soon as practicable but not later than 48 hours after one of the following:

(1) Receipt of information showing that the operator is responsible for adversely affecting the water supply.

(2) Receipt of notice from the Department that the operator is responsible for adversely affecting the water supply.

(c) A permanent water supply shall be provided as soon as practicable but no later than 90 days after one of the following:

(1) Receipt of information showing that the operator is responsible for adversely affecting the water supply.

(2) Receipt of notice from the Department that the operator is responsible for adversely affecting the water supply.

(d) Permanent water supplies include development of a new well with a distribution system, interconnection with a public water supply, or extension of a private water supply, but do not include provision of bottled water or a water tank supplied by a bulk water hauling system, which are temporary water supplies.

EMERGENCY PROCEDURES

§ 279.242. Emergency equipment.

(a) Except as provided in subsection (b), a person or municipality operating a transfer facility shall have avail-

able in proper working condition the following equipment at the immediate operating area of the facility:

\* \* \* \* \*

(3) Portable fire extinguishers, fire control equipment, spill control equipment [ , ] and decontamination equipment [ and self-contained breathing apparatus ]. For fire control equipment requiring water, the facility shall have a water supply of adequate quantity and pressure to supply the equipment.

\* \* \* \* \*

§ 279.243. Implementation of contingency plan.

\* \* \* \* \*

(b) During an emergency, the operator shall:

\* \* \* \* \*

(3) Immediately telephone the Department and county emergency management agency, and report the following information:

(i) [ Name ] The name of the person reporting the incident and telephone number where that person can be reached.

(ii) [ Name ] The name, address and permit number of the facility.

(iii) [ Date ] The date, time and location of the emergency.

\* \* \* \* \*

(vi) [ Parts ] The parts of the contingency plan being implemented to alleviate the emergency.

(c) After an emergency, the operator of the facility shall do the following:

\* \* \* \* \*

(2) Prevent processing or storage of solid waste in the area affected by the emergency until the operator has cleaned up the area, and the Department has [ inspected and ] approved the resumption of operation after the cleanup.

RECORDKEEPING AND REPORTING

§ 279.251. Daily operational records.

\* \* \* \* \*

(b) The daily operational record shall include the following:

\* \* \* \* \*

(10) A record of rejected waste loads and the reasons for rejecting the loads.

\* \* \* \* \*

§ 279.252. Annual operation report.

\* \* \* \* \*

(b) The annual operating report, which shall be submitted on a form supplied by the Department, shall include the following:

\* \* \* \* \*

(5) Certification that the operator has received the analysis or certification [ required ] required by § 287.54 (relating to chemical analysis of waste) for each type of residual waste or special handling waste received at the facility, and that the residual waste or special

handling waste that is received at the facility meets the conditions in the facility's permit.

(c) The annual operation report shall be accompanied by a nonrefundable annual permit administration fee of \$ [600] 700 in the form of a check payable to the "Commonwealth of Pennsylvania."

**CESSATION AND CLOSURE**

**§ 279.262. Cessation of operations.**

\* \* \* \* \*

(b) An operator required under § 279.233 (relating to soil and groundwater monitoring) to conduct soil monitoring may discontinue soil monitoring upon cessation of processing operations **with the Department's approval. In deciding whether to allow discontinuance of monitoring, the Department will consider the operational history of the facility, the likelihood that soil contamination will manifest itself in the future and other factors.**

\* \* \* \* \*

**CHAPTER 281. COMPOSTING FACILITIES**

**Subchapter B. APPLICATION REQUIREMENTS FOR GENERAL COMPOSTING FACILITIES**

**GENERAL PROVISIONS**

**§ 281.101. General requirements.**

\* \* \* \* \*

(b) Maps, plans and cross sections submitted to comply with this subchapter shall be on a scale in which 1 inch equals no more than 50 feet with 2-foot maximum contour intervals, **unless otherwise approved by the Department.**

**PLANS**

**§ 281.111. Operating plan.**

An application to operate a general composting facility shall contain the following:

\* \* \* \* \*

(9) A plan for **[ hiring and ]** training equipment operators and other personnel concerning the operation and approved design of the facility.

\* \* \* \* \*

**§ 281.112. Maps and related information.**

(a) An application shall contain a topographic map, including necessary narrative descriptions, which shows the following:

(1) **[ Boundaries ]** The boundaries and names of present owners of record of land, both surface and subsurface, and including easements, rights-of-way and other property interests, for the proposed permit area and adjacent area; **the boundaries of the land within the proposed permit area;** and a description of title, deed or usage restrictions affecting the proposed permit area.

(2) **[ Boundaries ]** The boundaries of land to be affected over the estimated total life of the proposed operation.

\* \* \* \* \*

(4) The location and name of public and private water **[ supplies ]** sources that are located on the proposed permit area and adjacent area.

\* \* \* \* \*

(13) **[ Water ]** The water diversion, collection, conveyance, sedimentation and erosion control, treatment, storage and discharge facilities to be used.

(14) **[ Composting ]** The composting pads, tipping areas, storage areas **[ and ],** windrows **and loading/unloading areas.**

(15) **[ Areas ]** The areas of land for which a bond will be posted under Chapter 271, Subchapter D (relating to financial assurances requirements).

\* \* \* \* \*

(18) **[ Utilities ]** The utilities to be installed at the facility.

\* \* \* \* \*

(b) **[ An application shall contain a United States Department of Agriculture Soil Conservation Service soil map, or aerial photographs if current soil maps are unavailable, for the proposed permit area and adjacent area showing the site boundaries and soil types.**

(c) ] \* \* \*

**§ 281.115. Plan for access roads.**

The application shall contain designs, cross sections and specifications for access roads, including load limits, to demonstrate compliance with § 281.212 (relating to access roads). **Access roads shall be designed and constructed to handle adequately the truck traffic expected at the facility.**

**COMPOSTING**

**§ 281.121. Composting pad and vessel design.**

(a) An application shall contain plans and specifications for the design, construction and maintenance of composting pads **and vessels** that will be required for the proposed facility.

(b) The application shall also contain a plan for inspection of composting pads **and vessels** to ensure **[ the ]** **their integrity [ of the composting pad ].**

(c) Composting pad **and vessel** plans and designs shall be consistent with § 281.231 (relating to composting pad **or vessel**).

**SOIL AND WATER**

**§ 281.132. Soil erosion and sedimentation control plan.**

(a) The applicant shall submit a plan to manage surface water and control erosion during all phases of construction and operation at the facility. The plan shall be based on the requirements of Chapter 102 (relating to erosion control), § 281.252 (relating to soil erosion and sedimentation control) and other applicable State and Federal requirements. Calculations indicating water quantities shall be based on the 24-hour precipitation event in inches to be expected once in 25 years. **More stringent design standards may be required by the Department based on the most recent edition of the United States Department of Agriculture Soil Conservation Services' Engineering Field Manual for Conservation Practices.**

\* \* \* \* \*

§ 281.134. Soil and groundwater monitoring plan.

(a) If required by the Department, the applicant shall submit a groundwater monitoring plan to detect groundwater degradation [ or pollution of groundwater ] from the facility.

\* \* \* \* \*

Subchapter C. OPERATING REQUIREMENTS FOR GENERAL COMPOSTING FACILITIES  
GENERAL PROVISIONS

§ 281.201. Basic limitations.

\* \* \* \* \*

(f) The approved mitigation measures identified in the permit application shall be completed before a facility may accept waste, unless a later date is authorized in writing by the Department for technical reasons.

§ 281.202. Areas where general composting facilities are prohibited.

(a) Except for areas that were permitted prior to April 9, 1988, [ no ] a general composting facility, may not be operated as follows:

(1) **Floodplain.** In the 100-year floodplain of waters of this Commonwealth unless demonstrated that the compost facility can be protected during flooding.

(2) **Wetland.**

(i) \* \* \*

(ii) For a general composting facility permitted on or after \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.) other than an expansion of a general composting facility that was permitted prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.) in or within 100 feet of a wetland other than an exceptional value wetland, unless storage and processing will not occur within that distance or storage and processing take place in an enclosed facility and one of the following is true:

(A) If the operation is in or along the wetland, the operator has received a permit from the Department under Chapter 105 (relating to dam safety and waterway management).

(B) If the operation is not in or along the wetland, no adverse hydrologic or water quality impacts will result.

(3) [ Within 100 feet of a sinkhole or area draining into a sinkhole.

(4) ] **Occupied dwelling.** Within 300 feet measured horizontally from an occupied dwelling, unless the [ current ] owner of the dwelling has provided a written waiver consenting to the facility being closer than 300 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the [ current ] owner.

[ (5) ] (4) **Perennial stream.** Within 100 feet of a perennial stream, unless the storage and processing take place in an enclosed facility and no adverse impacts to the perennial stream will result.

[ (6) ] (5) **Property line.** Within 50 feet of a property line unless the [ operator demonstrates that actual

composting of waste is not occurring within that distance ] storage and processing take place in an enclosed facility.

[ (7) ] (6) **Water source.** Within 1/4 mile upgradient and within 300 feet downgradient of a private or public water source.

[ (8) ] (7) **Water table.** In an area where the pad or vessel will be in contact with the seasonal high water table or perched water table [ is less than 4 feet from the surface ].

(8) **School, park, playground.**

(i) For a municipal waste transfer facility permit issued on or after \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), except an expansion of a municipal waste transfer facility permitted prior to \_\_\_\_\_ (Editor's Note: The blank refers to the effective date of adoption of this proposal.), within 300 yards of the following:

(A) A building which is owned by a school district or school and used for instructional purposes.

(B) A park.

(C) A playground.

(ii) The current property owner of a school building, park or playground may waive the 300-yard prohibition by signing a written waiver. Upon receipt of the waiver, the Department will waive the 300-yard prohibition and will not use the prohibition as the basis for the denial of a new permit.

\* \* \* \* \*

DAILY OPERATIONS

§ 281.211. Signs and markers.

(a) A person or municipality that operates a general composting facility shall identify the facility for the duration of operations by posting and maintaining a sign which will be clearly visible and can be easily seen and read at the junction of each access road and public road unless otherwise approved by the Department. The sign shall be constructed of a durable, weather resistant material [ and shall be of a minimum size of 3 feet by 4 feet with a light background and contrasting letters and numbers of a minimum height of 3 inches that can be easily seen and read. The sign shall show the name, business address and telephone number of the person or municipality operating the facility, the operating hours of the facility and the number of the current permit authorizing operations at the facility ].

\* \* \* \* \*

§ 281.212. Access roads.

\* \* \* \* \*

(b) A crossing of a perennial or intermittent stream or a wetland shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachments or water obstructions shall meet the requirements of Chapter 105 (relating to dam safety and waterway management).

(c) An access road shall have a drainage system that is compatible with the natural drainage system, structurally stable and which will pass safely the peak flow from a 25-year, 24-hour precipitation event. The drainage system

shall [include sloped or crowned road surfaces, cross drains or culverts, stabilized ditches, erosion resistant surfacing, sediment traps and other appropriate sediment control measures as required by § 281.252 (relating to soil erosion and sedimentation control) ] comply with Chapter 102 (relating to erosion control).

(d) An access road shall be paved or surfaced with asphalt, gravel, cinders or other equivalent material approved by the Department in the permit. An access road shall be capable of withstanding the load limits projected by the applicant under § 281.115 (relating to plan for access roads). The maximum sustained grade of an access road may not exceed 12%.

\* \* \* \* \*

(h) [ Disturbed ] The disturbed areas adjacent to a road shall be vegetated or otherwise stabilized to prevent erosion.

(i) [ An access road ] Access roads shall be designed, constructed and maintained to allow the orderly egress and ingress of vehicular traffic when the facility is in operation, including during inclement weather.

§ 281.214. Measuring and inspection of waste.

(a) An operator of a general composting facility that has received, is receiving or will receive 30,000 or more cubic yards of [ municipal ] solid waste in a calendar year shall weigh [ municipal ] solid waste when it is received. The scale used to weigh [ municipal ] solid waste shall conform to the Weights and Measures Act of 1965 (73 P. S. §§ 1651—1692) and regulations thereunder. The operator of the scale shall be a licensed public weighmaster under the Public Weighmasters Act (73 P. S. §§ 1771—1796) and regulations thereunder.

\* \* \* \* \*

(c) The operator of a general composting facility shall inspect and monitor incoming waste to ensure that the waste received is consistent with this article and the permit, unless otherwise approved by the Department. Monitoring and inspection shall include screening of waste for radioactive isotopes and be consistent with § 271.613 (relating to waste analysis plan).

§ 281.215. Equipment.

\* \* \* \* \*

(b) [ Standby equipment shall be located on the site or at a place where it can be available within 24 hours. ] If a breakdown of the operator's equipment occurs, the operator shall utilize standby equipment as necessary to comply with the act, the environmental protection acts, this subchapter and its permit conditions.

\* \* \* \* \*

(d) Equipment [ used to handle putrescible solid waste with which operations personnel are in direct contact shall be cleaned at the end of each working day or every 24 hours. Other equipment ] shall be cleaned at frequencies specified in the permit based on scheduled or emergency maintenance periods.

\* \* \* \* \*

§ 281.217. Air resources protection.

(a) The operator shall control fugitive [ dust ] air contaminants and otherwise prevent and control air pollution under the Air Pollution Control Act (35 P. S. §§ 4001—[ 4015 and regulations thereunder ] 4014), Article III (relating to air resources) and § 281.218 (relating to nuisance control).

(b) [ No ] A person or municipality may not cause or allow open burning at the facility.

§ 281.218. Nuisance Control.

(a) The operator [ may not cause or allow ] shall control and minimize the attraction, harborage or breeding of vectors.

(b) The operator [ may not cause or allow ] shall control and minimize conditions not otherwise prohibited by this subchapter that are harmful to the environment or public health, or which create safety hazards, odors, dust, noise, unsightliness and other public nuisances.

§ 281.220. Litter.

\* \* \* \* \*

(c) At least weekly, blown off and intercepted litter shall be collected from fences, roadways, tree-lined barriers and other barriers, and disposed or stored in accordance with the act and regulations thereunder, unless a greater frequency is set forth in the permit.

COMPOSTING PROVISIONS

§ 281.231. Composting pad or vessel.

(a) No solid waste may be composted, loaded, unloaded or stored, except on a composting pad or vessel that meets the requirements of this section.

(b) The composting pad or vessel shall be adequate in size and capacity to manage the projected solid waste, compost and residue volumes.

(c) A composting pad or vessel shall be:

(1) [ Be no more permeable than 1 x 10<sup>-7</sup> cm/sec ] For a pad, capable of preventing the migration of waste and leachate generated from the composting process through the pad.

(2) [ Be designed ] Designed, constructed and maintained to protect the integrity of the pad or vessel during the projected life of the facility.

(3) [ Be designed ] Designed to collect leachate.

(4) [ Be ] For a pad, constructed of nonearthen material.

(5) [ Be inspected ] Inspected for uniformity, damage and imperfections during construction and installation.

(6) [ Be designed ] Designed and operated so that the physical and chemical characteristics of the composting pad or vessel and its ability to restrict the flow of solid waste, solid waste constituents or leachate is not adversely affected by the leachate.

(d) The operator shall inspect the composting pad or vessel in a manner and frequency approved by the Department in the permit.

(e) Upon completion of the construction of a composting pad or vessel, the operator shall:

(1) Submit a certification by a registered professional engineer on forms provided by the Department. The certification shall describe the composting pad or vessel being certified, using drawings and plans if appropriate and shall state that the actual construction was observed by the engineer or persons under his direct supervision, and that the construction was carried out in a manner that is consistent with the permit.

(2) Notify the Department that the facility is ready for inspection. No solid waste may be composted, and no solid waste or compost may be stored, loaded or unloaded on the composting pad or in the composting vessel, until the Department has conducted an inspection and has transmitted its written approval to the permittee indicating that the construction was done according to the permit.

§ 281.234. Sale [ , ] or utilization [ or disposal ] of compost.

Prior to sale [ , ] or utilization [ or disposal ] of compost, the operator shall [ provide the Department with a written chemical analysis of the compost on forms provided by the Department. If the Department determines that the compost has the potential for causing air, water or land pollution, the Department will notify the operator that the compost is to be disposed of at a permitted disposal facility ] obtain a general permit from the Department under Chapter 271, Subchapters I or J (relating to beneficial use of municipal waste; and beneficial use of sewage sludge by land application).

SOIL AND WATER PROTECTION

§ 281.251. General requirements.

\* \* \* \* \*

(d) The operator may not cause or allow water pollution [ of groundwater ] within or outside of the site. [ The operator may not cause or allow a discharge of a contaminant into groundwater except as authorized by a permit from the Department. ]

§ 281.253. Sedimentation ponds.

\* \* \* \* \*

(b) Sedimentation ponds shall be constructed, operated and maintained under this section, Chapters 102 and 105 (relating to erosion control; and dam safety and waterway management) and the minimum design criteria contained in the United States Soil Conservation Service's Engineering Standard 378, 'Pond' Pa., as amended.

\* \* \* \* \*

§ 281.255. Water supply replacement.

(a) A person or municipality operating a composting facility which adversely affects a water supply by degradation, pollution or other means shall restore or replace the affected water supply with an alternative source that is of like quantity and quality to the original supply at no additional cost to the owner.

(b) A temporary water supply shall be provided as soon as practicable but not later than 48 hours after receipt of one of the following:

(1) Information showing that the operator is responsible for adversely affecting the water supply.

(2) Notice from the Department that the operator is responsible for adversely affecting the water supply.

(c) A permanent water supply shall be provided as soon as practicable but not later than 90 days after receipt one of the following:

(1) Information showing that the operator is responsible for adversely affecting the water supply.

(2) Notice from the Department that the operator is responsible for adversely affecting the water supply.

(d) Permanent water supplies include development of a new well with a distribution system, interconnection with a public water supply or extension of a private water supply, but do not include provision of bottled water or a water tank supplied by a bulk water hauling system, which are temporary water supplies.

EMERGENCY PROCEDURES

§ 281.263. Implementation of contingency plan.

\* \* \* \* \*

(b) During an emergency, the operator shall:

\* \* \* \* \*

(3) Immediately telephone the Department and county emergency management agency, and report the following information:

(i) [ Name ] The name of the person reporting the incident and telephone number where that person can be reached.

(ii) [ Name ] The name, address and permit number of the facility.

(iii) [ Date ] The date, time and location of the emergency.

(iv) A brief description of the nature of the emergency, the type and quantity of the solid waste involved and what dangers to public health and safety, public welfare and the environment exist or may occur.

\* \* \* \* \*

(vi) [ Parts ] The parts of the emergency plan being implemented to alleviate the emergency.

(c) After an emergency, the operator of the facility shall do the following:

\* \* \* \* \*

RECORDKEEPING AND REPORTING

§ 281.271. Daily operational records.

\* \* \* \* \*

(b) The daily operational record shall include the following:

\* \* \* \* \*

(8) A description of waste handling problems or emergency disposal activities.

\* \* \* \* \*

§ 281.272. Annual operation report.

\* \* \* \* \*

(b) The annual operation report, which shall be submitted on a form supplied by the Department, shall include the following:

\* \* \* \* \*

(c) The annual operation report shall be accompanied by a nonrefundable annual permit administration fee of \$ [ 600 ] 700 in the form of a check payable to the "Commonwealth of Pennsylvania."

**CESSATION AND CLOSURE**

**§ 281.282. Cessation of operations.**

(a) Upon cessation of composting operations at the facility, the operator shall [ **immediately** ] remove solid waste and structures or other materials which contain or are contaminated with solid waste, and shall provide for the processing or disposal of the waste or material under the act, the environmental protection acts and this title.

\* \* \* \* \*

(c) An operator required under § 281.254 (relating to soil and groundwater monitoring) to conduct soil monitoring may discontinue soil monitoring upon cessation of composting operations **with the Department's approval. In deciding whether to allow the discontinuance of monitoring, the Department will consider the operational history of the facility, the likelihood that groundwater degradation will manifest itself in the future and other relevant factors.**

\* \* \* \* \*

**CHAPTER 283. RESOURCE RECOVERY AND OTHER PROCESSING FACILITIES**

**Subchapter B. APPLICATION REQUIREMENTS**

**GENERAL PROVISIONS**

**§ 283.102. Operating plan.**

An application shall contain:

\* \* \* \* \*

(5) A plan for [ **hiring and** ] training equipment operators and other personnel concerning the operation and approved design of the facility.

\* \* \* \* \*

(8) An explanation of how the applicant intends to comply with § 283.214 (relating to measuring **and inspection** of waste).

\* \* \* \* \*

**§ 283.103. Maps and related information.**

An application shall contain a topographic map of the **proposed permit area and adjacent area**, including necessary narrative descriptions, which show the following:

(1) [ **Boundaries** ] **The boundaries** and names of present owners of record of land, both surface and subsurface, and including easements, rights-of-way and other property interests, for the proposed permit area and adjacent area; **the boundaries of the land within the proposed permit area**; and a description of title, deed or usage restrictions affecting the proposed permit area.

\* \* \* \* \*

(4) The location and name of public and private water [ **supplies** ] **sources** that are located on or within 1/4-mile of the proposed [ **permit area and adjacent area** ] facility. **If more than 50 wells are located within the 1/4-mile radius, the applicant may identify only the closest wells in each direction and**

**generally describe the location and number of wells within 1/4-mile of the proposed facility.**

\* \* \* \* \*

(7) The anticipated location of water quality monitoring points, **if monitoring is required by the Department.**

\* \* \* \* \*

(15) The solid waste storage or loading/unloading areas.

\* \* \* \* \*

**§ 283.105. Plan for access roads.**

The application shall contain designs, cross sections and specifications for access roads, including load limits, to demonstrate compliance with § 283.213 (relating to access roads). **Access roads shall be designed and constructed to handle adequately the truck traffic expected at the facility.**

**§ 283.107. Soil and groundwater monitoring plan.**

(a) If required by the Department, the applicant shall submit a groundwater monitoring plan to detect groundwater degradation [ **or pollution** ] from the facility.

\* \* \* \* \*

**§ 283.112. Relationship to county plans.**

\* \* \* \* \*

(b) An application shall contain the following:

(1) An explanation of whether the proposed facility is [ **expressly** ] provided for in the approved plan for the host county. [ **A facility will be considered expressly provided for in the host county plan only to the extent that implementing documents submitted by the county under § 272.245 designate the facility to receive a specified volume of waste under the host county plan.** ] A facility is "provided for" if it is designated by the host county to provide capacity assurance in the approved host county plan. A facility analyzed as part of a planning process, but not designated, will not be considered "provided for."

(2) If the proposed facility is not [ **expressly** ] provided for in the approved host county plan:

\* \* \* \* \*

(iii) **A detailed response to objection, if any, filed by the governing body of the host county within 60 days of the written notice under section 504 of the act (35 P. S. § 6018.504).**

[ (c) **To the extent that the application is for a facility that is not expressly provided for in the host county plan, an application for a proposed facility or for an expansion of capacity or volume at an existing facility shall contain an environmental siting analysis for each county generating municipal waste that will be disposed at the facility, demonstrating that the proposed location of the facility is at least as suitable as alternative locations within the generating county, giving consideration to environmental and economic factors. The environmental siting analysis shall include a discussion and analysis of each of the following:**

(1) **Transportation distances and associated impacts.**

(2) The environmental assessment criteria listed in § 271.127(a) (relating to environmental assessment).

(3) The siting criteria and technical standards of 40 CFR Part 257 (relating to classification of solid waste disposal facilities).

(d) The location of an existing permitted facility, including the reasonable expansion of the facility, that is not expressly provided for in the host county plan will be considered at least as suitable as alternative locations within the generating county to the extent that the implementing documents submitted by the county under § 272.245 designate the facility to receive waste under one or more county plans.

(e) The location of a proposed facility that is expressly provided for under subsection (b)(1) will be considered at least as suitable as alternative locations within the generating county to the extent that implementing documents submitted by the county under § 272.245 designate the facility to receive waste under one or more county plans.

(f) The Department will consider that a proposed facility or reasonable expansion of an existing facility is needed under § 271.127 only to the extent that the proposed facility or expansion is provided for in an approved county plan or is determined by the Department to be located at a proposed site that is at least as suitable as alternative locations under this section.

(g) The Department will require an applicant with a pending application to submit the information required under this section if, before the Department takes final action on the application, the Department receives from the county all legal documents necessary to implement the plan under § 272.145. ]

RECYCLING

§ 283.121. Recycling plan.

[ (a) ] An application [ for a facility that will be receiving waste after September 26, 1990, ] shall contain [ the following information in accordance with § 283.281 (relating to salvaging of materials):

(1) A detailed analysis of the potential for salvaging and recycling waste materials received at the facility, including the type of materials that will be received, the likelihood of receiving unmixed loads of waste materials and the markets for the materials. The analysis shall include the source separated recyclable materials as defined in § 271.1 (relating to definitions) at a minimum, plastics, high grade office paper, aluminum and newsprint.

(2) ] A plan for salvaging and recycling waste materials received at the facility for which recycling is cost effective, including proposed salvage areas, salvaging methods and anticipated markets for salvaged materials in accordance with § 283.281 (relating to salvaging of materials).

[ (b) If the proposed facility would incinerate municipal waste, the application shall contain a separate recycling analysis and plan in accordance with subsection (a) for ash generated by operation of the facility. ]

Subchapter C. OPERATING REQUIREMENTS  
GENERAL PROVISIONS

§ 283.201. Basic limitations.

\* \* \* \* \*

(d) A person or municipality that operates a facility subject to this subchapter may not:

(1) Mix solid waste with, or store solid waste in close proximity to, other solid waste as to create a risk of fire or explosion, or a risk of the accumulation of poisonous or otherwise harmful vapors or gases.

(2) Allow explosive waste to be stored, processed or disposed at the facility.

\* \* \* \* \*

(j) The approved mitigation measures identified in the permit application shall be completed before a facility may accept waste unless otherwise authorized in writing by the Department for technical reasons.

§ 283.202. Areas where resource recovery facilities and other processing facilities are prohibited.

(a) Except for areas that were permitted prior to April 9, 1988, a municipal waste processing facility subject to this chapter may not be operated as follows:

(1) **Floodplain.** In the 100-year floodplain of waters of this Commonwealth, unless the Department approves in the permit a method of protecting the facility from a 100-year flood consistent with the Flood Plain Management Act (32 P. S. §§ 679.101—679.601) and the Dam Safety and Encroachment Act (32 P. S. §§ 693.1—693.27).

(2) **Wetlands.**

(i) \* \* \*

(ii) For a processing facility permit issued on or after \_\_\_\_\_ (*Editor's Note: The blank refers to the effective date of adoption of this proposal.*) other than an expansion of a processing facility that was permitted prior to \_\_\_\_\_ (*Editor's Note: The blank refers to the effective date of adoption of this proposal.*), in or within 100 feet of a wetland other than an exceptional value wetland, unless for a processing facility other than a resource recovery facility storage and processing will not occur within that distance or storage and processing take place in an enclosed facility and one of the following is true:

(A) If the operation is in or along the wetland, the operator has received a permit from the Department under Chapter 105 (relating to dam safety and waterway management).

(B) If the operation is not in or along the wetland, no adverse hydrologic or water quality impacts will result.

(3) [ Within ] *Occupied dwelling.*

(i) For a processing facility permit issued prior to \_\_\_\_\_ (*Editor's Note: The blank refers to the effective date of adoption of this proposal.*), or for an expansion of a resource recovery facility or other processing facility that was permitted prior to \_\_\_\_\_ (*Editor's Note: The blank refers to the effective date of adoption of this proposal.*), within 300 feet measured horizontally from an occupied dwelling, unless the [ current ] owner of the dwelling has provided a written waiver consenting to the facility being

closer than 300 feet. The waiver shall be [made] knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the [current] owner. This siting limitation does not apply to onsite infectious and chemotherapeutic waste incineration facilities which are not commercial facilities.

(ii) For a processing facility permit issued on or after \_\_\_\_\_ (Editor's Note: The blank refers to effective date of adoption of this proposal, within 300 yards measured horizontally from an occupied dwelling, unless the owner of the dwelling has provided a written waiver consenting to the facility being closer than 300 yards. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the owner.

(4) Perennial stream. Within 100 feet of a perennial stream unless the storage and processing will not occur within that distance and no adverse hydrologic or water quality impacts to the perennial or intermittent stream will result.

(5) Property line. Within 50 feet of a property line unless [one of the following applies:] storage and processing takes place in an enclosed facility or the owners of occupied dwellings within that distance have provided written waivers consenting to the facility being closer than 50 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the owner.

[ (i) The operator demonstrates that actual processing of waste is not occurring within that distance.

(ii) The Department determines that the following are met:

(A) The proposed facility is in conformance with local zoning codes.

(B) The proposed facility would result in an overall reduction in air emissions.

(C) Owners of occupied dwellings within the distance have provided written waivers consenting to the facility being closer than 50 feet. A waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the current owner. ]

(6) School, park, playground.

[ (b) ] Except for areas that were permitted prior to [ (i) For a resource recovery facility permit issued on or after September 26, 1988, [ a resource recovery facility may not be operated ] except an expansion of a resource recovery facility permitted prior to September 26, 1988, within 300 yards of the following:

[ (1) Within 300 yards of a ] (A) A building which is owned by a school district or school and used for instructional purposes.

[ (2) Within 300 yards of a ] (B) A park.

[ (3) Within 300 yards of a ] (C) A playground.

[ (c) ] (ii) The current property owner [ under subsection (b) near which a new facility is proposed ] of a school building, park or playground may waive

the 300-yard prohibition by signing a written waiver. Upon receipt of the waiver, the Department will waive the 300-yard prohibition and will not use the prohibition as the basis for the denial of a new permit.

[ (d) ] (b) Except as provided in subsection [ (e) ] (c), this section does not apply to a feature that may come into existence after the date of the first newspaper notice under § 271.141 (relating to public notice by applicant).

[ (e) ] (c) \* \* \*

\* \* \* \* \*

DAILY OPERATIONS

§ 283.211. Signs and markers.

(a) A person or municipality that operates a facility subject to this subchapter shall identify the [ operation ] facility and the recycling drop-off center required under § 283.282 (relating to recycled materials collection center) for the duration of municipal waste processing operations by posting and maintaining a sign which is clearly visible and can be easily seen and read at the junction of each access road and public road. The sign shall be constructed of a durable, weather-resistant material [ and shall be of a minimum size of 3 feet by 4 feet with a light background and contrasting letters and numbers of a minimum height of 3 inches that can be easily seen and read. The sign shall show the name, business address and telephone number of the person or municipality operating the facility, the operating hours of the facility and the number of the current permit authorizing operations at the facility ] .

(b) Permit area markers and the permanent physical markers for the grid coordinate system shall be:

(1) [ Be posted ] Posted and maintained for the duration of the operation to which they pertain.

(2) [ Be clearly ] Clearly visible, readable and uniform throughout the operation.

(3) [ Be permanently ] Permanently fixed and made of a durable material.

\* \* \* \* \*

§ 283.212. Access control.

\* \* \* \* \*

(b) The operator shall [ construct and ] maintain a fence or other suitable barrier around the site sufficient to prevent unauthorized access.

\* \* \* \* \*

§ 283.213. Access roads.

\* \* \* \* \*

(b) A crossing of a perennial or intermittent stream or a wetland shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachments or water obstructions shall meet the requirements of Chapter 105 (relating to dam safety and waterway management).

(c) An access road shall have a drainage system that is compatible with the natural drainage system, structurally stable and which will pass safely the peak flow from a 24-hour, 25-year precipitation event. [ The drainage system shall include sloped or crowned road surfaces, cross drains or culverts, stabilized ditches, erosion resistant surfacing, sediment traps and

other appropriate sediment control measures as required by § 283.232 (relating to soil erosion and sedimentation control). ] The drainage system shall comply with Chapter 102 (relating to erosion control).

(d) An access road shall be paved or surfaced with asphalt, gravel, cinders or other equivalent material approved by the Department in the permit. An access road shall be capable of withstanding the load limits projected by the applicant under § 283.105 (relating to plan for access roads). The maximum sustained grade of an access road may not exceed 12%.

\* \* \* \* \*

(h) An access road shall be maintained to control dust and to prevent or control the tracking of mud on or off site.

[ (h) ] (i) \* \* \*

§ 283.214. Measuring and inspection of waste.

(a) An operator of a municipal waste processing facility that has received, is receiving or will receive 30,000 or more cubic yards of [municipal] solid waste in a calendar year shall weigh [municipal] solid waste when it is received. The scale used to weigh [municipal] solid waste shall conform to the Weights and Measures Act of 1965 (73 P. S. §§ 1651—1692) and regulations thereunder. The operator of the scale shall be a licensed public weighmaster under the Public Weighmasters Act (73 P. S. §§ 1771—1796) and regulations thereunder.

\* \* \* \* \*

(c) The operator of a facility shall inspect and monitor incoming waste to ensure that the disposal of waste is consistent with this article and the permit, unless otherwise approved by the Department, the monitoring and inspection shall include screening of waste for radioactive isotopes and be consistent with § 271.613 (relating to waste analysis plan).

§ 283.215. Equipment.

\* \* \* \* \*

(b) [ Standby equipment shall be located on the site or at a place where it can be available within 24 hours. ] If a breakdown of the operator's equipment occurs, the operator shall utilize standby equipment as necessary to comply with the act, the environmental protection acts, this subchapter and its permit conditions.

\* \* \* \* \*

§ 283.216. Unloading area.

\* \* \* \* \*

(b) The loading areas and unloading areas shall be constructed of impervious material which is capable of being cleaned by high pressure water spray and shall be equipped with drains or sumps connected to a sanitary sewer system or treatment facility to facilitate the removal of water. Drains or treatment systems may be connected to a sanitary sewer system if a waste characterization is submitted to the sewage sludge treatment plant operator and the operator finds that the treatment plant can fully treat the waste

stream. Leachate may be collected in holding tanks prior to its transport to the sewage treatment facility.

\* \* \* \* \*

§ 283.217. Cleaning and maintenance.

\* \* \* \* \*

(b) [ Except for scheduled or emergency shut-down of processing operations, the ] The operator may not allow putrescible waste to remain at the facility at the end of the day or for more than 24 hours except that putrescible waste may remain at the facility for any time period up to 72 hours over a weekend or 3-day weekend if provided for in the permit.

\* \* \* \* \*

(d) Processing equipment and areas that have contact with solid waste shall be capable of being cleaned by high-pressure water spray or other methods, and shall be located near drains that connect to a sanitary sewer system or treatment facility. Drains or treatment systems may be connected in a sanitary sewer system if a waste characterization is submitted to the sewage sludge treatment plant operator and the operator finds that the treatment plant can fully treat the waste stream. Leachate may be collected in holding tanks prior to its transport to the sewage treatment facility.

\* \* \* \* \*

§ 283.218. Air resources protection.

(a) Emissions from a facility subject to this chapter shall meet the requirements of the Air Pollution Control Act (35 P. S. §§ 4001—[ 4015] regulations thereunder, ] 4014), Article III (relating to air resources), the terms or conditions of its permit and, if applicable, the most recent edition of the Department's criteria for best available technology, and other applicable Department guidelines.

(b) The operator may not cause or contribute to [ the exceeding ] an exceedance of any ambient air quality standards under § 131.3 (relating to ambient air quality standards).

\* \* \* \* \*

§ 283.219. Nuisance control.

(a) The operator [ may not cause or allow ] shall control and minimize the attraction, harborage or breeding of vectors.

(b) The operator [ may not cause or allow ] shall control and minimize conditions not otherwise prohibited by this subchapter that are harmful to the environment or public health, or which create safety hazards, odors, dust, noise, unsightliness and other public nuisances.

SOIL AND WATER PROTECTION

§ 283.231. General requirements.

(a) The operator may not cause or allow a point or nonpoint source discharge [ of pollution ] in violation of The Clean Streams Law (35 P. S. §§ 691.1—691.1001) from or on the facility to surface waters of this Commonwealth.

(b) A municipal waste processing facility shall be operated to prevent and control water pollution. An operator

shall operate and maintain necessary [surface and groundwater] water pollution treatment facilities until [surface or groundwater] water pollution from or on the facility has been permanently abated.

\* \* \* \* \*

(d) The operator may not cause or allow water pollution [of groundwater] on or off the site. [The operator may not cause or allow a discharge of a contaminant into groundwater except as authorized by a permit from the Department.]

\* \* \* \* \*

§ 283.232. Soil erosion and sedimentation control.

The operator shall manage surface water and control erosion and sedimentation to:

(1) Divert surface water away from the storage area with measures and structures necessary to handle surface water flows, based on a 25-year, 24-hour precipitation event, [and] supported by written calculations and also in compliance with Chapter 102 (relating to erosion control).

\* \* \* \* \*

§ 283.234. Water supply replacement.

(a) A person or municipality operating a municipal waste processing facility subject to this chapter which adversely affects a water supply by degradation, pollution or other means shall restore or replace the affected water supply with an alternate source that is of like quantity and quality to the original supply at no additional cost to the owner.

(b) A temporary water supply shall be provided as soon as practicable but not later than 48 hours after one of the following:

(1) Receipt of information showing that the operator is responsible for adversely affecting the water supply.

(2) Receipt of notice from the Department that the operator is responsible for adversely affecting the water supply.

(c) A permanent water supply shall be provided as soon as practicable but not later than 90 days after one of the following:

(1) Receipt of information showing that the operator is responsible for adversely affecting the water supply.

(2) Receipt of notice from the Department that the operator is responsible for adversely affecting the water supply.

(d) Permanent water supplies include development of a new well with a distribution system, interconnection with a public water supply, or extension of a private water supply, but do not include provision of bottled water or a water tank supplied by a bulk water hauling system, which are temporary water supplies.

EMERGENCY PROCEDURES

§ 283.253. Implementation of contingency plan.

\* \* \* \* \*

(b) During an emergency, the operator shall:

\* \* \* \* \*

(3) Immediately telephone the Department and county emergency management agency, and report the following information:

(i) [Name] The name of the person reporting the incident and telephone number where that person can be reached.

(ii) [Name] The name, address and permit number of the facility.

(iii) [Date] The date, time and location of the emergency.

\* \* \* \* \*

(vi) [Parts] The parts of the contingency plan being implemented to alleviate the emergency.

(c) After an emergency, the operator of the facility shall do the following:

\* \* \* \* \*

(2) Prevent processing, [or] storage or disposal of solid waste in the area affected by the emergency until the operator has cleaned up the area, and the Department has [inspected and] approved the resumption of operation after the cleanup.

RECORDKEEPING AND REPORTING

§ 283.261. Daily operational records.

\* \* \* \* \*

(b) The daily operational record shall include the following:

\* \* \* \* \*

(10) A record of rejected waste loads and the reasons for rejecting the loads.

\* \* \* \* \*

§ 283.262. Annual operation report.

\* \* \* \* \*

(c) The annual operation report shall be accompanied by a nonrefundable annual permit administration fee in the form of a check payable to the "Commonwealth of Pennsylvania" for the following amounts:

(1) [One thousand four] Seven hundred dollars for facilities that incinerate municipal waste.

(2) [Six] Seven hundred dollars for other municipal waste processing facilities subject to this chapter.

CESSATION AND CLOSURE

§ 283.272. Cessation of operations.

(a) Upon cessation of processing operations at the facility, the operator shall immediately remove solid waste and structures or other materials which contain or are contaminated with solid waste, and shall provide for the processing or disposal of the waste or material [under the act] in accordance with the environmental protection acts and this title.

\* \* \* \* \*

RECYCLING AND WASTE REMOVAL

§ 283.281. Salvaging of materials.

(a) [After September 26, 1990, a] A person or municipality may not operate a resource recovery facility unless the operator has developed and is implementing a program to recycle waste materials received at the facility for which recycling is cost effective, in accordance with

the plan approval under § 283.121 (relating to recycling plan). [The materials may include, but are not limited to, plastics, high grade office paper, aluminum, clear glass and newsprint. If the facility incinerates municipal waste, the operator shall also salvage and recycle materials contained in ash generated by operation of the facility to the extent the recycling is cost effective, in accordance with the plan approved under § 283.121.]

\* \* \* \* \*

**Subchapter E. ADDITIONAL OPERATING REQUIREMENTS FOR SPECIAL HANDLING WASTES**

**§ 283.402. Infectious waste monitoring requirements.**

(a) A person or municipality that disinfects infectious waste shall monitor the waste to ensure the following:

\* \* \* \* \*

(2) For other disinfection processes, [total destruction of specified indicator organisms in 95% of the samples tested during disinfection.] both of the following are met:

(i) The process shall be capable of inactivating vegetative bacteria, fungi, lipophilic/hydrophilic viruses, parasites and mycobacteria at a 6 log 10 reduction or greater.

(ii) Inactivating B. stearothermophilus spores, b. pumilus or B. subtilis spores at a 4 log 10 reduction or greater.

\* \* \* \* \*

(d) If the facility disinfects infectious waste by means other than incineration or thermal processing, the operator shall perform a microbiological analysis of indicators removed from the processed waste. The analysis shall be conducted at a minimum, every 40 hours during the operational life of the facility, unless otherwise provided in a permit. The analyses shall be made available to the Department upon request.

\* \* \* \* \*

(m) In addition to other applicable requirements, an autoclave facility shall comply with the following:

(1) The processing of pathological waste is prohibited.

(2) The facility shall maintain a retention time for processing bulk fluids (greater than 500 ml) which allows for the complete vaporization of fluids.

**CHAPTER 285. STORAGE, COLLECTION AND TRANSPORTATION OF MUNICIPAL WASTE**

**Subchapter A. STORAGE OF MUNICIPAL WASTE GENERAL**

**§ 285.111. General requirements.**

[No] A person or municipality that stores municipal waste may not do the following:

\* \* \* \* \*

(4) Allow [litter] waste or constituents of waste to be blown or otherwise deposited outside of the storage area.

**§ 285.115. Nuisance control.**

(a) A person or municipality that stores municipal waste shall:

\* \* \* \* \*

(2) Take other measures necessary to [prevent] minimize and control the presence of vectors.

\* \* \* \* \*

(b) A person or municipality storing municipal waste shall also [prevent and eliminate] minimize and control conditions not otherwise prohibited by this subchapter that are harmful to the public health, public safety or the environment, or which create safety hazards, odors, dust, unsightliness or other public nuisances.

**§ 285.116. Surface and groundwater protection.**

(a) Surface water runoff from storage areas shall be minimized. Collection of surface water runoff shall be managed in accordance with The Clean Streams Law (35 P. S. §§ 691.1—691.1001) and the regulations promulgated thereunder.

(b) Surface water run-on to storage areas shall be minimized.

(c) Waste may not be stored in a manner that causes groundwater degradation.

**§ 285.117. Emergency storage.**

Notwithstanding a provision of this article or term or condition of a permit for a solid waste processing or disposal facility, the Department may allow the storage of municipal waste at a permitted facility if the following conditions are met:

(1) The waste was created, spilled or released during or as a result of an emergency. The waste may also be created as a result of adverse effects on groundwater from a solid waste management facility, materials storage tank or similar source.

(2) The permitted facility includes the following:

(i) A designated waste storage area.

(ii) An approved storage and handling plan that will allow storage of the waste without any adverse effect on public health, safety, welfare or the environment.

(iii) Plans for prompt removal of the waste and disposal or processing at another permitted facility if the Department denies the application for permit modification under paragraph (3).

(3) Within 5 working days after storage begins, the Department has received an application for permit modification under § 271.222 or § 287.222 (relating to permit modification; and permit modification) to allow the disposal or processing of the waste at the facility.

**TYPES OF STORAGE**

**§ 285.121. Containers.**

(a) A person or municipality storing municipal waste shall provide a sufficient number of containers to prevent leaks, odors and vector attraction and to contain solid waste generated during periods between regularly scheduled collections.

\* \* \* \* \*

[ (c) Putrescible municipal waste shall be stored in an individual container or bulk container that has the following characteristics:

(1) ] (3) \* \* \*

[ (2) ] (4) \* \* \*

(5) The container shall be clearly labeled as "municipal waste" or a specific type of municipal waste.

\* \* \* \* \*

§ 285.124. Impoundments—failure.

\* \* \* \* \*

(b) [ No ] A surface impoundment that has been removed from service due to failure may not be restored to service unless the following requirements are met:

\* \* \* \* \*

(c) If a storage impoundment fails and the impoundment or surrounding area cannot be cleaned up in a manner that will protect public health, safety and the environment and that is satisfactory to the Department, the operator shall submit a closure plan to the Department that meets one of the following and, upon Department approval, implement the closure plan:

(1) Removal of waste.

(i) The closure plan provides for removal of the waste and structures or other materials which contain or are contaminated with solid waste.

(ii) The closure plan provides for the processing or disposal of the waste and material under the environmental protection acts and this title.

(iii) If required by the Department, the closure plan includes a soil and groundwater monitoring plan to assess the impact of the failure on groundwater consistent with § 273.286 (relating to assessment plan).

(iv) If the groundwater assessment shows the presence of groundwater degradation at one of the monitoring wells, the operator shall comply with § 273.287 (relating to abatement plan).

(2) Waste remaining in place. If the closure plan provides for leaving the waste in place, the operator shall comply with the requirements of § 271.113 (relating to closure plan).

ADDITIONAL REQUIREMENTS FOR INFECTIOUS AND CHEMOTHERAPEUTIC WASTE

§ 285.147. Marking of containers.

(a) The outermost container for each package of infectious or chemotherapeutic waste for offsite transportation shall be labeled immediately after packing. The label shall be securely attached and shall be clearly legible. Indelible ink shall be used to complete the information on the label. [ and the ] If handwritten, the label shall be at least 3 inches by 5 inches in dimension.

\* \* \* \* \*

(d) The labeling information specified in subsection (c)(1) shall be black. The labeling information specified in subsection (c)(2) shall be fluorescent orange or orange-red in color, or predominantly so, with a background of a contrasting color for infectious waste, and yellow in color, or predominately so, with a background of a contrasting color for chemotherapeutic waste.

\* \* \* \* \*

Subchapter B. COLLECTION AND TRANSPORTATION OF MUNICIPAL WASTE

GENERAL PROVISIONS

§ 285.211. General requirements.

(a) Municipal waste, including ash residue from municipal waste incineration and infectious or chemotherapeutic waste incineration, shall be completely covered during transportation and parking with a cover that meets the following requirements. The cover shall:

(1) Be [ waterproof ] water resistant.

\* \* \* \* \*

§ 285.212. Collection and transportation.

\* \* \* \* \*

§ 285.214. [ Equipment ] Transportation equipment cleaning areas and securing loads in vehicles.

(a) [ Equipment ] Transportation equipment cleaning areas shall meet the following requirements:

\* \* \* \* \*

§ 285.216. Wastes from accidents and spills.

\* \* \* \* \*

(b) The Department may immediately approve emergency storage, transportation, processing or disposal methods necessary to mitigate harm to the public health, safety or the environment. Storage may be at the site of emergency at a permitted processing or disposal facility under § 285.117 (relating to emergency storage) or at a site approved by the Department.

\* \* \* \* \*

§ 285.217. Recordkeeping and reporting.

(a) General. A person or municipality that collects or transports municipal waste other than infectious and chemotherapeutic waste shall make and maintain an operational record each day that municipal waste is collected or transported, or both. The daily operational record shall be kept in the cab of each transportation vehicle on the date of collection or transportation. The record shall include the following;

\* \* \* \* \*

(2) The name [ and ], mailing address and telephone number of the person or municipality collecting or transporting the waste.

\* \* \* \* \*

§ 285.219. Transporting foodstuffs and feedstuffs in vehicles used to transport waste.

\* \* \* \* \*

(b) A person or municipality may not knowingly accept a food product or produce from, or provide a food product or produce to, a vehicle used to transport municipal, residual or hazardous waste, or, chemical or liquid, in bulk, which is not a food product or produce.

(c) As used in this section, the following words and phrases have the following meaning:

(1) Food product or produce—\* \* \*

(2) In bulk—\* \* \*

(3) Chemical or Liquid—The term includes any chemical or liquid, including any pesticide or her-

bicide regardless of its use or intended use. The term does not include the following:

(i) A chemical or liquid food product or produce.

(ii) A chemical or liquid being transported for use directly in the production and preparation for market of poultry, livestock and their products or in the production, harvesting or preparation for market of agricultural agronomic, horticultural, silvicultural or aquicultural crops and commodities.

(iii) A chemical or liquid being transported for use as an ingredient in a product used in the production and preparation for market of poultry, livestock and their products or in the production, harvesting or preparation for market of agricultural, agronomic, horticultural, silvicultural or aquicultural crops and commodities.

\* \* \* \* \*

**Subchapter C. TRANSPORTER LICENSING FOR INFECTIOUS AND CHEMOTHERAPEUTIC WASTE  
LICENSE APPLICATION REQUIREMENTS**

**§ 285.311. General application requirements.**

\* \* \* \* \*

(b) [The application shall be in two parts. The second part of the application may be submitted with the first part. If the two parts are not submitted simultaneously, the second part shall be submitted within 90 days after the Department's written request.

(c) ] The [ first part of an ] application shall contain the following:

\* \* \* \* \*

[ (d) The second part of an application shall contain the following:

(1) ] (6) \* \* \*

[ (2) ] (7) \* \* \*

[ (3) ] (8) \* \* \*

[ (4) ] (9) \* \* \*

\* \* \* \* \*

**Subchapter D. MANIFESTING FOR INFECTIOUS AND CHEMOTHERAPEUTIC WASTE  
FACILITY RESPONSIBILITIES**

**§ 285.432. Use of manifest.**

(a) Except [ as provided in ] for waste managed in accordance with § 285.401 (relating in scope), an owner or operator of a designated facility may not accept shipments of infectious or chemotherapeutic waste or processed infectious or chemotherapeutic waste that is recognizable from offsite sources unless the shipment is accompanied by a Pennsylvania manifest in accordance with this subchapter.

\* \* \* \* \*

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