

# RULES AND REGULATIONS

## Title 25—ENVIRONMENTAL PROTECTION

### ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CHS. 271—273, 275, 277, 279, 281, 283, 285 AND 287]

#### Sewage Sludge; Municipal Waste; and Residual Waste

The Environmental Quality Board (Board) by this order adopts amendments to the Department of Environmental Protection's (Department's) municipal waste regulations in Chapters 271—273, 275, 277, 279, 281 and 283 to implement section 104(18) of the Solid Waste Management Act (SWMA) (35 P. S. § 6018.104(18)). The Board also is adopting amendments to the Department's residual waste regulations in Chapter 287 (relating to residual waste management—general provisions) to improve and clarify the existing regulations.

This order was adopted by the Board at its meeting of October 15, 1996.

#### A. *Effective Dates*

The amendments to the municipal waste regulations will go into effect January 25, 1997, with the following exceptions:

(1) The deletion of §§ 275.101—275.107, 275.301 and 275.401 will go into effect May 27, 1997. The deletion of the surface land disposal requirement, §§ 275.501—275.531 and the sewage sludge distribution program requirements, §§ 275.601—275.614, will go into effect January 25, 1997. The remainder of Chapter 275, as amended by this rulemaking, will remain in effect for the limited purposes of regulating the operation and enforcement of individual solid waste permits issued under Chapter 275.

(2) The deletion of § 271.232 will go into effect May 27, 1997.

(3) The addition of Chapter 271, Subchapter J (relating to beneficial use of sewage sludge by land application) will go into effect May 27, 1997, with the exception of §§ 271.902(e) and (f) and 271.903 (relating to permits and direct enforceability; and operation under existing permits and beneficial use orders), which will go into effect January 25, 1997.

The amendments to the residual waste regulations, Chapter 287, will go into effect January 25, 1997.

#### B. *Contact Persons*

For further information contact William F. Pounds, Chief, Division of Municipal and Residual Waste, Bureau of Land Recycling and Waste Management, P.O. Box 8471, Rachel Carson State Office Building, Harrisburg, PA 17105-8471, (717) 787-7381, Stephen Socash, Chief, Permitting Section, Bureau of Land Recycling and Waste Management, P.O. Box 8471, Rachel Carson State Office Building, Harrisburg, PA 17105-8471, (717) 783-7381, 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. 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 document is available electronically through the Department's Web site (<http://www.dep.state.pa.us>).

#### C. *Statutory Authority*

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

The SWMA (35 P. S. §§ 6018.101—6018.1003), which in section 105(a) (35 P. S. § 6018.105(a)) grants the Board the power and duty to adopt the rules and regulations of the Department to carry out the provisions of the SWMA; and which in section 104(18), as amended by the act of July 11, 1989 (P. L. 331, No. 55) (Act 55), authorizes general permits for the processing and beneficial use of municipal waste.

Sections 5(b), 304 and 402 of The Clean Streams Law (35 P. S. §§ 691.5(b), 691.304 and 691.402), which in section 5(b) grants the Department the authority to formulate, adopt, promulgate and repeal the rules and regulations as are necessary to implement the provisions of the act; which in section 304 grants the Department the power to adopt, prescribe and enforce the rules and regulations as may be deemed necessary for the protection of the purity of the waters of this Commonwealth, or parts thereof, and to purify those now polluted, and to assure the proper and practical operation and maintenance of treatment works approved by the Department; and which in section 402 grants the Department the authority to require, by rule or regulation, that activities be conducted under a permit or other conditions established by the Department whenever the Department finds that the activity creates a danger of pollution of the waters of this Commonwealth or that regulation is necessary to avoid pollution.

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

The Pennsylvania Used Oil Recycling Act (58 P. S. §§ 471—480), which in section 10 (58 P. S. § 480) grants the Department the authority to institute civil actions under regulations issued under the act.

Section 1917-A of The Administrative Code of 1929 (71 P. S. § 510-17), which 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; and section 1920-A (71 P. S. § 510-20), which grants the Board the power and duty to formulate, adopt and promulgate rules and regulations.

#### D. *Background and Summary*

##### *Municipal Waste Regulations*

For 27 years, the Commonwealth has allowed sewage sludge to be land applied in one manner or another. Until 1988, the Department regulated the land application of sewage sludge under individual permits for individual sites. In 1988, § 271.232 (relating to beneficial use) was promulgated. Under that section, the Department may issue an order to a person or municipality allowing the beneficial use of sewage sludge. This process enables a person or municipality that demonstrates that its sewage

sludge meets a certain quality to land apply it at sites not specified in the beneficial use order. The process is more time and cost efficient than the issuance of individual permits under Chapter 275, but no longer sufficient in light of the 1989 amendment to the SWMA. That year, the SWMA was amended by Act 55, which amended section 104(18) of the SWMA to require that the Department establish waste regulations to effectuate the beneficial use of municipal and residual waste, including regulations for the issuance of general permits for any category of beneficial use or processing of municipal or residual waste on a regional or Statewide basis.

After Act 55 was passed, the Department began examining alternatives to meet this duty. On July 20, 1993, the Pennsylvania Septage Management Association submitted a petition to the Board requesting that a specific rule-making be required of the Department in order to streamline the permitting process for land application permits. The Department responded that it agreed in concept to the petitioner's request, but that a better approach existed than that suggested by the petitioner. The Board agreed with the Department and, at its January 18, 1994, meeting, directed the Department to draft proposed regulations addressing this issue. The Department presented the proposed regulations to the Board on July 19, 1994, at which time the Board approved them. The proposed regulations were published in the *Pennsylvania Bulletin* on October 1, 1994. This rulemaking package contains the final regulations and regulatory amendments.

Proposed Chapter 271, Subchapter I (relating to beneficial use) and Subchapter J implement section 104(18) of the SWMA. Subchapter I authorizes the issuance of general permits for the processing or beneficial use, or both, of municipal waste. It does not, however, authorize the issuance of general permits for the processing or beneficial use of infectious or chemotherapeutic waste. Additionally, it does not authorize general permits for the beneficial use of sewage sludge by land application; these are authorized in Subchapter J.

Subchapter J authorizes individual and general permits for the land application of sewage sludge. Its structure and overall content have been revised to mirror more closely the format and requirements in the EPA Part 503 regulations, whereas the proposed regulations were modeled on the residual waste general permit format. The Federal regulations developed risk based numbers that address sewage sludge quality and cumulative metal loading rates for land applications. The definitions, pollutant limits, management practices, pathogen and vector attraction reduction requirements, monitoring requirements, and recordkeeping requirements in the final regulations are similar, and in some cases identical, to the Part 503 requirements. Instances in which Subchapter J is more stringent than Part 503 are explained in this section of the Preamble. The fee for application for coverage under a Land Application of Sewage Sludge permit will be \$500.

#### *Residual Waste Regulations*

The Board is revising Chapter 287 of the residual waste regulations, which were promulgated in 1992, to address a few relatively minor issues relating to the general permits program, to clarify obligations for permit-by-rule facilities, to add new categories of activities to the permit-by-rule section and to streamline the procedures for allowing the beneficial use of coal ash. Based on the Department's experience in implementing the programs

affected by these changes since 1992, the regulations will improve the overall effectiveness of these programs.

The changes associated with the general permits program will provide consistency in the implementation of general permits between the municipal waste and residual waste programs. In addition, the regulations allow mixtures of residual and municipal wastes to be managed under one general permit. The regulations no longer include a "me too" process for persons to request consideration of an application during the public comment period of the original application. Instead, persons may apply for approval to operate under a general permit after the permit is issued. The "me too" process was removed because it caused conflicts between applicants with regard to their timeliness for review and approval.

The permit-by-rule section was amended to include container processing and empty drum reconditioning facilities. In addition, the Board clarified its regulatory position on storage impoundments that are associated with processing facilities, on mechanical processing facilities and on transfer facilities that collect used oil. For storage impoundments that are associated with processing facilities, the regulations represent a clarification with regard to the implementation of water quality monitoring plans and the application of the storage requirements of Chapter 299 (relating to storage and transportation of residual waste). Storage impoundments associated with permits-by-rule are on the same transition schedule for compliance with the regulations as all other storage impoundments. The final-form regulations provide written notification for these impoundments with regard to the submission of water quality monitoring plans. Under the residual waste regulations that became effective on July 4, 1992, all operators of storage impoundments must implement a water quality monitoring plan by no later than July 4, 2002.

The regulations have been extensively revised to simplify and streamline the process for allowing the use of coal ash for beneficial purposes at coal mining activity sites and at abandoned coal and abandoned noncoal surface mine sites. The regulations eliminate many of the design standards and replace them with performance standards. The review of a beneficial use request will be considered as part of the review of a reclamation plan. In addition, a generator of coal ash will have the opportunity to seek certification from the Department for multiple beneficial uses of the ash.

#### *Advisory Committees*

This regulatory package has been developed with input from several of the Department's advisory committees.

For the municipal waste portions of the package, the Department worked closely with the biosolids subcommittee of the Solid Waste Advisory Committee (SWAC), as well as the full SWAC. The Department also worked with the Agricultural Advisory Board, the Pennsylvania Water Environment Association and the Pennsylvania Septage Management Association. Each of these groups received drafts of the regulations, provided written or oral comments, or both, to the Department, and met with the Department either at a plenary meeting, through a subcommittee, or in combined meetings, to discuss the regulations.

The Department worked closely with the SWAC on the residual waste portions of this package. Additionally, the coal ash regulations were discussed with the Mining and Reclamation Advisory Board (MRAB). The MRAB recommended these regulations proceed to final rulemaking at its meeting on May 29, 1996.

The Department considered all comments received from these organizations and incorporated many of them into these final regulations. At its July 11, 1996 meeting, SWAC recommended that this final rulemaking be submitted to the Board.

*Sewage sludge final-form regulations more stringent than Federal standards*

The Federal Environmental Protection Agency (EPA) promulgated Standards for the Use or Disposal of Sewage Sludge (Part 503) at 58 FR 9387 (February 19, 1993). Part 503 is codified at 40 CFR Part 503. The Federal rule applies to land application, surface disposal and incineration of sewage sludge. Subchapter J applies only to land application of sewage sludge.

Part 503 allows a generator of sewage sludge to obtain a permit to land apply sewage sludge through one of several avenues, and does not require a land applier of residential septage to obtain a permit. See 40 CFR 503.3. Subchapter J of these final-form regulations requires that persons generating sewage sludge to be land applied, and land appliers of residential septage, operate under an individual or general Land Application of Sewage Sludge permit issued by the Department. See § 271.902. Alternatively, persons may operate under individual permits issued under Chapter 275 (relating to land application of sewage sludge) for a limited period of time. The SWMA requires a permit prior to processing or disposing of municipal waste. The SWMA directs the Department to develop regulations to implement a program for the beneficial use of municipal waste, including general permits. This includes general permits for the land application of sewage sludge, including residential septage.

Part 503 allows a person to sell or give away sewage sludge in bags or other containers regardless of the quality of the sewage sludge, as long as it meets the EPA's minimum quality criteria for land application. See 40 CFR 503.11(j) and 503.13(a)(1). The EPA assumed that a homeowner would calculate and keep track of the lifetime metal loading rate and follow restrictions on the bag or other container for home garden use. Some problems, such as odors, have occurred with the bagging of this variable quality sewage sludge; therefore the EPA is considering changes to this portion of the regulations. Subchapter J is more stringent in that it only authorizes exceptional quality (EQ) sewage sludge to be distributed in this manner. See § 271.911(b)(3) (relating to special requirements). The EQ sewage sludge is fertilizer-like. It can be marketed or used without restrictions. Requiring this sewage sludge to be EQ diminishes the potential for adverse effects upon human health and the environment.

Part 503 describes an EQ sewage sludge that is exempt from general requirements and management practices if it meets certain pollutant concentration requirements, pathogen reduction standards and vector attraction reduction standards. See 40 CFR 503.10(b)(1). Subchapter J adds additional requirements. First, the sewage sludge must, prior to use, continuously meet the pollutant concentrations identified in Part 503 as well as a concentration limit for PCBs added in the regulations. See § 271.911(b)(1). Second, the sewage sludge must be nonliquid. *Id.* The municipal waste regulations already contain a definition of "liquid waste," which will be used to determine if sewage sludge is nonliquid. Third, the sewage sludge must be nonrecognizable as human waste. *Id.* Additionally, the sewage sludge must be applied at the agronomic application rate. See § 271.911(b)(2).

There are several explanations for these differences. EPA assumed in the risk assessment for Part 503 that

EQ sewage sludge will not vary in quality and is a valuable product which is sold and for which over-application will not occur. The EPA concluded that no site or other restrictions are necessary. The Department's experience demonstrates that these assumptions are not always true.

Liquid sewage sludge has the potential to be much more variable than a nonliquid sludge, particularly with respect to pathogen and vector attraction reduction. Limiting the EQ sewage sludge to nonliquid products will reduce the potential for adverse effects to human health, which are caused by using sewage sludge that may not continuously meet the required pathogen and vector reduction standards. In addition, contrary to the EPA assumptions, liquid sewage sludge is not fertilizer-like and due to its variability is not always marketed. Because of the low nitrogen and high water content, it may be necessary to bring 40 times more liquid sludge to a site to get the same amount of nutrients supplied by one load of liquid commercial fertilizer. This intense traffic and the management practices associated with land applying the huge volumes of liquid require the more intensive management techniques that are necessary for non-EQ sewage sludges.

The requirement that the EQ sewage sludge be nonrecognizable as human waste is necessary to prevent adverse aesthetic impacts. There are no site restrictions required for the land application of EQ sewage sludge, but experience has shown that offensive odors can evoke with some nonliquid sludges meeting the EQ standards. By treating the waste as nonrecognizable, the EQ sewage sludge can be marketed and safely used as a fertilizer.

The requirement that the EQ sewage sludge be applied at the agronomic rate is necessary to prevent the over-application of nutrients and to prevent the land application operations from becoming a disposal facility, especially if the sludge is not purchased by the farmer. The EQ sewage sludge contains nitrogen that could cause surface and groundwater pollution problems if over applied. The final-form regulations allow the agronomic rate requirement to be altered for land reclamation activities.

Subchapter J adds the requirement for land application of all qualities of sewage sludge that they must not be applied at a rate greater than the agronomic rate, unless approved by the Department for land reclamation activities. See § 271.911(b)(2) and § 271.915(f) (relating to management practices). Part 503 has no such requirement. As explained above, this requirement prevents over application of nutrients and prevents a land application site from becoming a disposal facility.

Part 503, 503.12, contains general requirements for land application of sewage sludge. These apply to all land application activities except those involving the EQ sewage sludge. The counterpart to this section is found in § 271.913 (relating to general requirements), which contains several additional requirements not found in the Federal regulations.

The first of these is § 271.913(d), which requires that a reclamation activity be permitted or otherwise approved by the Department in order for a person to land apply sewage sludge to a reclamation site.

The second is found in § 271.913(e), which requires that a person operating under a Land Application of Sewage Sludge permit issued under Subchapter J obtain written consent of the owner of the land upon which the sewage sludge will be land applied prior to land applying it. This is a common sense requirement that derives from

existing regulations requiring landowner consent for municipal waste processing or disposal activities.

The third is found in § 271.913(f), which requires that a person provide the current occupant of the land upon which sewage sludge application will occur with a user instruction sheet at least 7 days prior to land applying sewage sludge for the first time. This also is a common sense requirement which will help educate the occupant as to the nature of the land application activity. It is also consistent with the requirement in Part 503, 503.12(h), that the person applying sewage sludge give the owner or lease holder notice and necessary information to comply with Part 503. Certain land application practices, for instance, could require the occupant to post signs restricting access to the site.

The fourth is found in § 271.913(g), which requires that a person who prepares sewage sludge, or a land applier of residential septage, give appropriate notice to the adjacent landowners, the county conservation district and the Department prior to the first application of sewage sludge at a particular location. Notice may be performed by personal delivery or first class mail and, for adjacent landowners, by posting at the site.

The adjacent landowner requirement was added, in part, to address concerns expressed by members of the general public who live near land application sites. Notification will familiarize adjacent landowners with any access restrictions that may apply to the operation and to provide them with information on whom they should contact if questions arise or problems occur at the site. This is the only "public notice" provided prior to the land application of sewage sludge.

County conservation district notification will benefit the Commonwealth because the districts are expected to play an increasingly important role in working with the Department to implement the land application program. It is anticipated that the districts will assist permittees in locating acceptable sites, and that all sites that receive sewage sludge will be covered by a soil conservation plan that the districts usually prepare. It is also projected that the districts will assist the Department in increasing public acceptance of the program at a local level.

Notification to the Department is necessary in order for the regional office to maintain a database of site users. This database is to provide future land appliers with information on who previously used the site so they can determine the cumulative pollutant loading that has occurred.

The fifth is found in § 271.913(h), which requires the person who prepares the first sewage sludge that is applied at a particular location, or the first septage hauler, to obtain a background soil chemical analysis for pH and for the constituents listed in the tables in § 271.914(b)(relating to pollutant limits), unless the sewage sludge is EQ. This analysis provides the landowner or farmer, or both, with baseline information at the site, in the event that questions on the site operation occur in the future. No other soil analyses are required and it is anticipated that many sites will have this type of information available because annual soil analyses are required under the current regulations.

The final difference in this section is found in § 271.913(m), which adds "equitable owner" to the list of persons (legal owner or lease holder) to whom the person who applies sewage sludge must give necessary information to comply with Subchapter J. This was added in order to make the requirement comprehensive.

Part 503.13 addresses pollutant limits. It contains four tables which are central to determining the quality of sewage sludge, the uses of sewage sludge and the amounts of sewage sludge that may be land applied. The counterpart to this section is § 271.914. This section is no more stringent than the Federal regulation except as follows:

Section 271.914 requires that the cumulative pollutant loading information (that is, the cumulative levels of pollutants applied to the land over time) be tracked for all sewage sludge except the EQ sewage sludge, whereas Part 503 exempts sewage sludge that falls below the Table 3 levels regardless of whether the EQ pathogen reduction requirements and vector attraction reduction requirements are met. The EPA assumed that it would take 100 years for the cumulative pollutant loading rates to be reached at a site if the sewage sludge pollutant concentrations were below the levels in Table 3. The Department's calculations indicated that the number of years is 20, not including sewage sludge that may already have been applied to a site under the current land application program. To prevent the overloading of farmland with metals, this simple recordkeeping requirement is necessary.

Additionally, § 271.914 reflects the Pennsylvania requirement that sewage sludge sold or given away in a bag or other container must be EQ sewage sludge, that is, it must not exceed the pollutant concentrations of Table 3. Accordingly, Table 4 of the EPA's Part 503 is unnecessary and has been eliminated from this rulemaking.

Finally, Table 1 in § 271.914(b) states a ceiling concentration level (the level above which no sewage sludge can be land applied) for PCBs, and Table 3 states a pollutant concentration level (the level not to be exceeded for EQ sewage sludge) for PCBs. The PCBs are not restricted in Part 503. The 8.6 mg/kg level established for Table 1 and the 4 mg/kg level established for Table 3 are based on risk assessment analyses. In the near future, the EPA is expected to publish similar PCB pollutant concentrations.

Part 503, 503.14, contains management practices for land application of non-EQ sewage sludge. The counterpart to this section is found in § 271.915, which contains several requirements not found in the Federal regulations.

To begin with, § 271.915(a) prohibits sewage sludge from being land applied if it is likely to adversely affect a Federal or Pennsylvania endangered species or its listed critical habitat. The Federal regulation only concerns the Federal protections. This was added to protect Pennsylvania's threatened and endangered species and their habitat.

Section 271.915(c) contains the following isolation distances not contained in the Federal regulation:

Section 271.915(c) prohibits sewage sludge from being applied within 100 feet of a perennial stream, an exceptional value wetland, or the edge of a sinkhole. This distance is necessary to prevent direct runoff of sewage sludge into surface waters of this Commonwealth. This distance is taken from recommendations in the Department's Manure Management Manual to prevent physical runoff of waste into surface water. This distance is especially important considering the final-form regulations allow land application to occur on slopes up to 25% for agricultural activities and 35% for land reclamation activities.

Section 271.915(c) prohibits sewage sludge from being applied within 300 feet of a water source (such as,

drinking water well), or within 300 feet of an occupied dwelling unless landowner consent is obtained. The distance from the water source is necessary to protect drinking water supplies. No hydrogeologic or soil information is required in the final-form regulations, so the setback provides a buffer or mixing zone in the event that excessive drainage, fractures or other features that exist at the site may provide a direct conduit to groundwater. The 300 foot distance from occupied dwellings is necessary to prevent noise, fugitive dust, excessive traffic and odors from affecting the surrounding community. The Part 503 implementing guidance indicates that buffer zones should be established based on the conditions at the particular site. Since these regulations do not require site-specific permits, these minimum distances, which have been successfully used for the past 8 years, will provide the necessary protection.

At the request of the Department's Agricultural Advisory Board, § 271.915(c) also contains language protecting a land application operation from future changes in distances to occupied dwellings and water sources that occur after adjacent landowner notification is given.

Section 271.915(c) also prohibits sewage sludge from being land applied within 11 inches of the seasonal high water table. Soils with less than 11 inches between ground level and the seasonal high water table are classified as hydraulic or wetland soils, and the management practices would need to be intensified significantly for them. This distance was also recommended by the Agricultural Advisory Board.

Section 271.915(d), (e) and (g) contain slope, pH and nitrogen restrictions not mentioned in the Federal regulations. The regulation includes maximum slopes of 25% for agricultural utilization and 35% for land reclamation unless otherwise approved by the Department. It is necessary to limit slopes to prevent the physical runoff of sewage sludge into surface water. The soil pH is required to be at least 6.0, unless otherwise approved by the Department. The pH is necessary to make sure that the crop to be grown can meet the expected yield that is used in the annual nitrogen application rate calculations. The regulation indicates that if the volume of manure at the farm is adequate to supply crop needs, then sewage sludge should not be applied. This is necessary to prevent the over application of nutrients and to be in compliance with other nutrient management activities at the site.

Section 271.915(h) contains requirements for sampling and analyses procedures and for calculating the agronomic rate, the cumulative pollutant loading rate and the annual whole sludge application rate. These were added to clarify the procedures.

Section 271.915(j) requires that persons land applying sewage sludge satisfactorily complete a training course. This was written to add an extra element of quality assurance. Since a site specific permit is not required, this training is necessary to help all persons understand the regulations. It is anticipated that this will significantly reduce the number of violations and compliance actions taken by the Department, which may result in more local acceptance of the program. This concept was recommended by the Department's Solid Waste Advisory Committee.

Section 271.915(k) requires the person land applying sewage sludge to display the permit number on the vehicle used in the operation. This will allow the Department and the public to identify rapidly the sewage sludge generator or residential septage land applier, and will

allow people questioning the operation to check the permit without involving the Department.

Finally, § 271.915(l) requires that nonorganic objects be removed prior to spreading residential septage. Part 503 merely includes "screening" in the definition of sewage sludge, but does not directly require removal of non-organic materials from residential septage. The requirement in § 271.915 responds to public complaints and concerns about foreign objects being left on the land after septage land application. These objects may blow off the site and cause a hazard to children and wildlife.

Section 271.919 (relating to reporting) contains reporting requirements. Subchapter J is less stringent than the Federal rule in that reports need only be submitted if requested, but it includes a requirement not found in the Federal rule, that a person shall notify the Department of when and where it is land applying sewage sludge if so requested by the Department. This requirement was added to buttress the Department's monitoring capabilities.

Section 271.920 (relating to inspection) has no counterpart in the Federal rule. It is also added to buttress the Department's monitoring capabilities. It provides that Department representatives shall have access to areas in which activities covered by the Land Application of Sewage Sludge permit are occurring, and shall have the right to take samples. This requirement derives from section 608 of the SWMA.

Section 271.933 (relating to pathogens) describes the various options for reducing pathogens in sewage sludge before it is land applied. This section differs only slightly from the Federal regulation by requiring residential septage to be stabilized before land application, whereas the Federal regulation allows raw, unstabilized septage to be applied. This will help ensure prevention of odors, pathogens and vector problems associated with the disposal of raw human waste.

Section 285.225 (relating to transportation of residential septage) requires that all septage haulers register with the Department and include an identification number on the transporting vehicle. This was a recommendation of the Pennsylvania Septage Management Association to reduce illegal disposal which is significantly undercutting haulers operating in compliance with the regulations. The registration and identification number will assist the Department with compliance monitoring activities and will increase accountability of the haulers.

#### *E. Summary of Comments and Responses on the Proposed Rulemaking*

##### *Municipal Waste Regulations*

Notice of proposed rulemaking was published at 24 Pa.B. 4975 (October 1, 1994). The proposal set forth a 90-day public comment period which was extended because of the Legislative sine die period and concluded on January 23, 1995.

During the public comment period, the Department held three public informational meetings (Pittsburgh, King of Prussia, Harrisburg) and six public informational workshops (Monroeville, Meadville, Williamsport, Wilkes-Barre, Conshohocken and Harrisburg). The Board held three public hearings (Pittsburgh, King of Prussia, Harrisburg).

The public meetings were well attended, averaging about 30 people at each. The workshops, which were held in the evenings, were well attended in Pittsburgh, Williamsport and Harrisburg, with poor attendance in the

other three regions. The workshops were held in an effort to gain more input from the public, but the attendees were primarily sewage sludge haulers, consultants and municipal authorities.

The Board and Department received written comments from 174 individuals or groups, and 29 individuals presented testimony at the public hearings. The issue of most interest was the proposed changes to allow for the land application of sewage sludge under a general permit.

The Board and the Department considered the comments received at the public hearings, meetings and workshops and the written comments in formulating the final amendments to these regulations. The Department has completed an intensive review of the comments, and has prepared a comment and response document that addresses each comment on the proposed regulations.

The following is a summary of major comments received and changes which have been made to the proposed rulemaking as a result. The summary is listed in the same order as the proposed regulations found at 24 Pa.B. 4975.

1. *Definitions—Transfer facility—§ 271.1 (relating to definitions)*

The Board received several comments about the revisions to the definition of “transfer facility.”

The Board revised the definition of “transfer facility” to be identical to that in the SWMA and in the residual waste regulations. In so doing, the Board eliminated the proposed language that specified that a facility at which municipal waste is stored on a parked municipal waste transportation or collection vehicle for less than 24 hours was not a transfer facility. Too many variables exist to codify this exception, but the intent of the proposed language will be carried over into the implementation of the regulations. Generally, when waste is stored for less than 24 hours on a parked transportation or collection vehicle, the facility will not be deemed to be a transfer facility. For instance, the Department does not intend to treat a motel parking lot at which one waste truck parks overnight as a transfer facility. Similarly, a vehicle used by a septage hauler parked at his place of business overnight may not require a transfer facility permit. However, there are exceptions. One example is an area at which numerous vehicles storing municipal waste park continuously, each for less than 24 hours. This may well be considered a transfer facility.

2. *Permit-By-Rule—§ 271.103 (relating to permit-by-rule for municipal waste processing facilities other than for infectious or chemotherapeutic waste; qualifying facilities; general requirements)*

a. *Septage treatment facilities*

The Board received comments suggesting clarification of the discharge requirements.

The Board revised this permit-by-rule, subsection (e), slightly to clarify that the facility must have a permit issued by the Department under The Clean Streams Law for the facility’s wastewater treatment process or a permit issued by the Department’s waste management program, or the discharge must be connected to a public sewer.

b. *Mechanical processing facility*

The Board received several comments about the weight limitations as they would apply to the processing of sewage sludge.

The Board revised the regulation, subsection (g), to specify the materials for which this permit-by-rule is

available. They are uncontaminated rock, stone, gravel, brick, block and concrete from construction activities.

c. *Yard Waste Composting Permit-By-Rule*

The Board received various comments on the incorporation of the Department’s guidelines for yard waste composting into the proposed permit-by-rule for yard waste composting.

The specific requirements of the guidelines that were included in the proposed language have been eliminated and replaced in § 271.103(h) with a cross reference to the Department’s guidelines in order to be less prescriptive. In addition, a size limit of 5 acres has been placed on activities that may qualify for this permit-by-rule because operation of a larger facility creates the potential for impact on surrounding areas. The National Compost Council indicates that areas greater than 5 acres require more intensive management practices. These larger sites are better managed under an individual or general permit.

d. *Bagged sewage sludge, horticultural and turf grass production; and distribution programs*

The Board received various comments on these proposed permit-by-rule provisions.

These regulations, proposed § 271.103(h)—(j), have been eliminated because the activities are covered in the revised Subchapter J.

3. *Minimum Penalties—§ 271.413 (relating to assessment of penalties—minimum penalties)*

The Board received conflicting comments about civil penalties. Some reflected that the Department should be strict about enforcing its penalty provisions; others indicated that mandatory civil penalties were excessive in some instances.

The mandatory civil penalties specifically relating to the land application of sewage sludge, proposed in § 271.413(e), (f) and (j), have been modified into discretionary civil penalties in order to allow flexibility for the Department to prioritize enforcement actions based on the human health and environmental impacts of land application activities in the context of activities and facilities regulated under the water quality management regulatory program. The civil penalty proposed in subsection (g), for failure to submit a sewage sludge biennial report, has been eliminated because the report requirement in § 271.901 (relating to purpose and applicability) has been eliminated.

4. *Mixing Municipal and Residual Wastes—§§ 271.811(e) and 287.601 (relating to authorization for general permit; and scope)*

The Board received comments asking for clarification of the proposed regulations concerning the mixing of municipal and residual wastes under general permits.

In the municipal waste regulations, the Board has amended § 271.811(e) authorizing the beneficial use of mixtures of municipal and residual wastes, and has deleted the provisions concerning on-farm composting of mixtures of certain materials with food processing waste or agricultural waste. The new subsection covers these mixtures. Corresponding changes have been made to the residual waste regulations in § 287.601.

5. *Land Application of Sewage Sludge—Subchapter J—§§ 271.901—271.934*

a. *Adopt the Federal regulations verbatim*

The Pennsylvania Water Environment Association and their members, along with several sewage treatment facilities, commented that they would like to see the Part 503 regulations adopted with no additional standards.

The final-form regulations closely mirror Part 503 regulations. The Board has included the Federal sewage sludge quality requirements for metals and pathogen and vector attraction reduction as part of the final-form regulations. The final-form regulations for the most part have adopted the Federal definitions.

While the final-form regulations mirror the technical requirements of the Part 503 regulations, the Board has determined that certain management practices are necessary to address compelling social and aesthetic concerns that were not considered in the risk assessment used to develop Part 503. These practices are common sense practices that should apply to all land applications of sewage sludge.

In addition, the final-form regulations delete the permit application sections of Chapter 275, because sewage sludge land application permits will now be issued under Chapter 271, Subchapter J which authorizes individual and general Land Application of Sewage Sludge permits to be issued by the Department. Sewage treatment facilities and septage haulers can obtain an individual permit, or apply for coverage under the general permit under Subchapter J, when the permit is completed by the Department and notification of availability of its issuance is published in the *Pennsylvania Bulletin*. Due to the fact that the general permit is initiated and issued by the Department, the application requirements are no longer identified in the regulations but will be identified in the general permit, which will be made available for public comment in draft form soon after Subchapter J becomes effective.

Except for §§ 271.902(e) and (f), and 271.903, which become effective immediately, Subchapter J will become effective May 27, 1997. In the interim, Chapter 275 will remain available for issuance of individual permits. When Subchapter J becomes effective, new applicants will apply for coverage under a Land Application of Sewage Sludge permit. Operators with Chapter 275 permits or beneficial use orders will be required to transition into the new permit system over time, in § 271.903.

A person operating under a Land Application of Sewage Sludge permit may, of course, operate under more stringent requirements (such as, more stringent setback distances from features such as water supplies and occupied dwellings) than required under the permit if the person so chooses. This would include a person not yet covered under a permit, as well as a person currently operating under an individual permit who wishes to maintain certain practices.

#### b. *Uniform implementation of the regulations*

Several commentators expressed concern about uniform implementation of the regulations.

The Board and Department have addressed this concern in the final-form regulations. The general permit will be developed by the Department's Central Office and be available Statewide. Central Office staff will train regional staff on the substance and implementation of the regulations.

#### c. *Site-specific requirements and permits*

A number of commentators expressed concern that if the Department issued general permits without site specific requirements, there would be no control over how

sewage sludge was applied. Many commentators expressed concern that sewage sludge should not be applied to the land, and that the existing regulations were not protective of the environment. Some commented that if sewage sludge were applied, individual permits should be required for all sites.

The final-form regulations continue to endorse the general permit concept for land application of those sewage sludges that meet the quality standards established under the Part 503 regulations. The risk assessments conducted by the EPA considered 14 potential pathways. The maximum concentration for each metal is based on the most limiting pathway. The Department feels that if sewage sludge quality is carefully monitored, as required under the final-form regulations, the land application of these high quality materials can be safely addressed through a general permit.

The draft general permit will be developed by the Department and published in the *Pennsylvania Bulletin* with an extended public comment period. The Department will then, after consideration of all timely comments, publish notice of the issuance and availability of the Land Application of Sewage Sludge general permit in the *Pennsylvania Bulletin*.

Once a general permit is issued for high quality sewage sludges, generators wishing to operate under the permit will have to file a notice of intent (application), which may provide an additional opportunity to comment. The Department has issued beneficial use approvals, which were not site specific, since 1988. While the process of approving beneficial use applications has proven burdensome, the program has been successful. The SWMA was amended in 1989 to provide for the issuance of general permits for beneficial use of municipal and residual waste. This rulemaking package has provided the first opportunity for the Department to include regulations for a general permitting process for municipal waste. The final-form regulations also provide for individual permits for land application which will be particularly useful in high quality watersheds.

#### d. *Provide incentive to improve sewage sludge quality*

While many commentators agreed that the proposed regulations provided significant regulatory relief, concern was expressed that the proposed regulations did not provide an incentive for treatment plants to improve sewage sludge quality.

In the October 1, 1994, proposed rulemaking, this EQ sewage sludge was limited to bagged sewage sludge and sewage sludge used for horticultural and turfgrass production. The final-form regulations allow for the land application or distribution of this EQ sewage sludge under a Land Application of Sewage Sludge permit without site restrictions or significant management practices. This will provide a needed incentive to improve sewage sludge quality. EQ sewage sludge, in addition to meeting the Federal pathogen and vector attraction reduction requirements and the pollutant limits, will have to be nonrecognizable and nonliquid. In addition, for agricultural use the EQ sewage sludge will have to be applied at the agronomic rate.

In addition, in the final-form regulations the management practices and isolation distances will apply to the land application of sewage sludge that is not considered EQ. See §§ 271.913 and 271.915. The final-form regulations differ from the proposed regulations in that the isolation distances in the final-form regulations only

apply when non-EQ sewage sludge is applied to agricultural land, forests or land reclamation sites. See § 271.915.

e. *Transition scheme—§ 271.903*

The Board received several comments requesting a 5-year transition period for holders of beneficial use approvals instead of the 2 years proposed.

The Board has revised this regulation to reflect a 5-year transition period and has expanded it to cover individual and general Land Application of Sewage Sludge permits, and to add a 5-year expiration date for permits that do not contain an expiration date.

f. *EQ sewage sludge—§ 271.911(a) and (c)*

Several commentators suggested that the Department should not consider high quality sewage sludge to be a waste, but should consider it to be a fertilizer or soil amendment. They expressed concern that the general permit concept, even with limited operational requirements, was burdensome for high quality sludges.

The Board believes that EQ sewage sludge should be treated as a fertilizer or soil amendment. While the final-form regulations fall short of actually “de-wasting” these materials, they allow for the development of a general permit for the EQ sewage sludge. This is a change from the proposed regulations, which authorized the Department to exclude a sewage sludge from being regulated as a waste if it met certain requirements. Under the final-form regulations, the EQ sewage sludge is sewage sludge that meets the metal concentration and pathogen reduction requirements of a Class A sewage sludge under Part 503 and are nonliquid and nonrecognizable as human waste. This differs from the proposed regulations in several ways, including the requirements to be nonliquid and nonrecognizable. See justification, under the heading: “Sewage sludge final-form regulations more stringent than Federal standards,” in this Preamble. These materials, when applied at an agronomic rate, will not be required to meet the additional requirements set forth for other general permits. In essence, these materials are similar to fertilizer both chemically and physically and, provided they meet the regulatory pollutant requirements, need not be further restricted.

g. *Reduce requirements further for EQ sewage sludge*

Some commentators recommended that reporting, recordkeeping and source reduction requirements were unnecessary for high quality sludges.

The final-form regulations have significantly reduced the reporting requirements and are, for the most part, consistent with the reporting requirements under Part 503. However, the Board continues to stress the need for generators to look at ways to improve sewage sludge quality. A sewage sludge quality enhancement plan, formerly labelled “source reduction strategy” in proposed regulation, is required in the final-form regulations for any generator of sewage sludge that is land applied.

h. *Landowner notification requirements—§ 271.913*

Several commentators expressed concerns about the landowner and adjacent landowner notification requirements in the proposed regulations. Many commentators felt that the notification requirements were burdensome, while others felt that the comment period was not long enough to provide for meaningful public comments. Some felt that the general permit process left them out of the loop on having any input on the permitting process.

The final-form regulations have attempted to address these concerns. In developing the general permit for land application, the Department will publish the notice of availability of the draft and final general permit in the *Pennsylvania Bulletin*, and over the Department's World Wide Web site. The Department will make every effort to obtain as much input on the permit as possible. The meaningful input on general permits will occur during that time period. There may be additional opportunity to comment when a person submits a notice of intent to operate under the general permit.

The final-form regulations have expanded the adjacent landowner notification, county conservation district notification, and Department notification to 30 days, from 7 days, prior to land application. The notice shall provide a brief description of the operations, any additional site restrictions, the name of the person or company land applying the sewage sludge, and the permit number. In addition, 7 days prior to operation, the generator must provide the occupant of the land with a user instruction sheet that describes acceptable uses and limitations of the general permit.

In an effort to address additional concerns on notification, the final-form regulations provide for assistance from the county conservation districts as part of an overall process to provide additional information and a general knowledge of what is involved in sludge utilization to the landowner, adjacent landowners and the community in general on the value and potential concerns that are addressed as part of an overall land application program.

i. *Background soil analysis—§ 271.913(h)*

The Board received several comments on the background soil analysis requirement, some requesting more stringency and some requesting more leniency.

The Board has revised the soil analysis requirement in § 271.913(h) so that an analysis is only required to be performed prior to the first land application at a particular location, and not at all for land application of EQ sewage sludge. In the proposed regulations, the soil analysis was also required when half of the lifetime metal loading limit established in the guidelines was met, or every 5 years for residential septage.

j. *Pollutant limits—§ 271.914*

The Department received a number of comments that the pollutant limits should be consistent with those in Part 503.

The pollutant limits previously found in the Department's guidelines are now in the final-form regulations and differ somewhat with the proposed limits. For example, the limit for cadmium for the EQ sewage sludge was 25 mg/kg in the guidelines referenced in the proposed regulations. It is 39 mg/kg in the final-form regulations, consistent with Part 503. The limits for chromium found in the guidelines do not appear in the final-form regulations because the EPA deleted them from Part 503. See 60 FR 54764 (1995). Similarly, the final-form regulations reflect increases in the limits for selenium and molybdenum effected by Federal rulemakings. *Id.* and 59 FR 9095 (1994). The limits in the final-form regulations are further explained under the heading: “Sewage sludge final-form regulations more stringent than Federal standards,” of this Preamble.

Additionally, the final-form regulations incorporate by reference any new or revised pollutant concentration or loading rate published in the *Federal Register* as a



modification to Part 503. If the Department is not satisfied with a future EPA amendment, the Department may present a rulemaking to the Board to justify the Department's dissatisfaction in order to avoid having to adopt the amendment.

k. *Isolation distances—§ 271.915*

The Board received various comments on the isolation distances in the proposed regulations. As a result, several of the isolation distances have been revised.

The distance from an intermittent stream in the proposed regulations was 100 feet; in the final-form regulations it is 33 feet to be consistent with Part 503. See § 271.915(c)(1).

The proposed regulations set a distance to the seasonal high water table of 12 inches without incorporation and 20 inches with incorporation. The final-form regulations set a distance in both cases of 11 inches. See § 271.915(c)(7). Soils with less than 11 inches between ground level and the seasonal high water table are classified as hydraulic or wetland soils, and the management practices would need to be intensified significantly for them. This distance was also recommended by the Agricultural Advisory Board.

Similarly, the proposed regulations set a distance to the regional groundwater table of 4 feet, whereas the final-form regulations set the distance at 3.3 feet to be consistent with Part 503. EPA's risk-based assumptions used a 3.3 foot (1 meter) setback. See § 271.915(c)(7).

l. *Nonorganic objects in sewage sludge (including septage)—§ 271.915(l)*

The Pennsylvania Septage Management Association expressed concern on the requirement to remove nonorganic objects from septage prior to application.

The Board finds that this requirement is important. The final-form regulations retain the requirement to remove nonorganic objects from septage prior to land application. The regulations do not require a specific method for removal of these materials and, as a result, provides maximum flexibility to the hauler. The aesthetic impact of removing the materials will go a long way toward the eventual public acceptance of the land application of these materials.

m. *Frequency of monitoring sewage sludge quality—§ 271.917 (relating to frequency of monitoring)*

The Board received several comments on the frequency of monitoring of sewage sludge quality. One comment requested that the Board allow less frequent monitoring, upon request, after 2 years of monitoring, consistent with Part 503.

The frequency of monitoring sewage sludge quality remains the same in the final-form regulations except that two Federal requirements have been added: for some qualities of residential septage, each container of residential septage applied to the land shall be monitored; and for some qualities of sewage sludge, monitoring frequency may be reduced, with Department approval, after 2 years of monitoring.

n. *Recordkeeping requirements—§ 271.918 (relating to recordkeeping)*

The Board received comments requesting that the records and recordkeeping requirements remain consistent with the Federal Part 503 regulations, to prevent dual records and recordkeeping efforts. There were also comments requesting that recordkeeping be revised to

provide that the date and time of sewage sludge application at each site must be recorded.

The recordkeeping and reporting requirements in the final-form regulations differ from those in the proposed regulations. The final-form regulations largely track the Part 503 requirements, retaining recordkeeping requirements and adding the requirement to record dates and times of application of non-EQ sewage sludge. Records shall be produced to the Department upon request.

In addition, the biennial report that was required of sewage sludge generators in proposed § 271.901 (relating to Biennial report—generator of sewage sludge other than residential septage) has been eliminated in order to avoid duplication of information that will be requested in other reports.

o. *Guidelines*

Several commentators expressed concern about using the Interim guidelines to define sewage sludge quality. Others were confused on how the guidelines were changed to provide methods for calculating nitrogen loading.

The final-form regulations eliminate the reliance placed upon guidelines for permits issued under Subchapter J in the proposed regulations. The sewage sludge quality tables and the cumulative loading rates of Part 503, found in the guidelines, are now contained in the regulations. The final-form regulations also include the requirements for pathogen reduction from Part 503. The nitrogen loading calculations will be based on the Federal guidelines that accompany the Part 503 regulations. The Department will only develop additional guidelines, if necessary, to clarify or interpret the final-form regulations. The final rulemaking references EPA's guidance for calculating agronomic loading rates.

The interim guidelines will remain in effect, however, for the benefit of persons operating under Chapter 275 individual land application permits.

6. *Grants—§ 272.315 (relating to limits on Department's authority to award grants)*

The Board received a comment requesting that grant authorization under this section be extended to items that directly relate to tasks applied for in the original grant application.

The Board has revised § 272.315 to indicate that grants may only be awarded for items which are included in a grant application or which are proposed to be used for the same limited purpose as an item included in a grant application. This change was needed to eliminate confusion which has existed in the past.

7. *Daily and intermediate cover at landfills—§§ 273.232 and 273.233 (relating to daily cover; and intermediate cover and slopes)*

The Board received a number of comments concerning the proposal to require daily cover to be incapable of sustaining burning. The commentators expressed concern that the language was not stringent enough to serve its intended purpose.

The Board has revised the landfill daily cover requirement of § 273.232 to require daily cover to be capable of controlling fires. This language tracks the Federal language of 40 CFR 258.21. The Department will work with the Pennsylvania Fire Services Institute and industry representatives to develop criteria for evaluating performance standards for determining which materials meet this standard.

The Board made a corresponding revision to the intermediate cover requirements found in § 273.233.

The Board also corrected subsection (c) of the daily cover requirements by inserting the word "loam," which had accidentally been left out of the design standards.

#### 8. *Individual Sewage Sludge Land Application Permits—Chapter 275*

The Board received a wide range of comments on the proposed revisions to Chapter 275. Some addressed specific revisions, such as hauler requirements and training requirements, and others addressed more general concerns, especially requesting exemptions from requirements for EQ sewage sludge.

The proposed regulations envisioned a program in which general permits would be available for high quality sewage sludge under Subchapter J, and individual permits would be available for lower quality sewage sludge under Chapter 275. The final-form regulations provide for individual and general permits under Subchapter J. Therefore, there is no need to retain Chapter 275 other than to provide a permitting mechanism until Subchapter J becomes effective, and to enforce existing Chapter 275 permits until they expire. Consequently, most of the changes that were proposed to be made to Chapter 275 are no longer necessary or appropriate and are eliminated in the final rulemaking. The remaining changes address the breadth of permitting options and make several other clarifications.

Two provisions in Subchapter J will expressly apply to permits that have been or will be issued under Chapter 275: the requirement to obtain training before land applying sewage sludge, § 271.915(j), and the requirement to display the permit number on the vehicle land applying sewage sludge, § 271.915(k).

The permit application sections are deleted effective May 27, 1997, because permits will no longer be available under this chapter after that date. See §§ 275.101—275.107, 275.301 and 275.401.

The requirements for training, displaying permit numbers, and various types of notification in proposed § 275.201 have been deleted and restated in Subchapter J. Proposed § 275.209, which also set forth the training requirements, has been eliminated.

The sections of Chapter 275 concerning surface land disposal, §§ 275.501—275.531, are deleted, effective upon publication of this rulemaking in the *Pennsylvania Bulletin*. Corresponding changes have been made in § 271.1 by revising the proposed definition of "land application" to eliminate reference to "surface land disposal" and by deleting the definition of "land disposal."

#### 9. *Transportation of Residential Septage—§ 285.225*

The Board received several comments on this section, suggesting that the requirements for sewage sludge transporters to register with the Department should be deleted.

The final-form regulations have changed. They require that septage haulers—as opposed to all sewage sludge haulers—register with the Department and include an identification number on the transporting vehicle, as explained under the heading: "Sewage sludge final-form regulations more stringent than Federal standards," in this Preamble. The change was made in order to help the Department identify residential septage haulers who may be land applying septage without a permit and to increase accountability of land appliers. The requirement

was eliminated for haulers of sewage sludge other than residential septage because information about them is already more accessible to the Department through the treatment plants and others who prepare sewage sludge for land application.

In addition to major changes made in response to public comments, other changes included in the final-form regulations are summarized as follows.

#### 1. *Definitions—§ 271.1 (relating to definitions)*

##### a. *Horticultural and turf grass production*

The definition of "horticultural and turf grass production," which was added in the proposed regulations to address a category of activity addressed by the general permit provisions for the land application of sewage sludge, has been deleted on final because of changes in the land application provisions which cover this activity.

##### b. *Intermittent stream*

A definition of "intermittent stream" has been added because the isolation distances in § 271.915 of the final-form regulations address both perennial and intermittent streams. The definition is identical to that found in the Department's mining regulations and residual waste regulations.

##### c. *Land application*

The proposed definition of "land application" has been revised to eliminate the reference to "surface land disposal."

##### d. *Land disposal*

The definition of "land disposal" has been deleted in accordance with the deletion of §§ 275.501—275.531 concerning surface land disposal of sewage sludge.

##### e. *Permit*

The definition of "permit" has reverted to its original form.

##### f. *Seasonal high water table*

The definition of "seasonal high water table" has been deleted and replaced with a more concise definition based on the current method used to delineate seasonal high water tables by the Natural Resources Conservation Service.

##### g. *Sewage sludge*

The definition of "sewage sludge" has been amended to include materials derived from sewage sludge. An example of a material derived from sewage sludge would be composted sewage sludge. This consolidates the two separate concepts of preparing sewage sludge and deriving sewage sludge contained in Part 503.

#### 2. *Special Definitions—§§ 271.907 and 271.932 (relating to special definitions; and pathogens)*

Subchapter J contains a number of definitions specific to the land application of sewage sludge. They track the Part 503 definitions, with several exceptions:

##### a. *Agricultural land*

Agricultural land is land on which silvicultural crops or horticultural crops, in addition to crops identified in Part 503, are grown. Adding these crops expands the lands upon which additional precautions are taken in land applying sewage sludge, and is consistent with Part 503.

##### b. *Bag or other container*

A definition of "bag or other container" has been added because the phrase is used frequently in Subchapter J

with regard to EQ sewage sludge that is exempt from certain requirements if old, given away or otherwise distributed, in a bag or other container for land application.

*c. Land application of sewage sludge general permit, and land application of sewage sludge permit*

Permits issued under Subchapter J will be permits for the beneficial use of sewage sludge by land application. They may be general or individual permits.

*d. Cover crop*

A definition of "cover crop" has been added because the term is used in the definition of "agronomic rate."

*e. Domestic sewage, feed crops, fiber crops, food crops, industrial wastewater, pollutant, pollutant limit, public contact site, runoff, treat or treatment of sewage sludge, treatment works*

These EPA definitions were added because they are used in Subchapter J and did not exist in current or proposed regulations.

*f. Frozen ground*

A definition of "frozen ground" was added at the request of the Department's Agricultural Advisory Board. The term is used in the management practices section of Subchapter J.

*g. Municipality, person*

These definitions differ from the definitions in § 271.1. They are added in order to coordinate permits issued under Subchapter J with NPDES permit requirements.

*h. Pasture*

This definition was carried over from the State Conservation Commission's proposed nutrient management regulations.

*i. Range land*

This definition was added at the request of the Agricultural Advisory Board because the term is used in Subchapter J.

*j. Wetlands*

A definition of "wetlands" is added which is identical to that in § 105.1 (relating to definitions) in order to clarify the term as it is used in Subchapter J.

*3. Beneficial Use—Subchapter I, §§ 271.811—271.842*

A number of revisions have been made to Subchapter I, relating to beneficial use of municipal waste other than sewage sludge, to clarify the process.

*a. Bonding and insurance*

The Board has clarified the bonding and insurance exemptions applicable to general permits, in § 271.811(d) (relating to application for general permit), specifying activities and facilities for which bonding and insurance may not be waived. Under the proposed regulations, bonding and insurance were required in all cases, unless an applicant could demonstrate that there was a low likelihood that waste being handled could be contaminated with hazardous waste and that the quantity of waste stored at the processing or beneficial use facility may present a threat of harm to the public or the environment. Rather than asking applicants to determine in advance of filing an application whether a bond is required, the Board has included specific criteria in the final-form regulations that will indicate when a bond should be required and how the amount of the bond should be determined. Bonding and public liability insur-

ance will be required for composting facilities, construction/demolition waste processing facilities, and facilities that process municipal waste to produce refuse derived fuel. Also, bonding and insurance requirements must be met if the waste managed is potentially harmful or if large quantities of waste are stored.

*b. Permit renewal fee*

The Board has added a fee for permit renewal, in § 271.816(d) (relating to permit renewal), which was overlooked in the proposed rulemaking. The fee is \$300.

*c. Waiver and modification*

The Board has clarified § 271.822 (relating to waiver and modification of requirements) by specifying which portions of Article IX may not be waived or modified.

*4. Beneficial Use of Sewage Sludge—Subchapter J, §§ 271.901—271.934*

*a. Permits—§ 271.902 (relating to permits and direct enforceability)*

Section 271.902 has been written to clarify the type of permit that is available for the type of activity. In particular, for a sewage sludge land application project that will be carried out in an exceptional value watershed, an individual land application of sewage sludge permit will be required, because the water quality regulations prohibit land application of sewage sludge general permits from being issued for use in these areas. Other projects may be carried out under land application of sewage sludge general permits.

*b. Sampling and analysis—§ 271.906 (relating to sampling and analysis)*

Methods for sampling and analyzing sewage sludge quality are expanded in the final-form regulations by cross referencing seven publications adopted by the EPA and by incorporating by reference any later amendments published in the *Federal Register*. Other methods may be approved by the Department. This system replaces the proposed regulation which cross referenced the Department's Guidelines.

*c. General requirements and management practices—§§ 271.913 and 271.915*

Some of the changes in this area are discussed in this Preamble under the heading: "Summary of Comments and Responses on the Proposed Rulemaking." Others are as follows:

The final-form regulations add a series of responsibilities concerning sharing of information. See § 271.913(i)—(m). This comes directly from Part 503 and is an important component in helping determine whether and how much sewage sludge may be applied at a site.

The management practices now require, consistent with Part 503, that endangered species be considered before a site is selected for land application. See § 271.915(a).

Both the proposed and final-form regulations restrict land application within 100 feet of a sinkhole, but the final-form regulations clarify that this distance is measured from the edge of the sink hole. See § 271.915(c)(2).

Both the proposed and final-form regulations restrict land application within 300 feet of an occupied residence, unless waived, but the final-form regulations allow land application activities to continue closer than that if the residence came into existence after the land applier gave adjacent landowner notification under § 271.913(g). See § 271.915(c)(3). This clause was added at the request of the Agricultural Advisory Board in order to prevent later

improvements to nearby properties to interfere with preexisting land application activities.

The proposed regulations required a farm conservation plan and a nutrient management plan to be implemented at a farm on which sewage sludge was to be land applied for agricultural utilization purposes. The final-form regulations require that sewage sludge (including EQ sewage sludge) being land applied for agricultural utilization not be applied at a rate greater than the agronomic rate in order to avoid over-application of nutrients. See § 271.915(f). The final-form regulations do not require a nutrient management plan. They require a management plan if sewage sludge is to be land applied at a farm at which nitrogen from manure already meets the nutrient needs of the farm for realistic expected crop yields. See § 271.915(g). The management plan would indicate other uses for the manure.

#### 5. Other changes

Minor revisions were made in §§ 271.102, 271.123, 271.801, 271.812—271.815, 271.821, 271.831—271.833, 271.841, 271.842 and 285.201 for clarification purposes. Most of the revisions were to a section number, a title or a section number cross reference.

#### *Residual Waste Regulations*

The following is a summary of major comments received and changes which have been made to the proposed rulemaking in response to the comments received.

#### 1. Permit-by-rule—§ 287.102 (relating to permit-by-rule)

##### a. Surface impoundments associated with wastewater treatment facilities

The proposed regulations included a transition scheme for bringing storage impoundments associated with captive facilities and wastewater treatment facilities into compliance with Chapter 299. In order for a person who operates a facility to make a decision whether to close or continue to operate an impoundment in accordance with the 1992 regulations, it is necessary to determine whether the impoundment is associated with any groundwater degradation. To make this determination, water quality monitoring must be implemented.

Two commentators indicated that imposition of a 6-month deadline for submission of water quality monitoring plans for all residual waste storage impoundments is unwarranted and would subject the facilities to unnecessary financial and other associated burdens.

The 6-month deadline in the proposed regulations only applied to impoundments associated with wastewater treatment facilities and captive facilities operating under a permit-by-rule, since compliance issues relating to the processing facility were at risk. As originally adopted in 1992, § 287.112 (relating to storage impoundments and storage facilities) of the residual waste regulations states that “within 6 months after receiving written notification from the Department, an operator of a residual waste storage impoundment that has not submitted a water quality monitoring plan under § 287.111 shall submit the plan to the Department.” The 6-month period provided for in these final-form regulations serves as the Department’s written notification for a category of storage impoundments.

The implementation schedule for the water quality monitoring plans was also raised as an issue. The proposed regulations required that all plans be implemented within 6 months of the Department’s approval of

the plan. This language is consistent with § 287.112 of the 1992 regulations which state that “the operator of a residual waste storage impoundment shall implement a water quality monitoring plan that meets the requirements of this article within 6 months after the Department approves the plan.” Due to the large number of storage impoundments that exist, the 1992 regulations allow for a 10-year period to complete notification, review and implementation of water quality monitoring plans for all storage impoundments, including those associated with a permit-by-rule. The final-form regulations allow for an extension of time for implementation of water quality monitoring plans, beyond the 6 months, as long as implementation takes place no later than July 4, 2002. This language is consistent with § 287.112 of the 1992 regulations. The Department will prioritize review of monitoring plans based on the risks to human health and the environment and will schedule the implementation of the plans through July 4, 2002. This change on final rulemaking is consistent with another commentator’s recommendation to extend the implementation schedules in order to allow for implementation in phases.

One commentator indicated that storage impoundments which are part of permit-by-rule processing facilities are already regulated under The Clean Streams Law and should not be subject to the operational requirements of § 299.144 (relating to operating requirements) of the residual waste regulations.

Under the 1992 rulemaking, Chapter 101 (relating to special water pollution regulations), implementing The Clean Streams Law, was amended to exclude residual waste facilities and the regulation of these facilities was relocated to the residual waste regulations, including Chapter 299. The purpose of the change was to keep all regulations governing residual waste facilities in one location of The Administrative Code of 1929.

##### b. Incinerators

The proposed regulations did not include any changes to the scope of this permit-by-rule. A commentator, however, commented that the scope should be expanded to allow a generator with multiple facilities to aggregate wastes to be burned at an incinerator.

The final-form regulations include language that is in place for captive processing facilities and allows the burning of wastes at the generation site if the incinerator processes waste that is generated solely by the operator and processing occurs at the same production facility where some or all of the waste is generated.

##### c. Mechanical processing facilities

The proposed regulations prohibit facilities that separate waste oil and water from qualifying for permit-by-rule. The Board proposed this change based on the Department’s experience with these operations and is attempting to prevent the improper and inadvertent acceptance of hazardous waste at these facilities. Two commentators suggested that rather than eliminating these operations from being eligible for permit-by-rule, the Department should ensure that generators of wastes properly classify their waste streams. The Board continues to maintain that a general or individual permit is the best management option for these facilities, and the final-form regulations include the prohibition.

#### 2. General permits—§ 287.601—287.651

The proposed regulations deleted the “me too” process, § 287.644 (relating to waiver of registration or determination of applicability requirements), 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 he notified the Department during the public comment period of the proposed general permit. Although it was expected 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. One commentator suggested that the Department examine whether changes exist that could be instituted to make the "me too" process more efficient. The Board has concluded that 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. Therefore, the final-form regulations have eliminated the "me too" process.

In § 287.621(d)(relating to application for general permit), the Board proposed criteria for determining when bonding and public liability insurance requirements must be met under the general permit program. Under the proposed regulations, bonding and insurance were required in all cases, unless an applicant could demonstrate that there was a low likelihood that waste being handled could be contaminated with hazardous waste and that the quantity of waste stored at the processing or beneficial use facility may present a threat of harm to the public or the environment. Two commentators indicated that this language was a problem because applicants will be faced with trying to determine whether a bond is required prior to filing an application. It was recommended that the Board include specific criteria in the final-form regulations that will indicate when a bond should be required and how the amount of the bond should be determined.

It has always been the practice of the Department to encourage preapplication meetings with all potential applicants to discuss all aspects of an application process, including bonding and insurance matters. By including criteria in the regulations, the Board is attempting to give notice of the types of circumstances that will require bonding and insurance in all cases. The final-form regulations contain revised criteria. Bonding and public liability insurance will be required for waste tire operations, waste oil operations and contaminated soil operations. Also, bonding and insurance requirements must be met if the waste managed is potentially harmful or if large quantities of waste are stored.

In § 287.621(b), the Board proposed a discretionary waiver of the requirement to meet waste quality limitations on the use of residual wastes that contain contaminants identified as secondary maximum contaminant levels. Under the 1992 regulations, the waste was required to meet the waste quality requirements of § 288.623(a) (relating to minimum requirements for acceptable waste) if the waste was being beneficially used directly on the land.

One commentator supported the addition of a waiver of the requirements related to the secondary maximum contaminant levels. The final-form regulations continue to include the proposed waiver language.

### 3. *Beneficial use of coal ash—§§ 287.661—287.665*

The Board proposed a few regulatory changes to §§ 287.663 and 287.664 (relating to coal ash surface coal mining sites; requests for approval; and coal ash at

surface coal mining sites; operational requirements). Under § 287.663, the Board proposed an alternative mechanism for characterizing groundwater quality instead of monitoring for the data. Proposed changes to § 287.664 included adding a criterion for the final cover after placement of coal ash has taken place at a surface mining site and allowing for existing discharges to be used as monitoring points for evaluating groundwater degradation.

Commentators suggested specific changes to design requirements for the beneficial use of coal ash. Changes recommended include more flexibility on groundwater monitoring and more flexibility with regard to placement of ash materials and compaction.

In response to these comments and based on an overall review of the beneficial uses of coal ash at surface mine and abandoned mine sites, the final-form regulations for §§ 287.663 and 287.664 have been rewritten and include significant changes. The regulations applicable to the Bureau of Mining and Reclamation and the Bureau of Abandoned Mine Reclamation have been incorporated for such things as groundwater monitoring and reclamation plan requirements. References to residual waste regulations for groundwater monitoring have been deleted. The regulations commit the Department to develop a technical guidance document to facilitate review of beneficial uses of coal ash at coal mining activities and at abandoned mine sites. Also, the Department is committed to the development of certification guidelines to allow generators of coal ash to certify that the coal ash meets chemical and physical characteristics that are appropriate for various beneficial uses.

Overall, the changes to the coal ash provisions will allow greater flexibility for an applicant to propose designs that are appropriate for a particular site and will encourage more coal ash utilization. The final-form regulations place an emphasis on performance standards and tie the performance directly into reclamation plans under the mining and abandoned mine programs. By encouraging more beneficial uses of coal ash at already disturbed areas, the need for the development of more coal ash landfills will be reduced.

In addition to changes made in response to public comments, other major changes included in the final-form regulations are summarized as follows.

#### 1. *Permit-by-rule—§ 287.102 (relating to permit-by-rule)*

##### a. *Transfer facilities that collect used oil*

The final-form regulations no longer include other sites as eligible for operating under this permit-by-rule. Controversy over the meaning of the phrase "other sites" has caused this change in the regulations. The permit-by-rule is intended to apply to a very narrow class of used oil facilities. Primarily, this permit-by-rule was intended to cover facilities that collect used oil from members of the public that perform individual automobile maintenance. New language was added to this permit-by-rule to allow a captive processing facility that collects used oil generated only by the operator to serve as a collection point for employees of the facility operator who perform oil changes on their own automobiles. Used oil transfer facilities that do not fit within the description of this permit-by-rule section may apply for a general permit or individual permit.

##### b. *Mechanical processing facilities*

The final-form regulations include permit-by-rule coverage for a very narrow class of waste tire processing

operations. A permit-by-rule is available for the processing of existing tire piles that takes place for the sole purpose of remediation. No additional tires may be brought to the site for processing and the processed tires must be promptly removed for offsite reuse or disposal. Other tire processing operations must obtain either an individual or general permit.

*c. Container processing and drum reconditioning facilities*

Two new categories of processing were added to the permit-by-rule section. Facilities that process, by cleaning and rinsing, empty containers or empty drums for reuse are now eligible for permits by rule.

*2. General Permits*

On final rulemaking, § 287.611 (relating to authorization for general permit) was changed to allow for mixtures of municipal and residual waste to be managed under general permits. Depending on which article is most appropriate for the management of a facility that handles a mixture of municipal and residual waste, the general permit process under Article VIII or Article IX may apply.

A permit renewal process that was included in the proposed rulemaking, § 287.626, is contained in the final-form regulations.

In addition to the changes identified in this Preamble, minor revisions were made in this final rulemaking to the following sections: 287.1, 287.51, 287.102, 287.601, 287.611, 287.621, 287.622, 287.625, 287.626, 287.632, 287.642, 287.644, 287.651, 287.652 and 287.662—287.665.

*F. Benefits and Costs*

*Benefits*

The benefits are best described as a streamlining, or improvement, of the current land application requirements, resulting in a more rapid response by the Department and decreased costs to the operator. There are approximately 3,000 municipal wastewater treatment plants located in this Commonwealth. It is anticipated that over half of these facilities will opt to land apply under the new system.

The final-form regulations will eliminate sewage sludge generators' need for expensive application preparation costs associated with a site specific application for those activities which will now be covered under a general permit. Generators will benefit from reduced costs for preparation of a general permit application and the Department will benefit from reduced staff time required for reviewing site specific applications.

Those treatment plants that generate EQ sewage sludge which is similar to fertilizer may land apply under the regulations without site management practices.

*Compliance Costs*

The final-form regulations will benefit those persons that generate sewage sludge and use land application as the method of managing the material. The permitting processes will be streamlined and will result in a rapid response to applicants by the Department, and decreased costs to operators.

The current cost for preparation and implementation of an individual land application permit is \$10,000 per site. This combined with a \$1,200 permit application fee requires all applicants to spend about \$11,200 per application. The final-form regulations allow applicants to apply for coverage under a general permit which will be

prepared by the Department. The cost to apply for coverage to participate under such a general permit, or to apply for an individual Land Application of Sewage Sludge permit, is \$500 and the permit term is 5 years.

Additional savings result from savings in consulting expenses and other administrative costs associated with the individual permit process. These changes could result in savings of over \$ 30 million over the next 5 years. An additional \$ 2.5 million will be saved as the result of deleting the requirements for annual soil sampling and posting of collateral bonds for land application sites.

The largest potential savings will result from an expected dramatic increase in land application of sewage sludge. While disposal costs vary, it is generally less expensive to land apply sewage sludge than it is to landfill the material. Although, currently landfill costs are low due to an excess of landfill capacity, this could change and drive the cost of sludge disposed to double the current rate per ton. Land application could save the regulated community nearly \$ 400 million in landfilling and other disposal costs over the next 5 years.

The regulations require any holder of a general or individual land application permit to have staff attend a training session conducted by the Department. This requirement could cost the regulated community \$200,000 over the next 5 years.

There is also a cost associated with the requirement for background soil analysis for sites prior to being used for the first time. These two costs combined should not exceed a half million dollars over the next 5 years. The long-term benefits of the training may ultimately save the regulated community costs associated with additional consulting fees or fines associated with enforcement activities.

The only cost of any measurable effect will be the requirement that all nonorganic objects be strained from residential septage prior to application. This is expected to cost the regulated community approximately \$20 per 1,000 gallons of septage pumped.

*Compliance Assistance Plan*

The Department will sponsor a training program for all persons that land apply sewage sludge and residential septage. In addition, the Department will continue its efforts to establish a continuing education process for the regulated community and the general public on the benefits of land application of sewage sludge.

The Department will work with the Pennsylvania Water Environment Association and the Pennsylvania Septage Management Association to develop solution programs and land application.

The Department is also looking at the potential of expanding the use of Act 101 funds to develop additional programs geared toward education on the land application programs. These include additional fact sheets, videos, press releases and radio public service announcements in areas where sewage sludge is applied.

The Department will also work with its regional roundtables in an effort to reach those individuals on whom land application has the greatest impact.

*Paperwork Requirements*

The final-form regulations will result in a reduction in paperwork because, for land application activities under Chapter 271, Subchapter J, records will only be submitted to the Department upon request, site specific information will not be required, annual soil analyses reports will

not be required, and application documentation will be significantly less than under the existing system.

G. *Pollution Prevention*

The new permitting provisions for land application of sewage sludge encourage the development of clean sewage sludges because sewage sludge of a certain quality may be land applied with fewer restrictions than other sewage sludge, less oversight by the Department, and less impact on the environment.

Additionally, the final-form regulations require a generator of non-EQ sewage sludge, whose sewage sludge is intended to be land applied, to prepare a Sewage Sludge Quality Enhancement Plan that requires the generator to examine the physical, chemical and biological characteristics of the sewage sludge, the impact of industrial discharges into the treatment plant on the sludge quality, a description of pretreatment measures taken by the plant, and a description of options to improve the sludge quality. This plan shall be updated every 5 years or as necessary. If the generator demonstrates that it has improved its sewage sludge quality to meet the requirements of § 271.911(b)(1) for EQ sewage sludge, the Department may waive or modify the requirement to continue preparing the report. This effort should result in cleaner sludges being land applied.

H. *Sunset Review*

These final-form regulations 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 it was intended.

I. *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on September 9, 1994, the Department submitted a copy of the notice of proposed rulemaking, published at 24 Pa.B. 4975, to IRRC and the Chairpersons of the Senate and House Environmental Resources and Energy Committees for review and comment. In compliance with section 5(b.1) of the Regulatory Review Act, the Department also provided IRRC and the Committees with copies of the comments received, as well as other documentation.

In preparing these final-form regulations, the Department has considered the comments received from IRRC, the Committees and the public.

These final-form regulations were deemed approved by the House and Senate on November 4, 1996. IRRC met on November 7, 1996, and disapproved the amendments in accordance with section 5(c) of the Regulatory Review Act. The Department resubmitted the final-form regulations without changes to the House and Senate Committees on November 15, 1996. The Committees took no action, and the final-form regulations were deemed approved.

J. *Findings*

The Board finds that:

(1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder at 1 Pa. Code §§ 7.1 and 7.2.

(2) A public comment period was provided as required by law and all comments were considered.

(3) These final-form regulations do not enlarge the purpose of the proposal published at 24 Pa.B. 4975.

(4) These final-form regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of the Preamble.

K. *Order*

(a) The regulations of the Department, 25 Pa. Code Chapters 271—273, 275, 277, 279, 281, 283, 285 and 287, are amended by:

(i) amending §§ 271.1, 271.101, 271.102, 271.123, 271.413, 271.601, 271.611, 272.252, 272.315, 272.353, 273.202, 273.232, 273.233, 275.201, 275.202, 277.202, 279.201, 279.202, 279.217, 281.202, 283.1, 283.202, 283.222, 285.123, 285.201, 285.212, 287.1, 287.51, 287.102, 287.413, 287.601, 287.611, 287.621—287.623, 287.625, 287.631, 287.632, 287.641—287.643, 287.651, 287.652 and 287.662—287.665;

(ii) adding §§ 271.103, 271.801, 271.811, 271.812, 271.821—271.826, 271.831, 271.832, 271.841—271.843, 271.851, 271.852, 271.901—271.907, 271.911—271.921, 271.931—271.933 and Chapter 271, Appendix A, 285.225 and 287.626; and

(iii) deleting §§ 271.232, 275.1, 275.101—275.107, 275.301, 275.401, 275.501—275.503, 275.511—275.517, 275.521—275.528, 275.531, 275.601—275.603, 275.611—275.614, 281.2 and 287.644,

to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.

(b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for approval and review as to legality and form as required by law.

(c) The Chairperson shall submit this order and Annex A to IRRC and the Senate and House Committees as required by the Regulatory Review Act.

(d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau as required by law.

(e) This order shall take effect as set forth in Section A of the Preamble.

JAMES M. SEIF,  
*Chairperson*

*(Editor's Note: For the text of the Independent Regulatory Review Commission relating to this document, see 26 Pa.B. 5766 (November 23, 1996).)*

**Fiscal Note:** Fiscal Note 7-282 remains valid for the final adoption of the subject regulations.

**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:

\* \* \* \* \*

*Beneficial use*—Use or reuse of residual waste or residual material derived from residual waste for com-

mercial, industrial or governmental purposes, where the use does not harm or threaten public health, safety, welfare or the environment, or the use or reuse of processed municipal waste for any purpose, where the use does not harm or threaten public health, safety, welfare or the environment.

\* \* \* \* \*

*Construction material*—The engineered use of municipal waste as a substitute for a raw material or a commercial product in a construction activity, if the waste has the same engineering characteristics as the raw material or commercial product for which it is substituting. The term includes the use of municipal waste as a road bed material, for pipe bedding and in similar operations. The term does not include valley fills, the use of municipal waste to fill open pits from coal or other fills or the use of municipal waste solely to level an area or bring the area to grade when a construction activity is not completed promptly after the placement of the solid waste.

\* \* \* \* \*

*General permit*—Except as provided in Subchapter J (relating to beneficial use of sewage sludge by land application), a regional or Statewide permit issued by the Department for a specified category of beneficial use or processing of solid waste, the terms and conditions of which allow an original applicant, a registrant and a person or municipality that obtains a determination of applicability, to operate under the permit if the terms and conditions of the permit and certain requirements of this article are met.

*Generator*—A person or municipality that produces or creates a municipal waste.

\* \* \* \* \*

*Intermittent stream*—A body of water flowing in a channel or bed composed primarily of substrates associated with flowing water which, during periods of the year, is below the local water table and obtains its flow from both surface runoff and groundwater discharges.

*Land application*—Agricultural utilization or land reclamation of solid waste. The term does not include the disposal of solid waste in a landfill or disposal impoundment.

\* \* \* \* \*

*NPDES*—National Pollutant Discharge Elimination System.

\* \* \* \* \*

*PCB containing waste*—Solid waste containing PCBs in the following concentrations:

- (i) More than 4 parts per million, but less than 50 parts per million.

\* \* \* \* \*

*Perennial stream*—A body of water flowing in a channel or bed composed of substrates associated with flowing waters and capable, in the absence of pollution or other manmade disturbances, of supporting a benthic macroinvertebrate community which is composed of two or more recognizable taxonomic groups of organisms which are large enough to be seen by the unaided eye and can be retained by United States Standard No. 30 sieve (28 meshes per inch, 0.595 mm openings) and live at least part of their life cycles within or upon available substrates in a body of water or water transport system.

*Permit*—A permit issued by the Department to operate a municipal waste disposal or processing facility, or to beneficially use municipal waste. The term includes a general permit, permit by rule, permit modification, permit reissuance and permit renewal.

\* \* \* \* \*

*Permit-by-rule*—A permit which a person or municipality is deemed to have for the operation of a facility or an activity upon compliance with § 271.102 or § 271.103 (relating to permit-by-rule for infectious or chemotherapeutic waste processing facilities; qualifying facilities; general requirements; and permit-by-rule for municipal waste processing facilities other than for infectious or chemotherapeutic waste; qualifying facilities; general requirements).

\* \* \* \* \*

*Related party*—A person or municipality engaged in solid waste management that has a financial relationship to a permit applicant or operator. The term includes a partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor, agent or principal shareholder of another person or municipality, or a person or municipality that owns land on which another person or municipality operates a municipal waste processing or disposal facility.

\* \* \* \* \*

*Residential septage*—Liquid or solid material removed from a septic tank, cesspool or similar treatment works that receives only waste or wastewater from humans or household operations. The term includes processed residential septage from a residential septage treatment facility. The term does not include liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

\* \* \* \* \*

*Seasonal high water table*—The minimum depth from the soil surface at which redoximorphic features are present in the soil.

*Sewage sludge*—Liquid or solid sludges and other residues from a municipal sewage collection and treatment system; and liquid or solid sludges and other residues from septic and holding tank pumpings from commercial, institutional or residential establishments. The term includes materials derived from sewage sludge. The term does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of sewage sludge at a municipal sewage collection and treatment system, or grit, screenings and nonorganic objects from septic and holding tank pumpings.

\* \* \* \* \*

*Soil additive or soil substitute*—Municipal waste which is beneficially used at specified loading or application rates, to replace soil that was previously available at the site, to enhance soil properties or to enhance plant growth. The term does not include structural fills, construction material, valley fills or the use of municipal waste to fill open pits from coal or noncoal mining or the disposal of coal ash.

\* \* \* \* \*

*Storage*—The containment of any waste on a temporary basis in such a manner as not to constitute disposal of



the waste. It shall be presumed that the containment of waste in excess of 1 year constitutes disposal. This presumption can be overcome by clear and convincing evidence to the contrary.

\* \* \* \* \*

*Transfer facility*—A facility which receives and processes or temporarily stores municipal or residual waste at a location other than the generation site, and which facilitates the transportation or transfer of municipal or residual waste to a processing or disposal facility. The term includes a facility that uses a method or technology to convert part or all of the waste materials for offsite reuse. The term does not include a collecting or processing center that is only for source-separated recyclable materials, including clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper and plastics.

\* \* \* \* \*

*Waste*—A material whose original purpose has been completed and which is directed to a disposal or processing facility or is otherwise disposed of. The term does not include source separated recyclable materials, material approved by the Department for beneficial use under a beneficial use order issued by the Department prior to May 27, 1997, or material which is beneficially used in accordance with a general permit issued under Subchapter I (relating to beneficial use) or Subchapter J if a term or condition of the general permit excludes the material from being regulated as a waste.

\* \* \* \* \*

**Subchapter B. GENERAL REQUIREMENTS FOR PERMITS REQUIREMENT**

**§ 271.101. Permit requirement.**

(a) Except as provided in subsection (b), a person or municipality may not own or operate a municipal waste disposal or processing facility unless the person or municipality has first applied for and obtained a permit for the facility from the Department under the requirements of this article.

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

(1) For the use or application of agricultural waste in normal farming operations, unless the proposed use or application of the waste may cause pollution to air, water or other natural resources of this Commonwealth.

(2) For a source separation and collection program for recycling municipal waste, or for dropoff points, or collection or processing centers for source separated recyclable materials.

(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.

(c) Subsection (b) does not relieve a person or municipality of the requirements of an applicable environmental protection act or an applicable regulation promulgated under it.

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

\* \* \* \* \*

**§ 271.103. Permit-by-rule for municipal waste processing facilities other than for infectious or chemotherapeutic waste; qualifying facilities; general requirements.**

(a) *Purpose.* Facilities and activities described in this section shall be deemed to have a municipal waste permit by rule if the following general requirements are met:

(1) The facility or activity complies with Chapter 285 (relating to storage, collection and transportation of municipal waste).

(2) The facility or activity has the other necessary permits under the applicable environmental protection acts, and is operating under the acts and the regulations promulgated thereunder, and the terms and conditions of permits.

(3) A copy of a Preparedness, Prevention and Contingency (PPC) Plan that is consistent with the Department's guidelines for the development and implementation of environmental emergency response plans is retained onsite and available to the Department upon request.

(4) Daily records of the weight or volume of waste that is processed, the method and location of processing or disposal facilities for wastes from the facility and waste handling problems or emergencies are retained onsite and available to the Department upon request.

(b) *Financial assurances.* Subchapter D (relating to financial assurances requirements) is not applicable to facilities which are deemed to have a permit under this section.

(c) *Inappropriate activity.* The Department may require a person or municipality deemed to have a permit-by-rule to apply for, and obtain, an individual or general permit, or take other appropriate action, when the person or municipality is not in compliance with the conditions of the permit-by-rule or is conducting an activity that harms or presents a threat of harm to the health, safety or welfare of the people or the environment of this Commonwealth.

(d) *Captive processing facility.* A facility that processes municipal waste that is generated solely by the operator, onsite or offsite, shall be deemed to have a municipal waste processing permit under this article if, in addition to subsections (a)—(c), the following conditions are met:

(1) Waste resulting from the processing is managed under the act and the regulations promulgated thereunder.

(2) The processing does not have an adverse effect on public health, safety, welfare or the environment.

(3) The processing occurs at the production facility at which some or all of the waste is generated.

(4) The operator performs the analyses required by § 271.611 (relating to chemical analysis of waste), unless the analyses are waived or modified by the Department in writing, and maintains results of these analyses at the facility for 5 years. The results shall be submitted to the Department upon request.

(e) *Septage treatment facility.* A processing facility, other than a transfer or composting facility, that treats residential septage, either exclusively or mixed with

nonresidential septage, shall be deemed to have a municipal waste processing permit under this article if, in addition to subsections (a)—(c), the facility complies with the following:

(1) The operator performs the analyses required by § 271.611, unless the analyses are waived or modified by the Department in writing, and maintains results of these analyses at the facility for 5 years. The results shall be submitted to the Department upon request.

(2) The processing is included as part of a wastewater treatment process permitted by the Department under The Clean Streams Law (35 P. S. §§ 691.1—691.1001), or as part of a permit issued under the act, or the discharge resulting from the processing activity is connected to a public sewer in compliance with the local sewer authority's requirements, and one of the following applies:

(i) The facility discharges into waters of this Commonwealth under a Part II NPDES permit or a water quality management permit and is in compliance with the permit.

(ii) The facility discharges into a permitted wastewater treatment plant and is in compliance with the permit.

(3) The operator submits a written notice to the Department that includes the name, address and the telephone number of the facility, the individual responsible for operating the facility and a brief description of the facility.

(f) *Incinerator.* A municipal waste incinerator located at the generation site shall be deemed to have a municipal waste permit under this article if, in addition to the requirements of subsections (a)—(c), the facility meets one of the following:

(1) The facility is not required to obtain a permit under the Air Pollution Control Act (35 P. S. §§ 4001—4015) and the regulations promulgated thereunder.

(2) The facility has a capacity of less than 500 pounds or 227 kilograms per hour and is permitted under the Air Pollution Control Act.

(g) *Mechanical processing facility.* A facility for the processing of uncontaminated rock, stone, gravel, brick, block and concrete from construction/demolition activities, individually or in combination, by mechanical or manual sizing or by mechanical or manual separation for prompt reuse shall be deemed to have a municipal waste processing permit-by-rule if it meets the requirements of subsections (a)—(c) and submits a written notice to the Department that includes the name, address and telephone number of the facility, the individual responsible for operating the facility and a brief description of the waste and the facility. The facility shall be onsite or process less than 50 tons or 45 metric tons per day, and may not operate in violation of any State, county or municipal waste management plan.

(h) *Yard waste composting facility.* A person or municipality that operates a yard waste composting facility that is less than 5 acres, other than an individual backyard composting facility, shall be deemed to have a municipal waste processing permit-by-rule if the person or municipality meets the requirements of subsections (a)—(c), and the facility is operated in accordance with the Department's guidelines on yard waste composting.

#### GENERAL APPLICATION REQUIREMENTS

##### § 271.123. Right of entry.

(a) An application shall contain a description of the documents upon which the applicant bases the legal right

to enter and operate a municipal waste processing or disposal facility within the proposed permit area. The application shall also state whether that right is the subject of pending litigation.

(b) The application shall provide one of the following for lands within the permit area:

(1) A copy of the written consent to the applicant by the current landowner to operate a municipal waste processing or disposal facility.

(2) A copy of the document of conveyance that expressly grants or reserves the applicant the right to operate a municipal waste processing or disposal facility and an abstract of title relating the documents to the current landowner.

(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 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.

(d) The forms required by subsection (c) shall be deemed to be recordable documents. Prior to the initiation of operations under the permit, the forms shall be recorded by the applicant at the office of the recorder of deeds in the county in which the proposed permit area is situated. This subsection does not apply to agricultural utilization permits under Chapter 275 (relating to land application of sewage sludge) nor to permits issued under Subchapter J (relating to general permits—beneficial use of sewage sludge by land application).

#### Subchapter C. PERMIT REVIEW PROCEDURES AND STANDARDS

##### OTHER PERMITTING PROVISIONS

§ 271.232. (Reserved).

#### Subchapter E. CIVIL PENALTIES AND ENFORCEMENT

##### CIVIL PENALTIES

§ 271.413. Assessment of penalties—minimum penalties.

(a) This section sets forth minimum civil penalties for certain violations of the act and regulations thereunder. The Department will assess a civil penalty under § 271.412 (relating to assessment of penalties—general) only if a civil penalty calculated under § 271.412 is greater in amount than the civil penalty calculated under this section.

(b) If a person or municipality operates a permitted municipal waste landfill on an area for which the person or municipality was not permitted to operate the facility, or in excess of final permitted elevations, the Department will assess a minimum civil penalty of \$5,000 per half acre, or portion thereof. Intermediate acreages will be assessed at the next highest half acre.

(c) If a person or municipality operates a construction/demolition waste landfill on an area for which the person or municipality was not permitted to operate the facility, or in excess of final permitted elevations, the Department will assess a minimum civil penalty of \$500 per half acre,

or a portion thereof. Intermediate acreages will be assessed at the next highest half acre.

(d) If a person or municipality applies sewage sludge to an area for which the person or municipality was not permitted to apply the sludge, the Department will assess a minimum civil penalty of \$1,000 per acre.

(e) If a person or municipality applies sewage sludge under a permit, and the sewage sludge does not meet the physical, chemical or biological quality specified in the permit, the Department may assess a minimum civil penalty of \$1,000 per occurrence.

(f) If a person or municipality transporting residential septage fails to submit the notice to the Department required by § 285.225 (relating to transportation of residential septage), the Department may assess a minimum civil penalty of \$500 for the first offense and a minimum civil penalty of \$1,000 for each subsequent offense.

(g) If a person or municipality fails to provide notification on a timely basis of an incident for which a reporting requirement exists in the act, regulations thereunder, the terms or conditions of a permit or order of the Department, the Department will assess a minimum civil penalty of \$1,000.

(h) If a person or municipality refuses, hinders, obstructs, delays or threatens an agent or employe of the Department in the course of performance of a duty under the act, including, but not limited to, entry and inspection under any circumstances, the Department will assess a minimum civil penalty of \$2,000.

(i) If a person or municipality is applying sewage sludge and has not complied with the training requirements in § 271.915(j) (relating to management practices), the Department may assess a minimum civil penalty of \$1,000.

**Subchapter G. RESIDUAL WASTE; SPECIAL HANDLING WASTE; BENEFICIAL USE OF MUNICIPAL WASTE**

**GENERAL PROVISIONS**

**§ 271.601. Scope.**

(a) This subchapter applies to municipal waste processing or disposal facilities that apply to receive residual waste for processing or disposal. Section 271.611 (relating to chemical analysis of waste) also applies to an application for a general permit for the beneficial use or processing of municipal waste under Subchapter I (relating to beneficial use). This subchapter does not apply to:

(1) Transfer facilities except as otherwise required in writing by the Department.

(2) The disposal at permitted municipal waste landfills of residual waste from a person or municipality that generates a total quantity of 2,200 pounds or less of residual waste per generating location in each month, if the application demonstrates to the Department's satisfaction that the waste is not hazardous.

(3) The disposal at permitted municipal waste landfills of an individual type of residual waste from a person or municipality that generates a total of 2,200 pounds or less of that type of residual waste per generating location in each month, if approved by the Department in writing.

(b) The requirements of this subchapter are in addition to the application and operating requirements in this article.

(c) The Department may require analyses under this subchapter for special handling waste other than sewage

sludge, infectious waste, chemotherapeutic waste and ash residue from a resource recovery facility.

**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 contents of 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:

(i) The name and location of the generator of the waste.

(ii) A detailed analysis that fully characterizes the physical properties and chemical composition of the waste. This analysis shall include available information from material safety data sheets or similar sources that may help characterize the physical properties and chemical composition of the waste.

(iii) An evaluation of the ability of the waste and the constituents in the waste to leach into the environment.

(iv) A determination of whether the waste is hazardous under Chapter 261, Subchapters A—D.

(2) More than one type of waste from a single generator may be included on a single application, if the information required by this section is separately included for each type of waste.

(3) The analysis required by this subsection shall include a waste sampling plan, including quality assurance and quality control procedures. The plan shall ensure an accurate and representative sampling of the waste.

(4) The Department may, in writing, waive or modify the evaluation required by this subsection for waste to be disposed at lined disposal facilities if the following conditions are met:

(i) The applicant has submitted a description of the process by which the waste was generated, a physical description of the waste and a certification that the waste is not hazardous.

(ii) The waste has the same characteristics as municipal waste that does not contain hazardous 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 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.

(c) *Methodologies.* The analytical methodologies used to meet the requirements of subsection (a) shall be those in

the most recent edition of the EPA's "Test Methods for Evaluating Solid Waste" (SW-846), "Methods for Chemical Analysis of Water and Wastes" (EPA 600/4-79-020), "Standard Methods for Examination of Water and Wastewater," prepared and published jointly by the American Public Health Association, American Waterworks Association, and Water Pollution Control Federation or a comparable method subsequently approved by the EPA or the Department.

(d) *Quality control.* The person taking the samples and the laboratory performing the analysis required by subsection (a) shall employ the quality assurance/quality control procedures described in the EPA's "Handbook for Analytical Quality Control in Water and Wastewater Laboratories" (EPA 600/4-79-019) or "Test Methods for Evaluating Solid Waste" (SW-846). The laboratory's quality control procedures, as well as the documentation of the use of those procedures, shall be included in the application unless waived by the Department.

(e) *Generator information.* An applicant may submit information received from a person or municipality under § 287.54 (relating to chemical analysis of waste) to meet the corresponding requirements of this section.

(f) *Waiver.* The Department may, in writing, waive the requirements of this section for special handling waste, waive or modify the requirements of this section for general permits issued under Subchapter I, and waive or modify the chemical analysis requirements under § 271.103 (relating to permit-by-rule for municipal waste processing facilities other than for infectious or chemotherapeutic waste; qualifying facilities; general requirements).

### Subchapter I. BENEIFICIAL USE

#### SCOPE

Sec.

271.801. Scope

#### GENERAL PERMIT FOR PROCESSING OR BENEIFICIAL USE, OR BOTH, OF MUNICIPAL WASTE AUTHORIZATION AND LIMITATIONS

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#### SCOPE

### § 271.801. Scope.

(a) This subchapter sets forth requirements for general permits for the processing and beneficial use of municipal waste, except as follows:

(1) This subchapter does not set forth requirements for general permits for the processing or beneficial use of infectious or chemotherapeutic waste.

(2) This subchapter does not set forth requirements for general permits for the beneficial use of sewage sludge by land application. A general permit for the beneficial use of sewage sludge will be issued only under Subchapter J (relating to beneficial use of sewage sludge by land application).

(b) An operation that is approved under this subchapter does not require an individual processing or disposal permit under this article. The requirements of Chapter 271, Subchapters A—G, and Chapters 273, 277, 279, 281, 283 and 285 are applicable to the extent required in § 271.832 (relating to waiver and modification of requirements).

#### GENERAL PERMIT FOR PROCESSING OR BENEIFICIAL USE, OR BOTH, OF MUNICIPAL WASTE AUTHORIZATION AND LIMITATIONS

### § 271.811. Authorization for general permit.

(a) Under §§ 271.812 and 271.821—271.825, the Department may issue general permits on a regional or Statewide basis for a category of processing when processing is necessary to prepare the waste for beneficial use, or for a category of beneficial use, or both, of municipal waste, if the following are met:

(1) The wastes included in the category are generated by the same or substantially similar operations and have the same or substantially similar physical properties and chemical characteristics.

(2) The wastes included in the category are proposed for the same or substantially similar beneficial use or processing operations.

(3) The activities in the category can be adequately regulated utilizing standardized conditions without harming or presenting a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. The Department will not issue a general permit if the use of the waste as an ingredient in an industrial process or as a substitute for a commercial product presents a greater harm or threat of harm than the use of the product or ingredient which the waste is replacing.

(b) The Department may issue a general permit upon its own motion under § 271.825 (relating to Department initiated general permits) or upon an application from a person or municipality under §§ 271.821—271.824.

(c) The Department may modify, suspend, revoke, issue or reissue a general permit or coverage under a general permit under this subchapter as it deems necessary to prevent harm or the threat of harm to the health, safety or welfare of the people or environment of this Commonwealth.

(d) The Department may modify, suspend, revoke, issue or reissue a general permit or coverage under a general permit under this subchapter as it deems necessary to prevent violation of or interference with the laws or solid waste management plans of any state, county or municipality.

(e) The Department may issue a general permit for processing combinations of municipal and residual wastes when processing is necessary to prepare a waste for beneficial use, or for beneficial use of combinations of municipal and residual wastes, or both, under this article or Article IX (relating to residual waste management), whichever the Department determines is appropriate. The Department will determine which article is appropriate based on factors including whether the facility is captive or noncaptive, and the proportions of municipal and residual wastes.

(f) The requirements in this subchapter that apply to municipal waste also apply to residual waste when residual waste is mixed with municipal waste.

(g) The Department will not issue a general permit under this subchapter for the following:

(1) A municipal waste landfill, the use of municipal waste to fill open pits from coal or noncoal mining, or the use of municipal waste solely to level an area or bring the area to grade unless construction activity is completed on the area promptly after placement of the waste.

(2) A facility or activity which should be covered under the individual permitting process required in this article because of its size and potential to affect the environment adversely or because of its relationship to municipal waste management plans.

(3) The processing or beneficial use of infectious or chemotherapeutic waste.

(4) The beneficial use of sewage sludge by land application.

**§ 271.812. Nature of a general permit.**

(a) When the Department issues a general permit for a specified category of beneficial use or processing of municipal waste on either a regional or Statewide basis, persons or municipalities may beneficially use or process municipal waste in accordance with the terms and conditions of the general permit and this subchapter without filing an individual application for, and first obtaining, an individual permit, if the persons or municipalities comply with this section and this subchapter.

(b) The use of an applicable general permit for the beneficial use or processing of municipal waste satisfies the permit requirements in § 271.101(a) (relating to permit requirement) if the following are met:

(1) The beneficial use or processing activities are conducted in accordance with the terms and conditions of the applicable general permit.

(2) The person or municipality conducting the beneficial use or processing activities is the permittee identified in the general permit or is otherwise authorized to operate under the applicable general permit in accordance with § 271.841 (relating to inclusion in a general permit).

(c) Notwithstanding subsections (a) and (b), the Department may require a person or municipality operating under a general permit to apply for, and obtain, an individual permit when the person or municipality is not in compliance with the conditions of the general permit or is conducting an activity that harms or presents a threat of harm to the health, safety or welfare of the people or the environment of this Commonwealth.

**ISSUANCE OF GENERAL PERMITS**

**§ 271.821. Application for general permit.**

(a) A person or municipality may apply to the Department for the issuance of a general permit for a category of beneficial use of municipal waste or for a category of processing of municipal waste when processing is necessary to prepare the waste for beneficial use.

(b) An application for the issuance of a general permit shall be submitted on a form prepared by the Department and shall contain the following:

(1) A description of the municipal waste to be covered by the general permit, including the physical and chemical characteristics of the waste. The chemical description shall contain an analysis meeting the requirements of

§ 271.611 (relating to chemical analysis of waste) for a sufficient number of samples of the waste to represent accurately the range of physical properties and chemical characteristics of the municipal waste.

(2) A description of the proposed type of beneficial use or processing activity to be covered by the general permit.

(3) For beneficial use general permits, proposed concentration limits for contaminants in the waste which is to be beneficially used, and a rationale for those limits.

(4) For general permits that involve beneficial use of a processed or unprocessed waste, a detailed demonstration of the efficacy of the waste for the proposed beneficial use, which shall include:

(i) If the waste is to be used as a substitute for a commercial product, a demonstration that the waste is capable of performing the desired functions of the commercial product, and that the waste meets or exceeds applicable ASTM, Department of Transportation or other applicable National, State, local or industry standards or specifications for the material for which the waste is being substituted.

(ii) If the waste is to be used as a raw material for a product with commercial value, a demonstration that the waste will contribute significant properties or materials to the end product, and that the waste meets or exceeds applicable ASTM, Department of Transportation or other applicable National, State, local or industry standards or specifications for the material for which the waste is being substituted.

(iii) If the waste is to be used in general roadway application or highway construction, a demonstration that approval has been granted by the Department of Transportation Product Evaluation Board, if applicable, for the use of the waste for the intended application.

(iv) If the waste is to be used as a construction material, soil substitute, soil additive or antiskid material, or is to be otherwise placed directly onto the land, an evaluation of the potential for adverse public health and environmental impacts from the proposed use of the municipal waste. The evaluation shall identify the particular constituents of the waste which present the potential for adverse public health and environmental impacts, and the potential pathways of human exposure to those constituents, including exposure through groundwater, surface water, air and the food chain. This requirement does not apply to general permits for the land application of sewage sludge. The Department may waive or modify this requirement in writing.

(v) If the waste is to be used without reclamation as a construction material, soil additive, soil substitute or antiskid material or is to be otherwise placed directly onto the land, a demonstration that the leaching analysis of the municipal waste to be beneficially used is no greater than 25 times the primary maximum contaminant level (MCL) for metals and other cations and the primary MCL for contaminants other than metals and cations.

(c) An application for the issuance of a general permit under this subchapter shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for \$1,000.

(d) The Department may not waive bonding and insurance requirements in Subchapter D (relating to financial assurances requirements) for composting facilities, construction/demolition waste processing facilities, facilities that process municipal waste to produce refuse

derived fuel and for other general permit activities if the waste managed is potentially harmful or large quantities of waste are stored.

(e) An applicant for a general permit shall provide written notice to each municipality in which the applicant intends to operate under a general permit, if a location is known. Proof of this notice, including a copy of the notice and a certified or registered mail returned receipt, shall be submitted to the Department.

**§ 271.822. Completeness review.**

(a) After receipt of an application for the issuance of a general permit, or an application for a determination of applicability under § 271.842 (relating to determination of applicability), the Department will determine whether the application is administratively complete. For purposes of this subchapter, an application is administratively complete if it contains the necessary analyses, fees, documents and information, regardless of whether the analyses, fees, documents and information would be sufficient for the issuance of the permit, or the determination of applicability.

(b) If the application is not administratively complete, the Department will, within 30 days of receipt of the application, return it to the applicant, along with a written statement of the specific analyses, fees, documents or other information that is required to make the application administratively complete.

(c) The Department will deny the incomplete application if the applicant fails to provide the analyses, fees, documents or information within 90 days of receipt of the notice in subsection (b).

**§ 271.823. Public notice and review period.**

(a) The Department will publish notice of receipt of an application for a general permit in the *Pennsylvania Bulletin* when the Department determines that the application is administratively complete.

(b) The notice will include:

(1) A brief description of the category of waste and the category of beneficial use or processing of municipal waste which is identified in the application.

(2) The Department address and telephone number at which interested persons or municipalities may obtain further information and review a copy of the application for the general permit.

(3) A brief description of the procedures for public comment on the general permit application in accordance with this subchapter.

(4) A statement that interested persons or municipalities may submit comments to the Department within 60 days of the publication of the notice, and may recommend conditions upon, revisions to, approval or disapproval of the general permit application.

(c) The Department may hold a public meeting or public hearing on the application for a general permit.

(d) The Department will approve or deny an application for a general permit within 6 months from the last day of the comment period established in subsection (b)(4). Failure by the Department to comply with this timetable will not result in grounds for issuance of a general permit.

(e) Upon issuance of a general permit, the Department will place a notice in the *Pennsylvania Bulletin* of the availability of the general permit.

**§ 271.824. Approval or denial of an application.**

The Department will not issue a general permit for a category of beneficial use or processing of municipal waste unless the applicant has affirmatively demonstrated the following:

(1) The application for the general permit is accurate and complete and the requirements of §§ 271.811, 271.812, 271.821—271.826, 271.831, 271.832, 271.841—271.843, 271.851 and 271.852 have been complied with.

(2) The proposed beneficial use or processing activities will be conducted in a manner that will not harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth through exposure to constituents of the waste during or after the proposed beneficial use or processing activities. Use of the waste as an ingredient in an industrial process or as a substitute for a commercial product may not present a greater harm or threat of harm than the use of the product or ingredient which the waste is replacing.

(3) For beneficial use general permits, the physical character and chemical composition of the municipal waste which is proposed to be covered by the general permit contributes to the proposed beneficial use, and the physical character and chemical composition of the municipal waste does not interfere with the proposed beneficial use.

**§ 271.825. Department initiated general permits.**

(a) The Department may issue or modify a general permit for a category of beneficial use or processing of municipal waste upon its own motion in accordance with this section.

(b) At least 60 days prior to the issuance or modification of a general permit under this section, the Department will publish a notice in the *Pennsylvania Bulletin* of intent to issue or modify a general permit under this section.

(c) The notice required by subsection (b) will include the following:

(1) A clear and specific description of the category of waste and the category of beneficial use or processing of municipal waste eligible for coverage under the proposed general permit or affected by the modification.

(2) The standards in § 271.811(a) (relating to authorization for general permit), and a brief description of the reasons for the Department's determination that the category of beneficial use or processing is eligible for coverage under a general permit in accordance with these standards.

(3) A brief description of the terms and conditions of the proposed general permit or modification.

(4) A brief description of the procedures for public comment on the general permit or modification in accordance with this subchapter.

(5) The Department address and telephone number at which interested persons or municipalities may obtain further information and review a copy of the proposed general permit or modification.

(6) A statement that interested persons or municipalities may submit comments to the Department within 60 days of the publication of the notice and may recommend conditions upon, revisions to and approval or disapproval of the proposed general permit or modification.

(d) The Department may hold a public meeting or public hearing on the proposed general permit or proposed modification.

(e) Upon issuance or modification of a general permit, the Department will place a notice in the *Pennsylvania Bulletin* of the availability of the new or modified general permit.

**§ 271.826. Permit renewal.**

(a) A person or municipality that plans to process or beneficially use municipal waste after the expiration of the term in the general permit shall file a complete application for permit renewal on forms provided by the Department at least 180 days before the expiration date of the permit. A permit renewal shall authorize persons or municipalities that have applied for renewal within the time period provided in this subsection to operate under the renewal permit.

(b) A person or municipality that does not file an application for permit renewal within the time period in subsection (a) shall be required either to register or obtain a determination of applicability, whichever is applicable, under a renewed general permit.

(c) A general permit renewal shall be for a period of time not to exceed the length of the term of the original permit.

(d) An application for permit renewal shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for \$300.

**CONTENT OF GENERAL PERMITS AND WAIVERS**

**§ 271.831. Contents of general permits.**

(a) A general permit issued by the Department will include, at a minimum:

(1) A clear and specific description of the category of waste and the category of beneficial use or processing of municipal waste eligible for coverage under the general permit.

(2) The standards in § 271.811(a) (relating to authorization for general permit), and a brief description of the reasons for the Department's determination that the category of beneficial use or processing is eligible for coverage under a general permit in accordance with these standards.

(3) A specification of registration or determination of applicability requirements established in accordance with § 271.841 (relating to inclusion in a general permit) and the fee imposed on registrants or applicants for coverage under the general permit.

(4) A set of terms and conditions governing the beneficial use or processing of municipal waste covered by the general permit as are necessary to assure compliance with the act, this article and the environmental protection acts, including provisions for the protection of groundwater. At a minimum, the conditions shall include:

(i) The limits on the physical and chemical properties of waste that may be beneficially used or processed. The permit shall also include a requirement that persons or municipalities that conduct activities authorized by the general permit shall immediately notify the Department, on forms provided by the Department, of a change in the physical properties or chemical characteristics of the municipal waste, including leachability, or of a change in the information required by § 271.841(f).

(ii) A requirement that persons or municipalities that conduct activities authorized by the general permit shall

allow authorized representatives of the Commonwealth, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to areas in which the activities covered by the general permit will be, are being or have been conducted to ensure compliance with the act, regulations promulgated thereunder and a permit, license or order issued by the Department under the act.

(iii) A requirement that the activities authorized by the general permit will not harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. At a minimum, for beneficial use of municipal waste, the use of the waste as an ingredient in an industrial process or as a substitute for a commercial product may not present a greater harm or threat of harm than the use of the product or ingredient which the waste is replacing.

(iv) An effective date and a fixed permit term, which may not exceed 10 years from the effective date. If the Department renews a general permit, the term may not exceed the term of the original permit.

(v) A requirement that a person or municipality operating under the permit shall immediately notify the Department within the time stated in the permit and if no time is stated no later than 45 days, in writing, of any changes in the following:

(A) The company's name, address, owners, operators and responsible officials.

(B) Land ownership of land at the permitted facility.

(C) The physical and chemical characteristics of the municipal waste.

(D) The generators of the municipal waste.

(E) The status of any permit issued to the permittee or any agent of the permittee engaged in activities under the permit by the Department or Federal government under the environmental protection acts.

(vi) A requirement that the activities conducted under the authorization of a general permit shall be conducted in accordance with the permittee's application. Except to the extent that a general permit states otherwise, the permittee shall operate as described within the permit application.

(5) A requirement that a person or municipality that registers for coverage under a general permit or applies to the Department for a determination of applicability under a general permit shall submit a copy of the registration or application to each municipality in which processing activities or the primary beneficial use activities will be located, prior to initiating operations. If additional locations are identified during the term of the permit that were not known at the time of a registration or application, including an application by the original applicant, written notice shall be provided to the municipalities.

(b) A general permit may include a requirement that persons or municipalities who conduct activities authorized by the general permit shall submit periodic reports, analyses of waste and other information to ensure that the quality of the waste to be beneficially used or processed does not change.

**§ 271.832. Waiver and modification of requirements.**

(a) An operation that is approved under this subchapter is subject to 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, Subchapter D in accordance with § 271.811(d), Subchapter E or Subchapter H.

#### **REGISTRATION AND DETERMINATION OF APPLICABILITY**

##### **§ 271.841. Inclusion in a general permit.**

(a) A person or municipality is authorized to operate under a general permit if one of the following occurs:

(1) The applicable general permit requires persons or municipalities to register with the Department prior to operating under the general permit, and the person or municipality has registered in accordance with the terms of the general permit.

(2) The applicable general permit requires persons or municipalities to apply for and obtain a determination of applicability from the Department prior to operating under the general permit, and the Department has made this determination.

(b) Except as provided in subsections (c) and (d), as a condition of each general permit, the Department will require persons or municipalities who intend to operate under the general permit to register with the Department within a specified time period prior to conducting the activity authorized by the general permit.

(c) For beneficial use general permits where the municipal waste is to be used as a construction material, antiskid material or otherwise placed directly onto the land, as a condition of the general permit, the Department will require persons or municipalities who intend to operate under the general permit to apply for and obtain a determination of applicability from the Department prior to conducting the activity authorized by the general permit. The Department may require persons or municipalities who intend to operate under a general permit for land application either to apply for and obtain a determination of applicability or register with the Department.

(d) The Department may impose the determination of applicability condition described in subsection (c) on general permits for beneficial use or processing activities other than those described in that subsection if the Department determines that the condition is necessary to prevent harm or a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth.

(e) Registration or application requirements and time limits, if any, shall be set forth in the general permit governing each category of beneficial use or processing of municipal waste.

(f) At a minimum, the registration or application shall include:

(1) The name and address of the person or municipality conducting the activity covered by the general permit.

(2) A description of each waste which will be beneficially used or processed in accordance with the general permit.

(3) A description of the proposed method of processing or beneficial use of waste.

(4) If a general permit requires a registrant or applicant to chemically analyze each waste to be processed or

beneficially used, an analysis that is in accordance with § 271.611 (relating to chemical analysis of waste).

(5) For beneficial use general permits for which an evaluation was submitted under § 271.821(b)(4)(iv) (relating to application for general permit), a supplemental evaluation that meets the requirements of that section if the waste contains constituents at levels not reviewed as part of the general permit, or if the proposed beneficial use would be at a type of location not reviewed as part of the general permit.

(6) The name or number of the general permit being utilized for the activity.

(7) A demonstration that the activities which the person or municipality intends to conduct are authorized by the general permit.

(8) A signed and notarized statement by the person or municipality conducting the activity authorized by the general permit, on a form prepared by the Department, which states that the person or municipality agrees to accept the conditions imposed by the general permit for beneficial use or processing of municipal waste under the general permit.

(g) A person or municipality that registers for coverage under a general permit, or applies to the Department for a determination of applicability of a general permit, shall submit a copy of the registration or application to the host municipality and the host county at the same time that the person or municipality files the registration or application with the Department. The host municipality and host county shall be determined by the location of the person's or municipality's primary or first beneficial use or processing operation under the general permit.

##### **§ 271.842. Determination of applicability.**

(a) This section sets forth standards and procedures that are applicable to general permits which require persons or municipalities to apply for and obtain a determination of applicability from the Department prior to conducting the activity authorized by the general permit. The requirements in this section are in addition to the applicable requirements of § 271.841 (relating to inclusion in a general permit).

(b) An application for a determination of applicability under this subchapter shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for \$500.

(c) The Department will provide notice in the *Pennsylvania Bulletin* of each application for a determination of applicability for a general permit which the Department has determined to be administratively complete. For applications for determinations of applicability for a general permit for construction materials, the notice will indicate that interested persons or municipalities may submit comments to the Department within 60 days recommending revisions to and approval or disapproval of the application, unless the 60-day notice requirement is waived by the Department. The Department may hold a public meeting or public hearing on an application for determination of applicability for a general permit for construction materials.

(d) The Department will make a determination that a general permit is or is not applicable to an activity for which an application for determination of applicability is filed under § 271.841 within 60 days from the publication of the notice under subsection (c) or for construction materials when a 60-day comment period is provided, within 120 days after publication of the notice under



subsection (c). The time period does not include periods 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 corrections or changes to the Department's satisfaction. Failure by the Department to comply with this timetable will not be construed or understood to constitute grounds for a determination that the general permit applies to the proposed activity.

(e) The Department will determine that the general permit does not apply to the proposed beneficial use or processing activity and will deny coverage under the general permit if the applicant fails to demonstrate to the Department's satisfaction that the proposed activity is consistent with the terms and conditions of the general permit, and does not have the potential to harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth.

(f) The Department will provide written notice of its determination that a general permit is or is not applicable to an activity for which a determination of applicability is required to the host municipality and the appropriate county, county planning agency and county health department, if one exists, for the applicant's proposed primary or first beneficial use or processing operation under the general permit and will publish notice of its decision in the *Pennsylvania Bulletin*.

(g) The Department may amend, suspend or revoke coverage under a general permit if a person or municipality authorized to conduct solid waste activities under a general permit is not in compliance with the permit conditions or for one or more of the reasons in subsection (e).

**§ 271.843. Registration.**

(a) This section sets forth standards and procedures that are applicable to general permits which require persons or municipalities to register with the Department prior to operating under the general permit. The requirements of this section are in addition to the applicable requirements of § 271.841 (relating to inclusion in a general permit).

(b) A registration to operate under a general permit under this subchapter shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for \$250.

(c) The Department will provide notice in the *Pennsylvania Bulletin* of each registration for coverage under a general permit.

(d) Persons or municipalities may operate under a general permit upon registering with the Department under § 271.841 and the terms of the general permit.

(e) The Department may amend, suspend or revoke coverage under a general permit if the waste or activity is not covered by the terms and conditions of the general permit.

(f) A person or municipality operating under a registration has the burden of proving, by clear and convincing evidence, that the waste and activity are consistent with the general permit.

**COMPLIANCE**

**§ 271.851. Investigations and corrective action.**

(a) Upon notification by a person or municipality beneficially using or processing municipal waste under a general permit that there has been a change in the physical properties or chemical characteristics of the

municipal waste being beneficially used or processed, including leachability, the Department will conduct an investigation and order necessary corrective action. Notice to the Department under this section does not, by itself, suspend continued beneficial use or processing after a change has occurred.

(b) Upon receipt of a signed, written complaint of a person whose health, safety or welfare may be adversely affected by a physical or chemical change in the properties of the municipal waste to be beneficially used or processed under a general permit, including leachability, the Department will determine the validity of the complaint and take appropriate action.

**§ 271.852. Compliance with permit conditions, regulations and laws.**

A person or municipality that beneficially uses or processes municipal waste under a general permit shall comply with the terms and conditions of the general permit, with this article and with the environmental protection acts to the same extent as if the activity were covered by an individual permit.

**Subchapter J. BENEFICIAL USE OF SEWAGE SLUDGE BY LAND APPLICATION**

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**GENERAL**

**§ 271.901. Purpose and applicability.**

(a) *Purpose.*

(1) This subchapter establishes standards for general and individual land application of sewage sludge permits for the beneficial use of sewage sludge by land application. The standards consist of general requirements, pollutant limits, management practices and operational standards. This subchapter also includes pathogen and alternative vector attraction reduction requirements.

(2) In addition, the standards in this subchapter include reporting requirements and the frequency of monitoring and recordkeeping requirements when sewage sludge is applied to the land for beneficial use.

(b) *Applicability.*

(1) This subchapter applies to a person who prepares sewage sludge that will be sold or given away in a bag or other container or that will be land applied, and to a person who applies sewage sludge to the land.

(2) This subchapter applies to sewage sludge applied to the land.

**§ 271.902. Permits and direct enforceability.**

(a) *Permits.* The requirements in this subchapter may be implemented through an individual land application of sewage sludge permit or a land application of sewage sludge general permit. An individual land application of sewage sludge permit will be issued to, and a land application of sewage sludge general permit will provide coverage for, persons who prepare sewage sludge or persons who land apply residential septage, or both. For a land application of sewage sludge permit to be issued to or provide coverage for a person who prepares sewage sludge other than residential septage, that person shall have one or more of the following:

(1) A permit for operation of the facility issued by the Department under the procedures and requirements of Chapter 91, 92 or 271 (relating to general provisions; National Pollutant Discharge Elimination System; and municipal waste management—general provisions), as applicable.

(2) A permit for operation of the facility issued or modified by the state in which the facility is located or by the EPA, from which the Department may determine that the sewage sludge to be land applied will meet the standards in 40 CFR Part 503 (relating to standards for the use or disposal of sewage sludge).

(b) *Direct enforceability.* A person may not land apply sewage sludge through any practice for which requirements are established in this subchapter except in accordance with these requirements.

(c) Persons seeking to land apply sewage sludge shall obtain a land application of sewage sludge permit under the procedures and requirements in Chapters 91 and 92, as applicable, and this subchapter.

(d) A land application of sewage sludge permit requires compliance with Chapters 91 and 92, as applicable, this subchapter, and the terms and conditions of the permit.

(e) The Department is authorized to issue a land application of sewage sludge general permit if the permit meets the applicable requirements in §§ 92.81—92.83 (relating to NPDES permits), as modified by subsection (f). The Department may issue a land application of sewage sludge general permit for an activity related to the land application of sewage sludge which may result in a discharge of pollutants to waters of this Commonwealth. The site specific review and approval requirements of §§ 92.81—92.83 are not applicable to general permits issued under this subchapter.

(f) The restrictions contained in §§ 92.81(a)(8) and 92.83(b)(8) are not applicable to the land application of sewage sludge to the extent the restrictions would prohibit general permit coverage in watersheds designated as “high quality waters” under Chapter 93 (relating to water quality standards).

(g) A person may not apply sewage sludge in a way that will cause surface or groundwater pollution, cause or allow the attraction, harborage or breeding of vectors, cause or allow emissions of any malodorous air contaminants under § 123.31(b) (relating to limitations), adversely affect private or public water supplies, or cause any public nuisance.

(h) Applications for individual land application of sewage sludge permits issued under this subchapter, or for coverage under land application of sewage sludge general

permits issued under this subchapter, shall be accompanied by a nonrefundable fee of \$500 made payable to the “Commonwealth of Pennsylvania.”

**§ 271.903. Operation under existing permits and beneficial use orders.**

(a) A person that possesses an existing individual permit or beneficial use order for the land application of sewage sludge, or a sewage sludge distribution program permit, issued by the Department shall either:

(1) Cease operations.

(2) Continue operations under the permit or beneficial use order until it expires or until the person obtains coverage under a land application of sewage sludge permit.

(b) When the Department makes an affirmative decision under subsection (a)(2), the terms and conditions of the land application of sewage sludge permit will supersede the terms and conditions of the existing permit or beneficial use order.

(c) Existing beneficial use orders issued by the Department under former § 271.232 (Reserved) expire on January 25, 2002.

(d) Existing permits identified in subsection (a), which do not contain an express expiration date, will be deemed to expire on January 25, 2002.

(e) The interim guidelines for the use of sewage sludge for agricultural utilization or land reclamation will remain in effect for the limited purposes of providing guidance for persons operating under, and for the enforcement of, individual solid waste permits issued prior to May 27, 1997, under Chapter 275 (relating to land application of sewage sludge) and beneficial use orders issued prior to May 27, 1997, under § 271.232 (Reserved).

**§ 271.904. Additional or more stringent requirements.**

On a case-by-case basis, the Department may impose requirements in addition to or more stringent than the requirements in this subchapter when necessary to protect public health and the environment from any adverse effect of a pollutant in the sewage sludge.

**§ 271.905. Requirement for a person who prepares sewage sludge.**

A person who prepares sewage sludge shall ensure that the applicable requirements in this subchapter are met when the sewage sludge is applied to the land.

**§ 271.906. Sampling and analysis.**

(a) *Sampling.* Representative samples of sewage sludge that is applied to the land shall be collected and analyzed.

(b) *Methods.* Methods in the materials listed in this subsection, or in any later amendments published in the *Federal Register*, are incorporated by reference and shall be used to analyze samples of sewage sludge. Other methods may be approved by the Department.

(1) *Enteric viruses.* ASTM Designation: D 4994-89, “Standard Practice for Recovery of Viruses from Wastewater Sludges,” 1992 Annual Book of ASTM Standards: Section 11—Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, Pennsylvania 19103-1187.

(2) *Fecal coliform.* Part 9221 E. or Part 9222 D., “Standard Methods for the Examination of Water and Wastewater,” 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005.

(3) *Helminth Ova*. Yanko, W. A. "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges," EPA 600/1-87-014, 1987. National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB 88-154273/AS).

(4) *Inorganic pollutants*. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, Second Edition (1982) with Updates I (April 1984) and II (April 1985) and Third Edition (November 1986) with Revision I (December 1987). Second Edition and Updates I and II are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB-87-120-291). Third Edition and Revision I are available from Superintendent of Documents, Government Printing Office, 941 North Capitol Street, NE., Washington, DC 20002 (Document Number 955-001-00000-1).

(5) *Salmonella SP. Bacteria*. Part 9260 D., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005; or Kenner, B. A. and H. P. Clark, "Detection and Enumeration of *Salmonella* and *Pseudomonas Aeruginosa*," Journal of the Water Pollution Control Federation, Vol. 46, No. 9, September 1974, pp. 2163- 2171. Water Environment Federation, 601 Wythe Street, Alexandria, Virginia 22314.

(6) *Specific oxygen uptake rate*. Part 2710 B., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005.

(7) *Total, fixed and volatile solids*. Part 2540 G., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005.

#### § 271.907. Special definitions.

The following words and terms have the following meanings and apply only to this subchapter; other definitions may be found in § 271.1 (relating to definitions):

*Agricultural land*—Land on which a food crop, a feed crop, a fiber crop, a silvicultural crop or a horticultural crop is grown. The term includes range land and land used as pasture.

*Agronomic rate*—The annual whole sludge application rate (dry weight basis) designed to do the following:

(1) Provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, silvicultural crop, cover crop, horticultural crop or vegetation grown on the land.

(2) Minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the groundwater.

*Annual whole sludge application rate*—The maximum amount of sewage sludge (dry weight basis) that can be applied to a unit area of land during a 365-day period.

*Apply sewage sludge or sewage sludge applied to the land or land apply*—Land application of sewage sludge.

*Bag or other container*—Either an open or closed receptacle. The term includes, but is not limited to, a bag, bucket, box, container, vehicle or trailer, with a load capacity of 1.1 tons (or 1.0 metric ton) or less.

*Cover crop*—A small grain crop, such as oats, wheat or barley, not grown for harvest.

*Cumulative pollutant loading rate*—The maximum amount of a pollutant that can be applied to an area of land.

*Domestic sewage*—Waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

*Dry weight basis*—Calculated on the basis of having been dried at 221°F (or 105°C) until reaching a constant mass (that is, essentially 100% solids content).

*Feed crops*—Crops produced primarily for consumption by animals.

*Fiber crops*—Crops such as flax and cotton.

*Food crops*—Crops consumed by humans. The term includes, but is not limited to, fruits, vegetables and tobacco.

*Forest*—A tract of land thick with trees and underbrush.

*Frozen ground*—Ground frozen to a depth of at least 2 inches for a period of 72-consecutive hours.

*Industrial wastewater*—Wastewater generated in a commercial or industrial process.

*Land application*—The spraying or spreading of sewage sludge onto the land surface for beneficial use; the injection of sewage sludge below the land surface for beneficial use; or the incorporation of sewage sludge into the soil for beneficial use so that the sewage sludge can either condition the soil or fertilize crops for vegetation grown in the soil.

*Land application of sewage sludge general permit*—A regionwide or Statewide land application of sewage sludge permit that is issued by the Department under the procedures and requirements in Chapters 91 and 92 (relating to general provisions; and National Pollutant Discharge Elimination System) and this subchapter, as applicable, for a clearly described category of activities which may involve a discharge to surface or groundwaters, when the activities are substantially similar in nature and do not have the potential to cause significant adverse environmental impact.

*Land application of sewage sludge permit*—A permit that is issued for an activity related to the land application of sewage sludge which may result in a discharge of pollutants to waters of this Commonwealth.

*Municipality*—A city, town, borough, county, township or an authority created by any of the foregoing under State law, including an intermunicipal agency of two or more of the foregoing entities.

*Pasture*—Land on which animals feed directly on feed crops such as legumes, grasses, grain stubble or stover.

*Person*—An individual, corporation, partnership, association, municipality, political subdivision or an instrumentality of State, Federal or local government, or an agent or employe thereof; or any other legal entity.

*Person who prepares sewage sludge*—Either the person who generates sewage sludge during the treatment or processing of domestic sewage in a treatment works or the person who derives a material from sewage sludge. The term includes a composting facility that composts sewage sludge.

*Pollutant*—An organic substance, an inorganic substance, a combination of organic substances, a pathogenic organism or another substance identified by the Department that, after discharge and upon exposure, ingestion, inhalation or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Department cause death, disease, behavioral

abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

*Pollutant limit*—A numerical value that describes the amount of a pollutant allowed per unit amount of sewage sludge (for example, milligrams per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (for example, pounds per acre or kilograms per hectare); or the volume of a material that can be applied to a unit area of land (for example, gallons per acre or liters per hectare).

*Public contact site*—Land with a high potential for contact by the public. The term includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms and golf courses.

*Range land*—Open land with indigenous vegetation.

*Reclamation site*—Drastically disturbed land that is reclaimed using sewage sludge. The term includes, but is not limited to, active and abandoned coal and noncoal surface mines and construction sites.

*Residential septage*—Liquid or solid material removed from a septic tank, cesspool or similar treatment works that receives only waste or wastewater from humans or household operations. The term includes processed residential septage from a residential septage treatment facility. The term does not include liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III Marine Sanitation Device or similar treatment works, that receives either commercial wastewater or industrial wastewater, and does not include grease removed from grease traps at a restaurant.

*Runoff*—Rainwater, leachate or other liquid that drains overland on any part of a land surface and runs off of the land surface.

*Treat or treatment of sewage sludge*—The preparation of sewage sludge for land application. The term includes, but is not limited to, thickening, stabilization and dewatering of sewage sludge. The term does not include storage of sewage sludge.

*Treatment works*—Either a Federally owned, publicly owned or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

*Wetlands*—Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions including swamps, marshes, bogs and similar areas.

## OPERATING REQUIREMENTS

### § 271.911. Special requirements.

(a) *Application*. This section applies to sewage sludge that meets the criteria in subsection (b).

(b) *Exceptional quality sewage sludge*.

(1) The general requirements in § 271.913 (relating to general requirements) and the management practices in § 271.915 (relating to management practices), do not apply when sewage sludge is applied to the land if, prior to use, the sewage sludge continuously meets the pollutant concentrations in § 271.914(b)(3) (relating to pollutant limits), the Class A pathogen requirements in § 271.932(a) (relating to pathogens) and one of the vector

attraction reduction requirements in § 271.933(b)(1)—(8) (relating to vector attraction reduction), and is nonliquid and nonrecognizable as human waste.

(2) Sewage sludge that meets the requirements of paragraph (1) or (3) may not be applied at a rate that is greater than the agronomic rate, unless a greater application rate is approved by the Department for land reclamation activities. For land reclamation, sewage sludge shall be incorporated within 24 hours after application.

(3) Sewage sludge sold, given away or otherwise distributed, in a bag or other container for application to the land shall continuously meet the pollutant concentrations in § 271.914(b)(3), the Class A pathogen requirements in § 271.932(a) and one of the vector attraction reduction requirements in § 271.933(b)(1)—(8), and shall be nonliquid and nonrecognizable as human waste.

(c) *Label or information sheet*. Either a label shall be affixed to the bag or other container in which sewage sludge is sold, given away or otherwise distributed, for application to the land, or an information sheet shall be provided to the person who receives sewage sludge sold, given away or otherwise distributed, in a bag or other container for application to the land. The label or information sheet shall contain the following information:

(1) The name and address of the person who prepared the sewage sludge that is sold, given away or otherwise distributed, in a bag or other container for application to the land.

(2) A statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the label or information sheet.

(3) A description of the restrictions or limitations and the nutrient value of the sewage sludge.

(d) *Application by Department*. The Department may apply any or all of the general requirements in § 271.913 and the management practices in § 271.915 to the sewage sludge in subsection (b)(1) on a case-by-case basis after determining that some or all of the general requirements or management practices in those sections are needed to protect public health and the environment from any reasonably anticipated adverse effect that may occur from any pollutant in the sewage sludge.

### § 271.912. Assistance of county conservation district.

The Department may enter into an agreement with a county conservation district with the approval of the State Conservation Commission to authorize the county conservation district to:

(1) Provide site evaluation and permit application review of land application of sewage sludge permits.

(2) Provide information and written materials to the general public, the regulated community and the agricultural community concerning the land application of sewage sludge.

(3) Conduct education sessions with interested parties on the land application of sewage sludge.

(4) Conduct inspections of permitted land application facilities and those areas where sewage sludge is applied under land application of sewage sludge permits.

(5) Take samples of sewage sludge delivered to land application sites.

**§ 271.913. General requirements.**

(a) A person may not apply sewage sludge to the land except in accordance with this subchapter.

(b) A person may not apply sewage sludge subject to the cumulative pollutant loading rates in § 271.914(b)(2) (relating to pollutant limits) to agricultural land, forest, a public contact site or a reclamation site if any of the cumulative pollutant loading rates in § 271.914(b)(2) have been reached.

(c) A person may not apply residential septage to agricultural land, forest or a reclamation site during a 365-day period if the annual application rate in § 271.914(c) has been reached during that period.

(d) A person may not apply sewage sludge to a reclamation site unless the reclamation activity is permitted or otherwise approved by the Department.

(e) A person who operates under a land application of sewage sludge permit issued under this subchapter shall obtain written consent of the owner of the land upon which the sewage sludge will be land applied, on a form prepared by the Department, prior to land applying the sewage sludge.

(f) A person who operates under a land application of sewage sludge permit issued under this subchapter shall, at least 7 days prior to land applying sewage sludge for the first time at a location, provide the occupant of the land with a user instruction sheet prepared by the person operating under the permit that describes the acceptable uses and limitations of the sewage sludge.

(g) Notification requirements are as follows:

(1) A person who prepares sewage sludge that is land applied at a location and a person who land applies residential septage at a location for agricultural, forest or land reclamation purposes shall send or otherwise provide written notification to the adjacent landowner, the county conservation district and the Department at least 30 days prior to the first application of the sewage sludge at that location. The notification shall:

(i) Include a brief description of the operation, any site restrictions, the name of the person land applying the sewage sludge and the applicable permit number.

(ii) Be sent by personal delivery or first class mail and, for an adjacent landowner, shall also be given by posting at the property line in a manner sufficient to notify the adjacent landowner of the items in subparagraph (i).

(iii) For the county conservation district and the Department, include the location of the fields on a United States Geological Survey map and on a Natural Resources Conservation Service Soils Map.

(iv) For the Department, be sent to the Department's regional office that has jurisdiction for the location where the sewage sludge will be applied.

(2) The Department may modify these requirements for purposes of land reclamation where the activity is part of another permit or approval issued by the Department and public notice has been provided as part of the permit or approval.

(h) Prior to the first time a site is used for land application, the first person who prepares sewage sludge or the first person who land applies residential septage shall obtain, at a minimum, one representative soil chemical analysis for each field on which sewage sludge is land applied, for pH and those constituents listed in the tables in § 271.914(b).

(i) The person who prepares sewage sludge that is applied to agricultural land, forest, a public contact site or a reclamation site shall provide the person who applies the sewage sludge written notification of the concentration of total nitrogen (as nitrogen on a dry weight basis) in the sewage sludge.

(j) Land application information requirements are as follows:

(1) The person who applies sewage sludge to the land shall obtain information needed to comply with the requirements in this subchapter.

(2) Before sewage sludge subject to the cumulative pollutant loading rates in § 271.914(b)(2) is applied to the land, the person who proposes to apply the sewage sludge shall contact the Department's regional office that has jurisdiction for the site where the sewage sludge will be applied to determine, based on existing and readily available information, whether sewage sludge subject to the cumulative pollutant loading rates in § 271.914(b)(2) has been applied to the site. The information will result in the following:

(i) If sewage sludge subject to the cumulative pollutant loading rates in § 271.914(b)(2) has not been applied to the site, the cumulative amount for each pollutant listed in Table 2 of § 271.914 may be applied to the site in accordance with § 271.914(a)(2).

(ii) If sewage sludge subject to the cumulative pollutant loading rates in § 271.914(b)(2) has been applied to the site, and the cumulative amount of each pollutant applied to the site in the sewage sludge is known, the cumulative amount of each pollutant applied to the site shall be used to determine the additional amount of each pollutant that can be applied to the site under § 271.914(a)(2).

(iii) If sewage sludge subject to the cumulative pollutant loading rates in § 271.914(b)(2) has been applied to the site, and the cumulative amount of each pollutant applied to the site in the sewage sludge is not known, an additional amount of each pollutant may not be applied to the site in accordance with § 271.914(a)(2).

(k) When a person who prepares sewage sludge provides the sewage sludge to a person who applies the sewage sludge to the land, the person who prepares the sewage sludge shall provide the person who applies the sewage sludge notice and necessary information to comply with this subchapter.

(l) When a person who prepares sewage sludge provides the sewage sludge to another person who prepares the sewage sludge, the person who provides the sewage sludge shall provide the person who receives the sewage sludge notice and necessary information to comply with this subchapter.

(m) The person who applies sewage sludge to the land shall provide the legal or equitable owner, or lease holder, of the land on which the sewage sludge is applied notice and necessary information to comply with this subchapter.

**§ 271.914. Pollutant limits.**

(a) *Sewage sludge other than residential septage.*

(1) Sewage sludge may not be applied to the land if the concentration of any pollutant in the sewage sludge exceeds the ceiling concentration for the pollutant in Table 1.

(2) If sewage sludge, other than sewage sludge that meets the criteria of § 271.911(b)(1) or (3) (relating to special requirements), is applied to agricultural land,

forest, a public contact site or a reclamation site, the cumulative loading rate for each pollutant may not exceed the cumulative pollutant loading rate for the pollutant in Table 2.

(3) If sewage sludge is applied to a lawn or a home garden, the concentration of each pollutant in the sewage sludge may not exceed the concentration for the pollutant in Table 3.

(4) If sewage sludge is sold, given away or otherwise distributed, in a bag or other container for application to the land, the concentration of each pollutant in the sewage sludge may not exceed the concentration for the pollutant in Table 3.

(b) *Tables.*

(1) *Ceiling concentrations.*

**TABLE 1—CEILING CONCENTRATIONS**

<i>Pollutant</i>	<i>Ceiling Concentration (Milligrams per Kilogram)<sup>1</sup></i>
Arsenic	75
Cadmium	85
Copper	4,300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	8.6
Selenium	100
Zinc	7,500

<sup>1</sup> Dry weight basis

(2) *Cumulative pollutant loading rates.*

**TABLE 2—CUMULATIVE POLLUTANT LOADING RATES**

<i>Pollutant</i>	<i>Cumulative Pollutant Loading Rate (Kilograms per Hectare)</i>	<i>English Units (Pounds per Acre)</i>
Arsenic	41	36
Cadmium	39	34
Copper	1,500	1,320
Lead	300	264
Mercury	17	15
Nickel	420	370
Selenium	100	88
Zinc	2,800	2,464

(3) *Pollutant concentrations.*

**TABLE 3—POLLUTANT CONCENTRATIONS**

<i>Pollutant</i>	<i>Monthly Average Concentrations (Milligrams per Kilogram)<sup>1</sup></i>
Arsenic	41
Cadmium	39
Copper	1,500
Lead	300
Mercury	17
Nickel	420
PCBs	4
Selenium	100
Zinc	2,800

<sup>1</sup> Dry weight basis.

(4) *Revisions to concentrations or loading rates.* A new or revised pollutant concentration or loading rate published in the *Federal Register* as a modification to 40 CFR 503.13(b) (relating to pollutant limits) is incorporated by reference.

(c) *Residential septage.* The annual application rate for residential septage applied to agricultural land, forest or a reclamation site may not exceed the annual application rate calculated using Equation (1).

$$AAR = \frac{N}{0.0026} \quad \text{Equation (1)}$$

Where:

AAR = Annual Application Rate in gallons per acre per 365-day period.

N = Amount of nitrogen in pounds per acre (kilograms per hectare) per 365-day period needed by the crop or vegetation grown on the land.

**§ 271.915. Management practices.**

(a) Sewage sludge may not be applied to the land if it is likely to adversely affect a Federal or Pennsylvania threatened or endangered species, or its designated critical habitat, listed under or pursuant to section 4 of the Endangered Species Act (16 U.S.C.A. § 1533), 30 Pa.C.S. § 2305 (relating to threatened and endangered species) or 34 Pa.C.S. (relating to game and wildlife code).

(b) Sewage sludge may not be applied to agricultural land, forest, a public contact site or a reclamation site that is flooded, frozen or snow-covered, except as expressly provided in a permit issued under Chapter 91, 92 or 105 (relating to general provisions; National Pollutant Discharge Elimination System; and dam safety and waterway management), as applicable.

(c) Sewage sludge may not be applied to agricultural land, forest or a reclamation site that is:

(1) Within 100 feet (or 30.5 meters) or less of a perennial stream or within 33 feet (or 10 meters) of an intermittent stream.

(2) Within 100 feet (or 30.5 meters) of the edge of a sink hole.

(3) Within 300 feet (or 91 meters) from an occupied dwelling unless the current owner there has provided a written waiver consenting to activities closer than 300 feet (or 91 meters). 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. This paragraph does not apply to features that may come into existence after the date upon which adjacent landowner notification is given under Chapter 275 or § 271.913(g) (relating to land application of sewage sludge; and general requirements).

(4) In an area without an implemented erosion and sedimentation control plan or a farm conservation plan.

(5) Within 300 feet (or 91 meters) of a water source unless the current owner has provided a written waiver consenting to the activities closer than 300 feet (or 91 meters). This paragraph does not apply to features that may come into existence after the date upon which adjacent landowner notification is given under Chapter 275 or § 271.913(g).

(6) Within 100 feet (or 30.5 meters) of an exceptional value wetland, as defined in § 105.17 (relating to wetlands).

(7) Within 11 inches (or 28 centimeters) of the seasonal high water table, nor within 3.3 feet (or 1 meter) of the regional groundwater table. For purposes of this section, the depths to seasonal high water table and to regional groundwater table shall be based on the most recent soil mapping as published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service, or more detailed mapping data as mapped by an expert in soil science using standard and acceptable mapping procedures as developed by the USDA Natural Resources Conservation Service.

(d) A person may not apply sewage sludge when sewage sludge is to be land applied for:

(1) Agricultural utilization on slopes that exceed 25%, unless otherwise approved in writing by the Department.

(2) Land reclamation on slopes that exceed 35%, unless otherwise approved in writing by the Department.

(e) A person may not apply sewage sludge unless the soil pH is 6.0 or greater prior to land application unless the Department allows the increase of pH by application of sewage sludge or other material in which case the soil pH shall be 6.0 or greater within 6 months following the application of sewage sludge, or unless otherwise approved in writing by the Department.

(f) Sewage sludge may not be applied at a rate that is greater than the agronomic rate, unless a greater application rate is approved by the Department for land reclamation activities.

(g) If the nitrogen available from the manure produced by animals at the farm satisfies the nutrient needs of the farm for realistic expected crop yields, the sewage sludge may not be applied at that farm, unless a management plan is implemented that allows for uses of the manure other than land application on that farm.

(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, the cumulative pollutant loading rate and the annual whole sludge application rate.

(i) A person that operates under an individual or general permit issued under this subchapter shall comply with applicable sections of Chapter 285 (relating to storage, collection and transportation of municipal waste) prior to land application, unless the applicant proposes to store sewage sludge on drying beds or structures under a solid waste permit from the Department.

(j) The Department will require persons land applying sewage sludge to complete training courses sponsored by the Department in a timely and satisfactory manner. Satisfactory completion means attendance at all sessions of training, and attainment of a minimum grade of 70% on tests given as part of the training courses. In the case of a person who prepares sewage sludge that will be land applied, and a person who land applies residential septage, at least one person with responsibility for the land application of sewage sludge shall satisfactorily complete the training in a timely fashion. The Department may suspend or revoke the individual permit issued under Chapter 275, the individual land application of sewage sludge permit, or coverage under a land application of sewage sludge general permit to land apply sewage sludge, if the person does not satisfactorily complete the training courses within the following time periods:

(1) Two years for a person conducting land application operations as of January 25, 1997.

(2) One year for a person that begins conducting land application operations after January 25, 1997.

(k) When land applying sewage sludge, a person shall display the permit number of the individual permit issued under Chapter 275, or the individual or general land application of sewage sludge permit, under which the person is operating on the sides and rear of each vehicle which is used in the land application of sewage sludge, in numbers at least 3 inches (or 7.6 centimeters) high in a color contrasting to the background.

(l) A person that land applies residential septage shall also ensure that nonorganic objects are removed prior to spreading.

(m) For land reclamation, sewage sludge shall be incorporated within 24 hours after application.

**§ 271.916. Operational standards—pathogens and vector attraction reduction.**

(a) *Pathogens—sewage sludge other than residential septage.*

(1) The Class A pathogen requirements in § 271.932(a) (relating to pathogens) or the Class B pathogen requirements and site restrictions in § 271.932(b) (relating to pathogens) shall be met when sewage sludge is applied to agricultural land, forest, a public contact site or a reclamation site.

(2) The Class A pathogen requirements in § 271.932(a) shall be met when sewage sludge is applied to a lawn or a home garden.

(3) The Class A pathogen requirements in § 271.932(a) shall be met when sewage sludge is sold, given away or otherwise distributed, in a bag or other container for application to the land.

(b) *Pathogens—residential septage.* The requirements in § 271.932(c) shall be met when residential septage is applied to agricultural land, forest or a reclamation site.

(c) *Vector attraction reduction—sewage sludge other than residential septage.*

(1) One of the vector attraction reduction requirements in § 271.933(b)(1)—(10) (relating to vector attraction reduction) shall be met when sewage sludge is applied to agricultural land, forest, a public contact site or a reclamation site.

(2) One of the vector attraction reduction requirements in § 271.933(b)(1)—(8) shall be met when sewage sludge is applied to a lawn or a home garden.

(3) One of the vector attraction reduction requirements in § 271.933(b)(1)—(8) shall be met when sewage sludge is sold, given away or otherwise distributed, in a bag or other container for application to the land.

(d) *Vector attraction reduction—residential septage.* The vector attraction reduction requirements in § 271.933(b)(9), (10) or (11) shall be met when residential septage is applied to agricultural land, forest or a reclamation site.

**§ 271.917. Frequency of monitoring.**

(a) *Sewage sludge other than residential septage.*

(1) The frequency of monitoring for the pollutants listed in Table 1, Table 2 and Table 3 of § 271.914 (relating to pollutant limits); the pathogen density requirements in § 271.932(a) and (b)(2)—(4) (relating to

pathogens); and the vector attraction reduction requirements § 271.933(b)(1)—(8) (relating to vector attraction reduction) shall be the frequency in Table 1 of this section.

**TABLE 1—FREQUENCY OF MONITORING—LAND APPLICATION**

<i>Amount of Sewage Sludge<sup>1</sup> (Tons/Or Metric Tons Per 365 Day Period)</i>	<i>Frequency</i>
Greater than zero but less than 319 (290)	Once per year
Equal to or greater than 319 (290) but less than 1,650 (1,500)	Once per quarter (4 times per year)
Equal to or greater than 1,650 (1,500) but less than 16,500 (15,000)	Once per 60 days (6 times per year)
Equal to or greater than 16,500 (15,000)	Once per month (12 times per year)

<sup>1</sup> Either the amount of sewage sludge applied to the land or the amount of sewage sludge received by a person who prepares sewage sludge that is sold, given away or otherwise distributed, in a bag or other container for application to the land (dry weight basis).

(2) After the sewage sludge has been monitored for 2 years at the frequency in Table 1, the Department may reduce the frequency of monitoring for pollutant concentrations and for the pathogen density requirements in § 271.932(a)(5)(ii) and (iii). However, the frequency of monitoring may not be less than once per year when sewage sludge is applied to the land.

(b) *Residential septage.* If either the pathogen requirements in § 271.932(c) or the vector attraction reduction requirements in § 271.933(b)(11) are met when residential septage is applied to agricultural land, forest or a reclamation site, each container of residential septage applied to the land shall be monitored for compliance with those requirements.

**§ 271.918. Recordkeeping.**

(a) *Sewage sludge other than residential septage.*

(1) The person who prepares or derives the sewage sludge in § 271.911(b)(1) or (3) (relating to special requirements) shall develop the following information and shall retain the information for 5 years:

(i) The concentration of each pollutant listed in Table 3 of § 271.914 (relating to pollutant limits) in the sewage sludge.

(ii) The following certification statement:

“I certify, under penalty of law, that the Class A pathogen requirements in § 271.932(a) and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in § 271.933(b)(1) through § 271.933(b)(8)] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.”

(iii) A description of how the Class A pathogen requirements in § 271.932(a) (relating to pathogens) are met.

(iv) A description of how one of the vector attraction reduction requirements in § 271.933(b)(1)—(8) (relating to vector attraction reduction) is met.

(2) If sewage sludge other than sewage sludge that meets the criteria in § 271.911(b)(1) or (3) is applied to agricultural land, forest, a public contact site or a reclamation site, the following apply:

(i) The person who prepares the sewage sludge shall develop the following information and shall retain the information for 5 years.

(A) The concentration of PCBs and each pollutant listed in Table 1 of § 271.914 in the sewage sludge.

(B) The following certification statement:

“I certify, under penalty of law, that the pathogen requirements in [insert either § 271.932(a) or § 271.932(b)] and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in § 271.933(b)(1) through (b)(8) if one of those requirements is met] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.”

(C) A description of how the pathogen requirements in § 271.932(a) or (b) are met.

(D) When one of the vector attraction requirements in § 271.933(b)(1)—(8) is met, a description of how the vector attraction requirement is met.

(ii) The person who applies the sewage sludge shall develop the following information, retain the information in clauses (A)—(G) indefinitely, and retain the information in clauses (H)—(M) for 5 years.

(A) The location, by either street address or latitude and longitude, or each site on which sewage sludge is applied.

(B) The number of acres (or hectares) in each site on which sewage sludge is applied.

(C) The date and time sewage sludge is applied to each site.

(D) The cumulative amount of each pollutant (in, pounds or kilograms) listed in Table 2 of § 271.914 in the sewage sludge applied to each site, including the amount in § 271.913(j)(2)(ii) (relating to general requirements).

(E) The amount of sewage sludge (in, tons or metric tons) applied to each site.

(F) The following certification statement:

“I certify, under penalty of law, that the requirements to obtain information in § 271.913(j)(2) have been met for each site on which sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment.”



(G) A description of how the requirements to obtain information in § 271.913(j)(2) are met.

(H) The following certification statement:

"I certify, under penalty of law, that the management practices in § 271.915 have been met for each site on which sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(I) A description of how the management practices in § 271.915 (relating to management practices) are met for each site on which sewage sludge is applied.

(J) The following certification statement when the sewage sludge meets the Class B pathogen requirements in § 271.932(b):

"I certify, under penalty of law, that the site restrictions in § 271.932(b)(5) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the site restrictions have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(K) A description of how the site restrictions in § 271.932(b)(5) are met for each site on which Class B sewage sludge is applied.

(L) The following certification statement when the vector attraction reduction requirement in either § 271.933(b)(9) or (10) is met:

"I certify, under penalty of law, that the vector attraction reduction requirement in [insert either § 271.933(b)(9) or § 271.933(b)(10)] has been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the vector attraction reduction requirement has been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(M) If the vector attraction reduction requirements in § 271.933(b)(9) or (10) are met, a description of how the requirements are met.

(b) *Residential septage.* When residential septage is applied to agricultural land, forest or a reclamation site, the person who applies the residential septage shall develop the following information and shall retain the information for 5 years:

(1) The location, by either street address or latitude and longitude, of each site on which residential septage is applied.

(2) The number of acres (or hectares) in each site on which residential septage is applied.

(3) The date and time residential septage is applied to each site.

(4) The nitrogen requirement for the crop or vegetation grown on each site during a 365-day period.

(5) The rate, in gallons per acre (or liters per hectare) per 365-day period, at which residential septage is applied to each site.

(6) The following certification statement:

"I certify, under penalty of law, that the pathogen requirements in § 271.932(c) and the vector attraction reduction requirements in [insert either § 271.933(b)(9), § 271.933(b)(10), or § 271.933(b)(11)] have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(7) A description of how the pathogen requirements in § 271.932(c)(1) or (2) are met.

(8) A description of how the vector attraction reduction requirements in § 271.933(b)(9), (10) or (11) are met.

**§ 271.919. Reporting.**

A person who prepares sewage sludge and a person that land applies residential septage, shall submit the following information to the Department:

(1) The information in § 271.918(a) and (b) (relating to recordkeeping), for the appropriate requirements, when requested by the Department.

(2) Notification that 90% or more of any of the cumulative pollutant loading rates in Table 2 of § 271.914 (relating to pollutant limits) is reached at a site. When this figure is reached, the Department may require submission of the information in § 271.918(a)(2)(ii)(A)—(G).

(3) Notification of the date, time and location at which land application will occur, when requested by the Department, for the purpose of inspection or investigation to ascertain compliance or noncompliance with the permit and with applicable statutes, rules and regulations.

**§ 271.920. Inspection.**

A person operating under a land application of sewage sludge permit shall allow authorized representatives of the Commonwealth, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to areas in which the activities covered by the land application of sewage sludge permit will be, are being or have been conducted to ensure compliance with The Clean Streams Law, the act, regulations promulgated under The Clean Streams Law or under the act, and a permit issued under this subchapter. Samples may be taken of solid, semisolid, liquid or contained gaseous material for analysis.

**§ 271.921. Sewage sludge quality enhancement plan.**

(a) A person that generates sewage sludge, except a person that generates residential septage or a person that generates sewage sludge meeting the requirements of § 271.911(b)(1) (relating to special requirements), shall prepare a sewage sludge quality enhancement plan in accordance with this section.

(b) The plan shall include:

(1) A physical, chemical and biological analysis and characterization of the sewage sludge.

(2) An evaluation of the impact industrial discharges have on the quality of the sewage sludge.

(3) A description of the measures taken by the generator of the sewage sludge to determine whether industrial discharges are in compliance with existing State and Federal pretreatment laws.

(4) A description of options to improve the physical, chemical or biological quality of the sewage sludge.

(5) A description of how the options were evaluated.

(6) An explanation of why each option was selected or rejected.

(7) A description of the methods to be used to analyze, evaluate and address potential sources or changes which may affect the quality of sewage sludge.

(c) The generator shall review the plan required by this section every 5 years and update it as necessary to address significant changes.

(d) The Department may, in writing, waive or modify the requirements of this section for generators of sewage sludge that meet the requirements of § 271.911(b)(1).

#### PATHOGENS AND VECTOR ATTRACTION REDUCTION

##### § 271.931. Special definitions.

The following words and terms have the following meanings and applicable to §§ 271.932 and 271.933 (relating to pathogens; and vector attraction reduction):

*Aerobic digestion*—The biochemical decomposition of organic matter in sewage sludge into carbon dioxide and water by microorganisms in the presence of air.

*Anaerobic digestion*—The biochemical decomposition of organic matter in sewage sludge into methane gas and carbon dioxide by microorganisms in the absence of air.

*Density of microorganisms*—The number of microorganisms per unit mass of total solids (dry weight) in the sewage sludge.

*Land with a high potential for public exposure*—Land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (for example, a construction site located in a city).

*Land with a low potential for public exposure*—Land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest and a reclamation site located in an unpopulated area (for example, a surface mine located in a rural area).

*Pathogenic organisms; disease-causing organisms*—These include, but are not limited to, certain bacteria, protozoa, viruses and viable helminth ova.

*pH*—The logarithm of the reciprocal of the hydrogen ion concentration

*Specific oxygen uptake rate (SOUR)*—The mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge.

*Total solids*—The materials in sewage sludge that remain as residue when the sewage sludge is dried at 103° to 105°C.

*Unstabilized solids*—Organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

*Vector attraction*—The characteristic of sewage sludge that attracts rodents, flies, mosquitoes or other organisms capable of transporting infectious agents.

*Volatile solids*—The amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 1022°F (or 550°C) in the presence of excess air.

##### § 271.932. Pathogens.

(a) *Sewage sludge other than residential septage*—Class A.

(1) The requirement in paragraph (2) and the requirements in paragraph (3), (4), (5), (6), (7) or (8) shall be met for a sewage sludge to be classified Class A with respect to pathogens.

(2) The Class A pathogen requirements in paragraphs (3)—(8) shall be met either prior to meeting or at the same time the vector attraction reduction requirements in § 271.933 (relating to vector attraction reduction), except the vector attraction reduction requirements in § 271.933(b)(6)—(8), are met.

(3) *Class A—Alternative 1.*

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 most probable number per gram of total solids (dry weight basis), or the density of salmonella sp. bacteria in the sewage sludge shall be less than three most probable number per 4 grams of total solids (dry weight basis) at the time the sewage sludge is used; at the time the sewage sludge is prepared for sale, give away or other distribution, in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 271.911(b)(1) or (3) (relating to special requirements).

(ii) The temperature of the sewage sludge that is used shall be maintained at a specific value for a period of time.

(A) When the percent solids of the sewage sludge is 7% or higher, the temperature of the sewage sludge shall be 122°F (or 50°C) or higher; the time period shall be 20 minutes or longer; and the temperature and time period shall be determined using Equation (2), except when small particles of sewage sludge are heated by either warmed gases or an immiscible liquid.

$$D = \frac{131,700,000}{10^{0.1400T}} \quad \text{Equation (2)}$$

Where,

D = Time in days

T = Temperatures in degrees Celsius

(B) When the percent solids of the sewage sludge is 7% or higher and small particles of sewage sludge are heated by either warmed gases or an immiscible liquid, the temperature of the sewage sludge shall be 122°F (or 50°C) or higher; the time period shall be 15 seconds or longer; and the temperature and time period shall be determined using Equation (2).

(C) When the percent solids of the sewage sludge is less than 7% and the time period is at least 15 seconds, but less than 30 minutes, the temperature and time period shall be determined using Equation (2).

(D) When the percent solids of the sewage sludge is less than 7%; the temperature of the sewage sludge is 122°F (or 50°C) or higher; and the time period is 30 minutes or longer, the temperature and time period shall be determined using Equation (3).

$$D = \frac{50,070,000}{10^{0.1400t}} \quad \text{Equation (3)}$$

Where,

D = Time in days

T = Temperatures in degrees Celsius

(4) *Class A—Alternative 2.*

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 most probable number per gram of total solids (dry weight basis), or the density of salmonella sp. bacteria in the sewage sludge shall be less than three most probable number per 4 grams of total solids (dry weight basis) at the time the sewage sludge is used; at the time the sewage sludge is prepared for sale, give away or other distribution, in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 271.911(b)(1) or (3).

(ii) pH adjustment as follows:

(A) The pH of the sewage sludge that is used shall be raised to above 12 and shall remain above 12 for 72 hours.

(B) The temperature of the sewage sludge shall be above 125°F (or 52°C) for 12 hours or longer during the period that the pH of the sewage sludge is above 12.

(C) At the end of the 72-hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%.

(5) *Class A—Alternative 3.*

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 most probable number per gram of total solids (dry weight basis), or the density of salmonella sp. bacteria in sewage sludge shall be less than three most probable number per 4 grams of total solids (dry weight basis) at the time the sewage sludge is used; at the time the sewage sludge is prepared for sale, give away or other distribution, in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 271.911(b)(1) or (3).

(ii) Virus monitoring requirements are as follows:

(A) The sewage sludge shall be analyzed prior to pathogen treatment to determine whether the sewage sludge contains enteric viruses.

(B) When the density of enteric viruses in the sewage sludge prior to pathogen treatment is less than one plaque-forming unit per 4 grams of total solids (dry weight basis), the sewage sludge is Class A with respect to enteric viruses until the next monitoring episode for the sewage sludge.

(C) When the density of enteric viruses in the sewage sludge prior to pathogen treatment is equal to or greater than one plaque-forming unit per 4 grams of total solids (dry weight basis), the sewage sludge is Class A with respect to enteric viruses when the density of enteric viruses in the sewage sludge after pathogen treatment is less than one plaque-forming unit per 4 grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen

treatment process that produces the sewage sludge that meets the enteric virus density requirement are documented.

(D) After the enteric virus reduction in clause (C) is demonstrated for the pathogen treatment process, the sewage sludge continues to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in clause (C).

(iii) Helminth monitoring requirements are as follows:

(A) The sewage sludge shall be analyzed prior to pathogen treatment to determine whether the sewage sludge contains viable helminth ova.

(B) When the density of viable helminth ova in the sewage sludge prior to pathogen treatment is less than 1 per 4 grams of total solids (dry weight basis), the sewage sludge is Class A with respect to viable helminth ova until the next monitoring episode for the sewage sludge.

(C) When the density of viable helminth ova in the sewage sludge prior to pathogen treatment is equal to or greater than one per 4 grams of total solids (dry weight basis), the sewage sludge is Class A with respect to viable helminth ova when the density of viable helminth ova in the sewage sludge after pathogen treatment is less than 1 per 4 grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the sewage sludge that meets the viable helminth ova density requirement are documented.

(D) After the viable helminth ova reduction in clause (C) is demonstrated for the pathogen treatment process, the sewage sludge continues to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in clause (C).

(6) *Class A—Alternative 4.*

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 most probable number per gram of total solids (dry weight basis), or the density of salmonella sp. bacteria in the sewage sludge shall be less than three most probable number per 4 grams of total solids (dry weight basis) at the time the sewage sludge is used; at the time the sewage sludge is prepared for sale, give away or other distribution, in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 271.911(b)(1) or (3).

(ii) The density of enteric viruses in the sewage sludge shall be less than one plaque-forming unit per 4 grams of total solids (dry weight basis) at the time the sewage sludge is used; at the time the sewage sludge is prepared for sale, give away or other distribution, in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 271.911(b)(1) or (3), unless otherwise specified by the Department.

(iii) The density of viable helminth ova in the sewage sludge shall be less than 1 per 4 grams of total solids (dry weight basis) at the time the sewage sludge is used; at the time the sewage sludge is prepared for sale, give away or other distribution, in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to

meet the requirements in § 271.911(b)(1) or (3), unless otherwise specified by the Department.

(7) *Class A—Alternative 5.*

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 most probable number per gram of total solids (dry weight basis), or the density of salmonella, sp. bacteria in the sewage sludge shall be less than three most probable number per 4 grams of total solids (dry weight basis) at the time the sewage sludge is used; at the time the sewage sludge is prepared for sale, give away or other distribution, in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 271.911(b)(1) or (3).

(ii) Sewage sludge that is used shall be treated in one of the processes to further reduce pathogens described in Appendix A.

(8) *Class A—Alternative 6.*

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1,000 most probable number per gram of total solids (dry weight basis), or the density of salmonella, sp. bacteria in the sewage sludge shall be less than three most probable number per 4 grams of total solids (dry weight basis) at the time the sewage sludge is used; at the time the sewage sludge is prepared for sale, give away or other distribution, in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in § 271.911(b)(1) or (3).

(ii) Sewage sludge that is used shall be treated in a process that is equivalent to a process to further reduce pathogens, as determined by the EPA.

(b) *Sewage sludge other than residential septage—Class B.*

(1) *Additional requirements.*

(i) The requirements in subsection (b)(2), (3) or (4) shall be met for a sewage sludge to be classified Class B with respect to pathogens.

(ii) The site restrictions in subsection (b)(5) shall be met when sewage sludge that meets the Class B pathogen requirements in subsection (b)(2), (3) or (4) is applied to the land.

(2) *Class B—Alternative 1.*

(i) Seven samples of the sewage sludge shall be collected at the time the sewage sludge is used.

(ii) The geometric mean of the density of fecal coliform in the samples collected in subparagraph (i) shall be less than either 2 million most probable number per gram of total solids (dry weight basis) or 2 million colony forming units per gram of total solids (dry weight basis).

(3) *Class B—Alternative 2.* Sewage sludge that is used shall be treated in one of the processes to significantly reduce pathogens described in Appendix A.

(4) *Class B—Alternative 3.* Sewage sludge that is used shall be treated in a process that is equivalent to a process to significantly reduce pathogens, as determined by the EPA.

(5) *Site restrictions.*

(i) Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface may not be harvested for 14 months after application of sewage sludge.

(ii) Food crops with harvested parts below the surface of the land may not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.

(iii) Food crops with harvested parts below the surface of the land may not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than 4 months prior to incorporation into the soil.

(iv) Food crops, feed crops and fiber crops may not be harvested for 30 days after application of sewage sludge.

(v) Animals may not be allowed to graze on the land for 30 days after application of sewage sludge.

(vi) Turf grown on land where sewage sludge is applied may not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the Department.

(vii) Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.

(viii) Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

(c) *Residential septage.* Residential septage shall be stabilized to meet processes to significantly reduce pathogens or processes to further reduce pathogens prior to land application, and the site restrictions in subsection (b)(5)(i)—(iv) shall be met. For alkali stabilization, the pH of residential septage applied to agricultural land, forest or a reclamation site shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes and the site restrictions in subsection (b)(5)(i)—(iv) shall be met.

**§ 271.933. Vector attraction reduction.**

(a) *Options.*

(1) One of the vector attraction reduction requirements in subsection (b)(1)—(10) shall be met when sewage sludge is applied to agriculture land, forest, a public contact site or a reclamation site.

(2) One of the vector attraction reduction requirements in subsection (b)(1)—(8) shall be met when sewage sludge is applied to a lawn or a home garden.

(3) One of the vector attraction reduction requirements in subsection (b)(1)—(8) shall be met when sewage sludge is sold, given away or otherwise distributed, in a bag or other container for application to the land.

(4) One of the vector attraction reduction requirements in subsection (b)(9), (10) or (11) shall be met when residential septage is applied to agricultural land, forest or a reclamation site.

(b) *Standards.*

(1) The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38% (see calculation procedures in "Environmental Regulations and Technology—Control of Pathogens and Vector Attraction in Sewage Sludge," EPA-625/R-92/013, 1992, United States Environmental Protection Agency, Cincinnati, Ohio 45268).

(2) When the 38% volatile solids reduction requirement in paragraph (b)(1) cannot be met for an anaerobically digested sewage sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously

digested sewage sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 86° and 98°F (or 30° and 37°C). When at the end of the 40 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 17%, vector attraction reduction is achieved.

(3) When the 38% volatile solids reduction requirement in paragraph (1) cannot be met for an aerobically digested sewage sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously digested sewage sludge that has a percent solids of 2% or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 68°F (or 20°C). When at the end of the 30 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 15%, vector attraction reduction is achieved.

(4) The SOUR for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 68°F (or 20°C).

(5) Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 104°F (or 40°C) and the average temperature of the sewage sludge shall be higher than 113°F (or 45°C).

(6) The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 2 hours and then at 11.5 or higher for an additional 22 hours.

(7) The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials.

(8) The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials.

(9) Sewage sludge shall be injected below the surface of the land. No significant amount of the sewage sludge may be present on the land surface within 1 hour after the sewage sludge is injected. When the sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within 8 hours after being discharged from the pathogen treatment process.

(10) Sewage sludge applied to the land surface shall be incorporated into the soil within 6 hours after application to the land. When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied within 8 hours after being discharged from the pathogen treatment process.

(11) The pH of residential septage shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes.

**APPENDIX A**

**PATHOGEN TREATMENT PROCESSES**

**A. Processes to significantly reduce pathogens (PSRP)**

1. *Aerobic Digestion*—Sewage sludge is agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 40 days at 68°F (or 20°C) and 60 days at 59°F (or 15°C).

2. *Air Drying*—Sewage sludge is dried on sand beds or on paved or unpaved basins. The sewage sludge dries for a minimum of 3 months. During 2 of the 3 months, the ambient average daily temperature is above 32°F (or 0°C).

3. *Anaerobic Digestion*—Sewage sludge is treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 95° to 131°F (or 35° to 55°C) and 60 days at 68°F (or 20°C).

4. *Composting*—Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the sewage sludge is raised to 104°F (or 40°C) or higher and remains at 104°F (or 40°C) or higher for 5 days. For 4 hours during the 5 days, the temperature in the compost pile exceeds 131°F (or 55°C).

5. *Lime Stabilization*—Sufficient lime is added to the sewage sludge to raise the pH of the sewage sludge to 12 after 2 hours of contact.

**B. Processes to further reduce pathogens (PFRP)**

1. *Composting*—Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the sewage sludge is maintained at 131°F (or 55°C) or higher for 3 days.

Using the windrow composting method, the temperature of the sewage sludge is maintained at 131°F (or 55°C) or higher for 15 days or longer. During the period when the compost is maintained at 131°F (or 55°C) or higher, there shall be a minimum of five turnings of the windrow.

2. *Heat Drying*—Sewage sludge is dried by direct or indirect contact with hot gases to reduce the moisture content of the sewage sludge to 10% or lower. Either the temperature of the sewage sludge particles exceeds 176°F (or 80°C) or the wet bulb temperature of the gas in contact with the sewage sludge as the sewage sludge leaves the dryer exceeds 176°F (or 80°C).

3. *Heat Treatment*—Liquid sewage sludge is heated to a temperature of 356°F (or 180°C) or higher for 30 minutes.

4. *Thermophilic Aerobic Digestion*—Liquid sewage sludge is agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the sewage sludge is 10 days at 131° to 140°F (or 55° to 60°C).

5. *Beta Ray Irradiation*—Sewage sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (CA. 68°F or 20°C).

6. *Gamma Ray Irradiation*—Sewage sludge is irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (CA. 68°F or 20°C).

7. *Pasteurization*—The temperature of the sewage sludge is maintained at 158°F (or 70°C) or higher for 30 minutes or longer.

**CHAPTER 272. MUNICIPAL WASTE PLANNING, RECYCLING AND WASTE REDUCTION**

**Subchapter C. MUNICIPAL WASTE PLANNING**

**§ 272.252. Development of plan revisions.**

(a) A county shall provide written notice to the Department when plan revision development begins. The notice shall describe the proposed plan revisions the county intends to undertake.

(b) Within 30 days after receipt of written notice submitted under subsection (a), the Department will notify the county if it determines the proposed revision is substantial.

(c) A county submitting a plan revision shall comply with:

(1) Sections 272.221—272.233 (relating to plan content), to the extent changes from the approved plan are proposed.

(2) Sections 272.201 and 272.204 (relating to purposes; 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.

(d) If the Department determines that the plan revision is substantial, the county shall also:

(1) Comply with §§ 272.202, 272.241—272.243 and 272.245.

(2) Identify and describe the facilities where municipal waste is currently being disposed or processed, and the remaining available permitted capacity of the facilities. The plan revision shall also consider the capacity which could be made available through the reasonable expansion of the facilities.

(e) For purposes of this section, substantial plan revisions shall include, but not be limited to:

(1) The designation of an additional resource recovery facility or municipal waste landfill.

(2) The elimination of a recycling program, contained in a county plan and operating in a county resulting in reduced volume of recycling.

(3) The deletion of a designated resource recovery or disposal facility by a county. The deletion will not be considered a substantial revision if the deletion occurs as a result of failure to secure necessary contracts as long as adequate disposal capacity remains to implement the plan.

(4) The addition of municipal waste streams not originally included in the plan.

**Subchapter D. GRANTS**

**GENERAL PROVISIONS FOR AWARDING GRANTS**

**§ 272.315. Limits on Department's authority to award grants.**

(a) Grant agreements that have been entered into under § 272.321, § 272.331 or § 272.381 (relating to scope of grant) shall terminate within 2 years after the grant funds have been encumbered. Upon written request from the grantee, the Department may extend the agreement termination date by up to 3 months. Lapsed funds will be returned to the Recycling Fund for distribution to applicants in subsequent grant periods.

(b) If grant funds offered for grants under § 272.231, § 272.331 or § 272.381 are not accepted by the applicant within 1 year of offering, the offered funds will be returned to the Recycling Fund for distribution to applicants in subsequent grant periods.

(c) A subcontract for a grant under this subchapter shall be made available to the Department within 10 days of request. A subcontract for 50% or more of the total grant award shall be submitted to the Department. The value of salaries or in-kind services that will be used as a match shall be included in the grant agreement.

(d) A subcontract for a grant under this chapter shall be consistent with Commonwealth procedures and requirements for contracts.

(e) The Department may withhold payments of at least 10% of each grant under this subchapter until the grantee has demonstrated to the Department's satisfaction that the requirements of this subchapter have been met.

(f) The Department will not award a grant for anything that has not been included in a grant application or is not proposed to be used for the same limited purpose as an item included in a grant application.

(g) Nothing in this section prevents the Department from offering returned or lapsed funds to a grantee or under a grant under this subchapter that differs from the original grantee or type of grant.

**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.

(b) The application shall be supported by documentation which includes weigh slips or receipts verifying the materials claimed as recycled and marketed and:

(1) The supporting documentation shall be retained by the applicant for 4 years from the end date of the year the materials were recycled and marketed.

(2) The supporting documentation shall be made available to the Department, the Office of Attorney General, the Office of the Treasurer or the agents of those offices.

(c) If the application involves a recycling operation that serves more than one municipality, the application shall describe the total weight and type of materials collected by the operation, and the applicant's contribution.

**CHAPTER 273. MUNICIPAL WASTE LANDFILLS**

**Subchapter C. OPERATING REQUIREMENTS**

**GENERAL PROVISIONS**

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

(a) Except for areas that were permitted prior to April 9, 1988, a municipal waste landfill may not be operated as follows:

\* \* \* \* \*

(2) In or within 300 feet of an exceptional value wetland, as defined in § 105.17 (relating to wetlands).

\* \* \* \* \*

(13) Within 1/4-mile upgradient, and within 300 feet or 91.4 meters downgradient, of a private or public water source.

\* \* \* \* \*

(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) The current property owner under subsection (b) in which a new facility is proposed may waive the 300-yard prohibition by signing a written waiver. Upon 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) Except as provided in subsection (e), 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) 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 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.

(2) The person or municipality files an administratively complete application under § 271.202 (relating to completeness review) with the Department within 1 year from the date of the first newspaper notice under this subsection.

**COVER AND REVEGETATION**

**§ 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, 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:

(1) Prevent vectors, odors, blowing litter and other nuisances.

(2) Cover solid waste after it is placed without change in its properties and without regard to weather.

(3) Be capable of allowing loaded vehicles to successfully maneuver over it after placement.

(4) Be capable of controlling fires.

(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) A 5-day supply of cover material shall be maintained on the site.

(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) Intermediate slopes constructed during daily landfilling activities may not exceed 50%. Intermediate slopes shall be covered, compacted within 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:

(1) Each partial lift for which the operator intends to place no additional waste for 6 months.

(2) Each partial or completed lift that represents final permitted elevations for that part of the facility.

(3) Each completed lift.

(b) The composition of the intermediate cover material shall meet the following performance standards. The intermediate cover shall:

(1) Prevent vectors, odors, blowing litter and other nuisances.

(2) Cover solid waste after it is placed without change in its properties and without regard to weather.

(3) Be capable of allowing loaded vehicles to successfully maneuver over it after placement.

(4) Be capable of controlling fires.

(5) Be capable of supporting the germination and propagation of vegetative cover as required by §§ 273.235 and 273.236 (relating to revegetation; and standards for successful revegetation).

(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.

(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.

(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.

(d) A 5-day supply of cover material shall be maintained on the site.

(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) 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.

#### **CHAPTER 275. LAND APPLICATION OF SEWAGE SLUDGE**

§ 275.1. (Reserved).

##### **Subchapter B. (Reserved)**

§ 275.101. (Reserved).

§ 275.102. (Reserved).

§ 275.103. (Reserved).

§ 275.104. (Reserved).

§ 275.105. (Reserved).

§ 275.106. (Reserved).

§ 275.107. (Reserved).

##### **Subchapter C. GENERAL OPERATING REQUIREMENTS FOR THE LAND APPLICATION OF SEWAGE SLUDGE**

###### **GENERAL**

§ 275.201. General provisions.

(a) A person or municipality may not land apply sewage sludge unless the person or municipality is operating under a permit for the land application of sewage sludge issued by the Department under this article.

(b) A person or municipality that land applies sewage sludge under a permit issued under this chapter shall comply with the following:

(1) The requirements of the act, this subchapter and the additional operating requirements for the specific type of operation that are in Subchapter D, E or F (relating to additional requirements for agricultural utili-

zation; additional requirements for land reclamation; and additional requirements for surface land disposal).

(2) The plans and specifications in the permit, the terms and conditions of the permit, the environmental protection acts, this title and orders issued by the Department.

(3) The Department's guidelines for the use of sewage sludge for agricultural utilization or land reclamation, unless the person or municipality is operating under a permit that allows use of the loading rate guidelines for land reclamation or surface land disposal, in which case the person or municipality shall comply with the applicable guidelines for the operation.

#### **§ 275.202. Areas where the land application of sewage sludge is prohibited.**

Except for areas permitted by the Department prior to April 9, 1988, the land application of sewage sludge may not be conducted:

(1) Within 100 feet of an intermittent or perennial stream.

(2) Within 300 feet of a water source, unless otherwise approved by the Department, in writing.

(3) Within 1,000 feet upgradient of a surface water source unless otherwise approved by the Department, in writing.

(4) Within 25 feet of a bedrock outcrop.

(5) Within 50 feet of a property line within which the sludge is applied, unless otherwise approved by the Department, in writing.

(6) Within 100 feet of a sinkhole or area draining into a sinkhole.

(7) Within 25 feet of the perimeter of an undrained depression.

(8) In or within 100 feet of an exceptional value wetland as defined in § 105.17 (relating to wetlands).

##### **Subchapter D. ADDITIONAL REQUIREMENTS FOR AGRICULTURAL UTILIZATION**

§ 275.301. (Reserved).

##### **Subchapter F. (Reserved)**

§ 275.401. (Reserved).

§ 275.501. (Reserved).

§ 275.502. (Reserved).

§ 275.503. (Reserved).

§ 275.511. (Reserved).

§ 275.512. (Reserved).

§ 275.513. (Reserved).

§ 275.514. (Reserved).

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§ 275.521. (Reserved).

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§ 275.525. (Reserved).

§ 275.526. (Reserved).

§ 275.527. (Reserved).



§ 275.528. (Reserved).

§ 275.531. (Reserved).

**Subchapter G. (Reserved)**

§ 275.601. (Reserved).

§ 275.602. (Reserved).

§ 275.603. (Reserved).

§ 275.611. (Reserved).

§ 275.612. (Reserved).

§ 275.613. (Reserved).

§ 275.614. (Reserved).

**CHAPTER 277. CONSTRUCTION/DEMOLITION WASTE LANDFILLS**

**Subchapter C. OPERATING REQUIREMENTS GENERAL PROVISIONS**

§ 277.202. Areas where construction/demolition waste landfills are prohibited.

(a) Except for areas that were permitted prior to April 9, 1988, no construction/demolition waste landfill may be operated as follows:

\* \* \* \* \*

(2) In or within 300 feet of an exceptional value wetland, as defined in § 105.17 (relating to wetlands).

\* \* \* \* \*

**CHAPTER 279. TRANSFER FACILITIES**

**Subchapter C. OPERATING REQUIREMENTS FOR TRANSFER FACILITIES GENERAL PROVISIONS**

§ 279.201. Basic limitations.

(a) A person or municipality may not own or operate a transfer facility unless the Department has first issued a permit to the person or municipality for the facility under this chapter.

(b) A person or municipality that operates a transfer station facility shall comply with the following:

(1) The operating requirements of the act, this subchapter and the applicable requirements of Chapter 271 (relating to municipal waste management—general provisions).

(2) The plans and specifications in the permit, the terms and conditions of the permit, the environmental protection acts, this title and orders issued by the Department.

(c) A person or municipality that operates a transfer facility may not allow residual waste or special handling waste to be received or handled at the facility unless the Department has specifically approved handling that waste in the permit.

(d) A person or municipality that operates a transfer facility may not:

(1) Mix solid waste with, or store solid waste in such close proximity to other solid waste to create a risk of fire or explosion, or a risk to the accumulation of poisonous or otherwise harmful vapors or gases.

(2) Allow exposable wastes to be processed at the facility.

(e) Hazardous waste subject to Chapters 260—265 and 270 may not be disposed, processed or stored at transfer facilities.

(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.

(g) 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 and transferring activity renders the requirement unnecessary.

§ 279.202. Areas where transfer facilities are prohibited.

(a) Except for areas that were permitted prior to April 9, 1988, no transfer facility may be operated:

(1) 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) In or within 300 feet of an exceptional value wetland, as defined in § 105.17 (relating to wetlands).

(3) 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) Within 100 feet of a perennial stream.

(5) Within 50 feet of a property line unless the operator demonstrates that actual processing of waste is not occurring within that distance.

\* \* \* \* \*

**DAILY OPERATIONS**

§ 279.217. Cleaning and maintenance.

(a) Areas within the building shall be kept clean.

(b) The operator may not allow putrescible waste to remain at the transfer facility at the end of the day or for more than 24 hours, except that putrescible waste may remain at a transfer facility for any period of time up to 72 hours over a weekend or 3-day weekend if the transfer facility permit so provides.

(c) Plumbing shall be properly maintained, and the floors shall be well drained.

(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.

(e) Provision shall be made for the routine operational maintenance of the facility.

**CHAPTER 281. COMPOSTING FACILITIES****Subchapter A. GENERAL****§ 281.2. (Reserved)****Subchapter C. OPERATING REQUIREMENTS FOR GENERAL COMPOSTING FACILITIES****GENERAL PROVISIONS****§ 281.202. Areas where general composting facilities are prohibited.**

(a) Except for areas that were permitted prior to April 9, 1988, no general composting facility may be operated:

(1) In the 100-year floodplain of waters of this Commonwealth.

(2) In or within 300 feet of an exceptional value wetland, as defined in § 105.17 (relating to wetlands).

(3) Within 100 feet of a sinkhole or area draining into a sinkhole.

(4) 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) Within 100 feet of a perennial stream.

(6) Within 50 feet of a property line unless the operator demonstrates that actual composting of waste is not occurring within that distance.

(7) Within 1/4 mile upgradient and within 300 feet downgradient of a private or public water source.

(8) In an area where the seasonal high water table or perched water table is less than 4 feet from the surface.

(b) Except as provided in subsection (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).

(c) This section does not apply to a feature 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 general composting facility 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.

(2) The person or municipality files an administratively complete application with the Department within 1 year from the date of the first newspaper notice under this subsection.

**CHAPTER 283. RESOURCE RECOVERY AND OTHER PROCESSING FACILITIES****Subchapter A. GENERAL****§ 283.1. Scope.**

This chapter sets forth application and operating requirements for a person or municipality that operates a municipal waste processing facility other than a transfer or composting facility, including a resource recovery facil-

ity as well as an incinerator other than an incinerator operating under a permit-by-rule under § 271.103(f) (relating to permit-by-rule for municipal waste processing facilities other than for infectious or chemotherapeutic waste; qualifying facilities; general requirements). The requirements in this chapter are in addition to the applicable requirements in Chapter 271 (relating to municipal waste management—general provisions).

**Subchapter C. OPERATING REQUIREMENTS****§ 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:

\* \* \* \* \*

(2) In or within 300 feet of an exceptional value wetland as defined in § 105.17 (relating to wetlands).

\* \* \* \* \*

**DAILY OPERATIONS****§ 283.222. Protection of capacity.**

A person or municipality operating a resource recovery facility may not receive solid waste at the facility contrary to the terms and conditions approved by the Department under § 283.111 (relating to plan for protection of capacity).

**CHAPTER 285. STORAGE, COLLECTION AND TRANSPORTATION OF MUNICIPAL WASTE****Subchapter A. STORAGE OF MUNICIPAL WASTE****§ 285.123. Impoundments—general.**

A person or municipality storing municipal waste in a surface impoundment shall:

(1) Comply with Chapter 105 (relating to dam safety and waterway management).

(2) Design and maintain the impoundment to prevent the dispersal of municipal waste by wind and water erosion, and to prevent odors.

(3) Design and maintain sufficient freeboard to prevent overtopping. There shall be at least 2 feet of freeboard unless otherwise approved by the Department, in writing.

(4) Construct and maintain a protective cover sufficient to minimize wind and water erosion and preserve structural integrity, including, but not limited to, suitable vegetation, rock riprap or nonerodible material.

(5) Design and maintain sufficient structural integrity to prevent failure.

(6) Design and maintain dikes or berms so that the outside slope does not exceed 33% unless otherwise approved by the Department, in writing.

(7) Design and maintain structures around impoundments sufficient to prevent surface runoff from entering the impoundment, based on the maximum surface runoff from a 25-year, 24-hour precipitation event.

(8) Design and maintain dikes or berms to be free of burrowing mammals and plants with root systems capable of displacing earthen materials upon which the structural integrity of the dikes or berms is dependent.

(9) For leachate storage:

(i) Install and maintain a liner that meets the requirements of Chapter 273 (relating to municipal waste landfills).

(ii) Design, install and operate a groundwater monitoring system that meets the requirements of Chapter 273.

(10) For sewage sludge storage impoundments constructed after January 25, 1997:

(i) Install and maintain a liner system that meets the requirements of §§ 273.253—273.257, unless otherwise approved by the Department in a permit.

(ii) Install and operate a groundwater monitoring system that meets the requirements in §§ 273.281—273.288 (relating to water quality monitoring), unless otherwise approved by the Department in a permit.

**Subchapter B. COLLECTION AND TRANSPORTATION OF MUNICIPAL WASTE**

**§ 285.201. Scope.**

A person or municipality that collects or transports municipal waste shall comply with §§ 285.211—285.219 (relating to general provisions). A person or municipality that transports the types of municipal waste referred to in §§ 285.221, 285.222 and 285.225 (relating to transportation of ash residue from municipal waste incineration and from infectious or chemotherapeutic waste incinerations; transportation of infectious and chemotherapeutic waste; general provisions and transportation of residential septage) shall transport the waste under the applicable provisions of those sections.

**GENERAL PROVISIONS**

**§ 285.212. Collection.**

(a) A person or municipality that is responsible for the collection of municipal waste shall make collection services available with sufficient frequency to prevent a nuisance or hazard to public health, safety or welfare.

(b) A person or municipality that generates municipal waste shall schedule collection of waste with sufficient frequency to prevent a nuisance.

(c) A person or municipality may not park a municipal waste collection or transportation vehicle to cause a nuisance or a hazard to public health, safety and welfare. A person or municipality may not allow a municipal waste collection or transportation vehicle to remain in a residential area for more than 4 hours.

**TYPES OF WASTE**

**§ 285.225. Transportation of residential septage.**

(a) By July 25, 1997, or upon beginning operations, whichever occurs later, a person or municipality that transports residential septage shall notify the Department that the person or municipality transports residential septage. The notification shall:

- (1) Be prepared on a form provided by the Department.
- (2) State the name, address and telephone number of the transporter.
- (3) State the name, address and telephone number of a person who will act as a contact with the Department.

(b) Upon receipt of the notification, the Department will issue a transporter number to the person or municipality transporting residential septage.

(c) The number provided to the transporter under subsection (b) shall be displayed on the sides and rear of

each vehicle the transporter uses to transport the residential septage, in numbers at least 3 inches high in a color contrasting to the background.

**ARTICLE IX. RESIDUAL WASTE**

**CHAPTER 287. RESIDUAL WASTE MANAGEMENT—GENERAL PROVISIONS**

**Subchapter A. GENERAL**

**§ 287.1. Definitions.**

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

\* \* \* \* \*

*General permit*—A regional or Statewide permit issued by the Department for a specified category of beneficial use or processing of solid waste, the terms and conditions of which allow an original applicant, a registrant and a person or municipality that obtains a determination of applicability, to operate under the permit if the terms and conditions of the permit and certain requirements of this article are met.

*Generator*—A person or municipality that produces or creates a residual waste.

\* \* \* \* \*

*Land application*—The agricultural utilization, land reclamation or surface land disposal. The term does not include the disposal of solid waste in a landfill or disposal impoundment.

\* \* \* \* \*

*MCL*—Maximum contaminant level.

\* \* \* \* \*

*PCB containing water*—Solid waste containing PCBs in the following concentrations:

(1) More than 4 parts per million, but less than 50 parts per million.

\* \* \* \* \*

*Permit*—A permit issued by the Department to operate a residual waste disposal or processing facility or to beneficially use residual waste. The term includes a general permit, permit-by-rule, permit modification, permit reissuance and permit renewal.

\* \* \* \* \*

*Permit-by-rule*—A permit which a person or municipality is deemed to have for the operation of a facility or an activity upon compliance with § 287.102 (relating to permit-by-rule).

\* \* \* \* \*

*Sewage sludge*—Liquid or solid sludges and other residues from a municipal sewage collection and treatment system; and liquid or solid sludges and other residues from septic and holding tank pumpings from commercial, institutional or residential establishments. The term includes material derived from sewage sludge. The term does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screening generated during preliminary treatment of sewage sludge at a municipal sewage collection and treatment system or grit, screenings and nonorganic objects from septic and holding tank pumpings.

\* \* \* \* \*

**Subchapter B. DUTIES OF GENERATORS**

**§ 287.51. Scope.**

(a) This subchapter contains requirements that are directly applicable to persons or municipalities that generate more than 2,200 pounds of residual waste per generating location in any single month of the previous year. The Department may waive or modify the requirements of this section for individual types of waste that are generated in quantities of less than 2,200 pounds per generating location.

(b) This subchapter does not apply to the following:

(1) Persons or municipalities that generate residual waste as a result of collecting the waste, including the collection of parts, machinery, vehicles, appliances and used oil from the repair or replacement of the parts, machinery, vehicles, appliances and used oil.

(2) Persons or municipalities that create waste from a spill, release, fire, accident or other unplanned event.

(c) Generators and collectors of used oil who are also waste oil marketers are subject to § 266.43 (relating to standards applicable to marketers of waste oil burned for energy recovery).

**Subchapter C. GENERAL REQUIREMENTS FOR PERMITS AND PERMIT APPLICATIONS**

**GENERAL**

**§ 287.102. Permit-by-rule.**

(a) *Purpose.*

(1) This section sets forth classes of facilities that are subject to permit-by-rule. A facility will not be deemed to have a permit-by-rule if it causes or allows violations of the act, the regulations promulgated thereunder, the terms or conditions of a permit issued by the Department or causes a public nuisance. A facility that is subject to permit-by-rule under this section is not required to apply for a permit under this article or comply with the operating requirements of Chapters 288—297, if that facility operates in accordance with this section.

(2) A facility is not subject to permit-by-rule under this section unless it meets the following:

(i) The facility complies with Chapter 299 (relating to storage and transportation of residual waste), except as provided in subsections (b)(7) and (c)(3).

(ii) The facility or activity has the other necessary permits under the applicable environmental protection acts, and is operating under the acts and the regulations promulgated thereunder, and the terms and conditions of the permits.

(3) A facility is not subject to permit-by-rule under this section unless the operator maintains the following at the facility in a readily accessible place:

(i) A copy of a Preparedness, Prevention and Contingency (PPC) plan that is consistent with the Department's most recent guidelines for the development and implementation of PPC plans.

\* \* \* \* \*

(b) *Captive processing facility.* A facility that processes residual waste that is generated solely by the operator shall be deemed to have a residual waste processing permit under this article if, in addition to subsection (a), the following conditions are met:

(1) Waste resulting from the processing is managed under the act and the regulations promulgated thereunder.

\* \* \* \* \*

(5) If the waste is burned, it meets the following:

(i) The waste is burned in an enclosed device using controlled flame combustion and is directed through a flue as defined in § 121.1 (relating to definitions).

\* \* \* \* \*

(6) If processing is part of an industrial or other wastewater treatment process permitted by the Department under The Clean Streams Law, one of the following applies:

\* \* \* \* \*

(ii) The facility discharges into a publicly owned treatment work and is in compliance with applicable pretreatment standards.

(7) If a wastewater treatment process includes the use of storage impoundments that are not in compliance with Chapter 299 (relating to storage and transportation of residual waste), the following shall be met:

(i) A water quality monitoring plan that meets the requirements of §§ 289.261—289.268 (relating to water quality monitoring) shall be submitted to the Department for review and approval by July 25, 1997. The Department may waive or modify the requirements of §§ 289.261—289.268 for storage impoundments included under this section as part of a captive facility on a case-by-case basis, based on conditions such as the size and location of the impoundment.

(ii) A water quality monitoring plan shall be implemented within 6 months of the Department's approval of the plan, unless the implementation schedule approved by the Department provides for a longer period. A water quality monitoring plan shall be implemented by July 4, 2002.

(iii) If, after implementation of the water quality monitoring plan, groundwater degradation is found that can reasonably be attributed to the storage impoundment, the operator shall comply with one of the following:

(A) Within 6 months of the Department's determination that degradation exists, the operator shall file a closure plan and closure schedule. After approval of the closure plan and closure schedule, the operator shall implement the closure plan and closure schedule as approved by the Department.

(B) Within 6 months of the Department's determination that degradation exists, the operator shall submit a schedule to upgrade and operate the impoundment under Chapter 299; provided that with respect to a storage impoundment that was permitted and constructed on or before July 4, 1992, the Department may modify the liner and leachate collection system requirements if the operator demonstrates that the conditions of § 287.112(f)(1) (relating to storage impoundments and storage facilities) are met. The schedule to upgrade and operate the impoundment under Chapter 299 may not exceed 5 years.

(8) The operator submits a written notice to the Department that includes the name, address and the telephone number of the facility, the individual responsible for operating the facility and a brief description of the facility.

(c) *Wastewater treatment facility.* A noncaptive processing facility, other than a transfer or composting facility,

shall be deemed to have a residual waste processing permit under this article if, in addition to subsection (a), the following apply:

\* \* \* \* \*

(2) Processing is solely part of an industrial or other wastewater treatment process permitted by the Department under The Clean Streams Law and one of the following apply:

\* \* \* \* \*

(i) The facility discharges into a publicly owned treatment work and is in compliance with applicable pretreatment standards

\* \* \* \* \*

(3) If a wastewater treatment process includes the use of storage impoundments that are not in compliance with Chapter 299, the following shall be met:

(i) A water quality monitoring plan that meets the requirements of §§ 289.261—289.268 shall be submitted to the Department for review and approval by July 25, 1997. The Department may waive or modify the requirements of §§ 289.261—289.268 for storage impoundments included under this section as part of a wastewater treatment process on a case-by-case basis, based on conditions such as the size and location of the impoundments.

(ii) A water quality monitoring plan shall be implemented within 6 months of the Department's approval of the plan, unless the implementation schedule approved by the Department provides for a longer period. A water quality monitoring plan shall be implemented by July 4, 2002.

(iii) If, after implementation of the water quality monitoring plan, groundwater degradation is found that can reasonably be attributed to the storage impoundments, the operator shall comply with one of the following:

(A) Within 6 months of the Department's determination that degradation exists, the operator shall file a closure plan and closure schedule. After approval of the closure plan and closure schedule, the operator shall implement the closure plan and closure schedule as approved by the Department.

(B) Within 6 months of the Department's determination that degradation exists, the operator shall submit a schedule to upgrade and operate the impoundment in accordance with Chapter 299; provided that with respect to a storage impoundment that was permitted and constructed on or before July 4, 1992, the Department may modify the liner and leachate collection system requirements if the operator demonstrates that the conditions of § 287.112(f)(1) are met. The schedule to upgrade and operate the impoundment under Chapter 299 may not exceed 5 years.

(4) The operator submits a written notice to the Department that includes the name, address and the telephone number of the facility, the individual responsible for operating the facility, and a brief description of the facility.

(d) *Transfer facilities that collect used oil.* A State inspection facility, oil retailer, retail service station or a captive processing facility that collects used oil generated only by the operator of the facility and by the employees of the operator who change their used oil in their vehicles which accepts used oil for recycling shall be deemed to have a residual waste transfer facility permit-by-rule under this article if the following are met:

(1) The facility is operated for the transfer of used oil only, and does not blend used oil with waste oil that is not used oil for offsite reuse.

\* \* \* \* \*

(6) The operator submits a written notice to the Department that includes the name, address and the telephone number of the facility, the individual responsible for operating the facility and a brief description of the facility.

(e) *Incinerator.* A residual waste incinerator located at the generation site shall be deemed to have a residual waste permit under this article if, in addition to the requirements of subsection (a), it processes waste that is generated solely by the operator, processing occurs at the same production facility where some or all of the waste is generated and it meets one of the following:

\* \* \* \* \*

(3) The operator submits a written notice to the Department that includes the name, address and the telephone number of the facility, the individual responsible for operating the facility and a brief description of the facility.

\* \* \* \* \*

(g) *Waste oil energy recovery.* A facility that burns waste oil for energy recovery shall be deemed to have a residual waste processing permit if, in addition to subsection (a), the following conditions are met:

(1) The facility does not burn, or otherwise process, waste that is hazardous waste under Chapter 261 (relating to criteria, identification and listing of hazardous waste).

(2) The waste oil is burned in an enclosed device using controlled flame combustion and is directed through a flue as defined in § 121.1.

\* \* \* \* \*

(8) The operator submits a written notice to the Department that includes the name, address and the telephone number of the facility, the individual responsible for operating the facility and a brief description of the facility.

(9) The operator complies with the applicable requirements of Chapter 266, Subchapter E (relating to requirements for oil meeting specifications when burned for energy recovery permit-by-rule).

(h) *Mechanical processing facility.* A facility for the processing of residual waste only by mechanical or manual sizing or separation for prompt reuse shall be deemed to have a residual waste processing permit-by-rule if it meets the requirements of subsection (a) and submits a written notice to the Department that includes the name, address and the telephone number of the facility, the individual responsible for operating the facility and a brief description of the waste and the facility. A noncaptive processing facility that separates waste oil and water does not qualify for a permit-by-rule. A facility for the processing of waste tires may be deemed to have a residual waste permit by rule under this paragraph if the following are met in addition to the requirements in this subsection and in subsection (a):

(1) The mechanical or manual sizing or separation is conducted solely for the purpose of remediating an existing tire pile.

(2) The mechanical or manual sizing or separation is part of a remediation plan that has been approved by the Department.

(3) No additional tires are brought to the site.

(4) The processed tires are promptly removed for offsite reuse or disposal.

(i) *Container processing facility.* A facility that processes, by cleaning or rinsing, empty containers for refill and reuse shall be deemed to have a residual waste processing permit if the containers are reused for their originally intended purpose, the facility meets the requirements of subsection (a), any rinsate or containers not reused are managed in accordance with the applicable waste management regulations and the operator of the facility submits written notice to the Department that includes the name, address and the telephone number of the facility, the individual responsible for operating the facility and a brief description of the waste and the facility.

(j) *Empty drum reconditioning.* A facility that processes, by cleaning or rinsing, empty drums for reconditioning and reuse shall be deemed to have a residual waste processing permit-by-rule if it meets the requirements of subsection (a) and submits a written notice to the Department that includes the name, address and the phone number of the facility, the individual responsible for operating the facility and a description of the waste and the facility.

#### **Subchapter F. CIVIL PENALTIES AND ENFORCEMENT**

##### **CIVIL PENALTIES**

#### **§ 287.413. Assessment of penalties; minimum penalties.**

(a) This section sets forth minimum civil penalties for certain violations of the act and the regulations promulgated thereunder. The Department will assess a civil penalty under § 287.412 (relating to assessment of penalties; general) only if a civil penalty calculated under § 287.412 is greater in amount than the civil penalty calculated under this section.

(b) If a person or municipality operates a residual waste landfill or residual waste disposal impoundment on an area for which the person or municipality was not permitted to operate the facility, or in excess of final permitted elevations, the Department will assess a minimum civil penalty of \$5,000 per 1/2 acre, or portion thereof. Intermediate acreages will be assessed at the next highest 1/2 acre. This subsection does not require the imposition of a civil penalty on persons or municipalities operating without a permit on July 4, 1992, if the persons or municipalities are in compliance with §§ 287.111 and 287.113 (relating to notice by impoundments and unpermitted processing or disposal facilities; and permitting procedure for unpermitted processing or disposal facilities).

(c) If a person or municipality applies residual waste to an area for which the person or municipality was not permitted to apply the residual waste, the Department will assess a minimum civil penalty of \$500.

(d) If a person or municipality fails to provide notification on a timely basis of an incident for which a reporting requirement exists in the act, the regulations promulgated thereunder, the terms or conditions of a permit, or order of the Department, the Department will assess a minimum civil penalty of \$1,000.

(e) If a person or municipality generating residual waste fails to provide notice to the Department as required by § 287.52 (relating to biennial report), the Department will assess a minimum civil penalty of \$300.

(f) If a person or municipality refuses, hinders, obstructs, delays or threatens an agent or employe of the Department in the course of performance of a duty under the act, including entry and inspection, the Department will assess a minimum civil penalty of \$1,000.

(g) If a violation is included as a basis for an administrative order requiring cessation of solid waste management operations, or for any other 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 shall be assessed for each day during which the failure continues. This subsection does not limit 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.

#### **Subchapter H. BENEFICIAL USE**

##### **SCOPE**

#### **§ 287.601. Scope.**

(a) This subchapter sets forth requirements for the processing and beneficial use of residual waste, including coal ash, and sets forth requirements for certain beneficial uses of coal ash. Sections 287.611, 287.612, 287.621—287.625, 287.631, 287.632, 287.641—287.644, 287.651 and 287.652 establish procedures and standards for general permits for the beneficial use or processing of residual waste other than certain uses of coal ash, and §§ 287.661—287.666 (relating to beneficial use of coal ash) establish procedures and standards for certain beneficial uses of coal ash.

(b) An operation that is approved by or under this subchapter does not require an individual processing or disposal permit under this article. The requirements of Chapter 287, Subchapters A—G and Chapters 288, 289, 291, 293, 295, 297 and 299 are applicable to the extent required in § 287.632 (relating to waiver and modification of requirements).

#### **GENERAL PERMITS FOR PROCESSING OR BENEFICIAL USE, OR BOTH, OF RESIDUAL WASTE OTHER THAN CERTAIN USES OF COAL ASH—AUTHORIZATION AND LIMITATIONS**

#### **§ 287.611. Authorization for general permit.**

(a) In accordance with §§ 287.612, 287.621—287.625, 287.631, 287.632, 287.641—287.644, 287.651 and 287.652 and this section, the Department may issue general permits on a regional or Statewide basis for a category of processing when processing is necessary to prepare the waste for beneficial use, or for a category of beneficial use, or both, of residual waste when the following are met:

(1) The wastes included in the category are generated by the same or substantially similar operations and have the same or substantially similar physical character and chemical composition. If wastes are not the same or substantially similar and are blended for use, the blend shall be consistently reproduced with the same physical character and chemical composition.

(2) The wastes included in the category are proposed for the same or substantially similar beneficial use or processing operations.

(3) The activities in the category can be adequately regulated utilizing standardized conditions without harming or presenting a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. At a minimum, the use of the waste as an ingredient in an industrial process or as a substitute for a commercial product may not present a greater harm or threat of harm than the use of the product or ingredient which the waste is replacing.

(c) The Department may modify, suspend, revoke or reissue general permits or coverage under a general permit under this subchapter as it deems necessary to prevent harm or threat of harm to the health, safety or welfare of the people or environment of this Commonwealth.

(d) The Department may issue a general permit for processing combinations of municipal and residual wastes when processing is necessary to prepare a waste for beneficial use, or for beneficial use of combinations of municipal and residual wastes, or both, under Article VIII (relating to municipal waste) or this article, whichever the Department determines appropriate. The Department will determine which article is appropriate based on factors including whether the facility is captive or noncaptive, and the proportion of municipal and residual waste. The requirements in this subchapter that apply to residual waste also apply to municipal waste when municipal waste is mixed with residual waste.

(e) The Department will not issue a general permit for the following:

- (1) A residual waste disposal impoundment.
- (2) A residual waste landfill, a valley fill or other fill.
- (3) The use of residual waste to fill open pits from coal or noncoal mining except for coal ash mixed with residual waste when the use does not present a safety hazard, will improve the overall quality of the area, is limited to the filling to natural contours of the land and does not present a threat to public health or the environment.
- (4) The use of residual waste solely to level an area or bring the area to grade unless construction activity is completed on the area promptly after placement of the waste. A general permit may be issued for the beneficial use of waste as a construction material.

(5) The placement of waste oil or asbestos containing waste on roads in this Commonwealth.

(6) Surface land disposal activities.

(f) The Department may issue a general permit on a regional or Statewide basis for a category of processing when processing is necessary to prepare a residual waste for beneficial use, or for a category of beneficial use, or both, for coal ash mixed with other residual waste.

**ISSUANCE OF GENERAL PERMITS**

**§ 287.621. Application for general permit.**

(a) A person or municipality may apply to the Department for the issuance of a general permit for a category of beneficial use of residual waste or for a category of processing of residual waste, where processing is necessary to prepare the waste for beneficial use.

(b) An application for the issuance of a general permit shall be submitted on a form prepared by the Department and shall contain the following:

(1) A description of the type of residual waste to be covered by the general permit, including physical and chemical characteristics of the waste. The chemical de-

scription shall contain an analysis meeting the requirements of § 287.132 (relating to chemical analysis of waste) for a sufficient number of samples of residual waste in the waste type to accurately represent the range of physical and chemical characteristics of the waste type.

(2) A description of the proposed type of beneficial use or processing activity to be covered by the general permit.

(3) A detailed narrative and schematic diagram of the production or manufacturing process from which the waste to be covered by the general permit is generated.

(4) For beneficial use general permits, proposed concentration limits for contaminants in the waste which is to be beneficially used, and a rationale for those limits.

(5) For general permits that involve beneficial use of a processed or unprocessed waste, a detailed demonstration of the efficacy of the waste for the proposed beneficial use, which shall include:

(i) If the waste is to be used as a substitute for a commercial product, a demonstration that the waste is capable of performing the desired functions of the commercial product, and that the waste meets or exceeds all applicable ASTM, Department of Transportation or other applicable National, state, local or industry standards or specifications for the material for which the waste is being substituted.

(ii) If the waste is to be used as a raw material for a product with commercial value, a demonstration that the waste will contribute significant properties or materials to the end product, and that the waste meets or exceeds all applicable ASTM, Department of Transportation or other applicable National, state, local or industry standards or specifications for the material for which the waste is being substituted.

(iii) If the waste is to be used in general roadway application or highway construction, a demonstration that approval has been granted by the Department of Transportation Product Evaluation Board, if applicable, for the use of the waste for the intended application.

(iv) If the waste is to be used as a construction material, soil substitute, soil additive or antiskid material, or is to be otherwise placed directly onto the land, an evaluation of the potential for adverse public health and environmental impacts from the proposed use of the residual waste. The evaluation shall identify the particular constituents of the waste which present the potential for adverse public health and environmental impacts, and the potential pathways of human exposure to those constituents, including exposure through groundwater, surface water, air and the food chain. The Department may waive or modify this requirement in writing.

(v) If the waste is to be used without reclamation as a construction material, soil additive, soil substitute or antiskid material or is to be otherwise placed directly onto the land, a demonstration that the residual waste to be beneficially used meets, at a minimum, the requirements of § 288.623(a) (relating to minimum requirements for acceptable waste). The Department may waive the requirements of § 288.623(a) that relate to secondary MCLs for this demonstration. The Department may waive or modify this provision for the use of oil and gas brines for road stabilization.

(6) If residual wastes are blended for use, a demonstration that each waste results in a beneficial contribution to the use of the mixed waste and that the consistency of the blend will be maintained. The applicant shall specify

the quantities and proportions of all materials included in the blended waste and the mixture shall meet appropriate standards for use.

(c) An application for the issuance of a general permit shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for \$2,000.

(d) The Department will not waive the bonding and public liability insurance requirements in Subchapter E (relating to bonding and insurance requirements) for waste tire operations, waste oil operations and contaminated soil operations, and for other general permit activities if the waste managed is potentially harmful or large quantities of waste are stored.

(e) An applicant for a general permit shall provide written notice to each municipality in which the applicant intends to operate, if a location is known, under a general permit. Proof of this notice, including a copy of the notice and a certified or registered mail returned receipt, shall be submitted to the Department. For mobile facilities, written notice shall be provided to the municipality where the primary processing or beneficial use activity is located.

**§ 287.622. Completeness review.**

\* \* \* \* \*

(c) The Department will deny the incomplete application if the applicant fails to provide the analyses, fees, documents or information within 90 days of receipt of the notice in subsection (b).

**§ 287.623. Public notice and review period.**

(a) The Department will publish notice of receipt of an application for a general permit in the *Pennsylvania Bulletin* when the Department determines that the application is administratively complete.

\* \* \* \* \*

(b) The notice shall include:

(1) A brief description of the category of waste and the category of beneficial use or processing of residual waste which is identified in the application.

(2) The Departmental address and telephone number at which interested persons or municipalities may obtain further information and review a copy of the application for the general permit.

(3) A brief description of the procedures for public comment on the general permit application in accordance with this subchapter.

(4) A statement that interested persons or municipalities may submit comments to the Department within 60 days of the publication of the notice, and may recommend conditions upon, revisions to, approval or disapproval of the general permit application.

(c) The Department may hold a public meeting or public hearing on the application for a general permit.

(d) The Department will approve or deny an application for a general permit within 6 months from the last day of the comment period established in subsection (b). Failure by the Department to comply with this timetable will not be construed to constitute grounds for issuance of a general permit.

(e) Upon issuance of a general permit, the Department will place a notice in the *Pennsylvania Bulletin* of the availability of the general permit.

**§ 287.625. Department initiated general permits.**

(a) The Department may issue or modify a general permit for a category of beneficial use or processing of residual waste upon its own motion in accordance with this section.

(b) At least 60 days prior to the issuance or modification of a general permit under this section, the Department will publish a notice in the *Pennsylvania Bulletin* of intent to issue or modify a general permit under this section.

(c) The notice required by subsection (b) shall include the following:

(1) A clear and specific description of the category of waste and the category of beneficial use or processing of residual waste eligible for coverage under the proposed general permit.

(2) The standards in § 287.611(a) (relating to authorization for general permit), and a brief description of the reasons for the Department's determination that the category of beneficial use or processing is eligible for coverage under a general permit in accordance with these standards.

(3) A brief description of the terms and conditions of the proposed general permit.

(4) A brief description of the procedures for public comment on the general permit in accordance with this subchapter.

(5) The Departmental address and telephone number at which interested persons or municipalities may obtain further information and review a copy of the proposed general permit.

(6) A statement that interested persons or municipalities may submit comments to the Department within 60 days of the publication of the notice and may recommend conditions upon, revisions to and approval or disapproval of the proposed general permit.

(d) The Department may hold a public meeting or public hearing on the proposed general permit or proposed modifications to the general permit.

(e) Upon issuance or modification of a general permit, the Department will place a notice in the *Pennsylvania Bulletin* of the availability of the new or modified general permit.

**§ 287.626. Permit renewal.**

(a) A person or municipality that plans to process or beneficially use residual waste after the expiration of the term set forth in the general permit shall file a complete application for permit renewal on forms provided by the Department at least 180 days before the expiration date of the permit.

(b) A permit renewal may include all persons or municipalities that have applied for renewal within the time period provided in subsection (a). A person or municipality that does not meet the time period provided in subsection (a) shall be required either to register or obtain a determination of applicability, whichever is applicable, under a renewed general permit.

(c) A general permit renewal shall be for a period of time not to exceed the length of the term of the original permit.

(d) An application for permit renewal shall be accompanied by a nonrefundable fee in the form of a check payable to the "Commonwealth of Pennsylvania" for \$300.



**CONTENT OF GENERAL PERMITS AND WAIVERS**

**§ 287.631. Contents of general permits.**

(a) Each general permit issued by the Department will include, at a minimum:

(1) A clear and specific description of the category of waste and the category of beneficial use or processing of residual waste eligible for coverage under the general permit.

(2) The standards in § 287.611(a) (relating to authorization for general permit), and a brief description of the reasons for the Department's determination that the category of beneficial use or processing is eligible for coverage under a general permit in accordance with these standards.

(3) A specification of registration or determination of applicability requirements established in accordance with § 287.641 (relating to inclusion in a general permit) and the fee imposed on registrants or applicants for coverage under the general permit.

(4) A set of terms and conditions governing the beneficial use or processing of residual waste covered by the general permit as are necessary to assure compliance with the act, this article and the environmental protection acts, including provisions for the protection of groundwater. At a minimum, the conditions shall include:

(i) Limits on the physical and chemical properties of waste that may be beneficially used or processed. The permit shall also include a requirement that persons or municipalities who conduct activities authorized by the general permit shall immediately notify the Department, on forms provided by the Department, of a change in the physical or chemical properties of the residual waste, including leachability, or of a change in the information required by § 287.641(f).

(ii) A requirement that persons or municipalities who conduct activities authorized by the general permit shall allow authorized representatives of the Commonwealth, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to areas in which the activities covered by the general permit will be, are being, or have been conducted to ensure compliance with the act, regulations promulgated under the act and a permit, license or order issued by the Department under the act.

(iii) A requirement that the activities authorized by the general permit will not harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth. At a minimum, for beneficial use of residual waste, the use of the waste as an ingredient in an industrial process or as a substitute for a commercial product may not present a greater harm or threat of harm than the use of the product or ingredient which the waste is replacing.

(iv) An effective date and a fixed permit term which may not exceed 10 years from the effective date. If the Department renews a general permit, the term may not exceed the term of the original permit.

(v) A requirement that a person or municipality operating under the permit shall immediately notify the Department within the time stated in the permit and if no time is stated no later than 45 days, in writing, of any changes in the following:

(A) The company's name, address, owners, operators and responsible officials,.

(B) Land ownership of land at the permitted facility.

(C) The physical and chemical characteristics of the residual waste.

(D) The generators of the residual waste and the manufacturing process that generates the residual waste.

(E) The status of any permit issued to the permittee or any agent of the permittee engaged in activities under the permit by the Department or Federal government under the environmental protection acts.

(vi) A requirement that the activities conducted under the authorization of a general permit shall be conducted in accordance with the permittee's application. Except to the extent that a general permit states otherwise, the permittee shall operate as described within the permit application.

(5) A requirement that a person or municipality that registers for coverage under a general permit or applies to the Department for a determination of applicability under a general permit shall submit a copy of the registration or application to each municipality in which processing activities or the primary beneficial use activities will be located, prior to initiating operations. If additional locations are identified during the term of the permit that were not known at the time of a registration or application, including an application by the original applicant, written notice shall be provided to the municipalities. For mobile facilities, written notice shall be provided to the municipality where the primary processing or beneficial use activity is located.

(b) A general permit may include a requirement that persons or municipalities that conduct activities authorized by the general permit shall submit to the Department periodic reports, analyses of waste and other information to ensure that the quality of the waste to be beneficially used or processed does not change.

**§ 287.632. Waiver and modification requirements.**

(a) An operation that is approved under this subchapter is subject to this article.

(b) The Department may waive or modify any application and operating requirements in this article, except the Department will not waive or modify Subchapter A, §§ 287.124, 287.125 and 287.128, Subchapter E in accordance with § 287.621(d) or Subchapter F.

**REGISTRATION AND DETERMINATION OF APPLICABILITY**

**§ 287.641. Inclusion in a general permit.**

(a) A person or municipality is authorized to operate under a general permit if one of the following occurs:

(1) The applicable general permit requires persons or municipalities to register with the Department prior to operating under the general permit, and the person or municipality has registered in accordance with the terms of the general permit.

(2) The applicable general permit requires persons or municipalities to apply for and obtain a determination of applicability from the Department prior to operating under the general permit, and the Department has made this determination.

(b) Except as provided in subsections (c) and (d), as a condition of each general permit, the Department will require persons or municipalities who intend to operate under the general permit to register with the Department within a specified time period prior to conducting the activity authorized by the general permit.

(c) For beneficial use general permits where the residual waste is to be used as a construction material, antiskid material or otherwise placed directly onto the land, as a condition of the general permit, the Department will require persons or municipalities who intend to operate under the general permit to apply for and obtain a determination of applicability from the Department prior to conducting the activity authorized by the general permit. The Department may require persons or municipalities that intend to operate under a general permit for land application either to apply for and obtain a determination of applicability or register with the Department.

(d) The Department may impose the determination of applicability condition described in subsection (c) on general permits for beneficial use or processing activities other than those described in that subsection if the Department determines that the condition is necessary to prevent harm or a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth.

(e) Registration or application requirements and time limits, if any, shall be set forth in the general permit governing each category of beneficial use or processing of residual waste.

(f) At a minimum, the registration or application shall include:

(1) The name and address of the person or municipality conducting the activity covered by the general permit.

(2) A description of each waste which will be beneficially used or processed in accordance with the general permit.

(3) A description of the proposed method of processing or beneficial use of the waste.

(4) If a general permit requires a registrant or applicant to chemically analyze each waste to be processed or beneficially used, an analysis that is in accordance with § 287.132 (relating to chemical analysis of waste).

(5) For beneficial use general permits for which an evaluation was submitted under § 287.621(b)(5)(iv) (relating to application for general permit), a supplemental evaluation that meets the requirements of that subsection if the waste contains constituents at levels not reviewed as part of the general permit, or if the proposed beneficial use would be at a type of location not reviewed as part of the general permit.

(6) The name or number of the general permit being utilized for the activity.

(7) A demonstration that the activities which the person or municipality intends to conduct are authorized by the general permit.

(8) A signed and notarized statement by the person or municipality conducting the activity authorized by the general permit, on a form prepared by the Department, which states that the person or municipality agrees to accept the conditions imposed by the general permit for beneficial use or processing of residual waste under the general permit.

(g) A person or municipality that registers for coverage under a general permit, or applies to the Department for a determination of applicability of a general permit, shall submit a copy of the registration or application to the host municipality and the appropriate county, county planning agency and county health department, if one exists, at the same time that the person or municipality files the registration or application with the Department.

The host municipality and host county shall be determined by the location of the person's or municipality's primary or first beneficial use or processing operation under the general permit.

#### § 287.642. Determination of applicability.

(a) This section sets forth standards and procedures that are applicable to general permits which require persons or municipalities to apply for and obtain a determination of applicability from the Department prior to conducting the activity authorized by the general permit. The requirements in this section are in addition to the applicable requirements of § 287.641 (relating to inclusion in a general permit).

(b) 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 \$500.

(c) The Department will provide notice in the *Pennsylvania Bulletin* of each application for a determination of applicability for a general permit which the Department has determined to be administratively complete. For applications for determinations of applicability for a general permit for construction materials, the notice shall indicate that interested persons or municipalities may submit comments to the Department within 60 days recommending revisions to, and approval or disapproval of the application, unless the 60-day notice requirement is waived by the Department. The Department may hold a public meeting or public hearing on an application for determination of applicability for a general permit for construction materials.

\* \* \* \* \*

(g) The Department may amend, suspend or revoke coverage under a general permit if a person or municipality authorized to conduct solid waste activities under a general permit is not in compliance with the permit conditions or for one or more of the reasons in subsection (e).

#### § 287.643. Registration.

(a) This section sets forth standards and procedures that are applicable to general permits which require persons or municipalities to register with the Department prior to operating under the general permit. The requirements of this section are in addition to the applicable requirements of § 287.641 (relating to inclusion in a general permit).

(b) 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 \$250.

(c) The Department will provide notice in the *Pennsylvania Bulletin* of each registration for coverage under a general permit.

(d) Persons or municipalities may operate under a general permit upon registering with the Department in accordance with § 287.641 and the terms of the general permit.

(e) The Department may amend, suspend or revoke coverage under a general permit if the waste or activity is not covered by the terms and conditions of the general permit.

(f) A person or municipality operating under a registration has the burden of proving, by clear and convincing evidence, that the waste and activity are consistent with the general permit.

§ 287.644. (Reserved).

**COMPLIANCE**

§ 287.651. **Investigations and corrective action.**

(a) Upon notification by a person beneficially using or processing residual waste under a general permit that there has been a change in the physical or chemical properties of the residual waste being beneficially used or processed, including leachability, the Department will conduct an investigation and order necessary corrective action. Notice to the Department under this section does not, by itself, suspend continued beneficial use or processing after a change has occurred.

(b) Upon receipt of a signed, written complaint of a person whose health, safety or welfare may be adversely affected by a physical or chemical change in the properties of the residual waste to be beneficially used or processed under a general permit, including leachability, the Department will determine the validity of the complaint and take appropriate action.

§ 287.652. **Compliance with permit conditions, regulations and laws.**

A person or municipality that beneficially uses or processes residual waste under a general permit shall comply with the terms and conditions of the general permit, with this article and with the environmental protection acts to the same extent as if the activity were covered by an individual permit.

**BENEFICIAL USE OF COAL ASH**

§ 287.662. **Use of coal ash as a soil substitute or soil additive.**

(a) Coal ash may be beneficially used as a soil substitute or soil additive without a permit from the Department under the act if the person or municipality proposing the use complies with this section.

(b) At least 60 days before using coal ash as a soil substitute or soil additive, the person or municipality proposing the use shall submit a written notice to the Department. The notice shall contain, at a minimum:

(1) A description of the nature, purpose and location of the project, including a topographic map showing the project area and available soils maps of the project area. The description shall include an explanation of how coal ash will be stored prior to use, how the soil will be prepared for the application of coal ash, how coal ash will be spread and, when necessary, how coal ash will be incorporated into the soil.

(2) The estimated beginning and ending dates for the project.

(3) An estimate of the volume of coal ash to be used for the project, the proposed application rate and a justification for the proposed application rate.

(4) A chemical and leaching analysis for the coal ash to be used in the project. If the coal ash was generated at a facility for which the Department has previously approved a chemical and leaching analysis, the person or municipality may submit a copy of the analysis that was approved.

(5) A chemical analysis of the soil on which the coal ash is proposed to be placed.

(6) An analysis showing how the application of coal ash will be beneficial to the productivity or properties of the soil to which it is proposed to be applied. The analysis shall be prepared and signed by an expert in soils science.

(7) A signed statement by the owner of the land on which the coal ash is to be placed, acknowledging and consenting to the use of coal ash as a soil substitute or soil additive.

(c) After receiving the information required by subsection (b), the Department may inform the person or municipality that provided the information whether the proposed use of coal ash as a soil substitute or soil additive is consistent with this section.

(d) Coal ash used as a soil substitute or soil additive may not be considered a beneficial use unless the following requirements are met:

(1) The person or municipality has provided to the Department the information required by subsection (b) at least 60 days before using coal ash as a soil substitute or soil additive.

(2) The pH of the coal ash and the pH of the soil shall be in the range of 6.5 to 8.0 when mixed together in the manner required by the project, as shown by field and laboratory testing. Lime addition may be used to raise pH.

(3) Surface runoff from the project area shall be controlled during the project. Collection of surface runoff shall be controlled in accordance with The Clean Streams Law and the regulations promulgated thereunder.

(4) Diversion ditches, terraces and other runoff control structures shall be utilized to control erosion on the disturbed area of the project.

(5) The person or municipality conducting the activity shall have a Department-approved erosion and sedimentation control plan under Chapter 102 (relating to erosion control).

(6) Coal ash may not be placed within 4 feet of the seasonal high water table.

(7) Coal ash may not be placed within 8 feet of the regional groundwater table.

(8) Coal ash may not be used in a way that causes water pollution.

(9) Coal ash shall be incorporated into the soil within 48 hours of application, unless otherwise approved by the Department. The coal ash shall be incorporated into the top 1-foot layer of surface soil. If 1 foot of surface soil is not present, coal ash may be combined with the surface soil that is present until the layer of combined surface soil and coal ash is 1 foot. The coal ash required for the beneficial use is limited to the amount necessary to enhance soil properties or plant growth.

(10) Coal ash shall be applied at a rate per acre that will protect public health, public safety and the environment.

(11) Coal ash may not be applied to soil being used for agriculture where the soil pH is less than 5.5.

(12) Coal ash may not be applied if resultant chemicals or physical soil conditions would be detrimental to biota.

(f) Coal ash may not be used as a soil substitute or soil additive:

(1) Within 100 feet of an intermittent or perennial stream, or a wetland other than an exceptional value wetland.

(2) Within 300 feet of a groundwater source.

(3) Within 500 feet upgradient of a surface drinking water source.

(4) Within 100 feet of a sinkhole or area draining into a sinkhole.

(5) Within 300 feet measured horizontally from an occupied dwelling, unless the current owner thereof has provided a written waiver consenting to the activities 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.

(6) In or within 300 feet of an exceptional value wetland.

**§ 287.663. Beneficial use of coal ash at coal mining activity sites as coal mining activities are defined in § 86.1.**

(a) *Coal ash approval at coal mining activity sites.* Coal ash approval at coal mining activity sites shall, at a minimum, be based on the following:

(1) Coal ash may be used for beneficial use at coal mining activity sites if the use complies with this section, The Clean Streams Law and the regulations promulgated thereunder, the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19a), the Coal Refuse Disposal Control Act (52 P. S. §§ 30.51—30.66), the applicable provisions of Chapters 86—90, the Coal Ash Certification Guidelines (Certificate Guidelines) developed under this section and other applicable environmental statutes and regulations promulgated thereunder.

(2) The Department will develop Certification Guidelines that identify the acceptable physical and chemical characteristics of coal ash for beneficial uses. A generator of coal ash shall demonstrate that the coal ash quality meets the chemical and physical characteristics identified in the Certification Guidelines for the intended uses. The demonstration shall be reviewed and approved by the Department prior to a beneficial use.

(3) The Department will develop a technical guidance document to facilitate review of beneficial uses of coal ash at coal mining activities.

(b) *Request.* The request for use at coal mining activity sites shall be addressed in the reclamation plan of the mining activities permit and shall contain the following and shall be reviewed and approved by the Department:

(1) A narrative description of the project, including an explanation of how coal ash will be placed, where and how coal ash will be stored prior to placement, identification of the sources of coal ash and an estimate of the cubic yards of coal ash to be used. For the beneficial use of coal ash as a soil substitute or additive, the proposed application rate and justification for the application rate shall also be included.

(2) If the coal ash has not been certified under subsection (a)(2) by the Department, a statement signed by the generator of the coal ash including supporting data which demonstrates that the coal ash quality meets the chemical and physical characteristics identified in the Certification Guidelines for the intended use. If the coal ash has been certified in accordance with subsection (a)(2), information that identifies the generator and the certification number.

(3) A signed statement by the owner of the land on which the coal ash is to be placed, acknowledging and consenting to the placement of coal ash.

(c) *Operating requirements.* The use of coal ash as part of the mining reclamation activity shall be designed to achieve an overall improvement in water quality or shall

be designed to prevent the degradation of water quality. Coal ash may be beneficially used for reclamation in the following situations:

(1) The pit or area from which coal is extracted under a surface coal mining permit.

(2) Abandoned coal mining areas located within the surface coal mining permit area.

(3) Coal refuse disposal sites.

(4) Other beneficial uses that are part of the approved reclamation plan of the coal mining activity.

(d) *Additional operating requirements for the placement of coal ash at coal surface mining and coal refuse reprocessing sites.* The following applies to placement of coal ash at coal surface mining and coal refuse reprocessing sites:

(1) Coal ash placed at a coal mining activity site may not exceed the volume of coal, coal refuse, culm or silt removed from the site by the active mining operation on a cubic yard basis unless more coal ash is needed to complete the reclamation plan of the surface mining activity permit.

(2) Placement of coal ash can be accomplished by mixing with spoil material or by spreading in horizontal layers. The reclamation plan of the approved permit shall address the placement of the coal ash.

(3) Groundwater monitoring at coal mining activity sites for the coal ash shall be in accordance with applicable provisions of Chapters 86—90.

(4) For coal refuse pile reprocessing sites where refuse material is presently deposited in large surface piles, the piles may not be rebuilt with coal ash. The placement of coal ash shall be accomplished in a manner which blends into the general surface configuration, and complements the surface drainage pattern of the surrounding landscape.

(5) For multiple refuse pile reprocessing projects, the Department may allow at an individual refuse pile reprocessing site more coal ash used than coal refuse removed if:

(i) A single operator will control a project involving the coordinated use of multiple coal refuse sites.

(ii) A reclamation plan is approved for each of the sites and identifies the total cubic yards of coal ash that may be placed at each site.

(iii) The total cubic yards of coal ash placed on the sites is less than the total cubic yards of refuse, culm or silt removed from the sites. Only coal ash from the integrated project can be used.

(iv) The integrated project shall be designed to achieve an overall improvement of surface water or groundwater quality at each site, where acid mine drainage is evident. For instances in which there is no acid mine drainage, the project will be so designed to achieve no degradation of the surface or groundwater quality.

(v) The integrated project shall be accomplished in a manner which blends into the general surface configuration and complements the surface drainage pattern of the surrounding landscape.

(6) The coal ash may not be placed within 8 feet of the regional groundwater table unless the Department approves placement within 8 feet based upon a demonstration that groundwater contamination will not occur or

that the Department approves this placement as part of a mine drainage abatement project.

(7) The coal ash shall meet the physical and chemical characteristics identified in the Certification Guidelines for the intended use.

(8) The operator shall maintain information concerning the sources and the cubic yards of coal ash used.

(e) *Additional operating requirements for the beneficial use of coal ash as a soil substitute or soil additive.* The following apply to the beneficial use of coal ash as a soil substitute or soil additive:

(1) Coal ash shall be applied at a rate per acre that will protect public health, safety and the environment.

(2) The coal ash that is applied will be part of the approved reclamation plan of the coal mining activity in order to increase the productivity or properties of the soil.

(f) *Additional operating requirements for the beneficial use of coal ash at coal refuse disposal sites.* The following apply to the beneficial use of coal ash at coal refuse disposal sites:

(1) Placement of coal ash as part of coal refuse disposal operations which are permitted under Chapters 86—90 shall be considered beneficial use if the following conditions are met:

(i) The cubic yards of coal ash does not exceed the total cubic yards of coal refuse to be disposed based on uncompacted volumes of materials received at the site, and only amounts necessary to meet subparagraph (iii) may be used.

(ii) The Department may allow cubic yards of coal ash to exceed the cubic yards of coal refuse to be disposed if the approved reclamation plan would require the additional cubic yards of coal ash to improve the quality of leachate generated by the coal refuse.

(iii) The coal ash has physical and chemical characteristics which:

(A) Improve compaction and stability within the fill.

(B) Reduce infiltration of water into coal refuse.

(C) Improve the quality of leachate generated by the coal refuse.

(iv) Groundwater monitoring shall be in accordance with the applicable provisions of Chapters 86—90.

(v) The coal ash may not be placed within 8 feet of the regional groundwater table, unless the Department approves placement within 8 feet based upon a demonstration that groundwater contamination will not occur.

**§ 287.664. Coal ash beneficial use at abandoned coal and abandoned noncoal surface mine sites.**

(a) *Approval by Department.* Coal ash may be beneficially used at abandoned coal and abandoned noncoal surface mine sites if the reclamation work is approved by the Department or is performed under a contract with the Department. Coal ash approval shall, at a minimum, be based on the following:

(1) Beneficial use of the coal ash shall comply with this section, and the applicable environmental statutes and regulations promulgated thereunder.

(2) The Department will develop Coal Ash Certification Guidelines (Certification Guidelines) that identify the acceptable physical and chemical characteristics for beneficial uses of coal ash. A generator of coal ash shall demonstrate that the coal ash quality meets the chemical

and physical characteristics identified in the Certification Guidelines for the intended uses. The demonstration shall be reviewed and approved by the Department prior to a beneficial use.

(3) The Department will develop a technical guidance document to facilitate review of beneficial uses of coal ash at abandoned mine sites.

(b) *Request.* The request for the use of coal ash at abandoned mine sites shall be addressed in the reclamation plan submitted to the Department and shall contain the following:

(1) A narrative description of the project, including an explanation of how coal ash will be placed, where and how coal ash will be stored prior to placement, identification of the sources of coal ash and an estimate of the cubic yards of coal ash to be used. For the beneficial use of coal ash as a soil substitute or additive, the proposed application rate and justification for the application rate shall also be included.

(2) If the coal ash has not been certified under subsection (a)(2) by the Department, a statement signed by the generator of the coal ash including supporting data which demonstrates that the coal ash quality meets the chemical and physical characteristics identified in the certification guidelines for the intended use. If the coal ash has been certified in accordance with subsection (a)(2) information that identifies the generator and the certification number.

(3) A signed statement by the owner of the land on which the coal ash is to be placed, acknowledging and consenting to the placement of coal ash.

(c) *Operating requirements.* The use of coal ash as part of the reclamation activity shall be designed to achieve an overall improvement in water quality or shall be designed to prevent the degradation of water quality or be designed to treat mine drainage or function as a soil substitute or soil additive.

(1) The cubic yards of coal ash to be used at any reclamation activity at an abandoned mine site will be determined by the Department. Consideration may be given to using up to the total volume needed to accomplish reclamation of the entire affected site, so that the final contours resulting from the project blend with the surrounding topography, promote positive surface water runoff and protect surface and groundwater quality.

(2) The necessity for water quality monitoring will be determined by the Department where the information is needed to evaluate the success of the reclamation project.

(3) The coal ash will not be placed within 8 feet of the regional groundwater table, unless the Department approves placement within 8 feet based upon a demonstration that groundwater contamination will not occur.

(4) For use of coal ash as a soil substitute or soil additive, the coal ash shall be applied at the rate per acre in order to increase the productivity or properties of the soil and to protect public health, safety and the environment.

**§ 287.665. Other beneficial uses of coal ash.**

(a) This section sets forth beneficial uses of coal ash other than use as a structural fill, soil substitute or soil additive.

(b) The following uses of coal ash are deemed to be beneficial and do not require a permit from the Department under the act as long as the uses are consistent with the requirements of this section:

(1) The use of coal ash in the manufacture of concrete.

(2) The extraction or recovery of one or more materials and compounds contained within the coal ash.

(i) Storage of coal ash before and after extraction or recovery shall be subject to Chapter 299 (relating to storage and transportation of residual waste).

(ii) Disposal of the unrecovered fraction of coal ash shall be subject to the applicable requirements for residual waste.

(3) The use of fly ash as a stabilized product. Other uses of fly ash in which physical or chemical characteristics are altered prior to use or during placement shall be considered a beneficial use under this section if the following are met:

(i) The person or municipality proposing the use has first given advance written notice to the Department.

(ii) The coal ash is not mixed with solid waste, unless otherwise approved in writing by the Department prior to the use.

(iii) The use of the coal ash results in a demonstrated reduction of the potential of the coal ash to leach constituents into the environment.

(4) The use of bottom ash or boiler slag as an antiskid material or road surface preparation material, if the use is consistent with Department of Transportation specifications or other applicable specifications. The use of fly ash

as an antiskid material or road surface preparation material is not deemed to be a beneficial use.

(5) The use of coal ash as raw material for a product with commercial value, including the use of bottom ash in construction aggregate. Storage of coal ash prior to processing is subject to § 299.153 (relating to storage and containment of coal ash).

(6) The use of coal ash for mine subsidence control, mine fire control and mine sealing, if the following requirements are met:

(i) The person or municipality proposing the use gives advance written notice to the Department.

(ii) The pH of the coal ash is in a range that will not cause or allow the ash to contribute to water pollution.

(iii) Use of the coal ash in projects funded by or through the Department is consistent with applicable Departmental requirements and contracts.

(7) The use of coal ash as a drainage material or pipe bedding, if the person or municipality proposing the use has first given advance written notice to the Department, and has provided to the Department an evaluation of the pH of the coal ash and a chemical analysis of the coal ash that meets the requirements of § 287.132 (relating to chemical analysis of waste).

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