BEFORE THE
ENVIRONMENTAL QUALITY BOARD

Safe Fill) Docket No. 7-372

COMMENTS OF THE ENERGY ASSOCIATION OF PENNSYLVANIA

The Energy Association of Pennsylvania (the "Energy Association") files these comments on behalf of its members pursuant to the proposal adopted by the Board in the above docket on November 20, 2001, and published in the February 2, 2002, issue of the *Pennsylvania Bulletin*.[1] We present four comments: Comment 1 raises issues specific to the Energy Association members' operations as transporters and distributors of electricity and natural gas, while Comments 2, 3 and 4 address more general concerns reflecting the members' role as major and diversified Pennsylvania business enterprises.

1. Fill Generated in the Course of Extending, Expanding, Repairing, Maintaining or Replacing Natural Gas or Electric Utility Systems Should Be Categorized as "Safe Fill" by Definition.

Under the proposed regulations there are basically three possible categories for treating fill generated in the course of utility work. First, the spoils could be classified as safe fill. Because safe fill is not a waste, the spoils could be used without regulation or restriction (as they are today).[2] Second, the spoils could be classified not as safe fill, but as residual waste, and they could be used as fill subject to conditions specified in a residual waste permit-by-rule ("PBR"). Finally, the spoils could be deemed to be residual waste, as in the second category, but they

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1. 32 Pa.B. 564 (2002) [hereinafter "Safe Fill Proposed Rulemaking"].

2. Current practice, which has performed ably without regulations, has been for the Energy Association's members to manage their trench spoils in accordance with their professional judgment and sound engineering and business practices. Classifying these spoils as safe fill would simply allow these proven best management practices to continue.

would not be placed under a PBR. These wastes would have to be disposed of in a permitted landfill.

The proposed safe fill regulations are characterized, *inter alia*, as providing avenues that will allow generators to avoid costly landfill disposal,[3] and whether this is true as a general matter is not for the Energy Association to say. However, it is most definitely **not** true for the thousands and thousands of trenches natural gas and electric utilities dig each year to expand and operate their distribution systems. For reasons specified below, there is no practical means for utility trench spoils currently to qualify as "safe fill" under the regulations as proposed. As a result, utilities would have to fit these spoils under a PBR or send them to a landfill. However, the proposed PBR options are so prohibitively expensive that they are, for all practical purposes, unavailable.

Thus, for members of the Energy Association, the proposed regulations do not provide less costly alternatives; rather, they threaten to impose a crippling level of new costs. Assuming the typical utility trench is one yard wide and one-an-a-half yards deep (an assumption most would consider conservative) and further assuming landfill disposal costs of $50 per ton (as estimated by the Department) the absence of workable safe fill qualifications will increase utility project costs by $25 per foot for disposal costs alone (not to mention the extra transportation, testing and other charges commonly associated with sending material to a landfill.) The impact on project economics will be dramatic, imposing an enormous drag on utility line extensions and enhancements in direct contradiction not only of long-held policies and practices embraced by the Pennsylvania Public Utility Commission,[4] but also provisions of Governor Schweiker's recently-adopted state energy policy.[5]

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3. *Id.* at 571. ("The current cost of disposal in a permitted landfill is estimated at $50/ton or cubic yard. *The proposed amendments will result in huge savings to the regulated community by avoiding disposal costs.*") (emphasis supplied, footnote omitted).

4. *E.g.*, 52 Pa. Code § 57.19(b) (duty of electric utilities to make line extensions), *Id.*, § 57.82(a)

The Energy Association recognizes that the Board and the Department of Environmental Protection (the "Department") have been wrestling with the safe fill status of utility trench spoils some time. In the draft policy that preceded these proposed regulations, fill generated in lots smaller than 500 cubic yards would have been exempt from the Department's substantive standards (unless the fill was affected by a spill or release, was contaminated by a hazardous material, or was remediated under the Act 2 Land Recycling Program).[6] In the fact sheet that would have accompanied the draft policy, as well as in outreach materials that would have described that policy to the public, the 500-yard exemption was cited as providing an exemption for fill generated from utility trenching.[7]

The proposed regulations try to maintain that approach through provisions in the definition of "safe fill." Basically, the proposed definition is made up of three parts. Under proposed clause (i)(A), material is deemed to be safe fill if, upon extensive testing, it is confirmed that the material does not possess excess amounts of any of literally hundreds of listed contaminants.[8] Under proposed clauses (i)(B) and (i)(C), site-specific knowledge can be used to reduce the extent of testing, and material will qualify as safe fill if it meets contaminant limits for a smaller set of listed

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(requiring underground installation of electric distribution and service lines).

5. *Energy in Pennsylvania: Recommendations of the Governor's Energy Task Force for a State Energy Policy* (2002), *available at*, http:/www.paenergy.state.pa.us/finalpolicy.htm. (Under the heading "Ensuring Diverse Generation and Availability of Supply," Pennsylvania is to "[e]ncourage interstate and local natural gas pipeline expansion in sufficient quantity and within an adequate timeframe to meet the increasing demand for this resource and to encourage as well as support statewide economic growth.")

6. As used in these comments, "Act 2" refers to the Land Recycling and Environmental Remediation Standards Act, *codified at* 35 P.S. §§ 6026.101-.909; *cf.* Safe Fill Proposed Rulemaking, 32 Pa.B. at 564.

7. Because the draft fact sheet and outreach materials were prepared by the Department, it did not seem necessary to reproduce them here. The Energy Association will provide copies of these materials on request.

8. The material must also have "no visible staining, odor or other sensory nuisance resulting from chemical contaminants associated with the material." Proposed Section 287.1 "safe fill" (i)(A(II). The Energy Association does not take issue with this requirement, and we would agree that utility trench spoils that evidence a sensory nuisance should not be considered safe fill.

chemicals. Finally, under proposed clauses (ii) through (v) materials that meet specified conditions can qualify as safe fill through categorical inclusion, without regard to its chemical constituents. With due respect to the efforts to maintain that definitional approach in the proposed regulations, the current proposal comes up short because it does not fully reflect the operational, logistical and legal realities inherent in utility trenching.

Utilities dig trenches in fulfillment of their public service functions and obligations. Their legal relationship to the lands they excavate is often restricted to a limited easement or license. In general, utilities come to the land as they find it, without any basis for knowing a site's prior uses or history. In addition, utilities are not at liberty to leave trench spoils by the roadside or excavation site for any significant length of time.

With this in mind, logistics and costs make in unfeasible to qualify trench spoils as safe fill under proposed clause (i)(A). The testing required under that provision assumes the excavated material can be set aside for whatever time it takes to draw samples, send them for testing, complete the tests, and receive the results. Whether this approach can be followed where the excavation is being performed by the land owner, it will not be tolerated by owners whose lands are being traversed by utility lines.[9] Separately, by the Department's own estimates, the testing costs associated with qualification under proposed clause (i)(A) total $1000 per sample.[10] Since a minimum of eight samples are required,[11] testing costs will run $8000 per excavation. This cost would be significant even if a single excavation covered a utility trench spanning several properties. If each property were considered a separate excavation—an interpretation not outside the realm of possibility—the testing costs would be staggering.

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9. Typical of this view, the Pennsylvania Department of Transportation ("PennDOT") generally requires spoils must be disposed of as they are generated (and they certainly cannot be left by the roadside for any significant length of time).

10. Safe Fill Proposed Rulemaking, 32 Pa.B. at 571.

11. *See*, Proposed Section 287.11(b)(1)(i)(composite samples) and Proposed Section 287.11(b)(2)(iii)

While qualification under proposed clause (i)(A) is unfeasible, qualification under the provisions requiring site-specific knowledge, *i.e.*, proposed clauses (i)(B) and (i)(C), is not available at all. The utility comes to a property without knowledge of the property's past uses or history. It will not have "historical data" on the site, so it will not be able to classify the spoils as clean fill under proposed clause (i)(B) of the proposed definition. Similarly, the utility will not have "knowledge of the site," so it will not be able to classify the spoils as clean fill under proposed clause (i)(C).[12]

Of the categorical inclusions, only three are potentially relevant to the typical case of utility trench spoils generated as a result of roadside excavation.[13] First, proposed clause (ii)(A) provides a categorical inclusion for material that is "moved within a right-of-way." Unfortunately, this provision is overwhelmingly unavailable to natural gas and electric utilities. On many state-owned rights-of-way PennDOT prohibits the utility from returning trench spoils to the excavation. (Instead, PennDOT requires the utility to use new fill meeting engineering specifications.) Numerous municipalities have adopted PennDOT's position, thus prohibiting the reuse of trench spoils on local roads. Finally, in a large number of cases some or all of the trench spoils cannot be returned to the trench because the excavated material contains jagged stones or other naturally occurring material that cannot be placed directly on top of the utility's pipe or wire without substantial risk of

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(discrete samples).

12. Of course the absence of prior knowledge regarding a site has not prevented utilities from properly handling spoils that appear to be contaminated. As a matter of standard operating procedure and best management practices, utilities have used their professional and business judgment to determine proper handling where contamination is evident or suspected.

13. Even where potentially relevant, these exclusions carry within themselves barriers that substantially compromise their availability. As proposed, fill qualifying for these exclusions from testing would still need to meet Proposed Section 287.1(i)(A)(I): "Based on an appropriate level of due diligence, there is no knowledge of past activity that indicates the material has been subject to a release." Since the burden of demonstrating safe fill status would ultimately rest with the person using the fill, Proposed Section 287.1 "safe fill" (vii), users may very well insist on full testing and documentation, rather than relying on a generator's representations concerning the level of due diligence expended. Even in contexts outside roadside construction, *e.g.*, the residential development exclusion in proposed subclause 287.1 "safe fill" (2)(B), the due diligence issue undermines and potentially eradicates the exclusion's potential effect.

damage. Whether reuse is governmentally prohibited or impossible because of displacement by buffering material (or the pipes and wires themselves) the spoil from a utility's trench will not qualify for the right-of-way exclusion because it will have to be hauled somewhere else.

A second potential avenue for categorical inclusion appears in proposed paragraph (v), which affords safe fill status to historic fill—itself a defined term—in quantities of 125 cubic yards or less per excavation. Here, as elsewhere, the exclusion turns on knowledge about the history of the excavation site. Where the utility lacks such knowledge, the exclusion will be unavailable.

The final categorical inclusion affords safe fill status to material "moved within a property."[14] For roadside utility trenching, where the "property" is via a public or private right-of-way that often crossing multiple properties, the effect of this provision is at best unclear.

With safe fill status unavailable for all practical purposes, the only remaining options are placement pursuant to a PBR[15] or landfill disposal. However, the costs, paperwork and potential liabilities associated with these alternatives are so great that they cease to be viable. The responsible party has to ascertain and document the chemical properties of the waste, and that process must be undertaken in strict accordance with regulations that leave with no room for professional judgment.[16] Given the costs associated with testing the materials and keeping the corresponding records, one can reasonably expect only few parties would go through the expense and bother.[17] In the end, utility trench spoils would have to be placed in a landfill.

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14. Proposed Section 287.1 "safe fill" (2)(C).

15. Proposed Section 287.102(j)-(m). Incidentally, in the Safe Fill Proposed Rulemaking Proposed Section 287.102(k) is misprinted as Proposed Section 287.102(*l*).

16. *See generally*, Proposed Sections 287.102(k)(1)-(3) and 287.102(*l*)(1)-(2).

17. Some of these costs spring from vagueness within the PBR regulations themselves. For example, one of the proposed PBRs deals with material that "exceeds safe fill numeric standards *as a result of urbanization*." Proposed Section 287.102(k)(1) (emphasis supplied). "Urbanization" is not a defined term, so a party proceeding under this PBR must assume an unspecified risk that it's definition will differ from the Department's.

2. The PBR Regulations Should Incorporate a Repose Standard Which Insulates a Fill-Generating Party from Subsequent Actions by the Party That Uses It.

One of the key functions of these regulations should be to establish boundaries defining the liability of the person generating the fill and the liability of the person using it. Under the PBR provisions, contaminated soils would be considered residual wastes (albeit wastes covered under a Department permit) while they are being placed. Once delivered and placed, however, they will cease to be wastes as long "as the material remains in place." [18] One assumes the same logic would apply to contaminated fill that is initially covered by a PBR but subsequently re-excavated: the fill would revert to its status as residual waste, and it would need to be handled as such through qualification under a new PBR or otherwise.

Within this chain of logic, the regulations should specify that a generating party's liability as to the permit status of its fill is defined by and limited to the status of that fill **as and until deposited**. The original generator should not be not liable for the permit status of that fill if it is re-excavated and moved to another location. To find otherwise is to infuse PBRs with open-ended liability, a result that would operate, in effect, to render PBRs useless.

Analogous provisions limiting liability are a central feature of the land recycling regulations, and the Board should extend the same logic here.

3. Apart from Omitting a Workable Standard for Utility Trench Spoils, the Proposed Definition for Safe Fill Remains Problematic on Several Critical Fronts.

The definition of what constitutes safe fill (and what does not) lies at the heart of these proposed regulations. Unfortunately, Paragraph (i) of that definition, and the numerous clauses and sub-clauses within it, fall short in several key respects.

First, under Paragraph (i) safe fill expressly includes construction and demolition waste from residential and commercial properties, implicitly excluding construction and demolition waste

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18. Safe Fill Proposed Rulemaking, 32 Pa.B. at 571.

from industrial buildings. In justifying this exclusion, the Safe Fill Proposed Rulemaking states that "Construction or demolition materials from an industrial site will not qualify as 'safe fill' due to the potential of a contamination resulting from industrial activities at the property."[19]

In our view, a categorical exclusion is unnecessary. Material that meets the requirements of Paragraph (i) will still not be considered "safe fill" unless it also meets the contaminant standards in Appendix A, Tables 1 and 2.[20] If a load of construction and demolition waste satisfies the contaminant standards, it should not matter whether it came from a residential, commercial or industrial property.

Second, proposed clauses (i)(B) and (i)(C) of the definition,[21] which are characterizec as providing additional options for determining that fill is "uncontaminated," collapse into the first option because each of these alternatives would require that the material "meets the requirements of clause (A)." In that the second and third options would each require a determination of the status of the fill relative to the contamination standards,[22] the only cross-reference to the first option should be the "sensory nuisance" provision, *i.e.*, subclause (i)(A)(II).[23]

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19. *Id.*, 32 Pa.B. at 568.

20. Proposed Section 287.1 "safe fill" (i)(A).

21. Proposed Section 287.1 "safe fill" (i)(B) and (C).

22. A separate argument, which will doubtlessly be raised by others, concerns the sheer range of substances covered in the various tables embodying the contamination standards, Proposed Appendix A, Tables 1-4, *published in* Safe Fill Proposed Rulemaking, 32 Pa.B. at 584-596. As drafted, if sampling for contaminants is required at all, then the sample must be tested for all the contaminants listed in the pertinent table. The proposed regulations leave no room for professional judgment, even if that judgment is informed by a due diligence inquiry or, going further, direct experience with the excavation site. As the Energy Association is arguing for a provision that would exempt utility trench spoils from all testing requirements, it is more appropriate to allow other parties to raise issues concerning the amount of flexibility that should be allowed as far as the range of substances to be tested.

23. On the general applicability of subclause (i)(A)(II), *see* n.8, *supra*.

Third, two of the due diligence provisions call for parties to specify that the material has not been subject to a release[24] or, alternatively, that there is no knowledge of a release at the excavation site.[25] Significant stress is placed on the concept of a release, but the term is undefined and its applicability is unclear. For example, consider excavation on an Act 2 site that has already been remediated to the statewide health standard. The site clearly has been subject to potential contamination, but it is just as clear that the potential contamination has been addressed. There is no clear guidance how the "subject to release" requirements should apply in this situation (if they should apply at all).

Finally, "historic fill" falls within the definition of "safe fill" provided it is "in quantities of less than or equal to 125 cubic yards **per excavation**.[26] The regulations should specify that more than one excavation can occur at a single site at the same time, provided the excavations are not connected and will not be contiguous with one another. In addition, the regulations should specify that the 125-yard limit applies only to that portion of the excavated material which is "historic fill."

4. In Determining Whether Fill Is Uncontaminated or Not, the Only Appropriate Yardstick, both for Setting Contamination Levels and for Determining Whether Those Levels Are Present, is the Act 2 Statewide Health Standards.

The Board and the Department spent considerable effort making sure the Act 2 Statewide Health Standards not only rested on sound science, but also incorporated a safety margin that took into effect site variability within Pennsylvania. By statute, the Board set the statewide health standards "so that any substantial present or probable future risk to human health and the environment is eliminated . . . ." [27] In addition, Act 2 implementation established that where

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24. Proposed Section 287.1 "safe fill" (i)(A)(I).

25. Proposed Section 287.1 "safe fill" (i)(B).

26. Proposed Section 287.1 "safe fill" (v) (emphasis supplied).

27. 35 P.S. § 6026.301(a)(2).

contamination status was being determined through an analysis of discrete samples, satisfaction of the standard would be assessed using a "75%/10x" rule, which meant that 75% of the samples had to fall below the contamination threshold, and no sample could exceed ten times the threshold.

The Energy Association joins others in urging the Board to adopt the statewide health standards, both as with regard to the contamination thresholds and as to the "75%/10x" rule. In the preamble to the Safe Fill Proposed Rulemaking, it is argued that more stringent thresholds are warranted in some cases because the fill will be moved to places that have soil with below-threshold contaminant levels or that have unknown geology or hydrology:

> Since the [statewide health standards] were developed to address cleanups at contaminated sites, they do not consider the impacts associated with the movement of soils to areas where soils are below the numeric levels used as the threshold for safe fill. In addition, unlike the land recycling program, locations where safe fill is placed are not evaluated from a geological or hydrological standpoint in advance of placement of material.[28]

We respectfully take issue with this reasoning. As to the pre-placement characteristics of the fill site, one must remember that the fill material already met the statewide health standards. Low levels of contamination in the receiving site's native soil would at worst serve to reduce contamination levels in the fill even further. As to the fill site's geology or hydrology, such site-specific characteristics might be appropriate if one was dealing with fill that met site-specific standards under Act 2, but it is irrelevant to the assessing fill that meets the statewide health standards (which were set with due consideration of Pennsylvania's diverse geology and hydrology). There is no evident need to depart from the Act 2 levels, and we urge that they be incorporated directly into these regulations by reference.[29]

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28. Safe Fill Proposed Rulemaking, 32 Pa.B. at 565.

29. Incorporation by reference would have the added benefit of allowing the safe fill thresholds to be updated automatically whenever there is a change in the statewide health standards. In contrast, maintaining two independent sets of standards carries the constant risk that the levels will fall out of harmony solely due to timing differences in the regulatory amendment process.

Separately, the preamble to the proposed regulations reports that the proposed regulations adopt a significantly more stringent 75%/2x rule, rather than the 75%/10x rule used in implementing Act 2, because the stricter rule appeared in recommendations offered by the Cleanup Standards Scientific Advisory Board ("CSSAB").[30] A review of the pertinent materials reveals that the CSSAB's recommendations were very extensive, and that some of them were carried through to the proposed regulations while others were not. Under the circumstances, a citation to the CSSAB's recommendation is not sufficient, in itself, to warrant adoption of the 75%/2x rule in lieu of the field-tested 75%/10x standard.

In an even greater departure from the 75%/10x rule, the proposed regulations would hold composite samples to an across-the-board 50% rule. No justification is offered for holding composite samples to a separate, higher standard, and it is difficult to envision a justification when one considers that composite samples generally provide a more accurate reflection of the characteristics of the fill as it will be after it is excavated, loaded, transported, unloaded and spread around with earthmoving equipment. (The value of this approach is recognized by the American Society for Testing and Materials, whose protocol for sampling piles of granular materials relies on using properly composited samples to obtain reliable, representative information.)

30. Safe Fill Proposed Rulemaking, 32 Pa.B. at 566.

CONCLUSION

As currently drafted, the proposed safe fill regulations threaten to impose massive landfilling costs on Pennsylvania utility expansion, enhancement and operation. The resulting disruption could take any number of forms. Those already receiving service through these systems will see significant increases in their bills, and those hoping to receive service through new or expanded legs may not receive service at all.

These and other unwanted effects can be avoided by establishing workable standards for qualifying utility trench spoils as safe fill. The Energy Association stands ready to work with the Board and the Department to the develop these standards, and we urge the Board to hold these regulations in abeyance while these standards are assembled.[31]

The Energy Association appreciates the opportunity to express these comments and asks the Board to take them into consideration as it continues its deliberations in this proceeding.

Respectfully submitted,
ENERGY ASSOCIATION OF PENNSYLVANIA

By: _____
DAN REGAN
Vice President: Regulatory Affairs

Dated: April 3, 2002

31. We believe categorical qualification, subject to the "sensory nuisance" requirements of proposed subclause (i)(A)(II), is justified on the merits; fully accords with utilities' environmentally sound current practices; and appropriately reflects the fact that utility trench spoils, while a major issue in terms of line extension, operations and maintenance, represent a relatively modest share of the materials that will be covered by these regulations. If discussions with the Department and others lead to refinements as to size use or other criteria, they can be incorporated in due course.

Trostle, Sharon F. - DEP ORIGINAL: 2245

From: Dan Regan [Dregan@ENERGYPA.ORG]
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Subject: Safe Fill: Environmental Quality Board Docket No. 7-372

20020403 EAPA comments.doc

Good afternoon:

The "Comments of the Energy Association of Pennsylvania" are attached for consideration in the referenced rulemaking proceeding (Environmental Quality Board Docket No. 7-372). I would appreciate a reply message confirming your receipt.

Best regards,
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ORIGINAL: 2245

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF 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:

* * * * *

[*Clean fill*--Uncontaminated, nonwater-soluble, nondecomposable inert solid material used to level an area or bring the area to grade. The term does not include material placed into or on waters of this Commonwealth.]

* * * * *

Construction/demolition waste--Solid waste resulting from the construction or demolition of buildings and other structures, including, but not limited to**[, wood, plaster, metals, asphaltic substances, bricks, block and unsegregated concrete.]**:

(i) Wood.

(ii) Plaster.

(iii) Metals.

(iv) Asphaltic substances.

(v) Bricks, block and concrete.

The term does not include the following if they are separate from other waste and are used as fill:

(i) Soil, rock, stone, gravel, brick and block, concrete, historic fill and used asphalt meeting the definition of safe fill.

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

* * * * *

Historic fill--

Historically contaminated material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to ____ [effective date of safe fill regulations] that is a conglomeration of soil and residuals, such as ashes from the residential burning of wood and coal, incinerator ash, coal ash, slag, dredged material and construction and demolition debris that was not subject to waste permitting requirements at the time it was placed.

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Safe fill--**Safe fill as defined in § 287.1 (relating to definitions).**

* * * * *

§ 271.2. Scope.

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

* * * * *

(7) Historic fill.

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Subchapter B. GENERAL REQUIREMENTS FOR PERMITS AND PERMIT APPLICATIONS

REQUIREMENT

§ 271.101. Permit requirement.

* * * * *

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

* * * * *

(3) For the use as fill of waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material, provided such materials are separate from other waste.

(4) * * *

(5) * * *

* * * * *

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

* * * * *

(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), **the rock, stone, gravel, brick, block and concrete are separate from other waste** and **the operator** 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. **If the facility is offsite and processes more than 50 tons or 45 metric tons per day, the following additional requirements shall be met:**

(1) The facility may not receive more than 350 tons or 315 metric tons per day.

(2) The facility shall maintain a 300-foot isolation distance from an occupied dwelling, unless the owner of the dwelling has provided a written waiver consenting to the facility being closer than 300 feet.

(3) The facility shall process the incoming waste within 30 days.

(4) Processed waste shall be removed from the facility within 60 days after processing for reuse.

(5) The operator shall maintain records that indicate compliance with the waste processing and removal limits identified in paragraphs (3) and (4).

(6) Residue from the operation shall be removed and disposed within 30 days after being generated. For purposes of this paragraph, the term "residue" includes material that is unable to be processed and processed material that is unusable.

* * * * *

(i) *Brick, block or concrete.* The placement of brick, block or concrete, or mixtures thereof, that does not qualify as safe fill shall be deemed to have a municipal waste permit when the brick, block or concrete is used to bring an area to grade, as construction material or in the reclamation of an active or abandoned mine or an abandoned quarry, provided that the brick, block or concrete is not a hazardous waste under Chapter 261a (relating to

identification and listing of hazardous waste) and, if in addition to subsections (a)--(c), the following conditions are met:

(1) The concentrations of regulated substances in the brick, block or concrete, or mixtures thereof, shall not exceed the lowest nonresidential direct contact numeric values calculated in accordance with the methodologies in §§ 250.306 and 250.307 (relating to ingestion numeric values; and inhalation numeric values). The numeric standards to be met are listed in Appendix A, Tables 5 and 6. [TABLES WILL NEED TO BE REVISED.] This condition does not apply if at the locations where the brick, block or concrete (or mixtures thereof) is placed, direct contact pathways are promptly and permanently eliminated by the placement of uncontaminated soil, safe fill or other materials or through other engineering controls.

(2) The concentrations of regulated substances in the brick, block or concrete, or mixtures thereof, shall satisfy groundwater protection standards based on either of the following:

(i) Analysis using the Synthetic Precipitation Leaching Procedure (SPLP) (*Method 1312 of SW-846, Test Methods for Evaluating Solid* Waste, promulgated by the EPA) that demonstrates that the brick, block or concrete does not produce a leachate in excess of the nonresidential medium specific concentrations (MSCs) for groundwater, in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter, contained in Chapter 250, Appendix A, Tables 1 and 2. The numeric standards are listed in Appendix A, Tables 5 and 6 [TABLES WILL NEED TO BE REVISED].

(ii) The higher of the nonresidential generic value of the soil-to-groundwater pathway numeric value calculated in accordance with the methodology in § 250.308 (a)(2)(i), (3), (4)(i) and (5) (relating to soil to groundwater pathway numeric values) and a value which is 100 times the nonresidential medium-specific concentration (MSC) for groundwater, as calculated in § 250.308 (relating to soil to groundwater pathway numeric values) and listed in Chapter 250, Appendix A, Table 4. The numeric standards to be met are listed in Appendix A, Tables 5 and 6 [TABLES WILL NEED TO BE REVISED].

(3) When calculating numeric standards under paragraphs (1) and (2), the following additional requirements apply:

(i) Formulae identified in § 250.305(b) (relating to MSCs in soil) shall apply as limits to the physical capacity of the soil to contain a substance.

(ii) When calculating the nonresidential soil-to-groundwater pathway numeric values, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total

dissolved solids concentrations less than or equal to 2,500 milligrams per liter.

(4) To determine whether the brick, block or concrete (or mixtures thereof) meets the standards in paragraphs (1) and (2), the material shall be sampled and analyzed in accordance with §§ 287.11(b) and (c) (relating to safe fill numeric standards), as applicable.

(5) Brick, block or concrete (or mixtures thereof) may not be placed pursuant to this permit-by-rule into or along surface waters of this Commonwealth unless prior Department approval has been obtained associated with active or abandoned mine or abandoned quarry reclamation activities or under Chapter 105 (relating to dam safety and waterway management)

(6) Brick, block or concrete (or mixtures thereof) may only be placed under this permit-by-rule on properties that are zoned and exclusively used for commercial and industrial uses. For unzoned properties, brick, block or concrete (or mixtures thereof) shall be reused in an area where the background concentrations of regulated substances are equal to or greater than the concentrations of regulated substances exceeding the safe fill numeric standards in the brick, block or concrete (or mixtures thereof) being brought to the site and the property is used exclusively for commercial or industrial purposes.

(7) At locations where brick, block or concrete (or mixtures thereof) is placed pursuant to this permit-by-rule, an erosion and sedimentation control plan shall be implemented that is consistent with the applicable requirements of Chapter 102 (relating to erosion and sediment control).

(8) At locations where brick, block or concrete (or mixtures thereof) is placed pursuant to this permit-by-rule, the materials may not be placed in karst terrain within 100 feet of the edge of a sinkhole.

(9) At locations where brick, block or concrete (or mixtures thereof) is placed pursuant to this permit-by-rule, the materials may not be placed within 300 feet of a potable water supply well or potable surface water intake unless the owner has provided a written waiver consenting to the placement of the material closer than 300 feet.

(10) Brick, block or concrete (or mixtures thereof) when placed pursuant to this permit-by-rule may not contain free liquids, based on visual inspection, and may not create recurring or persistent odor or other public nuisance resulting from chemical contaminants associated with the material.

(11) A person who has received and used brick, block or concrete (or mixtures thereof) pursuant to this permit-by-rule shall submit a written notice to the Department that includes the following:

(i) The name, address and phone number of the person receiving and using the waste material.

(ii) The quantity of waste material used at the receiving location.

(iii) The locations where waste material was removed for use and locations where the waste material is placed for use.

(iv) An identification of whether the area from which the waste material is removed is the subject of a corrective action or remediation activity.

(v) A description of engineering practices and construction activities used to assure that site excavation and placement of waste material does not cause onsite or offsite contamination.

(12) Records of analytical evaluations conducted on the brick, block or concrete (or mixtures thereof) used pursuant to this permit-by-rule shall be maintained by the person using and distributing the material and shall be made available to the Department for inspection. The records shall include the following:

(i) The dates of testing.

(ii) Each parameter tested.

(iii) The test results.

(iv) The laboratory where testing was conducted.

(v) The sampling procedures and analytical methodologies used.

(vi) The name of the person who collected the sample.

(13) This permit-by-rule does not authorize and may not be construed as an approval to discharge waste, wastewater or runoff from the site where the brick, block or concrete (or mixtures thereof) originated, or the site where the brick, block or concrete (or mixtures thereof) is beneficially used, to the land or waters of this Commonwealth.

(14) Brick, block or concrete (or mixtures thereof) placed in accordance with this permit-by-rule shall cease to be waste once the material is placed. Such material that is excavated or moved subsequent to placement pursuant to this permit-by-rule shall be evaluated at that time to determine whether the material qualifies as safe fill or is subject to regulation as a waste.

ARTICLE IX. RESIDUAL WASTE MANAGEMENT

CHAPTER 287. RESIDUAL WASTE MANAGEMENT--GENERAL PROVISIONS

Subchapter A. General

§ 287.1. Definitions.

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

* * * * *

Along – **Touching or contiguous, to be in contact with; to abut upon the normal wetted perimeter of surface waters.**

* * * * *

[*Clean fill*--Uncontaminated, nonwater-soluble, inert solid material used to level an area or bring the area to grade. The term does not include materials placed in or on the waters of this Commonwealth.]

* * * * *

Historic fill--

Historically contaminated material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to _____[effective date of safe fill regulations] that is a conglomeration of soil and residuals, such as ashes from the residential burning of wood and coal, incinerator ash, coal ash, slag, dredged material and construction/demolition debris that was not subject to waste permitting requirements at the time it was placed.

* * * * *

Nonresidential property – **Any real property on which commercial, industrial, manufacturing or any other activity is undertaken to further either the development, manufacturing or distribution of goods and services, intermediate and final products, including, but not limited to, administration of business activities, research and development, warehousing, shipping, transport, remanufacturing, stockpiling of raw materials, storage, repair and maintenance of commercial machinery and equipment, and solid waste management. This term shall not include schools, nursing homes or other residential-style facilities or recreational areas.**

* * * * *

Residential property – **Any property or portion of the property which does not meet the definition of "nonresidential property."**

* * * * *

Safe fill--

(i) Material that is soil, including rock and stone, dredged material, used asphalt, historic fill or brick, block or concrete (or mixtures thereof) resulting from construction or demolition activities; provided that there is no visible staining, recurring or persistent odor or other sensory nuisance resulting from chemical contaminants associated with the material, and that, based on an appropriate level of due diligence and knowledge of the material, meets one of the following requirements:

(A) The material meets the safe fill numeric standards referenced in § 287.11 (relating to safe fill numeric standards) and listed in Appendix A, Tables 1 and 2 of this Chapter without sampling and analysis.

(B) Based on sampling and analysis as described in § 287.11 (relating to safe fill numeric standards), the material meets the safe fill numeric standards listed in Appendix A, Tables 1 and 3 of this Chapter, and for those organic regulated substances that were known to have been released (or potentially released) into the material, the corresponding safe fill numeric standards listed in Appendix A, Table 2 not otherwise listed in Table 3.

(ii) The term includes the material in subparagraph (i) that exceeds the numeric limits in Appendix A, Table 1 or either Table 2 or 3, based on knowledge of the material or sampling, if there is no visible staining, recurring or persistent odor, or other sensory nuisance resulting from chemical contaminants associated with the material and the material meets one of the following requirements:

(A) The material is moved within a right-of-way.

(B) The material is moved offsite from a residential property currently developed as a residential property or zoned residential and never used for nonresidential purposes.

(C) The material is moved within a property, except for soil moved in accordance with subparagraph (iii).

(D) The quantity of material moved is less than 50 cubic yards and is moved to a nonresidential property.

(E) The material is historic fill in quantities of less than or equal to 125 cubic yards per excavation location.

(iii) The term includes soil impacted by normal agricultural use of pesticides including pesticides containing lead and arsenic. If the soil exceeds the numeric limits in Appendix A, Table 1 or either Table 2 or 3, and meets one of the following requirements, it is considered "safe fill":

(A) The soil is used for commercial or industrial purposes.

(B) The soil is blended with other soil to meet the limits in Appendix A, Table 1 and either Tables 2 or 3, and used for residential purposes.

(iv) The term includes dredged material provided that the dredged material is drained prior to placement. Dredged material and sediments from tidal streams shall meet the numeric criteria for chlorides as listed in Appendix A, Table 1 in order to qualify as safe fill. If dredged material exceeds the numeric limits in Appendix A, Table 1 and either Table 2 or 3, based on knowledge of the material or sampling, it is considered to be "safe fill" if the following requirements are met: (1) there is no visible staining, recurring or persistent odor or other sensory nuisance resulting from chemical contaminants associated with the dredged material; (2) the dredged material is placed directly on land adjacent to the dredging operation for beach nourishment or as a soil additive or soil substitute; and (3) one of the following conditions is met:

(A) The dredged material is placed on land at a location used for commercial or industrial purposes.

(B) The dredged material is blended with other soil or other dredged material to meet the numeric limits in Appendix A, Tables 1 and 2, and used for residential purposes.

(v) The term does not include material placed into or along surface waters of this Commonwealth unless prior Department approval has been obtained associated with active or abandoned mine or abandoned quarry reclamation activities or under Chapter 105 (relating to dam safety and waterway management), and the material meets the following conditions:

(A) Placement of the material does not cause an exceedance of the water quality standards in Chapters 16 and 93 (relating to water quality toxics management strategy--statement of policy; and water quality standards).

(B) For purposes of determining whether an exceedence of the water quality standards in Chapters 16 and 93 may occur, the Synthetic Precipitation Leaching Procedure (SPLP) *(Method 1312 of SW-846, Test Methods for Evaluating Solid Waste,* promulgated by the EPA) may be used, sampling and analysis showing that the material does not contain regulated substances at concentrations greater than the generic values in Table 7 [TO BE PREPARED] may be performed, or such other methods as the Department may approve may be used.

(vi) The person using the material has the burden of proof to demonstrate that the material is safe fill.

(vii) If, based on a determination made under subparagraph (i), the material exceeds the numeric standards referenced in subparagraph (i) and is covered under subparagraphs (ii)(A), (ii)(B), (ii)(C), (iii) or (iv), the concentrations of regulated substances that exceed the safe fill numeric

standards may be no greater than the lower of the nonresidential direct contact numeric values (using §§ 250.306 and 250.307 (relating to ingestion numeric values; and inhalation numeric values)) or nonresidential soil-to-groundwater pathway numeric values (using § 250.308(a)(2)(i), (3), (4)(i) and (5) (relating to soil to groundwater pathway numeric values)) established for aquifers used or currently planned for use containing less than 2,500 mg/l total dissolved solids. Formulae identified in § 250.305(b) (relating to MSCs in soil) apply as a limit to the physical capacity of the soil to contain a substance.

(viii) Notwithstanding any other provisions of Chapters 271 and 287, materials that meet the requirements under this definition of safe fill are not regulated as waste when used as fill or for other beneficial purposes.

* * * * *

***Sediment*--Materials deposited and directly overlain by water in rivers, lakes, ponds or tidal streams that consist of well sorted fractions or heterogeneous mixtures of sand, silt, clay, gravel and organic material deposited through erosion or by lake or river currents.**

* * * * *

***Site undergoing remediation activities*--The extent of contamination originating within the property boundaries and all areas in close proximity to the contamination necessary for the implementation of remediation activities to be conducted under the Land Recycling and Environmental Remediation Standards Act (Act 2) (35 P. S. §§ 6026.101--6026.909) or other environmental protection acts.**

* * * * *

§ 287.2. Scope.

* * * * *

(c) **Upon generation, m**anagement of the following types of waste is subject to this article instead of Article VIII (relating to municipal waste), and shall be regulated as if the waste is residual waste, regardless of whether the waste is municipal waste or residual waste:

* * * * *

(7) Historic fill.

* * * * *

§ 287.11. Safe fill numeric standards and sampling, analysis and attainment procedures.

(a) Safe fill numeric standards listed in Appendix A, Tables 1, 2 and 3 shall be calculated as follows:

(1) The lower of the following:

(i) The residential soil-to-groundwater pathway numeric value calculated either in accordance with the methodology in § 250.308 (a)(2)(i), (3), (4)(i) and (5) (relating to soil-to-groundwater pathway generic numeric values) or based on a concentration in the material that does not produce a leachate in excess of the residential medium specific concentrations for groundwater, in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter, contained in Chapter 250, Appendix A, Tables 1 and 2, when subjected to the Synthetic Precipitation Leaching Procedure (Method 1312 of SW-846, Test Methods for Evaluating Solid Waste).

(ii) The lowest residential direct contact numeric values calculated in accordance with the methodologies in §§ 250.306 and 250.307 (relating to ingestion numeric values; and relating to inhalation numeric values).

(iii) For copper and zinc, numeric limits which take plant toxicity into consideration and that do not exceed concentrations in § 271.914(b)(3) (relating to pollutant limits).

(2) When calculating numeric standards under paragraph (1), the following additional requirements apply:

(i) Formulae identified in § 250.305(b) (relating to MSCs in soil) shall apply as limits to the physical capacity of the safe fill to contain a substance.

(ii) When calculating the residential soil-to-groundwater pathway numeric value, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.

(b) To determine whether a material meets the permit-by-rule numeric standards in §§ 271.103(i) and 287.102(l), one of the sampling and analysis procedures identified in paragraphs (1) or (2), below, shall apply. These sampling and analysis procedures are also recommended for use in determining whether a material meets the safe fill numeric standards when this determination is made based on sampling and analysis of the material.

(1) Determinations based on composite sampling procedures shall include the following:

(i) For volumes of material equal to or less than 125 cubic yards, a total of eight samples shall be collected and analyzed as follows:

(A) For analysis of all substances other than volatile organic compounds (VOCs), the samples shall be analyzed in two composites of four samples each, in accordance with the most current version of the USEPA Manual, SW-846 *(Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. Office of Solid Waste and Emergency Response).*

(B) Two sampling locations shall be selected from the 8 sampling locations for analysis of VOCs. The selection of these sampling locations shall be based on field screening of the eight samples to select those locations that are most likely to contain the highest concentrations of VOCs.

(C) One grab sample shall be taken from each of the two sampling locations selected in accordance with § 287.11(b)(1)(i)(B). Collection and analysis of these samples for VOCs shall be in accordance with Method 5035 from the most current version of the USEPA Manual, SW-846 *(Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. Office of Solid Waste and Emergency Response).*

(ii) For volumes of material greater than 125 cubic yards and less than or equal to 3,000 cubic yards, a total of 12 samples shall be collected and analyzed as follows:

(A) For analysis of all substances other than VOCs, the samples shall be analyzed in three composites of four samples each.

(B) Three sampling locations shall be selected from the 12 sampling locations for analysis of VOCs. The selection of these sampling locations shall be based on field screening of the 12 samples to select those locations that are most likely to contain the highest concentrations of VOCs.

(C) One grab sample shall be taken from each of the three sampling locations selected in accordance with § 287.11(b)(1)(ii)(B). Collection and analysis of these samples for VOCs shall be in accordance with EPA, Method 5035, referenced in subparagraph (i)(C).

(iii) For each additional 3,000 cubic yards of material or part thereof over the initial 3,000 cubic yards, 12 additional samples shall be collected and analyzed as follows:

(A) For analysis of all substances other than VOCs, the samples shall be analyzed in composites of four samples each.

(B) One quarter of the total number of sampling locations shall be selected for analysis of VOCs. The selection of these sampling locations shall be based on field screening of all samples to select those locations that are most likely to contain the highest concentrations of VOCs.

(C) One grab sample shall be taken from each of the sampling locations selected in accordance with § 287.11(b)(1)(iii)(B). Collection and analysis of these samples for VOCs shall be in accordance with EPA Method 5035, referenced in subparagraph (i)(C).

(iv) Nothing herein shall preclude the use of discrete sampling procedures for VOCs as set forth in § 287.11(b)(2) and the associated attainment criteria in § 287.11(c)(2).

(2) Determinations based on discrete sampling procedures shall include the following:

(i) Sampling shall be in accordance with the most current version of the EPA RCRA Manual, SW-846 *(Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. Office of Solid Waste and Emergency Response).* Sampling for VOCs shall be in accordance with Method 5035 from the most current version of the EPA RCRA Manual, SW-846.

(ii) For volumes of material equal to or less than 125 cubic yards, a minimum of eight samples shall be collected and analyzed. For volumes of material greater than 125 cubic yards and less than or equal to 3,000 cubic yards, a minimum of 12 samples shall be collected and analyzed. For each additional 3,000 cubic yards of material or part thereof over the initial 3,000 cubic yards, a minimum of 12 additional samples shall be collected and analyzed.

(c) The measured numeric values for regulated substances shall meet the following:

(1) For a composite sample, the measured numeric value for a substance shall be equal to or less than half the safe fill numeric standard in § 287.11 (relating to numeric standards) for that substance and as listed in Appendix A, Tables 1, 2 and 3 or as specified in § 271.103(i) or § 287.102(l), as applicable; or

(2) For discrete samples, the measured numeric values for a substance in 75% of the discrete samples shall be equal to or less than the applicable numeric standard for that substance with no single measured numeric value exceeding more than twice the applicable numeric standard for a substance.

(3) For a grab sample, taken for analysis for VOCs in accordance with subsections (b)(1)(i)(C), (ii)(C) and (iii)(C), the measured numeric value for a substance must be less than or equal to the safe fill numeric standard in § 287.11 for that substance and as listed in Appendix A, Tables 1, 2 and 3, or as specified in § 271.103(i) or § 287.102(l), as applicable.

Subchapter C. GENERAL REQUIREMENTS FOR PERMITS AND PERMIT APPLICATIONS

§ 287.101. General requirements for permit.

* * * * *

(b) A person or municipality is not required to obtain a permit under this article, comply with the bonding or insurance requirements of Subchapter E (relating to bonding and insurance requirements) or comply with Subchapter B (relating to duties of generators) for one or more of the following:

* * * * *

(6) The use as fill of waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material, provided that they are separate from other waste.

* * * * *

(f) The Department will not require a permit under this article for the use of soil, dredged material, used asphalt, or historic fill material to bring an area to grade, to limit infiltration of rainfall, to facilitate runoff, or as construction material at a site undergoing remediation activities under Chapter 250 (relating to administration of land recycling program) and the Land Recycling and Environmental Remediation Standards Act (Act 2), (35 P.S. §§ 6026.101—6026.909) provided that the following conditions are met:

(1) The notice of intent to remediate the soils at the receiving site undergoing remediation activities (required by section 303(h) of Act 2 (35 P.S. § 6026.303(h)) identifies the Statewide health standard or the site specific standard as the remediation standard to be attained.

(2) The soil, dredged material, used asphalt, or historic fill material being used at the site will not cause the site undergoing remediation to exceed the remediation standard (or standards) selected for the site.

(3) The soil, dredged material, used asphalt, or historic fill material meets the standards set forth in Sections 287.102(l)(1) – (4).

(4) For soil, dredged material, used asphalt, or historic fill material placed at a site undergoing remediation activities prior to submission of the final report, the final report shall describe the sampling and analysis performed to characterize the material and the manner and location in which the material is used, and relief from liability shall include such materials upon approval of the final report.

* * * * *

§ 287.102. Permit-by-rule.

* * * * *

(l) *Soil, dredged material,used asphalt or historic fill material that exceeds safe fill numeric standards.* The placement of soil, dredged material, used asphalt, or historic fill material that exceeds safe fill numeric standardsshall be deemed to have a residual waste permit when the soil, dredged material, used asphalt, or historic fill material is used to bring an area to grade, as construction material, for control of fire and subsidence events or in reclamation of active or abandoned mines if the reclamation work is approved by the Department or is performed under contract with the Department, provided that the soil, dredged material, used asphalt, or

historic fill material is not a hazardous waste under Chapter 261a (relating to identification and listing of hazardous waste), and, if in addition to subsection (a), the following conditions are met:

(1) The concentrations of regulated substances in the soil, dredged material, used asphalt, or historic fill material used pursuant to this permit-by-rule shall not exceed the lowest nonresidential direct contact numeric values calculated in accordance with the methodologies in §§ 250.306 and 250.307 (relating to ingestion numeric values; and inhalation numeric values). The numeric standards are listed in Appendix A, Tables 5 and 6 [TABLES WILL NEED TO BE REVISED] . This condition does not apply if at the locations where the soil, dredged material, used asphalt or historic fill material is placed, direct contact pathways are promptly and permanently eliminated by the placement of uncontaminated soil, safe fill or other materials or through other engineering controls. Formulae identified in § 250.305(b) shall apply as limits to the physical capacity of the soil to contain a substance.

(2) Concentrations of regulated substances in soil, dredged material, used asphalt or historic fill material used pursuant to this permit-by-rule shall satisfy groundwater protection standards based on any of the following:

(i) Analysis using the Toxicity Characteristic Leaching Procedure (TCLP) that demonstrates that the soil, dredged material, used asphalt or historic fill material meets the requirements in § 288.623(a) (relating to minimum requirements for acceptable waste).

(ii) Analysis using the Synthetic Precipitation Leaching Procedure (SPLP) (*Method 1312 of SW-846, Test Methods for Evaluating Solid Waste*, promulgated by the EPA) that demonstrates that the soil, dredged material, used asphalt or historic fill material does not produce a leachate in excess of the nonresidential MSCs for groundwater, in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter. The numeric standards are listed in Appendix A, Tables 5 and 6 [TABLES WILL NEED TO BE REVISED

(iii) Analysis using the applicable analytical methods set forth in § 287.11 that demonstrates that the soil, dredged material, used asphalt or historic fill material does not contain regulated substances at concentrations exceeding the nonresidential soil-to groundwater pathway numeric values based on the highest value between the nonresidential generic value and a value which is 100 times the nonresidential medium-specific concentration (MSC) for groundwater, as calculated in § 250.308 (relating to soil to groundwater pathway numeric values) and listed in Chapter 250, Appendix A, Table 4.

(A) When calculating the nonresidential soil-to-groundwater pathway numeric value, the calculation shall be based on groundwater in aquifers

used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.

(B) Formulae identified in § 250.305(b) (relating to MSCs in soil) shall apply as limits to the physical capacity of the soil to contain a substance.

(3) To determine whether soil, dredged material, used asphalt or historic fill material meets the standards in paragraphs (1) and (2), the soil, dredged material, used asphalt or historic fill material shall be sampled and analyzed in accordance with §§ 287.11(b) and (c), as applicable.

(4) Soils from areas impacted by normal agricultural practices resulting in lead, arsenic or pesticide contamination (such as orchards) shall be analyzed for lead, arsenic, and organic pesticides used in those areas such as aldrin, dieldrin, DDD, DDE and DDT.

(5) At locations where soil, dredged material, used asphalt or historic fill material is placed pursuant to this permit-by-rule, an erosion and sedimentation control plan shall be implemented that is consistent with the applicable requirements of Chapter 102.

(6) At locations where soil, dredged material, used asphalt or historic fill material is placed pursuant to this permit-by-rule, the soil, dredged material, used asphalt or historic fill material may not be placed in or along waters of this Commonwealth unless prior approval has been obtained from the Department.

(7) At locations where soil, dredged material, used asphalt, or historic fill material is placed pursuant to this permit-by-rule, the soil, dredged material,used asphalt or historic fill material may not be placed in karst terrain within 100 feet of the edge of a sinkhole.

(89) At locations where soil, dredged material, used asphalt or historic fill material is placed pursuant to this permit-by-rule, the soil, dredged material, used asphalt or historic fill material may not be placed within 300 feet of a potable water supply well or a potable surface water intake unless the owner has provided a written waiver consenting to the placement of the soil, dredged material, used asphalt, or historic fill material closer than 300 feet.

(9) At locations where soil, dredged material, used asphalt or historic fill material is placed pursuant to this permit-by-rule, the soil, dredged material, used asphalt or historic fill material shall only be used under this permit on properties that are zoned and exclusively used for commercial and industrial uses. For unzoned properties, soil, dredged material, used asphalt or historic fill material shall only be used under this permit in an area where the background concentrations of regulated substances are equal to or greater than the concentrations of regulated substances exceeding the safe fill numeric standards in the soil, dredged material, used asphalt, or historic fill

material being brought to the site, and the property is used exclusively for commercial or industrial purposes.

(10) Soil, dredged material or used asphalt, or historic fill material when placed pursuant to this permit-by-rule may not contain free liquids, based on visual inspection, and may not create recurring or persistent odor or other public nuisance resulting from chemical contaminants in the soil, dredged material, used asphalt or historic fill material.

(11) A person who has received and used soil, dredged material, used asphalt or historic fill material pursuant to this permit-by-rule shall submit a written notice to the Department that includes the following:

(i) The names, addresses and phone numbers of the persons receiving and using the soil, dredged material, used asphalt or historic fill material.

(ii) The quantity of soil, dredged material, used asphalt or historic fill material used at the receiving location.

(iii) The locations where the soil, dredged material, used asphalt, or historic fill material were removed for use and where the soil, dredged material, used asphalt or historic fill material are placed for use.

(iv) An identification of whether the area where the soil, dredged material, used asphalt, or historic fill material originated is the subject of a corrective action or remediation activity.

(v) A description of engineering practices and construction activities used to assure that site excavation and placement of the soil, dredged material, used asphalt or historic fill material does not cause onsite or offsite contamination.

(vi) If soil, dredged material, used asphalt, or historic fill material is used for control of fire and subsidence events or in reclamation at abandoned mines, identification of the Department's separate authorization of the use in those projects.

(12) Records of analytical evaluations conducted on the soil, dredged material, used asphalt or historic fill material shall be maintained by the person using the soil, dredged material, used asphalt or historic fill material pursuant to this permit-by-rule and shall be made available to the Department for inspection. The records shall include the following:

(i) The dates of testing.

(ii) Each parameter tested.

(iii) The test results.

(iv) The laboratory where testing was conducted.

(v) The sampling procedures and analytical methodologies used.

(vi) The name of the person who collected the sample(s).

(13) This permit-by-rule does not authorize and may not be construed as an approval to discharge waste, wastewater or runoff from the site where the soil, dredged material, used asphalt or historic fill material originated or the site where the soil, dredged material, used asphalt or historic fill material is beneficially used, to the land or waters of this Commonwealth.

(14) Soil, dredged material, used asphalt or historic fill material placed in accordance with this permit-by-rule shall cease to be waste once the soil, dredged material, used asphalt or historic fill material is placed. Such soil, dredged material, used asphalt or historic fill material that is excavated or moved subsequent to placement pursuant to this permit-by-rule shall be evaluated at that time to determine whether the material qualifies as safe fill or is subject to regulation as a waste.

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF 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:

* * * * *

[*Clean fill***--Uncontaminated, nonwater-soluble, nondecomposable inert solid material used to level an area or bring the area to grade. The term does not include material placed into or on waters of this Commonwealth.]**

* * * * *

Construction/demolition waste--Solid waste resulting from the construction or demolition of buildings and other structures, including, but not limited to**[, wood, plaster, metals, asphaltic substances, bricks, block and unsegregated concrete.]**:

(i) Wood.

(ii) Plaster.

(iii) Metals.

(iv) Asphaltic substances.

(v) Bricks, block and concrete.

[The term does not include the following if they are separate from other waste and are used as clean fill:

(i) ~~Uncontaminated s~~Soil, rock, stone, gravel, brick and block, concrete, historic fill and used asphalt meeting the definition of safe fill.

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

* * * * *

Historic fill--

~~(i)~~ **Historically contaminated material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to** **[effective date of safe fill regulations]** ~~1988~~ **that is a conglomeration of soil and residuals, such as ashes from the residential burning of wood and coal, incinerator ash, coal ash, slag, dredged material and construction and demolition** ~~waste~~ **debris that was not subject to waste permitting requirements at the time it was placed.**

~~(ii) The term does not include historically contaminated material in quantities of less than or equal to 125 cubic yards per excavation location if there is no visible staining, recurring or persistent odor or other sensory nuisance resulting from chemical contaminants associated with the materialthe following conditions are met:~~

~~(A) There is no indication that the material has been subject to a release of regulated substances.~~

~~(B) There is no visible staining, odor or other sensory nuisance associated with the material.~~

* * * * *

Safe fill--**Safe fill as defined in § 287.1 (relating to definitions).**

* * * * *

§ 271.2. Scope.

* * * * *

(c) **Upon generation, m**~~M~~anagement of the following types of waste is subject to Article IX instead of this article, and shall be regulated as if the waste is residual waste, regardless of whether the waste is municipal waste or residual waste:

* * * * *

(7) Historic fill.

* * * * *

Subchapter B. GENERAL REQUIREMENTS FOR PERMITS AND PERMIT APPLICATIONS

REQUIREMENT

§ 271.101. Permit requirement.

* * * * *

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

* * * * *

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

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

~~(ii) W~~waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material, provided such materials are separate from other waste.

~~(4)]~~ ~~(3)~~ * * *

~~[(5)]~~ ~~(4)~~ * * *

* * * * *

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

* * * * *

(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), **the rock, stone, gravel, brick, block and concrete are separate from other waste ~~and contaminants~~** and **the operator** 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. **If the facility is offsite and processes more than 50 tons or 45 metric tons per day, the following additional requirements shall be met:**

(1) The facility may not receive more than 350 tons or 315 metric tons per day.

(2) The facility shall ~~and~~ maintain a 300-foot isolation distance from an occupied dwelling, unless the owner of the dwelling has provided a written waiver consenting to the facility being closer than 300 feet.

(3) The facility shall process the incoming waste within 30 days.

(4) Processed waste shall be removed from the facility within 60 days after ~~of~~ processing for reuse.

(5) The operator shall maintain records that indicate compliance with the waste processing and removal limits identified in paragraphs (3) and (4).

(6) Residue from the operation shall be removed and disposed within 30 days after ~~1 week of~~ being generated. For purposes of this paragraph, the term "residue" includes material that is unable to be processed and processed material that is unusable.

* * * * *

(i) *Brick, block or concrete.* The placement of ~~segregated~~ brick, block or concrete, or mixtures thereof, that does not qualify as safe fill ~~resulting from construction or demolition activities at industrial properties or placement of contaminated and segregated brick, block or concrete resulting from construction or demolition activities at commercial or residential properties~~ shall be deemed to have a municipal waste permit when the brick, block or concrete is used to bring an area to grade, as construction material or in the reclamation of an active or an abandoned mine or abandoned quarry, provided that the brick, block or concrete is not a hazardous waste under Chapter 261a (relating to identification and listing of hazardous waste) and, if in addition to subsections (a)--(c), the following conditions are met:

(1) The concentrations of regulated substances in the brick, block or concrete, or mixtures thereof, shall not exceed the ~~waste material does not exceed the lower of the following:~~

~~(i) The residential generic value of the soil-to-groundwater pathway numeric value calculated in accordance with the methodology in § 250.308 (a)(2)(i), (3), (4)(i) and (5) (relating to soil to groundwater pathway numeric values). The numeric standards to be met are listed in Appendix A, Tables 5 and 6.~~

~~(ii) The~~ lowest nonresidential direct contact numeric values calculated in accordance with the methodologies in §§ 250.306 and 250.307 (relating to ingestion numeric values; and inhalation numeric values). The numeric standards to be met are listed in Appendix A, Tables 5 and 6. [TABLES WILL NEED TO BE REVISED.] This condition does not apply if at the locations where the brick, block or concrete (or mixtures thereof) is placed, direct contact pathways are promptly and permanently eliminated by the placement of uncontaminated soil, safe fill or other materials or through other engineering controls.

(2) The concentrations of regulated substances in the brick, block or concrete, or mixtures thereof, shall satisfy groundwater protection standards based on either of the following:

(i) Analysis using the the Synthetic Precipitation Leaching Procedure (SPLP) (*Method 1312 of SW-846, Test Methods for Evaluating Solid* Waste, promulgated by the EPA) that demonstrates that the brick, block or concrete

does not produce a leachate in excess of the nonresidential medium specific concentrations (MSCs) for groundwater, in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter, contained in Chapter 250, Appendix A, Tables 1 and 2. The numeric standards are listed in Appendix A, Tables 5 and 6 [TABLES WILL NEED TO BE REVISED].

(ii) The higher of the nonresidential generic value of the soil-to-groundwater pathway numeric value calculated in accordance with the methodology in § 250.308 (a)(2)(i), (3), (4)(i) and (5) (relating to soil to groundwater pathway numeric values) and a value which is 100 times the nonresidential medium-specific concentration (MSC) for groundwater, as calculated in § 250.308 (relating to soil to groundwater pathway numeric values) and listed in Chapter 250, Appendix A, Table 4. The numeric standards to be met are listed in Appendix A, Tables 5 and 6 [TABLES WILL NEED TO BE REVISED].

(32) When calculating numeric standards under paragraphs (1) and (2), the following additional requirements apply:

(i) Formulae identified in § 250.305(b) (relating to MSCs in soil) shall apply as limits to the physical capacity of the soil to contain a substance.

(ii) When calculating the nonresidential soil-to-groundwater pathway numeric values, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.

(43) To determine whether the brick, block or concrete (or mixtures thereof) ~~waste material~~ meets the standards in paragraphs (1) and (2), the ~~waste~~ material shall be sampled and analyzed in accordance with §§ 287.11(b) and (c) ~~or (d)~~ (relating to safe fill numeric standards), as applicable.

(54) Brick, block or concrete (or mixtures thereof) ~~Waste material~~ may not be placed pursuant to this permit-by-rule into or along surface waters of this Commonwealth unless prior Department approval has been obtained associated with active or abandoned mine or abandoned quarry reclamation activities or under Chapter 105 (relating to dam safety and waterway management)~~, and the following conditions are met:~~

~~(i) Waste material placed into or along surface waters as approved by the Department under Chapter 105 may not exceed 10% of the numeric standards calculated in paragraphs (1) and (2), and placement of the waste may not cause an exceedance of the water quality standards in Chapters 16 and 93 (relating to water quality toxics management strategy—statement of policy; and water quality standards).~~

~~(ii) Waste material placed into or along waters as part of an active or abandoned mine or abandoned quarry reclamation may not cause an exceedance of the water quality standards in Chapters 16 and 93 and, based on an approved sampling and analysis plan, shall meet the following:~~

~~(A) The waste material received shall meet 10% of the numeric standards calculated in paragraphs (1) and (2).~~

~~(B) For metals only, in lieu of clause (A), the material may not produce a leachate in excess of the residential medium specific concentration for groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter, when subject to the Synthetic Precipitation Leaching Procedure (SPLP) *(Method 1312 of SW-846, Test Methods for Evaluating Solid Waste,* promulgated by the EPA). The numeric standards to be met for metals by SPLP are listed in Appendix A, Table 6. The SPLP may only be used when groundwater monitoring is being conducted at the location where waste is placed.~~

(6~~5~~) Brick, block or concrete (or mixtures thereof) ~~The waste material~~ may only be placed under this permit-by-rule on properties that are zoned and exclusively used for commercial and industrial uses. For unzoned properties, brick, block or concrete (or mixtures thereof) ~~waste material~~ shall be reused in an area where the background concentrations of regulated substances are ~~is~~ equal to or greater than the concentrations of regulated substances exceeding the safe fill numeric standards in the brick, block or concrete (or mixtures thereof) ~~contamination in waste material~~ being brought to the site and the property is ~~shall be~~ used exclusively for commercial or industrial purposes ~~only~~.

(7~~6~~) At locations where brick, block or concrete (or mixtures thereof) ~~waste material~~ is placed pursuant to this permit-by-rule, an erosion and sedimentation control plan shall be ~~is~~ implemented that is consistent with the applicable requirements of Chapter 102 (relating to erosion and sediment control).

~~(7) At locations where waste material is placed, the materials may not be placed within 100 feet of surface waters of this Commonwealth except as provided in paragraph (4).~~

(8) At locations where brick, block or concrete (or mixtures thereof) ~~waste material~~ is placed pursuant to this permit-by-rule, the materials may not be placed in karst terrain within 100 feet of the edge of a sinkhole.

(9) At locations where brick, block or concrete (or mixtures thereof) ~~waste material~~ is placed pursuant to this permit-by-rule, the materials may not be placed within 300 feet of a potable water supply well or potable surface water

intake ~~source~~ unless the owner has provided a written waiver consenting to the placement of the material closer than 300 feet.

~~(10) Waste material that is hazardous waste under Chapter 261a (relating to identification and listing of hazardous waste) may not be used under this permit.~~

(10~~1~~) Brick, block or concrete (or mixtures thereof) ~~Waste material~~ when placed pursuant to this permit-by-rule may not contain free liquids, based on visual inspection, and may not create recurring or persistent ~~an~~ odor or other public nuisance resulting from chemical contaminants associated with the material.

(11~~2~~) A person who has receiveds and useds brick, block or concrete (or mixtures thereof) pursuant to this permit-by-rule ~~waste material~~ shall submit a written notice to the Department that includes the following:

(i) The name, address and phone number of the person receiving and using the waste material.

(ii) The quantity of waste material used at the receiving location.

(iii) The locations where waste material was removed for use and locations where the waste material is placed for use.

(iv) An identification of whether the area from which the waste material is removed is the subject of a corrective action or remediation activity.

(v) A description of engineering practices and construction activities used to assure that site excavation and placement of waste material does not cause onsite or offsite contamination.

(12~~3~~) Records of analytical evaluations conducted on the brick, block or concrete (or mixtures thereof) pursuant to this permit-by-rule ~~waste material~~ shall be maintained by the person using and distributing the ~~waste~~ material and shall be made available to the Department for inspection. The records shall include the following:

(i) The dates of testing.

(ii) Each parameter tested.

(iii) The test results.

(iv) The laboratory where testing was conducted.

(v) The sampling procedures and analytical methodologies used.

(vi) The name of the person who collected the sample.

(134) This permit-by-rule does not authorize and may not be construed as an approval to discharge waste, wastewater or runoff from the site where the brick, block or concrete (or mixtures thereof) ~~waste material~~ originated, or the site where the brick, block or concrete (or mixtures thereof) ~~waste material~~ is beneficially used, to the land or waters of this Commonwealth.

(145) Brick, block or concrete (or mixtures thereof) ~~Waste~~ placed in accordance with this permit-by-rule shall cease to be waste once ~~as long as~~ the material ~~remains in~~ is placed. Such material that is excavated or moved subsequent to placement pursuant to this permit-by-rule shall be evaluated at that time to determine whether the material qualifies as safe fill or is subject to regulation as a waste

ARTICLE IX. RESIDUAL WASTE MANAGEMENT

CHAPTER 287. RESIDUAL WASTE MANAGEMENT--GENERAL PROVISIONS

Subchapter A. General

§ 287.1. Definitions.

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

* * * * *

Along – Touching or contiguous, to be in contact with; to abut upon the normal wetted perimeter of surface waters.

* * * * *

[*Clean fill*--Uncontaminated, nonwater-soluble, inert solid material used to level an area or bring the area to grade. The term does not include materials placed in or on the waters of this Commonwealth.]

* * * * *

Historic fill--

~~(i)~~ Historically contaminated material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to _____ [effective date of safe fill regulations] ~~1988~~ that is a conglomeration of soil and residuals, such as ashes from the residential burning of wood and coal, incinerator ash, coal ash, slag, dredged material and construction/demolition ~~waste~~ debris that was not subject to waste permitting requirements at the time it was placed.

~~(ii) The term does not include historically contaminated material in quantities of less than or equal to 125 cubic yards per excavation location if the following conditions are met:~~

~~(A) There is no indication that the material has been subject to a release of regulated substances.~~

~~(B) There is no visible staining, odor or other sensory nuisance associated with the material.~~

* * * * *

Nonresidential property – Any real property on which commercial, industrial, manufacturing or any other activity is undertaken to further either the development, manufacturing or distribution of goods and services, intermediate and final products, including, but not limited to, administration of business activities, research and development, warehousing, shipping, transport, remanufacturing, stockpiling of raw materials, storage, repair and maintenance of commercial machinery and equipment, and solid waste management. This term shall not include schools, nursing homes or other residential-style facilities or recreational areas.

* * * * *

Residential property – Any property or portion of the property which does not meet the definition of "nonresidential property."

* * * * *

Safe fill--

(i) Material that is ~~uncontaminated~~ soil, including rock and stone, ~~uncontaminated~~ dredged material, ~~uncontaminated~~ used asphalt, historic fill or ~~uncontaminated and segregated~~ brick, block or concrete (or mixtures thereof) resulting from construction or demolition activities; provided that there is no visible staining, recurring or persistent odor or other sensory nuisance resulting from chemical contaminants associated with the material, and that, based on an appropriate level of due diligence and knowledge of the material, ~~from residential and commercial properties and that~~ meets one of the following requirements:

(A) The material meets the safe fill numeric standards referenced in § 287.11 (relating to safe fill numeric standards) and listed in Appendix A, Tables 1 and 2 of this Chapter without sampling and analysis, ~~and meets the following requirements:~~

~~(I) Based on an appropriate level of due diligence, there is no knowledge or past activity that indicates the material has been subject to a release.~~

~~(II) There is no visible staining, odor or other sensory nuisance resulting from chemical contaminants associated with the material.~~

(B) Based on sampling and analysis as described in § 287.11 (relating to safe fill numeric standards), ~~an appropriate level of due diligence, the~~

~~historical data on the excavation site indicates that past activity had the potential to result in a release, but there is no knowledge of a release and~~ the material meets the safe fill numeric standards ~~referenced in § 287.11 and~~ listed in Appendix A, Tables 1 and 3 of this Chapter, and for those organic regulated substances that were known to have been released (or potentially released) into the material, the corresponding safe fill numeric standards listed in Appendix A, Table 2 not otherwise listed in Table 3~~, and meets the requirements of clause (A)~~.

~~(C) Based on an appropriate level of due diligence and knowledge of the site, the material meets the safe fill numeric standards without sampling and analysis and meets the requirements of clause (A).~~

(ii) The term includes the material in subparagraph (i) that exceeds the numeric limits in Appendix A, Table 1 or either Table 2 or 3, based on knowledge of the material or sampling, if there is no visible staining, recurring or persistent odor, or other sensory nuisance resulting from chemical contaminants associated with the material and the material ~~it meets the criteria in subparagraph (i)(A)(I) and (II) and~~ meets one of the following requirements:

(A) The material is moved within a right-of-way.

(B) The material is moved offsite from a residential property currently developed as a residential property or zoned residential and never used for nonresidential purposes.

(C) The material is moved within a property, except for soil moved in accordance with subparagraph (iii).

(D) The quantity of material moved is less than 50 cubic yards and is moved to a nonresidential property.

(E) The material is historic fill in quantities of less than or equal to 125 cubic yards per excavation location.

(iii) The term includes soil impacted by normal agricultural use of pesticides including pesticides containing lead and arsenic ~~moved from a fruit orchard under development where pesticides were used in an authorized manner in conjunction with standard horticultural practices~~. If the soil exceeds the numeric limits in Appendix A, Table 1 or either Table 2 or 3, and meets one of the following requirements, it is considered "safe fill":

(A) The soil is used for commercial or industrial purposes.

(B) The soil is blended with other soil to meet the limits in Appendix A, Table 1 and either Tables 2 or 3, and used for residential purposes.

(iv) The term includes dredged material provided that the dredged material is drained prior to placement. Dredged material and sediments from tidal streams shall meet the numeric criteria for chlorides as listed in Appendix A, Table 1 in order to qualify as safe fill. ~~placed directly on land adjacent to the dredging operation for beach nourishment or as a soil additive or soil substitute.~~ If dredged material exceeds the numeric limits in Appendix A, Table 1 and either Table 2 or 3, based on knowledge of the material or sampling, it is considered to be "safe fill" if the following requirements are met: (1) there is no visible staining, recurring or persistent odor or other sensory nuisance resulting from chemical contaminants associated with the dredged material; (2) the dredged material is placed directly on land adjacent to the dredging operation for beach nourishment or as a soil additive or soil substitute; and (3) ~~it shall meet the criteria in subparagraph (i)(A)(I) and (II) and meet~~ one of the following conditions is met~~, it is considered "safe fill"~~:

(A) The dredged material is placed on land at a location used for commercial or industrial purposes.

(B) The dredged material is blended with other soil or other dredged material to meet the numeric limits in Appendix A, Tables 1 and 2, and used for residential purposes.

~~(v) The term includes historic fill in quantities of less than or equal to 125 cubic yards per excavation location if the conditions of subparagraph (i)(A)(I) and (II) are met.~~

(v~~i~~) The term does not include material placed into or along surface waters of this Commonwealth unless prior Department approval has been obtained associated with active or abandoned mine or abandoned quarry reclamation activities or under Chapter 105 (relating to dam safety and waterway management), and the material meets the following conditions:

(A) ~~Material placed into or along surface waters as approved by the Department under Chapter 105 and does not exceed 10% of the numeric standards calculated in § 287.11(a)(1) and (2), and p~~Placement of the material does not cause an exceedance of the water quality standards in Chapters 16 and 93 (relating to water quality toxics management strategy--statement of policy; and water quality standards).

(B) For purposes of determining whether an exceedence of the water quality standards in Chapters 16 and 93 may occur, the Synthetic Precipitation Leaching Procedure (SPLP) *(Method 1312 of SW-846, Test Methods for Evaluating Solid Waste,* promulgated by the EPA) may be used, sampling and analysis showing that the material does not contain regulated substances at concentrations greater than the generic values in Table 7 [TO BE PREPARED] may be performed, or such other methods as the Department may approve may be used. -

~~(B) Material placed into or along waters as part of an active or abandoned mine or abandoned quarry reclamation does not cause an exceedance of the water quality standards in Chapters 16 and 93 and, based on an approved sampling and analysis plan, meets the following:~~

~~(I) The material received meets 10% of the numeric standards calculated in § 287.11(a)(1) and (2).~~

~~(II) For metals only, in lieu of subclause (I), the material does not produce a leachate in excess of the residential medium-specific concentration for groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter, when subject to the Synthetic Precipitation Leaching Procedure (SPLP) *(Method 1312 of SW-846, Test Methods for Evaluating Solid Waste,* promulgated by the EPA). The numeric standards to be met for metals by SPLP are listed in Appendix A, Table 1. The SPLP may only be used when groundwater monitoring is being conducted at the location where waste is placed.~~

(vii) The person using the material has the burden of proof to demonstrate that the material is safe fill.

(viii) If, based on a determination made under subparagraph (i), the material exceeds the numeric standards referenced in subparagraph (i) and is covered under subparagraphs (ii)(A), (ii)(B), (ii)(C), (iii) or (iv), the concentrations of regulated substances that exceed the safe fill numeric standards ~~exceedance~~ may be no greater than the lower of the nonresidential direct contact numeric values (using §§ 250.306 and 250.307 (relating to ingestion numeric values; and inhalation numeric values)) or nonresidential soil-to-groundwater pathway numeric values (using § 250.308(a)(2)(i), (3), (4)(i) and (5) (relating to soil to groundwater pathway numeric values)) established for aquifers used or currently planned for use containing less than 2,500 mg/l total dissolved solids. Formulae identified in § 250.305(b) (relating to MSCs in soil) apply as a limit to the physical capacity of the soil to contain a substance.

(viii~~x~~) Notwithstanding any other provisions of Chapters 271 and 287, ~~M~~materials that meet the requirements under this definition of safe fill ~~term~~ are not regulated as waste when used as fill or for other beneficial purposes.

* * * * *

***Sediment*--Materials deposited and directly ~~or~~ overlain by water in rivers, lakes, ponds or tidal streams that consist of well sorted fractions or heterogeneous mixtures of sand, silt, clay, gravel and organic material deposited through erosion or by lake or river currents.**

* * * * *

Site undergoing remediation activities--**The extent of contamination originating within the property boundaries and all areas in close proximity to the contamination necessary for the implementation of remediation activities to be conducted under the Land Recycling and Environmental Remediation Standards Act (Act 2) (35 P. S. §§ 6026.101--6026.909) or other environmental protection acts.**

* * * * *

§ 287.2. Scope.

* * * * *

(c) **Upon generation, m**~~M~~anagement of the following types of waste is subject to this article instead of Article VIII (relating to municipal waste), and shall be regulated as if the waste is residual waste, regardless of whether the waste is municipal waste or residual waste:

* * * * *

(7) Historic fill.

* * * * *

§ 287.11. Safe fill numeric standards and sampling, analysis and attainment procedures.

(a) ~~When conducting sampling and analysis, s~~Safe fill numeric standards listed in Appendix A, Tables 1, 2 and 3 shall be calculated as follows:

(1) ~~For safe fill containing substances other than copper and zinc, t~~The lower of the following:

(i) The residential ~~generic value of the~~ soil-to-groundwater pathway numeric value calculated either in accordance with the methodology in § 250.308 (a)(2)(i), (3), (4)(i) and (5) (relating to soil-to-groundwater pathway generic numeric values) or based on a concentration in the material that does not produce a leachate in excess of the residential medium specific concentrations for groundwater, in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter, contained in Chapter 250, Appendix A, Tables 1 and 2, when subjected to the Synthetic Precipitation Leaching Procedure (Method 1312 of SW-846, Test Methods for Evaluating Solid Waste).

(ii) The lowest residential direct contact numeric values calculated in accordance with the methodologies in §§ 250.306 and 250.307 (relating to ingestion numeric values; and relating to inhalation numeric values).

(iii~~2~~) ~~In addition to paragraph (1), f~~For ~~safe fill containing~~ copper and zinc, numeric limits which take plant toxicity into consideration and that do not exceed concentrations in § 271.914(b)(3) (relating to pollutant limits).

(23) When calculating numeric standards under paragraph (1), the following additional requirements apply:

(i) Formulae identified in § 250.305(b) (relating to MSCs in soil) shall apply as limits to the physical capacity of the safe fill to contain a substance.

(ii) When calculating the residential soil-to-groundwater pathway numeric value, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.

~~(34) Dredged material shall be drained prior to placement on land as safe fill. In addition, dredged material shall meet the requirements of subparagraphs (i) and (iii) or the requirements of subparagraphs (ii) and (iii).~~

~~(i) A Toxicity Characteristic Leaching Procedure (TCLP) that demonstrates that the dredged material meets the requirements in § 288.623(a) (relating to minimum requirements for acceptable waste).~~

~~(ii) The dredged material may not produce a leachate in excess of the residential medium specific concentration for groundwater, in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter, when subject to the Synthetic Precipitation Leaching Procedure (SPLP) *(Method 1312 of SW 846, Test Methods for Evaluating Solid Waste,* promulgated by the EPA). The numeric standards to be met by SPLP are listed in Appendix A, Tables 1 and 2.~~

~~(iii) Dredged material and sediments from tidal streams shall meet the numeric criteria for chlorides as listed in Appendix A, Table 1.~~

(b) To determine whether a material meets the permit-by-rule numeric standards in §§ 271.103(i) and 287.102(l), ~~safe fill numeric standards,~~ one of the sampling and analysis procedures identified in paragraphs (1) or (2), below, shall apply. These sampling and analysis procedures are also recommended for use in determining whether a material meets the safe fill numeric standards when this determination is made based on sampling and analysis of the material.~~:~~

(1) Determinations ~~Sampling~~ based on composite sampling procedures shall include the following:

(i) For volumes of material equal to or less than 125 cubic yards, a total of eight samples shall be collected and analyzed as follows:

(A) For analysis of all substances other than volatile organic compounds (VOCs), the samples shall be analyzed in two composites of four samples

each, in accordance with the most current version of the USEPA Manual, SW-846 *(Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. Office of Solid Waste and Emergency Response).*

(B) Two samplinges locations shall be selected from the 8 sampling locationses for analysis of VOCs. The selection of these sampling locationses shall be based on field screening of the eight samples to select those locations ~~samples~~ that are most likely to contain the highest concentrations of VOCs.

(C) One ~~Two~~ grab samples shall be taken from each of the two sampling locations selected in accordance with § 287.11(b)(1)(i)(B). Collection and analysis of these samples for VOCs shall be ~~same areas in the material from which the two samples used for field screening of VOCs were taken,~~ in accordance with Method 5035 from the most current version of the USEPA Manual, SW-846 *(Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. Office of Solid Waste and Emergency Response).*

(ii) For volumes of material greater than 125 cubic yards and less than or equal to 3,000 cubic yards, a total of 12 samples shall be collected and analyzed as follows:

(A) For analysis of all substances other than VOCs, the samples shall be analyzed in three composites of four samples each.

(B) Three sampling locationses shall be selected from the 12 sampling locationses for analysis of VOCs. The selection of these sampling locations ~~samples~~ shall be based on field screening of the 12 samples to select those locations ~~samples~~ that are most likely to contain the highest concentrations of VOCs.

(C) One ~~Three~~ grab samples shall be taken from each of the three sampling locations selected in accordance with § 287.11(b)(1)(ii)(B). Collection and analysis of these samples for VOCs shall be ~~the same areas in the material from which the three samples used for field screening of VOCs were taken,~~ in accordance with EPA, Method 5035, referenced in subparagraph (i)(C).

(iii) For each additional 3,000 cubic yards of material or part thereof over the initial 3,000 cubic yards, 12 additional samples shall be collected and analyzed as follows:

(A) For analysis of all substances other than VOCs, the samples shall be analyzed in ~~three~~ composites of four samples each.

(B) One quarter of the total number of ~~Three~~ sampling locationses ~~for analysis of VOCs~~ shall be selected ~~from the 12 samples~~ for analysis of VOCs. The selection of these sampling locationses shall be based on field screening of all ~~the 12~~ samples to select those locations ~~samples~~ that are most likely to contain the highest concentrations of VOCs.

(C) One ~~Three~~ grab samples shall be taken from each of the sampling locations selected in accordance with § 287.11(b)(1)(iii)(B). Collection and analysis of these samples for VOCs shall be ~~the same areas in material from which the three samples used for field screening of VOCs were taken,~~ in accordance with EPA Method 5035, referenced in subparagraph (i)(C).

(iv) Nothing herein shall preclude the use of discrete sampling procedures for VOCs as set forth in § 287.11(b)(2) and the associated attainment criteria in § 287.11(c)(2).

(2) Determinations ~~Sampling~~ based on discrete sampling procedures shall include the following:

~~(i) For analysis of substances, sampling shall be random and representative of the safe fill being sampled.~~

(ii) Sampling shall be in accordance with the most current version of the EPA RCRA Manual, SW-846 *(Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. Office of Solid Waste and Emergency Response).* Sampling for VOCs shall be in accordance with Method 5035 from the most current version of the EPA RCRA Manual, SW-846.

(iii) For volumes of material equal to or less than 125 cubic yards, a minimum of eight samples shall be collected and analyzed. For volumes of material greater than 125 cubic yards and less than or equal to 3,000 cubic yards, a minimum of 12 samples shall be collected and analyzed. For each additional 3,000 cubic yards of material or part thereof over the initial 3,000 cubic yards, a minimum of 12 additional samples shall be collected and analyzed.

~~(iv) For VOCs analysis, grab sampling procedures shall be the procedures described in paragraph (1), for the equivalent volumes of material sampled.~~

(c) The measured numeric values ~~analysis of composite samples~~ for regulated substances ~~required in subsection (b)(1)~~ shall meet the following:

(1) For a composite sample, the measured numeric value for a substance shall be ~~is~~ equal to or less than half the safe fill numeric standard in § 287.11 (relating to numeric standards) for that substance and as listed in Appendix A, Tables 1, 2 and 3, or as specified in § 271.103(i) or § 287.102(l), as applicable; or

(2) For discrete samples, the measured numeric values for a substance in 75% of the discrete samples shall be equal to or less than the applicable numeric standard for that substance with no single measured numeric value exceeding more than twice the applicable numeric standard for a substance.

(3) For a grab sample, taken for analysis for VOCs in accordance with subsections (b)(1)(i)(C), (ii)(C) and (iii)(C), the measured numeric value for a

substance must be ~~is~~ less than or equal to the safe fill numeric standard in § 287.11 for that substance and as listed in Appendix A, Tables 1, 2 and 3, or as specified in § 271.103(i) or § 287.102(l), as applicable.

~~(d) For discrete samples required in subsection (b)(2), the measured numeric values for a substance in 75% of the discrete samples shall be equal to or less than the safe fill numeric standard in this section for that substance with no single sample exceeding more than twice the safe fill numeric standard for a substance.~~

~~(e) To determine whether sediments meet the safe fill numeric standards, sampling and analyses shall be conducted in accordance with guidance developed by the Department.~~

Subchapter C. GENERAL REQUIREMENTS FOR PERMITS AND PERMIT APPLICATIONS

§ 287.101. General requirements for permit.

* * * * *

(b) A person or municipality is not required to obtain a permit under this article, comply with the bonding or insurance requirements of Subchapter E (relating to bonding and insurance requirements) or comply with Subchapter B (relating to duties of generators) for one or more of the following:

* * * * *

~~[~~(6) The use as ~~clean~~ fill of ~~the materials in subparagraphs (i) and (ii) if they are separate from other waste. The person using the material as clean fill has the burden of proof to demonstrate that the material is clean fill.~~

~~(i) The following materials, if they are uncontaminated: soil, rock, stone, gravel, brick and block, concrete and used asphalt.~~

~~(ii) W~~waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material, provided that they are separate from other waste.~~]~~

* * * * *

(f) The Department will not require a permit under this article for the use of soil, dredged material, used asphalt, or historic fill material to bring an area to grade, to limit infiltration of rainfall, to facilitate runoff, or as construction material at a site undergoing remediation activities under Chapter 250 (relating to administration of land recycling program) and the Land Recycling and Environmental Remediation Standards Act (Act 2), (35 P.S. §§ 6026.101—6026.909) provided that the following conditions are met:

(1) The notice of intent to remediate the soils at the receiving site undergoing remediation activities (required by section 303(h) of Act 2 (35 P.S. § 6026.303(h))

identifies the Statewide health standard or the site specific standard as the remediation standard to be attained.

(2) The soil, dredged material, used asphalt, or historic fill material being used at the site will not cause the site undergoing remediation to exceed the remediation standard (or standards) selected for the site.

(3) The soil, dredged material, used asphalt, or historic fill material meets the standards set forth in Sections 287.102(l)(1) – (4).

(4) For soil, dredged material, used asphalt, or historic fill material placed at a site undergoing remediation activities prior to submission of the final report, the final report shall describe the sampling and analysis performed to characterize the material and the manner and location in which the material is used, and relief from liability shall include such materials upon approval of the final report.

* * * * *

§ 287.102. Permit-by-rule.

* * * * *

~~(j) *Contaminated soil resulting from agricultural practices.* The placement of soil from known areas of contamination shall be deemed to have a residual waste permit when used to bring an area to grade, as construction material, for control of fire and subsidence events or in reclamation of active or abandoned mines, if the reclamation work is approved by the Department or is performed under contract with the Department, and if in addition to subsection (a), the following conditions are met:~~

~~(1) The soil from known areas of contamination is analyzed for lead and arsenic. If the soil comes from a location where an orchard once existed, the soil may be analyzed for pesticides including aldrin, dieldrin, DDD, DDE and DDT. Contamination in soil may not exceed the nonresidential soil-to-groundwater pathway numeric values based on the following:~~

~~(i) The highest value between the nonresidential generic value and a value which is 100 times the nonresidential medium-specific concentration (MSC) for groundwater, as calculated in § 250.308 (relating to soil to groundwater pathway numeric values) and listed in Appendix A, Table 4.~~

~~(ii) When calculating the nonresidential soil-to-groundwater pathway numeric value, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.~~

~~(iii) Formulae identified in § 250.305(b) (relating to MSCs in soil) shall apply as limits to the physical capacity of the soil to contain a substance.~~

~~(2) To determine whether soil meets the standards in paragraph (1), the soil shall be sampled and analyzed in accordance with § 287.11(b) and either (c) or (d) (relating to safe fill numeric standards).~~

~~(3) At locations where soil from known areas of contamination is placed, direct contact pathways are promptly and permanently eliminated by the placement of uncontaminated soil or through other engineering controls.~~

~~(4) At locations where soil from known areas of contamination is placed, an erosion and sedimentation control plan is implemented that is consistent with the applicable requirements of Chapter 102 (relating to erosion and sediment control).~~

~~(5) Soil is not placed into or on waters of this Commonwealth.~~

~~(6) At locations where soil from known areas of contamination is placed, soil may not be placed within 100 feet of surface waters of this Commonwealth.~~

~~(7) At locations where soil from known areas of contamination is placed, soil may not be placed within 100 feet of the edge of a sinkhole.~~

~~(8) At locations where soil from known areas of contamination is placed, soil may not be placed within 300 feet of a water source unless the owner has provided a written waiver consenting to the placement of the soil closer than 300 feet.~~

~~(9) At locations where soil from known areas of contamination is placed, soil shall only be used under this permit on properties that are zoned and exclusively used for commercial and industrial uses. For unzoned properties, soil from known areas of contamination shall be used in an area where the background is equal to or greater than the concentration of contamination in soil being brought to the site and the property shall be used for commercial or industrial purposes only.~~

~~(10) Soil from known areas of contamination that is hazardous waste under Chapter 261a (relating to identification and listing of hazardous waste) may not be used under this permit.~~

~~(11) Soil from known areas of contamination when placed may not contain free liquids, based on visual inspection, and may not create odor or other public nuisance resulting from chemical contaminants in the soil.~~

~~(12) A person who receives and uses soil from known areas of contamination shall submit a written notice to the Department that includes the following:~~

~~(i) The names, addresses and phone numbers of the persons receiving and using the soil from known areas of contamination.~~

~~(ii) The quantity of soil used from known areas of contamination at the receiving location.~~

~~(iii) The locations of the known areas of contamination where soil was removed for use and where the soil is placed for use.~~

~~(iv) An identification of whether the known areas of contamination is the subject of a corrective action or remediation activity.~~

~~(v) A description of engineering practices and construction activities used to eliminate direct contact pathways and to assure that site excavation and placement of soil does not cause onsite or offsite contamination.~~

~~(vi) If soil is used for control of fire and subsidence events or in reclamation at abandoned mines, include a reference to the Department's separate authorization of the use in those projects.~~

~~(13) Records of analytical evaluations conducted on the soil from known areas of contamination shall be maintained by the person using and distributing the soil and shall be made available to the Department for inspection. The records shall include the following:~~

~~(i) The dates of testing.~~

~~(ii) Each parameter tested.~~

~~(iii) The test results.~~

~~(iv) The laboratory where testing was conducted.~~

~~(v) The sampling procedures and analytical methodologies used.~~

~~(vi) The name of the person who collected the sample.~~

~~(14) This permit does not authorize and may not be construed as an approval to discharge waste, wastewater or runoff from the site where contaminated soil originated, or the site where contaminated soil is beneficially used, to the land or waters of this Commonwealth.~~

~~(15) Soil from known areas of contamination placed in accordance with this permit shall cease to be waste as long as the soil remains in place.~~

~~(16) For purposes of this subsection, the term "known areas of contamination" means known areas of soil impacted by authorized agricultural practices resulting in lead, arsenic and pesticide contamination.~~

(l) ~~*Contaminated s*~~*Soil, dredged material,* ~~*or used asphalt*~~ *or historic fill material* ~~*impacted by a release or contaminated soil, dredged material or used*~~

~~*asphalt* that exceeds safe fill numeric standards as a result of urbanization.~~ The placement of ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt, or historic fill material ~~impacted by a release or contaminated soil, dredged material or used asphalt~~ that exceeds safe fill numeric standards ~~as a result of urbanization~~ shall be deemed to have a residual waste permit when the soil, dredged material, used asphalt, or historic fill material is used to bring an area to grade, as construction material, for control of fire and subsidence events or in reclamation of active or abandoned mines if the reclamation work is approved by the Department or is performed under contract with the Department, provided that the soil, dredged material, used asphalt, or historic fill material is not a hazardous waste under Chapter 261a (relating to identification and listing of hazardous waste), and, if in addition to subsection (a), the following conditions are met:

(1) The concentrations of regulated substances in the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt, or historic fill material used pursuant to this permit-by-rule shall ~~impacted by a release or contaminated soil, dredged material or used asphalt that exceeds safe fill numeric standards may~~ not exceed the lowest nonresidential direct contact numeric values calculated in accordance with the methodologies in §§ 250.306 and 250.307 (relating to ingestion numeric values; and inhalation numeric values). The numeric standards are listed in Appendix A, Tables 5 and 6 [TABLES WILL NEED TO BE REVISED]. This condition does not apply if at the locations where the soil, dredged material, used asphalt or historic fill material is placed, direct contact pathways are promptly and permanently eliminated by the placement of uncontaminated soil, safe fill or other materials or through other engineering controls.

~~(i) When calculating the residential direct contact numeric value, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.~~

~~(ii)~~ Formulae identified in § 250.305(b) shall apply as limits to the physical capacity of the soil to contain a substance.

(2) Concentrations of regulated substances ~~Contamination~~ in soil, dredged material, ~~or~~ used asphalt or historic fill material used pursuant to this permit-by-rule ~~may not exceed~~ shall satisfy groundwater protection standards based on any ~~either~~ of the following:

(i) Analysis using the Toxicity Characteristic Leaching Procedure (TCLP) that demonstrates that the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material meets the requirements in § 288.623(a) (relating to minimum requirements for acceptable waste).

(ii) Analysis using the the Synthetic Precipitation Leaching Procedure (SPLP) (*Method 1312 of SW-846, Test Methods for Evaluating Solid Waste,*

promulgated by the EPA) that demonstrates that the ~~Contaminated s~~Soil, dredged material, ~~or~~ used asphalt or historic fill material does not produce a leachate in excess of the nonresidential MSCs for groundwater, in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter. ~~, when subject to the Synthetic Precipitation Leaching Procedure (SPLP) (Method 1312 of SW-846, Test Methods for Evaluating Solid Waste, promulgated by the EPA).~~ The numeric standards are listed in Appendix A, Tables 5 and 6 [TABLES WILL NEED TO BE REVISED].

(iii) Analysis using the applicable analytical methods set forth in § 287.11 that demonstrates that the soil, dredged material, used asphalt or historic fill material does not contain regulated substances at concentrations exceeding the nonresidential soil-to groundwater pathway numeric values based on the highest value between the nonresidential generic value and a value which is 100 times the nonresidential medium-specific concentration (MSC) for groundwater, as calculated in § 250.308 (relating to soil to groundwater pathway numeric values) and listed in Chapter 250, Appendix A, Table 4.

(A) When calculating the nonresidential soil-to-groundwater pathway numeric value, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.

(B) Formulae identified in § 250.305(b) (relating to MSCs in soil) shall apply as limits to the physical capacity of the soil to contain a substance.

(3) To determine whether ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material meets the standards in paragraphs (1) and (2), the soil, dredged material, ~~or~~ used asphalt or historic fill material shall be sampled and analyzed in accordance with §§ 287.11(b) and ~~either~~ (c) ~~or (d)~~, as applicable.

(4) Soils from areas impacted by normal agricultural practices resulting in lead, arsenic or pesticide contamination (such as orchards) shall be analyzed for lead, arsenic, and organic pesticides used in those areas such as aldrin, dieldrin, DDD, DDE and DDT.

(5) At locations where ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material is placed pursuant to this permit-by-rule, an erosion and sedimentation control plan shall be ~~is~~ implemented that is consistent with the applicable requirements of Chapter 102.

~~(6) Contaminated soil, dredged material or used asphalt is not placed into or on waters of this Commonwealth.~~

(6~~7~~) At locations where ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material is placed pursuant to this permit-by-rule, the

soil, dredged material, ~~or~~ used asphalt or historic fill material may not be placed ~~within~~ or along ~~100 feet of surface~~ waters of this Commonwealth unless prior approval has been obtained from the Department.

(~~8~~7) At locations where ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt, or historic fill material is placed pursuant to this permit-by-rule, the soil, dredged material or used asphalt or historic material may not be placed in karst terrain within 100 feet of the edge of a sinkhole.

(~~8~~9) At locations where ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material is placed pursuant to this permit-by-rule, the soil, dredged material, ~~or~~ used asphalt or historic fill material may not be placed within 300 feet of a potable water supply well or a potable surface water intake ~~source~~ unless the owner has provided a written waiver consenting to the placement of the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt, or historic fill material closer than 300 feet.

(~~9~~10) At locations where ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material is placed pursuant to permit-by-rule, the soil, dredged material, ~~or~~ used asphalt or historic fill material shall only be used under this permit on properties that are zoned and exclusively used for commercial and industrial uses. For unzoned properties, ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material shall only be used under this permit ~~shall be reused~~ in an area where the background concentrations of regulated substances are ~~is~~ equal to or greater than the concentrations of regulated substances exceeding the safe fill numeric standards ~~contamination~~ in the soil, dredged material, ~~or~~ used asphalt, or historic fill material being brought to the site, and the property is ~~shall be~~ used exclusively for commercial or industrial purposes ~~only~~.

~~(10) Contaminated soil, dredged material or used asphalt that is hazardous waste under Chapter 261a may not be used under this permit.~~

(~~10~~1) ~~Contaminated~~ Ssoil, dredged material or used asphalt, or historic fill material when placed pursuant to this permit-by-rule may not contain free liquids, based on visual inspection, and may not create recurring or persistent odor or other public nuisance resulting from chemical contaminants in the soil, dredged material, ~~or~~ used asphalt or historic fill material.

(~~11~~2) A person who has receiveds and useds ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material pursuant to this permit-by-rule shall submit a written notice to the Department that includes the following:

(i) The names, addresses and phone numbers of the persons receiving and using the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material.

(ii) The quantity of ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material used at the receiving location.

(iii) The locations of ~~contaminated soil, dredged material or used asphalt~~ where the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt, or historic fill material were removed for use and where the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material are placed for use.

(iv) An identification of whether the area ~~of contamination~~ where the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt, or historic fill material originated is the subject of a corrective action or remediation activity.

(v) A description of engineering practices and construction activities used to assure that site excavation and placement of ~~contaminated~~ the soil, dredged material, ~~or~~ used asphalt or historic fill material does not cause onsite or offsite contamination.

(vi) If ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt, or historic fill material is used for control of fire and subsidence events or in reclamation at abandoned mines, identification of ~~include a reference to~~ the Department's separate authorization of the use in those projects.

(12~~3~~) Records of analytical evaluations conducted on the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material shall be maintained by the person using ~~and distributing~~ the soil, dredged material, ~~or~~ used asphalt or historic fill material pursuant to this permit-by-rule and shall be made available to the Department for inspection. The records shall include the following:

(i) The dates of testing.

(ii) Each parameter tested.

(iii) The test results.

(iv) The laboratory where testing was conducted.

(v) The sampling procedures and analytical methodologies used.

(vi) The name of the person who collected the sample(s).

(13~~4~~) This permit-by-rule does not authorize and may not be construed as an approval to discharge waste, wastewater or runoff from the site where the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material originated or the site where the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material is beneficially used, to the land or waters of this Commonwealth.

(14~~5~~) ~~Contaminated s~~Soil, dredged material, ~~or~~ used asphalt or historic fill material placed in accordance with this permit-by-rule shall cease to be

waste once ~~as long as~~ the ~~contaminated~~ soil, dredged material, ~~or~~ used asphalt or historic fill material is ~~remains in~~ placed. Such soil, dredged material, used asphalt or historic fill material that is excavated or moved subsequent to placement pursuant to this permit-by-rule shall be evaluated at that time to determine whether the material qualifies as safe fill or is subject to regulation as a waste.

~~(16) Contaminated soil may not be used at a site undergoing a remediation or corrective action that will cause the receiving site to exceed the remediation standard selected.~~

~~(17) Placement of contaminated soil at a site undergoing a remediation or corrective action shall meet the requirements of subsection (m).~~

~~(l) *Historic fill.* The placement of historic fill shall be deemed to have a residual waste permit when used as construction material if, in addition to subsection (a), the following conditions are met:~~

~~(1) The historic fill shall be analyzed and shall meet one of the following:~~

~~(i) Historic fill may not exceed the residential soil to groundwater pathway numeric values based on the following parameters:~~

~~(A) The highest value between the residential generic value and a value which is 100 times the residential MSC for groundwater, as calculated in § 250.308. The numeric standards are listed in Appendix A, Tables 5 and 6.~~

~~(B) When calculating the residential soil to groundwater pathway numeric value, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.~~

~~(C) Formulae identified in § 250.305(b) apply as limits to the physical capacity of the soil to contain a substance.~~

~~(ii) Historic fill may not exceed the lowest residential direct contact numeric values calculated in accordance with the methodologies in §§ 250.306 and 250.307, if the requirements in clause (A) or (B) are met for groundwater protection and the requirements of clauses (C) and (D) are met when calculating the numeric value.~~

~~(A) A TCLP that demonstrates that the historic fill meets the requirements in § 288.623(a).~~

~~(B) The historic fill does not produce a leachate in excess of the residential MSC for groundwater, in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter, when subject to the Synthetic Precipitation Leaching Procedure (SPLP) *(Method 1312 of SW 846, Test Methods for Evaluating Solid*~~

~~*Waste*, promulgated by the EPA). The numeric standards are listed in Appendix A, Tables 5 and 6.~~

~~(C) When calculating the residential direct contact numeric value, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.~~

~~(D) Formulae identified in § 250.305(b) shall apply as limits to the physical capacity of the soil to contain a substance.~~

~~(2) To determine whether historic fill meets the standards in paragraph (1), the historic fill shall be sampled and analyzed in accordance with § 287.11(b) and either (c) or (d).~~

~~(3) At locations where historic fill is placed and the numeric value under paragraph (1)(i) for a regulated substance does not provide protection from direct contact exposure, direct contact pathways are promptly and permanently eliminated by the placement of uncontaminated soil and uncontaminated dredged material or through other engineering controls.~~

~~(4) At locations where historic fill is placed, an erosion and sedimentation control plan is implemented that is consistent with the applicable requirements of Chapter 102.~~

~~(5) Historic fill is not placed into or on waters of this Commonwealth.~~

~~(6) At locations where historic fill is placed, material may not be placed within 100 feet of surface waters of this Commonwealth.~~

~~(7) At locations where historic fill is placed, material may not be placed within 100 feet of the edge of a sinkhole.~~

~~(8) At locations where historic fill is placed, material may not be placed within 300 feet of a water source unless the owner has provided a written waiver consenting to the placement of the material closer than 300 feet.~~

~~(9) At locations where historic fill is placed, material shall only be used under this permit on properties that are zoned and exclusively used for commercial and industrial uses. For unzoned properties, historic fill shall be reused in an area where the background is equal to or greater than the concentration of contamination in historic fill being brought to the site and the property shall be used for commercial or industrial purposes only.~~

~~(10) Historic fill that is hazardous waste under Chapter 261a may not be used under this permit.~~

~~(11) Historic fill when placed may not contain free liquids, based on visual inspection, and may not create odor or other public nuisance associated with the historic fill.~~

~~(12) A person that receives and uses historic fill shall submit a written notice to the Department that includes the following:~~

~~(i) The names, addresses and phone numbers of the persons receiving and using the historic fill.~~

~~(ii) The quantity of historic fill used at the receiving location.~~

~~(iii) The locations of historic fill where material was removed for use and where the historic fill is placed for use.~~

~~(iv) An identification of whether the location where the historic fill originated is the subject of a corrective action or remediation activity.~~

~~(v) A description of engineering practices and construction activities used to eliminate direct contact pathways and to assure that site excavation and placement of historic fill does not cause onsite or offsite contamination.~~

~~(13) Records of analytical evaluations conducted on the historic fill shall be maintained by the person using and distributing the soil and shall be made available to the Department for inspection. The records shall include the following:~~

~~(i) The dates of testing.~~

~~(ii) Each parameter tested.~~

~~(iii) The test results.~~

~~(iv) The laboratory where testing was conducted.~~

~~(v) The sampling procedures and analytical methodologies used.~~

~~(vi) The name of the person who collected the sample.~~

~~(14) This permit does not authorize and may not be construed as an approval to discharge waste, wastewater or runoff from the site where historic fill originated or the site where historic fill is beneficially used, to the land or waters of this Commonwealth.~~

~~(15) Historic fill placed in accordance with this permit shall cease to be waste as long as the material remains in place.~~

~~(m) *Contaminated soil placed at a receiving site undergoing remediation activities.* Contaminated soil generated offsite and placed at a site undergoing remediation activities under Chapter 250 (relating to administration of land recycling program) and the Land Recycling and Environmental Remediation Standards Act (Act 2) (35 P. S. §§ 6026.101—6026.909) shall be deemed to have a residual waste permit when used to bring an area to grade, to limit infiltration of rainfall and to facilitate runoff if, in addition to subsection (a), the following conditions are met:~~

~~(1) The notice of intent to remediate the soils at the receiving site undergoing remediation activities (required by section 303(h) of Act 2 (35 P. S. § 6026.303(h)) identifies the Statewide health standards as the remediation standards that shall be attained. The addition of contaminated soil at the site undergoing remediation activities shall meet the Statewide health standards as follows:~~

~~(i) Prior to the placement at a residential site undergoing remediation activities, the contaminated soil brought to the residential site undergoing remediation activities shall meet the residential Statewide health standards in accordance with §§ 250.306—250.308 and as listed in Chapter 250, Appendix A, Tables 3A, 3B, 4A and 4B.~~

~~(ii) Prior to the placement at a nonresidential site undergoing remediation activities, the contaminated soil brought to the nonresidential site undergoing remediation activities shall meet the nonresidential Statewide health standards in accordance with §§ 250.306—250.308 and as listed in Chapter 250, Appendix A, Tables 3A, 3B, 4A and 4B.~~

~~(iii) When calculating the direct contact numeric value or the soil-to-groundwater pathway numeric value for the Statewide health standards, the calculation shall be based on groundwater in aquifers used or currently planned for use with naturally occurring background total dissolved solids concentrations less than or equal to 2,500 milligrams per liter.~~

~~(iv) Formulae identified in § 250.305(b) shall apply as limits to the physical capacity of the soil to contain a substance.~~

~~(2) The quantity, quality and destination of the contaminated soil shall be identified in the final report (under section 303(h) of Act 2) submitted for the receiving site undergoing remediation activities.~~

~~(3) Placement of the contaminated soil may not cause the receiving site undergoing remediation activities to exceed the Statewide health standard selected and identified in the notice of intent to remediate.~~

~~(4) Contaminated soil containing a contaminant other than those identified in the notice of intent to remediate or subsequently identified during site characterization submitted for the receiving site undergoing remediation activities may not be placed at the receiving site undergoing remediation activities.~~

~~(5) For contaminated soil placed at a site undergoing remediation activities prior to the approval of the final report, relief from liability may include the material brought to the receiving site undergoing remediation activities and the material shall be included in the final report.~~

~~(6) At a site undergoing remediation activities where contaminated soil is placed, an erosion and sedimentation control plan is implemented that is consistent with the applicable requirements of Chapter 102.~~

~~(7) At a site undergoing remediation activities where contaminated soil is placed, soil may not be placed into or on waters of this Commonwealth.~~

~~(8) At a site undergoing remediation activities where contaminated soil is placed, soil may not be placed within 100 feet of surface waters of this Commonwealth.~~

~~(9) At a site undergoing remediation activities where contaminated soil is placed, soil may not be placed within 100 feet of the edge of a sinkhole.~~

~~(10) At a site undergoing remediation activities where contaminated soil is placed, soil may not be placed within 300 feet of a water source unless the owner has provided a written waiver consenting to the placement of the soil closer than 300 feet.~~

~~(11) At a site undergoing remediation activities where contaminated soil is placed, soil may not be placed in a 100 year flood plain of waters of this Commonwealth.~~

~~(12) To determine whether contaminated soil placed at a site undergoing remediation activities meets the standards in paragraph (1), the contaminated soil shall be sampled and analyzed in accordance with § 287.11(b) and either (c) or (d).~~

~~(13) Contaminated soil placed at a site undergoing remediation activities may not contain free liquids left in the soil, based on visual inspection, and the soil may not create odor or other public nuisance resulting from chemical contaminants in the soil.~~

~~(14) Upon completion of areas where contaminated soil is placed, the areas shall be promptly vegetated to minimize and control erosion or capped to minimize infiltration.~~

~~(15) This permit does not authorize and may not be construed as an approval to discharge waste, wastewater or runoff from the site where contaminated soil originated or the site undergoing remediation activities where contaminated soil is beneficially used, to the land or waters of this Commonwealth.~~

~~(16) A person who receives and uses contaminated soil at a site undergoing remediation activities shall submit a written notice to the Department. The notice shall include the following:~~

~~(i) The names, addresses and phone numbers of the persons receiving and using the contaminated soil.~~

~~(ii) The quantity of contaminated soil from a site used at the receiving site undergoing remediation activities.~~

~~(iii) The locations of areas where contaminated soil is generated and locations of areas where the contaminated soil will be placed.~~

~~(iv) Copies of recorded deed notices that identify where on a receiving property contaminated soil is placed if nonresidential Statewide health standards are used at the sites undergoing remediation activities as the remediation standards.~~

~~(v) An identification of whether the location where the contaminated soil originated is the subject of a corrective action or remediation activity.~~

~~(vi) A description of engineering practices and construction activities used to assure that excavation and placement of contaminated soil at the site undergoing remediation activities does not cause onsite or offsite contamination.~~

~~(17) Contaminated soils that are hazardous waste under Chapter 261a may not be used under this permit.~~

~~(18) Records of analytical evaluations conducted on the contaminated soil shall be maintained by the person using and distributing the soil and shall be made available to the Department for inspection. The records shall include the following:~~

~~(i) The dates of testing.~~

~~(ii) Each parameter tested.~~

~~(iii) The test results.~~

~~(iv) The laboratory where testing was conducted.~~

~~(v) The sampling procedures and analytical methodologies used.~~

~~(vi) The name of the person who collected the sample.~~

~~(19) Contaminated soil placed in accordance with this permit shall cease to be waste as long as the contaminated soil remains in place at the site undergoing remediation activities.~~

ORIGINAL: 2245

Snyder, James

From: Ron J Buchanan [Ron.J.Buchanan@USA.dupont.com]
Sent: Wednesday, April 03, 2002 12:45 PM
To: Snyder, James
Subject: safe fill re-draft


151845_2 (PDF Format) Clean Ve...


151415_4 (PDF Format) Compreh...

Jim.. also, please send along to Bill Pounds as I do not have his e-mail address....

Attached is a copy of the public comment as follows: 1) re-draft version and 2) red-lined version for comparison purposes, being submitted today. Actually, we re-wrote the proposed regs into a more logical, technically precise, and Act2 consistent document. It would take too long to delve into all of the logic behind this via e-mail, but suffice it to say that we re-wrote the proposal with Act2 in mind. The bottom line is we maintained the residential standards for safe fill.

Collectively, we spent well over 100-manhours re-writing the proposal. This re-draft will be submitted today as public comment from the four of us: Robertson, Holmstrom, Meloy, and myself. Further, to us it seems prudent to request CSSAB give all due consideration to this re-draft at their next meeting.

Best regards.... Ron

(See attached file: 151845_2 (PDF Format) Clean Version of Safe Fill Regulations (2).PDF) (See attached file: 151415_4 (PDF Format) Comprehensive Redline Version of Safe Fill Regulations (2).PDF)

SPECIALTY STEEL INDUSTRY OF PENNSYLVANIA

Address correspondence to: Allegheny Ludlum Corporation, 1000 Six PPG Place, Pittsburgh, PA 15222
Phone: (412) 394-2836 Facsimile: (412) 394-3010

April 3, 2002

The Environmental Quality Board
Rachel Carson State Office Building
P.O. Box 8477
Harrisburg PA 17105-8477

Dear Board Members:

Attached are the Specialty Steel Industry of Pennsylvania (SSIPA) comments on the PADEP's Safe Fill Proposed Rulemaking – 25 PA Code Chapters 271 and 287, issued February 2, 2002.

SSIPA appreciates the opportunity to comment on this Policy and looks forward to the Board's response to the comments.

Sincerely,

Chairman, SSIPA Environmental Committee
Sean McGowan

The Specialty Steel Industry of Pennsylvania, (SSIPA), appreciates the opportunity to comment on the Proposed Regulations for Safe Fill (modifications to 25 PA Code, Chapters 271 and 287). SSIPA recognizes the importance of providing guidance to Pennsylvania residents regarding the safe management of fill materials and recognizes the complexity of attempting to find an amicable solution to protecting the environment. SSIPA agrees that the current Clean Fill Policy is inappropriate. We believe that changes need to be made to the proposed Safe Fill Regulations to avoid regulations that are difficult to understand and that are too cumbersome. Also, we believe it's important to achieve the Department's goals without resulting in significant costs to businesses. The current proposal would be costly to implement making it tougher to do business in Pennsylvania that would not serve the overall interests of the Commonwealth. SSIPA believes that the proposed regulations will result in unnecessary disposal of large amounts of usable fill material as residual waste and further exacerbate the current waste disposal crisis currently afflicting Pennsylvania. Scarce landfill capacity will be consumed with materials that otherwise could be beneficially and safely used.

SSIPA is also concerned that the draft Safe Fill proposal is biased against industry. The Department has singled out industrial fill material (segregated and uncontaminated brick, block, and concrete from demolition debris, and backfill of utility right of ways) and characterizes this material as waste. The same materials generated by residential or commercial facilities are designated by the draft Safe Fill proposal as "Safe Fill". The Department provides no scientific evidence that these materials when generated at industrial sites should be handled differently than material generated at residential or commercial facilities. The bias against industry is further illustrated by the Department allowing certain commercial sectors (agricultural orchards, dredging, etc.) to dilute removed materials to acceptable levels for use as "Safe Fill". No allowance for the dilution of fill materials to meet "Safe Fill" levels is granted for industry. SSIPA believes that without scientific evidence that materials generated at industrial facilities are substantially different than materials generated at residential or commercial areas, the Department should regulate the management of these materials equally.

Furthermore, the proposed Safe Fill regulations also include additional layers of requirements that are different than the scientific principles on which the Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2) rests. The proposed Safe Fill regulations can be significantly simplified and coordinated with the regulations that are already in place under Act 2 without surrendering the protections that the Department has sought to achieve through the proposed Safe Fill regulations.

General and specific comments to the proposed Safe Fill regulations are provided in the following paragraphs.

General Comments

Proposal Safe Fill Regulations are Unnecessary

The Pennsylvania Department of Environmental Protection, "the Department", has not provided sufficient reason for regulating fill materials in the Commonwealth. Current and past management of clean fill has not been demonstrated to be unsafe to human health or the environment.

There are no indications or evidence that management of fill materials in accordance with these proposed regulations will reduce the impact of pollutants on the environment. No documentation of the existence, scope or severity of any problems was presented by the Department.

The Department already has in place extensive rules and regulations in place that prevent the improper disposal of wastes or materials impacted by spills or releases.

Prior to promulgating additional regulations, the Department should first assess need. If contaminants generated from the use of clean fill are in fact entering the environment, the Department should then determine what impact these regulations will have on these pollutants and at what costs.

The Proposed Regulation is Contrary to the Goals of the Department

In the preamble to this draft regulation, the Department indicates the authority for implementation of this regulation as the Solid Waste Management Act (SWMA), the Clean Streams Law (CSL), the Municipal Waste Planning, Recycling and Waste Reduction Act (Act), and the Administrative Code of 1929 (Code). Under the SWMA, the Department is authorized to regulate the handling, storage, and disposal of waste. By definition, a waste is "[d]iscarded material which is recycled or abandoned" (PA Code Section 287.1(i). Fill material is not discarded or abandoned material. The terms discarded and abandoned infer disposal in a haphazard or random manner and indicate a lack of value to the material. Fill materials serve a specific valuable use. In addition fill materials are placed (not disposed) at specific locations to bring these areas to grade. In many instances, if materials were not used for fill, then suitable "green field" materials would need to be purchased to bring the area to grade. SSIPA submits that demolition debris (soil, brick, block, concrete, gravel and asphalt) when used as fill, are not wastes and, therefore, are not subject to regulation as wastes. Continuing to use these

materials as fill is consistent with the regulatory framework that has existed in Pennsylvania since the municipal waste regulations were adopted in 1988.

The Department sites the Clean Streams Law (CSL) (section 402 (35 P.S. Section 691.402) as granting the Department the authority to regulate activities that create a danger of pollution of the waters in the Commonwealth. However, as stated previously, there has been no demonstration that current management of fill materials create a danger of pollution of the waters of the Commonwealth. The Department also sites the 1929 Code (section 1917-A (71 P.S. section 510-17) as the regulatory authority for implementing permit programs to protect the people of the Commonwealth from unsanitary conditions and other nuisances. However, once again, the Department has failed to provide any evidence that there exists a need for these proposed regulations.

SSIPA agrees that under the Municipal Waste Planning, Recycling and Waste Reduction Act (Act), the Department has the power and the duty to adopt regulations that accomplish the purposes of the Act. The Department should be promoting regulations and policies that reduce waste and increase recycling. Furthermore, the Department should also be working to preserve valuable landfill space. Landfill space in the Commonwealth is especially crucial due to the recent actions of the legislature to limit expansions of existing landfills and the current moratorium against installation of new landfills. However, implementation of the proposed regulations is contrary to these goals. Due to the onerous and costly sampling and analysis, permitting, and recordkeeping requirements of the proposed regulations, industries may landfill otherwise clean and safe fill materials instead of using these materials as "Safe Fill".

The Solid Waste Management Act (SWMA) does not mention soil and there is no indication that the legislature ever contemplated regulating soil that was not impacted by a spill under the Act. Soil that is moved or sold in good faith in the Commonwealth, is used for an intended purpose, i.e. fill, is not a "discarded material" or "inherently waste like" and does not meet the definition of a solid waste under the SWMA. Therefore, soil or other typical fill materials, such as concrete, that is not directly impacted by a spill is not a solid waste and should not be regulated as such.

SSIPA requests that the Department clarify its statutory authority to regulate fill materials, especially soil, that were not impacted by a spill as a solid waste.

The Safe Fill Standards Are Only Appropriate for Soils

The ACT II standards that are utilized in the proposed rule are only applicable to soils and are not applicable to any other materials. The human health criteria numbers for the ACT II program are based on exposure to soils through ingestion or inhalation of soil particles and the bioavailability of chemicals in the soil. The

leachability standards of the proposed rule, which were derived from the ACT II standards, are based on soil's physical and chemical properties.

It is scientifically wrong to apply these standards to other materials such as concrete or slag, which are physically and chemically different from soil, have different bioavailabilities than soils, different leaching potentials than soil and significantly different mechanisms of exposure than soil.

SSIPA member companies have proven to the Department in the past that steel-making slag from our industry is safe for its intended use when used as fill material. The processes that generate slag have not changed over time. Historic slag materials have the same physical and chemical properties as currently generated matter.

Since the standards presented in the proposed rule are not appropriate for steel-making slag, the processes that generates slag has not changed over time, and since the Department has already determined that slag is safe for use as fill material, SSIPA requests that the Department specifically exclude steel-making slag from the specialty steel industry from regulation under this rule.

The Proposed Rule will Create Millions of Dollars of Environmental Liability and will Hinder Land Development

Materials, such as slag, have been used for the past century in the Commonwealth as fill material for uses such as road base, railroad ballast, and general fill material. The Department has approved these uses.

In fact, slag is sold as a product in the state and is regarded as a commodity product by the United States Geological Service, which tracks the used materials. Slag competes with natural aggregates and lime in the market place. During the past century, hundreds of thousands of tons of specialty steel slag have been utilized in the state in lieu of these materials, saving valuable natural resources.

This same situation applies to many other "safe" materials that have been and continue to be utilized as fill material in the Commonwealth.

Since the standards that the Department is applying to slag and many other materials are inappropriate, all of this previously utilized material will be designated as a waste product and will create a significant liability for the landowner. Their properties will now become waste disposal sites. The Commonwealth will also be impacted by this liability since it has extensively utilized slag and other fill materials in its road construction projects.

Property developers, especially "brown fields" developers, will be reluctant to purchase properties that the Department has determined to be waste disposal sites or to incur the cost of disposing of good fill material in landfills to prepare a site for development.

The Department needs to consider the economic impact to property owners, fill providers, the Commonwealth, or the local economies in the development of this rule.

The Department's Cost-Benefit Analysis is Questionable

The SSIPA questions the validity of the Department's Cost-Benefit Analysis. The Department predicts "huge savings" of $500 million per year by assuming that half the estimated quantity of fill material generated in Pennsylvania, 20 million cubic yards, will qualify as "safe fill" and will not have to be landfilled, therefore avoiding disposal costs.

The problem with this analysis is that this material is presently not being landfilled. It is currently being beneficially used as fill material. Therefore, if one-half of the estimated fill must be landfilled, there will be ***an additional cost to the citizens of the Commonwealth of $500 million per year.*** There will **not** be any savings.

The Department estimates soil analyses costs at 8.8 million dollars per year. The Department does not include consultant's fees, or more importantly, project time delays as a result of stringent testing requirements. Please note that turnaround time of the analyses will be three (3) weeks or more. These items could add a factor of ten to these costs.

The Department also did not consider the potential liability costs for landowners with fill that exceeds the arbitrary standards. This liability can easily exceed hundreds of millions of dollars per year. The Department itself estimates that half the fill in Pennsylvania will not meet the new standards. If the fill at these sites is deemed categorically not "safe," then the property containing the fill is by definition contaminated and unsafe. This will lead to the stigmatization of these properties with an associated devaluation in property costs.

The Department has not considered the cost of lost redevelopment of brown fields and other sites, where trivial excursions above these arbitrary standards could lead to large disposal costs due to the required costly landfilling of the fill or soil.

The Department has not taken into account the cost of constructing new landfills to accommodate the soil that will need to be disposed of or the large increase in

landfill fees due to limited disposal capacity. This is particularly troubling at this time due to Pennsylvania's refusal to approve new capacity at existing landfills.

In terms of benefits of the proposed rule, the Department has not presented any data supporting environmental improvements or cost reductions that will result from the implementation of the rule.

The Department needs to review and correct the cost benefit analysis it has developed.

The Exposure and Leaching Standards are not Representative of Actual Fill Use

The Department is applying standards to fill that are for direct human exposure to soil and groundwater leaching from soil. Fill is typically not used as final cover. It is either covered with topsoil or an engineered cover, such as pavement, concrete or a structure.

In all these cases, direct exposure to the fill does not occur, therefore, the utilization of direct exposure criteria is inappropriate when the fill is covered with another material.

Additionally, if the fill is covered with an engineered surface, rainwater will not percolate through the fill and leaching will not occur. Furthermore, the DEP assumes that all ground water can or will be used for drinking water, which is not the case in most urban or suburban areas.

The Department has not considered these factors in developing the Safe Fill standards and has therefore adopted standards that are inappropriate for the vast majority of fill utilized in the state. SSIPA believes that the Department should provide an alternative fill standards which takes the above mentioned factors into account.

The Proposed Rule Does Not Meet the Requirements of Executive Order 1996-1

The proposed regulations are not in accordance with the regulatory basics initiative. Instead of simplifying and streamlining the regulations to match (whenever possible) the Federal statutes, these regulations serve only to add more onerous restrictions and permitting programs. The end result of implementing the proposed regulations will be innumerable "permit by Rule" landfills throughout the Commonwealth, increased disposal of otherwise usable fill materials and increased regulatory burdens on both industry and the Department with no net decrease in pollutants in the environment.

Governor Ridge's Executive Order 1996-1 sets conditions for establishing new requirements. As noted in the above comments, the proposed rule does not meet many of these requirements, including:

- The Department has not demonstrated a compelling public interest for the rule.
- The cost of regulations significantly outweighs their benefit.
- The rules are not written in a clear and concise manor.
- The Department has not utilized non-regulatory alternatives. The Department could instead provide a "Safe Fill" guidance document instead of implementing this proposed rule.
- Due to the large cost of the regulation and the time consuming and burdensome requirements associated with it, the proposed rule will negatively impact Pennsylvania's ability to compete effectively with other states.

The Department needs to ensure that the final rule conforms to the requirements of Executive Order 1996-1.

Specific Comments to Proposed Regulation

Municipal Waste Management – (Chapter 271)

Historic Fill

Section 271.1(i) of the proposed regulations define all Historic Fill as "[h]istorically contaminated material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to 1988 that is a conglomeration of soil and residuals, such as ashes from the residential burning of wood and coal, incinerator ash, coal ash, slag, dredged material and construction and demolition waste." The term does not include historically contaminated material in quantities of less than or equal to 125 cubic yards per excavation location if there is no indication that the material has been subject to a release of regulated substances and there is no visible staining, odor or other sensory nuisance associated with the material. Under these proposed regulations, "Historic Fill" is regulated as residual waste under section 217.2(c)(7).

As stated above, SSIPA questions the arbitrary designation as "contaminated" for Safe Fill and Historic Fill. The Department actually defines "historic fill " as

"historically contaminated material." The Department has not provided any evidence indicating that the components described above as historic fill contain pollutants that are harmful to the environment.

SSIPA is particularly concerned with the designation of slag as one component of Historic Fill and the assumption that slag is "contaminated." The use of slag as a fill material has been and continues to be standard practice in industry, residential and commercial properties. It is imperative that the Department recognizes that slag is not only a historic fill material, but that slag continues to be a large component of "Safe Fill". Furthermore, slag from steel-making operations has been officially determined by the Department to be a co-product and not a waste. Based on the co-product determinations, SSIPA objects to any application of the "Safe Fill" regulations to steel-making slag and requests that the Department specifically indicate that steel-making slag is not regulated by the proposed Safe Fill regulations.

Furthermore, under the proposed safe fill regulations, historic fill material is generally classified as a residual waste and cannot qualify as a safe fill. Instead of regulating all Historic Fill as contaminated material, the Department should provide a separate definition for Historic Fill, Contaminated Historic Fill and Safe Historic Fill. Historic Fill should be defined as historical fill material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to (*issue date of final regulations*) that is a conglomeration of soil and residuals, such as ashes from the residential burning of wood and coal, incinerator ash, coal ash, slag, dredged material and construction and demolition waste."

"Contaminated Historic Fill" should be defined as "Historic Fill that has (A) indication that the material has been subject to a release of regulated substances, or (B) visible signs of staining, odor, or other sensory nuisance associated with the material. The term should not include historically contaminated material in quantities of less than or equal to 125 cubic yards per excavation location if there is no visible staining, recurring or persistent odor or other sensory nuisance associated with the material." Contaminated Historic Fill should be regulated as residual waste when removed from an excavation. There should be no requirement to remove Contaminated Historical Fill from facilities unless there is evidence of contamination of surface or groundwater at the site.

"Safe Historic Fill" should be defined as Historic Fill that has (A) no indication that the material has been subject to a release of regulated substances, and (B) no visible signs of staining, odor, or other sensory nuisance associated with the material. Safe Historic Fill should then be regulated as "Safe Fill".

Sediment

SSIPA requests that the definition of sediment be revised to include "[m]aterials deposited and directly overlain by water in rivers, lakes, ponds or tidal streams that consist of heterogeneous mixtures of sand, silt, clay, gravel and organic material deposited through erosion or by lake or river currents." If the definition stands to include deposited materials or materials directly overlain by waters, the definition would include all soils that were ever deposited by water.

Subchapter B. - General Requirements for Permits and Permit Applications

Section 271.101 - Permit Requirement

Removal Of Clean Fill Exclusion From Permitting Requirements

The current proposed regulation eliminates the exclusion of "clean fill" from the Municipal Waste regulations permitting requirements. SSIPA believes that by eliminating these exclusions, the Department does not effectively allow the exclusion of Safe Fill from these permit requirements. Therefore, to avoid confusion and to remedy this situation, SSIPA requests that Section 271.101 (b)(3)(i) and (ii) be re-written as follows:

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

(3) For the use of Safe Fill consisting of (but not limited to)

(i) Uncontaminated soil, rock, stone, gravel, brick, block, concrete, or asphalt

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

Regulation of Industrial Safe Fill under Municipal Waste Regulations

Under Section 271.103(i) (§271.103. Permit-by-rule for municipal waste processing facilities other than for infectious or chemotherapeutic waste; qualifying facilities; general requirements), the Department has added additional regulatory restrictions for industry that have no foundation and are discriminatory. According to the proposed regulations, only uncontaminated soil, including rock and stone, uncontaminated dredged material, uncontaminated used asphalt, and uncontaminated and segregated brick, block or concrete resulting from construction or demolition activities from residential and commercial properties may potentially qualify as safe fill. Therefore, brick, block and concrete resulting from construction or demolition activities at industrial

properties could never qualify as safe fill. As a result, the Department categorically classifies certain materials as wastes regardless of their characteristics. There is no justification for these prescriptive requirements.

The Department is proposing to regulate uncontaminated construction and demolition debris from commercial and residential facilities as "Safe Fill". The proposed regulations provide for specific procedures for determining the condition of the construction and demolition debris (contaminated or uncontaminated). There is no reason that the proposed procedures that apply to commercial and residential properties should not be applied to industrial facilities. Therefore, SSIPA requests that the Department revise the regulation to permit brick, block and concrete from any type of property be included in the list of materials that potentially may qualify as safe fill, provided that the other conditions of the definition of safe fill are met.. If those conditions are met, brick, block and concrete resulting from construction or demolition activities at industrial properties would qualify as safe fill. For this reason SSIPA requests that the Department revise Section 271.103(l) as follows:

> "(i) *Brick, block or concrete.* The placement of contaminated and segregated brick, block, concrete, and asphalt resulting from construction or demolition activities shall be deemed to have a municipal waste permit when used to bring an area to grade, as construction material or in reclamation of an active or abandoned mine or abandoned quarry, if in addition to subsections (a)-(c) the following conditions are met:"

Regulatory Requirements for Municipal Waste Management Permit By Rule Are Too Restrictive, Costly, and Cumbersome

SSIPA agrees with the Department's approach of establishing a new permit by rule (PBR) category to allow the beneficial use of appropriate materials instead of unnecessarily filling landfill space. However, by limiting use to only uncontaminated brick, block and concrete and imposing complex and onerous requirements for potential safe fill materials, many materials that could otherwise be used under the PBR may be instead directed to landfills for disposal. Under these proposed regulations, landfill disposal may represent an expedient and less costly but wasteful option for handling soils and other materials that are excavated or otherwise generated. It is quite likely that it would be less costly to dispose of material at a landfill rather than sample and analyze and handle as Safe Fill and risk that the material would not meet the stringent Safe Fill requirements anyway.

Section 271.103(l)(1) requires that contamination levels of brick, block and concrete not exceed the lower of either the residential generic soil-to groundwater numeric values or the residential direct contact (RDC) numeric

values developed by the Department under Act 2. SSIPA understands that restrictions on the levels of contaminants acceptable for construction and demolition debris (C&DD) need to be in place if the material is to be used as fill. However, SSIPA is concerned that the proposed regulation is too cumbersome, expensive and is overly restrictive. Based on the proposed definition of "Safe Fill" [(287.1(i)(C)] a generator will initially determine that C&DD is either "contaminated" or "uncontaminated" based on due diligence and knowledge of the site. If the C&DD is suspected of being contaminated, the next step in the proposed process is to analyze for the 321 organic and 25 metal compounds listed in Tables 5 and 6 (Appendix A). For each of these parameters both total and synthetic leachate analyses need to be performed in order to determine if the levels are exceeded. In order to perform only one (1) set of these analyses, it will cost approximately $4,500. Based on the sampling criteria set forth in 287.11(b), eight (8) samples are required for 125 yd^3 or less of material. In addition twelve (12) samples are required for up to 3,000 yd^3 of fill material tested and for each additional 3,000 yd^3. Using a conservative twelve (12) samples per 3,000 yd^3, the analytical costs are approximately $18.00 per yd^3.

In addition to sampling and analytical requirements, the proposed regulations require facilities to prepare an erosion and sedimentation control plan (ESCP), provide detailed notification to the Department (including information on the location(s) where the material is used) and maintain records of all evaluations conducted for each placement of C&DD. When the administration costs of this program are added to the sampling and analytical costs, the total costs of administrating this program can easily exceed the current C&DD disposal costs (approximately $22.25 yd^3) and will also exceed the existing residual waste disposal costs (approximately $26.00 per yd^3). In effect, the costs associated with sampling and analyses, when added to the costs and effort required to manage this program, nullifies any benefits that may be achieved by the on-site use of minimally contaminated C&DD.

Furthermore, ACT 2 standards that are utilized in the proposed rule are only applicable to soils and are not applicable to any other materials. The human criteria numbers for the ACT 2 program are based on exposure to soils through ingestion or inhalation of soil particles and the bioavailability of chemicals in the soil. The leachability standards of the proposed rule, which were derived from the ACT 2 standards, are based on soil's physical and chemical properties. It is scientifically wrong to apply these standards to other materials such as concrete or slag. Concrete and slag are physically and chemically different than soil, have different bioavailabilities than soils, different leaching potentials than soil and significantly different mechanisms of exposure than soil.

An alternative procedure that would protect the environment and provide a cost effective approach is site specific analytical protocols. Analytical parameters would be selected based on the generator's knowledge of the site. The criteria in Tables 5 and 6 (Appendix A) could then be used as the determining factor in

whether the C&DD meets the fill standards or if the material must be disposed as residual waste.

As an alternative, or in conjunction with the site specific sampling and analyses procedure proposed above, the Department could set forth a much more simplistic sampling and analysis program aimed at addressing the major contaminants of concern in the Commonwealth. As indicated previously, the Department has not provided a specific list of concerns regarding contaminants in fill material. However, the list of contaminants could include PCBs, Total Petroleum Hydrocarbons, and some selected metals of concern.

The Department could also structure this shortened list according to the type of facility. For example, those facilities not generating or utilizing organic materials would not be required to sample for organics. A simplistic screening evaluation (State short list of parameters) along with the site specific sampling and analyses conducted based on the generator's knowledge of the site would be achievable and cost effective. Such a program (unlike the program being proposed) would in turn reduce the burden on landfills, reduce costs to generators, and would also provide protection for the environment of the Commonwealth.

Agency Needs to Provide Record Retention Period

In section 271.103(i)(13), the Department indicates that records of analytical evaluations conducted on the C&DD material shall be maintained by the person using and distributing the waste material and shall be made available to the Department for inspection. The Department needs to clarify the record retention requirements for these and all records required to be maintained under the proposed regulation.

Article IX. Residual Waste Management (Chapter 287)

Exclusion of Industry from Safe Fill Definition

In Section 287.1(i) the Department excludes uncontaminated materials generated from industry from the "Safe Fill" definition. By doing this, the Department has singled out industrial fill material and unfairly determined this material to be waste. The same materials generated by residential or commercial facilities are designated by the proposed regulations as "Safe Fill". The Department provides no scientific evidence or facts that materials generated at industrial sites should be handled differently than material generated at residential or commercial facilities.

This proposed section of the regulations assumes, without basis, that all materials at industrial sites are "contaminated." SSIPA takes exception to this

assumption. Soil, dredged material, asphalt, gravel and construction and demolition debris (C&DD) generated at industrial sites should not be automatically assumed to be more contaminated than the same materials generated at residential or commercial facilities. Pennsylvania's industrial sites contain numerous buildings, foundations, roads, etc. that are not "contaminated". In fact, many industrial facility buildings may never have been used for industrial purposes (office buildings, warehouses, equipment storage, etc.). In addition, dredged materials from industrial facility water intakes are no more contaminated than any other dredged materials removed from the waters of the Commonwealth. Categorically denying the "Safe Fill" option for industrial materials is unfair and unjust and will result in the generation of tons of additional materials being disposed at residual waste and/or C&DD landfills.

As a further example, of the unfair nature of this action, the Department is aware that numerous residential and commercial facilities throughout the Commonwealth are afflicted with the concerns of persistent organic pollutants such as pesticides and herbicides from agricultural and horticultural operations. In fact, this concern is so significant, that in Section 287.1 (iii)(A) of the proposed regulations, the Department has developed specific regulations that allow for pesticide laden material to be used as "Safe Fill" at industrial or commercial sites. In Section 287.1(iii)(B), the Department also allows pesticide laden soils to be commingled with clean soil to meet the "Safe Fill" requirements. And, in Section 287.102 (j), the Department has proposed specific permit-by-rule procedures for addressing contaminants from agricultural practices.

Most industrial sites do not exhibit major pesticide or herbicide contamination concerns. Instead of penalizing facilities that are polluted with pesticides (facilities known to exhibit historic contamination), the Department makes special compensation to these facilities in the proposed regulations. In contrast, the Department has chosen to unfairly penalize industry, without basis, and haphazardly exclude industrial fill material from the definition of "Safe Fill". All sites (industrial, commercial, and residential) should be regulated by the same set of rules. To do so any other way, violates common sense and fair business practice. Therefore, SSIPA submits that uncontaminated materials from industrial properties should also be regulated as "Safe Fill". For this reason, SSIPA requests that the Department revise Section 287.1(i) of these proposed regulations to read as follows:

> "(i) Material that is uncontaminated soil, including rock and stone, uncontaminated dredged material, uncontaminated used asphalt or uncontaminated and segregated brick, block, or concrete resulting from construction or demolition activities from industrial, residential, and commercial properties and that meets one of the following requirements:"

Requirements For "Safe Fill" Sampling And Analyses Are Overly Restrictive, Costly, and Cumbersome

As with the requirements for sampling and analyses of contaminated C&DD, SSIPA is concerned with the complex and costly system of sampling and analyses proposed in this section of the regulation. Under sections 287.1(A) and (B), the Department proposes lists of chemical parameters that must be met prior to meeting the "Safe Fill" requirements. These lists are extensive and unnecessary. Table 1 contains 21 metals, Table 2 contains 319 organic parameters, and Table 3 contains 25 organic parameters.

For each parameter, both total and synthetic leachate analyses needs to be performed in order to determine if the levels are exceeded. In order to perform only one (1) set of these analyses, it will cost approximately $2,500 to $4,500. Based on the sampling criteria set forth in 287.11(b) and using a conservative twelve (12) samples per 3,000 yd^3, the analytical costs are approximately $10.00 to $18.00 per yd^3.

SSIPA understands that under section 287.1(i)(C), with appropriate due diligence, sampling is not specifically required by the proposed regulation. However, based on the language of this section, facilities that wish to move fill material off-site will almost certainly need to conduct sampling to ensure that the material will not exhibit levels of contaminants greater than the pollutants listed in Tables 1, 2 and 3 of Appendix A. In addition, it is likely that once this regulation is finalized, sites receiving fill will also require sample data to ensure that all of the standards in the regulation are met.

In addition to sampling and analyses, the proposed regulations will require facilities to maintain records of all evaluations conducted pursuant to the proposed requirements of the "Safe Fill" regulations. When the administration costs of this program are added to the sampling and analytical costs, the total costs of administrating this program will likely exceed the current C&DD disposal costs (approximately $22.25 yd^3) and may even exceed residual waste disposal costs (approximately $ 26.00 per yd^3). In effect, as with the C&DD program, the costs associated with the requirements of the proposed Safe Fill regulations nullifies any benefits that may be achieved by the on-site use of "Safe Fill".

An alternative procedure that would be protective of the environment and provide a cost effective approach is site specific analytical protocols. Analytical parameters would be selected based on the generator's knowledge of the site. The criteria in Tables 1, 2 and 3 (Appendix A) could then be used as the determining factor in whether the fill materials meet the Safe Fill standards or if the material must be disposed as C&DD or residual waste.

As an alternative, or in conjunction with the site specific sampling and analyses procedure proposed above, the Department could set forth a much more

simplistic sampling and analyses program aimed at addressing the major contaminants of concern in the Commonwealth. As indicated previously, the Department has not provided a specific list of concerns regarding contaminants in fill material. A proposed list of contaminants could include PCBs, Total Petroleum Hydrocarbons, and some selected metals of concern.

A simplistic screening evaluation (State short list of parameters) along with the site specific sampling and analyses conducted based on the generator's knowledge of the site would be achievable and cost effective. Such a program (unlike the program being proposed) would in turn reduce the burden on landfills, reduce costs to generators and provide protection for the environment of the Commonwealth.

Commingling of Fill Material to Meet "Clean Fill" Criteria – Option Should be Open to Industry.

In Section 287.1(iii)(B), the Department proposes to allow pesticide laden soils contaminated through historical, authorized use to be blended with other soil to meet the "Safe Fill" limits. SSIPA concurs with the Department that the blending of soil to produce a "Safe Fill" material is better than potentially generating millions of tons of unusable material that will need to be disposed at tremendous costs. SSIPA also believes that this concept should be extended to fill materials generated from industrial sites. As is the case with pesticide contamination in fruit orchards, industrial facilities may also exhibit minor levels of pollutant contamination from historical operations. SSIPA believes that the blending of industrial fill (material not associated with past releases at the site) that contain low concentrations of contaminants with other "clean" soils will (as with soil from fruit orchards) result in fill material that can serve a useful function at the facility, reduce the burden on landfills and not pose a concern to the environment.

Management of Dredged Materials

SSIPA has several concerns with the Department's proposed management of dredged materials. As indicated previously, the definition of "Safe Fill" should include uncontaminated dredged material from industrial facilities. Dredged materials from industrial facility intakes are no more contaminated than any other dredged material removed from the waterways of the Commonwealth. Therefore, dredged materials from industrial locations should also be considered "Safe Fill".

SSIPA also believes that requiring sampling and analysis of dredged materials and requiring these materials to meet all of the "Safe Fill" standards in Tables 1 and 2 or Tables 1 and 3 is unwarranted and unnecessary. Removed sediments are not wastes and are currently not being managed as waste. Instead, they are

being used as beneficial fill. SSIPA member companies, like many industrial facilities, contract dredging firms to periodically dredge river water intakes. Upon removal and de-watering of the dredged sediments, the dredging contractor typically deposits the dredged material at a United States Army Corps of Engineers approved site. A change in this current practice is not warranted.

The Department has not provided any technical reasons to necessitate the proposed extensive sampling and analysis requirements. Furthermore, the costs/benefit analyses provided by the Department do not contain sufficient detail and contain many erroneous assumptions. The Department needs to compare the true costs (and difficulty) of sampling, analyses and program management to the benefits (if any) that would be gained from implementation of this regulation. The costs and effort required to sample and analyze sediment for all of the parameters in Tables 1 and 2, or Tables 1 and 3 (as with other "Clean Fill") will be near or will exceed the cost of disposal. As such, the proposed regulations will only serve to halt current beneficial practices of sediment re-use and increase the burden on the landfills within the Commonwealth.

SSIPA agrees with the Department that the option to place removed sediment on the banks of rivers and streams (without sampling and analyses) should be allowed. However, the characteristics of dredge sites (steep banks, lack of land access, etc.) at SSIPA member company locations, as with many dredge sites, may preclude the use of this option. As such, SSIPA believes that the Department should expand the proposed allowance to the placement of sediments at approved Army Corps of Engineer sites. Placement of removed sediments in designated fill sites not only results in a cost effective solution to the disposition of dredged material but also will result in the same (or better) protection of the environment.

If the Department requires analytical analyses of dredged material prior to off site use as "Safe Fill", the Department should select a more reasonable list of parameters to be met. SSIPA believes that the parameters set forth in the Department's Draft Dredging Guidelines (1/15/98) are more realistic and achievable. Specifically, the requirements for TCLP metals and Organics, Total Petroleum Hydrocarbons (100 ppm), Total Lead (45 ppm), Total PCB ($\leq$1ppm) Total Organic Halides (TOX - $\leq$25 ppm) and Chlordane ($\leq$ 20 ppb) in the Draft Dredging Guidelines are more than sufficient to provide the environmental protection sought by the Department.

Due to the difficulties in obtaining samples prior to disposition of dredged material, SSIPA also requests that the Department allow facilities to conduct only periodic sampling of dredged materials (sampling for each dredge event should not be required). If the facility has at least one (1) set of sampling data (Draft Dredging Guidelines) and is not aware of any releases to the waterway that would adversely affect the sediments, it is reasonable to assume that future sediments will contain approximately the same levels of contaminants. Allowing

facilities to conduct reduced sampling and analyzing for specific targeted substances of concern will result in protection of the environment.

Calculation of Numerical Standards for Safe Fill is Overly Complicated and Difficult to Achieve

In Section 287.11, the Department has provided extremely cumbersome and complicated procedures for determining if materials are "Safe Fill". The amount of effort required to decipher the myriad of sample and analytical techniques seems to only serve to further ensure that no fill material will be deemed "Safe Fill". Facilities may find it necessary to hire teams of consultants to oversee actions at the facilities that were previously addressed in a simple and reasonable manner. The costs associated with consultants, sampling, analysis, project delays, and long term liabilities inferred by these regulations could result in no material from industrial facilities being used as "Safe Fill". This is contrary to the precepts and intentions of this regulation. The Department should review the existing criteria and, if sampling and analyses are deemed necessary, realistic achievable criteria need to be proposed. Sampling procedures should be simple (collect grab or composite samples) and the analytical requirements should be reasonable and concise (one simple table of analytical limits).

Sampling Procedures are Overly Stringent and Should be Guidance Not Regulation

The Department has provided detailed sampling procedures for "Safe Fill" in these proposed regulations [Sections287.11(b)]. These sampling procedures are overly stringent, even more stringent than hazardous waste sampling requirements. The Department does not provide sufficient scientific evidence to require the collection of eight (8) samples for 125 yd^3 of material or twelve (12) samples for every 3,000 yd^3. If materials are homogeneous and from the same location, one (1) composite from the entire site should be sufficient to determine the presence of contaminants. The Department may argue that taking a representative composite sample from a large area may result in missing some potential pockets of impacted material. This is not a concern during fill operations as all the material will be co-mingled during relocation to the fill site. Therefore, a composite sample or samples based on the location of fill material to be excavated and the visual characteristics of the fill material should be more than adequate to characterize the site.

In addition to being overly stringent, in many instances it is simply not feasible to implement the proposed sampling requirements in the field. Due to fill location and type (i.e. foundations under existing buildings) or the need to expedite projects in active facilities for safety and operation reasons, it may be difficult to impossible to sample materials prior to excavation. The Department needs to

allow facilities to be flexible with the sampling protocol on a case by case basis, and not require one set of sample protocols.

Also, as with the requirements for determining hazardous vs. residual waste, under the proposed regulations facilities are ultimately responsible for determining if generated materials are "Safe Fill". As such, if the Department insists on providing sampling protocols, these protocols should only be in the form of guidance and not as regulation.

Regulatory Requirements for Permit by Rule for Contaminated Fill Material are Overly Restrictive, Costly, and Cumbersome

Under Section 287.102, the Department proposes lists of chemical parameters that must be met prior to obtaining a permit-by-rule for disposal of contaminated construction and demolition debris. SSIPA agrees with the Department that minimally impacted materials should be allowed to be used as fill material instead of unnecessarily filling landfill space. SSIPA also understands that there needs to be restrictions on the levels of contaminants acceptable for these materials to be used as fill. However, as stated previously, SSIPA is concerned that the proposed regulations are too cumbersome, expensive and are overly restrictive.

An alternative procedure that would be protective of the environment and provide a cost-effective approach is site specific analytical protocols. Analytical parameters would be selected based on the generator's knowledge of the site. The criteria in Tables 1, 2 and 3 (Appendix A), or a more appropriate set of limitations and analytical requirements, could then be used to determine whether the fill materials meet the Safe Fill standards or if the materials must be disposed as C&DD or residual waste.

In conjunction with the site specific sampling and analyses procedure proposed above, the Department could set forth a much more simplistic sampling and analyses program aimed at addressing the major contaminants of concern in the Commonwealth. This list of contaminants could include PCBs, Total Petroleum Hydrocarbons, and some selected metals of concern. Further, the analytical limitations should be based on leachability rather than concentration.

A simplistic screening evaluation (State short list of parameters) along with site specific sampling and analyses conducted based on the generator's knowledge of the site would be achievable and cost effective. Such a program (unlike the program being proposed) would in turn reduce the burden on landfills, reduce costs to generators, and provide protection for the environment of the Commonwealth.

Requirement for Erosion and Sedimentation Plan for Permit-by-Rule for Contaminated Fill Material is Unnecessary

The Department indicates that facilities operating under a permit-by-rule for contaminated fill material (and for C&DD) need to prepare an erosion and sedimentation control plan (ESCP). SSIPA believes that preparation of a separate ESCP for each disposal location is not necessary for industrial facilities that operate under NPDES permits that contain Stormwater requirements. Under existing permit programs, facilities are required to minimize discharge of pollutants and to minimize erosion. Facilities are also regulated as to the pollutants allowed in stormwater discharges. As such, SSIPA believes preparation of additional ESCP plans for the "Safe Fill" program is not necessary and is duplicative of existing requirements and therefore should be removed from the proposed regulations.

Notification Requirements for Permit by Rule for Contaminated Fill Material Should be Clarified

Under section 287.102 (l)(12), the Department proposes that facilities receiving contaminated fill material under the proposed permit-by rule program are required to provide the Department with details regarding the placement of the fill material. This section is unclear as to whether facilities need to notify the Department for each fill project or if a one-time notification is sufficient. In many instances a facility may receive fill material from numerous small projects. SSIPA believes that in the interest of clarity and reduced paperwork, facilities should be allowed to provide the Department with a single notice indicating the expected receipt of fill from numerous projects.

Limits Below Analytical Detection and Lack of Approved Analytical Procedures

Parameters in Tables 1-6 of Appendix A contain at least one (1) example of a parameter (hexavalent chromium) where the detection level is too low to meet. In addition, there are some parameters that do not have EPA approved methods for analysis. SSIPA requests that the Department reevaluate the parameters and limits provided in Tables 1-6. Only limits that are analytically achievable and have approved methods for analysis should be incorporated into these tables.

Out of State Shipment of Fill Material Not Addressed

SSIPA requests that the Department clarify the applicability of the policy for shipment of "fill" from a Pennsylvania facility to Out of State facilities. SSIPA is concerned that regulating "fill" as "Safe" or under a "permit-by-rule" in Pennsylvania may preclude the shipment of this material to a neighboring state. SSIPA requests that the Department specifically indicate that this policy does not

regulate the transfer of fill from Pennsylvania to other states. The regulations currently in effect at the receiving state should apply.

Summary:

In summary, SSIPA is extremely concerned with the proposed regulation. The stated goal of the Department is to reduce the amount of material currently being landfilled and to provide guidance to landowners on the appropriate management of "Safe Fill". The proposed regulation does not appear to accomplish either of these goals. Instead, the outcome of the proposed regulations will result in increased disposal of materials and costs. The strict "safe fill" limits, costly sampling and analysis, confusing language and potential long-term liabilities associated with this regulation will result in a major increase in landfill disposal tonnages and costs. Not only is this a cost concern but it is also extremely problematic given the current refusal to allow additional landfills to be installed in Pennsylvania or even for expansion of existing landfills.

The cost of implementing these regulations will be significant. The Department has incorrectly estimated that this regulation will result in a savings of approximately $500 million per year. This savings is based upon the assumption that the regulation will result in a decrease in disposal of "Safe Fill" material. The Department believes that approximately one-half of the current fill material generated in Pennsylvania (approximately 20 million yd^3) will no longer be land disposed. However, this assumption is a gross error. Facilities are not currently land disposing this material. In fact, based on these regulations (using the Department's own estimates for fill material), it is likely that much of the fill material generated at sites (and likely all of the fill material generated at industrial sites) will be land disposed instead of being used as fill. SSIPA believes that instead of saving $500 million there will be a cost increase of at least $500 million.

In addition to the direct financial costs, the proposed regulation will result in innumerable permit-by-rule landfills throughout the state. By and large, these "landfills" will be filled with material that is safe for the environment and that should not be classified as landfills. The Department has not provided any accounting for how these landfills are to be regulated over the long term. Due to the presence of these "safe" landfills, property values in Pennsylvania may fall, tax revenues may be decreased, and unnecessary long term liability for the sites may increase. SSIPA does not believe that the impact of this proposed regulation on Pennsylvania business, residents, government or the environment has been adequately analyzed. SSIPA believes that the Department should conduct a thorough review of the social, economic and environmental impacts of the policy prior to issuance. These less intangible costs need to be included in the Department's cost/benefit analysis and need to be addressed prior to promulgation of any "Safe Fill" regulation.

The complexity of the entire "Safe Fill" program, and the permit-by-rule program in particular (sampling and analysis, and recordkeeping, notification requirements, etc.), serve not to reduce environmental contamination but only to increase regulatory burden.

As stated previously, the proposed regulations also appear to be directly disadvantageous to industry by not allowing on-site use of uncontaminated fill material as "Safe Fill". SSIPA is concerned with this situation and with the fact that the Department has come to this decision without expressed sound basis or scientific evidence. SSIPA believes that, at a minimum, industrial sites should be given the same opportunity to utilize uncontaminated fill material on-site as "Safe Fill" as residential and commercial facilities.

Industry is not in the position to be able to absorb the increased costs and management requirements of this regulation. Dozens of steel making facilities in the United States have recently filed for bankruptcy. SSIPA believes that the Department needs to re-assess the real impact of this proposed regulation upon the industrial community and incorporate the results of such an assessment into any regulations issued.

In short, due to the enormous costs and the lack of demonstrated environmental benefit, the proposed Safe Fill regulation should be either rescinded in its entirety or substantially revised prior to issuance.

SSIPA appreciates the opportunity to provide comments to this regulation and is available to provide further assistance.

Trostle, Sharon F. - DEP ORIGINAL: 2245

From: smcgowan@cartech.com
Sent: Wednesday, April 03, 2002 4:05 PM
To: RegComments@state.pa.us
Subject: SSIPA Comments for Safe Fill Proposed Rulemaking - PA. Code Chapters 271 and 287

SSIPA Comments to Safe Fill Pr...

Attached are SSIPA's comments to the Proposed Safe Fill Proposed, PA. Code Chapters 271 and 287.

A hard copy will follow in the mail.

If you need further information on the submission, please contact:

Sean McGowan
Carpenter Technology
101 Bern Street
Reading, PA 19601
(610) 208-3018
(See attached file: SSIPA Comments to Safe Fill Proposed Rulemaking.doc)

ORIGINAL: 2245

Pennsylvania Utility Contractors Association

Strawberry Arcade
223A Walnut Street
Harrisburg, PA 17101
Phone: 717-234-8055
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Rick Zoelle, President
Brenda Reigle, Executive Director

April 3, 2002

Re: Comments on Proposed Safe Fill Regulations on
Behalf of the Pennsylvania Utility Contractors Association

Secretary, Environmental Quality Board
P.O. Box 8477
Harrisburg, PA 17105-8477

Mr. William Pounds
Pennsylvania Department of
Environmental Protection
Division of Municipal and Residential
Waste
P.O. Box 8472
Harrisburg, PA 17105-8472

Dear Secretary and Mr. Pounds:

On behalf of the Pennsylvania Utility Contractors Association, I am pleased to submit the following comments on the Safe Fill Regulations (25 PA CODE CHS. 271 and 287) as proposed by the Environmental Quality Board (the "Board") to the Department of Environmental Protection (the "Department"), and noticed in the *Pennsylvania Bulletin* on February 2, 2002.

First, we would like to call to the attention of the Board and Department the fact that our Association represents over 200 contractors, subcontractors and suppliers throughout the Commonwealth of Pennsylvania. These members of the Pennsylvania Utility Contractors Association (PUCA) perform most of the water and sewer line utility and plant work for authorities and municipalities throughout the Commonwealth. As such, they are dedicated to keeping a healthy, safe and pollution-free environment through the treatment and transmission of potable water and sewage in a manner which is consistent with not only the letter, but the spirit of environmental needs of Pennsylvania.

However, many of the contractors who perform this environmentally valuable work are admittedly small to medium-size competing companies. They are concerned with the costs and difficulties posed if the obligations and duties of the new proposed Regulations are imposed upon them, as opposed to the owners of the utility line rights-of-way, and the designers of utility line projects. These are the local governmental

authorities and municipalities who own, design and contract out the work. Some of our comments reflect these concerns and we respectfully ask that the Board and Department take these concerns into consideration.

Our specific comments on the Regulations are as follows:

First, the proposed Regulations should be amended to reflect that in cases of utility and right-of-way work, "The person using the material... " (vii) and "A person who receives and uses" (l)(12) material which does not meet the standard of Safe Fill, is the right-of-way owner or controller that lets any contract which results in excavation of material which comes under the definitions set forth in the proposed Regulations. The Regulations should reflect that this responsibility is a non-waivable responsibility and, to the extent possible, any burdens for determining whether Safe Fill standards and applications are met should be made at the design stage of any utility line or plant project involving movement of material within a right-of-way or movement of material within a property or offsite from a right-of-way or property. Similarly, any unforeseen or unanticipated site conditions involving the applicability of the Safe Fill Regulations and costs which result must be borne by the owner or controller of the right-of-way, which in some cases is a municipality or authority and branch of local government. Similarly, the burden and cost of testing, handling and any remediation or disposing of excavated material required by the Safe Fill Regulations must be borne by the owner of the right-of-way or local governmental body or authority which contracts for such subterranean work on the right-of-way.

In this respect, it should be pointed out that contractors who perform such excavation and utility line and plant work do not participate in the design stage of the project, nor do they usually have access to the site for a determination of subterranean conditions. By the same token, most municipalities and authorities contracting for utility line work within rights-of-way they control, do not utilize in their contracts the type of Hidden or Unforeseen Site Condition clause found in the AIA contracts and in the Federal Acquisition Regulations. Similarly, the authority has access to the records involved in the exercise of due diligence in its locality, and would be able to better determine knowledge of past activity which would indicate that the material has been subject to a release.

This change in the Regulations would help contain costs of the performance of the work and the costs reflected in the bids submitted by the contractors for this environmentally vital work. Consequently, the responsibilities and costs in connection with the application of the Safe Fill Regulations should be borne by the owners and controllers of the rights-of-way and work sites for water and sewer utility lines and plants rather than the contractor who merely performs the work pursuant to the plans and specifications given to it.

Second, the definition in respect to "historic fill" does not take into consideration the realities of sewer and water line utility work. In this respect, the term "safe fill" in the Regulations include historic fill in quantities of less than or equal to 125 cubic yards per excavation location, if the conditions of Subparagraph (i)(A)(I) and (II) are met. Sewer and water line contractors may excavate and cover three or four times that amount in one particular day. This is especially true in instances where there is a time element involved because of the critical nature of the condition of the water or sewer line. The Regulations should be clarified to indicate that the term Safe Fill includes historic fill in quantities of less than or equal to 350 cubic yards per excavation location per day on line work. Again, this would be subject to the conditions of Subparagraph (i)(A)(I) and (II) being met.

Third, for projects involving sewer and water line work, the condition that material moved within a right-of-way must be no greater than the lower of the non-residential direct contact numeric values and other numeric values stated in (viii) should be eliminated. Again, we ask that the Board and the Department take into consideration the nature of water and sewer line work within a right-of-way owned by a municipality or authority. The rights-of-way are very narrow and the excavation, laying of pipe and backfilling is very limited and on a rigid time schedule. If the material being excavated meets the standards of (I) and (II), and taking into consideration that it is the most part in the nature of historic fill, which is being put back into place in the trench from which it came, the requirement of applying the numerical limits in (viii) imposes a testing and time limitation which could prove to be costly both in terms of time and expense and is unnecessary.

Fourth, there should be modification to the Regulations taking into consideration the narrow nature of rights-of-way and utility corridors when excavating water and sewer line projects with long dimensional lines. In such cases, it is frequently impractical to pile questionable material excavated within the right-of-way. In fact, in the case of utility work along a highway, it is actually not advisable to attempt to store questionable material on right-of-way edge locations where storm water could cause material dispersal. Therefore, the Regulation should be changed and revised to indicate that contractors can move materials which are excavated on such site to appropriate storage locations, as long as the materials are placed on a tarp and covered by a tarp while being characterized and dealt with. Again, the responsibility for such location should be that of the owner of the right-of-way, which is the local authority or municipal government which owns the utility right-of-way and has let the contract for the excavation. Similarly, such local authority or government should have responsibility for the costs of transporting such materials so they could be properly classified. This position on the Regulations would be an acknowledgement that local transport of such excavated materials is acceptable until it is determined what classification the materials are and, therefore, the municipality or authority can avoid being charged with hauling waste. Again, it should be pointed out

that the raising of the historic fill limitation to 350 cubic yards per excavation per day would help to alleviate the potential for problems arising out of this issue.

Fifth, while we do not wish to be repetitive, we would like to recommend that in case the recommendation set forth in the First item above is not adopted in totality, the Regulations should be changed so that the cost of due diligence and testing are borne by the owner of any right-of-way involved in utility water and sewer work, which as stated, is generally the local government or authority. This should be a non-waivable provision.

Sixth, consistent with the position taken in item First, our Association recommends that the Regulations provide that it is the owner of the right-of-way, which is the local authority or municipality in utility water and sewer line projects, that has total responsibility for the material in the excavation and the classifications of fill of the material excavated. However, in case that position is not totally adopted by the Board and the Department, it is our recommendation that the owner of the right-of-way in utility line projects be responsible for the requirements of (i)(A)(I) and (II) of the recommended Regulations. It is the owner who performs the engineering and lets the contract. In respect to the appropriate level of due diligence, the owner of the right-of-way, as stated above, is in a much better position to determine past activity which would indicate that material had been subject to a release. Similarly, such owner of the right-of-way would be in a much better position to determine whether or not the numerical standards for (viii) would be met in respect to the excavation and is in a better position to satisfy the requirements in (vii) inasmuch as it would maintain the records and documentation in respect to the Safe Fill.

Seventh, we recommend that the definition of "historic fill" set forth in the recommended Regulations be modified by eliminating the requirement of (ii)(A). That is, an elimination of the requirement that there be no indication that such historic fill has been subject to a release of regulated substances. Again, this takes into consideration the nature of the narrow rights-of-way and long dimensions on sewer and water utility work. Inquiries of a Phase I nature for a 9-mile narrow right-of-way would be impractical and if undertaken, expensive. Basically, if the second part of the standard or requirement as to visible staining, odor or other sensory nuisances associated with material is present, that should eliminate the need for the added costs and difficulty of a long dimension Phase I.

Eighth, the visible staining, odor and other sensory nuisances standard or requirement for both historic fill and Safe Fill is too vague as to be meaningful. In this respect, the standard for historic fill in the definition section of the Regulations, or §287.1, should be changed to indicate that there be no "recurring or persistent" odor and that as in the Safe Fill definition, that the visible staining, recurring or persistent odor or other sensory nuisance be "resulting from chemical contaminants." By the same token, the definition of Safe Fill should be changed in (i)(II) to indicate that any odor must be

recurring or persistent. This would eliminate a temporary or unexplained odor which is momentary in respect to the particular excavation.

Conclusion

The above constitute the comments of PUCA in respect to the proposed Regulations. As always, our Association supports a strong and healthy environment and commends the effort of both the Department of Environmental Protection and the Environmental Quality Board in attempting to reach that goal. As stated above, however, we have a genuine concern. Our work, which consists of multi-mile narrow right-of-way work designed by engineers employed by municipalities and authorities is unique.

Our industry remains healthy because of the competition among the various contractors and the professionalism of all those who contribute towards building environmentally sound and durable water and sewer lines and treatment plants.

As you will note, many of our concerns are that the burden of meeting lengthy right-of-way excavation restrictions will be pushed off by the owner of the rights-of-way who are also the designers and engineers on the line projects, on to our contractors. The types of conditions which can be encountered are impossible to anticipate by the contractor, but are simpler for the owner of the right-of-way employing the engineer on the job to satisfy. In all due respect, if our recommendations are not followed, we can anticipate much higher bids for sewer and water line and plant work. Contractors faced with conditions which they can't possibly determine in advance may have no choice other than to build the costs of such compliance into their bids. We do not want this to happen. We do believe, however, that the goals of the proposed Regulations can be met, and at the same time, the costs of water and sewer line and plant work can be held down if our recommendations on responsibility for meeting the regulations, together with some of the other recommendations pertaining to rights-of-way, historic fill and the application of numerical standards are adopted.

Therefore, we respectfully submit these comments and recommendations for modification of the proposed Regulations.

If you have any questions at all, please do not hesitate to contact me.

Very truly yours,
Brenda V. Reigle
Brenda V. Reigle, Executive Director

cc: Board of Directors of PUCA
Allan L. Fluke, Esquire
Gary Brown, P.E., RTES, Inc.

BVR/jlb/c/puca/letter.commentsonsafefillletter