

Pennsylvania Turnpike Commission

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April 3, 2002

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

> Re: Comments on Proposed Safe Fill Regulations

25 PA Code Chapters 271 & 287

Dear Environmental Quality Board:

On behalf of the Pennsylvania Turnpike Commission, I am very pleased to submit to you the following comments on the Safe Fill Regulations as proposed by the Department of Environmental Protection in the February 2, 2002, issue of the Pennsylvania Bulletin. Our comments are as follows:

GENERAL COMMENTS

- 1. A flow chart of the means by which one complies would be very beneficial due to the multitude of "if/then" type statements and numerous potential pathways which are dependent upon yet more possibilities.
- 2. Many of our contracts include the use of recycled asphalt and concrete pavement. The milling process occurs directly on the road surface and is then transported to a storage location prior to its reuse. The material can be used as a sub-base for total reconstruction projects, added to the hot mix mixture in another locale, or stored for future use. The limitations proposed for the length of time that material can be stored are to restrictive and would result in higher project costs and delays in the schedule due to the need to waste more material than otherwise would have been utilized under current regulations.
- 3. We have concerns about the material quantitative limits, which we feel, need revision. Specifically, the thought is that these limits will increase the time frame for a project and in turn also increase the projects overall cost (see Specific Section Comment #1).
- 4. As a result of the proposed testing requirements, it would be reasonable to assume that a certain portion of demolition materials would not meet the proposed safe fill standards. We are also aware that landfill space is limited in Pennsylvania and as a result, project costs would increase as materials that no longer meet standards need to be treated as waste and disposed of in approved landfills, and possibly hauled out of state.

SPECIFIC SECTION COMMENTS

1. Section 271.103 (g)(1) - The 350-ton limit established here may be sufficient for milling of bituminous surfaces, however, our experience on total reconstruction projects is that we can generate over 800 tons/day of concrete pavement. If the 350-ton upper limit would be in effect, project duration would likely be extended, which would in turn, result in higher project costs.

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- 2. Section 271.103 (i)(7) What is the specific definition of "surface waters" that is used in this section? If intermittent watercourses, drainage ways, or headwater areas are considered surface waters due to their abundance in Pennsylvania, there would exist major limitations in placement of fill material.
- 3. Section 287.1 (i)(II) This section deals with visible staining and odors associated with the material. Most roadway surfaces typically have visible staining caused by normal vehicular use. These requirements are extremely strict and may very well exclude all transportation facilities from meeting safe fill regulations and from being recycled. A resultant effect would be an increase in the amount of material that will require disposal.
- 4. Section 287.1 (B)&(C) There seems to be some confusion between these subsections. It appears that it would be impossible to know if a sample meets the safe fill numeric standards without having conducted sampling and appropriate analysis.
- 5. Section 287.1 (vi)(A) Again the question arises related to the definition of "surface water" which is being utilized (see Specific Section Comment # 1). This occurs several more times throughout the proposed regulations and needs to be addressed.
- 6. Section 287.1 (vii) The Commission generally uses contractors for reconstruction and resurfacing projects and the question arises as to who is responsible for demonstrating that the material is classified as safe fill.
- 7. Section 287.11 The Commission is concerned with the proposed sampling protocol and associated laboratory/analytical cost which impact our operating cost and time frame for the completion of our projects. With the procedures proposed in the regulations, material must first be excavated and then stockpiled before testing can take place. The delay in testing the material in this fashion inherently extends the project schedule. Some form of in-place testing should be developed so that a more accurate description of the project can be established. This will allow a clearer scope of work to be formulated and a much tighter control of the entire project schedule. The uncertainty of not knowing how much material may be recycled and how much will have to be handled as waste can greatly effect the overall scope of the project as well as the cost and time frame.

These reflect our major concerns with the proposed Safe Fill Regulations. Should you have any questions, please don't hesitate to call.

Sincerely

Alexander R. Jansen, P.E. Deputy Executive Director –

Engineering and Maintenance/Chief Engineer

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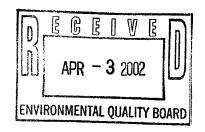
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April 3, 2002

Environmental Quality Board Rachel Carson State Office Building 15th Floor P.O. Box 8477 Harrisburg, PA 17105-8477

RE: The Pennsylvania Bulletin proposed amendments to Pennsylvania's municipal and residual waste regulations (Safe Fill)

Dear Environmental Quality Board:

The Pennsylvania Chamber of Business and Industry (the Chamber) is the largest, broad based business association in Pennsylvania. Our more than 10,000 members employ about 50% of Pennsylvania's private workforce or approximately 1.5 million people. 80% of our members have less than 100 employees.

On February 2, 2002, the Pennsylvania Environmental Quality Board ("EQB") published in the Pennsylvania Bulletin proposed amendments to Pennsylvania's municipal and residual waste regulations commonly referred to as the safe fill regulations.

We have reviewed the package and believe that the proposed safe fill regulations represent marked progress in rectifying the problems created by the Clean Fill Policy. However, substantial additional changes to the proposed safe fill regulations are necessary in order to avoid regulating under the Pennsylvania Solid Waste Management Act ("SWMA") enormous amounts of soils and other materials that can be beneficially used as fill with no adverse impact to either public health or the environment.

We have included both detailed comments and recommended regulatory language for your consideration. Please feel free to contact Sharon Roth of the Chamber staff at 717-720-5455 should you have any questions.

Sincerely,

Fred A. Sembach

Fred A. Sembach Vice President, Government Affairs

Attachments

PENNSYLVANIA CHAMBER OF BUSINESS AND INDUSTRY COMMENTS ON SAFE FILL REGULATIONS

I. INTRODUCTION

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On February 2, 2002, the Pennsylvania Environmental Quality Board ("EQB") published in the Pennsylvania Bulletin proposed amendments to Pennsylvania's municipal and residual waste regulations. These proposed regulatory amendments are commonly referred to as the "safe fill regulations" and are designed to replace a guidance document entitled "Policy and Procedure Establishing Criteria for Use of Uncontaminated Soils, Rock, Stone, Brick and Block, Concrete, Gravel, Used Asphalt, Dredged Material and Waste from Land Clearing, Grubbing and Excavation as Fill" (hereinafter the "Clean Fill Policy") that the Pennsylvania Department of Environmental Protection (the "Department") issued on February 29, 1996.

As described in these comments, the Pennsylvania Chamber of Business and Industry (the "Chamber") believes that the proposed safe fill regulations represent marked progress in rectifying the problems created by the Clean Fill Policy. However, substantial additional changes to the proposed safe fill regulations are necessary in order to avoid regulating under the Pennsylvania Solid Waste Management Act ("SWMA") enormous amounts of soils and other materials that can be beneficially used as fill with no adverse impact to either public health or the environment. While the proposed safe fill regulations incorporate standards based on the medium specific concentrations ("MSCs") developed by the Department as part of implementing the statewide health standard under the Pennsylvania Land Recycling and Environmental Remediation Standards Act ("Act 2"), the proposed safe fill regulations also include additional layers of requirements that are unnecessary and inconsistent with the scientific principles on which Act 2 rests. The proposed safe fill regulations can be significantly simplified and harmonized with the regulations that are already in place under Act 2 without sacrificing the protections that the Department has sought to achieve through the proposed safe fill regulations. Such efforts are critical to facilitating the ability of the regulated community to comply with the proposed safe fill regulations and the Department to administer those regulations. In the absence of further changes to the proposed safe fill regulations, Pennsylvania's landfill capacity will quickly be depleted as materials that can safely be used for beneficial purposes will instead be disposed of as wastes.

II. BACKGROUND

Few if any guidance documents issued by the Department have had broader ramifications for the regulated community than the Clean Fill Policy. The Clean Fill Policy in practical terms establishes the dividing line between soils and other materials which are deemed sufficiently "clean" to be insulated from regulation as wastes under the SWMA and those that instead are subject to the complex requirements imposed by the SWMA. As such, the Clean Fill Policy has relevance to virtually every construction and remediation project in Pennsylvania, ranging from the construction of sewer lines and

roads to the redevelopment of industrial sites and "brown fields." Indeed, virtually all earthmoving activities in Pennsylvania are potentially affected by the Clean Fill Policy. The proposed safe fill regulations cover the same expanse of activities and therefore have massive economic ramifications for the Commonwealth and its citizens.

In developing the Clean Fill Policy, the Department sought to bridge a key regulatory gap highlighted by the current framework of the residual waste regulations. Under the residual waste regulations, wastes are defined to include "contaminated soil, contaminated water [and] contaminated dredge material." 25 Pa. Code § 287.1. By contrast, clean fill is defined as "[u]ncontaminated, nonwater-soluble, inert solid material used to level an area or bring the area to grade." 25 Pa. Code § 287.1. In both instances, the concept of what is "contaminated" is critical to determining whether a material qualifies as a waste or as clean fill. The residual waste regulations, however, provide no standards for making such a determination.

The residual waste regulations also incorporate the notion of clean fill in defining the scope of permitting requirements thereunder, exempting from permitting requirements the following activities:

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

25 Pa. Code § 287.101(b)(6). (The municipal waste regulations include a similar provision set forth at 25 Pa. Code § 271.101(b)(6).) Again, this permit exemption rests on the concept of what is "contaminated" and what is not.

In order to establish lines of demarcation concerning soils and other materials that are sufficiently "contaminated" to be regulated as wastes rather than qualifying as clean fill, the Department issued the Clean Fill Policy in 1996. The Clean Fill Policy includes standards that are an order of magnitude less than the most restrictive of the MSCs under Act 2. In many instances, these standards have proved to be thoroughly unworkable because the standards are below background concentrations of regulated substances found in soils and other materials. In practice, the Clean Fill Policy has afforded the Department with nearly unfettered discretion to classify soils and other materials

associated with construction and excavation projects as wastes under the SWMA. Because compliance with the Clean Fill Policy on its face has often been impossible, the Clean Fill Policy has not been utilized by many members of the regulated community. In other instances, the Clean Fill Policy has served as a monumental and unnecessary impediment to construction and development projects, including "brownfields" redevelopment projects that the Commonwealth has sought to foster.

The proposed safe fill regulations are the product of nearly five years of effort by the Department and a broad spectrum of members of business and industry. The Chamber has played a vital role in this process. Significant progress has been made. Much work remains to be completed, however. If the safe fill regulations are finalized in their current form, vast amounts of soil and other materials which are moved about as part of construction and other activities will have to be managed as wastes under the SWMA with no attendant demonstrated benefit to either public health or the environment. Limited landfill capacity will be consumed with materials that otherwise could be beneficially and safely used. At the same time, the need for virgin mined materials will increase as such materials are used to replace the materials being sent to landfills. Consequently, the proposed safe fill regulations will have profound effects on the manner in which construction, development and demolition projects are conducted in Pennsylvania and the costs associated with such projects. Moreover, the ripple effects from the safe fill regulations will be felt in a much larger sphere of activities.

The preamble to the proposed safe fill regulations indicates that 80% of soils managed yearly will not need to be sampled and analyzed under the provisions of the proposed regulations. The requirements contained in the proposed regulations, however, suggest that most soils and other materials potentially qualifying as safe fill will be subject to expensive analytical procedures. The Chamber's comments are, in part, intended to help effectuate the stated goal of allowing for the management of most soils and other similar materials without undue regulatory involvement.

The safe fill regulations need to be protective of human health and the environment while at the same time being simple to apply and administer. The safe fill regulations also need to be cost effective. The comments set forth below are intended to advance these goals.

In order to provide the EQB and the Department with specific suggestions regarding the manner in which the proposed safe fill regulations should be revised to address the comments and concerns presented herein, a redlined version of the proposed safe fill regulations is attached hereto showing changes and modifications to the proposed regulations that the Chamber recommends be incorporated. The redlined version of the proposed regulations has been prepared by an ad hoc group of individuals who, among other things, are members of the Cleanup Standards Scientific Advisory Board, the Solid Waste Advisory Committee, and the Chamber's Solid Waste Advisory Committee.

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III. DISCUSSION

A. The Definition of Safe Fill

1. Overview

The heart of the proposed safe fill regulations is the definition of "safe fill" that the Department has developed. Under this definition, only certain materials can potentially qualify as safe fill. Specifically, these materials include 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. To be classified as safe fill, such materials must also meet certain numeric standards, not have been subject to a release, and not exhibit any visible staining, odor or other sensory nuisance resulting from chemical contaminants associated with the material. The Chamber believes that the proposed definition of "safe fill" is overly complicated and restrictive, and represents a "belt and suspenders" approach that is unnecessary and unwise.

2. Types of Materials Potentially Qualifying as Safe Fill

As noted above, 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. There is no reason to use the descriptor "uncontaminated" before each such category of material. The term "uncontaminated" is not defined and is subject to a range of interpretations. Using this term is confusing and unnecessary. The safe fill regulations are designed to establish standards for materials that are deemed to be safe. If a material meets those standards, then it may be used as safe fill regardless of whether it is "uncontaminated." Accordingly, the Chamber recommends that this descriptor be eliminated.

Moreover, the proposed safe fill regulations categorically classify certain materials as wastes regardless of their characteristics. For example, brick, block and concrete from construction or demolition activities at industrial properties can never qualify as safe fill under the proposed regulations and are therefore automatically classified as construction and demolition wastes. In addition, under the proposed safe fill regulations, historic fill material is generally classified as a residual waste and cannot qualify as safe fill. The justification for such prescriptive requirements is wholly missing.

Brick, block and concrete from industrial properties may pose special concerns or may be perfectly innocuous. Depending on how broadly an industrial property is defined, the proposed regulations potentially render brick, block and concrete from office buildings, warehouses, shipping areas, parking lots and other areas at industrial facilities wastes even though such brick, block and concrete may be wholly devoid of impacts from industrial operations and exhibit characteristics no different than brick, block and

concrete from commercial or residential properties. Moreover, brick, block and concrete from production areas may have no different characteristics than brick, block and concrete from commercial or residential properties. The Chamber believes that the classification scheme that the Department has developed in the proposed safe fill regulations paints with too broad a brush and does not take into account the high degree of variability that is encountered in many circumstances. To eliminate this problem, the Chamber strongly recommends that brick, block or concrete from any type of property be included in the list of materials that <u>potentially</u> may qualify as safe fill provided that the other conditions of the definition of safe fill are met. If those conditions are not met, then the brick, block or concrete must be managed as a waste. However, if those conditions are met, then brick, block and concrete resulting from construction or demolition activities at industrial properties should qualify as safe fill.

The fact that a permit-by-rule for the use of brick, block and concrete has been included in the proposed safe fill regulations does not negate the difficulties posed by categorically defining as wastes brick, block and concrete from construction or demolition activities at industrial properties. As discussed in more detail later in these comments, the proposed permit-by-rule contains extensive conditions and limitations. These conditions and limitations will restrict the areas where brick, block and concrete from industrial properties could otherwise be used, make such materials more costly to manage, and result in delays in the use of such materials. Moreover, these burdens will not result in any significant environmental benefits.

In addition, the proposed definition of safe fill only covers "uncontaminated and segregated brick, block or concrete resulting from construction or demolition activities from residential and commercial properties." The term "uncontaminated" has already been discussed. The additional requirement - that brick, block or concrete be "segregated" - is not explained in the proposed regulations. It is unclear in the context of the proposed definition of safe fill what "segregated" means. Must bricks be separated from blocks? Must concrete be separated from bricks? Does concrete need to be separated from rebar? Can some amount of exposed rebar be present? Does it matter if the brick, block and concrete satisfy the safe fill numeric standards? Is painted brick, block or concrete unsegregated? These types of inquiries needlessly complicate the proposed definition of safe fill. The Chamber recommends that brick, block or concrete, without other qualifiers, be included on the list of materials that may potentially be classified as safe fill, and that mixtures of brick, block and concrete likewise potentially qualify as safe fill. In many instances, masonry structures may contain a mixture of brick, block and concrete. Segregating such masonry (assuming that it is feasible) may serve little purpose and result in no environmental or public health benefits. (The Department has informally adopted certain "rules of thumb" for evaluating whether sufficient extraneous materials may be present with brick, block or concrete so that the brick, block and concrete do not qualify as clean fill. Those "rules of thumb" may continue to be useful under the safe fill regulations.)

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Likewise, the Chamber believes that there is no justification for categorically defining historic fill material as a residual waste. Instead, such material should be subject to the same standards as soils, dredged material and used asphalt. If historic fill material meets the criteria established under the definition of safe fill, there is no reason that such material should not qualify as safe fill.

3. General Criteria

Based on recommendations that the Department received from the Cleanup Standards Scientific Advisory Board ("CSSAB") two years ago, the Department has proposed numeric standards to be used to determine whether a material qualifies as safe fill based generally on the MSCs developed by the Department under Act 2 for soils at residential properties overlying used aquifers. As required under Act 2, the MSCs represent conservative risk-based numeric standards that are deemed to be protective of public health and which can be applied anywhere within Pennsylvania. Given the fact that the proposed safe fill numeric values rely on the most restrictive of the MSCs (which in turn are conservative in nature and designed to be protective), there is no reason to independently require that the material not have been subject to a release of regulated substances. The key question is whether the material meets the safe fill numeric values, not what may have happened to the material in the past. If the safe fill numeric standards are considered to be safe, then the current condition of the material and not its history should be determinative. To disqualify from being classified as safe fill any material which has been subject to a release, regardless of how minimal the release may have been and regardless of whether the material otherwise meets the safe fill numeric standards. ignores the scientific underpinnings of the Act 2 program.

The "no release" requirement is fraught with additional difficulties. First, the proposed safe fill regulations do not define what constitutes a release. Is air-borne deposition of regulated substances? Is passive migration of regulated substances a release? Are releases limited to "regulated substances?" Are impacts from "urbanization" releases? Given the fact that as currently drafted, a material that has been subject to a release cannot qualify as safe fill, answers to these questions are critically important.

Second, depending on how broadly a release is defined, the presence of non-naturally occurring substances in soils or other materials may be indicative of a release without providing any information about the nature, extent, mechanism or history of the release. This potentially could serve to disqualify as safe fill any materials in which non-naturally occurring substances have been detected.

Third, it is unclear whether the "no release" requirement extends forever. For example, is a material which has been impacted by a release but remediated barred from qualifying as safe fill? What if the remediation achieved the MSCs for residential property under Act 2? What if a documented release occurred in the distant past but the impacts are no longer discernable because of biodegradation of the released material? It

makes little sense to permanently classify a material as a waste simply because of what may have happened to it in the past rather than relying on its current characteristics.

Fourth, the "no release" requirement potentially creates a disincentive to undertake due diligence investigations concerning the history of the material potentially qualifying as safe fill. Information suggesting that a release has occurred can only serve to disqualify the material in question. As such, members of the regulated community may be loathe to conduct such investigations and may instead simply rely on sampling to demonstrate that the safe fill criteria have been satisfied.

The "no release" requirement is difficult to document (proving a negative), somewhat subjective, and most importantly, does not specifically address the potential risks posed to human health or the environment by the material. By contrast, sampling and analyzing the material provides specific information concerning such potential risks. In light of these considerations, the Chamber strongly recommends that the proposed definition of safe fill be simplified to eliminate the "no release" requirement. The Chamber also recommends that the provisions of clause (i) of the proposed definition of safe fill be reorganized to reflect the following analytical structure -

- Is the material of a type that potentially qualifies as safe fill?
- If so, does it exhibit visible staining, recurring or persistent odors or other sensory nuisance resulting from chemical contaminants associated with the material?
- If not, does the material meet the safe fill numeric standards?

With respect to meeting the safe fill numeric standards, the Chamber recommends that clause (i) of the definition of safe fill provide for two options. First, a determination may be made on the basis of knowledge of the material that the material meets the safe fill numeric standards. (Such an option parallels the provisions of the hazardous waste regulations that allow a generator to determine whether a material qualifies as a hazardous waste based on his or her knowledge of the material in lieu of sampling and analysis.) Second, a determination may be made on the basis of sampling and analysis. Under the second option, information concerning releases or potential releases should be used to help guide the selection of analytes to be evaluated (rather than to disqualify the material from being used as safe fill). In this fashion, strong incentives exist to conduct appropriate due diligence in order to help devise a sampling program that will focus on the regulated substances that may be present at concentrations exceeding the safe fill numeric standards. At the same time, the analytes listed in Tables 1 and 3 of the proposed regulations can be used for screening purposes unless there is site-specific information to suggest that either additional regulated substances on Table 2 should be evaluated or analysis of a subset of the regulated substances listed on Tables 1 and 3 is appropriate.

Finally, the Chamber agrees that safe fill should not cause nuisances. However, because soils and dredged materials frequently exhibit odors when freshly excavated, the Chamber suggests that the phrase "recurring or persistent" be inserted before the word "odor" so that transient odors associated with initial excavations should not bar a material from qualifying as safe fill.

4. Safe Fill Numeric Standards

The safe fill numeric standards referenced in clause (i) of the definition of safe fill are described in detail in the proposed version of 25 Pa. Code § 287.11. As set forth in 25 Pa. Code § 287.11(a)(1) (proposed), the safe fill numeric standards are based on the lower of the residential generic soil-to-groundwater pathway values and the residential direct contact values developed by the Department under Act 2. By contrast, the regulations implementing the statewide health standard under Act 2 provide for a series of different options to meet the soil-to-groundwater protection standard other than satisfying the generic soil-to-groundwater pathway value.

Because the universe of materials that may qualify as safe fill is heterogeneous, the Chamber believes that it is critical to afford regulated entities the ability to demonstrate that a particular material meets the residential soil-to-groundwater protection standard by using the Synthetic Precipitation Leaching Procedure ("SPLP") method of analysis in lieu of relying solely on the generic soil-to-groundwater pathway values. In many instances, SPLP testing will provide a far more accurate measure of the propensity of regulated substances to leach from a particular material than will an evaluation of the total concentrations of regulated substances in the material. For example, regulated substances may be present in concrete but be bound in the structural matrix of the material so that they pose no threat to groundwater. Likewise, regulated substances may be present in soils but have a high affinity for the particular soils so that the potential for leaching is minimal. In addition, analysis of used asphalt may show that the used asphalt contains certain organic regulated substances. However, those substances may have little or no propensity to leach. In such circumstances, SPLP analysis may be critical to evaluating the true potential for used asphalt to pose any sort of risk to groundwater.

The SPLP protocol is conservative in that the concentrations of regulated substances in the SPLP leachate are compared directly with the groundwater MSCs. This discounts any attenuation, dispersion or dilution that would otherwise naturally occur in the environment. Accordingly, the Chamber strongly recommends that 25 Pa. Code § 287.11(a)(1)(i) (proposed) be revised to read as follows:

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).

Such a change in the proposed regulations will afford both the regulated community and the Department with the flexibility to use SPLP testing where it makes sense to do so while at the same time ensuring that materials qualifying as safe fill can be used without posing unacceptable risks to human health or the environment. In addition to the language proposed above, the applicable standards against which SPLP testing results are to be compared will need to be added to Tables 1, 2, and 3 of the proposed safe fill regulations.

The Chamber also recommends that the phrase at the beginning of 25 Pa. Code § 287.11(a)(1) (proposed) stating "For safe fill containing substances other than copper and zinc" be deleted. Virtually all soils and soil-like materials contain copper and zinc at varying concentrations. The safe fill numeric limits for copper and zinc (which the Department proposes to base on plant toxicity) can simply be referenced as a third clause under 25 Pa. Code § 287.11(a)(1) (proposed).

Finally, because the safe fill numeric standards are based on the MSCs for residential property under Act 2, the Chamber recommends including in the safe fill regulations a provision that would automatically amend the safe fill numeric standards to reflect changes to the MSCs under Act 2. Otherwise, it is possible (if not probable) that changes will be made to the MSCs under Act 2 without conforming changes being made to the safe fill numeric standards at the same time.

5. Materials Subject to the Safe Fill Cap or Other Special Rules

The proposed definition of safe fill includes in clause (ii) certain materials that may still qualify as safe fill even if they do not meet safe fill standards. Such materials are subject to the numeric standards in clause (vii) of the proposed definition of safe fill (referred to hereinafter as the "safe fill cap"). As discussed earlier in these comments, the Chamber strongly recommends that the "no release" requirement be deleted while retaining a limitation for materials that exhibit visible staining, recurring or persistent odor, or other sensory nuisance resulting from chemical contaminants associated with the material. Accordingly, the Chamber proposes that the introduction to clause (ii) of the definition of safe fill be revised as follows:

The term includes the material in subparagraph (i) that exceed 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:

In addition, as proposed, the definition of safe fill does not contain any provisions to address projects involving small amounts of fill materials. To close this important gap in the proposed regulations, the Chamber recommends that a new category be added to clause (ii) of the definition of safe fill covering materials moved at either residential or nonresidential property or to nonresidential property where the quantity of the materials is less than 50 cubic yards. The Chamber also recommends that, as in the case of the exclusion for historic fill materials from excavations of 125 cubic yards or less, materials falling in this category not be subject to the safe fill cap.

Finally, to simplify the proposed definition of safe fill and to reflect the fact that historic fill material should, as a category of material, be potentially encompassed by the safe fill definition, the Chamber recommends that the provisions set forth in clause (v) of the proposed definition of safe fill relating to historic fill materials from excavations of 125 cubic yards or less be inserted into clause (ii) of the proposed definition of safe fill. Consistent with the proposed definition of safe fill, such small amounts of historic fill material would not be subject to the safe fill cap. This recommended modification does not result in a substantive change in the proposed regulations but instead is designed to be more consistent with the revised structure of the safe fill definition recommended by the Chamber. The Chamber also suggests that the proposed regulations clarify what is meant by the phrase "per excavation location." For example, excavations that are not connected or contiguous to one another should be treated as separate excavations. In addition, the 125 cubic yard limit should refer only to that amount of historic fill removed from an excavation and not the size of the excavation itself.

6. Soils Impacted by Pesticides

Clause (iii) of the proposed definition of safe fill, as proposed, covers soil moved from a fruit orchard under development where pesticides were used in an authorized manner in conjunction with standard horticultural practices. While orchards have exhibited impacts from pesticide usage, other agricultural lands may be similarly impacted. To take this fact into account, the Chamber recommends revising clause (iii) of the proposed definition of safe fill to cover "soil impacted by normal agricultural use of pesticides including pesticides containing lead and arsenic." Such a change avoids the problems that would be otherwise be created by the unduly narrow language developed by the Department without changing the substantive effect of the clause. In addition, the Chamber recommends that the phrase "authorized agricultural use" be changed to "normal agricultural use because the use of certain arsenated compounds predated any regulatory "authorization." Moreover, such a change is consistent with the language used in the Pennsylvania Hazardous Sites Cleanup Act to define a "release." See 35 P.S. § 6020.103.

7. Dredged Material

Clause (iv) of the proposed definition of safe fill addresses the use of dredged material as safe fill. A number of provisions contained 25 Pa. Code § 287.11 (proposed) address the conditions under which dredged material may qualify as safe fill. As such, those requirements are more appropriately included in the proposed definition of safe fill. To address this issue, the Chamber recommends that clause (iv) of the proposed definition of safe fill be revised to read as follows:

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, 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:

These changes do not represent major substantive alterations to the proposed definition of safe fill but rather are designed to clarify existing elements of the proposed regulations.

8. Historic Fill Material

Clause (v) of the proposed definition of safe fill addresses historic fill material in quantities of less than or equal to 125 cubic yards per excavation location. As discussed above, the Chamber suggests that the exclusion set forth in clause (v) of the proposed definition of safe fill be moved to clause (ii) of the proposed definition. Such a change simplifies the definition without altering the substantive effect of the definition.

9. Materials Placed into or along Surface Waters

Clause (vi) of the proposed definition of safe fill contains additional restrictions that apply to materials placed into or along surface waters of the Commonwealth. The Chamber believes that these provisions can be simplified and better harmonized with the regulations under Act 2.

As a general proposition, the proposed regulations establish a performance standard for materials that are placed into or along surface waters of the Commonwealth.

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Specifically, such placement may not cause an exceedance of the surface water quality standards in 25 Pa. Code Chapters 16 and 93. While easily stated, actually making such a demonstration may be exceedingly difficult. Accordingly, the Chamber suggests that the proposed safe fill regulations afford regulated entities with three options.

First, the Chamber recommends that regulated entities be allowed to use SPLP analysis to show that the materials that are to be placed will not leach regulated substances at concentrations such that surface water quality standards will be exceeded. Second, the Chamber recommends that a table be added to the proposed regulations setting forth generic values based on surface water quality standards that will be protective using the type of analysis employed to develop the soil-to-groundwater generic numeric values under Act 2. In this regard, it is important to note that because the surface water quality standards rather than groundwater MSCs provide the ultimate target for compliance under this prong of the proposed definition of safe fill, using 10% of the safe fill standards as currently proposed in the regulations may be overly conservative in many instances. Third, the Chamber recommends that the proposed regulations be modified to provide for utilization of alternative methods that the Department may approve, either generally or on a case-by-case basis. This option is important to provide the regulated community and the Department with regulatory flexibility to utilize new sampling techniques and protocols that may be developed in the future.

With respect to the structure of clause (vi) of the proposed definition of safe fill, the Chamber recommends that provision be streamlined by eliminating the different standards that are currently proposed for materials used in active or abandoned mines or abandoned quarry reclamation versus materials that are being used pursuant to a permit issued under 25 Pa. Code Chapter 105.

10. Use of Safe Fill

Clause (ix) of the proposed definition of safe fill provides that materials that meet the definition of safe fill are not regulated as wastes when used as fill. The Chamber believes that this clause is overly narrow. For example, materials qualifying as safe fill should be able to be used as construction materials, to help facilitate mine reclamation activities, for landscaping purposes, to help control fire or subsidence events, as pipe bedding, for beach replenishment, as soil additives and so forth. It is unclear whether in each instance, the use of the materials would fit under the umbrella of the term "use as fill."

In addition, the definition of a waste in the residual waste regulations includes contaminated soil, contaminated water and contaminated dredge material. The term "contaminated" is not defined in the regulations. Both the municipal and residual waste regulations also include provisions directing that contaminated soil, used asphalt and dredged material are to be regulated under the residual waste program.

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If the language of clause (ix) of the proposed definition of safe fill is finalized in its current form, it is likely to invite disputes and difficulties concerning the manner in which safe fill may be used and the interplay between the definition of safe fill and other provisions of the municipal and residual waste regulations. To avoid these problems, the Chamber suggests revising clause (ix) to state as follows – "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."

B. Definitions other than the Definition of Safe Fill

1. Definitions of Historic Fill, Sediment, and Site Undergoing Remediation Activities

While the definition of safe fill included in the proposed safe fill regulations is by far the most important of the definitions contained in the regulations, it is not the only definition that is proposed to be added to the municipal and residual waste regulations. Specifically, the proposed regulations include definitions for the terms "historic fill," "sediment," and "site undergoing remediation activities." The Chamber's comments concerning these definitions are as follows.

First, the definition of historic fill includes an exemption from that definition for small amounts (125 cubic yards or less) of historic fill material excavated per excavation location. The definition is circular in that such materials do not qualify as historic fill material but the parallel exemption in the proposed definition of safe fill only applies to historic fill material. The Chamber fully supports the exemption for small amounts of historic fill material that is currently in the proposed safe fill regulations. However, to more clearly effectuate this exemption, the definition of historic fill material should simply describe what constitutes historic fill without excluding from the definition itself small amounts of historic fill.

In addition, in recognition of the fact that large amounts of soils and other materials have been used across Pennsylvania as fill material, both historically and more recently, the Chamber recommends that the cutoff date in the proposed definition of historic fill be changed from 1988 to the effective date of the proposed safe fill regulations. Significant amounts of such materials have been used in accordance with the permit exclusions for clean fill under the terms of the municipal and residual waste regulations. Moreover, the definition of a waste under the residual waste regulations excludes the onsite use of steel slag as a substitute for aggregate. The proposed definition of historic fill excludes landfills, waste piles and impoundments. In addition, the Chamber suggests adding language to make clear that materials that were placed in violation of waste permitting requirements do not automatically escape regulation by moving the cutoff date forward.

In light of the foregoing, the Chamber suggests revising the definition of historic fill to provide as follows:

Historically contaminated material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to _____ [effective date of the 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.

Second, with respect to the proposed definition of "sediment," the Chamber recommends that the introductory phrase be revised to cover "[m]aterials deposited and directly overlain by waters . . ." rather than "[m]aterials deposited or overlain by waters . . ." as currently proposed. If this change is not made, the proposed definition on its face is so broad that it could cover any soils that were ever deposited by water (such as entire river valleys). In addition, the Chamber suggests including in the definition of sediments well sorted fractions of sand, silt, clay gravel and organic material was well as heterogeneous mixtures of such materials.

Third, the Chamber recommends that the definition of "site undergoing remediation activities" be expanded to cover not only sites where remediation activities are being conducted under Act 2 but sites where remediation activities are being conducted under other environmental protection acts (such as the Hazardous Site Cleanup Act and the Resource Conservation and Recovery Act.).

2. Additional Definitions

The Chamber recommends that for purposes of clarity, three definitions be added to the proposed safe fill regulations covering the terms "along," "nonresidential property," and "residential property."

The proposed safe fill regulations describe areas "along" surface waters in which additional restrictions may apply to the use of fill material. To clarify where such additional restrictions may apply, the Chamber recommends that the term "along" be defined to mean "[t]ouching or contiguous, to be in contact with; to abut upon the normal wetted perimeter of surface waters." This definition is based on the definition of the term "along" found in 25 Pa. Code § 105.1.

Likewise, because the proposed safe fill regulations make distinctions based on the type of property from which fill material came or that may be receiving fill material, the Chamber suggests that the definitions of nonresidential property and residential property found in Act 2 be added to the regulations. Specifically, the definition of nonresidential property from Act 2 states as follows:

Any real property on which commercial, industrial, manufacturing or any other activity is done 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.

Act 2 defines residential property as "[a]ny property or portion of the property that does not meet the definition of 'nonresidential property."

C. Sampling and Analysis Requirements

The proposed safe fill regulations include detailed sampling and analysis requirements in 25 Pa. Code § 287.11 (proposed). Key aspects of these requirements have already been discussed in connection with the comments regarding the proposed definition of safe fill. Moreover, these sampling and analysis requirements apply to criteria set forth in the proposed permits-by-rule included in the safe fill regulations. Appropriate cross-references should therefore be included in the proposed regulations.

For purposes of clarity, the Chamber recommends that 25 Pa. Code §§ 287.11(c) and (d) (proposed) be revised, as follows:

- (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.

These changes clarify the different standards that apply to the different types of samples that are authorized. The changes also underscore the fact that a person or entity may collect discrete samples (including for VOCs) and use the statistical methods that are specified rather than collecting composite samples for non-VOCs and biased grab samples for VOCs.

In addition, the Chamber suggests that 25 Pa. Code § 287.11(e) (proposed) be eliminated. There is no need for the Department to develop separate requirements in the form of guidance for determining whether sediments meet safe fill numeric standards. Sediments are simply another fill matrix.

The sampling requirements contained in 25 Pa. Code § 287.11 (proposed) appear to contemplate that sampling will be performed after soils or other materials are excavated. As a practical matter, it may be infeasible to stockpile soils or other materials at construction sites for substantial periods of time while samples are collected and analyzed so that determinations can be made as to the status of the stockpiled material. For example, highway construction projects, utility projects, and other similar projects may take place in locations where it is simply impossible to temporarily store large amounts of excavated materials while the materials are sampled and analyzed. To address this problem, the Chamber recommends that the proposed safe fill regulations be clarified, with input from the CSSAB, to authorize *in situ* sampling of materials to be excavated or moved. *In situ* sampling is critically important in terms of allowing the regulated community to plan in advance how to handle soils and other materials that are to be excavated or moved so that projects are not delayed and can proceed in a controlled fashion.

The Chamber also recommends revising 25 Pa. Code § 287.11 (proposed) to clarify that for purposes of demonstrating that a material qualifies as safe fill, the sampling and analysis provisions constitute recommended procedures but not mandatory procedures. (This is in contrast to the use of such procedures to satisfy requirements under the proposed permit-by-rules.) As currently proposed, a determination that a material meets the safe fill criteria can be made on the basis of knowledge of the material without actually sampling the material. It follows then that if a contractor or other entity wanted to augment his or her knowledge of the material by collecting and analyzing samples of the material, such a step a would be perfectly permissible even if the sampling protocols were not those specified in the proposed regulations. At the same time, by providing guidance on how sampling and analysis may be performed to determine whether a material qualifies as safe fill, the proposed regulations offer the regulated

community a bench mark for acceptable practices. To reflect this distinction, the Chamber recommends the introductory section of 25 Pa. Code § 287.11(b) (proposed) to read as follows:

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.

Finally, assuming that the proposed safe fill regulations are revised to allow the use of SPLP analysis as a method for demonstrating that the material to be used as safe fill satisfies soil-to-groundwater protection standards, it may be helpful to include in 25 Pa. Code § 287.11 a description for how the SPLP analysis is to be performed. The Chamber suggests that the EQB and the Department work with the CSSAB to develop such protocols.

D. Proposed Permits-by-Rule

1. General Framework of the Permits-by-Rule

The proposed safe fill regulations contain five proposed permits-by-rule ("PBRs"). One of these new PBRs (covering the use of brick, block or concrete) is to be included in the municipal waste regulations. The other four PBRs are to be included in the residual waste regulations. While each of the PBRs are designed to cover different materials and activities, they contain a large number of similar, if not identical, requirements. For example, the PBRs require that erosion and sedimentation control plans be implemented, that certain siting criteria be followed, that the material being used under the PBRs not constitute hazardous waste, and that with one exception (for materials moved to a site undergoing remediation), the materials being used under the PBRs only be used at commercial or industrial properties.

Given the similarities between the various PBRs, the Chamber strongly recommends that the PBRs be combined and streamlined. In addition, in many instances, the threshold standards that must be met in order to utilize the PBRs are so restrictive that the PBRs will serve little purpose. These issues are discussed in more detail below.

Three of the proposed PBRs cover respectively (1) contaminated soil from agricultural practices, (2) contaminated soil, dredged material or used asphalt impacted by a release or contaminated soil, dredged material or used asphalt that exceeds safe fill numeric standards as a result of urbanization, and (3) historic fill material. These three PBRs can readily be combined and simplified by having one PBR that covers the use of

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soil, dredged material, used asphalt or historic fill material that exceeds safe fill numeric standards. Such a PBR has the advantage of covering the major classes of materials (other than brick, block and concrete) that potentially may qualify as safe fill and serves appropriately as the backstop for such materials that do not meet the safe fill criteria.

With respect to the numeric criteria that should be included in a unified PBR, the Chamber strongly recommends the following framework. First, because materials covered by the unified PBR may only be used at nonresidential properties, the numeric criteria contained in the PBR should be based on the nonresidential MSCs under Act 2 rather than the residential MSCs under Act 2. This structure provides, at least in certain instances, a cushion between the safe fill numeric standards and the PBR numeric standards that will facilitate the utility of the PBR. (As currently drafted, the numeric standards in the PBR for contaminated soil, dredged material and used asphalt are based on residential MSCs and will, in many instances, coincide with the safe fill numeric limits.)

Second, material subject to the unified PBR should meet the nonresidential direct contact MSCs unless direct contact pathways are promptly and permanently eliminated by the placement of uncontaminated soils, safe fill or other materials or through other engineering controls. This concept was included in some but not all of the various PBRs set forth in the proposed safe fill regulations.

Third, material subject to the unified PBR should meet appropriate groundwater protection standards. In order to provide flexibility to the regulated community and the Department, the Chamber believes that it should be sufficient to meet any one of the following criteria:

- Analysis using the Toxicity Characteristic Leaching Procedure ("TCLP") that shows that the material meets the requirements in 25 Pa. Code
 § 288.623(a) (relating to Class III residual waste landfills).
- Analysis using SPLP that shows that the material will not leach regulated substances at concentrations exceeding the MSCs under Act 2 for used aquifers underlying nonresidential properties.
- Analysis showing that the concentration of each regulated substance in the
 material is below the higher of the generic soil-to-groundwater numeric
 value for that regulated substance in soils at nonresidential properties
 overlying used aquifers and the value that is 100 times the nonresidential
 groundwater MSC for that regulated substance (assuming a used aquifer
 scenario).

The same numeric criteria should be incorporated into the PBR in the municipal waste regulations for brick, block and concrete. Moreover, the scope of that PBR should

be revised to cover any brick, block or concrete that does not qualify as safe fill, provided that the other requirements of the PBR are satisfied.

With respect to the PBR for materials that are brought to a site undergoing remediation, the Chamber recommends that a permit exemption be added to 25 Pa. Code § 287.101 rather than creating a new PBR. Such an approach is consistent with the permit waiver provisions of Act 2 and the existing permit exemption set forth at 25 Pa. Code § 287.101(e). Proposed language creating such a permit exemption is set forth below:

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

2. Comments Regarding General Conditions of Permits-by-Rule

As noted above, each of the various PBRs in the proposed safe fill regulations include a large number of general conditions. These requirements are sufficiently complex and onerous that many materials that could otherwise be used under the PBRs may be instead directed to landfills for disposal. In essence, landfill disposal may represent a practical and expedient but wasteful option for handling soils and other materials that are excavated or otherwise generated. The Chamber strongly recommends that the EQB and the Department carefully evaluate whether such requirements are absolutely necessary in order for the PBRs to properly function and eliminate any requirements that do not meet this standard. Comments relating to particular general conditions are set forth below.

First, the proposed PBRs generally prohibit the placement of materials within 100 feet of surface waters. This set back requirement is enormously restrictive and will have an adverse impact on many redevelopment projects that are occurring in areas along rivers and streams. The Chamber suggests that this condition be revised to provide that materials covered by the PBRs may not be placed in or along surface waters unless prior approval has been obtained from the Department. This harmonizes the condition with requirements found in 25 Pa. Code Chapter 105.

Second, the proposed PBRs prohibit the placement of materials within 100 feet of the edge of a sinkhole. The Chamber recommends that this requirement only apply in karst terrain because it is in such locations where sinkholes may serve as direct conduits to large volumes of groundwater, thereby eliminating the natural attenuation that is factored into the determination of the generic soil to groundwater standards.

Third, the proposed PBRs generally prohibit the placement of materials within 300 feet of a water source. To better define the universe of water sources that are of concern, the Chamber recommends that this siting criterion be revised to apply to potable water supply wells and potable surface water intakes.

Fourth, the proposed PBRs generally limit the placement of materials to properties that are zoned and exclusively used for commercial and industrial purposes. In the absence of zoning, the proposed PBRs limit the use of materials to properties where "the background is equal to or greater than the concentrations of contamination" in the material to be used and the property is used for commercial or industrial purposes only. Significant questions exist as to how in practice this requirement is to be implemented. Will there need to be a substance by substance comparison between background conditions and the incoming material? Will it be sufficient to compare classes or groups of regulated substances (such as volatile organic compounds)? What if certain regulated substances in the incoming material satisfy the safe fill criteria but are above background levels at the receiving property? Implementation of this requirement is likely to be difficult and confusing unless the requirement is clarified. Certainly, it would seem to make little sense to evaluate background levels of regulated substances where those

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substances in the incoming material meet the safe fill numeric standards. If the material fails the safe fill numeric standards for a limited set of regulated substances, then perhaps a comparison between the concentrations of those regulated substances in the material and concentrations of those regulated substances at the site where the material is to be used may be possible.

Fifth, the notification requirements included in the proposed PBRs include information that can only be collected after material covered by the PBR has been placed at the receiving site. To reflect this reality, the Chamber recommends that the introductory phrase of the condition relating to notification state "A person who has received and used [material]" Such a change makes the condition internally consistent with other portions of the notification requirements. In addition, the Chamber request that the EQB specify where the required notice is to be submitted. For example, the source of fill material may be located in one part of Pennsylvania while the receiving site may be located in another part of Pennsylvania. What office of the Department should receive the notice in such circumstances?

Sixth, the notification requirements included in the proposed PBRs apply to the person who "receives and uses" the soil or other material covered by the PBRs. The proposed PBRs also include record-keeping requirements that apply to those "using and distributing" the soil or other material covered by the PBRs. It is unclear who actually is responsible for ensuring that the conditions of the proposed PBRs are satisfied, and whether the generator of the fill material or the person receiving that material must maintain records. Moreover, the proposed safe fill regulations are silent as to how long such records must be maintained. The Chamber suggests that a three-year required retention period is sufficient.

Finally, a number of Chamber members have raised concerns relating to the general provision that materials placed under the proposed PBRs cease to be wastes "as long as the materials remain in place." The implication of the quoted language is that such materials become wastes automatically if subsequently moved. Aside from the challenges of trying to administer such a requirement, the condition is extremely confusing. In practical terms, the analysis under the safe fill regulations will need to be performed each time material is excavated or moved anyway. If material is placed pursuant to a PBR because it did not meet the safe fill criteria but when later moved is found to satisfy such criteria, its condition at the time of subsequent movement should control its status, not what it may have been at some point in the past. Moreover, the provision as currently drafted potentially leaves those that generate fill material subject to liability under the SWMA as a result of actions that may occur long after the fill material is initially placed and that are entirely outside of the generators' ability to control. Accordingly, the Chamber recommends that this general provision be revised in the proposed PBR in the residual waste regulations to state as follows:

Soil, dredged material, used asphalt or historic fill material placed in accordance with this permit-by-rule shall cease to

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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-byrule shall be evaluated at that time to determine whether the material qualifies as safe fill or is subject to regulation as a waste.

Parallel changes are also proposed for the PBR covering brick, block and concrete.

E. Additional Concerns

1. Status of Vegetative Materials from Land Clearing, Grubbing and Excavation Activities

The proposed safe fill regulations delete the permit exclusion found in both the municipal and residual waste regulations for the use as clean fill of waste from land clearing, grubbing and excavation, including trees, brush, stumps and vegetative material. These kinds of materials are not otherwise discussed in the proposed safe fill regulations. The implication of this proposed revision is that such materials in the future are to be subject to full regulation as wastes under the SWMA. Such a result would be a mistake. It makes little sense to fill Pennsylvania's landfills with trees, brush, stumps and vegetative materials when other alternatives exist. The Chamber recommends that the existing exclusion for these materials be retained.

2. Generation of Soils and Other Materials

The proposed safe fill regulations address the status under the SWMA of soils and other materials resulting from construction, development, demolition and similar activities which are used as safe fill. The requirements of the proposed safe fill regulations apply after such materials have been generated. However, no guidelines are provided to delineate when a material has actually been generated. The U.S. Environmental Protection Agency ("EPA") has developed policies to address when wastes are generated. In the context of utility installations, EPA has concluded that if soils are excavated and then returned to the excavation, they have not been "generated." (See Letter from Sylvia K. Lowrance, Director of Office of Solid Waste, to Douglas H. Green dated July 11, 1992 (available on EPA's web site).) Moreover, EPA has long endorsed the "area of contamination" policy which allows contaminated media that might otherwise qualify as hazardous wastes to be moved within an area of contamination without triggering permitting, land disposal and minimum technology requirements under the hazardous waste program. These policies have significant ramifications with respect to the proposed safe fill regulations. If the Department follows these policies, then it may alleviate many of the difficulties that would otherwise be encountered by application of the proposed safe fill regulations to utility projects and similar infrastructure projects

involving activities in rights-of-way or projects that involve only the onsite movement of soils or other materials.

Consistent with the foregoing, the Chamber recommends that the phrase "upon generation" be inserted at the beginning of 25 Pa. Code §§ 271.2(c) and 287.2(c) to make clear that the requirements under the SWMA apply after a material has been generated. Given the breadth of materials that potentially qualify as wastes under the SWMA including soils, dredged material, used asphalt and brick, block and concrete, such a phrase is important to make clear that the requirements under the SWMA apply only after a waste has been generated and not to *in situ* materials such as soils and dredged material.

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.

1 1

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 sSoil, 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--

- —(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) <u>Upon generation, mM</u> 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 elean-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) Wwaste 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.

- [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 <u>after</u> 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 <u>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:</u>
- —(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. ITABLES 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 REVISEDI.
- (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 <u>non</u>residential 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) <u>Brick, block or concrete (or mixtures thereof)</u> Waste material may not be placed <u>pursuant to this permit-by-rule</u> 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.
- (65) 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.
- (<u>76</u>) At locations where <u>brick, block or concrete (or mixtures thereof)</u> waste material is placed <u>pursuant to this permit-by-rule</u>, an erosion and sedimentation control plan <u>shall be is-implemented</u> 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 <u>brick, block or concrete (or mixtures thereof)</u> waste material is placed <u>pursuant to this permit-by-rule</u>, the materials may not be placed <u>in karst terrain</u> within 100 feet of the edge of a sinkhole.
- (9) At locations where <u>brick, block or concrete (or mixtures thereof) waste</u> material is placed <u>pursuant to this permit-by-rule</u>, the materials may not be placed within 300 feet of a <u>potable</u> water <u>supply well or potable surface water</u>

<u>intake source</u> 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.
- (101) <u>Brick, block or concrete (or mixtures thereof)</u> Waste material when placed <u>pursuant to this permit-by-rule</u> may not contain free liquids, based on visual inspection, and may not create <u>recurring or persistent an</u> odor or other public nuisance <u>resulting from chemical contaminants associated with the material.</u>
- (1<u>1</u>2) A person who <u>has</u> receive<u>ds</u> and use<u>ds</u> <u>brick</u>, <u>block or concrete (or mixtures thereof) pursuant to this permit-by-rule waste material</u> 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.
- (123) Records of analytical evaluations conducted on the <u>brick, block or</u> <u>concrete (or mixtures thereof) pursuant to this permit-by-rule waste material</u> 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) <u>Brick, block or concrete (or mixtures thereof)</u> Waste placed in accordance with this permit<u>by-rule</u> shall cease to be waste <u>once as long as</u> the material <u>remains in is placed</u>. <u>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 <u>subject to regulation as a waste</u></u>

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:

<u>Along - Touching or contiguous, to be in contact with; to abut upon the normal wetted perimeter of surface waters.</u>

[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-

- (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 <u>safe fill</u> numeric standards referenced in § 287.11 (relating to safe fill numeric standards) and listed in Appendix A, Tables 1 and 2<u>of this Chapter without sampling and analysis</u>, 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 <u>sampling and analysis as described in § 287.11 (relating to safe fill numeric standards)</u>, 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 <u>safe fill</u> 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, <u>based on knowledge of the material or sampling</u> 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 orehard 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.
- (vi) 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 pPlacement 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*) Notwithstanding any other provisions of Chapters 271 and 287, Mmaterials 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 <u>and directly or</u> overlain by water in rivers, lakes, ponds or tidal streams that consist of <u>well sorted fractions or</u> 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) <u>Upon generation, mM</u> an agement 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, 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, $t\underline{T}$ he 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).
- (<u>iii</u>2) In addition to paragraph (1), fFor 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.
- (<u>3</u>4) 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) <u>Determinations Sampling</u> 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 <u>locations</u> shall be selected from the 8 sampling <u>locations</u>es for analysis of VOCs. The <u>selection of these</u> sampling <u>locations</u>es shall be based on field screening of the eight samples to select those <u>locations</u> 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) <u>Determinations Sampling</u> 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 <u>measured numeric values analysis of composite samples for</u> <u>regulated substances required in subsection (b)(1)</u>-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.
- <u>(3)</u> For a grab sample, taken <u>for analysis for VOCs</u> in accordance with subsection (b)(1)(i)(C), (ii)(C) and (iii)(C), the measured numeric value for a

substance <u>must be</u> 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) Wwaste 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(1)(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 orehard 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 (e) 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 sSoil, 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) <u>Concentrations of regulated substances Contamination</u> in soil, dredged material, or used asphalt or historic fill material used pursuant to this <u>permit-by-rule may not exceed shall satisfy groundwater protection</u> standards based on <u>any either</u> of the following:
- (i) Analysis using the Toxicity Characteristic Leaching Procedure (TCLP) that demonstrates that the contaminated soil, dredged material set 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 sSoil, 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 eontaminated-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.
- (67) At locations where eontaminated 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.

- (87) At locations where eontaminated soil, dredged material, or used asphalt, or historic fill material is placed <u>pursuant to this permit-by-rule</u>, the soil, dredged material or used asphalt <u>or historic material</u> may not be placed in karst terrain within 100 feet of the edge of a sinkhole.
- (89) At locations where eontaminated-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.
- (210) 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.
- (101) Contaminated 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, or used asphalt or historic fill material.
- (112) A person who <u>has</u> receive<u>ds</u> and use<u>ds contaminated</u> soil, dredged material, or used asphalt or <u>historic fill material pursuant to this permit-by-rule</u> 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 <u>or</u> <u>historic fill material</u> 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.
- (123) Records of analytical evaluations conducted on the eontaminated 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).
- (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 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.
- (145) Contaminated sSoil, 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).
- —(1) 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 exeavation 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:

1 #

- -(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.

KLETT ROONEY LIEBER & SCHORLING

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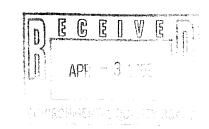
Howard J. Wein (412) 392-2160

FACSIMILE (412) 392-2128 E-MAIL: hjwein@klettrooney.com

April 3, 2002

VIA E-MAIL (secure .pdf file)
ORIGINAL VIA FIRST CLASS MAIL

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



Re: Comments to Proposed Rulemaking Safe Fill Regulations

Dear Sir/Madam:

This letter is written to provide comments to the Environmental Quality Board in connection with the proposed rulemaking.

To the extent that the proposed rulemaking purports to regulate virgin materials, I believe that such regulation is outside the scope of the Department's regulatory authority under the Solid Waste Management Act. Therefore, virgin materials should be specifically excluded from regulation as a waste under this proposal and under the existing Municipal and Residual Waste Regulations. Moreover, soils and other materials i.e, rock, stones, etc., that have not been impacted by a release of a contaminant should likewise be excluded from regulation. See, e.g. Baumgartner Oil Company v. Commonwealth, 606 A. 2nd 617 (Pa. Cmwlth 1992) and Starr v. Department of Environmental Resources, 607 A.2nd 321 (Pa. Cmwlth 1992) where the Court looked at materials as being waste when they are discarded. Moving soil and other materials from one location to another does not

Environmental Quality Board April 3, 2002 Page 2

constitute the discarding of those materials; therefore, those materials should be excluded from regulation.

Thank you for your consideration of the comment.

Sincerely yours,

Howard J. Wein
For KLETT ROONEY LIEBER & SCHORLING
A PROFESSIONAL CORPORATION

HJW/rlm

Trostle, Sharon F. - DEP

ORIGINAL: 2245

To:

Howard Wein

BEUEINED

Subject:

RE: Comments to Safe Fill Regulations

2002 APR - 5 PM 4: 45

Got 'em. (Thanks.)

REVIEW COMMISSION

Peregrine Falcons Start New Family! Live video/sound from the nest! http://www.dep.state.pa.us/dep/falcon

----Original Message----

From: Howard Wein [mailto:hjwein@klettrooney.com]

Sent: Wednesday, April 03, 2002 3:24 PM

To: RegComments@state.pa.us

Subject: Comments to Safe Fill Regulations



Attached you will find comments to the Proposed Safe Fill regulations. Please reply to let me know that you have received the comments. - Thank you. — Howard J. Wein

The information transmitted in this electronic message is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this electronic transmission in error, please contact the sender and delete the material from any computers on which it may be stored.

Howard J. Wein, Esq. Klett Rooney Lieber & Schorling A Professional Corporation 40th Floor, One Oxford Centre Pittsburgh, PA 15219 (Phone) 412-392-2160 (Fax) 412-392-2128 hjwein@klettrooney.com

April 3, 2002

Environmental Quality Board Department of Environmental Protection P.O. Box 8477, Harrisburg, PA 17105-8477 Graymont (PA) Inc. P.O. Box 448 Bellefonte, PA 16823 Phone - (814) 355-4761 Facsimile - (814) 355-4780

Via E-mail: RegComments@state.pa.us

Re: Public Comment for proposed Safe Fill Regulations – 32 Pennsylvania Bulletin 564, February 2, 2002

Provided herein are Graymont (PA) Inc. (Graymont's) comments to the proposed Safe Fill Regulations as published in the Pennsylvania Bulletin on February 2, 2002 at 32 Pa.B.564. Graymont has three lime plants in central Pennsylvania that generate various materials, which would be impacted by the proposed safe fill regulations.

As proposed, Graymont believes the safe fill regulations are too restrictive and would prevent lime and aggregate industries from using materials beneficially as a fill material. The proposed definition of safe fill restricts such materials to: 1) soils resulting from construction and demolition activities at residential and commercial properties; 2) soils contaminated from urbanization and agriculture; and 3) dredge materials. Accordingly, the proposed regulations appear to focus on Act 2 cleanups and brownfield restoration.

In Residual Waste Management Article IX, Section 287.1 of the Pennsylvania Bulletin, the Pennsylvania Department of Environmental Protection (DEP) is proposing to delete the term "clean fill" and replace it with the term "safe fill." The clean fill definition allows for alternate materials outside of soil, dredge material, and construction demolition debris. Removal of the term clean fill as currently defined in 25 PA Code 287.1 could eliminate a number of materials, which could be utilized as safe fill. There are a multitude of materials generated as byproducts or coproducts that would be prime candidates to use for fill, which chemically and physically meet proposed safe fill standards in Appendix A of 32 Pa. B. 564. These materials could be utilized for captive reclamation of abandoned and active quarries, road bedding, or backfilling/leveling areas on commercial or industrial properties. For example, material collected from particulate matter emission control devices for aggregate sizing, screening, and separating, can be used for quarry reclamation as it has similar chemical characteristics to its parent material.

Accordingly, Graymont urges the Department to modify the proposed regulations to address a broader scope of materials as long as it has the physical and chemical characteristics of a safe fill have been met. Therefore, Graymont recommends that the definition of safe fill be modified to include the following additional language: "soil, rock, stone, gravel, and alternate materials such as byproducts and coproducts, which are uncontaminated, non-water-soluble, and nondecomposable inert solid material."

Sincerely,

Brian W. Mensinger Environmental Engineer ORIGINAL: 245

Trostle, Sharon F. - DEP

From:

Brian Mensinger [bmensinger@graymont-pa.com]

Sent:

Wednesday, April 03, 2002 12:08 PM

To:

regcomments@state.pa.us

Subject:

Comments to Proposed Safe Fill Regulations



SafeFillComments to

DEP from G... Dear Sir/Madam,

Attached are Graymont (PA) Inc (Graymont's) comments to the proposed Safe Fill Regulations as published in the Pennsylvania Bulletine at 32 Pa. B. 54. If you are unable to open this document or have trouble opening it, please email me in return.

Thank you,
Brian Mensinger
Environmental Engineer
Graymont (PA) Inc.
PO Box 448
Bellefonte PA 16823
(814) 355-4761

2002 APR -4 PH 4:51

April 3, 2002

Environmental Quality Board Department of Environmental Protection P.O. Box 8477, Harrisburg, PA 17105-8477 Graymont (PA) Inc. P.O. Box 448 Bellefonte, PA 16823 Phone - (814) 355-4761 Facsimile - (814) 355-4780

Via E-mail: RegComments@state.pa.us

Re: Public Comment for proposed Safe Fill Regulations – 32 Pennsylvania Bulletin 564, February 2, 2002

Provided herein are Graymont (PA) Inc. (Graymont's) comments to the proposed Safe Fill Regulations as published in the Pennsylvania Bulletin on February 2, 2002 at 32 Pa.B.564. Graymont has three lime plants in central Pennsylvania that generate various materials, which would be impacted by the proposed safe fill regulations.

As proposed, Graymont believes the safe fill regulations are too restrictive and would prevent lime and aggregate industries from using materials beneficially as a fill material. The proposed definition of safe fill restricts such materials to: 1) soils resulting from construction and demolition activities at residential and commercial properties; 2) soils contaminated from urbanization and agriculture; and 3) dredge materials. Accordingly, the proposed regulations appear to focus on Act 2 cleanups and brownfield restoration.

In Residual Waste Management Article IX, Section 287.1 of the Pennsylvania Bulletin, the Pennsylvania Department of Environmental Protection (DEP) is proposing to delete the term "clean fill" and replace it with the term "safe fill." The clean fill definition allows for alternate materials outside of soil, dredge material, and construction demolition debris. Removal of the term clean fill as currently defined in 25 PA Code 287.1 could eliminate a number of materials, which could be utilized as safe fill. There are a multitude of materials generated as byproducts or coproducts that would be prime candidates to use for fill, which chemically and physically meet proposed safe fill standards in Appendix A of 32 Pa. B. 564. These materials could be utilized for captive reclamation of abandoned and active quarries, road bedding, or backfilling/leveling areas on commercial or industrial properties. For example, material collected from particulate matter emission control devices for aggregate sizing, screening, and separating, can be used for quarry reclamation as it has similar chemical characteristics to its parent material.

Accordingly, Graymont urges the Department to modify the proposed regulations to address a broader scope of materials as long as it has the physical and chemical characteristics of a safe fill have been met. Therefore, Graymont recommends that the definition of safe fill be modified to include the following additional language: "soil, rock, stone, gravel, and alternate materials such as byproducts and coproducts, which are uncontaminated, non-water-soluble, and nondecomposable inert solid material."

Sincerely,

Brian W. Mensinger Environmental Engineer ORIGINAL: 2245

Trostle, Sharon F. - DEP

From:

Brian Mensinger [bmensinger@graymont-pa.com]

Sent:

Wednesday, April 03, 2002 12:08 PM

To:

regcomments@state.pa.us

Subject:

Comments to Proposed Safe Fill Regulations



SafeFillComments to

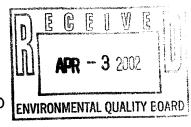
DEP from G... Dear Sir/Madam,

Attached are Graymont (PA) Inc (Graymont's) comments to the proposed Safe Fill Regulations as published in the Pennsylvania Bulletine at 32 Pa. B. 54. If you are unable to open this document or have trouble opening it, please email me in return.

email me in return.
Thank you,
Brian Mensinger
Enviromental Engineer
Graymont (PA) Inc.
PO Box 448
Bellefonte PA 16823
(814) 355-4761



BEFORE THE ENVIRONMENTAL QUALITY BOARD



Safe Fill

Docket No. 7-372

COMMENTS OF THE ENERGY ASSOCIATION OF PENNSYLVANIA

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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*. 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

^{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, but also provisions of Governor Schweiker's recently-adopted state energy policy.

^{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). 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.

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. 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

(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. Separately, by the Department's own estimates, the testing costs associated with qualification under proposed clause (i)(A) total \$1000 per sample. Since a minimum of eight samples are required, 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.

^{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. 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

(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." 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 PBR¹⁵ 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.

^{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

^{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."

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 characterized 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

^{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

^{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 heath 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 heath 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

^{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

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.

- 12 -

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Trostle, Sharon F. - DEP

ORIGINAL: 2245

From:

Dan Regan [Dregan@ENERGYPA.ORG]

Sent:

Wednesday, April 03, 2002 4:34 PM

To:

RegComments@state.pa.us

Cc: allan fernandes@exe

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Subject:

Safe Fill: Environmental Quality Board Docket No. 7-372



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, Dan Regan

Vice President: Regulatory Affairs Energy Association of Pennsylvania

800 North Third St. #301 Harrisburg, PA 17102 717-901-0631

Fax: 717-901-0631

cc: Environmental Committee

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202 APR - 5 PH 4: 45



ORIGINAL: 2245 CITY OF PHILADELPHIA

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ENVIRONMENTAL QUALITY BOARD

VIA E-MAIL AND UPS OVERNIGHT

April 3, 2002

Environmental Quality Board Rachel Carson State Office Bldg., 15th Floor 400 Market Street Harrisburg, PA 17101-2301

RE: Proposed Rulemaking for "Safe Fill"

To the Board and Staff:

Enclosed please find the City of Philadelphia's (City) Comments and Proposed Modifications to the Proposed Rulemaking for "Safe Fill" Published in the Pennsylvania Bulletin at Volume 32, Number 5, February 2, 2002. Also enclosed is a summary of said comments for the convenience of the Board members.

The City believes that the proposed Safe Fill Regulations are a significant improvement over past proposals as well as the current regulations. However, by way of the enclosed comments, the City respectfully suggests that there is a need for additional clarification and flexibility. In its comments, the City explains the potential adverse consequences that could impact municipalities if appropriate additional changes are not made. As part of its comments, the City also submits a small number of recommended modifications which the City believes would maintain appropriate protections of public health and the environment while eliminating excessive financial and programmatic burdens on municipalities.

Thank you for this opportunity to comment and for your consideration of this submission. The City would also respectfully request an opportunity to meet with EQB staff and/or Department of Environmental Protection staff at the earliest mutually convenient opportunity to further explain the City's concerns.

Very truly yours

Patrick K. O'Neill

Senior Attorney

Enclosures

cc: William F. Pounds, Chief of Division of Municipal & Residual Waste Michelle M. Moses, Assistant Counsel, Bureau of Regulatory Counsel

Comments by the City of Philadelphia on Proposed Safe Fill Regulations EXECUTIVE SUMMARY

The City of Philadelphia appreciates the opportunity to comment on the proposed Safe Fill Regulations, which the City believes to be a major improvement over both the "Clean Fill" policy and currently applicable regulatory requirements. Like the EQB, we are committed to assuring that fill materials do not contribute to degradation of human health and safety or cause environmental harm. However, the City is very concerned that the proposed regulation in its current form would result in significantly higher municipal operating costs and significant delays in implementing important municipal functions and projects.

Of particular concern to the City are the anticipated impacts of the proposed regulations in three areas: the City's new Neighborhood Transformation Initiative (NTI); Water Department underground utility excavation; and Road/Bridge reconstruction and paving programs. NTI represents a major blight control and economic redevelopment initiative of the City to revitalize neighborhoods. NTI envisions the demolition of 14,000 long-term vacant residential buildings, reflecting the magnitude of the City's neighborhood transformation and redevelopment challenge. The estimated additional compliance costs and lack of flexibility afforded under the proposed regulations for anticipated demolitions are problematic. Background contamination in such urban areas often already exceeds the limits proposed for "safe fill," and could thus void any preceived benefits to the City. The City notes municipal water is available to all citizens and most of the City is above a formally or practically designated non-use aquifer.

With respect to underground utility excavations, the ability of the City to perform historical due diligence and sampling in highly variable locations is limited both by cost and practicability. There is no need to regulate material in utility trenches, particularly where the majority of the material is returned to the excavation and covered with street or sidewalk paving. City engineers and contractors perform continuing sight inspections to detect unacceptable fill materials during excavation, with unacceptable materials disposed of in accordance with applicable law. If necessary, this is the level of due diligence, based on best management practices, that is appropriate for formalization in the regulations.

Currently, road reconstruction debris is used as fill on site, for future paving and bridge construction projects or permanently disposed of in appropriate manner. This effective reuse of paving and construction materials should be established as best management practices under the "Safe Fill" regulations.

While the City appreciates the effort by EQB staff to construct proposed regulations that address the myriad of safe fill needs across the Commonwealth, we remain concerned that additional flexibility, cost reductions, and revisions of the proposed regulations are required to adequately address the inherently governmental functions, budgets and historical development of the City of Philadelphia and other municipalities. We respectfully suggest specific revisions to the proposed regulations and request the opportunity to meet with EQB staff to discuss the enclosed comments.

City of Philadelphia

Comments and Proposed Modifications to the Proposed Rulemaking for "Safe Fill" Published in the Pennsylvania Bulletin at Volume 32, Number 5, February 2, 2002

The Environmental Quality Board (EQB) has requested comments from interested persons on the above published proposed regulations. The City of Philadelphia (City) respectfully submits the following comments.

INTRODUCTION

The City believes that the proposed Safe Fill regulations represent a major improvement over both the "Clean Fill" policy, as well as currently applicable regulatory requirements. Like the EQB and others, the City is concerned that fill materials not contribute to degradation of human health and safety or cause environmental harm. However, the City respectfully suggests that there is a strong need for additional flexibility, particularly in regard to uniquely governmental and municipal functions. This lack of flexibility could manifest itself as not only extraordinary increases in operational costs seriously impacting municipal budgets across the Commonwealth, but could also significantly delay important functions and projects. Certain development programs could be irreparably harmed. The potential for significantly increased operational costs posed by a regulatory program lacking appropriate flexibility and sensitivity to urban environments is particularly burdensome for the City. The impact of such additional costs falls disproportionately on Philadelphia given the City's difficult financial situation as highlighted by the continued oversight of the City's Budget and Five (5) Year Plan by the state's Pennsylvania Intergovernmental Authority (PICA), and the recent take-over of the City's school system.

The City sets forth below three of the major municipal functions likely to be negatively impacted, should the proposed Safe Fill regulations not provide the required flexibility. These functions or programs are briefly described, along with certain specific concerns or questions raised by the proposed regulations. Certain specific modifications are also suggested. While these suggested changes are necessary and helpful, they are not considered to be comprehensive enough to remedy all of the concerns which are here raised. A number of broader issues are also addressed as general comments.

I. Comments Addressing the Demolition of Dangerous and Unsafe Buildings in regard to Redevelopment Programs

A. Background

The City has embarked upon an ambitious urban blight and redevelopment program called the Neighborhood Transformation Initiative (NTI). Under NTI, the City intends to finance bonds which will pay for approximately 295 million dollars worth of activity over the next five years. From this, 160 million dollars is allocated to demolition, 140 million dollars will address the demolition of residential structures. The remaining 20 million dollars is targeted to commercial/industrial demolitions. The scale of the problem that this program intends to address with respect to vacant dangerous and unsafe buildings is enormous. There are currently on record close to 60,000 residential properties that either are vacant buildings or cleared lots. This number amounts to more than ten percent of all known residential properties in the City. In some neighborhoods, this percentage is as high as fifty percent. At least 29,000 buildings are long-term vacant structures. Of the 29,000 structures, just under 8,000 are currently known to be dangerous. Based on recent experience, an additional 1,000 properties are becoming dangerous each year. Under the five year program, NTI will remove most of the currently known dangerous buildings and those that will become dangerous during the program. The City believes that the successful implementation of the NTI program is essential to transforming Philadelphia's neighborhoods.

The budget for residential demolition is currently limited to 140 million dollars, which will provide for 14,000 projected demolitions at an average cost of \$10,000 per property. History has shown that bids close to this cost can be maintained if certain criteria can be met, including demolition material disposal.

The City also expects to demolish a number of large commercial or industrial buildings at a total cost of \$20 Million. These will primarily be targeted for redevelopment for commercial or industrial purposes, although experience also indicates some of these could also become residential.

B. Specific Concerns

- 1. Inert materials such as brick, block, concrete, and stone generated by the demolition of a building must be used to fill the void from the basement as the removal of this material from a site would be cost prohibitive. There would also be substantial cost increases related to obtaining additional fill. All other debris (wood, metals, plaster, roofing materials, flooring, trash, etc.) will be removed from the site.
- 2. Some amount of fill is always required to finish a site. This imported fill is typically top soil, sand, or crushed stone. Any absolute requirement to test the incoming fill material, or a liability scheme that has the same effect, under standard methods could easily add approximately \$1,000 to each of the 14,000 projects. This \$1,000 estimate is based on EQB's preamble to the proposed regulations.
- 3. Any testing or monitoring that may be required because of "due diligence" requirements under the proposed rulemaking would add even greater per project costs to large commercial/industrial projects.

- 4. Such municipal demolition projects have characteristics that under the Safe Fill regulations, as proposed, could lead to actions and costs that exceed reasonable or appropriate costs. The City therefore proposes that demolition projects receive special attention in the Safe Fill regulations.
- 5. There is confusion in Section 271.103 Permit by Rule for Municipal Waste Processing Facilities, as it seems to imply that a residential demolition site would be considered a "processing facility." There should be a clear definition that excludes residential demolition sites from this section.
- 6. A clear definition for demolition of residential structures and the uses of certain inert materials generated by the demolition on the same site has not been provided. It seems that the intent of the regulations is to control earth excavation and the importation of fill. Operationally, the City has typically believed that inert materials generated from residential demolitions should be allowed to remain on the site. Since these materials were present on a site in a built form, they should be treated no differently than if left on the site in a deconstructed state. For the inert demolition material left on site to be considered "safe fill," the City would request that the only requirement be best practices and due diligence without testing.

II. Comments Addressing Underground Utility Excavations

A. Background

The City's Water Department (PWD) is a municipal water and sewer utility located in one of this nation's oldest urban centers. Utility excavation is a routine activity that occurs in response to water main breaks, sewer obstructions, scheduled replacement and new construction. In all of our excavations, existing soil and other material is excavated and reused as fill material. On average, approximately twenty to thirty percent of the fill material is not returned to the excavated area. Such material is typically used as fill material at other urban sites, and is often initially deposited at a construction material recycling facility. In a typical year, PWD replaces 23 miles of water mains and 8 miles of sewer mains.

The histories of the public and utility rights-of-way within the City are highly variable. In some cases the streets and sidewalk have been in the same locations for hundreds of years. In other cases, streets have been moved or expanded one or more times, or are in relatively newly developed locations. The ability of the City to perform historical due diligence in these locations is limited both by cost and practicability. The cost of performing representative sampling for a typical sewer replacement (approximately 800 cubic yards of excavated material) is also prohibitive. In the past, City engineers and our contractors have performed continuing inspections to detect unacceptable fill materials during excavation. Unacceptable materials (e.g., those contaminated by chemicals) are disposed of in accordance with applicable law.

The staging of utility reconstruction, particularly for sewers, is challenging in a highly developed urban area. Entire city blocks are excavated, and the fill materials must be stored in off-site locations. Large sewer projects can generate several thousand cubic yards of material. Typically, a parking lot or vacant land is leased and used as temporary storage. Materials that are not reused as fill are then removed from the storage area for final disposition.

When completed, the vast majority of water and sewer projects in Philadelphia are covered with impermeable surfaces. Usually this is a city street or sidewalk. Occasionally private lands, such as parking lots are dedicated as utility rights-of-way. Urban underground utility projects also frequently are located in areas, like Philadelphia, where the groundwater is not used as a potable water supply.

B. Comments

- 1. As indicated above, underground utility projects have unique characteristics that under the proposed Safe Fill regulations could lead to unnecessary actions and costs.
- 2. The background levels for lead in many urban areas that are not contaminated by industrial activity or releases of regulated substances are above the standards proposed in Appendix A, Table 6. See General Comments, Section V, Paragraphs 1-4.
- 3. Fill materials that are returned to an underground utility excavation site are very often separated from direct human contact by impermeable paving. This paving also serves to limit impacts on groundwater from contaminated soils or other fill materials.
- 4. The appropriate level of due diligence required for "Safe Fill" as defined in § 287.1 is not established in the proposed regulations. The appropriate level of due diligence for underground utility projects should be an inspection of existing conditions by the utility or its contractor.
- 5. The quantity of material from an excavation of "historic fill" sites should be increased to 250 cubic yards to provide a better match with the actual quantities of fill from typical underground utility excavations.

III. Road and Bridge Reconstruction and Paving Activities

The City's Streets Department and its Highways Division engage in road reconstruction costing the City more than 13 million dollars each year. At present, road reconstruction debris is often sent to a Construction and Demolition (C&D) processor which takes debris from road and bridge reconstruction and maintenance activities, processes the material, and either returns it as needed for fill in future paving and bridge construction projects or permanently disposes of it. It is also common for debris from road and bridge reconstruction to be reused on-site as fill with minimal or no off-site processing. It is not uncommon for extra debris from such projects to be used as fill material at other City projects.

The specific concerns raised by the proposed Safe Fill regulations are primarily the ones noted above for Water Department utility activities. The nature and location of debris from these activities militates in favor of an outright exemption from the majority of the regulations absent significant indications at a site that substantial contamination is present.

IV. General Comments

A. The following general comments impact one or more of the specific activities identified in the previous sections.

- 1. Numeric standards in the draft policy remain too restrictive and are very likely to result in regulating slightly contaminated soil as waste. This is particularly true in urban areas where the existing background levels for a number of materials such as lead or arsenic are likely to be higher than those approved in this proposed regulation. In Philadelphia for example, background numbers for lead have regularly varied from 200 ppm to over 900 ppm, with some areas spiking even higher.
- 2. Greater consideration should be given to existing background levels of contaminants in urban areas, particularly where the material resulting from demolition or the use thereof is related to urban renewal projects in long time residential areas for future residential purposes.
- 3. Many of these background concentrations of various contaminants have nothing to do with the use of the properties in question but are rather the result of air-born contaminants from otherwise unknown sources which show no relationship to any known spill or release. The safe fill numeric standards fail to properly account for pervasive historic anthropogenic contamination (e.g. lead deposition from the former use in motor vehicles of leaded gasoline, wide spread use of coal ash and incinerator ash as fill throughout Pennsylvania, including Philadelphia, etc.). These factors should be used in broadening the acceptable uses of so-called "historic fill."
- 4. EQB is directed to U. S. EPA's announcement in the January 5, 2001 Federal Register dealing with Residential Lead Hazard Standards [Toxics Substances Control Act] TSCA Section 403. EPA notes the concern over the health effects of lead exposure on children and promulgates that acceptable lead levels in bare soil in children's play areas be set at 400 ppm and 1200 ppm on average for bare soil elsewhere in a yard.
- 5. Many urban areas are served by municipal water systems and the deposition of fill material for purposes of bringing properties to grade may not have any significant impact upon an existing potable water aquifer. Such areas are usually expressly designated, or by practice are, non-use aquifers. For this reason, urban redevelopment areas, public utility and road/bridge projects in non-use aquifer areas should be allowed to use standards related to non-use aquifer designations.

- 6. The sampling protocol also does not properly consider the presence of non-use aquifer areas or areas likely to be easily determined as non-use aquifers. These factors should be considered when determining what fill might be considered "safe fill" if the primary concern is a threat of an aquifer or the possible existence of a contamination pathway via a "used aquifer." Exceptions for material that does not meet the numeric standards should further provide for allowance of meeting numeric standards for residential use where a non-use aquifer is present. This is particularly true for material moved within a right-of-way, moved off-site from residential properties, and material moved within a property such as in the activities noted in detail above.
- 7. There should be an additional provision allowing for de minimus spills as well as de minimus exposure to a release staining or odors, as might be expected on a common roadway surface.
- 8. The EQB should further define what is meant by the term "right-of-way," and further clarify the type of activities it expects to occur in them.
- 9. If demolition materials from a residential site are being separated and then used for fill on that site, there should be a rebuttable presumption that the material meets the safe fill standards and need not be tested.
- 10. While a residential site is subject to an on-going urban renewal project, there should be free use of separated demolition materials, as well as historic fill during and immediately after initial demolition and clearing.
- 11. The exception provided for "historic fill" at quantities below 125 cubic yards per excavation should be increased to 250 cubic yards per excavation to allow for more reasonable expectations involving demolition and redevelopment in urban areas.
- 12. The new Permit By Rule (PBR) subsection (i) should allow for greater flexibility for reuse purposes. For example, brick, block and concrete which might be used to return an area to grade but which would only be used up to a certain elevation below grade (e.g., a foot below grade on top of which safe fill would be placed and/or an impermeable barrier used to further eliminate exposure pathways but allow greater use of such materials). The Department should consider whether or not this might allow these materials or a greater range of such materials to be used at additional sites perhaps even residential properties. At the very least, the number of restrictions should be reduced in such circumstances.
- 13. The PBR options are too difficult for practical application. Potential testing and standards remain too stringent. Additionally, the recordkeeping provisions are burdensome and unclear. Who exactly is to keep analytical evaluations and for how long? What happens when properties transfer hands?
- 14. "Safe Fill" the Department should consider the creation of best management practices or the acceptance of best management practices when considering whether o

brick, block or concrete which is uncontaminated has been properly separated from materials such as lead-based paint surfaces, friable asbestos, and hazardous materials such as PCB ballast and flourescent lightbulbs.

- 15. In determining if materials are "uncontaminated," the use of best management practices should create a presumption at sites which have only been residential for meeting the due diligence requirements and the site will otherwise meet numeric standards. Best management practices would, of course, include at a minimum an examination to determine that the material is free of significant visible stains, odors and other sensory nuisances.
- 16. EQB should consider the creation of a "Temporary Fill" or "Temporary Safe Fill" category where on-site fill is not expected to be permanent or to eventually be covered by Safe Fill or an impermeable surface that eliminates any exposure pathways.
- 17. References to right-of-way or movement of material within a property should clearly provide that a definition of the "property" in question, the "site" or "excavation location" is broad enough to allow for demolition or redevelopment projects involving contiguous multiple parcel properties. City demolition or redevelopment projects can encompass entire City blocks.

Compliance Costs

- 18. The statement in the preamble of the proposed rulemaking that there will be no increases in costs or savings to local governments associated with these proposed amendments is highly inaccurate. As demonstrated herein, numerous municipal functions stand to be significantly impacted by these new requirements, particularly if implemented in unnecessarily restrictive fashion. Due to the scope of the City's NTI program, any otherwise modest increase in costs, such as the need for additional sampling or the need for additional separation of materials, would significantly and unreasonably increase costs when multiplied by the thousands of demolitions expected under this program. The \$1,000 cost estimate quoted in the preamble alone could add 1.4 million dollars in additional costs.
- 19. The costs associated with road reconstruction and the use or disposal of debris either used as fill or disposed of as construction and demolition debris will be heavily impacted by this program. Any fill which cannot be presumed to be safe fill will need to either be tested at significant cost, disposed of at increased disposal cost, and additional safe fill will have to be purchased at yet additional cost for any of the activities noted above.

V. Proposed Modifications

The City of Philadelphia proposes the following modifications to the EQB's proposed Safe Fill regulations:

§ 287.1. Definitions.

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

Historic fill--

- (i) Historically 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.
- (ii) The term does not include historically contaminated material in quantities of less than or equal to $\frac{125}{250}$ 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.

Safe fill--

* * * * *

- (ii) The term includes the material in subparagraph (i) that exceed the numeric limits in Appendix A, Table 1 or either Table 2 or 3, if 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 material is excavated as part of an underground utility project in a public and/or utility right-of-way; is returned to the excavated area as fill material; and is covered with impermeable paving. Such material may be stored off-site for a period not to exceed ninety (90) days. The requirement for due diligence in subsection (i)(A)(I) will be met if the utility inspects the excavation for indications of a release of regulated substances.
- (E) The material is from a residential demolition and is used at a future residential development as part of an urban development initiative or project.

- (F) The material is moved within a property that has never been used for non-residential purposes.
- (G) Demolition material used as back fill at a site never used for non-residential purposes shall be presumed to be safe fill, and notwithstanding any other provision of this regulation not subject to testing in the absence of affirmative evidence of contamination.

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April 2, 2002

Via Overnight Delivery
Ms. Sharon Trostle
Regulatory Coordinator
Environmental Quality Board
Rachel Carson State Office Building
15th Floor
400 Market Street
Harrisburg, PA 17101-2301

Re: Proposed Safe Fill Regulations

Dear Ms. Trostle:

Over the past decade, the Pennsylvania Department of Environmental Protection (the "Department") and the regulated community have struggled to define the manner in which requirements arising under the Pennsylvania Solid Waste Management Act ("SWMA") potentially apply to the excavation, movement and use of soils, dredged materials, fill materials, brick, block and concrete, and used asphalt. In 1996, the Department issued the Clean Fill Policy which was intended to help clarify these issues. Unfortunately, because the Clean Fill Policy incorporated standards that in many cases were impossible to meet even where virgin materials were being handled, the Clean Fill Policy in practice has proved to be almost impossible to implement in any effective fashion.

On February 2, 2002, the Pennsylvania Environmental Quality Board (the "EQB") published for public comment proposed amendments to Pennsylvania's municipal and residual waste regulations. These proposed regulations, commonly referred to as the safe fill regulations, are designed to replace the Clean Fill Policy. The proposed safe fill regulations potentially sweep within their scope every construction, excavation, development and remediation project in Pennsylvania, ranging from construction of sewer lines and roads to the redevelopment of industrial sites and "brownfields." As such, they are critically important to a wide spectrum of persons and entities.

Ms. Sharon Trostle April 15, 2002 Page 2

To be effective, environmental regulatory programs need to be protective of public health and the environment, technically and scientifically sound, cost effective, easy to understand, and readily able to be implemented and administered. The proposed safe fill regulations represent substantial progress in addressing the difficulties posed by the Clean Fill Policy. However, significant additional changes need to be made to the proposed safe fill regulations in order to achieve the foregoing goals.

Over the past four months, an ad hoc group of highly experienced environmental professionals have worked together to develop a set of recommendations regarding changes that should be made to the proposed safe fill regulations. This group has included Dr. Ronald Buchanan, a senior environmental consultant with Du Pont and a member of the Cleanup Standards Scientific Advisory Board ("CSSAB") established under the Pennsylvania Land Recycling and Environmental Remediation Standards Act ("Act 2"), Craig G. Robertson, P.G., a registered professional geologist with over thirty years of environmental experience and a current member of the CSSAB as well as the past chair of the CSSAB, Al Holmstrom, an environmental professional with Rohm and Haas Company with over twenty years of environmental experience, and myself. (I have both an engineering and legal background, have served as an environmental attorney in private practice for almost twenty years, have handled a number of cases in which "clean fill" issues have been a central focus, have been directly involved in efforts to revise the Clean Fill Policy over the past five years, and currently co-chair the Solid Waste Advisory Committee of the Pennsylvania Chamber of Business and Industry.) In addition, Mr. Holmstrom and Dr. Buchanan are members of the Department's Solid Waste Advisory Committee.

The recommendations of this ad hoc group are set forth in a redlined version of the proposed safe fill regulations showing changes that we suggest be made to the regulations before the regulations are finalized. A copy of the redlined version of the proposed safe fill regulations is enclosed for consideration by the EQB along with a "clean" copy of the regulations incorporating those changes. Several key concepts provide the unifying cornerstones for these recommendations.

First, under Act 2, the Department, in conjunction with the CSSAB and the EQB, has developed a set of cleanup standards that are designed to be protective of human health and the environment. The medium specific concentrations ("MSCs") that have been promulgated provide conservative, risk based standards that can be applied across the Commonwealth. The regulations implementing Act 2 include provisions that are intended to afford the regulated community with appropriate flexibility to handle environmental conditions in a variety of contexts. The Act 2 program has been recognized as one the preeminent environmental programs in the United States. It is therefore important to harmonize the proposed safe fill regulations with the technical components of the Act 2 program. Many of the proposed recommendations are designed to incorporate into the safe fill regulations elements of the Act 2 program that will allow the regulations to remain protective of human health and the

Ms. Sharon Trostle April 15, 2002 Page 3

environment while simplifying the proposed safe fill regulations and introducing needed flexibility to enable the regulations to be implemented and administered effectively.

Second, the proposed safe fill regulations include prescriptive layers of requirements that will result in fill materials being subject to regulation as wastes with no corresponding environmental benefits. In order to ensure that the safe fill regulations, when finalized, represent a set of requirements that the regulated community can comply with and the Department can effectively administer, it is crucial to streamline the regulations. Accordingly, many of the proposed recommendations are designed to simplify the regulations, to eliminate overlapping and redundant requirements, and to remove impediments to using fill materials that do not result in additional environmental benefits. For example, the recommendations include streamlining the four new permits-by-rule that are proposed to be included in the residual waste regulations into a single permit-by-rule and a permit exemption.

Third, a number of recommendations are designed to clarify the terms of the proposed safe fill regulations. Given the broad scope of the proposed safe fill regulations and the fact that the regulations will cover persons and entities that traditionally have not been subject to extensive environmental requirements, it is vitally important that the regulations be understandable and comprehensible. Many of the recommendation are intended to promote this objective.

While the recommended changes are extensive in places, they retain the basic structure of the proposed safe fill regulations. We recognize that the issues that are addressed in the proposed safe fill regulations are complex and vitally important. The Department has expended significant time and effort over the past five years working to develop a rational and reasonable alternative to the Clean Fill Policy. Progress has been made. The enclosed recommendations are offered with the hope that further changes will be made to the proposed safe fill regulations before the regulations are finalized so that the final version of the regulations is protective, workable and cost-effective.

Very truly yours,

Michael M. Meloy For MANKO, GOLD & KATCHER, LLP

MMM/wda/99999/00014 Enclosures

cc: Ronald Buchanan, Ph.D. (w/enclosures)
Craig G. Robertson, P.G. (w/enclosures)
Mr. Al Holmstrom (w/enclosures)

ORIGINAL: 2245

IRRC

From:

Smith, James M.

Sent:

Tuesday, April 16, 2002 9:59 AM

To:

IRRC

Cc:

Sandusky, Richard M.; Schalles, Scott R.; Wyatte, Mary S.

Subject:

FW: Safe Fill Rulemaking



Comment on #2245

----Original Message----

From: Ron J Buchanan [mailto:Ron.J.Buchanan@USA.dupont.com]

Sent: Tuesday, April 16, 2002 9:55 AM

To: Smith, James M.

Subject: Re: Safe Fill Rulemaking

Letter that was apparently separated from the transmittal is attached.

Advise of questions. ...Ron Buchanan

(See attached file: 151920_1.pdf)

"Smith, James M." <jims@IRRC.STATE.PA.US> on 04/15/2002 11:08:37 AM

To: Ron J Buchanan/AE/DuPont@DuPont

cc:

Subject: Safe Fill Rulemaking

Hello,

We recieved a copy of your "safe fill re-draft" and the "red-lined version" you submitted via e-mail to the EQB on April 3, 2002. This copy contains changes to the regulation, but no commentary on the basis for your amendments. If you submitted commentary in addition to these amendments, we may not have received it.

If you have any further comment, please send it via e-mail to irrc@irrc.state.pa.us or to the Independent Regulatory Review Commission, 333 Market St., 14th Floor, Harrisburg, PA 17101.

Also, it is not clear from your e-mail who your comments relate to.

If you have any questions, please give me a call.

Thanks,

Jim Smith Regulatory Analyst IRRC (717) 783-5439