



Urban Research & Development Corporation

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This project was completed in partnership with the Lehigh Valley Greenways Conservation Landscape Program. Funding was provided in part by a grant from the Pennsylvania

Draft Plainfield Township Clean Fill Regulations

URDC has provided mapping of the many former quarries, most of which are slate quarries. A goal of this project is to promote returning former quarries to a productive use, but in a way that makes sure that the activity occurs in an environmentally safe manner that will protect groundwater, creeks and public health.

For many years, there was little real oversight of the fill that occurred in many quarries in Pennsylvania. As a result, in some cases, organized crime was involved in dumping contaminated materials, in order to avoid the costs of proper treatment. Fortunately, New Jersey recently passed a new state law that provides much more assertive oversight over the trucking operations involved with fill, including trucking across state lines. Large amounts of fill also occurred in Pennsylvania because Pennsylvania considered many materials to be clean fill that were not considered to be clean fill in New Jersey and New York. Based upon information provided by Township Environmental Advisory Committee Boardmember Robert Simpson, Pennsylvania's environmental standards for fill continue to be more lenient than the standards in place in New York and New Jersey. This disparity creates the economic incentive to transport fill to Pennsylvania.

The contamination risks are particularly high in quarries that have water or that are close to the water table or where contaminants could reach groundwater or surface waters. It is much more difficult to address contamination after it occurs, and much more difficult to remove contaminated materials than to dump them.

There also are concerns about the potential contamination of fill used in other projects, particularly residential developments, where there is a higher health risk.

Coordination With DEP Regulations

URDC cannot provide legal advice, and the Township Solicitor needs to review any draft ordinance. One issue is whether potential Township regulations would be preempted by State regulations. We have to be very careful regarding Township regulation of a specific matter that is also regulated by DEP. In any case, a municipality cannot enact regulations that conflict with State regulations on the same matter. The issue is whether a municipality can build upon State regulations with their own regulations, or whether the matter is preempted. One recent decision found that a township could prohibit the injection of wastes deep into the ground, even though DEP was willing to approve it. However, it was noted in that decision that it involved a "home rule" township with its own charter, which Plainfield Township is not.

Typically, municipal regulation of an issue is not a problem if the municipal regulation is intended to assist in carrying out State regulations, provided the municipal regulation does not conflict with the State regulations. There have been very few court cases in Pennsylvania involving municipal regulation of fill, so the matter is not clear. We understand that it is very material whether a State law specifically includes a statement of municipal preemption or not.

In general, a municipality cannot regulate "operational" matters that are regulated by DEP. For instance, municipalities are completely preempted from regulating blasting that meets DEP regulations and cannot regulate water pumping from quarries or berms around quarries.

In general, municipalities can regulate the location of facilities such as mining and gas wells, and can require wider setbacks beyond the DEP minimum setbacks, because those are traditional land use controls. Municipalities have also been allowed to apply steep slope, woodland preservation and creek setback provisions to mining activities, because those are traditional land use controls. Municipalities can also regulate truck traffic, road bonding and road improvement matters, within other limitations of State law.

Based upon the above considerations, as laypersons, we suggest that the Township cannot enact contamination limits that are more strict than DEP standards. We believe the Township can require additional testing of the fill materials and water quality, because that process would assist in carrying out the DEP standards.

Therefore, we recommend cross-referencing DEP definitions and contamination standards, without trying to write separate scientific standards for the Township. By referencing State standards, we also benefit from periodic updates of its standards, which may take advantage of national research. DEP's Clean Fill and Regulated Fill concentration limits are intended by DEP to be updated every three years, based upon scientific research and updated EPA standards.

Updated State Standards

Fortunately, after years of insufficient oversight, PA DEP has updated their clean fill standards, including the January 16, 2021 "Management of Fill Policy." There is now a more clear definition of Clean Fill, and are updated concentration limits for Clean Fill and for Regulated Fill. The environmental standards for PCB standards have also been made more strict. Pennsylvania's extremely permissive PCB standard was a major reason why contaminated fill from New York and New Jersey was being brought into Pennsylvania. However, there still is no analytical testing required by DEP of purported clean fill if the applicant submits forms showing that they have conducted environmental due diligence and submit a form to DEP.

Appendix A of this new DEP Policy includes Sample Collection Analytical Testing Protocols. This process could be used by reference in any Township regulations.

Type of Township Regulation

We need to propose regulations for Plainfield that are within the administrative capability of the Township to administer. In this regard, cross-references to established DEP standards are valuable, because an applicant is already required to comply with those standards. The main goal is to make sure there is sufficient oversight of the operations, and testing of random samples. One example of an easy to administer standard is to require that fill must not have any malodors. That requirement can be used to help stop fill that includes petroleum and certain other contaminants. Also, if the Township makes sure that dust is controlled during fill operations, it will assist in avoiding potential airborne public health hazards if there are any contaminants in the fill.

DEP has limited staff to oversee fill operations on a regular basis. Many DEP procedures involve complex application requirements, but less emphasis on enforcement in the field. A Township ordinance can help to fill this gap. The Township can have a major role in quickly identifying situations that a call to DEP to request an investigation and enforcement action by DEP. Also, the Township oversight process is intended to have a strong deterrent effect upon entities that otherwise would violate environmental regulations because they believe there is little oversight.

Very few Pennsylvania municipalities have written regulations that directly regulate fill, other than to manage stormwater and stability of slopes. There are a few relevant ordinances in place in New Jersey, but the NJ DEP has recently been actively encouraging municipal ordinances that regulate fill through their "Guard Your Backyard" program. As part of that effort, NJ DEP has prepared a model municipal "Soil Importation" ordinance that provides many useful provisions that should be considered in Plainfield. The New Jersey model does not propose that the municipalities write their own

contamination level requirements, but instead the municipal ordinance is intended to assist in carrying out State standards.

The new provisions need to be coordinated with the stormwater management and floodplain ordinances, which also regulate fill.

The Township regulations should require a fee for a fill permit to cover at least a portion of the Township's costs of administering the regulations.

A statement of purpose has been added to make the regulations more resistant to challenge.

We believe the main regulations should be placed in the Zoning Ordinance to make sure that all situations are covered. Placing regulations in a SALDO opens up opportunities for loopholes. That is because the typical fill operation is not a subdivision or a land development. Preparation of a site for development cannot be regulated by the SALDO if there is not an active proposal for a subdivision or a land development. The state definition of "land development" is rather awkward, and has been further limited by Court decisions. One landmark Commonwealth Court decision involved a township that had placed all of their tree preservation regulations in the SALDO. A developer leveled a forest of mature oak trees, and the court ruled that the SALDO was not applicable because there was not a subdivision or land development application in front of the Township at the time.

Many municipalities have concentrated upon enforcing weight limits of trucks that carry fill. That type of vehicle inspection by the police may also help to identify and deter potential contamination. While substantial training and equipment is needed to enforce weight limits, the fines that can be levied by the Township are substantial, and it avoids expensive damage to roads. Some municipalities share the costs of the portable weighing equipment.

Municipalities typically regulate the stability of fill, and control fill in flood-prone areas and along riparian buffer areas. In development plans, notes are sometimes used to state that the contractor is responsible to make sure that any fill meets the DEP standards for clean fill, and must maintain records.

This draft would require a Township zoning permit for use of purported clean fill. As part of the permit, the owner of the property or the entity depositing the fill must provide a written statement describing the sources of the material. Setbacks should apply from waterways. For larger fill operations, the Township would be given the authority to require periodic random testing of the materials by an independent laboratory, at no cost to the Township, as a condition of the zoning approval. There also could be requirements for water quality testing, particularly when a quarry has water within it or nearby, or if there is a waterway within a specified distance.

The persons conducting fill operations should be required to provide a copy of DEP form FP-001 directly to the Township. This is the form that DEP uses to monitor the source of fill.

Appendix A of the 2021 DEP Policy includes Sample Collection Analytical Testing Protocols. Parts of this process would be used by reference in the Township regulations.

Fill operations within a water-filled quarry would be required to obtain special exception approval from the Zoning Hearing Board. A special exception process would be mainly valuable if the Township felt that there may be a need to add site-specific conditions beyond what is appropriate in a Township-wide ordinance.

The following pages include a revised draft of the Plainfield zoning regulations:

Ordinance No. ____

AN AMENDMENT TO THE PLAINFIELD TOWNSHIP
ZONING ORDINANCE TO REGULATE THE IMPORTATION
AND USE OF SOIL AND OTHER FILL MATERIALS
AND TO REQUIRE TESTING OF CERTAIN FILL MATERIALS

Under the authority and procedures of the Pennsylvania Municipalities Planning Code, as amendment, the Board of Supervisors of Plainfield Township, Northampton County, Pennsylvania hereby enact the following amendment to the Plainfield Township Zoning Ordinance:

PART ONE. The following new section 27-323 is hereby added to the Zoning Ordinance:

“27-323. Regulation of Fill.

1. Purposes. To assist in ensuring proper compliance with State and Federal environmental regulations, by providing a level of oversight at the Township level. To avoid contamination of groundwater and surface water supplies. To avoid the creation of health hazards. To avoid the high costs of cleaning up sites after land and water become contaminated.
2. A Zoning Fill Permit shall be required before more than 100 aggregate tons of fill are brought into Plainfield Township for placement on a tract of land or in a former quarry. In addition, *a Zoning Fill Permit shall be required if more than one aggregate ton of fill will be placed into a water-filled quarry, even if the fill originated within Plainfield Township.* A Zoning Fill Permit shall also be required if more than one aggregate ton of fill is brought into Plainfield Township and proposed to be placed within 200 feet of a natural lake or perennial waterway. When such permit is required, a Zoning Fill Permit Application shall be required to be submitted.
 - A. This Section 27-323 does not regulate the movement of fill materials that originated within Plainfield Township, *except when the materials are to be placed within a water-filled quarry.*
 - B. This Section 27-323 shall not regulate the following: rocks, stone, landscape mulch, materials for use within a septic system (such as sand), an approved Solid Waste Landfill and closely related activities occurring under a State landfill permit, materials used within an existing public road or highway right-of-way, *or construction by PennDOT or a PennDOT contractor.*
 - c. *A water-filled quarry shall mean a former quarry hole that has standing water during the seasonally high water table. Once approved fill has been placed in a quarry so that it is 10 feet above the seasonally high water level, it shall not longer be regulated by this section as a water-filled quarry. When a hydro-geologic study is required by this section, it shall determine the seasonally high water table level.*
3. Fill shall only be allowed to be placed on land if it meets this Section, Pennsylvania Department of Environmental Protection (DEP) standards for “Clean Fill,” and applicable DEP standards for contaminants, considering the intended use of the property, except as otherwise provided in this section. See also 25 PA. Code Chapter 250 entitled “Administration of Land Recycling Programs.” As of the enactment date of this amendment, such Statewide Health Standards were published by DEP at:
<https://www.dep.pa.gov/Business/Land/LandRecycling/Standards-Guidance-Procedures/Pages/Statewide-Health-Standards.aspx> .
 - A. A future Residential Direct Contact use of the property shall be assumed, except: 1) if the property is in a commercial or industrial zoning district, then a non-residential standard may be used, and 2) the Residential Soil-to-Groundwater standard shall be used if the fill would involve a water-filled quarry.

- B. If DEP has specifically set an alternative contamination level for a specific site, such as for an industrial redevelopment project or under a “Beneficial Use” Permit, then that DEP-approved contamination level shall apply.
 - C. Demolition wastes (*except for masonry and concrete that meet the DEP definition for “clean fill”*) or putrescent wastes shall not be used as fill.
 - D. Wastes resulting from industrial operations shall only be used as fill if the materials are specifically approved under a DEP Beneficial Reuse permit or a closely similar DEP approval that allows the deposit of materials after processing.
 - E. The following materials specifically shall not be allowed to be placed into a water-filled quarry *or within 10 feet above the seasonally high water level in a quarry, even if DEP classifies the material as clean fill*: 1) dredged material from a waterway or water body, 2) concrete with rebar, 3) used asphalt, *including not limited to reclaimed asphalt pavement (millings), and 4) wood that includes lead-based paint.*
4. See also the DEP policy document entitled “Management of Fill” and DEP regulations. Note - As of enactment date of this Ordinance, many applicable DEP regulations were in 25 PA. Code Chapters 250, 271 and 287, including but not limited to 25 PA. Code §§ 271.101 and 287.101.
5. If more than 500 tons of fill material are being brought onto a tract of land from outside of Plainfield Township, or more than one ton of fill material is to be placed within a water-filled quarry, then the Zoning Officer shall require that a written chemical analysis of the materials be provided. If the fill operations are conducted in phases, then the 500 ton threshold shall apply to the total of all phases on a tract of land.
- A. Such analysis shall be completed by an independent environmental laboratory that has federal and/or state certifications to complete such testing, and shall use completely random samples taken by the laboratory staff or a representative of a Professional Engineer of Record (as described below) for the project from various loads. The testing should occur before the materials arrive at the site, such as conducting sampling at the point of origin of the materials. The applicant receiving the fill shall be responsible for the costs of the testing, unless a contractual arrangement provides that another entity will pay the costs, and the Township shall not be responsible for the testing costs.
 - B. The analysis shall be provided in writing or by email to the Zoning Officer within one business day after the results are received by the applicant or his/her agent.
 - C. The Zoning Officer shall have the ability to require a test of a suspect truck load (*such as a load that has a chemical or petroleum odor or staining*), in addition to the testing that typically occurs at the donor site. Required testing shall be completed and shown to meet applicable DEP standards prior to the materials being deposited into a quarry or onto the ground. The fill operations shall be halted immediately if a test shows that the material does not meet applicable DEP standards for the intended use.
 - C. The testing shall comply with the latest version of DEP’s “Sample Collection and Analytical Testing Protocol for Performing Environmental Due Diligence” or its successor standards. The Zoning Hearing Board may approve a special exception request to modify the testing regime as it applies to this Section, if the applicant proves that an alternative will provide the same level of public and environmental protection.
 - D. The applicant shall designate a Pennsylvania-Registered Professional Engineer to serve as the Engineer of Record for the project. Such Professional Engineer shall be responsible to oversee the process of compliance, including reviewing the trucking records, making sure that the testing is completed, and periodically visiting the site. Copies of the trucking manifests shall be periodically provided to the Zoning Officer, showing the origin of the materials.
 - E. Reports submitted by the Engineer of Record shall be subject to review by the Township Staff and their designees.
 - F. *At least monthly during active fill operations and at the conclusion of the fill operations, the Engineer of Record is required to provide a written certification to the Zoning Officer that based upon the knowledge of the engineer and his/her staff and based upon a reasonable level of supervision, the fill operation complies with the requirements of this Section. The Engineer*

of Record may also be required to report that no fill activities are occurring on the tract, during periods when activities are suspended.

6. The placement of more than one ton of fill is proposed within a water-filled quarry or on land that is within 200 feet of a natural lake or perennial waterway shall only occur after special exception approval has been obtained for such activity from the Zoning Hearing Board. As part of such special exception process, the following additional requirements shall apply:
 - A. The applicant shall provide credible evidence to demonstrate that the requirements of this Section have been fully met.
 - B. The applicant shall be required to submit a hydro-geologic study by a Professional Geologist or Professional Engineer with relevant experience to determine whether there will be any adverse impacts upon groundwater and surface water quantity and quality, including whether the aquifer and off-site water supply wells will be adversely affected.
 - C. As a condition of approval, the Zoning Hearing Board may require that a well water quality test be conducted to test for chemical contaminants, at the expense of the applicant. Such test shall be conducted at the nearest water supply well that has an owner that is willing to cooperate with the test. Such test shall be conducted prior to the start of the fill operations, during the operations, and after the operations are completed. If all of the owners of wells within 2,000 feet from the tract refuse to cooperate, then the well test is not required to be completed. Documentation of such refusal to cooperate shall be provided to the Zoning Officer, such as certified mail receipts. However, the Zoning Hearing Board may still require that the applicant install one or more test wells as a condition of special exception approval, considering the hydro-geologic study, the likely flow of contaminants and size of the project. In such case, the test wells shall be installed at the applicant's expense.
 - D. The Zoning Hearing Board shall have the authority to place additional conditions and safeguards upon a special exception approval, as is necessary to implement the purposes of this Ordinance and the Pennsylvania Municipalities Planning Code, *such as limits on late night and early morning operations that generate excessive noise for nearby residents.*
 - E. *The site plan that is required to be submitted as part of the special exception application under this section shall be to scale, and shall only need information that is necessary to determine compliance with this Section, including accurate existing and proposed contours, locations of proposed fill, sources of proposed fill, the extent of the 100 year floodplain, the locations of any waterways or major drainageways, and locations of proposed truck entrances into the site. Details regarding stormwater management may be addressed after a special exception is approved. Additional information may be later required to be added to the site plan to determine compliance with other sections of Township ordinances.*
7. If DEP requires that DEP form FP-001 (or its successor form or a similar DEP form) be submitted regarding the source of the fill material, a copy shall be sent or submitted to the Zoning Officer within one business day after it is submitted to DEP. Information shall be submitted for each donor site. In any case, if a total of more than 50 tons of fill *that did not originate within Plainfield Township* are brought into Plainfield Township, or if more than one ton of materials *that did not originate within Plainfield Township* is to be placed within a water-filled quarry, such form shall be completed and submitted to the Zoning Officer, even if DEP does not require submittal of the form.
 - A. The Zoning Officer may also require that form FP-001 be completed and submitted if there is a proposed movement of fill from a part of Plainfield Township that is suspected of having contamination to another part of Plainfield Township.
8. If the material was originally contaminated, but was cleaned to meet DEP standards, information must be provided regarding the type of treatment and the entity that performed the treatment. The level of treatment shall be consistent with the intended final use of the property. A copy of any applicable DEP permit shall be provided, such as a Beneficial Use permit.

9. Any placement of fill shall also comply with the Floodplain, Grading and Stormwater regulations of the Township and with applicable State and Federal regulations. There shall also be compliance with the Riparian and Wetland Buffer requirements of the Subdivision and Land Development Ordinance. Any placement of a fill within a minimum of 200 feet from the top of the primary bank of any perennial waterway shall meet DEP standards for Residential Soil-to-Groundwater standards, or a stricter standard.
10. Fill shall not include any type of malodor that could be a possible indicator of contamination by petroleum products, *except that reclaimed asphalt (millings) may be used as part of a driveway, road or parking lot.* Dust shall be properly controlled during all fill operations to prevent the creation of airborne contaminants. See also DEP fugitive emission regulations in 25 PA. Code Section 123.
11. If the Township becomes aware that fill has been placed that does not meet applicable DEP environmental standards, then the Zoning Officer shall notify DEP in writing or by email. In addition to requesting DEP enforcement actions, the Township may also make use of all of the remedies, penalties and enforcement mechanisms available in response to a violation of the Zoning Ordinance, including seeking an order to remove hazardous materials.
 - A. Any zoning permit is automatically conditioned upon compliance with DEP and U.S. Environmental Protection Agency (EPA) requirements related to the placement of fill. A zoning permit may be withdrawn or suspended if the Zoning Officer becomes aware of a violation of DEP or EPA requirements, until the applicant proves that compliance has been achieved. Such EPA requirements include, but are not limited to, provisions that regulate materials including Polychlorinated Biphenyls (PCBs), such as 40 C.F.R. Section 761 that may restrict PCB disposal to EPA-approved indoor sites.
12. *This Section allows fill that is intended to make a site more suitable for new uses or to remediate an existing problem. However, amounts of fill that are excessive for the intended new uses or remediation shall not be brought onto a site in Plainfield Township from outside of the Township for the purposes of profiting from soil disposal fees.*
13. If the operator or owner of any use becomes aware that an unauthorized release of groundwater or surface water contaminants has occurred or may have occurred, the operator shall immediately contact the County Emergency Communications Center and the applicable Regional Office of DEP, and shall also report it in writing or email to the Zoning Officer within one business day.
14. Any use of fill shall result in stable slopes. See also State regulations concerning use of fill in areas intended for on-lot septic drain fields.
15. This Section is not intended to regulate operational matters of mine reclamation that occur in compliance with a State-approved mining reclamation plan as a condition of a valid current State mining permit.
16. See the Township's Fee Schedule, which may be revised by Resolution.

PART 2. Permits.

A new section 27-802.1.A.(1) is added as follows:

“(1) A Zoning Fill Permit is also required for the placement of fill in certain cases in compliance with Section 27-323.

PART 3. Severability.

The provisions of this Ordinance Amendment shall be severable, and if any provisions hereof shall be declared unconstitutional, illegal or invalid, such decision shall not affect the validity of any of the remaining provisions of this Ordinance Amendment. It is hereby declared as a legislative intent of the Township that all other portions this Ordinance Amendment would have been adopted, if such unconstitutional, illegal or invalid provision or provisions had not been included herein.

PART 4. Repealer.

All portions of Township Ordinances that were adopted prior to this Ordinance and are clearly in direct conflict with this Ordinance Amendment are hereby repealed.

Enactment:

This Ordinance Amendment shall become effective five calendar days after passage by the Board of Supervisors.

ENACTED AND ORDAINED this _____ day of _____, 20__, in lawful session duly assembled.

ATTEST:

TOWNSHIP OF PLAINFIELD BOARD OF SUPERVISORS

Township Secretary

Chairperson