


**Environmental Special Topics**

**Application of Pennsylvania's  
Management of Fill Policy**

*Sponsored by Design Community Training  
Program*

11/16/2010



**pennsylvania**  
DEPARTMENT OF TRANSPORTATION  
[www.dot.state.pa.us](http://www.dot.state.pa.us)

Roll Call for District Offices.

Good afternoon and welcome to this Environmental Special Topics presentation. My name is XXXXXXX, and I will be your instructor for this session. This presentation was developed to provide you with a brief primer on how PennDOT satisfies the Pennsylvania Department of Environmental Protection's (PADEP's) Management of Fill Policy. This policy affects design, construction and maintenance efforts performed by PennDOT, and we will discuss this policy, the impacts to PennDOT operations and the resources you might need.

A few housekeeping points that we want to remind you of. Please put any of your cell phones and your office phone mute for the duration of this presentation. This is so that background noise does not disturb your colleagues. The Webex utility that you see on your screen has a number of functions. There are three icons which I want to identify for everyone. The first icon appears to be two people, which gives you a list of individuals in the web conference. The second is a chat box and that opens the chat function. If you have a question during the presentation you can either click the 'raise your hand' button or enter it into the chat box. We have the capability to see all those signed in to the presentation and can un-mute your phone to ask the question. Using the chat box, your typed question can be reviewed by me and others in this room, and allows us to determine whether to answer the question immediately, determine that the question will be answered in a subsequent slide, or whether we wait for the programmed break.

Lastly, I want to remind you, if it has not already happened, to pass the sign-in sheet among the attendees. Please submit the filled out sign-in sheet to your training coordinator promptly after this training has been completed.

Now that we've taken care of those few housekeeping items....I know your time is important, so let's get started.

## Management of Fill

- **August 2010, replaced PADEP's Clean Fill Policy (1996)**
- **Provides PADEP's procedures to determine whether material is Clean or Regulated Fill**
  - **Clean fill – unrestricted use**
  - **Regulated fill – may not be used without Solid Waste Management Act permit**



The Management of Fill Policy replaced PADEP's Clean Fill Policy that was established in 1996.

This policy provides PADEP's procedures to determine whether a material is Clean or Regulated Fill.

As noted in the lower bullets, clean fill can be used in an unrestricted manner. Regulated fill, and again, this policy helps establish this, has restrictions in the uses and these are covered in a SWMA permit.

This sounds like a simple process, but the nuances of the policy and procedures required to comply do affect PennDOT's operations.

I will also point out that these procedures are provided in Publication 281 which was updated earlier this year. However, PADEP released some clarifications and changes in August that are discussed today and will be addressed an addendum to Publication 281 in the near future.

## Course Objectives

- **Determine whether a fill material is classified as Clean or Regulated Fill**
- **Comply with the due diligence requirements of the MoF Policy**
- **Use of Form FP-001 and Form 20 RF**
- **Comply with the reporting and record retention requirements of the Policy**



When the Pollution Prevention Section established the need for this webinar, the objectives established were to have PennDOT personnel in Construction, Maintenance and Design be able to:

- Determine whether a fill material is classified as Clean Fill or Regulated Fill and understand the use limitations of each of these fill materials
- Comply with the due diligence requirements of the Management of Fill policy that are incorporated into Publication 281
- Correctly use Form FP-001 and Form 20 RF and understand the General Permit requirements
- Comply with the reporting and record retention requirements of the Policy

We are going to discuss the due diligence options allowed under the policy, but we are not going to discuss in detail how PennDOT can complete the records review of environmental due diligence. This was the subject of a separate webinar offered last month.

## Definitions

- **Clean Fill** – Uncontaminated, non-water soluble, non-decomposable inert solid material. (§§25 PA Code 271.101 and 287.101)
- **Historic Fill** – Material used to bring an area to grade prior to 1988 that consists of soil and residuals.



Before we get into the meat of the policy, there are a few definitions to go over first. I am not going to read them, but have provided them for your reference.

The first definition is Clean Fill and you can see it applies to a variety of earthen materials. Not noted in this slide is there are concentrations of regulated substances above which the material is NOT clean. PADEP has established those concentrations in Table FP-1a and b, and this table is provided in your handouts with a copy of the Policy.

Historic fill is material, used to bring an area to grade prior to 1988 that is a conglomeration of soil and residuals such as ashes slag, dredged material and C&D waste. Historic Fill MAY be Clean Fill if the material is uncontaminated and recognizable as such.

<The term does not include iron or steel slag that is separate from residual if it meets the co-product definition and the requirements of 25 PA Code 287. The term does NOT include coal ash that is separate from residuals if it is beneficially used in accordance with 25 PA Code 287.661-.666.>

## Definitions

- **Regulated Fill** – Soil, stone rock, dredged material, used asphalt, historic fill, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such that has been affected by a spill or release of a regulated substance and concentrations of regulated substances exceed the values in Table GP-1a and b.



Here is a mouthful – but essentially it is material that can be used as fill that contains regulated substances at concentrations below those established by this policy. These concentrations are provided in Tables GP-1a and b.

These tables are also provided in your handout attachments.

## Definitions

- **Regulated Substance** – includes all hazardous substances and contaminants regulated under the Hazardous Site Cleanup Act, and substances covered by the Clean Streams Law, the Air Pollution Control Act, the Solid Waste Management Act, the Infectious and Chemotherapeutic Waste Law, and Storage Tank and Spill Prevention Act.

I won't read all this, but suffice to say that PADEP covers all regulated hazardous substances and contaminants in their definition of a regulated substance.

## Definition

- **Release** - Spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a regulated substance into the environment in a manner not authorized by the Department of Environmental Protection. The term includes the abandonment or discarding of barrels, containers, vessels and other receptacles containing a regulated substance. (35 P.S. § 6026.103)



You've seen the terminology 'affected by a release' in the Clean and Regulated Fill definitions. PADEP defines this phrase as a spill, leak, discharge, etc, of a regulated substance to the environment inconsistent with the laws of the Commonwealth or PADEP procedure.

## Definitions

- ***Uncontaminated Material*** – Material unaffected by a spill or release of a regulated substance, or if affected by a spill or release, the concentrations of regulated substances are below the concentrations specified in Table FP-1a and b.

You'd think this is obvious – but actually it is not, and PADEP has defined an uncontaminated material.

The first half is self-explanatory – it has not been impacted by a release of a regulated substance. But what about low-level concentrations? In this case, if sampled, the concentrations are below those listed in the Clean Fill tables FP-1a/b.



## Clarification

### **PADEP has Clarified:**

'PADEP has reiterated the Clean Fill definition to be interpreted as "the DEP policy does not apply to the Clean Fill use of concrete and used asphalt containing naturally occurring contaminants or regulated substances that are a part of used asphalt and that may exceed the Clean Fill levels." Thus, these materials removed from existing highways/bridges are considered Clean Fill without the need for testing.'

[Note: unless there is evidence of a spill or release]



We have mentioned that Publication 281 contains terminology and procedures consistent with the Management of Fill Policy. But, some of the aspects of the Policy required interpretation and intent discussions between PADEP and PennDOT. The quote provided was formerly issued in a Strike-Off letter that was subsequently incorporated into Publication 281.

This particular quote is important in that it reiterates that highway materials, such as used concrete and asphalt, can be used as Clean Fill without testing as long as there is no evidence of a release.

## Summary

- **Applies to: soil, rock, stone, dredge material, used asphalt, and brick, block, & concrete from building demolitions.**
- **Does not apply to permitted mine land reclamation activities.**
- **Historic fill may be Clean Fill**
- **Highway/bridge pavement materials are considered Clean Fill, without testing, if there is no evidence of a spill or release.**



This slide summarizes some of the policy highlights that perhaps were not apparent in the slides shown so far:

Clean Fill may be from demolition debris or soil, rock, stone, dredge material, used asphalt, brick, block, stone etc, that is not affected by a release of a regulated substance.

Historic fill – fill that was placed prior to 1988, during original development and is generally widespread, may qualify as Clean Fill as we have noted earlier in the definition.

Highway or bridge pavement materials may also qualify as Clean Fill – again if there is no evidence of contaminant impact.

Are there any questions so far on these definitions or material so far?

## Applicability

- **Determination of Clean or Regulated Fill**
- **Not applicable:**
  - **Mine land reclamation activities (requires permit)**
  - **Excavation, movement, or reuse of fill material within project ROW (no permit required)**
- **PennDOT impact?**



11

The Policy establishes whether a fill material is Clean or Regulated. But let's first establish when this policy is NOT applicable:

For any mine reclamation activities, a specific permit is required.

If the excavated material will be reused within the project site, or contiguous properties if under one ownership, this determination is NOT necessary and no permit is required.

The impact to PennDOT? This policy affects your planning and operations if you are exporting material from, or importing material to a construction site.

## Management of Clean Fill

- **Does not require a SWMA permit**
- **Unrestricted use, but**
  - **Other regulations may apply such as:**
    - Chapter 102 – Erosion and Sediment Control
    - Chapter 105 – Dam Safety and Waterways
- **BMPs may be used to isolate unacceptable C&D materials**
- **No free liquids or public nuisance**



12

**Clean Fill** may be used in an unrestricted or unregulated manner. But the use of fill is still regulated under other environmental laws and regulations such as those listed on this slide.

Clean Fill can be derived from construction and demolition activities if unacceptable materials such as asbestos containing materials, PCB ballasts, fluorescent light bulbs are separated from building's brick, block and concrete. Used asphalt may be used if there is no evidence of a spill.

The Technical Guidance specifically calls out that Clean Fill may not contain any free liquids based on visual inspection and shall not create public nuisances, such as an objectionable odor, to the user/receiving party OR adjacent properties. The odor issue has come up on at least one PennDOT project so far. Another example of nuisance is salt-impacted soil – clearly not covered in the Clean Fill criteria but capable of impacting water quality.

## Management of Regulated Fill

- **Regulated fill is a waste**
- **May be used under General Permit WMGR 096SE003**
  - Concentrations < GP-1a/b



**Regulated Fill** is a waste and must therefore be managed in accordance with the PADEP's municipal or residual waste regulations, whichever is applicable.

Regulated Fill may be beneficially used under General Permit WMG096SE003 if the material and proposed activities for the fill meet the conditions of that permit. **This is a beneficial use permit for the use of Regulated Fill as construction material.**

Fill containing concentrations of regulated substances that exceed the values in Table GP-1a/b may not be managed under the provisions of this policy or the Permit, but must be otherwise managed in accordance with PADEP's municipal or residual waste regulations.

## General Permit WMGR096SE003

- **Beneficial use of Regulated Fill**
  - **Commercial/Industrial use**
- **Must notify municipality**
  - **Analytical results must accompany the submission**
- **Deed acknowledgement and siting limitations**



A few quick highlights to General Permit WMGR-096SE003:

Under this permit, Regulated Fill may be beneficially used on a property that is approved for construction and zoned exclusively for commercial and industrial uses.

The permit requires that the user notify the municipality where the material will be placed a minimum of 30 days prior to use, and sample analytical results are required and must accompany the submission to the municipality.

The permittee must provide to PADEP proof of a recorded deed notice that includes the exact location of the fill placed on the property, and there are siting limitations in the permit including floodplain, sinkholes, perennial stream, water source, wetland, etc.

## General Permit WMGR096SE003

- **No free liquids or objectionable odors**
- **Records maintained for 5 years**
- **General Permit Form 20 RF is completed and submitted to PADEP**



Similar to Clean Fill requirements, the materials must not visually contain free liquids and shall not have an objectionable odor.

The completed permit, and analytical, and other documentation must be maintained by the permittee for 5 years.

I mentioned in the last slide that when proposing to export Regulated Fill to another site, notification to PADEP and the municipality is required, and this is accomplished through completion and submission of Form 20RF. Approval of use must be gained prior to export, so you have to plan accordingly.

The WMGR 096 Permit and Form 20 RF are provided as attachments to your handouts.

## Regulated Fill Form 20 RF

### Form 20 RF is an application for Regulated Fill General Permit

- Reflects the WMGR 096SE003 General Permit restrictions
- If >1 acre (receiving site), PNDI required
- Certification of accuracy
- Regulated Fill cannot be placed on a "Greenfields" Property.



Form 20 RF, is a 5-page application for Regulated Fill use; the \$250 fee is waived for PennDOT.

The application requires that the user identify how the fill will be used, the zoning and other site characteristics, a description of the fill and source of the materials, sample analytical data, and proof that notification was provided to the municipality.

If the receiving site is greater than 1 acre, a Pennsylvania Natural Diversity Inventory (PNDI) review must and the results accompany the PADEP submission (Policy #400-0200-001, January 2003).

There is also a certification that the information provided is, "to the best of my knowledge" true and correct.

With respect to the last bullet, Regulated Fill may not be placed on a 'greenfield' property not planned for development or a property currently or planned for residential use (unless authorized).

All this said, Regulated Fill is appropriate for commercial and industrial construction and PENNDOT may consider the use of imported Regulated Fill on a construction site. But this should be coordinated with the PPS and PADEP consulted prior to the project. Also, this type of discussion should be handled in Final Design.

Before we move on to the next subject, are there any questions?



## General Steps to the Process

- **Determine if there is export**
- **Determine whether fill is Clean or Regulated**
- **Evaluate options**
- **If exported, complete appropriate forms**
- **Maintenance of records**



If there are no questions, let's discuss the decision tree of the Management of Fill process. Listed on this page are the four generalized steps consisting of:

- Determining if there is export of fill materials from the project site
- Determining whether the fill is Clean or Regulated
- Evaluate the options once the determination is made
- If export fill is necessary, then the appropriate form, FP-001 for Clean Fill or Form 20 RF for Regulated Fill, and
- Records must be completed and retained.

The process we are discussing is presented in a flow chart included in the attachments to your handout. This is revised from the Pub 281 version to make it 1-page long.

## First Steps

- **Is there export fill from this site?**
- **Does the material(s) to be exported fit the description of Clean Fill?**
  - Complete and document EDD
- **Can you isolate/selectively export?**
  - What is the basis of determining no impact?



The first question, "Is there export fill from this project site?". Remember, characterization of the fill, whether Regulated or Clean, is NOT required nor Permits required if the material is reused within the project site.

If there will be exported fill materials, then due diligence is required and should be documented using PennDOT EDD Phase I Form VI.

The next question might be, "can you selectively export – take the Clean away and use Regulated Fill within the project site?"

If the answer to this question is 'yes', than that could be your priority. Thus, you would use the potentially Regulated Fill within the project site.

Note that export from one PennDOT project to another WILL require compliance with the Management of Fill Policy – it is still considered export from the generating site. In this case, PennDOT is both the generator and recipient.

## Is it Clean Fill or Regulated

- **PADEP allows environmental due diligence (EDD)**
  - **If no evidence of release, managed as Clean Fill**
- **Document findings**
  - **EDD Phase I Form VI (maintenance and construction)**
  - **Form FP-001 (if recipient requests)**



For this training, let's assume there is export of fill required; Environmental Due Diligence (EDD) can be used to determine Clean Fill characterization.

The Policy technical guidance, which is consistent with that provided in Publication 281, establishes that due diligence can be first-hand knowledge, the investigation of historic site use, or testing to determine that there is no evidence of a release of a regulated substance.

In fact, the technical guidance documentation states, "Analytical assessment, testing or sampling is only required if visual inspection or reviews of historic property use indicates evidence of a release of a regulated substance."

So, the EDD Phase I, Form VI should be used to document your due diligence and this should answer the question most of you were going to ask – do I have to sample the material?

No, it is NOT necessary to sample and perform chemical analyses.

If export will occur, PennDOT should provide a copy of Form VI with the fill to the recipient. Note that they may ask for form FP-001, and we will discuss that in a minute.

## Definitions

- ***Environmental Due Diligence*** - Investigative techniques, that may include, but not limited to, visual property inspections, electronic data base searches, review of ownership and use history of property, Sanborne maps, environmental questionnaires, transaction screens, environmental assessments and audits. (35 P.S. § 6027.103)



We've mentioned Environmental Due Diligence, or EDD several times now. So, perhaps a couple more definitions are appropriate.

EDD is the investigation of the historic use of a property to determine whether regulated substances were used, stored, disposed or spilled and could have affected the subject fill materials.

The investigation of historic use is accomplished through research that may include, but is not limited to a combination of:

- First hand knowledge
- Interviews with knowledgeable parties
- Visual inspections
- Review of ownership
- Historic property use

For larger construction projects, the EA or EIS completed for the project site includes these elements.

For smaller projects or maintenance efforts, PennDOT personnel can complete the requisite EDD.

PennDOT offers a webinar on EDD with specific information on sources of documents, research, and tools, so I am only going to briefly discuss this process in this presentation.

## Definitions – A.S.T.M. (E1527 & 1528)

- ***Due diligence*** – the process of inquiring into the environmental characteristics of a parcel... the degree and kind of due diligence vary for different properties and differing purposes.

The ASTM standard also defines EDD, and this is defined similarly in Publication 281. Again, this is the process of inquiring into the environmental characteristics of a parcel. Both the ASTM and Publication 281 note that the degree and kind of due diligence will vary depending on the property and purpose.

## Definitions – A.S.T.M. (E1527 & 1528)

- ***Practically Reviewable*** – information that is provided by a source in a manner and in a form that, upon examination, yields information relevant to the property without the need for *extraordinary* analysis of irrelevant data.
- ***Reasonably Ascertainable*** – Information that is publicly available, obtainable from its source within a reasonable time and cost constraints, and practically reviewable.



Here are two more terms that are used in both the ASTM standard and PennDOT's Publication 281.

The two terms “practically reviewable” and “reasonably ascertainable” are defined here. Essentially, it is the discovery of information gained through reasonable effort.

## Environmental Due Diligence

### Typical items for due diligence investigations:

- **Site inspection [PENNDOT EDD Phase 1]**
- **Transaction Screen or other documents**
- **Environmental database searches**
  - **PA DEP HSCA Sites**
  - **RCRA Generators**
  - **Toxics Releases Inventory (TRI)**
  - **PA DEP Storage Tank Release Sites List**

Listed on this slide and the next slide are the elements that may be used by PENNDOT personnel to satisfy due diligence. At a minimum, the site inspection or reconnaissance is a required element. These are some of the items discussed in PennDOT's EDD database training, they are discussed in Publication 281, and are included on the EDD Phase II, Form VII included in your handouts.

Other background information on site use can include environmental documents such as a transaction screen or on-line databases.

## Environmental Due Diligence

### Typical items for due diligence investigations:

- Ownership history [deed] review
- Interviews, e.g. current & former property owners, fire departments, hazmat teams, regulatory agencies
- Aerial photography review
- Fire insurance maps (Sanborne)
- Testing [PENNDOT EDD Phase 2-Step 2]



This is a continuation of items that can satisfy EDD and includes historic ownership, historic maps and figures, photographs, and interviews.

And yes- testing is an option if spill/release impact is suspected.



## PennDOT Form EDD Phase 1

ENVIRONMENTAL DUE DILIGENCE (EDD) PHASE 1  
VISUAL INSPECTION FORM

DATE: \_\_\_\_\_

SR/SEC: \_\_\_\_\_ COUNTY: \_\_\_\_\_

SEGMENT: \_\_\_\_\_

ECMS Project#: \_\_\_\_\_

ACTIVITY: \_\_\_\_\_

**Visual Site Inspection (EDD-PHASE 1):**

• Stressed Vegetation	Yes [ ]	No [ ]
• Staining on Soils	Yes [ ]	No [ ]
• Staining Along PennDOT ROW or on ROW Materials	Yes [ ]	No [ ]
• Detectable Odors	Yes [ ]	No [ ]

Comments: \_\_\_\_\_

**Findings**

Check one:

Due diligence inspection performed and no visual evidence of a spill or release in project ROW was detected.

Due diligence inspection performed and evidence of a spill or release in project ROW was detected. Phase 2 documents attached.

Due diligence not applicable for this project. No waste or fill.

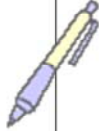

SIGNATURE: \_\_\_\_\_


PRINTED NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

ORGANIZATION: \_\_\_\_\_

\* FORM MUST BE MAINTAINED FOR A MINIMUM 5 YEARS IN THE PROJECT FILE\*



DEPARTMENT OF TRANSPORTATION  
www.dot.state.pa.us

PennDOT has formalized the EDD process in their EDD Phase I using Forms VI and VII. You should all be familiar with this form and both the Form VI and VII are provided as attachments to your handouts.

The Phase I Form VI, shown on this page, is essentially a checklist to document that PennDOT has performed sufficient due diligence to determine the fill material is classified as Clean Fill.

Items included allow the reviewer to identify whether there is stressed vegetation, stained soil or odors, and allows room for other comments or observations.

The form then asks the user to determine with there is any evidence of impact and a signature. If there is evidence, further investigation is required.

If there is no evidence of a spill or release, completion of this form is sufficient for maintenance projects; a copy of the form is provided to the recipient of the exported Clean Fill and a copy maintained by PennDOT <for 5 years>.

Let's look at some visual examples that should be noted as part of the EDD process and noted in PennDOT Forms.

## Environmental Due Diligence

- **Impacted Asphalt Pavement from a spill/release of a regulated substance**



Here is an example of a spill on a roadway. Depending on the work PENNDOT proposes, some investigation of the nature of the spill should be ascertained:

- Whether the regulated substance entered the storm drain
- What was the substance spilled (just fuel?) and impacted the underlying base
- Was it cleaned up to the satisfaction of PADEP
- Was groundwater impacted

## Environmental Due Diligence

### Stressed Vegetation



This is an example of stressed vegetation – a clearing in an otherwise wooded lot. This is potentially indicative of buried substances, impact of a regulated substance spill, or buried foundation. Some of this information can be discovered by looking at historic aerial photographs or maps.

## Environmental Due Diligence

- Example of the obvious – potential illegal disposal



This is an obvious sign of potential release. Note that these drum may not have been empty when deposited here.

## Environmental Due Diligence

- Example of miscellaneous fill with potential buried, rusted drum



This is another example of buried debris, drum carcasses or miscellaneous fill that could contain concentrations of regulated substances above the Clean or Regulated Fill criteria.

Note that this material could be segregated from surrounding fill – this does not necessarily limit the specific use of surrounding material.

But these are examples of notes that should be identified on the EDD Form VI; and they suggest that further investigation of site conditions is required to determine whether the materials are Clean Fill.

In this case, as Form VI requires, EDD Phase II is required and the Form VII should be used.

## Next Steps

- **Is there evidence of impact?**
  - **Sampling required**
- **Document on EDD Phase I/II Form VI/VII**
- **Use appropriate Permit**
  - **Form FP-001 (Clean Fill)**
  - **Form 20 RF (Regulated Fill)**



Now that you have completed the Phase I EDD, the question of whether further investigation is necessary to determine Clean Fill status can be answered.

Let me repeat, if it is classified as Clean Fill based on EDD alone, only the EDD Phase I Form VI is required for maintenance jobs, but Form FP-001 is required for Construction projects.

If there is suspected spill/release impact, EDD Phase II, Form VII is required to be completed and, depending on the results, either Form FP-001 (Clean Fill) or 20 RF (Regulated Fill) accompanies the fill to its location.

Lets look at Form VII

## PennDOT EDD Phase 2 Form VII

CLEAN FILL ENVIRONMENTAL DUE DILIGENCE (EDD) PHASE 2

DATE: \_\_\_\_\_  
 BR/SEC: \_\_\_\_\_ EDCS PROJECT #: \_\_\_\_\_  
 COUNTY: \_\_\_\_\_  
 SEGMENT: \_\_\_\_\_  
 ACTIVITY: \_\_\_\_\_  
 LOCATION: \_\_\_\_\_

A Phase 1 EDD was conducted for the above project and has identified evidence of a potential spill or release of regulated substances to the material. A Phase 2 EDD was performed.

**Findings:** Check all that apply:

1. Based on the results of the EDD Phase 2: Step 1 investigation, it has been determined that **no spill or release** has occurred.

2. Based on the results of the EDD Phase 2: Step 1 investigation there is documented evidence that a spill or release has occurred. **MUST COMPLETE ITEM 3**

3. The materials were collected and sampled, in accordance with Appendix A of the PADEP Management of Fill Guidance, and

All regulated substances analyzed were reported as non-detectable. Form FP-001 must be completed along with the laboratory data, and provided to the property owner of the fill receiving site. Attach documentation.



The concentration of regulated substances detected were below the levels indicated in Table FP-1a/1b. Form FP-001 must be completed along with the laboratory data, and provided to the property owner of the fill receiving site. Attach documentation.

The concentration of regulated substances detected exceeds the levels in Table FP-1a/1b, but are below the levels indicated in Table GP-1a/1b. **The material is Regulated Fill** and must be approved by the PENNDOT Project Manager for use. If approved, PADEP General Permit WMGR096 must be obtained.

The concentration of regulated substances detected exceeds the levels in Table GP-1a/1b. **The materials are a waste.** Manage in accordance with applicable PA Solid Waste Management Act waste regulations. Attach documentation.

SIGNATURE: \_\_\_\_\_  
 PRINTED NAME: \_\_\_\_\_  
 TITLE: \_\_\_\_\_  
 ORGANIZATION: \_\_\_\_\_

\* FORM MUST BE MAINTAINED FOR A MINIMUM 5 YEARS IN PROJECT FILE \*

www.dot.state.pa.us 31

Shown on this page is Phase II, EDD Form VII; a copy of this is included in the attachment.

Note 'A' states that a specific Area of Concern (AOC) was identified, and the Phase 2 EDD was performed. The findings of the EDD are documented on this form. The choices are:

- 1) Further investigation suggests no spill or release has occurred and the material is considered Clean Fill,
- 2) There is documented evidence of a spill or release, in which case,
- 3) Samples were collected and analyzed in accordance with the Management of Fill Policy

Subsets of Item 3 are four choices of fill classification based on analytical results and we will discuss this in subsequent slides.

At the bottom of this form, similar to the Phase I Form VI is a signature line. This signature is only an acknowledgement that proper due diligence was performed.



Management of Fill Policy, FP-001

FORM FP-001 Rev. 8/2010  
 COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 BUREAU OF WASTE MANAGEMENT

FORM FP-001 - CERTIFICATION OF CLEAN FILL

Prior to completing this form and signing this certification, please review the entire Management of Fill policy (25PA-2502-770), including the certification requirements. Please note that Section III as defined in the Management of Fill policy, may meet the definition of clean fill if the material is limited to uncontaminated soil, rock, stone, dredged material, sand, gravel and brick, block or concrete from construction and demolition activities that is separate from other waste and recyclizable as such.

Instructions: Sections I and 2 of this form must be completed by the person making the determination of clean fill at the site of origin. Section 3 must be completed by the person using the material as clean fill. Both the person determining clean fill and the user of the clean fill are responsible for maintaining copies of this completed form on site for a period of five (5) years for Department inspection.

**Section 1: Person Determining Clean Fill**

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Clean Fill Material originated on the following property:

Site Name: \_\_\_\_\_

Street Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**Section 2: Site Characterization**

Check the following that applies:

A. If the site of origin for the fill material has undergone or is undergoing cleanup or remediation pursuant to a local state or federal regulatory program that requires site characterization, provide the following information along with a copy of the entire site characterization and laboratory analysis for the material to be used as clean fill.

Name of local, state, or federal agency: \_\_\_\_\_

Identification number assigned to the project: \_\_\_\_\_

Name of the local, state, or federal contact person: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Name of the Laboratory that conducted the analysis: \_\_\_\_\_

Laboratory Accreditation Number: \_\_\_\_\_

B. If the material proposed to be used as clean fill has otherwise been subject to analytical testing or other procedure identified in the definition of "environmental due diligence" contained in the Management of Fill policy, provide or attach the following:

Copies of ALL lab analytical testing performed as part of environmental due diligence (see Management of Fill policy: 25PA-2502-770).

Name of the Laboratory that conducted the analysis: \_\_\_\_\_

Laboratory Accreditation Number: \_\_\_\_\_

FORM FP-001 Rev. 8/2010

C. If the proposed material to be used as clean fill was subject to environmental due diligence procedures as defined in the Management of Fill policy other than those listed in A and B, describe those procedures.

\_\_\_\_\_

I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided in Sections 1 and 2 of this form is true and correct to the best of my knowledge, information and belief.

Signature: \_\_\_\_\_

**Section 3: Person Receiving or Placing Clean Fill**

Name and address of person completing this form:

Name (Print): \_\_\_\_\_ Date: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Fill material that has been determined to be clean fill will be placed on the following property solely for property improvement or construction purposes:

Property Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Current Owner of Property: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

The quantity of clean fill to be placed on the property is:

<3,000 cubic yards  3,000 cubic yards to 25,000 cubic yards  >25,000 cubic yards

I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided is true and correct to the best of my knowledge, information and belief.

Signature: \_\_\_\_\_

\*\*\*\*\*

Prior to placement of the clean fill, the owner of the property receiving fill material shall provide a copy of this completed form and attachments to the DEP Regional Office serving the county in which the receiving site is located. If a property receives fill from multiple sources, a separate Form FP-001 is required for each source.

TION  
32

For a couple minutes, lets look at Form FP-001 which was modified in August 2010 and now is two pages, with three sections.

I know this is difficult to read, but we will show and discuss each of the three sections of this form in subsequent slides and it is also included as an attachment to your handout. The intent of this form is similar to the intent of PennDOT's EDD Phase I/II Forms VI and VII.

Form FP-001 is used to provide a recipient of Clean Fill documentation that the material meets the Management of Fill criteria for Clean Fill. This form was revised by PADEP to add a 'certification' of the origin of the fill, and document the method, or methods by which Clean Fill was determined.

This form must be submitted to the regional PADEP office **PRIOR TO THE PLACEMENT OF FILL**. This is a new requirement and you have to plan for that in construction projects. In the interest of maintaining project schedule, PPS recommends that PennDOT submit the form to PADEP and not rely on the receiving site owner.

Also, if a property receives fill from multiple sources, a separate Form FP-001 is required from each source.

But let me clarify that this form is NOT necessarily required for maintenance.



# Instructions

FORM FP-001 Rev. 03/10  
COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WASTE MANAGEMENT  
**FORM FP-001 - CERTIFICATION OF CLEAN FILL**

Prior to completing this form and signing this certification, please review the entire Management of Fill policy (42Pa-D132-773), including the certification requirements. Please note that historic fill, as defined in the Management of Fill policy, may meet the definition of clean fill if the material is limited to uncontaminated soil, rock, stone, crushed material, steel rebar, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such.

Instructions: Sections 1 and 2 of this form must be completed by the person making the determination of clean fill at the site of origin. Section 3 must be completed by the person using the material as clean fill. Both the person determining clean fill and the user of the clean fill are responsible for maintaining copies of this completed form on site for a period of five (5) years for Department inspection.

**Section 1: Person Determining Clean Fill**  
 Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_  
 Company Name: \_\_\_\_\_  
 Street Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_  
 Clean Fill Material originated on the following property:  
 Site Name: \_\_\_\_\_  
 Street Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**Section 2: Site Characterization**  
 Check the following that applies:  
 A. If the site of origin for the fill material has undergone or is undergoing cleanup or remediation pursuant to a local state or federal regulatory program that requires site characterization, provide the following information along with a copy of the entire site characterization and laboratory analysis for the material to be used as clean fill.  
 Name of local, state, or federal agency: \_\_\_\_\_  
 Identification number assigned to the project: \_\_\_\_\_  
 Name of the local, state, or federal contact person: \_\_\_\_\_  
 Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_  
 Name of the Laboratory that conducted the analysis: \_\_\_\_\_  
Laboratory Accreditation Number: \_\_\_\_\_

B. If the material proposed to be used as clean fill has otherwise been subject to analytical testing or other procedure identified in the definition of "environmental due diligence" contained in the Management of Fill policy, provide or attach the following:  
Copies of ALL lab analytical testing performed as part of environmental due diligence (see Management of Fill policy, 42Pa-D132-773).  
 Name of the Laboratory that conducted the analysis: \_\_\_\_\_  
Laboratory Accreditation Number: \_\_\_\_\_

- 1 -

- Form completed by person making the determination of Clean Fill at the origin
- Originator and user must maintain a copy of form for 5 years

The top portion of page 1 has instructions, including the following statement to review the entire Management of Fill policy, and:

- they repeat that historic fill can qualify as Clean Fill,
- specify that complete and accurate information is needed, and
- require that the completed form is maintained by both the certifier AND the recipient for 5 years, <and this is subject to Department inspection>.

## Form FP-001, Section 1

### Section 1: Person Determining Clean Fill

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

#### Clean Fill Material originated on the following property:

Site Name: \_\_\_\_\_

Street Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

- **Name of individual and contact information**
- **Origin of fill material with address**

Section 1 requires that the person determining Clean Fill, the originator, list contact information and specify the origin of the fill.

## Form FP-001, Section 2

**Section 2: Site Characterization**

Check the following that applies:

**A. IF the site of origin for the fill material has undergone or is undergoing cleanup or remediation pursuant to a local state or federal regulatory program that requires site characterization, provide the following information along with a copy of the entire site characterization and laboratory analysis for the material to be used as clean fill.**

Name of local, state, or federal agency: \_\_\_\_\_

Identification number assigned to the project: \_\_\_\_\_

Name of the local, state, or federal contact person: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Name of the Laboratory that conducted the analysis: \_\_\_\_\_

Laboratory Accreditation Number: \_\_\_\_\_

**B. IF the material proposed to be used as clean fill has otherwise been subject to analytical testing or other procedure identified in the definition of "environmental due diligence" contained in the Management of Fill policy, provide or attach the following:**

Copies of ALL lab analytical testing performed as part of environmental due diligence (see Management of Fill policy, #258-2152-773).

Name of the Laboratory that conducted the analysis: \_\_\_\_\_

Laboratory Accreditation Number: \_\_\_\_\_

- **Three Choices**

- Origin of fill has/will undergo remediation
- Fill was subject to analytical testing or due diligence per Management of Fill Policy
- Clean fill determined another method

- **Certification**



Section 2 requires that the originator identify the method by which they determined how the material was classified as Clean Fill, and these are designated Choices, A, B, or C.

Choice A should be chosen if the origin of the fill material has been characterized through a state or federal regulatory program. Specific site information is required including site characterization reports and analytical data specific to the fill material. This generally includes conditions where the soil was characterized prior to excavation.

Choice B should be chosen if the material was suspected to be impacted, likely from the EDD findings, and was tested to confirm the Clean Fill status. The typical example of this is an excavated soil pile that was sampled. Again, copies of laboratory results should accompany the form and the laboratory information is required.


Form FP-001, Section 2

**C. IF the proposed material to be used as clean fill was subject to environmental due diligence procedures as defined in the Management of Fill policy other than those listed in A and B, describe those procedures.**

I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided in Sections 1 and 2 of this form is true and correct to the best of my knowledge, information and belief.

Signature: \_\_\_\_\_

- **Third Choice (C)**
  - Clean fill determined through EDD
  - PennDOT uses Form EDD Phase I, Form VI
- **Certification**



www.dot.state.pa.us 36

Choice C should be selected if the material has been determined to be Clean Fill based on EDD procedures ALONE (not sampled) as defined in the Management of Fill Policy.

As we have discussed, satisfaction of the EDD procedures are within the capabilities of Department personnel. The slides from the other webinar are posted on your shared directory under webinars and environmental special topics (penndot shared/webinars/environmental special topics).

Regarding the certification signature, you should not have a problem signing this certification if you have completed this Due Diligence.

From PennDOT's perspective, this is where I need to clarify. Prior to this form, PADEP agreed that PennDOT does not have to complete or submit this form for MAINTENANCE projects. PennDOT Maintenance staff uses EDD Phase I Form VI to document their due diligence efforts. If there is no evidence of a spill or release affecting the material, it is considered Clean Fill and only Form VI is required. Form FP-001 is NOT required, although the recipient may requests it. Regardless, the Form VI is only required between PennDOT and the recipient, PADEP is not sent a copy.

On the other hand, if the due diligence suggests the potential for release/spill impact and sampling and analysis occurs, then PennDOT form EDD Phase II Form VII must be completed AND form FP-001, and both provided to the recipient and PADEP with analytical results.

Are there any questions on the material discussed?

Form FP-001, Section 3

---

**Section 3: Person Receiving or Placing Clean Fill**  
**Name and address of person completing this form:**

Name (Print): \_\_\_\_\_ Date: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

**Fill material that has been determined to be clean fill will be placed on the following property solely for property improvement or construction purposes:**

Property Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Current Owner of Property: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_


**The quantity of clean fill to be placed on the property is:**

<3,000 cubic yards       3,000 cubic yards to 20,000 cubic yards       >20,000 cubic yards

**I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided is true and correct to the best of my knowledge, information and belief.**

Signature: \_\_\_\_\_

- Contact information
- Volume of material
- Signature



www.dot.state.pa.us 37

Section 3 is to be completed by the recipient. They are required to indicate contact information including address, telephone, and e-mail address.

They are also to identify the address of the property where the material is used and the volume of clean fill imported. Remember that separate forms are required for each source of fill.

Lastly, they are to sign the form where the following language is provided:

*“I, the undersigned, certify under penalty of law (18 PA CSA §4804) that the information provided is true and correct to the best of my knowledge, information and belief.”*

If PennDOT is the recipient, I highly suggest that the construction individual responsible for signing this form becomes familiar with the general permit requirements and limitations and analytical criteria to insure you are NOT receiving Regulated Fill or Residual Waste.

## Fill Characterization Sampling

### Appendix A of Technical Guidance

- **Sampling is the only way to determine that materials are Clean or Regulated Fill if there is evidence or suspicion that a spill or release has occurred**
- **Sampling Protocol is defined in Appendix A of the Management of Fill Policy**
- **Technical guidance allows for composite or discrete samples, but should be representative of concern**



If there are no questions, let's discuss some of the items to consider if sampling is required to determine fill status.

Sampling and analyses of fill material is performed only when other EDD efforts suggest a spill or release of regulated substance impact the proposed export fill materials.

The sampling protocol is defined in Appendix A of the Management of Fill policy and cross-references the EPA RCRA Manual, SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

The guidance allows for the collection of discrete or composite samples. Regardless of the method selected, the samples must be representative of the area of concern AND address the contaminants of concern.

There are some differences in the analytical results interpretation depending on whether discrete or composite samples were collected. But if sampling will occur, I encourage you to check the procedures and methods with PPS staff.

## Fill Characterization Sampling

### Keys to consider

- **Number of samples is volume dependent**
- **Analyze for contaminants of concern**
- **VOC analysis requires grab samples**



Some factors to consider if sampling is required are summarized on this slide.

First, the number of samples is dependent on the volume of soil. The minimum number of samples, for 125 cubic yards of fill or less, is 8 samples. Then it moves to 12 sample locations for up to 3000 cubic yards and every fraction thereof.

Your EDD procedures should have identified the type of suspected impact. As such, the analyses should specify, where possible, the specific contaminants of concern. For example, if the concern is diesel fuel, then the PADEP shortlist for diesel fuel should be specified and NOT the entire Priority Pollutant List volatile and semi-volatile organics and inorganics. Or if the concern is pesticides, then just request pesticide analysis. Remember, this is not characterization for disposal, but satisfaction of due diligence.

The last bullet reminds you that samples submitted for volatile organic compound analysis must be grab samples regardless of whether discrete or composite sampling is implemented.

## Fill Characterization Sampling

### Subsection (d) allows that:

- In lieu of subsection (c), 95% Upper Confidence Limit of the arithmetic mean is also available.
- SPLP leachate analysis also available to meet soil-to-groundwater standard.

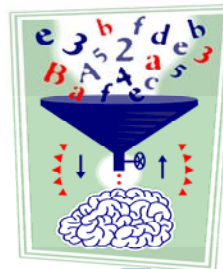
There are other methods of statistically characterizing the fill material such as the 95% Upper Confidence Limit or establishment of a site-specific criteria using Synthetic Precipitation Leaching Procedure (SPLP) analyses.

But these options should generally not be employed without consultation with PPS staff.



## Analytical Results

- **Compare results to:**
  - **If below Table FP-1a/b, then Clean Fill**
  - **If above Table FP-1, but below Table GP-1a/b, managed as Regulated Fill**
  - **If above GP-1, handle**
- **Exception - arsenic**



Once you have the analytical results, the data is reviewed against the Clean and/or Regulated Fill permit criteria.

If the results are below the criteria in Table FP-1a/b, then it is Clean Fill; this is noted on the PennDOT Form VII.

If the results are above Table FP-1a/b criteria but below the criteria in Table GP-1a/b, then the material must be managed as Regulated Fill. In this case, Form VII AND 20 RF completion is required and distributed accordingly.

If they are above that listed in Table GP-1a/b, then the material is residual or other waste not covered by the beneficial use General Permit (WMGR-096SE003), and must be managed accordingly.

One other item I need to point out. Table FP-1b is the Clean Fill concentration limits for metal and inorganics.

In this table, Arsenic has a limit of 12 mg/kg. HOWEVER, PADEP has established a concentration of 20 mg/kg that, "applies to certain construction materials not subject to direct contact upon completion of construction". This accounts for the fact that certain areas of Pennsylvania have naturally occurring arsenic at higher concentration than provided for in the Management of Fill policy. In this case, PADEP may allow the use of fill containing arsenic and pre-approval is required. In a construction project, this approval and handling should be through the construction Waste Management Plan.

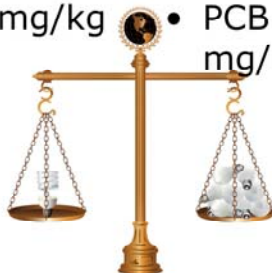
## Fill Characterization Sampling

### Clean Fill (FP-1a)

- Anthracene-350 mg/kg
- Benzene-0.13 mg/kg
- Benzo(A)anthracene-25 mg/kg
- PCB (1016)-15 mg/kg

### Regulated Fill (GP-1a)

- Anthracene-350 mg/kg
- Benzene-0.13 mg/kg
- Benzo(A)anthracene-110 mg/kg
- PCB (1016)-200 mg/kg



This slide provides a couple compound concentrations listed in the Clean Fill and Regulated Fill criteria.

In the first two listed examples, there are no differences in allowable concentration of anthracene or benzene between FP-1a and GP-1a. The next two listed organics demonstrate the allowable concentration difference between Clean and Regulated Fill criteria.

So, this suggests that many of the Clean Fill criteria will also fail if the Regulated Fill criteria.

My point to this, don't just review a single Fill criteria; review both criteria to be certain of your Fill classification.

The last choice under Option 3 is used if the materials exceed the WMGR 096SE003 permit criteria, they exceed Table GP-1a/b, and are a waste that must be handled in accordance with Solid Waste Management Act regulations.

## Management of Fill Summary

- **PADEP has defined Clean Fill**
- **Regulated Fill use requires permit application**
- **Fill classification is determined through EDD**
- **PennDOT can use Regulated or Clean Fill on many projects, but plan for RF coordination**



Time to summarize these 40-plus slides <click to build slide on bold>.

We have discussed that **PADEP has defined what is Clean Fill and how it can be determined through due diligence.**

**Regulated Fill** is also defined and its beneficial use requires a permit application. BUT, Regulated Fill use within the project site does **NOT** require a permit – only if exported.

**Due diligence can be satisfied through research or chemical testing.** PennDOT documents its process and findings using EDD Phase I/II Forms VI and VII.

PennDOT can use either Clean or Regulated Fill. Clean fill has unrestricted use. Regulated Fill **can** be beneficially used within the project site without a permit, but consistency with General Permit WMGR-096SE003 is required if exported off site or if PennDOT accepts Regulated Fill for its project.

Form 20RF must be completed for Regulated Fill use, submitted to PADEP and the municipality prior to use, and records maintained for 5 years.

**If exporting Clean Fill from a site** and EDD determined the fill to be Clean, use EDD Phase I Form VI. If sample analysis proved it clean, use EDD Phase II Form VII and Form FP-001. Signed copies are maintained by both the generator and recipient for 5 years.

## Management of Fill Summary

- **Sampling and analysis is not the default**
- **Refer to Table FP-1a/b or GP-1a/b**
- **BMPs must be used to remove materials of concern from otherwise Clean Fill**
  - **Rebar must be cut down to the surface of a concrete rubble pile**

As we stated in this presentation, sampling and analysis is only required if there is some evidence or contaminant impact, AND, the analyses selected should be specific to the contaminants of concern identified during the due diligence efforts.

If a release or spill is suspected to have impacted fill to be exported, and the materials are sampled, the results are compared to tables FP-1a/b and GP-1a/b for determination of Clean or Regulated Fill, respectively. If a compound/element concentration falls above GP-1a/b, it is a residual waste and must be managed as such.

You can also use best management practices to separate contaminated material from, for example, demolition debris to qualify the material as Clean Fill. For example, removal of asbestos containing materials or, and this is a clarification from PADEP – that the rebar on concrete should be cut flush with the concrete block so there are no protruding pieces.

## Management of Fill Summary

- **Only exported fill requires determination**
  - **Ask your contractor for the form (not applicable to quarried materials)**
  - **If export, consider Clean Fill for export and Regulated Fill on site**



We have said this before but want to emphasize:


- 1) this entire process is necessary only if soil is exported from a project site;
- 2) PennDOT should be prepared to ask their Contractor the source(s) of imported fill and understand the requirements for the use of Form FP-001, and
- 3) PennDOT must require that their Contractor identify the recipient of fill exported from a site and complete Form FP-001.

I want to clarify one item here – aggregate from a quarry is NOT required to provide the Forms for PennDOT. In your attachments is another document clarifying this issue with PADEP.

And lastly, if there is export, consider selective export such that Clean Fill is exported and fill material that may be classified as Regulated Fill is used within the project site.


QUESTIONS ???

- **Any shared problems or questions**
- **Speaker notes and handouts are posted at:**
  - **P:/penndot shared/Webinars/Environmental Special Topics**



Copyright © 2010 by the Commonwealth of Pennsylvania. All rights reserved.

This training course is produced as part of the Design Community's Comprehensive Training Plan and is offered exclusively through the Pennsylvania Department of Transportation, Bureau of Design, located in Harrisburg. For information about this course, contact Mary Sharp at 717-705-4170.



www.dot.state.pa.us     **46**

Technically, that completes our webinar on the application of PADEP's Management of Fill policy on PennDOT projects. The next several slides are select questions submitted to and answered by PADEP on this subject. I am not going to read them, but encourage you to when you have a few minutes.

I want to remind you to sign the attendance roster and have somebody at your location return that to the District training coordinator. Also, there is a course evaluation form available and we appreciate your comments and recommendations on improve this webinar and recommendations for different topics.

I also want to say that the speaker notes and handouts for this presentation are available on the PennDOT shared drive under webinars and environmental special topics.

Thank you for your time.

Does anyone have questions?

Copyright © 2010 by the Commonwealth of Pennsylvania. All rights reserved.

This training course is produced as part of the Design Community's Comprehensive Training Plan and is offered exclusively through the Pennsylvania Department of Transportation, Bureau of Design, located in Harrisburg. For information about this course, contact Mary Sharp at 717-705-4170.

## Q&A from PADEP

- Can Regulated Fill be used as landscaping?– **Yes in conjunction with an approved construction project.**
- Can Regulated Fill be used within a ROW w/o a Permit? **Yes, if below concentrations of Table GP-1a/b.**
- I have a building where block and brick foundation has been painted and I am going to demolish it – can I use the foundation as fill: **Yes, but you must determine whether the painting was pre-1978 and separate the foundation from balance**

## Q&A from PADEP

- Does contaminated material reused along a ROW have to meet the Regulated Fill requirements although a permit is not required? **Yes, the material must meet the definition of Regulated Fill or not exceed the background level of the project area of the ROW for inorganics**
- Is an engineer's seal required on the GP application? **The new Form 20RF requires certification and notary seal only. Form B, Professional Certification submitted as part of the application requires the PE or PG**



## Q&A from PADEP

- Can Clean Fill contain free liquid if it is water? **No. The intent is not to use a slurry.**
- Can a municipality notified of Regulated Fill use object to fill placement? **Yes, they should inform PADEP of their concerns and PADEP may inform the applicant to delay fill placement.**
- Who is the applicant; the receiving site or the source? **Either can qualify as the permit applicant.**
- Is rejection or denial of a permit appealable? **Yes**

## Q&A from PADEP

- Regarding the exemption from a waste permit given to movement w/in a ROW or property, can a contaminated material or historic fill be moved to a clean area of the property or ROW? **The utility, PennDOT, or other entity involved must use industry-established BMPs to identify clean or suspected impacted materials. They may be used, unrestricted if Clean Fill, within the ROW or property if Regulated Fill, and only require a permit if transported off site.**

## Q&A from PADEP

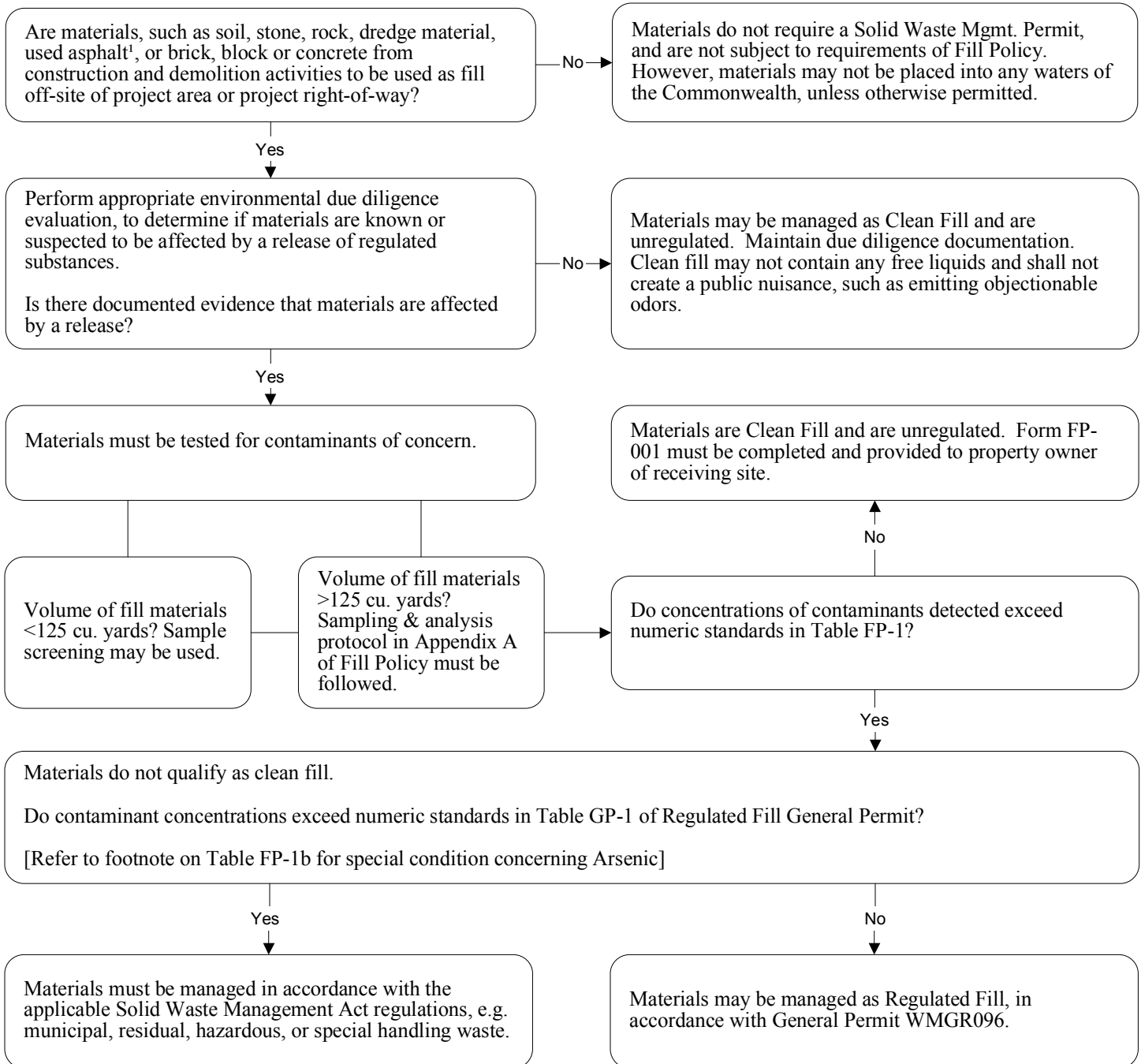
- **How is material that meets the Clean Fill limits but has a high TPH level and strong odor handled? **It is NOT Clean Fill as the odor is considered a public nuisance.****
- **What is considered "evidence of a release"? **Due diligence may consist of historic and written records, interviews, screenings, etc to confirm/reject findings.****

## Q&A from PADEP

- Does the definition of a release include agricultural chemicals and pesticides applied according to regulations/industry standards? **Yes, and under due diligence, such applications would trigger the need to sample and test the materials.**
- Is a GP required if the source of Regulated Fill is not an Act 2 site but the receiving site is? **Yes**
- Is Regulated Fill a waste that is subject to the storage and transportation requirements of the municipal and residual waste regulations? **Yes**

# Management of Fill Flow Chart

Asphalt concrete which contains naturally occurring regulated substances and that may exceed the Clean Fill levels, and cement concrete from highways & bridges are considered clean fill, without the need for testing, unless knowledge of a spill or release has occurred.



1 Used Asphalt - Bituminous asphalt pavement that has been excavated without the use of a milling machine. Milling material (RAP) and mixtures of RAP and clean fill may be managed under Industry-Wide Coproduct #1 Reclaimed Asphalt Pavement.

2 Clean Fill Policy also applies to fill brought onto a project area or project right-of-way.

3 Environmental Due Diligence - Investigation techniques that may include, but is not limited to, visual property inspections; electronic data base searches; review of property ownership and historic use; review of Sanborn [fire insurance] maps or aerial photography; environmental questionnaires and transaction screens; environmental assessments or audits; and/or environmental sampling and analysis.

**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**Bureau of Waste Management**

**DOCUMENT NUMBER:** 258-2182-773

**INTERIM FINAL  
EFFECTIVE DATE:** August 7, 2010

**TITLE:** Management of Fill

**AUTHORITY:** This document is established in accordance with the Act of July 7, 1980, as amended, 35 P.S. §§ 6018.101 *et seq.*, known as the Solid Waste Management Act (SWMA); the Act of June 22, 1937, as amended, 35 P.S. §§ 691.1 *et seq.*, known as the Clean Streams Law; the Act of April 9, 1929, Section 1917-A of the Administrative Code, 71 P.S. § 510-17; the Act of July 18, 1995, 35 P.S. §§ 6026.101 *et seq.*, known as the Land Recycling and Environmental Remediation Standards Act.

**POLICY:** This policy is designed to replace the Department's existing Clean Fill Policy dated February 29, 1996.

**PURPOSE:** This policy provides DEP's procedures for determining whether material is clean fill or regulated fill. Regulated fill may not be used unless a SWMA permit is secured by the individual or entity using the regulated fill.

**APPLICABILITY:** This policy shall be used to evaluate whether material qualifies as clean fill or regulated fill. This policy does not apply to mine land reclamation activities subject to a permit. Excavation, movement or reuse of fill material within a project area or right-of-way of a project is not an activity that requires a SWMA permit.

**DISCLAIMER:** The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements. The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of the DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

**PAGE LENGTH:** 10 pages

**LOCATION:** Volume 6, Tab 40(b)

## **DEFINITIONS:**

*Act 2* - The Land Recycling and Environmental Remediation Standards Act, Act of May 18, 1995 (P.L. 4, No. 1995-2), 35 P.S. §§ 6026.101 et seq.

*Clean fill* - Uncontaminated, nonwater-soluble, nondecomposable inert solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such. (25 Pa. Code §§ 271.101 and 287.101) The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized.

*Environmental due diligence* - Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of ownership and use history of property, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits.

*Historic fill* - Material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to 1988 that is a conglomeration of soil and residuals, such as ashes from the residential burning of wood and coal, incinerator ash, coal ash, slag, dredged material and construction and demolition waste. The term does not include iron or steel slag that is separate from residuals if it meets the coproduct definition and the requirements of 25 Pa. Code § 287.8. The term does not include coal ash that is separate from residuals if it is beneficially used in accordance with 25 Pa. Code § 287.661 - 287.666.

*Regulated fill* - Soil, rock, stone, dredged material, used asphalt, historic fill, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such that has been affected by a spill or release of a regulated substance and the concentrations of regulated substances exceed the values in Table FP-1a and b.

*Regulated substance* - The term shall include hazardous substances and contaminants regulated under the Hazardous Sites Cleanup Act, and substances covered by the Clean Streams Law, the Air Pollution Control Act, the Solid Waste Management Act, the Infectious and Chemotherapeutic Waste Law, and the Storage Tank and Spill Prevention Act.

*Release* - Spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a regulated substance into the environment in a manner not authorized by the Department of Environmental Protection. The term includes the abandonment or discarding of barrels, containers, vessels and other receptacles containing a regulated substance.

*Uncontaminated material* - Material unaffected by a spill or release of a regulated substance, or if affected by a spill or release, the concentrations of regulated substances are below the concentrations specified in Table FP-1a and b.

## **REFERENCES:**

25 Pa. Code Chapters 287 to 299 (residual waste regulations)

25 Pa. Code Chapters 271 to 285 (municipal waste regulations)

Solid Waste Management Act, 35 P.S. §§ 6018.101 et seq.

Land Recycling and Environmental Remediation Standards Act, 35 P.S. §§ 6026.101 et seq.

## **TECHNICAL GUIDANCE:**

### FILL DETERMINATION

- 1) To determine whether fill is clean or regulated, a person must perform environmental due diligence.<sup>1</sup>
  - a) If due diligence shows no evidence of a release of a regulated substance, the material may be managed as clean fill under this policy.
  - b) If due diligence shows evidence of a release, the material must be tested to determine if it qualifies as clean fill. Testing must be performed in accordance with Appendix A.
    - i) If testing reveals that the material contains concentrations of regulated substances that are below the residential limits in Table FP-1a and b, the material must be managed as clean fill.
    - ii) If testing reveals that the material contains concentrations of regulated substances that exceed the limits in Table FP-1a and b, the material must be managed as regulated fill.
- 2) A person may not blend or mix materials to become clean fill. Materials that contain regulated substances that are intentionally released may not be managed under this policy.

### MANAGEMENT OF REGULATED FILL

- 1) Materials identified as regulated fill are waste and must be managed in accordance with the Department's municipal or residual waste regulations, whichever is applicable, based on 25 Pa. Code §§ 287.2 or 271.2. Regulated fill may be beneficially used under General Permit WMGR096 (proposed) if the materials and the proposed activities for the fill meet the conditions of that permit. A person may apply for an industry-wide beneficial use general permit for the beneficial use of regulated fill in lieu of this general permit.
- 2) Regulated fill may not be placed on a greenfield property not planned for development, or on a property currently in residential use or planned for residential use unless otherwise authorized.
- 3) Fill containing concentrations of regulated substances that exceed the values in Table GP-1 a and b may not be managed under the provisions of this policy or General Permit WMGR096, but must be otherwise managed in accordance with the provisions of the Department's municipal or residual waste regulations.
- 4) A general permit is not required for remediation activities undertaken entirely on an Act 2 site pursuant to the requirements of Section 902 of the Land Recycling and Environmental Remediation Standards Act. A general permit is also not required if regulated fill from an Act 2 site is used as construction material at a receiving site that is being remediated to attain an Act 2 standard as long as the procedural and substantive requirements of Act 2 are met. Regulated

---

<sup>1</sup> Analytical assessment, testing or sampling is only required if visual inspection or reviews of historic property use indicates evidence of a release of a regulated substance.



substances contained in the regulated fill must be incorporated into the notice of intent to remediate and the final report. Movement of regulated fill between Act 2 sites must be documented in both the sending and receiving sites' cleanup plans and final reports. Placement of the regulated fill may not cause the receiving site undergoing remediation to exceed the selected Act 2 standard.

#### MANAGEMENT OF CLEAN FILL

- 1) Use of material as clean fill does not require a permit under the Solid Waste Management Act and regulations, and it may be used in an unrestricted or unregulated manner under this Act and its regulations. The use of materials as clean fill is still regulated under other environmental laws and regulations. A person using materials as clean fill under the policy is still subject to and must comply with all applicable requirements governing the placement or use of material as clean fill, such as Chapter 102 (Erosion and Sediment Control) and Chapter 105 (Dam Safety and Waterway Management).
- 2) Any person placing clean fill which has been affected by a release of a regulated substance on a property must certify the origin of the fill material and results of analytical testing to qualify the material as clean fill on Form FP-001. Form FP-001 must be retained by the owner of the property receiving the fill.
- 3) Best management practices (BMP) must be followed prior to demolition activities to remove materials like lead-based paint surface, friable asbestos and hazardous materials such as mercury switches, PCB ballasts and fluorescent light bulbs from a building if the brick, block, or concrete is used as clean fill.
- 4) Clean fill may not contain any free liquids based on visual inspection, and shall not create public nuisances (for example objectionable odors) to users of the receiving property or adjacent properties.

## Appendix A

### Sampling and Analyses for Regulated Material to be Used as Fill:

Sampling of regulated material proposed to be used as fill shall be done either by composite samples or by discrete samples. Sampling in either case shall be random and representative of the fill material being sampled. 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*).

- (a) Sampling based on composite sampling procedures shall include the following:
  - (i) For volumes of material equal to or less than 125 cubic yards, a total of eight samples shall be collected and analyzed as follows:
    - (A) For analysis of all substances other than volatile organic compounds (VOCs), the samples shall be analyzed in two composites of four samples each, in accordance with the most current version of the USEPA Manual, SW-846 (*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. Office of Solid Waste and Emergency Response*).
    - (B) Two samples shall be selected from the 8 samples for analysis of VOCs. The samples shall be based on field screening of the eight samples to select those samples that are most likely to contain the highest concentrations of VOCs.
    - (C) Two grab samples shall be taken from the 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 samples shall be selected from the 12 samples for analysis of VOCs. The samples shall be based on field screening of the 12 samples to select those samples that are most likely to contain the highest concentrations of VOCs.
    - (C) Three grab samples shall be taken from 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) Three samples for analysis of VOCs shall be selected from the 12 samples for analysis of VOCs. The samples shall be based on field screening of the 12 samples to select those samples that are most likely to contain the highest concentrations of VOCs.
  - (C) Three grab samples shall be taken from 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).
- (b) Sampling based on discrete sampling procedures shall include the following:
  - (i) 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.
  - (ii) For VOCs analysis, grab sampling procedures shall be the procedures described in subsection (a), for the equivalent volumes of material sampled.
- (c) Analyses of results:
  - (i) For a composite sample taken in accordance with subsection (a), the measured numeric value for a parameter shall be less than or equal to the concentration limit listed in Table FP-1a or b for that parameter in order for the material to qualify as clean fill, or in Table GP-1a or b for that parameter in order for the fill material to qualify as regulated fill.
  - (ii) For a grab sample, taken in accordance with subsections (a) and (b), the measured numeric value for a parameter shall be less than or equal to the concentration limit listed in Table FP-1a or b for that parameter in order for the material to qualify as clean fill, or in Table GP-1a or b for that parameter for the fill material to qualify as regulated fill.
  - (iii) For discrete samples required in subsection (b), the measured numeric values for a substance in 75% of the discrete samples shall be equal to or less than the concentration limit listed in Table FP-1a or b, or in Table GP-1a or b for that parameter with no single sample exceeding more than twice the concentration limit for a parameter.
- (d) In lieu of subsection (c), a person may use 95% Upper Confidence Limit (UCL) of the arithmetic mean to determine whether a fill material meets the appropriate concentration limits for use as clean or regulated fill. The calculated 95% UCL of the arithmetic mean must be below the appropriate concentration limit for clean or regulated fill. Sampling shall be random and

representative of the material being sampled. The minimum number of samples shall be determined in accordance with EPA approved methods on statistical analysis of environmental data, as identified in 25 PA. Code, §250.707(e) (relating to statistical tests). The application of the 95% UCL of the arithmetic mean shall comply with the following performance standards:

- (i) The null hypotheses (Ho) shall be that the true fill arithmetic average concentration is at or above the regulated fill appropriate concentration limit, and the alternative hypothesis (Ha) shall be that the true fill arithmetic average concentration is below the regulated fill appropriate concentration limit.
- (ii) The underlying assumptions of the statistical method shall be met, such as data distribution.
- (iii) Compositing cannot be used for volatile organic compounds.
- (iv) The censoring level for each nondetect shall be the assigned value randomly generated that is between zero and the limit related to the PQL.
- (v) Tests shall account for spatial variability, unless otherwise approved by the Department.
- (vi) Statistical testing shall be done individually for each parameter present in the fill.
- (vii) Where a fill has distinct physical, chemical or biological characteristics, or originates from different areas, the statistical testing shall be done separately.
- (viii) The following information shall be documented:
  - (A) A description of the original areas of the fill, and physical, chemical and biological characteristics of the fill.
  - (B) A description of the underlying assumptions of the statistical method.
  - (C) Documentation showing that the sample data set meets the underlying assumptions of the statistical method.
  - (D) Documentation of input and output data for the statistical test, presented in tables or figures, or both, as appropriate.
  - (E) An interpretation and conclusion of the statistical test.

- (e) The Synthetic Precipitation Leaching Procedure (SPLP, per *Technical Guidance Manual*, 253-0300-100/ May 4, 2002 /Page II-26-27), is listed below:

The value for the SPLP is the concentration of a regulated substance in soil at the site that does not produce a leachate in which the concentration of the regulated substance exceeds the groundwater MSC. Since this test must be conducted on the actual site soil, no values for the SPLP could be published in the tables of MSCs in the regulations. The following procedure should be used to determine the alternative soil-to-groundwater value based upon the SPLP:

- (i) During characterization, the remediator should obtain a minimum of ten samples from within the impacted soil area. The four samples with the highest total concentration of the regulated substance should be submitted for SPLP analysis. Samples obtained will be representative of the soil type and horizon impacted by the release of the regulated substance.
- (ii) Determine the lowest total concentration (TC) that generates a failing SPLP result. The alternative soil-to-groundwater standard will be the next lowest TC.
- (iii) If all samples result in a passing SPLP level, the alternative soil-to-groundwater standard will be the TC corresponding to the highest SPLP result. The remediator has the option of obtaining additional samples.
- (iv) If none of the samples generates a passing SPLP, the remediator can obtain additional samples and perform concurrent TC/SPLP analyses to satisfy the above requirements for establishing an alternative soil-to-groundwater standard.



**FORM FP-001 - CERTIFICATION OF CLEAN FILL**

Prior to completing this form and signing this certification, please review the entire Management of Fill policy (#258-2182-773), including the certification requirements. Please note that historic fill, as defined in the Management of Fill policy, may meet the definition of clean fill if the material is limited to uncontaminated soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such.

**Instructions:** Sections 1 and 2 of this form must be completed by the person making the determination of clean fill at the site of origin. Section 3 must be completed by the person using the material as clean fill. Both the person determining clean fill and the user of the clean fill are responsible for maintaining copies of this completed form on site for a period of five (5) years for Department inspection.

**Section 1: Person Determining Clean Fill**

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

**Clean Fill Material originated on the following property:**

Site Name: \_\_\_\_\_

Street Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

**Section 2: Site Characterization**

**Check the following that applies:**

- A. IF the site of origin for the fill material has undergone or is undergoing cleanup or remediation pursuant to a local state or federal regulatory program that requires site characterization, provide the following information along with a copy of the entire site characterization and laboratory analysis for the material to be used as clean fill.**

Name of local, state, or federal agency: \_\_\_\_\_

Identification number assigned to the project: \_\_\_\_\_

Name of the local, state, or federal contact person: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Name of the Laboratory that conducted the analysis: \_\_\_\_\_

Laboratory Accreditation Number: \_\_\_\_\_

- B. IF the material proposed to be used as clean fill has otherwise been subject to analytical testing or other procedure identified in the definition of "environmental due diligence" contained in the Management of Fill policy, provide or attach the following:**

Copies of **ALL** lab analytical testing performed as part of environmental due diligence (see Management of Fill policy, #258-2182-773).

Name of the Laboratory that conducted the analysis: \_\_\_\_\_

Laboratory Accreditation Number: \_\_\_\_\_

C. IF the proposed material to be used as clean fill was subject to environmental due diligence procedures as defined in the Management of Fill policy other than those listed in A and B, describe those procedures.

I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided in Sections 1 and 2 of this form is true and correct to the best of my knowledge, information and belief.

Signature: \_\_\_\_\_

**Section 3: Person Receiving or Placing Clean Fill**

**Name and address of person completing this form:**

Name (Print): \_\_\_\_\_ Date: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

**Fill material that has been determined to be clean fill will be placed on the following property solely for property improvement or construction purposes:**

Property Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Current Owner of Property: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

**The quantity of clean fill to be placed on the property is:**

<3,000 cubic yards       3,000 cubic yards to 20,000 cubic yards       >20,000 cubic yards

I, the undersigned, certify under penalty of law (18 Pa. C.S.A. §4904) that the information provided is true and correct to the best of my knowledge, information and belief.

Signature: \_\_\_\_\_

\* \* \* \* \*

**Prior to placement of the clean fill, the owner of the property receiving fill material shall provide a copy of this completed form and attachments to the DEP Regional Office serving the county in which the receiving site is located. If a property receives fill from multiple sources, a separate Form FP-001 is required for each source.**

# General Permit For Processing/Beneficial Use of Residual Waste

Permit No. WMGR096SE003

Date Amended April 24, 2009

Date Issued April 13, 2009

Date Expires December 24, 2013

The Department of Environmental Protection, Bureau of Waste Management, Division of Municipal and Residual Waste hereby approves the:

Beneficial Use       Processing prior to Beneficial Use       Other

of: regulated fill as defined in Guidance Document 258-2182-773 (Management of Fill).

for use as: construction material.

This approval is granted to: Eligible persons or municipalities qualifying for the general permit.

subject to the attached conditions and may be revoked or suspended for any project which the Department of Environmental Protection determines to have a substantial risk to public health, the environment, or cannot be adequately regulated under the provisions of this permit.

The processing of wastes not specifically identified in the documentation submitted for this approval, or the beneficial use of wastes not approved in this permit, is prohibited without the written permission of the Department.

This permit is issued under the authority of the Solid Waste Management Act (35 P.S. §§6018.101-6018.1003), The Pennsylvania Used Oil Recycling Act (58 P.S. §§471-480), The Clean Streams Law (35 P.S. §§691.1-691.1001), Sections 1905-A, 1917-A and 1920-A of the Administrative Code of 1929 (71 P.S. §§510-5, 510-17 and 510-20) and the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. §§4000.101-4000.1904).

This approval is granted: By: \_\_\_\_\_

Statewide       Regional      Title: Environmental Program Manager



**Regulated Fill**

Rev 04/2009

1. *Permitted Activities.* The approval herein granted is limited to the beneficial use of regulated fill as a construction material when moved offsite or received onsite. Regulated fill may only be moved to a property that is approved for construction and that is zoned and used exclusively for commercial and industrial uses or that is unzoned but is exclusively used for commercial and industrial uses (excluding parks, playgrounds, nursing homes, child care facilities, schools or other residential-style facilities or recreation areas). This permit does not authorize blending or processing of material to meet concentration limits in Table GP-1.
2. *Definitions.* The following terms, when used in this permit, have the following meanings:

“*Regulated fill*” is soil, rock, stone, dredged material, used asphalt, historic fill, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such that has been affected by a spill or release of a regulated substance and the concentrations of regulated substances exceed the values in Table FP-1 (a) and (b) of the Department’s fill policy.

“*Historic fill*” is material (excluding landfills, waste piles and impoundments) used to bring an area to grade prior to 1988 that is a conglomeration of soil and residuals, such as ashes from the residential burning of wood and coal, incinerator ash, coal ash, slag, dredged material and construction and demolition waste. The term does not include iron or steel slag that is separate from residuals if it meets the coproduct definition and the requirements of 25 Pa. Code § 287.8. The term does not include coal ash that is separate from residuals if it is beneficially used in accordance with 25 Pa. Code § 287.661- 287.666.
3. *Concentration limits.* Regulated fill may not exceed the values in Table GP-1.
4. *Hazardous waste prohibited.* Material that is hazardous waste under Chapter 261a (relating to identification and listing of hazardous waste) may not be used under this permit.
5. *Proper management of fill.* Regulated fill may not be placed on a greenfield property not planned for development, or on a property currently used for or planned for residential use. Material containing concentrations of regulated substances that exceed the values in Table GP-1 may not be moved under the provisions of this general permit, but must be managed in accordance with the provisions of the Department’s municipal or residual waste regulations.
6. *Proper management of dredged materials.* In addition to meeting the values in Table GP-1, regulated fill consisting of dredged material from tidal streams shall meet 250 mg/l for chlorides based on an SPLP analysis.

**Regulated Fill**

Rev 04/2009

7. *Proper management of fill materials containing metals.* Regulated fill containing metals may be moved to a site if those metals concentrations meet either the concentration limits for metals in Table GP-1 or the background concentration, whichever is higher. Fill that exceeds the concentration limits must be placed as part of an approved construction project in such a manner that all direct contact exposure pathways are eliminated. The background concentration is defined as the concentration of a substance that is present at the site before beneficial use activities occur under this permit. Background concentrations may be determined by taking a representative number of samples, based on the size of the site, from each of the receiving site and the fill proposed for beneficial use. The average concentration in the receiving site samples becomes the background concentration.
8. *Notice to municipalities.* A person that applies for coverage under this general permit shall submit a copy of the determination of applicability application to each municipality in which the beneficial use activities will be located a minimum of 30 days prior to initiating operations.
9. *Sampling and analysis.* Prior to the beneficial use, the permittee shall perform chemical analysis on representative samples of regulated fill for the appropriate parameters in accordance with the protocol in Appendix A to the Fill Policy. The chemical analyses required in this condition shall be performed by a laboratory accredited or registered for accreditation under the Pennsylvania Environmental Laboratory Accreditation Act of 2002. The operator of the facility shall inspect incoming waste to insure that the receipt of the waste is consistent with the permit.
10. *Deed Acknowledgment for beneficial use of regulated fill.* The permittee shall provide to the Department proof of a recorded deed notice that includes the exact location of the fill placed on the property, including longitude and latitude descriptions, and a description of the types of fill identified by sampling and analysis. The location and description shall be made a part of the deed for all future conveyances or transfers of the subject property. This deed notice may be provided as an ongoing part of the project or at the end of the completed project.
11. *Siting limitations.* Regulated fill shall not be beneficially used under this permit unless authorized in writing by the Department:
  - a. in the 100-year floodplain;
  - b. within 100 feet of a sinkhole or area draining into a sinkhole;
  - c. within 50 feet of a dwelling unless the owner has provided a written waiver consenting to the beneficial use being closer than 50 feet;
  - d. within 100 feet of a perennial stream;
  - e. within 300 feet of a water source unless the owner has provided a written waiver consenting to the beneficial use being closer than 300 feet;
  - f. within 300 feet of an exceptional value wetland, an exceptional value water or a high quality water.
  - g. The siting limitations in paragraph 11 are not applicable to the placement of regulated fill at a brownfield site provided the placement is in accordance with all other applicable requirements.

**Regulated Fill**

Rev 04/2009

12. *Water quality.* Regulated fill shall not be placed in the waters of the Commonwealth.
13. *Nuisances.* Regulated fill shall not contain any free liquids based on visual inspection, and shall not create public nuisances (for example objectionable odors) and shall minimize the generation of fugitive dust emissions related to operation of the facility.
14. *Stabilization.* Upon completion of areas where regulated fill is beneficially used, the areas shall be promptly vegetated or otherwise stabilized to minimize and control erosion if the construction activity is not undertaken within 30 days of fill placement.
15. *Mixing prohibited.* The regulated fill may not be mixed with other types of solid waste unless otherwise approved by the Department.
16. *Storage and transportation.* The storage and transportation of regulated fill shall be in a manner that does not create a nuisance or be harmful to the public health, safety or the environment. Storage and transportation shall comply with the requirements of 25 Pa. Code Chapters 285 or 299 (relating to storage, collection and transportation of municipal waste and residual waste), whichever is applicable to the waste type being stored or transported.
17. *Discharge of waste prohibited.* This permit does not authorize and shall not be construed as an approval to discharge any other waste, wastewater or runoff from the site where regulated fill originated or the site where regulated fill is beneficially used, to the land or waters of the Commonwealth.
18. *Fugitive emissions.* The permittee shall comply with any applicable fugitive emissions standards adopted under 25 Pa. Code §123.1 and 123.2.
19. *Erosion and sedimentation control.* An erosion and sedimentation control plan shall be implemented that is consistent with the applicable requirements of Chapter 102 (relating to erosion and sedimentation control). A copy of the approved stormwater management, and erosion and sedimentation control plans shall be maintained onsite during construction activities.
20. *Recordkeeping.* Records of analytical evaluations conducted on the regulated fill under this permit, daily records of the weight or volume and source of the regulated fill received, the placement locations, and the approved construction plans shall be kept onsite by the permittee and at the permittee's place of business. This information shall be available to the Department for inspection and submitted to the Department upon request. This waste analysis information shall be retained by the permittee for a minimum of 5 years.
21. *Relationship to local law.* Nothing in this permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable local law, ordinance, or regulation, providing that said local law, ordinance, or regulation is not preempted by the Solid Waste Management Act, 35 PS §6018.101 et seq.; and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988, 53 P.S. §4000.101 et seq.
22. *Inspections.* As a condition of this permit and of the permittee's authority to conduct the activities authorized by this permit, the person receiving the fill hereby authorizes and consents to allow authorized employees or agents of the Department, without advance notice or search warrant, upon

**Regulated Fill**

Rev 04/2009

presentation of appropriate credentials and without delay, to have access to and to inspect all areas on which solid waste management activities are being, will be, or have been conducted. This authorization and consent shall include consent to collect samples of waste, soils, water, or gases; to take photographs; to perform measurements, surveys, and other tests; to inspect any monitoring equipment; to inspect the methods of operation; and to inspect and/or copy documents, books, and papers required by the Department to be maintained. This permit condition is referenced in accordance with Sections 608 and 610(7) of the Solid Waste Management Act, 35 P.S. § 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.

23. *Prevention of harm or threat of harm.* The activities authorized by this permit shall not harm or present a threat of harm to the health, safety, or welfare of the people or environment. The Department may modify, suspend, revoke, or reissue the authorization granted in this permit if it deems necessary to prevent harm or the threat of harm to the public health, the environment, or if the activities cannot be adequately regulated under the conditions of this permit.
24. *Individual permits.* The permittee shall comply with the terms and conditions of this general permit and with the environmental protection acts to the same extent as if the activities were covered by an individual permit. The Department may require the permittee to apply for, and obtain an individual permit or cease operation if the permittee is not in compliance with the conditions of this general permit or is conducting an activity that harms or presents a threat of harm to the health, safety or welfare of the people or the environment.
25. *Incorporation of application.* All activities conducted under the authorization granted in this permit shall be conducted in accordance with the permittee's application. Except to the extent that the permit states otherwise, the permittee shall use the regulated fill as described in the approved application.
26. *Permit application requirements.* Persons or municipalities that propose to beneficially use regulated fill by operating under the terms and conditions of this general permit after the date of permit issuance shall submit a determination of applicability application for each location of beneficial use. The application shall be sent to the Department's appropriate regional office that has jurisdiction for waste-related activities in the county where the regulated fill will be beneficially used. At a minimum, the following determination of applicability information shall be submitted on application forms provided by the Department:
  - a. Name and street address of the applicant;
  - b. Names, addresses, and locations of known or potential sources of regulated fill and estimated source weights or volumes;
  - c. Name, location, area and ownership of the location of beneficial use;
  - d. Documentation including laboratory analytical results and a certification by the permittee that the regulated fill meets the conditions of this general permit;
  - e. Number and title of the general permit;
  - f. Proof that the beneficial use management activities are consistent with the general permit.

**Regulated Fill**

Rev 04/2009

- g. A description of the construction activities that will take place and an estimated schedule for placement of regulated fill.
  - h. If the size of the receiving site, where the beneficial use takes place, is greater than or equal to one acre, proof that a Pennsylvania Natural Diversity Inventory (PNDI) review at the site has been completed. This review should be in accordance with the Department's policy #400-0200-001, "Policy for Pennsylvania Natural Diversity Inventory Coordination During Permit Review and Evaluation" (Jan. 18, 2003) and all known occurrences must be resolved with the jurisdictional agency. If a PNDI review has been completed at the receiving site under another Department program, the report of that review and approval may be submitted to the Department to satisfy this permit application requirement.
  - i. Signed and notarized statement by the person who seeks the "determination of applicability" to accept all conditions and operate under the terms and conditions of this general permit;
  - j. Proof that copies of the "determination of applicability" have been submitted to each municipality, county, county planning agency and county health department where the beneficial use is located;
  - k. Proof that the applicant has legal right to enter the land where the beneficial use will occur and perform the activities approved in Condition 1 of this permit and an irrevocable written consent from the landowner giving the Department permission to enter upon land where the applicant will be conducting waste management activities;
  - l. Information that identifies the applicant (i.e. individual, corporation, partnership, government agency, association, etc.) and related parties, including the names and addresses of every officer who has a financial interest in or controls the facility operation;
  - m. Evidence of noncompliance with state and federal environmental laws and regulations;
  - n. Independent contractors retained by the applicant to perform any activities authorized under this permit must comply with state and federal laws and regulations relating to environmental protection and transportation safety; and
  - o. The non-refundable fee for a determination of applicability, as specified in the residual waste management regulations, payable to the "Commonwealth of Pennsylvania."
- 27 *Commencement of activities.* For persons or municipalities that propose to beneficially use regulated fill on nonresidential brownfields, the activities may commence after 60 working days from the date the determination of applicability application is submitted to the Department, unless otherwise instructed by the Department. A "brownfield" is defined as real property where regulated substances have been released and remain present. For persons or municipalities that propose to beneficially use regulated fill for one of the following, the activities may commence after 60 working days from the date the determination of applicability application is submitted to the Department, unless otherwise instructed by the Department:
- a. on nonresidential greenfields;

**Regulated Fill**

Rev 04/2009

- b. on properties where the area subject to regulated fill placement is larger than 10 acres; or
- c. on properties where waiver or modification of a siting limitation in Condition 11 has been requested.

A “greenfield” is defined as real property that is not a brownfield.

- 28. *New sources of fill.* If new sources of regulated fill are to be included at the approved beneficial use location, the permittee shall notify the Department in writing by submitting information in accordance with subparts (b) and (d) of Condition 26 above. A permittee may commence with beneficial use of the new source after 10 working days from the date the information is submitted to the Department, unless otherwise instructed by the Department
- 29. *Expansions.* If the placement of the regulated fill will expanded beyond the permitted area, the permittee shall notify the Department in writing by submitting information in accordance with subparts (a)-(h), (j)-( k) of Condition 26 above. If additional regulated fill volumes are needed for the approved construction activities within the existing permit area, the permittee shall submit a letter notifying the appropriate Department regional office. The letter shall include a description of the proposed changes and identify the additional volumes necessary.
- 30. *Notification of changes in operator.* Any person who is operating under the provisions of this permit shall immediately notify, in writing, the waste program Operations Manager of the appropriate regional office of the Department (address in attached list) within 30 days via certified mail of any changes in: the company name, address, owners, operators, and/or responsible officials of the company; the generator(s) of the regulated fill; the compliance status (e.g., violations) of any permit issued by the Department or federal government under the environmental protection acts.
- 31. *Determination that material is no longer waste.* Regulated fill that meets all the terms and conditions of this permit and that does not exceed concentration limits in Table GP-1 shall cease to be waste once the regulated fill is placed. If dewatered regulated fill is subsequently excavated or moved beyond the area permitted for fill placement, it will then be subject to applicable requirements for the use of regulated fill.
- 32. *Revocation or suspension.* Failure of the measures herein approved to be performed as intended, or as designed, or in compliance with the applicable laws, rules and regulations, and terms and conditions of this permit, for any reason, shall be grounds for the revocation or suspension of the permittee’s approval to operate under this permit.

**Table GP-1a  
Regulated Fill Concentration Limits For Organics**

PARAMETER		Regulated Fill
		Total analysis
	CASRN	mg/kg
ACENAPHTHENE	83-32-9	4700
ACENAPHTHYLENE	208-96-8	6900
ACEPHATE	30560-19-1	3.6
ACETALDEHYDE	75-07-0	0.63
ACETONE	67-64-1	110
ACETONITRILE	75-05-8	3.9
ACETOPHENONE	98-86-2	540
ACETYLAMINOFLUORENE, 2- (2AAF)	53-96-3	0.28
ACROLEIN	10-702-8	0.0014
ACRYLAMIDE	79-06-1	0.0024
ACRYLIC ACID	79-10-7	0.11
ACRYLONITRILE	107-13-1	0.037
ALACHLOR	15972-60-8	0.077
ALDICARB	116-06-3	0.12
ALDRIN	309-00-2	0.44
ALLYL ALCOHOL	107-18-6	1.2
AMINOBIHENYL, 4-	92-67-1	0.0046
AMITROLE	61-82-5	0.12
AMMONIA	7664-41-7	360
AMMONIUM SULFAMATE	7773-06-0	24
ANILINE	62-53-3	0.34
ANTHRACENE	120-12-7	350
ATRAZINE	1912-24-9	0.13
BAYGON (PROPOXUR)	114-26-1	0.057
BENOMYL	17804-35-2	970
BENTAZON	25057-89-0	45
BENZENE	71-43-2	0.13
BENZIDINE	92-87-5	0.34
BENZO[A]ANTHRACENE	56-55-3	110
BENZO[A]PYRENE	50-32-8	11
BENZO[B]FLUORANTHENE	205-99-2	110
BENZO[GHI]PERYLENE	191-24-2	180
BENZO[K]FLUORANTHENE	207-08-9	610
BENZOIC ACID	65-85-0	7800
BENZOTRICHLORIDE	98-07-7	0.048
BENZYL ALCOHOL	100-51-6	1100
BENZYL CHLORIDE	100-44-7	0.22
BHC, ALPHA	319-84-6	0.19
BHC, BETA-	319-85-7	0.82
BHC, DELTA-	319-86-8	30
BHC, GAMMA (LINDANE)	58-89-9	0.072
BIPHENYL, 1,1-	92-52-4	2200
BIS(2-CHLOROETHYL)ETHER	111-44-4	0.017
BIS(2-CHLORO-ISOPROPYL)ETHER	108-60-1	8

**Table GP-1a  
Regulated Fill Concentration Limits For Organics**

BIS(CHLOROMETHYL)ETHER	542-88-1	0.000044
PARAMETER		Regulated Fill
		Total analysis
	CASRN	mg/kg
BIS[2-ETHYLHEXYL] PHTHALATE	117-81-7	130
BISPHENOL A	80-05-7	2000
BROMACIL	314-40-9	2
BROMOCHLOROMETHANE	74-97-5	1.6
BROMODICHLOROMETHANE	75-27-4	3.4
BROMOMETHANE	74-83-9	0.54
BROMOXYNIL	1689-84-5	170
BROMOXYNIL OCTANOATE	1689-99-2	360
BUTADIENE, 1,3-	106-99-0	0.027
BUTYL ALCOHOL, N-	71-36-3	24
BUTYLATE	2008-41-5	51
BUTYLBENZENE, N-	104-51-8	2600
BUTYLBENZENE, SEC-	135-98-8	960
BUTYLBENZENE, TERT-	98-06-6	740
BUTYLBENZYL PHTHALATE	85-68-7	10000
CAPTAN	133-06-2	31
CARBARYL	63-25-2	41
CARBAZOLE	86-74-8	83
CARBOFURAN	1563-66-2	0.87
CARBON DISULFIDE	75-15-0	350
CARBON TETRACHLORIDE	56-23-5	0.26
CARBOXIN	5234-68-4	53
CHLORAMBEN	133-90-4	1.6
CHLORDANE	57-74-9	49
CHLORO-1,1-DIFLUOROETHANE, 1-	75-68-3	4800
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107-05-1	0.13
CHLOROACETOPHENONE, 2-	532-27-4	0.026
CHLOROANILINE, P-	106-47-8	52
CHLOROBENZENE	108-90-7	6.1
CHLOROBENZILATE	510-15-6	6.3
CHLOROBUTANE, 1-	109-69-3	6400
CHLORODIBROMOMETHANE	124-48-1	3.2
CHLORODIFLUOROMETHANE	75-45-6	2.6
CHLOROETHANE	75-00-3	19
CHLOROFORM	67-66-3	2.5
CHLORONAPHTHALENE, 2-	91-58-7	18000
CHLORONITROBENZENE, P-	100-00-5	18
CHLOROPHENOL, 2-	95-57-8	4.4
CHLOROPRENE	126-99-8	0.97
CHLOROPROPANE, 2-	75-29-6	44
CHLOROTHALONIL	1897-45-6	61
CHLOROTOLUENE, O-	95-49-8	20
CHLORPYRIFOS	2921-88-2	23



**Table GP-1a  
Regulated Fill Concentration Limits For Organics**

CHLORSULFURON	64902-72-3	71
CHLORTHAL-DIMETHYL (DACTHAL) (DCPA)	1861-32-1	650
PARAMETER		Regulated Fill
		Total analysis
	CASRN	mg/kg
CHRYSENE	218-01-9	230
CRESOL(S)	1319-77-3	8.9
CRESOL, 0- (METHYLPHENOL, 2-)	95-48-7	180
CRESOL, M (METHYLPHENOL, 3-)	108-39-4	100
CRESOL, P (METHYLPHENOL, 4-)	106-44-5	12
CRESOL, P-CHLORO-M-	59-50-7	110
CROTONALDEHYDE	4170-30-3	0.0043
CROTONALDEHYDE, TRANS-	123-73-9	0.0043
CUMENE	98-82-8	1600
CYCLOHEXANONE	108-94-1	2800
CYFLUTHRIN	68359-37-5	33
CYROMAZINE	66215-27-8	240
DDD, 4,4'-	72-54-8	30
DDE, 4,4'-	72-55-9	170
DDT, 4,4'-	50-29-3	230
DI(2-ETHYLHEXYL)ADIPATE	103-23-1	10000
DIALLATE	2303-16-4	0.59
DIAMINOTOLUENE, 2,4-	95-80-7	0.016
DIAZINON	333-41-5	0.082
DIBENZO[A,H]ANTHRACENE	53-70-3	11
DIBROMO-3-CHLOROPROPANE, 1,2-	96-12-8	0.0092
DIBROMOBENZENE, 1,4-	106-37-6	410
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106-93-4	0.0012
DIBROMOMETHANE	74-95-3	7.7
DIBUTYL PHTHALATE, N-	84-74-2	4100
DICHLORO-2-BUTENE, 1,4-	764-41-0	0.0039
DICHLOROBENZENE, 1,2-	95-50-1	59
DICHLOROBENZENE, 1,3-	541-73-1	61
DICHLOROBENZENE, P-	106-46-7	10
DICHLOROBENZIDINE, 3,3'-	91-94-1	32
DICHLORODIFLUOROMETHANE (FREON 12)	75-71-8	100
DICHLOROETHANE, 1,1-	75-34-3	2.7
DICHLOROETHANE, 1,2-	107-06-2	0.1
DICHLOROETHYLENE, 1,1-	75-35-4	0.19
DICHLOROETHYLENE, CIS-1,2-	156-59-2	1.6
DICHLOROETHYLENE, TRANS-1,2-	156-60-5	2.3
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	0.076
DICHLOROPHENOL, 2,4-	120-83-2	1
DICHLOROPHENOXYACETIC ACID, 2,4- (2,4-D)	94-75-7	1.8
DICHLOROPROPANE, 1,2-	78-87-5	0.11
DICHLOROPROPENE, 1,3-	542-75-6	0.46
DICHLOROPROPIONIC ACID (DALAPON), 2,2-	75-99-0	5.3

**Table GP-1a  
Regulated Fill Concentration Limits For Organics**

DICHLORVOS	62-73-7	0.052
DICYCLOPENTADIENE	77-73-6	0.26
PARAMETER		Regulated Fill
		Total analysis
	CASRN	mg/kg
DIELDRIN	60-57-1	0.44
DIETHYL PHTHALATE	84-66-2	160
DIFLUBENZURON	35367-38-5	52
DIMETHOATE	60-51-5	0.77
DIMETHOXYBENZIDINE, 3,3-	119-90-4	64
DIMETHYLAMINOAZOBENZENE, P-	60-11-7	0.15
DIMETHYLANILINE, N,N-	000121-69-7	11
DIMETHYLBENZIDINE, 3,3-	000119-93-7	1.5
DIMETHYLPHENOL, 2,4-	105-67-9	87
DINITROBENZENE, 1,3-	99-65-0	0.049
DINITROPHENOL, 2,4-	51-28-5	0.46
DINITROTOLUENE, 2,4-	121-14-2	0.2
DINITROTOLUENE, 2,6- (2,6-DNT)	606-20-2	3
DINOSEB	88-85-7	0.29
DIOXANE, 1,4-	123-91-1	0.31
DIPHENAMID	957-51-7	12
DIPHENYLAMINE	122-39-4	12
DIPHENYLHYDRAZINE, 1,2-	122-66-7	0.58
DIQUAT	85-00-7	0.24
DISULFOTON	298-04-4	0.078
DIURON	330-54-1	0.86
ENDOSULFAN	115-29-7	61
ENDOSULFAN I (ALPHA)	959-98-8	260
ENDOSULFAN II (BETA)	33213-65-9	260
ENDOSULFAN SULFATE	1031-07-8	70
ENDOTHALL	145-73-3	4.1
ENDRIN	72-20-8	5.5
EPICHLOROHYDRIN	106-89-8	0.12
ETHEPHON	16672-87-0	5.9
ETHION	563-12-2	110
ETHOXYETHANOL, 2- (EGEE)	110-80-5	17
ETHYL ACETATE	141-78-6	470
ETHYL ACRYLATE	140-88-5	0.5
ETHYL BENZENE	100-41-4	46
ETHYL DIPROPYLTHIOCARBAMATE, S- (EPTC)	759-94-4	180
ETHYL ETHER	60-29-7	120
ETHYL METHACRYLATE	97-63-2	30
ETHYLENE GLYCOL	107-21-1	170
ETHYLENE THIOUREA (ETU)	96-45-7	0.034
ETHYLP-NITROPHENYL PHENYLPHOSPHOROTHIOATE	2104-64-5	0.31
FENAMIPHOS	22224-92-6	0.17
FENVALERATE (PYDRIN)	51630-58-1	94

**Table GP-1a  
Regulated Fill Concentration Limits For Organics**

FLUOMETURON	2164-17-2	2.5
FLUORANTHENE	206-44-0	3200
PARAMETER		Regulated Fill
		Total analysis
	CASRN	mg/kg
FLUORENE	86-73-7	3800
FLUOROTRICHLOROMETHANE (FREON 11)	75-69-4	87
FONOFOS	944-22-9	2.9
FORMALDEHYDE	50-00-0	12
FORMIC ACID	64-18-6	460
FOSETYL-AL	39148-24-8	27000
FURAN	110-00-9	0.87
FURFURAL	98-01-1	3.7
GLYPHOSATE	1071-83-6	620
HEPTACHLOR	76-44-8	0.68
HEPTACHLOR EPOXIDE	1024-57-3	1.1
HEXACHLOROBENZENE	118-74-1	0.96
HEXACHLOROBUTADIENE	87-68-3	1.2
HEXACHLOROCYCLOPENTADIENE	77-47-4	91
HEXACHLOROETHANE	67-72-1	0.56
HEXANE	110-54-3	1100
HEXYTHIAZOX (SAVEY)	78587-05-0	820
HYDRAZINE/HYDRAZINE SULFATE	302-01-2	0.00042
HYDROQUINONE	123-31-9	55
INDENO[1,2,3-CD]PYRENE	193-39-5	110
IPRODIONE	36734-19-7	1200
ISOBUTYL ALCOHOL	78-83-1	160
ISOPHORONE	78-59-1	1.9
KEPONE	143-50-0	2.2
MALATHION	121-75-5	34
MALEIC HYDRAZIDE	123-33-1	47
MANEB	12427-38-2	5.8
MERPHOS OXIDE	78-48-8	41
METHACRYLONITRILE	126-98-7	0.067
METHAMIDOPHOS	10265-92-6	0.063
METHANOL	67-56-1	120
METHOMYL	16752-77-5	3.2
METHOXYCHLOR	72-43-5	630
METHOXYETHANOL, 2-	109-86-4	1.1
METHYL ACETATE	79-20-9	1900
METHYL ACRYLATE	96-33-3	77
METHYL CHLORIDE	74-87-3	0.038
METHYL ETHYL KETONE	78-93-3	110
METHYL ISOBUTYL KETONE	108-10-1	6.3
METHYL METHACRYLATE	80-62-6	56
METHYL METHANESULFONATE	66-27-3	0.32
METHYL PARATHION	298-00-0	0.42

**Table GP-1a  
Regulated Fill Concentration Limits For Organics**

METHYL STYRENE (MIXED ISOMERS)	25013-15-4	340
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	0.28
PARAMETER		Regulated Fill
		Total analysis
	CASRN	mg/kg
METHYLENE BIS(2-CHLOROANILINE), 4,4'-	101-14-4	15
METHYLNAPHTHALENE, 2-	91-57-6	8000
METHYLSTYRENE, ALPHA	98-83-9	250
NAPHTHALENE	91-20-3	25
NAPHTHYLAMINE, 1-	134-32-7	1.1
NAPHTHYLAMINE, 2-	91-59-8	0.046
NAPROPAMIDE	15299-99-7	2300
NITROANILINE, M-	99-09-2	0.091
NITROANILINE, O-	88-74-4	0.1
NITROANILINE, P-	100-01-6	0.086
NITROBENZENE	98-95-3	2.2
NITROPHENOL, 2-	88-75-5	17
NITROPHENOL, 4-	100-02-7	4.1
NITROPROPANE, 2-	79-46-9	0.0011
NITROSODIETHYLAMINE, N-	55-18-5	0.000076
NITROSODIMETHYLAMINE, N-	62-75-9	0.00017
NITROSO-DI-N-BUTYLAMINE, N-	924-16-3	0.014
NITROSODI-N-PROPYLAMINE, N-	621-64-7	0.0051
NITROSODIPHENYLAMINE, N-	86-30-6	83
NITROSO-N-ETHYLUREA, N-	759-73-9	0.00022
OCTYL PHTHALATE, DI-N-	117-84-0	10000
OXAMYL (VYDATE)	23135-22-0	2.6
PARATHION	56-38-2	360
PCB-1016 (AROCLOR)	12674-11-2	200
PCB-1221 (AROCLOR)	11104-28-2	2.5
PCB-1232 (AROCLOR)	11141-16-5	2
PCB-1242 (AROCLOR)	53469-21-9	62
PCB-1248 (AROCLOR)	12672-29-6	44
PCB-1254 (AROCLOR)	11097-69-1	44
PCB-1260 (AROCLOR)	11096-82-5	130
PEBULATE	1114-71-2	860
PENTACHLOROBENZENE	608-93-5	660
PENTACHLORONITROBENZENE	82-68-8	20
PENTACHLOROPHENOL	87-86-5	5
PHENACETIN	62-44-2	46
PHENANTHRENE	85-01-8	10000
PHENOL	108-95-2	66
PHENYLENEDIAMINE, M-	108-45-2	8.6
PHENYLPHENOL, 2-	90-43-7	1900
PHORATE	298-02-2	0.88
PHTHALIC ANHYDRIDE	85-44-9	6200
PICLORAM	1918-02-1	7.4
PRONAMIDE	23950-58-5	3.1

**Table GP-1a  
Regulated Fill Concentration Limits For Organics**

PROPANIL	709-98-8	26
PROPHAM	122-42-9	48
PARAMETER		Regulated Fill
		Total analysis
	CASRN	mg/kg
PROPYLBENZENE, N-	103-65-1	780
PROPYLENE OXIDE	75-56-9	0.19
PYRENE	129-00-0	2200
PYRIDINE	110-86-1	0.22
QUINOLINE	91-22-5	0.074
QUIZALOFOP (ASSURE)	76578-14-8	47
RONNEL	299-84-3	800
SIMAZINE	122-34-9	0.15
STRYCHNINE	57-24-9	2.5
STYRENE	100-42-5	24
TEBUTHIURON	34014-18-1	83
TERBACIL	5902-51-2	2.2
TERBUFOS	13071-79-9	0.12
TETRACHLOROBENZENE, 1,2,4,5-	95-94-3	14
TETRACHLORODIBENZO-P-DIOXIN, 2,3,7,8- (TCDD)	1746-01-6	0.00053
TETRACHLOROETHANE, 1,1,1,2-	630-20-6	18
TETRACHLOROETHANE, 1,1,2,2-	79-34-5	0.0093
TETRACHLOROETHYLENE (PCE)	127-18-4	0.43
TETRACHLOROPHENOL, 2,3,4,6-	58-90-2	950
TETRAETHYL LEAD	78-00-2	0.012
TETRAETHYLDITHIOPYROPHOSPHATE	3689-24-5	1.5
THIOFANOX	39196-18-4	0.34
THIRAM	137-26-8	130
TOLUENE	108-88-3	44
TOLUIDINE, M-	108-44-1	0.51
TOLUIDINE, O-	95-53-4	1.2
TOLUIDINE, P-	106-49-0	1.3
TOXAPHENE	8001-35-2	1.2
TRIALATE	2303-17-5	660
TRIBROMOMETHANE (BROMOFORM)	75-25-2	4.4
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	76-13-1	53000
TRICHLOROBENZENE, 1,2,4-	120-82-1	27
TRICHLOROBENZENE, 1,3,5-	108-70-3	31
TRICHLOROETHANE, 1,1,1-	71-55-6	7.2
TRICHLOROETHANE, 1,1,2-	79-00-5	0.15
TRICHLOROETHYLENE (TCE)	79-01-6	0.17
TRICHLOROPHENOL, 2,4,5-	95-95-4	6100
TRICHLOROPHENOL, 2,4,6-	88-06-2	8.9
TRICHLOROPHENOXYACETIC ACID, 2,4,5- (2,4,5-T)	93-76-5	1.5
TRICHLOROPHENOXYPROPIONIC ACID, 2,4,5- (2,4,5-TP) (SILVEX)	93-72-1	22
TRICHLOROPROPANE, 1,1,2-	598-77-6	8.7
TRICHLOROPROPANE, 1,2,3-	96-18-4	0.82

**Table GP-1a  
Regulated Fill Concentration Limits For Organics**

TRICHLOROPROPENE, 1,2,3-	96-19-5	30
TRIFLURALIN	1582-09-8	0.96
PARAMETER		Regulated Fill
		Total analysis
	CASRN	mg/kg
TRIMETHYLBENZENE, 1,3,4- (TRIMETHYLBENZENE, 1,2,4-)	95-63-6	20
TRIMETHYLBENZENE, 1,3,5-	108-67-8	6.2
TRINITROTOLUENE, 2,4,6-	118-96-7	0.023
VINYL ACETATE	108-05-4	14
VINYL BROMIDE (BROMOETHENE)	593-60-2	0.28
VINYL CHLORIDE	75-01-4	0.027
WARFARIN	81-81-2	7.4
XYLENES (TOTAL)	1330-20-7	990
ZINEB	12122-67-7	81

**Table GP-1b  
Regulated Fill Concentration Limits For Metals and Inorganics**

PARAMETER		Regulated Fill
		Total analysis
	CASRN	mg/kg
ALUMINUM	7429-90-5	190000
ANTIMONY	7440-36-0	27
ARSENIC	7440-38-2	53
BARIUM AND COMPOUNDS	7440-39-3	8200
BERYLLIUM	7440-41-7	320
BORON AND COMPOUNDS	7440-42-8	6.7
CADMIUM	7440-43-9	38
CHROMIUM III	16065-83-1	190000
CHROMIUM VI	18540-29-9	190
COBALT	7440-48-4	22
COPPER	7440-50-8	36000
CYANIDE, FREE	57-12-5	200
IRON	7439-89-6	190000
LEAD	7439-92-1	450
MANGANESE	7439-96-5	190000
MERCURY	7439-97-6	10
NICKEL	7440-02-0	650
NITRATE NITROGEN	14797-55-8	na
NITRITE NITROGEN	14797-65-0	na
SELENIUM	7782-49-2	26
SILVER	7440-22-4	84
THALLIUM	7440-28-0	14
TIN	7440-31-5	680
VANADIUM	7440-62-2	72000
ZINC	7440-66-6	12000



Date Prepared/Revised
<b>DEP USE ONLY</b>
Date Received

## FORM 20 RF APPLICATION FOR REGULATED FILL GENERAL PERMIT

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form 20 RF, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General References: §271.801 - §271.852; §287.601 - §287.652; Fill Management Policy # 258-2182-773; General Permit #WMGR096

### SECTION A. SITE IDENTIFIER

Applicant/Permittee:

Site Name:

Facility ID (as issued by DEP):

### SECTION B. FEE

**Registration under General Permit #WMGR096 issued on April 13, 2004: \$250.00**

Payable to the "Commonwealth of Pennsylvania"

(Registration fee does not apply if adding new source(s) of fill to an existing Permit).

If applying for beneficial use of regulated fill at more than one receiving site, include \$250.00 for each site.

Number of Receiving Sites \_\_\_\_\_ Check Amount \$ \_\_\_\_\_ Number of New Sources of Fill \_\_\_\_\_

### SECTION C. TYPE OF APPLICATION

1. Is this application for any of the following:

A residual waste disposal impoundment.  Yes  No

A residual waste landfill, a valley fill, or other fill.  Yes  No

The use of residual waste to fill open pits from coal or non-coal mining.  Yes  No

The use of residual waste solely to level an area or bring the area to grade.  Yes  No

If applicant answers "yes" to any of above categories, do not fill out this general permit application. Contact DEP for an appropriate waste disposal application. If answer is "no", go to item 2 below.

2. Is this application for:

Beneficial use as construction material on nonresidential brownfield (15-day registration)  Yes  No

Beneficial use as construction material on nonresidential greenfield (60-day registration):  Yes  No

a. Is the nonresidential greenfield planned for development?<sup>1</sup>  Yes  No

b. Is the property greater than 10 acres?  Yes  No

c. Is a waiver requested for one or more siting limitations?  Yes  No

If answer is "yes" to any of the above categories, go to items 3 and 4 below.

3. Is the receiving site approved for construction?  Yes  No

If answer is no, this general permit does not apply.

If answer is yes, submit a certified copy of the approved plan or construction permit issued by the applicable state, county or municipal authority that has jurisdiction for the property.

4. Is application for new source or sources of fill?  Yes  No

If answer is yes, provide the registration number issued for the receiving site, its location and fill out Sections E and F:

Registration No.: \_\_\_\_\_ Site name and Location: \_\_\_\_\_

<sup>1</sup> This general permit does not apply for beneficial use of regulated fill at a nonresidential greenfield property that is **NOT** planned for development. This general permit prohibits beneficial use of regulated fill on a property currently in residential use or planned for residential use unless otherwise authorized. This general permit also prohibits placement of regulated fill in waters of the Commonwealth.



**SECTION D. RECEIVING SITE INFORMATION**

*Note:* If this application is for beneficial use at more than one receiving site, provide the following information for each receiving site on separate 8 1/2 x 11" paper and mention this section on top of each sheet.

1. Is the receiving site zoned for residential purposes?  Yes  No  
If response is yes, STOP. This general permit does not apply.
2. Is the receiving site zoned and used exclusively for commercial/industrial purposes?  Yes  No  
If response is no, go to item 3.
3. If the receiving site is unzoned, will it be used exclusively for commercial/industrial purposes (excluding parks, playgrounds, nursing homes, child care facilities, schools, or other residential-style facilities or recreation areas)?  Yes  No  
If response is no, STOP. This general permit does not apply. If response is yes to items 2 or 3, submit documentation that confirms the commercial/industrial zoning or commercial/industrial use of the receiving site.
4. Attach a USGS map that identifies the receiving site with an arrow and a drawing of the receiving site that includes property boundary and proposed fill area(s) on a scale of 1" equals no more than 200 feet.
5. Indicate the approximate volume of regulated fill needed for the construction project. List the source and volume of each fill for a receiving site. \_\_\_\_\_
6. Provide a plan if mechanical processing for sizing or separation is proposed in accordance with the permit-by-rule provisions of Sections 271-103(g) or 287-102(f).
7. Submit a plan for the temporary storage and management of regulated fill at the receiving site.

*Note:* This general permit does not authorize blending or processing of material onsite or offsite to meet concentration limits in Table GP-1 of General Permit #WMGR096.

8. Siting limitations

a. Is the receiving site located:

- |                                                                                                                                                  |                              |                             |                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|--------------------------------------------|
| i. in the 100-year floodplain;                                                                                                                   | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Requesting Waiver |
| ii. within 100 feet of a sinkhole or area draining into a sinkhole;                                                                              | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Requesting Waiver |
| iii. within 50 feet of a dwelling unless the owner has provided a written waiver consenting to the beneficial use being closer than 50 feet;     | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Owner's Waiver    |
| iv. within 100 feet of a perennial stream;                                                                                                       | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Requesting Waiver |
| v. within 300 feet of a water source unless the owner has provided a written waiver consenting to the beneficial use being closer than 300 feet; | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Owner's Waiver    |
| vi. within 300 feet of an exceptional value wetland, an exceptional value water or a high quality water.                                         | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Requesting Waiver |

b. If a waiver is requested from the Department for any of the above siting limitations, identify that siting limitation and attach justification on a separate 8 1/2 x 11" paper. For each waiver request except (a)(iii) or (a)(v), provide detailed documentation why the waiver is necessary and the extraordinary conditions at that site that demands the waiver. The Department requires submission of compelling evidence that must show how equal and continuous level of protection to public health, safety and the environment will be provided at that location if the waiver is granted. For (a)(iii) and (a)(v), if an owner has provided a written waiver, submit a notarized copy of that waiver.

The documentation related to waiver requests must be submitted with the permit application.

9. Is the area of the property where beneficial use activities using regulated fill are to be conducted, greater than one acre?  Yes  No

If response is yes, what is the size of the area? \_\_\_\_\_  acres  square feet

A Pennsylvania Natural Diversity Inventory (PNDI) review of the site must be conducted if the receiving site is greater than one acre in accordance with the Department's policy #400-0200-001, "Policy for Pennsylvania Natural Diversity Inventory Coordination During Permit Review and Evaluation" (Jan. 18, 2003). All known occurrences must be resolved with the jurisdictional agency. Submit the report of the PNDI review with the application.

**SECTION D. RECEIVING SITE INFORMATION (continued)**

If a PNDI review has already been conducted for the property as a result of a Federal or state agency requirement for the area of beneficial use under this permit, applicant may submit that PNDI review report along with the requesting agency's approval or denial letter.

Is a PNDI review report attached with this application?  Yes  No

If answer is no, and if less than one acre, what is the size of the receiving site? \_\_\_\_\_  acres  square feet

10. Submit proof of the recorded deed notice from the county recorder of deeds office for the receiving site(s) that includes the exact location of where regulated fill will be placed on that property including the latitude and longitude and a description of the types of fill identified by the applicant through sampling and analysis.

Is proof of recorded deed notice submitted with this permit application?  Yes  No

*Note:* This information must become part of the deed notice for all future conveyances or transfer of the property.

11. Duration of construction activities:

Describe on 8 ½ x 11" paper, the proposed construction activity in detail for the receiving site and the intended use of the site. Explain how regulated fill will be beneficially used as construction material at that property. Include the time that will be needed to complete placement of regulated fill at that site. Provide proof to show that construction will begin promptly after placement of regulated fill or within one year from the date regulated fill placement begins at that location. The Department will not approve an application where fill placement extends beyond one year or construction is not proposed to start within the one-year time limit. Areas that are completed by fill placement are required to be promptly stabilized by vegetative cover or otherwise stabilized.

12. For Registration purposes:

Submit a demonstration that the activities which the person or municipality intends to conduct are authorized by the general permit.

**SECTION E. OFFSITE SOURCE(S) OF REGULATED FILL**

1. Describe the type(s) of materials proposed for beneficial use as construction material. Soil, rock, stone, dredged material, used asphalt, historic fill, and brick, block or concrete from construction and demolition activities that has been segregated using Best Management Practices (BMP) will qualify as regulated fill. If the fill source is construction/demolition structures, certify that brick, block or concrete has been or will be segregated from other construction/demolition waste using BMP. A copy of the BMP manual or other established procedure used should be submitted with this application. Include a short history of the contaminated material, the types of contamination, including the results of the environmental due diligence conducted to identify incidences of spill or release. Provide sufficient information to demonstrate that the fill material is not a listed hazardous waste.
2. On a separate sheet of 8 ½ x 11" paper for each regulated fill material, provide detailed information on:
  - a. the offsite source location including originating state, host municipality and volume of each regulated fill for a receiving site.
  - b. whether the excavation of fill material will take place under a relevant state permit or state authorization.
  - c. whether the offsite source is a brownfield, greenfield, agriculture land or an active commercial/industrial property.
  - d. a plan that will be used to ascertain that the fill will not contain free liquids or objectionable odors during placement.
  - e. sampling and analysis methodology used to determine concentration of contaminants in the fill material.

*Note:* If a regulated fill is proposed to be used at more than one receiving site, provide the list of receiving sites. Similarly, if more than one source of fill is proposed for a receiving site, provide the list of fill sources.

3. If the regulated fill is historic fill, provide its composition.
4. If the regulated fill is dredged material, provide documentation:
  - a. that the material will be drained prior to beneficial use at the receiving site;
  - b. that the material excavated from tidal basins will meet the concentration limits for chlorides using SPLP analysis.



**SECTION F. SAMPLING AND ANALYSIS OF REGULATED FILL**

1. The sampling and analysis results of the regulated fill material shall be based on procedures described in Appendix A of the Fill Management Policy (#258-2182-773). The analytical methodologies used shall be those set forth in the most recent edition of the USEPA's *Test Methods for Evaluating Solid Waste* (EPA SW-846), *Methods for Chemical Analysis of Water and Wastes* (EPA 600/4-79-020), *Standard Methods for the Examination of Water and Wastewater* (prepared jointly by the American Public Health Association, American Water Works Association, and the Water Environment Federation), or comparable method approved by the USEPA or the Department.

The person taking the samples and performing the analysis shall employ the quality assurance/quality procedures described in USEPA's *Test Methods for Evaluating Solid Waste* (EPA SW-846), or in the *Handbook for Analytical Quality Control in Water and Wastewater Laboratories* (EPA 600/4-79-019). The chemical analysis shall be performed by a laboratory that is in compliance with the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, No. 90, 27 Pa C.S. §4101 et seq.

All analyses submitted must specify the method used and any special preparation required, deviation from the method, or other pertinent information. Each analysis sheet must include: date of sampling, date of analysis, name of laboratory performing the analysis, and the laboratory contact person and phone number. A description of the sampling methodologies used should be attached. Analytical determinations should be run on samples as is, unless otherwise specified in the cited method. Report the analysis in mg/kg on a dry weight basis. For chlorides in dredged material from tidal basins, SPLP analysis is required to be reported as mg/L.

2. For each sample, record and submit with the application, the date of sample collection, the date of sample tested, including how samples were stored in the interim period from collection until testing.
3. List all the regulated substances detected in the fill material, analytical data and certification that none of the detected regulated substances exceed the concentration limits in Table GP-1(a) and (b).
4. Regulated fill and receiving site background. One or both of the following may apply:
  - a. If concentration of a metal or inorganic regulated substance in a regulated fill is higher than that in the corresponding background of the receiving site, provide justification with proof that the fill material will not exceed Table GP-1 limits even though it exceeds the receiving site background.
  - b. If a regulated fill exceeds the Table GP-1(b) limits for any metal or inorganic, provide justification with proof that it does not exceed the background concentration for that regulated substance at the receiving property where it will be beneficially used as construction material.

*Note:* The receiving site background concentrations for metals and inorganics shall be determined taking representative samples which are based on property size and are not related to any release at the property. The average concentration calculated from these representative samples will be considered the background concentration for that metal or inorganic regulated substance for the receiving property. Receiving site background concentration is defined as that concentration that is present at the site before beneficial activities occur at that site. The background concentration of a regulated substance at a receiving site will always be the value determined prior to the first placement of regulated fill at that location.

**SECTION G. PUBLIC NOTICE**

Supply proof that copies of "Registration" have been submitted to each host municipality, county, county planning agency and county health department where the receiving site is located.

**SECTION H. CERTIFICATION**

I \_\_\_\_\_ do hereby certify pursuant to the penalties of 18 Pa. C.S.A. Section 4904 to the best of my knowledge, information, and belief, that the information contained in this document is true and correct.

\_\_\_\_\_  
Print or Type Name of Responsible Official

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

IN WITNESS WHEREOF, I have hereunder set my hand and official seal.

**NOTARY  
SEAL**

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
DATE

ENVIRONMENTAL DUE DILIGENCE (EDD) PHASE 1  
VISUAL INSPECTION FORM

DATE: \_\_\_\_\_

SR/SEC: \_\_\_\_\_

COUNTY: \_\_\_\_\_

SEGMENT: \_\_\_\_\_

ECMS  
Project#: \_\_\_\_\_

ACTIVITY: \_\_\_\_\_

LOCATION: \_\_\_\_\_

**Visual Site Inspection (EDD-PHASE 1):**

- |                                                     |         |        |
|-----------------------------------------------------|---------|--------|
| ▪ Stressed Vegetation                               | Yes [ ] | No [ ] |
| ▪ Staining on Soils                                 | Yes [ ] | No [ ] |
| ▪ Staining Along PennDOT ROW<br>or on ROW Materials | Yes [ ] | No [ ] |
| ▪ Detectable Odors                                  | Yes [ ] | No [ ] |

Comments: Attached additional pages or information as necessary.

**Findings**

Check one:

- Due diligence inspection performed and no visual evidence of a spill or release in project ROW was detected.
- Due diligence inspection performed and evidence of a spill or release in project ROW was detected. Phase 2 documents attached.
- Due diligence not applicable for this project. No waste or fill.

SIGNATURE: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

ORGANIZATION: \_\_\_\_\_



CLEAN FILL ENVIRONMENTAL DUE DILIGENCE [EDD] PHASE 2

DATE: \_\_\_\_\_

SR/SEC: \_\_\_\_\_ ECMS PROJECT #: \_\_\_\_\_

SEGMENT: \_\_\_\_\_

COUNTY: \_\_\_\_\_

ACTIVITY: \_\_\_\_\_

LOCATION: \_\_\_\_\_

A Phase 1 EDD was conducted for the above project and has identified evidence of a potential spill or release of regulated substances to the material. A Phase 2 EDD was performed.

**Findings** Check all that apply:

- 1. Based on the results of the Phase 2 investigations, it has been determined that **no** spill or release has occurred.
- 2. Based on the results of the Phase 2 investigations, there is documented evidence that a spill or release has occurred. **MUST COMPLETE ITEM 3**
- 3. If Item 2 is checked, Item 3 must be completed: The materials were Collected and sampled, in accordance with Appendix A of the PADEP Management of Fill Guidance, and
  - All regulated substances analyzed were reported as non-detectable. Form FP-001 must be completed along with the laboratory data, and provided to the property owner of the fill receiving site. Attach documentation.
  - The concentration of regulated substances detected were below the levels indicated in Table FP-1a/1b. Form FP-001 must be completed along with the laboratory data, and provided to the property owner of the fill receiving site. Attach documentation.
  - The concentration of regulated substances detected exceeds the levels in Table FP-1a/1b, but are below the levels indicated in Table GP-1a/1b. **The material is Regulated Fill** and must be approval by the PENNDOT Project Manager for use. If approved, PADEP General Permit WMGR096 must be obtained.
  - The concentration of regulated substances detected exceeds the levels in Table GP-1a/1b. **The materials are a waste.** Manage in accordance with applicable PA Solid Waste Management Act waste regulations. Attach documentation.

SIGNATURE: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

ORGANIZATION: \_\_\_\_\_

**ENVIRONMENTAL DUE DILIGENCE PHASE 2: CLEAN FILL DETERMINATION**

**NOTE: PERSONS INVOLVED IN PERFORMING EDD ACTIVITIES DO NOT NEED TO COMPLETE ALL STEPS OF THIS PROCESS. ONLY THOSE REQUIRED FOR PROPERLY CHARACTERIZING MATERIALS TO DETERMINE THEY ARE CLEAN FILL.**

**EDD Phase 2: STEP 1**

- **Property ownership and use histories (deed reviews) for evidence of potential releases of wastes or chemicals from operations along the PennDOT ROW:**

Land and Property Use and Ownership Types Found (Check All That Apply):

- *Public* [ ]
- *Private* [ ]
- *Agricultural* [ ]
- *Industrial* [ ]
- *Commercial* [ ]
- *Residential* [ ]
- *Unused* [ ]
- *Other* [ ]

(Specify) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- **Searching environmental databases to determine the existence of potential impacts from any types of waste sites or related activities that exist or may have existed within the vicinity of the PennDOT ROW: (See Appendix 1)**

Databases Searched (Check All That Apply):

- *PennDOT* [ ]
- *PA DEP* [ ]
- *US EPA* [ ]
- *Other* [ ]

(Specify) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**ENVIRONMENTAL DUE DILIGENCE PHASE 2: CLEAN FILL DETERMINATION**

- **Conducting Interviews with All Relevant Parties to determine whether there had been any incidents that involved the release of substances directly to the PennDOT ROW:**

Interviews Conducted (Check All That Apply):

- *Former Property Owners* [ ]
- *Current Property Owners* [ ]
- *Former Land Owners* [ ]
- *Current Land Owners* [ ]
- *Fire Departments* [ ]
- *Hazardous Materials Teams* [ ]
- *Regulatory Agencies* [ ]

(Specify) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- **Examination of aerial photographs in order to determine all land uses within the vicinity of the ROW:**

- Aerial Photographs Evaluated Yes [ ] No [ ]; if "Yes": refer to Appendix 1 for a Pennsylvania Department of Conservation and Natural Resources (PA DCNR) web site address for locating aerial photographs.

- **Examination of Sanborne or other fire insurance maps (there is an additional cost for obtaining these), in order to determine the existence of businesses that may have had any prior releases of regulated substances hazardous chemicals to the PennDOT ROW:**

- *Sanborne Fire Insurance Maps Examined* [ ]; refer to Appendix 1 for web site address and telephone number for obtaining these maps;
- *Alternate Fire Insurance Maps Examined* [ ]

(Specify) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**EDD Phase 2 STEP 2:**

- **Sampling and Analysis of PennDOT ROW Materials. If there is documented evidence of a spill or release, materials must be tested to determine if they are clean fill, or to characterize for proper disposal.**
- **Sampling and analysis should be conducted in accordance with Appendix A of the PA DEP Management of Fill Guidance: 258-2182-773 April 24, 2004.**



ENVIRONMENTAL DUE DILIGENCE PHASE 2: CLEAN FILL DETERMINATION

APPENDIX 1: LISTING OF WEB SITES AND RELATED CONTACTS FOR  
ENVIRONMENTAL DUE DILIGENCE DATABASE SEARCHES

Pennsylvania Department of Environmental Protection (PA DEP) -Related Sites

- *Pennsylvania Municipal and Residual Waste Facilities* (web link: [www.dep.state.pa.us/dep/deputate/airwaste/wm/mrw/Docs/Landfill\\_list.htm](http://www.dep.state.pa.us/dep/deputate/airwaste/wm/mrw/Docs/Landfill_list.htm); (this website contains descriptions of all Pennsylvania landfills and incinerators (site name, permit number, host county, municipality, and contact person), all arranged by PA DEP region; for more information, click on either the facility name link (this leads to the PA DEP Environmental Facility Application and Compliance Tracking System (E-Facts) information about any specific facility) or contact person (e-mail) link).
- *Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2) Sites* (web link: [www.pasitefinder.state.pa.us/Site\\_listing.asp](http://www.pasitefinder.state.pa.us/Site_listing.asp); this website contains information on all Act 2 sites that have been completed to date and updates that are made to the website when needed; click on the "more details" box associated with each site listed to obtain an interactive "E-Map" location/link for any site selected along with pertinent site information).
- *Pennsylvania Hazardous Sites Cleanup Act (HSCA) Sites* (web link: [www.dep.state.pa.us/dep/deputate/airwaste/wm/hscp/docs/HSCA\\_Site\\_List.pdf](http://www.dep.state.pa.us/dep/deputate/airwaste/wm/hscp/docs/HSCA_Site_List.pdf); this website brings up a list of Pennsylvania HSCA sites that are arranged by PA DEP Region and shows municipality, county, number and dates for HSCA responses (interim and remedial levels), in addition to the site status (complete, listed on Pennsylvania Priority List, or de-listed).
- *Pennsylvania Storage Tank Release and Active Storage Tank Sites* (web link for storage tank releases: [www.dep.state.pa.us/dep/deputate/airwaste/wm/Tanks/Document/tank\\_release.htm](http://www.dep.state.pa.us/dep/deputate/airwaste/wm/Tanks/Document/tank_release.htm)); this website contains a listing of all known storage tank incidents, and is arranged by PA DEP region (with each regional incident alphabetized by county); other details included are facility I.D. #, site name, address, city, county, incident description, confirmation date, type of incident (underground storage tank release (petroleum or hazardous material), or above-ground storage tank release; click on the "Tank Incidents" PDF or Adobe Acrobat Files to see the entire list of storage tank releases to date); web link for active storage tanks: [www.dep.state.pa.us/dep/deputate/airwaste/wm/tanks/storage/tanks/tank\\_listings.htm](http://www.dep.state.pa.us/dep/deputate/airwaste/wm/tanks/storage/tanks/tank_listings.htm); click on the PA DEP Regional links to obtain Excel spreadsheet lists of storage tanks; information similar to what can be found on the storage tank release sites (except releases) can be found on the active storage tanks list).

ENVIRONMENTAL DUE DILIGENCE PHASE 2: CLEAN FILL DETERMINATION

APPENDIX I: LISTING OF WEB SITES AND RELATED CONTACTS FOR  
ENVIRONMENTAL DUE DILIGENCE DATABASE SEARCHES

United States Environmental Protection Agency(US EPA)-Related Sites

- *Pennsylvania Comprehensive Environmental Response and Liability Act (CERCLA/Superfund) Sites* (web link: [www.epa.gov/reg3hwmd/super/PA/index.htm](http://www.epa.gov/reg3hwmd/super/PA/index.htm)); this website contains information on all Pennsylvania Superfund sites, including name, address, city, county, zip code, US EPA I.D. number, and National Priority List (NPL) status; click on the site name to learn more about any Superfund site).
- *Pennsylvania Resource Conservation and Recovery Act (RCRA)Facilities* (web link: [www.epa.gov/reg3hwmd/ca/pa.htm](http://www.epa.gov/reg3hwmd/ca/pa.htm)); this website contains information for all Pennsylvania RCRA sites, including facility name (click on this for more details), US EPA I.D. number, location (click on this link to get a map showing the site in relation to nearby roadways), environmental indicators (human exposure, groundwater - click on either of these to get the documentation sheets for either or both), and clean up status (initiated, remedy selected, complete with or without controls, construction completed)
- *Toxic Release Inventories (TRI)* (web link: [www.epa.gov/tri](http://www.epa.gov/tri)); this website is from the US EPA, and contains some background information about TRI is and how it is used; releases for specific areas can be found by entering a zip code on the title page; from here, the user can view the facilities that are part of the TRI for the zip code entered, and the extent of releases that have occurred over the years (starting with 1989, and continuing through 2001, the latest year for which TRI information is available); click on the name of any facility shown to obtain a detailed report about the releases and related activities associated with the facility (onsite, off-site, air emissions, water discharges, land disposa)).
- *Comprehensive Federal and State Site Environmental Database (Enviro-Facts)* (web link: [www.epa.gov/enviro/index\\_java.html](http://www.epa.gov/enviro/index_java.html)); this website contains information about virtually every type of environmental matter known, both in terms of facilities and the media affected by these facilities' collective activities; under the "topics" tab, click on the links related to "waste", "water", "air", "toxics", "land", "radiation", "maps", and "other", to determine the type of media information desired; under the "advanced capabilities" tab, click on the "queries", "maps", or "reports" links to locate more specific information; from here, the user will be led to a page where queries about any type of environmental site can be entered using a zip code, county or State abbreviation; click on the "find it" link to locate information about one or multiple environmental sites, or, to generate map locations for the any type of environmental site activity desired; the map is interactive, and the user can "zoom in" for closer details about the site; this database may include information on sites from the aforementioned Municipal and Residual Waste, Storage Tanks, RCRA, HSCA, CERCLA, Act 2, and TRI databases; sites with National Pollutant Discharge Elimination System (NPDES) and radiation-related permits also included in this database).



ENVIRONMENTAL DUE DILIGENCE PHASE 2: CLEAN FILL DETERMINATION

APPENDIX 1: LISTING OF WEB SITES AND RELATED CONTACTS FOR  
ENVIRONMENTAL DUE DILIGENCE DATABASE SEARCHES

Sites for Aerial Photographs and Fire Insurance Maps

- *Aerial Photographs:* Aerial photographs may be accessed via the Pennsylvania Department of Conservation and Natural Resources (PA DCNR) web site (web link [www.dcnr.state.pa.us/topogeo/gismaps/aerials.aspx.htm](http://www.dcnr.state.pa.us/topogeo/gismaps/aerials.aspx.htm); click on the "Proceed to the new DCNR" link, then click on the "Aerial Photos" option; this will lead to a link for the U. S. Geological Survey's Aerial Photo Finder; information can be sought, and site location maps can be generated by selecting the "zip code", "populated place", or "map location" options).

*Sanborne Fire Insurance Maps:* These maps may be obtained from EDR Sanborne, Inc., at 1-800-352-0050, or at [www.edrnet.com](http://www.edrnet.com); click on the "Sanborne Map" link, and then click on the phrase "Download Sample" to view an example of this map type. There is an additional cost for obtaining these maps.



## LEGAL REQUIREMENTS NOTIFICATION 4300-08-2

**DATE:** September 19, 2008

**SUBJECT:** Environmental Due Diligence Policy Clarification

**TO:** District Environmental Manager's

**FROM:** Ken Thornton, Chief  
Pollution Prevention Section - EQAD  
Bureau of Design

This LRN is to clarify the issue concerning the completion of Environmental Due Diligence Form 6 & 7 (EDD) by aggregate suppliers. **Please distribute to appropriate District Personnel.**

EDD forms, found in Publication 281, are to be provided to contractors for waste and/or borrow that is leaving or entering the project site, indicating that the due diligence has been performed and the material can be managed as clean fill.

It has been brought to my attention that a contractor was provided these forms for a project, who in turn, submitted the forms to their aggregate supplier for completion. DEP's Policy defines clean fill, as follows;

*Clean fill— Uncontaminated, nonwater-soluble, nondecomposable inert solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and recognizable as such.*

Although the definition includes rock and stone, DEP considers "aggregate" from a permitted quarry operation to be a product, when the material is being used as a construction material, such as base material, pipe bedding, drainage, or as a component in an asphalt or concrete mix. A permitted quarry operation is for natural aggregate (rock and stone), not a mined material that has been previously disposed, such as slag. If natural aggregate is being used to bring an area to grade or for embankment fill then due diligence should be conducted.

Additionally, these suppliers are Approved Suppliers in PennDOT's Bulletin 14 and are subject to the Quality Control/Quality Assurance requirements in the approval of their aggregates. As such, EDD forms are not required for aggregate being delivered to a project site as indicated above.

If you have any questions, please contact me at 717-787-0459.

4300/kjt

CC: S. Socash, DEP- RCSOB, 14<sup>th</sup> Fl.

P. Vlahos, Pennsylvania Aggregates and Concrete Association

J. Clarke, BOD-PPS

D. Condo, BOD-PPS

D. Snowden, BOD-PPS

K. Thornton, BOD-PPS