

"EXHIBIT A"

***(Version limited geotechnical borings or similar within Conrail property with no planned excavation or dewatering)***

# **EXCAVATED MATERIAL AND GROUNDWATER MANAGEMENT PLAN**

**(Licensee)  
(Name of Project)  
(City and State of Project)**

Date: \_\_\_\_\_

**Prepared at the Request of:**

**Consolidated Rail Corporation  
Philadelphia, Pennsylvania**

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
1.0 INTRODUCTION .....	4
2.0 PROJECT DESCRIPTION .....	4
3.0 PROJECT APPROACH.....	5
3.1 Project Background .....	3
3.2 Health and Safety .....	3
3.3 Soil Observation, Screening and Classification .....	5
3.4 Soil Handling and Management.....	6
3.4.1 No Environmental Concern, Suitable Backfill.....	7
3.4.2 No Environmental Concern, Unsuitable Backfill.....	7
3.4.3 Potential Environmental Concerns, Licensee Rated.....	7
3.4.4 Potential Environmental Concerns, Third Party Unknown .....	8
3.4.5 Potential Environmental Concerns, Third Party Known .....	8
3.5 Construction Dewatering/Water Management.....	9
3.6 Conrail and Regulatory Notifications .....	9
3.7 Site Restoration and Backfill Requirements.....	9
3.8 Disposal .....	10
3.9 Permitting Authority.....	10

**FIGURES**

1. Overview of Boring Locations Area
2. Detail Boring Locations

**APPENDICES**

- A. Clean Fill Certification Boilerplate

## 1.0 INTRODUCTION

[Company Name](#) (Licensee) prepared this Excavated Material and Groundwater Management Plan (the Plan) to address planned soil boring activities associated with the [\(detailed Project description\)](#). An overview of the work locations is shown on Figure 1. The work is on or along the Consolidated Rail Corporation (Conrail) right-of-way (ROW) in [\(Town and State\)](#). This Plan contains project-specific procedures for the planned investigative activities and was prepared at the request of Conrail prior to the issuance of an access permit along its ROW.

The purpose of the Plan is to provide general guidance for the field screening, classification, and proper handling of soil and/or groundwater encountered during the field work. The guidelines outlined herein were developed to ensure the materials are properly managed for use as backfill, off-site disposal or recycling, or decanting (as appropriate) based on observations and screening conducted during the construction activities.

## 2.0 PROJECT DESCRIPTION

This Plan is focused on the boring and backfill activities associated with the work on Conrail property.

The project activities are undertaken to [\(Project description and reason\)](#). The project will involve displacement of minimal material from borings and backfill with the excavated materials or clean fill, as appropriate, and restoration of the work area to an in-kind condition such that there is not a walking or other hazard created.

Boring, inspection, backfill and restoration of each investigation site within the theoretical load line of the railroad tracks will take approximately [\(number of days\)](#) working days, contingent upon the inspection results, offset from the center line of the tracks, the number and proximity of parallel underground utility lines along the easement, and the related access requirements.

Material, equipment or supplies requiring staging overnight or for longer durations will be located in an area approved by the Conrail Project Engineer, and will be staged only for so long as determined to be reasonably necessary by both Licensee and the Conrail Project Engineer. Every attempt will be made to conduct work outside the fouling limit along Conrail's critical lines. No staging of equipment or materials will occur within the fouling limit or in access roads, except with the specific approval of Conrail's Project Engineer and only for so long as determined to be reasonably necessary by both Licensee and the Conrail Project Engineer. The fouling limit of the track is fifteen (15) feet from the closest rail. Work in close proximity to Conrail track will be conducted in close coordination with Conrail Engineering Department representatives and the flagman assigned to the project. Licensee will not foul track without appropriate track protection in place arranged in

advance with Conrail and in accordance with Conrail and Federal Railroad Administration (FRA) requirements.

### **3.0 PROJECT APPROACH**

#### **3.1 Project Background**

(Detailed project background).

#### **3.2 Health and Safety**

Licensee personnel and its contractors may be required to complete Occupational Safety and Hazard Administration (OSHA) Hazwoper training in accordance with 29 CFR 1910, depending on the requirements of the planned work and OSHA regulations. FRA On-Track Worker Safety Training will be provided to workers as appropriate for their tasks and compliance with FRA regulations. Air monitoring, trench stabilization, and personnel protective equipment are all routine training completed by Licensee personnel.

Licensee requires that a Daily Work Permit be completed and a Job Safety Hazard Analysis be performed for each dig site. In addition, daily tailgate meetings shall be performed before the start of each work day to address specific health and safety concerns. Air monitoring will be completed, as determined to be necessary, by Licensee personnel to evaluate the potential for organic vapors, hydrogen sulfide, unacceptable oxygen levels, and explosive atmospheres in any boring location. The immediate area around a boring exhibiting and issue will be allowed to vent until acceptable levels are attained.

No excavation is approved under this agreement without written approval from Conrail. Trained and experienced equipment operators will be used to complete the work. Hand excavation or soft dig techniques will be used at a boring, as necessary, to minimize the potential for injury to site workers and/or damage to adjacent track structure, or adjacent utilities. Open borings that are not to be immediately closed will be surrounded with orange safety fence throughout the construction activities to alert vehicular or pedestrian along the ROW and to secure the area from third party trespassers at the end of each day. Flagman or watchman will be stationed where and when necessary as determined in coordination with Conrail.

#### **3.3 Soil Observation, Screening and Classification**

During the investigation activities on Conrail property, including recovery of materials from borings on Conrail property or otherwise related to Conrail property, recovered material will be field inspected and screened with a photoionization detector (PID). Field personnel will use visual observation, olfactory senses, and PID readings as indicators of the potential presence of soil/material that is not suitable for use as backfill, a release of petroleum or other constituents from licensee's utility/equipment, and/or third party

contamination. Examples of the initial indicators that may warrant further evaluation include the following:

### **Visual**

- An oily, tar-like or stained appearance or sheen on the surface of the material.
- Debris or waste in form of wooden pallets, bags of plastic, paper, metal, etc.
- An oily sheen or free product floating on water in the boring.
- The presence of drums or other waste containers.
- The presence of seeping petroleum, sludge or other contaminated aqueous material into the boring.

### **Olfactory**

- The soil or water may have a sulfur (rotten egg), petroleum or chemical odor.
- A petroleum odor coupled with visual confirmation of oil or stained or tar-like appearance. Soil or water with chemical odor may not exhibit visual signs of impacts.

### **PID Readings**

- A PID will be used, as needed, to field screen for volatile organic compound (VOC) vapors in soil, debris, waste and water encountered during the excavation.
- In conjunction with the visual and olfactory observations, PID readings will be evaluated to make determinations with regard to the proper management of recovered material and water generated during the investigative activities.

Based on field observations, soil screening results, and site conditions, to the extent reasonably possible, soil/material will be classified as one of the following:

- No environmental concerns – material suitable for backfill;
- No environmental concerns – material not suitable as backfill due to non-environmental issues, e.g. trash and debris;
- Potential environmental concerns – possibly related to Licensee construction, operation and/or maintenance;
- Potential third party environmental concerns – not related to Licensee.

The appropriate material, soil and/or water handling and management decision processes will be initiated as described in the following section.

## **3.4 Soil Handling and Management**

Regardless of the classification of the material, soil recovered from Conrail property to perform the work will be staged on plastic or in a drum with a lid at a designated area within the approved workspace and covered at the end of each work day. The storage location will be near the boring location, if practical, and if permitted by Conrail's Project Engineer. Based on the classification of the material, the following additional handling and

management procedures will be employed. Regardless of the classification that applies to particular materials, Licensee shall promptly make that determination and promptly move any such soils off-site or use it as backfill in accordance with this Section.

#### **3.4.1 No Environmental Concern, Suitable Backfill**

If field observations and screening indicate the stockpiled or drummed soil is not impacted and is of sufficient engineering quality to be used as backfill, it will be returned to the boring as backfill and compacted in the reverse order of excavation (last out, first in).

#### **3.4.2 No Environmental Concern, Unsuitable Backfill**

In the event that field observations and screening indicate that material has no environmental impacts, but contains debris or material unsuitable for backfill, the debris (i.e wood, plastic, paper, etc.) will be segregated into a separate pile, staged on and covered by plastic, and transported off site for disposal. The use drums for off-site transport will be field determined in conjunction with Conrail's Project Engineer, based on site access and the volume and nature of the material. No debris will remain along the Conrail ROW. The other stockpiled material may be used as backfill, as detailed in Section 3.4.1. Licensee will manage the disposal of, and pay all fees associated with, any material identified for off-site disposal consistent with this section.

#### **3.4.3 Potential Environmental Concerns, Licensee Related**

If field observations, screening, inspection and/or testing procedures indicate a current or historical release or discharge related to construction, operation and/or maintenance activities of Licensee, the material will be staged in drums or on plastic and covered by plastic and surrounded by hay bales pending classification for off-site recycling or disposal at a State-approved facility or a United States Environmental Protection Agency (USEPA)-approved facility, if the former is inapplicable. Disposal facilities used must be approved in advance by Conrail. Storage and transportation of materials beyond Conrail's property will be field determined in conjunction with Conrail's Project Engineer based on site access and the volume of the material.

Conrail will immediately be notified (856-231-6400) along with the State Environmental Reporting Hotline. Licensee will retain an appropriately licensed environmental professional to manage the environmental issues. With consideration of the safety guidelines outlined in Section 3.2 and standard work practices, the inspection and repair work will be completed, and the boring will be backfilled with certified clean fill (see Section 3.7) in order to protect utility integrity.

Licensee will confer with Conrail regarding the appropriate manner for proceeding with remediation of the area of concern (AOC) in order to achieve applicable remediation standards and to ensure that Conrail is not adversely impacted by the selected remedy. Licensee will manage the disposal of, and pay all fees associated with, any material identified for off-site disposal consistent with this section.

#### **3.4.4 Potential Environmental Concerns, Third Party Unknown**

If field observations and screening indicate residual petroleum constituents or other contaminants (i.e. chlorinated solvents, metals, etc.) are encountered that are unrelated to Licensee as determined by consensus of Licensee and Conrail, the material will initially be stored in drums or staged on plastic and covered by plastic and surrounded by hay bales. Conrail will be notified promptly to discuss a path forward for handling the material. Licensee will coordinate the work with Conrail and/or develop the data necessary to pursue a responsible third party. As an initial matter, waste material generated as a result of the work under this section will be managed by Licensee, including payment of transportation and disposal fees, for proper off-site disposal by Licensee. Licensee management, transportation and disposal of waste materials under this section shall not be construed as an admission of responsibility for said waste material or any associated AOC. Waste management under this section will be in accordance with Conrail's waste management program and use a Conrail approved disposal facility. Waste disposal will be coordinated through a designated Conrail representative, familiar with this program. The designated Conrail representative will provide disposal facility information and all other related documents to Licensee.

Notifications to the State Environmental Reporting Hotline will not be made under this section without approval from Conrail's Risk Management Department.

#### **3.4.5 Potential Environmental Concerns, Third Party Known**

For known, third party areas of contamination, the responsible party will be contacted in advance of the project activities, and pre-arranged conditions will be established for the proper handling and management of impacted materials in accordance with agreements entered into directly between Licensee and the responsible party.

The work will be completed in a manner to protect the Conrail property and ensure that impacted materials are properly handled and disposed in accordance with prevailing regulations and guidance. Waste management under this section will be in accordance with Conrail's waste management program. If Licensee is able to reach agreement with the known third-party such that the known third-party assumes responsibility for the management of the impacted materials, including payment of all fees, the impacted materials shall be disposed of at a State-approved facility or a USEPA-approved facility, if the former is inapplicable. If Licensee is unable to reach agreement with the known third-party: (a) waste material generated as a result of the work under this section will be managed by \_\_\_\_\_ (licensee or licensee representative), including payment of transportation and disposal fees, for proper off-site disposal by \_\_\_\_\_ (company name); (b) waste disposal will be coordinated through a designated Conrail representative familiar with this program; and (c) the impacted materials will be disposed of at a Conrail-approved facility. Licensee's management, transportation and disposal of waste materials under this section shall not

be construed as an admission of responsibility for said waste material or any associated AOC.

### **3.5 Construction Dewatering/Water Management**

Dewatering of groundwater infiltrating into the boring(s) is not anticipated for this project. Dewatering by Licensee will in all cases comply with applicable State or municipality permitting requirements and may include surface discharge or discharge to groundwater consistent with such requirements. Licensee will secure all permits and assume responsibility for compliance. If field screening and observations indicate the water is suitable for discharge, it will be conveyed away from the borings and discharged through a silt bag. The discharge area will include hay bales for energy dissipation. Consistent with BMPs, the water will be discharged along the easement in the Conrail ROW but will not be discharged onto the Conrail roadbed or track structure. Licensee will manage the discharged groundwater to prevent direct runoff into a water body or residential property.

If a sheen or petroleum product is observed on the water, or the water is otherwise impacted or has been in contact with impacted media, Licensee will drum the water as necessary to prevent discharge to the ground surface. The water recovered from the boring(s) will be disposed at a permitted recycling facility. As an initial matter, Licensee will be responsible for management and fees associated with water treatment and/ or disposal. Manifesting for off-site disposal of dewatering materials and the selection of the off-site disposal facility will be in accordance with the applicable provisions of Sections 3.4.3, 3.4.4 and 3.4.5 hereof.

Notifications to the State Environmental Reporting Hotline will not be made under this section without approval from Conrail's Risk Management Department

### **3.6 Conrail and Regulatory Notifications**

In the event that environmental concerns are identified during the project activities, Licensee will immediately contact Conrail (856-231-6400) to confer on an appropriate course of action and path forward prior to notification to the State Environmental Reporting Hotline.

If through field screening and inspection, it appears that environmental concerns are a result of a release of petroleum or other materials to the environment by Licensee, or any discharge of hazardous substances related to the construction, operation and/or maintenance activities of Licensee, the appropriate State Environmental Reporting Hotline will be notified immediately.

### **3.7 Site Restoration and Backfill Requirements**



Based on the field observations and screening, cuttings from the borings and/or clean certified fill material will be placed in the excavation and properly compacted to grade to avoid creating a walking hazard. In areas critical to the stability of Conrail structures backfill and compaction will be in accordance with Conrail's CE-8 Specifications (Section 5.1.2) with the exception that the existing excavated material may be used for fill in lieu of crushed stone. Stone or topsoil will be used to restore Conrail property to the pre-work conditions. Areas outside Conrail property or the Theoretical Railroad Embankment Line will be backfilled and compacted as to prevent settlement or erosion to Conrail property and as appropriate for good work practices. If appropriate, seed and straw and/or seed mats will be placed over the work area to minimize erosion. Soil erosion and sediment control structures (i.e., silt fence) will be temporarily installed (and subsequently removed), as necessary, to minimize soil erosion and stabilize the work zone during the restoration period.

A clean fill certification (See e.g. Appendix A) will be obtained from the supplier for imported fill material to Conrail property other than granular fill rock or sand. Decontaminated or recycled soil will not be used on Conrail property.

### **3.8 Disposal**

Licensee will, at its own cost, properly transport and dispose/recycle trash, debris, material unsuitable for re-use as fill or impacted soils or waste generated through the work on Conrail property in accordance with the applicable provisions of this Plan. Properly licensed and permitted waste haulers will be used. All federal, state, and local rules and regulations will be adhered to including county solid waste flow control rules. Licensee will be responsible for obtaining all waste acceptance and approval for disposal, and will be the generator of record for all Licensee-derived waste. Licensee will coordinate for the disposal of these materials, in accordance with Conrail's waste management program, through a designated Conrail representative familiar with that program. To the extent Conrail has an approved list of disposal facilities, it shall provide such list fourteen (14) days in advance of the commencement of excavation work.

In addition, Licensee will be responsible for performing the required waste sampling, and will obtain all the required paperwork for shipment of waste material including the bill-of-lading or manifest, except as provided for above. Licensee will provide Conrail copies of all waste characterization data and shipping records upon request.

### **3.9 State Permitting Authority**

There are no additional environmental/Land Use permits required for the work.

## FIGURES

**(Licensee's Name)**

**Figure 1**

**Overview of Dig Locations**

**(Licensee's Name)**

**Figure 2**

**Detail of Dig Locations**

**APPENDIX A**

**CLEAN FILL CERTIFICATION BOILERPLATE**

CERTIFICATE OF CLEAN FILL

This certificate is being provided to document that the quality of the fill being used to backfill and/or cap the site meets applicable standards, does not contain extraneous debris or solid waste, does not contain free liquids, and is otherwise in compliance with State regulations for clean fill. The signatory below further states that the fill provided does not consist of decontaminated or recycled material. The following information is related to the material being provided for the project in question.

Name of Material Supplier: \_\_\_\_\_

Relationship to the Source of the Fill: \_\_\_\_\_

Location Where Fill was Obtained:

Street: \_\_\_\_\_

Town: \_\_\_\_\_

State: \_\_\_\_\_

Lot: \_\_\_\_\_

Block: \_\_\_\_\_

County: \_\_\_\_\_

Brief History of the Source of the Fill:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

“To the best of my knowledge and belief, the fill provided for this project is not contaminated pursuant to any applicable remediation standards.”

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

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