

Attachment J
Soil and Groundwater Management Plans for
Armagh and Entriken Compressor Stations
in support of Texas Eastern's
Request for State Water Quality Certification

SOIL AND GROUNDWATER MANAGEMENT PLAN

APPALACHIA TO MARKET II AND ARMAGH AND ENTRIKEN REPLACEMENT PROJECTS

ARMAGH COMPRESSOR STATION MODIFICATIONS

Prepared on Behalf of



890 Winter Street, Suite 320
Waltham, Massachusetts 02451
www.enbridge.com

Prepared by



200 American Metro Blvd, Suite 113
Trenton, NJ 08619

June 2022

TABLE OF CONTENTS

SOIL AND GROUNDWATER MANAGEMENT PLAN

1	Introduction	1
2	Location and Description of Project Facilities	2
3	History of Soil and Groundwater Contamination	5
4	Managing PCB-contaminated Soil	5
5	Managing all Other Soils On-Site	7
6	Transportation and Disposal	8
6.1	Off-Site Transportation and Disposal Requirements of Contaminated Soil	8
7	Groundwater Management Procedures	8
8	Hydro-vac Materials Management Procedures	9
9	Soil and Groundwater Sampling Protocol for Off-Site Disposal	9

LIST OF FIGURES

FIGURE 1: Project Overview Map.....	5
-------------------------------------	---

ATTACHMENT A – SITE PLAN SHOWING OCA AND PREVIOUSLY REMEDIATED AREAS

ACRONYMS AND ABBREVIATIONS

CO&A	Consent Order and Adjudication
FERC	Federal Energy Regulatory Commission
hp	horsepower
Mil	millimeter
NPDES	National Pollutant Discharge Elimination System
OCA	Operational Consideration Area
PADEP	Pennsylvania Department of Environmental Protection
PCBs	polychlorinated biphenyls
Plan	Soil and Groundwater Management Plan
Project Station	Appalachia to Market II and Armagh and Entriken HP Replacement Projects
Texas Eastern	Armagh Compressor Station
U.S.	Texas Eastern Transmission, LP
USEPA	United States
	U.S. Environmental Protection Agency

SOIL AND GROUNDWATER MANAGEMENT PLAN

1 Introduction

Pursuant to Sections 7(b) and 7(c) of the Natural Gas Act and Part 157, Subpart A of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) regulations, Texas Eastern Transmission, LP (“Texas Eastern”) is submitting an abbreviated application for Commission authorization to abandon certain facilities and to construct and operate the Appalachia to Market II Project (“A2M II Project”) and Armagh and Entriken HP Replacement Projects (“Replacement Projects”) in Pennsylvania. The A2M II Project and the Replacement Projects are comprised of overlapping facilities and therefore are included within a single application for certificates of public convenience and necessity from the Commission and are referred to collectively as the “Project” throughout this Environmental Report. The Replacement Projects are designed to improve reliability on the Texas Eastern system by replacing a 1950’s era gas-driven compressor unit with an electric-motor driven (“EMD”) compressor unit at two compressor stations. The A2M II Project is designed to provide up to 55,000 dekatherms per day (“Dth/d”) of additional firm natural gas transportation from the Appalachia supply basin in Southwest Pennsylvania to existing local distribution company (“LDC”) customers in New Jersey (PSEG Power LLC and Elizabethtown Gas). The facilities required for the Project are located primarily within Texas Eastern’s existing right-of-way (“ROW”) and at existing compressor stations owned and operated by Texas Eastern. The Project involves the following system modifications:

- Line 28 Pipeline Loop, located in Lebanon County, Pennsylvania: Install approximately 2 miles of 36-inch diameter looping pipeline generally adjacent and to the south of Texas Eastern’s existing Lines 12, 19, and 27 pipelines (“Line 28 Loop”) beginning at the terminus of the existing Line 28. At the western terminus of the Line 28 Loop, an existing receiver and valve site will be abandoned and removed (“Removal of Existing Receiver Site”). At the eastern terminus of the Line 28 Loop, a new receiver, valve, and crossover site will be constructed (“Proposed Receiver Site”). New permanent ROW will be required for the Line 28 Loop and the Proposed Receiver Site.
- Armagh Compressor Station Modifications, located in Indiana County, Pennsylvania: Install a 27,000 horsepower (“hp”) EMD compressor unit, gas coolers, filter separators, source control facilities, and associated buildings and piping at an existing compressor station to abandon and replace an existing 22,000 hp General Electric Company (“GE”) Frame 5 gas-driven turbine compressor unit. Additionally, a new electric substation will be constructed to provide power to the new EMD compressor. The proposed Armagh Compressor Station Modifications will occur within the operational footprint of the existing facility site and will increase the station’s total horsepower to 27,000 hp, which is an increase of 5,000 hp.
- Entriken Compressor Station Modifications, located in Huntingdon County, Pennsylvania: Install a 24,000 hp EMD compressor unit, gas coolers, filter separators, and associated buildings and piping at an existing compressor station to abandon and replace an existing 22,000 hp GE Frame 5 gas-driven turbine compressor unit. Additionally, a new electric substation will be constructed to provide power to the new EMD compressor unit. The proposed Entriken Compressor Station Modifications

SOIL AND GROUNDWATER MANAGEMENT PLAN

will occur primarily within the operational footprint of the existing facility site and will increase the station's total horsepower to 24,000 hp, which is an increase of 2,000 hp.

Texas Eastern anticipates mobilization and construction of the Project to begin January 31, 2024; however, pending receipt of applicable authorizations, Texas Eastern may accelerate this construction schedule. The construction schedule is based on the need to meet an in-service date of November 1, 2025.

Any contaminated soil or groundwater encountered during construction will be managed in accordance with this Soil and Groundwater Management Plan ("Plan") and applicable laws and regulations. This Plan is specific to activities related to the Armagh Compressor Station Modifications; herein the "Project" and "Site" are specific to the Armagh Compressor Station location.

2 Location and Description of Project Facilities

The Project Site is located in West Wheatfield Township, Indiana County, Pennsylvania, approximately one mile south of Highway 22 on Horse Thief Road (refer to Figure 1). The station is located on an approximately 89.34-acre property owned by Texas Eastern and lies within a fenced area encompassing approximately 26.75 acres. The Station was placed into service in 1956. The currently active compressor station facilities at the Site are located on an open hillside, and the remainder of the site is primarily heavily forested, rocky, and hilly terrain. The land surrounding the Site is sparsely populated and consists of steep, heavily wooded hills, some grazing land, and several single-family dwellings. The Site is situated within the Allegheny Mountain section of the Appalachian Plateau physiographic province.

All of the existing permanent facilities at the Station are located within the fence line on Horse Thief Road. The existing facilities include buildings that house a 22,000-hp GE Frame 5 compressor unit placed in service in 1957, a 18,100-hp Solar Titan 130 compressor unit placed in service in 2014, an emergency generator, related appurtenant facilities, an office building, and pipeline infrastructure.

The proposed facility changes at the Armagh Compressor Station consist of:

- Installation of one 27,000 hp EMD compressor unit;
- Abandonment of one 22,000-hp GE Frame 5 compressor unit and the associated auxiliary piping and equipment;
- Upgrade and addition of station and emergency shutdown ("ESD") valve actuators;
- Re-use of air-cooled heat exchangers to service Titan 130 compressor unit (2T);
- Installation of 8 bays of new air-cooled heat exchangers to service EMD compressor unit;
- Assessment for the need of one new emergency generator;
- Installation of two new filter/separators;
- Installation of new ESD skid w/canopy;

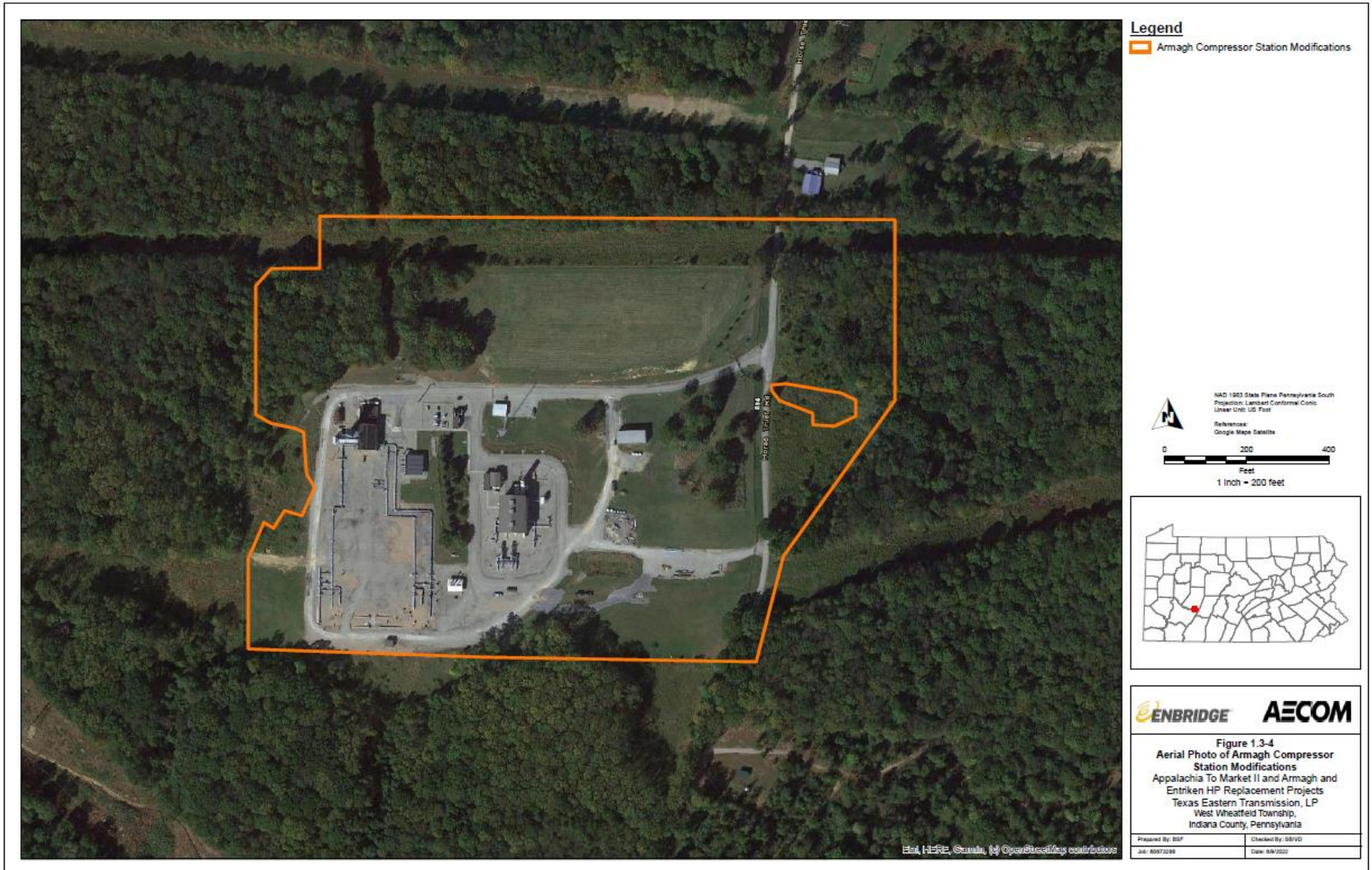
SOIL AND GROUNDWATER MANAGEMENT PLAN

- Installation of new air compressor skid;
- Installation of new domestic gas skid;
- New compressor, office, auxiliary, and electrical and control buildings;
- New variable frequency drive (“VFD”) building and VFD cooling;
- Source control additions;
- Station piping modifications;
- Installation of other appurtenant facilities; and
- New electrical substation.

All workspace is located on property owned by Texas Eastern. No additional land outside of the Texas Eastern property will be acquired or maintained to construct and operate the Project facilities.

Activities associated with the Armagh Compressor Station Modifications will include the abandonment of existing facilities and the construction of new, replacement, or relocated facilities to achieve the overall Project purpose.

SOIL AND GROUNDWATER MANAGEMENT PLAN



Legend
 Armagh Compressor Station Modifications

NAD 1983 State Plane Pennsylvania South
 Projection: Lambert Conformal Conic
 Linear Unit: US Feet
 Reference:
 Google Maps Satellite

1 Inch = 200 feet



AECOM

Figure 1.3-4
Aerial Photo of Armagh Compressor Station Modifications
 Appalachia To Market II and Armagh and
 Entriken HP Replacement Projects
 Texas Eastern Transmission, LP
 West Wheatfield Township,
 Indiana County, Pennsylvania

Prepared By: BDP	Checked By: SBVD
JOB: 00672088	Date: 04/2022

Est. HERE, Google, N OpenStreetMap contributors

SOIL AND GROUNDWATER MANAGEMENT PLAN

3 History of Soil and Groundwater Contamination

Texas Eastern previously conducted site characterization and remediation activities at the Armagh Compressor Station as part of the requirements of a Consent Order and Adjudication (“CO&A”) between Texas Eastern and the Pennsylvania Department of Environmental Resources (presently the Pennsylvania Department of Environmental Protection [“PADEP”]) and the federal consent decree (“Consent Decree”) between Texas Eastern and the United States Environmental Protection Agency (“USEPA”). Previously conducted remedial activities at the Armagh Compressor Station included remediation of polychlorinated biphenyls (“PCBs”) in accordance with the *“Site Remediation Work Plan for the Armagh Compressor Station, Indiana County, Pennsylvania” (WESTON, August 1996)*, referred to as the Site Remediation Work Plan.

Per these agreements, Texas Eastern has been conducting remediation activities since 1993. With two (2) exceptions, all identified PCB contamination areas have been included in the remediation activities and are in compliance with the CO&A and Consent Decree. However, the two (2) outstanding PCB contamination areas, which have been identified as Operational Consideration Areas (“OCA”), were located too close to existing infrastructures to safely conduct remediation activities under the CO&A and Consent Decree. In a small number of instances, soil remediation activities were terminated due to the presence of bedrock that was not able to be excavated with mechanical equipment. Competent bedrock that cannot be excavated constitutes a “limiting condition” for remediation, as defined in Section V.H.1 of Appendix A of the Consent Decree, which allows for the cessation of remediation activities in such circumstances. Bedrock limitation areas are identified on the figure included as Attachment A.

4 Managing PCB-contaminated Soil

As discussed in Section 3, Texas Eastern completed site remediation of PCB-impacted areas within the compressor station property under a Consent Decree with the EPA, with two (2) OCA exceptions. The Site Plan in Attachment A shows the OCA areas and the remediated areas. The proposed project activities at the Armagh site will allow access to the OCA areas identified as Areas 6A and 6B. All soils excavated from OCA Areas 6A and 6B shall be placed into lined roll-off containers for waste classification sampling and disposal. Texas Eastern will arrange for sampling on an expedited basis (10 business day turn-around should be anticipated). After the soils have been fully classified, off-site disposal will be coordinated by Texas Eastern and the Construction Contractor.

With respect to the remediated areas, the PADEP No Further Action letter, issued in response to the closure of remedial actions pertaining to soils onsite, does not specify any special handling procedures in those areas. As a result of the previous remediation efforts undertaken at these locations, Texas Eastern does not anticipate encountering levels of contamination that would cause concern to workers health and safety. Nevertheless, Texas Eastern and its Construction Contractor will adhere to its standard operating procedures for handling excess soil material and ensuring workers health and safety.

SOIL AND GROUNDWATER MANAGEMENT PLAN

The preferred disposition of excavated materials is to place the material back in the excavation where it was generated. However, some excavated materials may not be suitable for use as backfill/engineering purposes within the excavation. In the event that excess soils are generated, these soils will be managed for disposal in conformance with applicable federal, state and local regulations. The excavated soils will be managed based on the following procedures.

- Initial classification – Initial evaluation will consist of field screening by Texas Eastern to determine whether or not the material is suitable for on-site reuse for engineering purposes.
- Soil to be reused – Material deemed suitable for reuse based on the initial field screenings is to be sidecast adjacent to the excavation or stockpiled and segregated within the construction workspace in designated areas on Texas Eastern property and placed back in the same excavation after construction. The first 2 feet of soil must be segregated from the rest of the excavated material. Sidecast soil from the remediated areas will be returned to the same remediated areas where they were generated, with the top 2 feet of segregated soil replaced last.
- Soil to be disposed - Material deemed not suitable for reuse on-site based on the initial field screenings will be evaluated via in-situ sampling for waste classification. Sampled material will be pre-characterized and profiled for off-site disposal in accordance with EPA and PADEP requirements to allow for immediate transportation offsite when excavated. Any excess soil material that is not represented in the pre-characterized material will be stockpiled for waste classification and disposal in accordance with EPA and PADEP requirements. Texas Eastern will arrange for sampling on an expedited basis (10 business day turn-around should be anticipated). After the soils have been fully classified for disposal, off-site disposal will be coordinated by Texas Eastern and the Construction Contractor in accordance with the procedures outlined in Section 6 below.
- Additional stabilization - As an added measure, soil stockpiles will be placed on a polyethylene liner (minimum 20-millimeter [“mil”] thick) and covered with a polyethylene liner (minimum 6-mil thick) overlapped and weighted to form a continuous waterproof barrier over the material prior to inclement weather and at the end of each work day. The cover will be maintained throughout the stockpile period to control water entering the stockpiled materials and to limit dust generation. If dust suppression becomes necessary during the soil stockpiling, exposed soils will be wetted by Texas Eastern’s Construction Contractor.
- Stockpile areas - Designated, temporary stockpile storage areas have been identified on the approved environmental permit drawings to limit unauthorized entry and to limit contact of site workers with stockpiled materials. Each designated, temporary stockpile storage area will be visibly marked with appropriate signs warning of potential hazards.
- Stockpiled materials - Will be placed within the designated, temporary stockpile storage areas, graded by the Construction Contractor. Straw bale berms/silt fencing will be placed around the perimeter of the area. Straw bales will be used as needed near catch basins, surface waters and other discharge points. Stockpile slopes will be no steeper than 1 horizontal to 1 vertical (1:1).

SOIL AND GROUNDWATER MANAGEMENT PLAN

- Inspection - Stockpiles will be inspected at a minimum once each week and after every storm event. Inspection results will be recorded in a logbook and maintained at the site and available for inspection by the PADEP.
- Equipment decontamination - Excavation equipment that work within these areas must be cleaned prior to excavating in other areas of the site. Equipment can travel between previously remediated areas only after visible soil is removed from the equipment, including tracks/tires. Following decontamination procedures, equipment must be wipe sampled, and will be cleared for exiting the property after the results return a PCB concentration of less than 10 micrograms/100 sq cm. Equipment will be idle on site from the time of sampling until the results are returned.
- Cleaning procedures will be implemented before moving to other previously remediated areas that require excavation. After soil work is completed, the equipment must be decontaminated.

5 Managing all Other Soils On-Site

As a result of the remediation efforts undertaken at the Armagh Compressor Station, Texas Eastern does not anticipate encountering areas of contaminated soil outside of the OCAs and previously remediated areas. Soil excavated outside of the OCAs and previously remediated areas that is deemed not suitable for reuse on-site based on the initial field screenings will be evaluated via in-situ sampling for waste classification. Sampled material will be pre-characterized and profiled for off-site disposal in accordance with EPA and PADEP requirements to allow for immediate transportation offsite when excavated. Any excess soil material that is not represented in the pre-characterized material will be stockpiled for waste classification and transported to a duly regulated disposal facility in accordance with EPA and PADEP requirements. Texas Eastern will arrange for sampling on an expedited basis (10 business day turn-around should be anticipated). After the soils have been fully classified for disposal, off-site disposal will be coordinated by Texas Eastern and the Construction Contractor in accordance with the procedures outlined in Section 6 below.

If the material is suitable for re-use on site, soil excavated outside the previously remediated areas may be sidecast adjacent to the excavation or stockpiled and segregated within the construction workspace in designated areas on Texas Eastern property. These soils must be kept separate from the soils excavated within the previously remediated areas. Soils generated outside previously remediated areas can be reused on-site in accordance with the approved environmental permit and grading plans. Stockpiled soils must be stabilized in accordance with the Project Soil Erosion and Sediment Control Plan.

Soils generated within previously remediated areas can be placed back in the area where it was excavated pending an initial evaluation consisting of field screening by Texas Eastern to determine whether or not the material is suitable for on-site reuse. Soils within these areas should be returned to the previously remediated area in which it was generated and shall not be utilized as a backfill material outside that area.

SOIL AND GROUNDWATER MANAGEMENT PLAN

6 Transportation and Disposal

For any material profiled and loaded for transport to a duly regulated disposal facility, a Bill of Lading or Hazardous Waste Manifest will be signed by an authorized Texas Eastern representative and used to ship soil from the site to the selected facility. Any material that is stockpiled for disposal shall be maintained by the Construction Contractor until all waste classification, profiling, and approvals are completed.

Each excavation will be backfilled appropriately with excavated material on site from non-remediated areas or with certified clean fill material that meets the PADEP requirements.

6.1 Off-Site Transportation and Disposal Requirements of Contaminated Soil

Contaminated material from excavation activities will be managed by Texas Eastern's Waste Contractor in conformance with applicable Federal and state regulations.

All regulated soil, hazardous material, or hazardous waste transported off-site will be loaded by the Construction Contractor into properly licensed and permitted vehicles provided by Texas Eastern's Waste Contractor and transported directly to disposal or recycling facility(ies) approved and selected by Texas Eastern.

7 Groundwater Management Procedures

All water pumped from open excavation areas and decanted hydro-vac water will be pumped through a water filtration treatment system to remove potential contaminants. The water will be pumped directly into fractionation (frac) tanks, prior to being treated. If sediment infiltration creates continuous blockages resulting in increased bag filter changeouts during operations, a flocculent will be utilized within the frac/weir tank. The purpose of flocculent usage is to reduce the turbidity of the water by binding the suspended particles in the liquid allowing them to settle to the bottom of the tank reducing sediment deposition within the bag filters. After passing through the frac/weir tank, the water will be treated and discharged to the ground surface in compliance with the required National Pollutant Discharge Elimination System permit as well as the temporary discharge permit to be issued by PADEP.

Texas Eastern will collect a weekly pre-treatment water sample and post-treatment water sample to verify compliance with temporary discharge permit conditions. Prior to initial discharge, a post-treatment sample will be analyzed for PCB concentrations to verify proper treatment and compliance. If the post-treatment water sample exceeds temporary discharge permit thresholds, the treatment system will be serviced (i.e., change filters, replace carbon media, etc.) accordingly and the water will be recirculated through the treatment system to meet compliance. If the treated water does not meet temporary discharge permit standards, the water will be transported to a licensed off-site disposal facility. If results determine the processed water to exceed the identified thresholds established in the temporary discharge permit, the Company will arrange for the processed water to be transported for a disposal offsite at a duly regulated facility. The total volume of water to be managed and treated onsite will depend on the water

SOIL AND GROUNDWATER MANAGEMENT PLAN

table level at the time of construction, the amount of rainfall precipitation as well as depths/widths of excavations located at the site.

Texas Eastern will use storage tanks to temporarily store the water for hydrostatic testing and continuously reuse the water for all tests. At the completion of hydrostatic testing, the water will be discharged onsite under an existing PADEP General Permit for Discharges from Hydrostatic Testing of Tanks and Pipelines (PAG-10) permit coverage. Hydrostatic test water samples will be collected at the beginning of water discharge as well as at the end of discharge operation to verify compliance with PAG-10 permit conditions.

8 Hydro-vac Materials Management Procedures

All materials generated during hydro-vac operations will be placed into a fully lined hydro-vac slurry pit to allow for water decantation. Decanted hydro-vac water will be treated, sampled, and discharged/disposed as described in Section 7.

Hydro-vac soil material generated within previously remediated areas will be segregated from hydrovac materials generated outside of previously remediated areas. Once the material is suitable for backfill within each respective excavation area, it will be returned to the specific excavation it was removed from (i.e., previously remediated areas returned to previously remediated areas and areas outside of previously remediated areas returned to areas outside of remediated areas).

9 Soil and Groundwater Sampling Protocol for Off-Site Disposal

Texas Eastern will collect pre-construction in-situ soil samples for waste characterization for proper profiling for disposal off-site at an approved disposal facility. If needed, Texas Eastern will collect additional waste characterization samples of any stockpiled soils, if the material is not already represented in the pre-characterized material, for proper profiling for disposal off-site at an approved disposal facility. If treated water is not suitable for discharge, Texas Eastern will collect samples for waste classification and disposal. The soil and water samples collected will be submitted to a PADEP-certified laboratory to be tested on an expedited basis (10 business day turn-around should be anticipated).

CUI/CEII
Contains Critical Energy Infrastructure Information - Do Not Release

ATTACHMENT A
SITE PLAN SHOWING OCA AND PREVIOUSLY REMEDIATED AREAS

Filed Under Separate Cover Due to Confidential and Sensitive Information

Refer to Attachment D.3

SOIL AND GROUNDWATER MANAGEMENT PLAN

APPALACHIA TO MARKET II AND ARMAGH AND ENTRIKEN REPLACEMENT PROJECTS

ENTRIKEN COMPRESSOR STATION MODIFICATIONS

Prepared on Behalf of



890 Winter Street, Suite 320
Waltham, Massachusetts 02451
www.enbridge.com

Prepared by



200 American Metro Blvd, Suite 113
Trenton, NJ 08619

June 2022

TABLE OF CONTENTS

SOIL AND GROUNDWATER MANAGEMENT PLAN

1	Introduction	1
2	Location and Description of Project Facilities	2
3	History of Soil and Groundwater Contamination	5
4	Managing PCB-contaminated Soil	5
5	Managing all Other Soils On-Site	7
6	Transportation and Disposal	8
6.1	Off-Site Transportation and Disposal Requirements of Contaminated Soil	8
7	Groundwater Management Procedures	8
8	Hydro-vac Materials Management Procedures	9
9	Soil and Groundwater Sampling Protocol for Off-Site Disposal	9

LIST OF FIGURES

FIGURE 1: Project Overview Map.....	5
-------------------------------------	---

ATTACHMENT A – SITE PLAN SHOWING OCA AND PREVIOUSLY REMEDIATED AREAS

ACRONYMS AND ABBREVIATIONS

CO&A	Consent Order and Adjudication
FERC	Federal Energy Regulatory Commission
hp	horsepower
Mil	millimeter
NPDES	National Pollutant Discharge Elimination System
OCA	Operational Consideration Area
PADEP	Pennsylvania Department of Environmental Protection
PCBs	polychlorinated biphenyls
Plan	Soil and Groundwater Management Plan
Project Station	Appalachia to Market II and Armagh and Entriiken HP Replacement Projects
Texas Eastern	Entriiken Compressor Station
U.S.	Texas Eastern Transmission, LP
USEPA	United States
	U.S. Environmental Protection Agency

SOIL AND GROUNDWATER MANAGEMENT PLAN

1 Introduction

Pursuant to Sections 7(b) and 7(c) of the Natural Gas Act and Part 157, Subpart A of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) regulations, Texas Eastern Transmission, LP (“Texas Eastern”) is submitting an abbreviated application for Commission authorization to abandon certain facilities and to construct and operate the Appalachia to Market II Project (“A2M II Project”) and Armagh and Enriken HP Replacement Projects (“Replacement Projects”) in Pennsylvania. The A2M II Project and the Replacement Projects are comprised of overlapping facilities and therefore are included within a single application for certificates of public convenience and necessity from the Commission and are referred to collectively as the “Project” throughout this Environmental Report. The Replacement Projects are designed to improve reliability on the Texas Eastern system by replacing a 1950’s era gas-driven compressor unit with an electric-motor driven (“EMD”) compressor unit at two compressor stations. The A2M II Project is designed to provide up to 55,000 dekatherms per day (“Dth/d”) of additional firm natural gas transportation from the Appalachia supply basin in Southwest Pennsylvania to existing local distribution company (“LDC”) customers in New Jersey (PSEG Power LLC and Elizabethtown Gas). The facilities required for the Project are located primarily within Texas Eastern’s existing right-of-way (“ROW”) and at existing compressor stations owned and operated by Texas Eastern. The Project involves the following system modifications:

- Line 28 Pipeline Loop, located in Lebanon County, Pennsylvania: Install approximately 2 miles of 36-inch diameter looping pipeline generally adjacent and to the south of Texas Eastern’s existing Lines 12, 19, and 27 pipelines (“Line 28 Loop”) beginning at the terminus of the existing Line 28. At the western terminus of the Line 28 Loop, an existing receiver and valve site will be abandoned and removed (“Removal of Existing Receiver Site”). At the eastern terminus of the Line 28 Loop, a new receiver, valve, and crossover site will be constructed (“Proposed Receiver Site”). New permanent ROW will be required for the Line 28 Loop and the Proposed Receiver Site.
- Armagh Compressor Station Modifications, located in Indiana County, Pennsylvania: Install a 27,000 horsepower (“hp”) EMD compressor unit, gas coolers, filter separators, source control facilities, and associated buildings and piping at an existing compressor station to abandon and replace an existing 22,000 hp General Electric Company (“GE”) Frame 5 gas-driven turbine compressor unit. Additionally, a new electric substation will be constructed to provide power to the new EMD compressor. The proposed Armagh Compressor Station Modifications will occur within the operational footprint of the existing facility site and will increase the station’s total horsepower to 27,000 hp, which is an increase of 5,000 hp.
- Enriken Compressor Station Modifications, located in Huntingdon County, Pennsylvania: Install a 24,000 hp EMD compressor unit, gas coolers, filter separators, and associated buildings and piping at an existing compressor station to abandon and replace an existing 22,000 hp GE Frame 5 gas-driven turbine compressor unit. Additionally, a new electric substation will be constructed to provide power to the new EMD compressor unit. The proposed Enriken Compressor Station Modifications

SOIL AND GROUNDWATER MANAGEMENT PLAN

will occur primarily within the operational footprint of the existing facility site and will increase the station's total horsepower to 24,000 hp, which is an increase of 2,000 hp.

Texas Eastern anticipates mobilization and construction of the Project to begin January 31, 2024; however, pending receipt of applicable authorizations, Texas Eastern may accelerate this construction schedule. The construction schedule is based on the need to meet an in-service date of November 1, 2025.

Any contaminated soil or groundwater encountered during construction will be managed in accordance with this Soil and Groundwater Management Plan ("Plan") and applicable laws and regulations. This Plan is specific to activities related to the EntriKen Compressor Station Modifications; herein the "Project" and "Site" are specific to the EntriKen Compressor Station location.

2 Location and Description of Project Facilities

The Project Site is located in Todd Township, Huntingdon County, Pennsylvania along State Road 3031 (refer to Figure 1). The station is located on an approximately 55-acre property owned by Texas Eastern and lies within a fenced area encompassing approximately 18 acres. The Station was placed into service in 1956. The currently active compressor station facilities at the Site are located on an open hillside that slopes gently to the north-northwest. The land surrounding the Site is sparsely populated and consists of forests, small farms, and residences. The Site is situated within the Appalachia Mountain section of the Ridge and Valley physiographic province.

The existing permanent facilities are located entirely within the fence line of the existing station located west of Logging Road 31118. The existing facilities include buildings that house a 22,000-hp GE Frame 5 compressor unit placed in service in 1957, a 26,000-hp Solar Titan 250 compressor unit placed in service in 2014, an emergency generator, related appurtenant facilities, an office building, and pipeline infrastructure.

The proposed facility changes at the EntriKen Compressor Station consist of:

- Installation of one 24,000 hp EMD compressor unit;
- Abandonment of one 22,000-hp GE Frame 5 compressor unit and the associated auxiliary piping and equipment;
- Upgrade and addition of station and ESD valve actuators;
- Re-use of air-cooled heat exchangers to service Titan 250 Compressor unit (2T);
- Installation of 8 bays of new air-cooled heat exchangers to service EMD Compressor unit;
- Assessment for the need of one new emergency generator;
- Installation of two new filter/separators;

SOIL AND GROUNDWATER MANAGEMENT PLAN

- Installation of new ESD skid w/canopy;
- Installation of new air compressor skid;
- Installation of new domestic gas skid;
- New compressor, office, auxiliary, and electrical and control buildings;
- New VFD building and VFD cooling;
- Source control additions;
- Station piping modifications;
- Installation of other appurtenant facilities; and
- New electrical substation.

All workspace is located on property owned by Texas Eastern. No additional land outside of the Texas Eastern property will be acquired or maintained to construct and operate the Project facilities.

Activities associated with the Entriiken Compressor Station Modifications will include the abandonment of existing facilities and the construction of new, replacement, or relocated facilities to achieve the overall Project purpose.

SOIL AND GROUNDWATER MANAGEMENT PLAN



SOIL AND GROUNDWATER MANAGEMENT PLAN

3 History of Soil and Groundwater Contamination

Texas Eastern previously conducted site characterization and remediation activities at the Enriken Compressor Station as part of the requirements of a Consent Order and Adjudication (“CO&A”) between Texas Eastern and the Pennsylvania Department of Environmental Resources (presently the Pennsylvania Department of Environmental Protection [“PADEP”]) and the federal consent decree (“Consent Decree”) between Texas Eastern and the United States Environmental Protection Agency (“USEPA”). Previously conducted remedial activities at the Enriken Compressor Station included remediation of polychlorinated biphenyls (“PCBs”) in accordance with the *“Site Remediation Work Plan for the Enriken Compressor Station, Huntingdon County, Pennsylvania” (WESTON, November 1994)*, referred to as the Site Remediation Work Plan.

Per these agreements, Texas Eastern has been conducting remediation activities since 1995. With five (5) exceptions, all identified PCB contamination areas have been included in the remediation activities and are in compliance with the CO&A and Consent Decree. However, the five (5) outstanding PCB contamination areas, which have been identified as an Operational Consideration Area (“OCA”), were located too close to existing infrastructures to safely conduct remediation activities under the CO&A and Consent Decree. In a small number of instances, soil remediation activities were terminated due to the presence of bedrock that was not able to be excavated with mechanical equipment. Competent bedrock that cannot be excavated constitutes a “limiting condition” for remediation, as defined in Section V.H.1 of Appendix A of the Consent Decree, which allows for the cessation of remediation activities in such circumstances. Bedrock limitation areas are identified on the figure included as Attachment A.

4 Managing PCB-contaminated Soil

As discussed in Section 3, Texas Eastern completed site remediation of PCB-impacted areas within the compressor station property under a Consent Decree with the EPA, with five (5) OCA exceptions. The Site Plan in Attachment A shows the OCA areas and the remediated areas. It should be noted that some of the OCAs are situated close together and are grouped into a larger area, and are thus represented as only two hatched areas on the Site Plan in Attachment A. The proposed project activities at the Enriken site will allow access to OCA areas identified as Areas 13 and 15. All soils excavated from OCA Areas 13 and 15 shall be placed into lined roll-off containers for waste classification sampling and disposal. Texas Eastern will arrange for sampling on an expedited basis (10 business day turn-around should be anticipated). After the soils have been fully classified, off-site disposal will be coordinated by Texas Eastern and the Construction Contractor. The remaining three (3) OCAs, PA-ENT-01, PA-ENT-02 and Area 16, are not designated for additional remediation activities during the proposed construction because a limiting condition (bedrock) was encountered at those areas during previous remediation events.

With respect to the remediated areas, the PADEP No Further Action letter, issued in response to the closure of remedial actions pertaining to soils onsite, does not specify any special handling procedures in those areas. As a result of the previous remediation efforts undertaken at these locations, Texas Eastern does not anticipate encountering levels of contamination that would cause concern to workers health and

SOIL AND GROUNDWATER MANAGEMENT PLAN

safety. Nevertheless, Texas Eastern and its Construction Contractor will adhere to its standard operating procedures for handling excess soil material and ensuring workers health and safety.

The preferred disposition of excavated materials is to place the material back in the excavation where it was generated. However, some excavated materials may not be suitable for use as backfill/engineering purposes within the excavation. In the event that excess soils are generated, these soils will be managed for disposal in conformance with applicable federal, state and local regulations. The excavated soils will be managed based on the following procedures.

- Initial classification – Initial evaluation will consist of field screening by Texas Eastern to determine whether or not the material is suitable for on-site reuse for engineering purposes.
- Soil to be reused – Material deemed suitable for reuse based on the initial field screenings is to be sidecast adjacent to the excavation or stockpiled and segregated within the construction workspace in designated areas on Texas Eastern property and placed back in the same excavation after construction. The first 2 feet of soil must be segregated from the rest of the excavated material. Sidecast soil from the remediated areas will be returned to the same remediated areas where they were generated, with the top 2 feet of segregated soil replaced last.
- Soil to be disposed - Material deemed not suitable for reuse on-site based on the initial field screenings will be evaluated via in-situ sampling for waste classification. Sampled material will be pre-characterized and profiled for off-site disposal in accordance with EPA and PADEP requirements to allow for immediate transportation offsite when excavated. Any excess soil material that is not represented in the pre-characterized material will be stockpiled for waste classification and disposal in accordance with EPA and PADEP requirements. Texas Eastern will arrange for sampling on an expedited basis (10 business day turn-around should be anticipated). After the soils have been fully classified for disposal, off-site disposal will be coordinated by Texas Eastern and the Construction Contractor in accordance with the procedures outlined in Section 6 below.
- Additional stabilization - As an added measure, soil stockpiles will be placed on a polyethylene liner (minimum 20-millimeter [“mil”] thick) and covered with a polyethylene liner (minimum 6-mil thick) overlapped and weighted to form a continuous waterproof barrier over the material prior to inclement weather and at the end of each workday. The cover will be maintained throughout the stockpile period to control water entering the stockpiled materials and to limit dust generation. If dust suppression becomes necessary during the soil stockpiling, exposed soils will be wetted by Texas Eastern’s Construction Contractor.
- Stockpile areas - Designated, temporary stockpile storage areas have been identified on the approved environmental permit drawings to limit unauthorized entry and to limit contact of site workers with stockpiled materials. Each designated, temporary stockpile storage area will be visibly marked with appropriate signs warning of potential hazards.
- Stockpiled materials - Will be placed within the designated, temporary stockpile storage areas, graded by the Construction Contractor. Straw bale berms/silt fencing will be placed around the perimeter of

SOIL AND GROUNDWATER MANAGEMENT PLAN

the area. Straw bales will be used as needed near catch basins, surface waters and other discharge points. Stockpile slopes will be no steeper than 1 horizontal to 1 vertical (1:1).

- Inspection - Stockpiles will be inspected at a minimum once each week and after every storm event. Inspection results will be recorded in a logbook and maintained at the site and available for inspection by the PADEP.
- Equipment decontamination - Excavation equipment that work within these areas must be cleaned prior to excavating in other areas of the site. Equipment can travel between previously remediated areas only after visible soil is removed from the equipment, including tracks/tires. Following decontamination procedures, equipment must be wipe sampled, and will be cleared for exiting the property after the results return a PCB concentration of less than 10 micrograms/100 sq cm. Equipment will be idle on site from the time of sampling until the results are returned.
- Cleaning procedures will be implemented before moving to other previously remediated areas that require excavation. After soil work is completed, the equipment must be decontaminated.

5 Managing all Other Soils On-Site

As a result of the remediation efforts undertaken at the Enriken Compressor Station, Texas Eastern does not anticipate encountering areas of contaminated soil outside of the OCAs and previously remediated areas. Soil excavated outside of the OCAs and previously remediated areas that is deemed not suitable for reuse on-site based on the initial field screenings will be evaluated via in-situ sampling for waste classification. Sampled material will be pre-characterized and profiled for off-site disposal in accordance with EPA and PADEP requirements to allow for immediate transportation offsite when excavated. Any excess soil material that is not represented in the pre-characterized material will be stockpiled for waste classification and transported to a duly regulated disposal facility in accordance with EPA and PADEP requirements. Texas Eastern will arrange for sampling on an expedited basis (10 business day turn-around should be anticipated). After the soils have been fully classified for disposal, off-site disposal will be coordinated by Texas Eastern and the Construction Contractor in accordance with the procedures outlined in Section 6 below.

If the material is suitable for re-use on site, soil excavated outside the previously remediated areas may be sidecast adjacent to the excavation or stockpiled and segregated within the construction workspace in designated areas on Texas Eastern property. These soils must be kept separate from the soils excavated within the previously remediated areas. Soils generated outside previously remediated areas can be reused on-site in accordance with the approved environmental permit and grading plans. Stockpiled soils must be stabilized in accordance with the Project Soil Erosion and Sediment Control Plan.

Soils generated within previously remediated areas can be placed back in the area where it was excavated pending an initial evaluation consisting of field screening by Texas Eastern to determine whether or not the material is suitable for on-site reuse. Soils within these areas should be returned to the previously remediated area in which it was generated and shall not be utilized as a backfill material outside that area.

SOIL AND GROUNDWATER MANAGEMENT PLAN

6 Transportation and Disposal

For any material profiled and loaded for transport to a duly regulated disposal facility, a Bill of Lading or Hazardous Waste Manifest will be signed by an authorized Texas Eastern representative and used to ship soil from the site to the selected facility. Any material that is stockpiled for disposal shall be maintained by the Construction Contractor until all waste classification, profiling, and approvals are completed.

Each excavation will be backfilled appropriately with excavated material on site from non-remediated areas or with certified clean fill material that meets the PADEP requirements.

6.1 Off-Site Transportation and Disposal Requirements of Contaminated Soil

Contaminated material from excavation activities will be managed by Texas Eastern's Waste Contractor in conformance with applicable Federal and state regulations.

All regulated soil, hazardous material, or hazardous waste transported off-site will be loaded by the Construction Contractor into properly licensed and permitted vehicles provided by Texas Eastern's Waste Contractor and transported directly to disposal or recycling facility(ies) approved and selected by Texas Eastern.

7 Groundwater Management Procedures

All water pumped from open excavation areas and decanted hydro-vac water will be pumped through a water filtration treatment system to remove potential contaminants. The water will be pumped directly into fractionation (frac) tanks, prior to being treated. If sediment infiltration creates continuous blockages resulting in increased bag filter changeouts during operations, a flocculent will be utilized within the frac/weir tank. The purpose of flocculent usage is to reduce the turbidity of the water by binding the suspended particles in the liquid and allowing them to settle to the bottom of the tank reducing sediment deposition within the bag filters. After passing through the frac/weir tank, the water will be treated and discharged to the ground surface in compliance with the required National Pollutant Discharge Elimination System permit as well as the temporary discharge permit to be issued by PADEP.

Texas Eastern will collect a weekly pre-treatment water sample and post-treatment water sample to verify compliance with temporary discharge permit conditions. Prior to initial discharge, a post-treatment sample will be analyzed for PCB concentrations to verify proper treatment and compliance. If the post-treatment water sample exceeds temporary discharge permit thresholds, the treatment system will be serviced (i.e., change filters, replace carbon media, etc.) accordingly and the water will be recirculated through the treatment system to meet compliance. If the treated water does not meet temporary discharge permit standards, the water will be transported to a licensed off-site disposal facility. If results determine the processed water to exceed the identified thresholds established in the temporary discharge permit, the Company will arrange for the processed water to be transported for a disposal offsite at a duly regulated facility. The total volume of water to be managed and treated onsite will depend on the water

SOIL AND GROUNDWATER MANAGEMENT PLAN

table level at the time of construction, the amount of rainfall precipitation as well as depths/widths of excavations located at the site.

Texas Eastern will use storage tanks to temporarily store the water for hydrostatic testing and continuously reuse the water for all tests. At the completion of hydrostatic testing, the water will be discharged onsite under an existing PADEP General Permit for Discharges from Hydrostatic Testing of Tanks and Pipelines (PAG-10) permit coverage. Hydrostatic test water samples will be collected at the beginning of water discharge as well as at the end of discharge operation to verify compliance with PAG-10 permit conditions.

8 Hydro-vac Materials Management Procedures

All materials generated during hydro-vac operations will be placed into a fully lined hydro-vac slurry pit to allow for water decantation. Decanted hydro-vac water will be treated, sampled, and discharged/disposed as described in Section 7.

Hydro-vac soil material generated within previously remediated areas will be segregated from hydrovac materials generated outside of previously remediated areas. Once the material is suitable for backfill within each respective excavation area, it will be returned to the specific excavation it was removed from (i.e., previously remediated areas returned to previously remediated areas and areas outside of previously remediated areas returned to areas outside of remediated areas).

9 Soil and Groundwater Sampling Protocol for Off-Site Disposal

Texas Eastern will collect pre-construction in-situ soil samples for waste characterization for proper profiling for disposal off-site at an approved disposal facility. If needed, Texas Eastern will collect additional waste characterization samples of any stockpiled soils, if the material is not already represented in the pre-characterized material, for proper profiling for disposal off-site at an approved disposal facility. If treated water is not suitable for discharge, Texas Eastern will collect samples for waste classification and disposal. The soil and water samples collected will be submitted to a PADEP-certified laboratory to be tested on an expedited basis (10 business day turn-around should be anticipated).

CUI/CEII
Contains Critical Energy Infrastructure Information - Do Not Release

ATTACHMENT A
SITE PLAN SHOWING OCA AND PREVIOUSLY REMEDIATED AREAS

Filed Under Separate Cover Due to Confidential and Sensitive Information

Refer to Attachment D.4