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GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

A Practicing Geoprofessional Business Association Member Firm



July 25, 2024

Maryland Department of the Environment
Water And Science Administration, Regulatory Services Section
Montgomery Park Business Center, Suite 430
1800 Washington Boulevard
Baltimore, Maryland 21230-1708

RECEIVED

AUG 06 2024

WATER AND SCIENCE ADMIN.
REGULATORY SERVICES COORD.

Attn: Water Quality Certification

Re: Section 401 Water Quality Certification Request
Worcester Resiliency Upgrade - Salisbury Loop
FERC Prior Approval Notice Filing
Salisbury, Wicomico County, Maryland

To Whom it May Concern:

On behalf of Eastern Shore Natural Gas Company ("Applicant"), Geo-Technology Associates, Inc. (GTA) is submitting the following information to request a Section 401 Water Quality Certification in accordance with 40 C.F.R. §121 and the Code of Maryland Regulations (COMAR) 26.08.02.10.

(A) APPLICANT INFORMATION:

A. Name: Mr. Mark Parker, P.E. B. Daytime Telephone: (302) 373-4715
C. Company: Eastern Shore Natural Gas Company D. Email Address: maparker@esng.com
E. Address: 500 Energy Lane, Suite 200 Dover, DE 19901

(B) APPLICABLE FEDERAL LICENSE OR PERMIT INFORMATION:

The Applicant is proposing to construct approximately 6.1 miles of 10-inch pipeline in the Salisbury area of Wicomico County, Maryland. The applicant intends to file this project with the Federal Energy Regulatory Commission (FERC) via Prior Notice pursuant to Blanket Certificate under Section 7 of the Natural Gas Act, 18 CFR 157.205(b)(5).

(C) PROJECT LOCATION:

A. Site Address or Location: 6.1 miles along Sussex Highway (US-13), Connelly Mill Road, and the Norfolk Southern Railroad in the Salisbury area of Wicomico County, Maryland.
B. County Book Map Coordinates (ADC Maps): Map: 7 13 Letter: C-G Number:
C. Latitude: 38.41060° Longitude: -75.58278°
D. Watershed: Nanticoke River 12-Digit HUC: 021303040566

3445-A Box Hill Corporate Center Drive, Abingdon, MD 21009 (410) 515-9446

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* Somerset, NJ * NYC Metro * Pittsburgh Metro * Quakertown, PA * Scranton/Wilkes-Barre, PA * York, PA
* Northeastern, OH * Sterling, VA * Nashville, TN * Charlotte, NC * Raleigh, NC * Orlando, FL

Visit us on the web at www.gtaeng.com

(D) ADJACENT PROPERTY OWNER INFORMATION:

Name	Address	City	State	Zip
Please see attached table				

(E) SIGNED PUBLIC NOTICE BILLING FORM:

A copy of the signed Public Notice Billing Approval Form accompanies this Water Quality Certification Request.

(F) IDENTIFY THE PROPOSED PROJECT:

The Salisbury Loop ("project") includes the construction of approximately 6.1 miles of 10-inch pipeline looping along the eastern side of US-13 from the end of an existing pipeline approximately 790 feet south of Foskey Lane and extending southward along US-13, Connelly Mill Road, and eventually the Norfolk Southern Railroad

(G) A PLAN SHOWING THE PROPOSED ACTIVITIES:

A site plan titled *Eastern Shore Natural Gas Company - Salisbury Loop ("Plan & Profile")*; prepared by Morris & Ritchie Associates, Inc. (MRA) and dated July 25, 2024 accompanies this Water Quality Certification Request.

(H) LOCATION AND NATURE OF POTENTIAL DISCHARGE THAT MAY RESULT FROM THE PROJECT AND THE LOCATION OF RECEIVING WATER:

The proposed discharge involves the Horizontal Directional Drilling (HDD). Inadvertent surface releases of drilling fluids during HDD operations may occur during project construction. An inadvertent surface release (also sometimes referred to as an "inadvertent surface return" or "frac-out") is a condition in which drilling mud used in HDD operations is released through fractures in the soil and migrates towards the surface. Drilling mud consists of a bentonite clay water mixture, which is not considered to be hazardous or toxic. Escape of drilling mud from a surface release is most common near the HDD entry and exit locations; however, surface releases can occur in any location along a directional drill. Tributaries within the subject site drain towards the Wicomico River. In the vicinity of the subject site, nontidal tributaries of the Wicomico River are classified in the Code of Maryland Regulations (COMAR) 26.08.02.08 as designated use "Class I: Water Contact Recreation, and Protection of Nontidal Warmwater Aquatic Life." The subject site is not located within a Tier II watershed and does not contain Tier II Waters as defined in COMAR 26.08.02.04. Potential discharges that may result are located at the HDD crossing locations depicted on the enclosed *Eastern Shore Natural Gas Company- Salisbury Loop Plan & Profile* (Leonard Pond Run, Peggy Branch, Brewington Branch, and adjacent nontidal wetlands).

(I) DESCRIPTION OF METHODS AND MEANS PROPOSED TO MONITOR THE DISCHARGE AND THE EQUIPMENT OR MEASURES PLANNED TO TREAT, CONTROL, OR MANAGE THE DISCHARGE:

A Horizontal Directional Drilling Inadvertent Surface Release Contingency Plan has been prepared for the project and details operational procedures and responsibilities for the prevention, containment, and cleanup of surface releases associated with HDD operations. In the event of surface release, the mitigation measures outlined in the Contingency Plan will be used to cleanup surface releases. In addition, erosion and sediment control devices, including silt fences and inlet protection will be installed where needed within the project site prior to construction activities/discharge and will be maintained in good working condition. Any sediment and erosion control measures that are disturbed during construction will be repaired at the end of each working day. Following construction, sediment control devices will be removed only after receiving authorization.

(J) THE DATE ON WHICH THE ACTIVITY WILL BEGIN OR END, IF KNOWN, AND THE DATE OR DATES ON WHICH ANY DISCHARGE MAY OCCUR:

Unknown at this time.

(K) A DESCRIPTION, IF APPLICABLE, OF THE METHODS PROPOSED OR EMPLOYED TO MONITOR THE QUALITY AND CHARACTERISTICS OF ANY DISCHARGE.

N/A

(L) A SPECIFIC AND DETAILED MITIGATION PLAN AS APPLICABLE FOR PROJECTS REQUIRING MITIGATION.

N/A

(M) LIST OF OTHER FEDERAL, INTERSTATE, TRIBAL, STATE, TERRITORIAL, OR LOCAL AGENCY AUTHORIZATIONS REQUIRED FOR THE PROJECT:


A. Agency	B. Date Sought	C. Decision (granted/denied)	D. Decision Date	E. Other Status
MDE NOI	Pending	Pending	Pending	
MDE CZM	Pending	Pending	Pending	
MDE JPA	Pending	Pending	Pending	

The project proponent hereby certifies that information contained herein is true, accurate, and complete to the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action on this Clean Water Act (CWA) 401 certification

request within the applicable reasonable period of time. Should you have any questions, or require additional information, please contact this office at (410) 515-9446.

Sincerely,
GEO-TECHNOLOGY ASSOCIATES, INC.


Josh Riding
Project Scientist

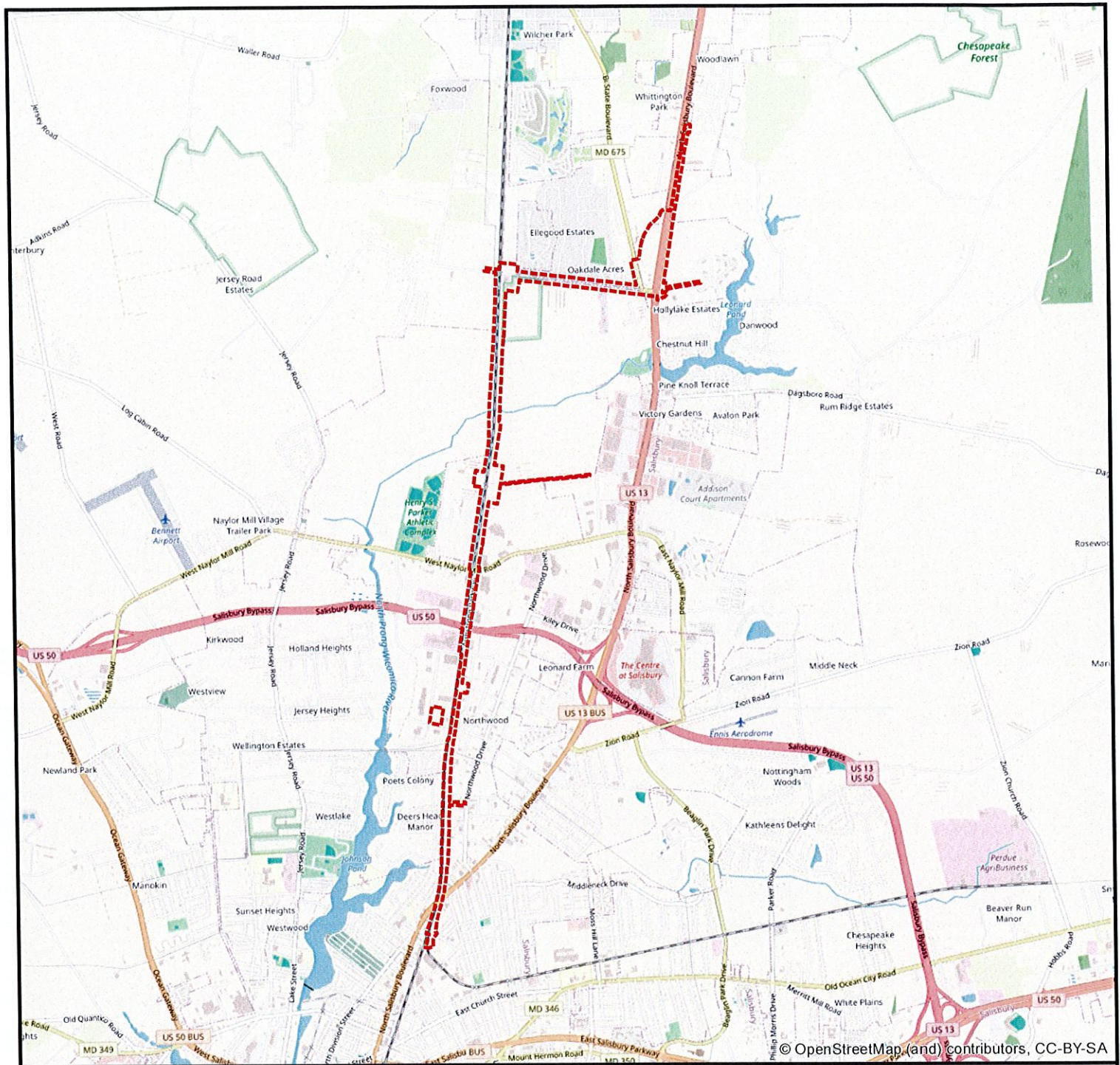

T. Andy Stansfield Jr.
Vice President

JSR/TAS
22394

E:\Shared\Project Files\2023\22394 - Salisbury Loop MAOP\WET\Reports - Permitting\WQC\22394 - WQC Request - Cover Letter.docx

Enclosures:

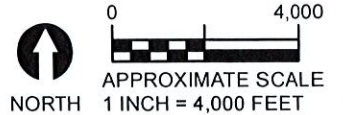
- Site Location Map (*Figure 1*)
- Public Notice Billing Approval Form.
- Pre-Filing Meeting Request Form.
- Pre-Filing Meeting Request Submission email, dated September 11, 2023.
- Adjacent Property Owners Information Table
- Horizontal Directional Drilling Inadvertent Surface Release Contingency Plan
- *Eastern Shore Natural Gas Company- Salisbury Loop Plan & Profile* prepared by Morris & Ritchie Associates, Inc., and dated July 25, 2024.



© OpenStreetMap (and) contributors, CC-BY-SA

LEGEND

REVIEW AREA



GEO-TECHNOLOGY ASSOCIATES, INC.
 GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
 3445-A BOX HILL CORPORATE CENTER DRIVE
 ABINGDON, MARYLAND 21009
 PHONE: 410-515-9446
 FAX: 410-515-4895
 WWW.GTAENG.COM

**SITE LOCATION MAP
 SALISBURY LOOP**

WICOMICO COUNTY, MARYLAND

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JOB NO.	22394	SCALE:	1"=4,000'	DATE:	NOVEMBER 16, 2023	DRAWN BY:	JSR	REVIEW BY:	MAJ/TAS	FIGURE:	1
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MARYLAND DEPARTMENT OF THE ENVIRONMENT

Water and Science Administration • Wetlands and Waterways Program
1800 Washington Boulevard • Suite 430 • Baltimore, Maryland 21230
410-537-3745 • 800-633-6101 • www.mde.maryland.gov

Pre-Filing Meeting Request

All fields with an asterisk * are required unless noted otherwise.

Use the SUBMIT by EMAIL button to send your request. READ the sending instructions.

Optionally, save this form, attach it to an email, and return it to: wetlandspreap.mde@maryland.gov

Project Location

Complete all of the following project location fields

http://www.latlong.net

Site Address

If a site address is not available, be sure to describe the project location in the available field below.

* Latitude / * Longitude

* County

* ADC Map

(ADC map coordinates not required for Allegany, Garrett or Somerset counties)

Describe project location

(eg., 200 yards NE of Rte 50 / Tempo Road)
Not needed if exact address is shown above.

House, lot, or location number
Street name

* City * State * Zip
Salisbury MD 21801

38°24'8.99"N 75°35'5.17"W

Select a county Wicomico

Map# Alpha Number Edition
7,13 2000 ADC

6.36 miles along US-13, Connelly Mill Road, and the Norfolk Southern Railroad.

Property Owner

Mailing address may be different from Project location address.

* At least one telephone

* Full name

* Mailing address

* City, State Zip

Telephone Home

Work

Cell

Email

Primary Contact

* Full name

Company

* Mailing address

* City, State Zip

Telephone Work

Cell

Email

* At least one telephone

Form fields for Property Owner information

Mark Parker, P.E.
Eastern Shore Natural Gas
500 Energy Lane, Suite 200
Dover, DE 19901
302-213-7270
maparker@esng.com

Project

* This project request is:

(Place an 'x' in the box for WQC)

Description of Project

Include the following (if known):
ACOE Category, ACOE reviewer,
Tracking # and AI #

Water Quality Certification (WQC) X

ESNG intends to construct approximately 6.36 miles of 10-inch pipeline near the City of Salisbury in Wicomico County, Maryland.

By submitting this form, the property owner grants permission to the representatives of the Maryland Department of the Environment to enter the property during business hours for the purpose of making observations of the proposed project site.

Submit by Email Print Form Clear Form

Joshua Riding

From: Joshua Riding
Sent: Monday, September 11, 2023 4:13 PM
To: danielle.spendiff1@maryland.gov
Cc: Andy Stansfield; Parker, Mark
Subject: WQC Pre-Filing Meeting Request, for Salisbury Loop
Attachments: 22394 Salisbury Loop Pre-filing meeting request.pdf

Hey Danielle,

Attached is the WQC Pre-Filing Meeting Request for one of the projects we discussed on our recent call.

Let me know if you need anything else,

Josh Riding | Environmental Scientist



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Tel: 410-515-9446 | Cell: 804-467-8989 | www.gtaeng.com

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GTA – Since 1985

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Visit us on the web at www.gtaeng.com

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N/A

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MDE CZM	Pending	Pending	Pending	
MDE JPA	Pending	Pending	Pending	

The project proponent hereby certifies that information contained herein is true, accurate, and complete to the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action on this Clean Water Act (CWA) 401 certification

request within the applicable reasonable period of time. Should you have any questions, or require additional information, please contact this office at (410) 515-9446.

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Josh Riding
Project Scientist

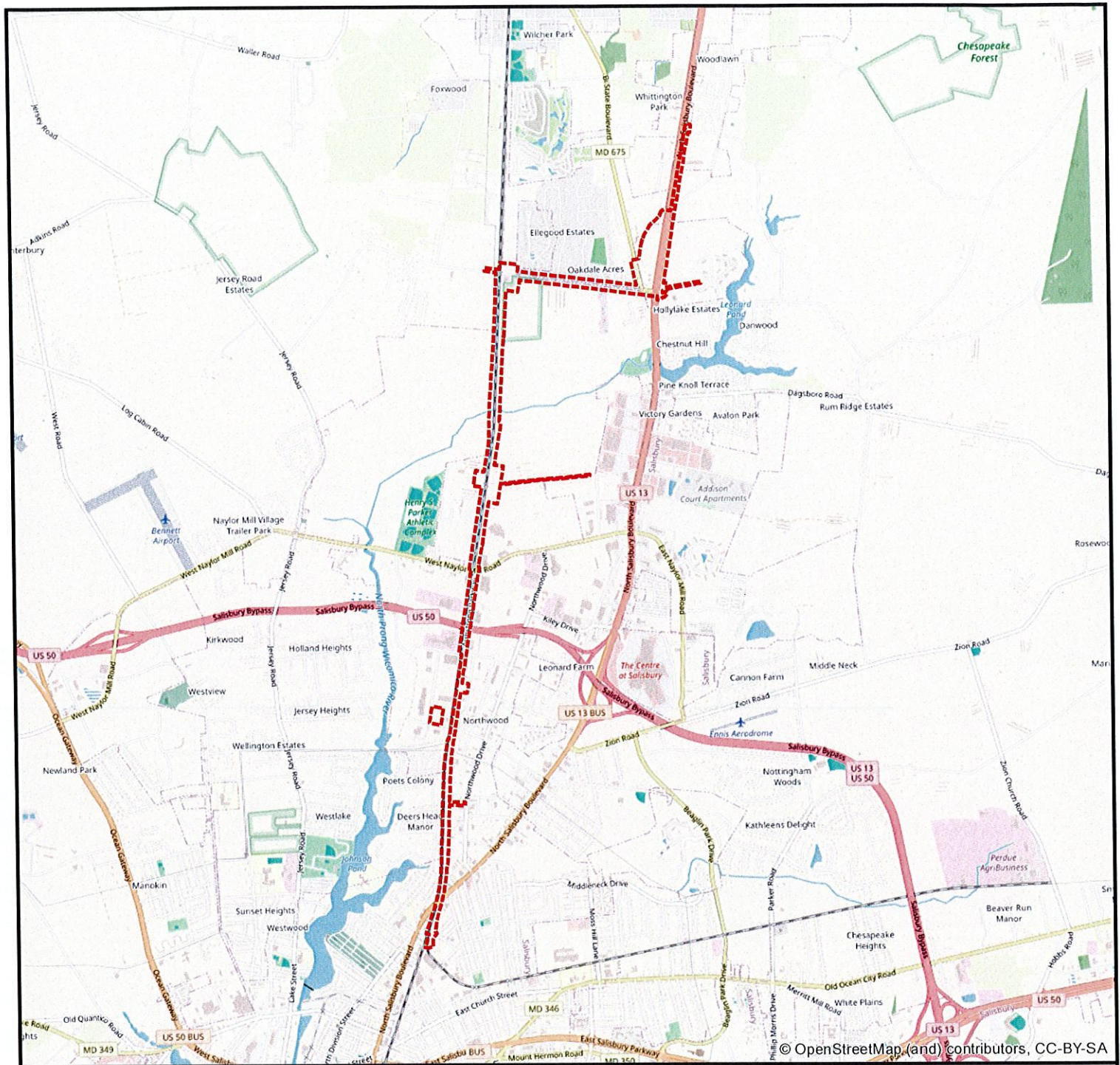

T. Andy Stansfield Jr.
Vice President

JSR/TAS
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E:\Shared\Project Files\2023\22394 - Salisbury Loop MAOP\WET\Reports - Permitting\WQC\22394 - WQC Request - Cover Letter.docx

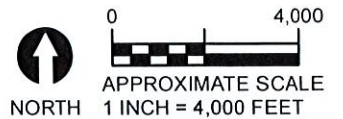
Enclosures:

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LEGEND

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 ABINGDON, MARYLAND 21009
 PHONE: 410-515-9446
 FAX: 410-515-4895
 WWW.GTAENG.COM

**SITE LOCATION MAP
 SALISBURY LOOP**

WICOMICO COUNTY, MARYLAND

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JOB NO.	22394	SCALE:	1"=4,000'	DATE:	NOVEMBER 16, 2023	DRAWN BY:	JSR	REVIEW BY:	MAJ/TAS	FIGURE:	1
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Joshua Riding

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Somerset, NJ • Sterling & Fredericksburg, VA • Malvern, OH • Charlotte & Raleigh, NC

GTA – Since 1985

**EASTERN SHORE NATURAL GAS
HORIZONTAL DIRECTIONAL DRILLING
INADVERTENT SURFACE RELEASE CONTINGENCY PLAN
SALISBURY LOOP PROJECT**

Purpose and Objective

The purpose of this Horizontal Directional Drilling Inadvertent Surface Release Contingency Plan (Contingency Plan) is to identify procedures to be followed in the event of an inadvertent surface release of drilling fluids during horizontal directional drilling (HDD) operations. An inadvertent surface release (also sometimes referred to as an “inadvertent surface return” or “frac-out”) is a condition in which drilling mud used in HDD operations is released through fractures in the soil and migrates toward the surface. Drilling mud consists mainly of a bentonite clay-water mixture, which is not considered to be hazardous or toxic. The company’s objective in adopting this plan is to minimize the potential of a surface release and identify response measures in the event that a surface release occurs, in order to mitigate any potential adverse impact to water bodies and associated habitats. Escape of drilling mud from a surface release is most common near the HDD entry and exit locations; however, surface releases can occur at any location along a directional drill.

This Contingency Plan provides operational procedures and responsibilities for the prevention, containment, and cleanup of surface releases associated with HDD operations.

The objectives of this plan are as follows:

- Minimize the potential for a surface release due to HDD operations.
- Identification and timely detection of surface releases.
- Provide for environmental protection of the water bodies and associated habitats.
- Establish response procedures in the event of a surface release.
- Provide for notifications to the applicable parties and regulatory agencies.

Scope of Work for HDD Crossings

The pipeline plan and profile drawings show the targeted entry and exit locations for each proposed HDD. These layouts have been designed to minimize the potential for impact to water bodies. The significant clearance between the bottom of the water bodies/wetlands and the top of the proposed pipeline provides additional protection for the water bodies. Specifically, a minimum clearance of 15 feet will be maintained between the top of the proposed pipeline and the tidal riverbed.

Potential Impacts to Biological Resources

The release of drilling mud during an inadvertent surface release may occur in either upland or aquatic environments. Releases occurring in upland areas can generally be contained relatively quickly, and with minimal difficulty, and therefore typically result in minor impacts to the surrounding environment. Releases occurring in aquatic environments may be more difficult to contain, because bentonite readily disperses in water, and may settle on the bottom quickly, depending on water flow. Although bentonite is non-toxic, it may have several indirect effects on aquatic life. Initially following a surface release, suspended bentonite may inhibit the respiration of fishes. This effect is typically of a short duration. Longer term effects may occur once the bentonite settles. One possible longer-term effect is egg masses of fish being covered by a layer of bentonite, thereby inhibiting the flow of dissolved oxygen to the egg masses. Another possible longer-term effect of a surface release is benthonic invertebrates and the larval stages of pelagic organisms becoming covered by the bentonite and suffocating.

Equipment

The following equipment is proposed to be used during HDD operations:

- Horizontal Directional Drill rig;
- Ancillary tractor trailers associated with the Drill rig;
- Drilling mud reclaimer;
- Multiple water tankers;
- Multiple vacuum trucks and trailers;
- Multiple construction pickup trucks;
- Multiple boom trucks; and a
- Small office trailer

On-Site Monitoring

During HDD operations, visual inspection along the bore path of the alignment will take place. Where the alignment crosses flowing water, trained inspection personnel will be placed approximately 50 feet upstream and downstream of the alignment crossing, access permitting. The names and phone numbers of inspection personnel will be provided to on-site regulatory representatives. During the duration of HDD operations, the contractor will provide the following information to the other inspection personnel.

- Position of the drilling head relative to the drilling point of entry;
- A comparison of the estimated total volume of drilling mud that has been pumped throughout the HDD operation and the estimated current total volume of returns;
- Equipment malfunctions and/or repairs;
- Abnormal changes in drilling mud pressure at the time of occurrence; and
- Changes in drilling mud mixture or contents.

Surface Release Mitigation Measures

- Applicable regulatory agencies will be contacted as required. Prior to construction, a complete list of applicable regulatory agencies will be prepared and available at the job site.

- All equipment will be checked and maintained daily to prevent hazardous material leaks.
- Sufficient supplies of spill containment materials and hay bales will be available on-site at all times. A vacuum truck will also be available at all times.
- A supply of empty barrels will be located on-site at all times.
- Entry and exit drill pits will be contained using berms, silt fence and/or hay bales.
- Tracing dye will be added to the drilling mud to help identify surface releases in water bodies.
- Visual observation (on-land and water bodies) will occur on a regular basis throughout HDD operations so that a potential surface release can be identified.
- The contractor will adjust the thickness of the drilling mud mixture to match the substrate conditions, and will monitor drilling mud pressures and penetration rates, in order to ensure optimal fluid pressure to penetrate the substrate.
- HDD operations will be suspended immediately upon evidence of a drop in drilling pressure, a sudden loss of approximately 75 percent of returns at the entrance pit, or other evidence of a surface release.
- In the event of a surface release, the bore stem will be pulled back to relieve pressure at the leak location, and the on-site inspection personnel will evaluate the situation and provide direction for mitigation actions.
- Cleanup of all surface releases/spills shall begin immediately.
- In the event of a surface release that does not reach a water body, bentonite shall be contained, removed and disposed at an approved facility.
- In the unlikely event that a surface release reaches a water body, corrective action will be taken immediately. Clean-up work will be performed by hand to the extent possible. A vacuum truck would be used to vacuum up the associated bentonite and soils as necessary. The materials will be properly disposed at an approved facility. Clean sand would be replaced in the riverbed if necessary.
- All cleanup materials will be disposed on a daily basis as applicable, and at the completion of the project.
- In the event that a drill hole must be abandoned, the bore will be sealed by the injection of a high-viscosity bentonite slurry.
- Documentation will be prepared for any surface releases that occur during HDD operations.