TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC

NORTHEAST SUPPLY ENHANCEMENT PROJECT

ENVIRONMENTAL REPORT
APPENDIX M. WATER QUALITY MONITORING PLAN

NOVEMBER 2026



TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

WATER QUALITY MONITORING PLAN

FOR

NEW JERSEY WATERS

NORTHEAST SUPPLY ENHANCEMENT PROJECT

NOVEMBER 13, 2026

VERSION 2.0

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LIST OF ACRONYMS AND ABBREVIATIONS

CM	Construction Manager
CAP	Corrective Action Plan
d/b/a	doing business as
Dth/d	dekatherms per day
DGPS	differential global positioning system
ECM	Environmental Compliance Manager
EI	Environmental Inspector
ER-M	Effects Range Median
HDD	horizontal directional drill
MP	milepost
N.J.A.C	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NJ-NELAP	New Jersey National Environmental Laboratory Accreditation Program
NTU	nephelometric turbidity unit
PCB	Polychlorinated Biphenyl
Project	Northeast Supply Enhancement Project
Transco	Transcontinental Gas Pipe Line Company, LLC
WQC	Water Quality Certificate
WQM	Water Quality Monitor
WQMP	Water Quality Monitoring Plan

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1 INTRODUCTION

This Draft Water Quality Monitoring Plan (WQMP) describes the water quality monitoring program and reporting to be performed during the Northeast Supply Enhancement Project's (Project) offshore excavation (including both dredging and trenching) in navigable waters located in New Jersey. This WQMP has been developed through consultation with the New Jersey Department of Environmental Protection (NJDEP) to comply with New Jersey Surface Water Quality Standards (New Jersey Administrative Code [N.J.A.C.] 7:9B) and New Jersey Coastal Zone Management Rules (N.J.A.C. 7:7).

1.1 Background

Transcontinental Gas Pipe Line Company, LLC (Transco), a wholly-owned subsidiary of Williams Partners Operating LLC, proposes to expand its existing interstate natural gas pipeline system in Pennsylvania and New Jersey and its existing offshore natural gas pipeline system in New Jersey and New York waters. The Project's capacity is fully subscribed by two entities of National Grid: Brooklyn Union Gas Company doing business as [d/b/a] National Grid NY) and KeySpan Gas East Corporation (d/b/a National Grid), collectively referred to herein as "National Grid."

To provide the incremental 400,000 dekatherms per day (Dth/d) of capacity, Transco plans to expand portions of its system from the existing Compressor Station 195 in York County, Pennsylvania, to the Rockaway Transfer Point in New York State waters. As defined in executed precedent agreements with National Grid, the Rockaway Transfer Point is the interconnection point between Transco's existing Lower New York Bay Lateral and existing offshore Rockaway Delivery Lateral.

The offshore portion of the Project includes a new 26-inch-diameter pipeline that will extend approximately 23.33 miles east-northeast across Raritan Bay and Lower New York Bay from the Borough of Sayreville shoreline in Middlesex County, New Jersey, to the Rockaway Transfer Point, located in the Atlantic Ocean approximately 3 miles seaward of the Rockaway Peninsula in Queens County, New York (see Figure 1).

Transco has selected a suite of offshore construction methods, including pre-lay clamshell dredge, post-lay jet trencher, and horizontal directional drill (HDD), for the Raritan Bay Loop. These methods were selected in consideration of the site-specific conditions located along the pipeline route, with particular focus on installation efficiency, minimization of sediment disturbance, site-specific burial depth requirements, and future success of facility operations (see Table 1 for a breakdown of construction methods by milepost [MP]). All of these construction methods will result in a temporary increase in suspended sediment levels and associated turbidity within New Jersey waters.

Table 1
Offshore Raritan Bay Loop Installation and Backfill Methods, New Jersey

Milepost Start	Milepost End	Proposed Trenching Method[e]	Proposed Backfill Method	Total Estimated Volume (cubic yards)
CP HDD Pit Excavation ~1,200 feet north of 12.30		Clamshell Dredge	Clamshell Dredge	461
12.10	12.30	HDD (CP Power Cable)	N/A	N/A
MSA HDD Pit Excavation at 12.50		Clamshell Dredge	Clamshell Dredge	9,931
12.20	12.50	HDD (MSA)	N/A	N/A
12.50	14.02	Clamshell Dredge	Clamshell Dredge	63,868
Neptune Cable Crossing at 13.88		Hand Jet	Hand Jet[a]	1,676
26.55[b]	29.52	Jet trencher	Clamshell Dredge[c]	51,548
AC HDD Pit Excavation at 29.52		Clamshell Dredge	Clamshell Dredge	14,050
29.52	30.40	HDD (AC)	N/A	N/A
AC HDD Pit Excavation at 30.40		Clamshell Dredge	Clamshell Dredge	32,450
30.40	30.64	Jet trencher	Clamshell Dredge[c]	4,187
			Total Volume	178,171[d]

Notes:

[a] If the hand jet or mass flow excavator is unable to adequately backfill the area using the sediments previously excavated from the trench, or if supplemental backfill is required, then a clamshell dredge will be used to backfill.

[b] This jet trenching segment extends west into New York state waters to Milepost 25.22.

[c] Sediment loss from areas installed via jet trencher is expected to be minimal (maximum of 5% trench volume loss). However, if supplemental backfill is required following pipeline installation/final pass, a clamshell dredge will be used to backfill.

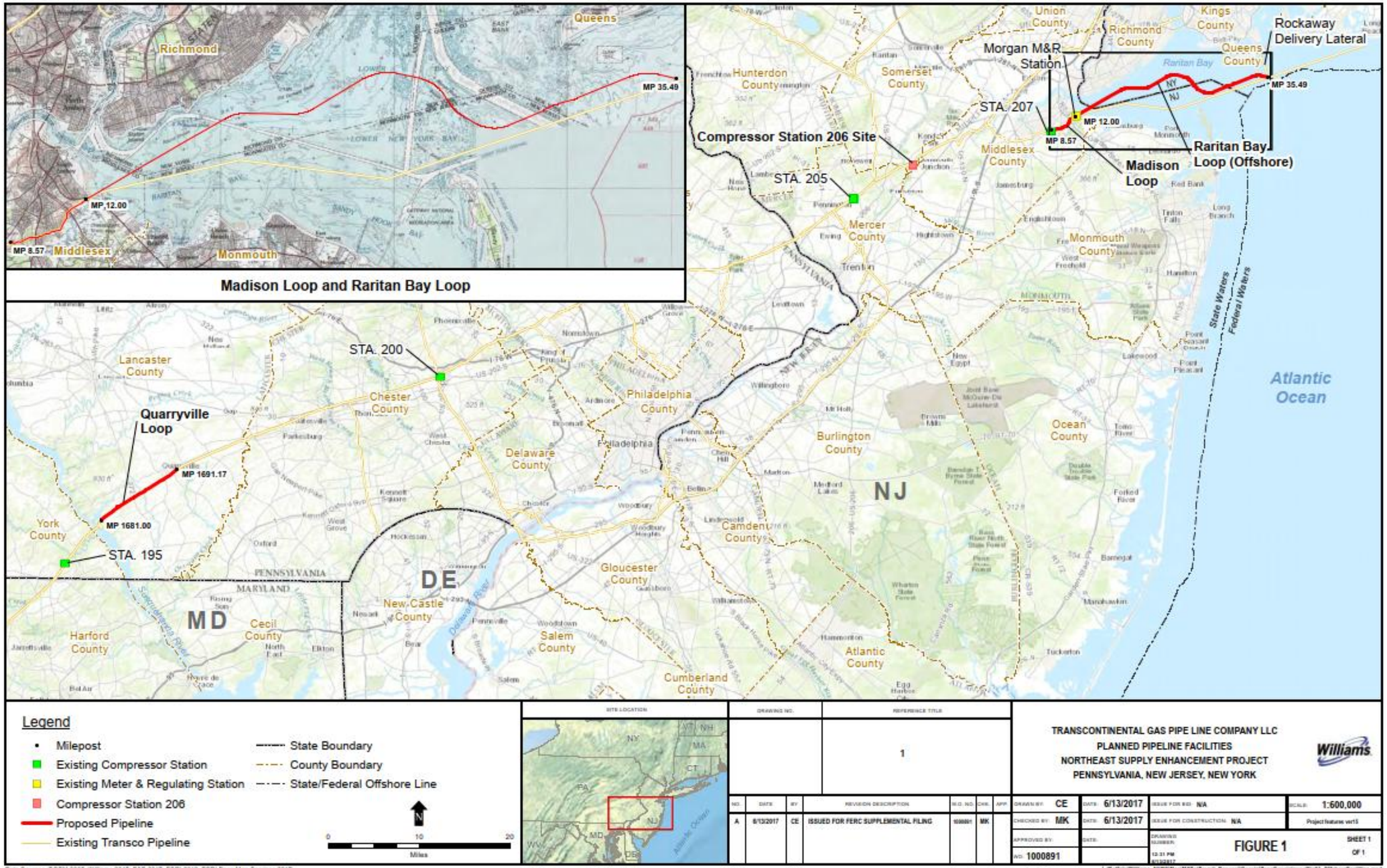
[d] Total may not sum exactly due to rounding.

[e] Clamshell bucket to be equipped with an environmental bucket for trenching activities.

Key:

AC = Ambrose Channel
CP = Cathodic protection
HDD = Horizontal directional drill
MSA = Morgan Shore Approach
N/A = Not applicable

Figure 1 Project Location Map



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1.2 Water Quality Modeling

Transco conducted Project-specific hydrodynamic and sediment transport and dispersion modeling for the installation methods proposed for the Raritan Bay Loop to numerically predict the suspended sediment plumes and areas of deposition that may be generated by the offshore construction, to better estimate potential impacts from suspended and deposited sediments, and to help determine appropriate avoidance and minimization measures. This consisted of two interconnected modeling tasks, which are described in detail in the Hydrodynamic and Sediment Transport Modeling Results (Modeling Reports) (RPS 2017a, b, 2018a, b, 2019a):

- Development and calibration of a three-dimensional hydrodynamic model for the New York/New Jersey Harbor Estuary and nearby waters of the Atlantic Ocean; and
- Simulations of the suspended sediment fate, transport, plumes, and deposition that could result from Project-specific offshore construction activities.

The model analysis is summarized in Transco's application for a New Jersey WQC, and the associated modeling reports are included as part of Transco's WQC application as an Appendix to the Environmental Report. For work proposed at least partly in New Jersey waters, the modeling predicts that TSS concentrations at or above 50 milligrams per liter (mg/L) would extend up to 2,346 feet from the work activity during jet trenching. Concentration values of 50 mg/L are expected to be roughly equivalent to turbidity levels between 10 nephelometric turbidity units (NTUs) and 30 NTUs[1], corresponding to New Jersey's water quality standard for the maximum turbidity threshold in Class SC and SE1 waters, respectively.

Sediment plumes with average TSS concentrations greater than 50 mg/L above ambient conditions are predicted to extend up to 2,592 feet from potential hand-jetting locations in New Jersey waters. Modeling for clamshell dredging with an environmental bucket in New Jersey waters yielded much more localized plumes, i.e., the clamshell dredging activities are predicted to generate elevated TSS concentrations more than 50 mg/L above ambient conditions not more than 443 feet from dredging locations. During backfill activities using clean, sandy material (less than 5% silt/clay), TSS concentrations greater than 50 mg/L above ambient conditions are

[1] Applying a standard direct conversion between TSS concentrations and turbidity for the entire length of the Raritan Bay Loop is not feasible, as the relationship is site-specific and can vary depending on concentrations of suspended particles, as well as other particle characteristics such as size, shape, surface area, color, etc. However, turbidity-to-TSS correlations ranging between approximately 1 NTU to 1 mg/L and 1 NTU to 6 mg/L have been reported for other freshwater and marine environments around the United States (Anchor Environmental CA, L.P. 2003; Holliday et al. 2003).

predicted to extend up to 5,299 feet from backfill locations in New Jersey waters; however, modeling indicates that the maximum distance would be 2,247 feet for approximately 99.9% of the time. Ambient TSS conditions are expected to return in less than 8 hours following completion of these activities. Actual TSS concentrations during construction may be less than modeled concentrations based on the use of conservative modeling assumptions.

Transco also conducted contaminant transport modeling for constituents at six sites where sediment sampling and analysis in late 2018 indicated contaminant concentrations that exceeded Ecological Saline Water Sediment Effects Range Median (ER-M) screening criteria (RPS 2019b). The contaminants included (bis [2-ethylhexyl] phthalate, phenanthrene, arsenic, manganese, mercury, polychlorinated biphenyls [PCBs], and 4,4'-DDE). The modeling results indicate that clamshell dredging with an environmental bucket at these sites is not expected to cause exceedances of acute or chronic toxicity standards for saline waters identified at N.J.A.C. 7:9B more than 500 feet from the dredging activity. This accounts for planned production rates of 4,800 to 7,500 cubic feet per hour and, at one site, the observance of a 1-hour pause in dredging during each slack-tide period.

Water quality monitoring for turbidity will be performed using visual observations, real-time measurements throughout the duration of excavation and fill placement activities required for pipeline installation. Turbidity will be verified by laboratory analysis in non-compliance scenarios as detailed in Section 3.2. Water quality monitoring for the contaminants noted above will be performed through the collection and laboratory analysis of whole-water grab samples during excavation activities at sites where the contaminants exceeded the ER-M sediment screening criteria. If concentrations exceed the compliance threshold(s), NJDEP will be notified and, as warranted, adaptive management measures will be implemented (see Section 3 for further detail).

1.3 Water Quality Monitoring Plan Organization

This WQMP establishes a water quality monitoring program to document Project compliance with water quality standards of New Jersey and corresponding conditions of the NJDEP WQC. This WQMP includes the following sections:

- Section 1 presents the Project background and a general overview of this WQMP.
- Section 2 describes the water quality monitoring program, including the monitoring parameters, monitoring locations, and schedule.

- Section 3 identifies the water quality compliance thresholds developed for this Project and the actions that will be followed based on monitoring results, including any potential adaptive management procedures.
- Section 4 describes the reporting procedures.
- Section 5 provides the references for this WQMP.

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2 WATER QUALITY MONITORING PROGRAM

This program will monitor turbidity during offshore excavation (including dredging and trenching) and fill activities associated with installation of the Raritan Bay Loop. This will be accomplished using a combination of real-time visual observation and measurement of turbidity during the various in-water excavation and fill activities. Whole water grab samples will be collected for laboratory analysis based on water quality modeling results for mercury, arsenic, manganese, 4',4', -DDE, phenanthrene, bis (2-ethylhexyl) phthalate, and PCBs during in-water excavation activities only. These activities may be adjusted in response to site conditions and results of previous monitoring. Any significant modifications to the monitoring activities described herein will be made in consultation with the NJDEP and will be documented, including an explanation for the modification, as described in Section 4.

2.1 Methods

Water quality monitoring will be accomplished at the offshore Project site in New Jersey waters using the following methods:

1. Visual observations of turbidity at the sea surface;
2. Turbidity measurements using field monitoring equipment;
3. Whole water grab sample collection for laboratory analysis of mercury, arsenic, manganese, 4',4' -DDE, phenanthrene, bis (2-ethylhexyl) phthalate, and PCBs in specified areas; and
4. The collection of concurrent temporal and positional information using a shipboard differential global positioning system (DGPS).

Visual Observations

The visual observation of the water surface near the excavation and fill activities will be conducted by an observer equipped with polarized glasses at the compliance stations described in Section 2.2. The observer will document whether or not Project-related activities appear to be causing a "substantial visible contrast to natural conditions" for turbidity. Observations will be recorded in a logbook and at least one photograph will be taken for each log entry. Other potentially relevant factors such as tidal stage, weather, and sea conditions will also be recorded.

Turbidity Measurements

Turbidity monitoring will be conducted at the locations described in Section 2.2. Measurements will be collected using a nephelometric turbidity monitoring probe (e.g., a Yellow Springs Instrument [YSI] 660 multiparameter data logger or equivalent) and recorded in Nephelometric Turbidity Units (NTUs). The probe will be deployed from the survey vessel and/or grab samples from the water column will be immediately analyzed with an onboard portable turbidity meter. Proposed depths and distances of turbidity monitoring are outlined in Sections 2.2 and 2.3 below. The measurement depth will be determined either by using the vessel's depth finder/sonar, hand-held electronic depth finder/sonar, or by manually deploying a weight attached to a calibrated rope/cable. Turbidity monitoring probes will be rinsed with ocean water at each monitoring location prior to turbidity measurements.

The turbidity probes and/or meters will be calibrated prior to initial use. Calibration and cleaning of the probes and/or meters will be performed on a daily basis thereafter.

Whole Water Grab Samples

The following describes the procedure for collecting all whole water grab samples for the Project. The sample collection locations and sampling depths are described in Section 2.2. The whole water grab sampling depth will be determined either by using the vessel's depth finder/sonar, handheld electronic depth finder/sonar, or by manually deploying a weight attached to a calibrated rope/cable. All samples will be collected by lowering a Kemmerer sampler or equivalent (e.g., Van Dorn sampler), or by using a submersible pump or peristaltic pump appropriate for contaminants and, if necessary, turbidity. Sampling equipment will be rinsed with seawater at the sampling location prior to the collection of the sample. At sites noted in this plan with sediment contaminant levels that exceed ER-M thresholds, sampling equipment will be decontaminated between samples using a brush and an anionic detergent (e.g., Alconox or equivalent), followed by a deionized water rinse. A field duplicate, matrix spike, and matrix spike duplicate sample will be collected for every 20 samples. The samples will be analyzed by Eurofins, a laboratory certified by the New Jersey National Environmental Laboratory Accreditation Program (NJ-NELAP) for analysis of mercury, arsenic, manganese, 4,4, -DDE, phenanthrene, bis (2-ethylhexyl) phthalate, and PCBs.

Samples will be handled in accordance with the laboratory's approved sample collection and preservation requirements. Immediately following collection, samples will be transferred to appropriate containers. Each sample container will be labeled with a unique sample identification

nomenclature, sampling location, date and time of collection, parameter(s) to be analyzed, and the sampler's initials.

Samples will be preserved, stored, and maintained at the required temperature (approximately 4 degrees Celsius) in an insulated cooler with ice until delivered to the laboratory. Sample custody will be documented using a chain-of-custody form that identifies each sample collected, the analyses requested, sample collection information, and all custody transfers occurring between field personnel, couriers, and laboratory staff.

Samples will remain under the control of authorized personnel from the time of collection through laboratory receipt. Samples will be transferred to the analytical laboratory via courier as soon as practicable following collection and within applicable holding times established by the analytical methods. Upon receipt, laboratory personnel will verify the condition, temperature, labeling, and custody documentation of the samples before accepting them for analysis.

2.2 Monitoring Locations

Two types of locations will be monitored as part of this monitoring program: background stations and compliance stations. At each station that is 20 feet and deeper, turbidity measurements using a turbidity probe and/or whole-water grab samples will be taken at 1 foot below the surface, at mid-depth, and 3 feet above the seafloor, depending on tide and wave conditions. At each station that is shallower than 20 feet, turbidity measurements using a turbidity probe and/or whole-water grab samples will be taken at 1 foot below the surface and at mid-depth, depending on tide and wave conditions.

The Water Quality Monitor(s) (WQM) will communicate daily with the offshore Environmental Inspector (EI) to conduct monitoring while in-water excavation activities are underway. However, monitoring will only be conducted during daylight hours and only when meteorological and oceanographic conditions are safe for vessel operations, as determined by the monitoring vessel captain. Any decision to discontinue monitoring activities will be documented, including an explanation for the modification, as described in Section 4.

Background Station(s)

Two background monitoring stations will be identified daily for each active offshore excavation and fill activity – one station location for an outgoing tide (ebb current) and another station location for an incoming tide (flood current). The background monitoring locations for jet trenching, hand-jetting, and backfilling will be established up-current approximately 5,000 feet

from each activity that may occur that day, outside of any existing visible plumes that may be attributable to the Project. The background monitoring locations for clamshell dredging will be established up-current approximately 1,500 feet from each activity that is underway, outside of any existing visible plumes that may be attributable to the Project. When spatially separate monitored activities are occurring concurrently within approximately 2 miles of each other, the background monitoring station that is farthest up-current shall apply for both activities. The WQM will visually survey the perimeter of the workspace and evaluate the prevailing current direction, tidal phases, and weather conditions in order to identify the area that is up-current of the active in-water excavation activities. The background locations may be modified during the course of the day depending on tidal phase and location of in-water excavation activities. When spatially separate in-water excavation activities occur then separate background locations will be identified to monitor up-current of each activity. Background turbidity monitoring frequency details are presented in Section 2.3.

Compliance Station(s)

Compliance monitoring stations for jet trenching, hand-jetting, and backfilling will be established approximately 2,500 feet down-current of each of these activities that occur that day. Compliance monitoring stations for clamshell dredging will be established approximately 500 feet down-current of each clamshell dredging activity that occurs that day. These compliance station distances are based on the results of Project-specific suspended sediment and contaminant modeling summarized above (see Section 1.2). Additionally, compliance station distances account for the typical minimum safe operating distance of approximately 500 feet for clamshell dredging operations.

The WQM will visually survey the perimeter of the workspace and evaluate the prevailing current direction, tidal phases, and weather conditions in order to identify the area that is down-current of the active in-water excavation activities. The compliance locations will be adjusted during the course of the day depending on tidal phase and location of in-water excavation activities. When spatially separate monitored activities occur concurrently, then separate compliance locations will be identified to monitor down-current of each activity as long as those compliance stations remain up-current of the nearby activity, at a minimum safe operating distance from the work vessel(s); else, the compliance stations for the activity that is farthest down-current shall apply for these multiple nearby work activities.

In addition to the compliance station, the WQM will monitor turbidity at an "informational" monitoring station to be located as close to the work activity as practicable, allowing for a safe operating distance that is to be determined by the monitoring vessel operator and the captain or designated person-in-charge of the work vessel/barge. The purpose of monitoring at the informational station is to better inform Transco on the potential for subsequent turbidity threshold exceedances at the compliance station, which will allow for operational adjustments, as warranted, to help prevent an exceedance. However, an informational monitoring station will not be established for an activity if the safe operating distance is at or near the compliance station since the readings at the two stations would be duplicative.

Table 2 summarizes the monitoring station locations with respect to the work activity. Compliance monitoring frequency details are presented in Section 2.3. Compliance thresholds for turbidity, which are summarized in Table 2 for ease of reference, are further described in Section 3.

Table 2
Monitoring Locations and Turbidity Compliance Thresholds

Monitoring Station Type	Distance of Station from Specified Activity	
	Jet Trenching / Hand-jetting / Backfilling	**Clamshell Dredging**
Background (Upcurrent)	5,000 feet	1,500 feet
Informational (Downcurrent)	Minimum safe operating distance [1]	Minimum safe operating distance[1]
Compliance (Downcurrent)	2,500 feet	500 feet
Turbidity Compliance Thresholds [2]	Greater of: (i) 30 NTU (Class SE waters) / 10 NTU (Class SC waters) [3] OR (ii) 50% over background	

Notes:
[1] The minimum safe operating distance, if significantly different from the Compliance location, will be determined by the monitoring vessel operator and the captain or designated person-in-charge of the work vessel/barge.
[2] The compliance threshold associated with waterbody classification will be determined by the location of the work activity, regardless of the classification at the compliance station.
[3] The Raritan Bay Loop route crosses SE waters from approximately MP 12.2 to MP 14.0; the route crosses SC waters from approximately MP 26.5 to MP 30.6.

2.3 Monitoring Schedule and Frequency

Turbidity Measurements

Real-time turbidity measurements will be performed in the field during daylight hours throughout the duration of the in-water excavation and fill activities. However, monitoring will not

be conducted if meteorological and/or oceanographic conditions may be unsafe for the survey vessel, as determined by the monitoring vessel captain.[2] Any days where turbidity monitoring was not attempted or accomplished due to meteorological or oceanographic conditions will be reported as discussed in Section 4.

Visual observations for sediment plumes will be performed continually (i.e., at least once hourly during the monitoring period) and turbidity levels will be measured and recorded twice daily when in-water excavation and fill activities are scheduled to occur, once during an outgoing tide (ebb current) and once during an incoming tide (flood current). The monitoring locations will be determined during each monitoring period as described in Section 2.2. Additional monitoring may be performed if routine measurements indicate an exceedance of the turbidity threshold, as described in Section 3.

Visual Observations

In addition to the turbidity monitoring, visual turbidity observations will be recorded at least once during each monitoring event.

Whole Water Grab Samples

During in-water excavation activities (daylight hours only), between MP 12.5 and MP 12.8, whole water grab samples will be collected daily for mercury, arsenic, 4',4' -DDE, phenanthrene, bis (2-ethylhexyl) phthalate, and PCBs at the monitoring locations and depths described in Section 2.2. During in-water excavation activities (daylight hours only), between MP 13.1 and MP 14.0, whole water grab samples will be collected daily for manganese at the monitoring locations and depths described in Section 2.2.

Samples collected for analysis will be transferred to an onshore laboratory daily, except on Sundays, when collected samples will be transferred on Monday morning. The requested turnaround time for laboratory analysis will be 72 hours. All samples will be analyzed by Eurofins.

[2] If conditions are determined to be unsafe for the monitoring vessel but safe for the work vessel, in-water work may proceed in absence of the monitoring; the continuation of work will be noted in the daily water quality monitoring report.

3 COMPLIANCE THRESHOLDS AND RESPONSE ACTIONS

This section identifies the water quality compliance thresholds developed for the Raritan Bay Loop and the actions that will be followed based on monitoring results. Modifications to the compliance thresholds described herein will be made in consultation with the NJDEP. If, during any in-water excavation activities, compliance thresholds are exceeded, the NJDEP will be notified as described in Section 4.

3.1 Water Quality Compliance Thresholds

Compliance thresholds for the in-water excavation activities have been developed to implement an efficient and environmentally protective program. The primary means of monitoring impacts of in-water excavation activities on water quality will be based on visual turbidity observations, real-time turbidity measurements, and analysis of whole-water grab sample contaminant concentrations, as described in Section 2.

3.1.1 Turbidity Monitoring

The compliance threshold for turbidity measurements at compliance stations is the greater of the following:

(a) The standard listed in N.J.A.C. 7:9B, effective as of November 11, 2026 (i.e., 30 NTUs for Class SE waters or 10 NTUs for Class SC waters); or,

(b) The level that is 50% higher than the ambient turbidity measured at corresponding background monitoring locations and depths.

3.1.2 Contaminant Sampling

The compliance thresholds for contaminants in whole-water grab samples collected at compliance stations are the greater of the following:

(a) The chronic toxicity standards for the applicable parameters presented in Table 3 for excavation activities within the designated route segments, except where the analytical method detection limit exceeds these standards. These standards for chronic toxicity to aquatic life in saline (SE and SC class) waters are derived from N.J.A.C. 7:9B, effective as of November 11, 2025.

(b) The level that is 50% higher than the contaminant concentrations at corresponding background monitoring locations and depths, for those parameters with chronic toxicity standards.[3]

For parameters in Table 3 that do not have chronic standards under N.J.A.C. 7:9B, data will be collected for informational purposes to validate Transco's Project-specific contaminant modeling.

Contaminant sampling analysis will not be performed during backfilling activities because backfill material will be obtained from a clean source that does not contain elevated levels of contaminants.

Table 3
Contaminant Sampling and Analysis Summary

Route Segment	Parameter	Standard (Chronic Toxicity)	Compliance Threshold	Unit	Analytical Method	Detection Limit	Sample Type
MP12.5 – MP12.8	Dissolved Arsenic	36[1]	36	µg/L	EPA 6020B	0.887	Grab
	Dissolved Mercury	0.94[1]	0.94	µg/L	EPA 7470A	0.2	Grab
	Total PCBs[2]	0.03[1]	0.119[3]	µg/L	EPA 8082A	0.119	Grab
	4',4'-DDE	None[4]	None[4]	µg/L	EPA 8081B	6.0×10^{-3}	Grab
	Bis (2-ethylhexyl) phthalate (DEHP)	None[4]	None[4]	µg/L	EPA 8270E	0.4	Grab
	Phenanthrene	None[4]	None[4]	µg/L	EPA 8270E	0.081	Grab
MP13.1 - MP14.0	Manganese	None[4]	None[4]	µg/L	EPA 6020B	0.072	Grab

Notes:
[1] The chronic toxicity standards are established under N.J.A.C. 7:9B as of November 11, 2026.
[2] The total PCBs will be calculated as the summation of Aroclors. The total PCBs detection limit is based on the highest detection limit of the individual constituents and is not calculated as the sum of the individual limits.
[3] The compliance threshold for total PCBs is set at the analytical method detection limit because the chronic water quality criterion is below the achievable detection limit.
[4] Whole-water grab samples for 4,4-DDE, bis (2-ethylhexyl) phthalate (DEHP), phenanthrene, and manganese will be collected for informational purposes, as chronic water quality standards are not established under N.J.A.C. 7:9B for these parameters.

Key: µg/L = microgram per liter; DDE = dichlorodiphenyldichloroethylene; EPA = U.S. Environmental Protection Agency; MP = milepost; NTU = Nephelometric Turbidity Unit; PCB = Polychlorinated Biphenyls

[3] For comparison, the acute toxicity criteria under N.J.A.C 7:9B for dissolved mercury (1.8 µg/L) and dissolved arsenic (69 µg/L) are approximately 92% higher than the corresponding chronic criteria. Thus, if background concentrations for these parameters were equal to the chronic toxicity standards, a compliance threshold that is 50% higher would remain lower than the acute toxicity standards.

3.2 Adaptive Management Plan

This section summarizes adaptive management actions that will be taken in the event of an apparent exceedance of a compliance threshold defined in Section 3.1, as determined by monitoring and sampling procedures described above.

3.2.1 Turbidity Exceedances

The following actions will be taken if apparent exceedances of the compliance threshold for turbidity are observed based on field measurements:

1. The WQM will immediately notify the EI and the Transco Construction Manager (CM) (or designee).
2. The WQM will confirm the turbidity measurement with additional probe and/or meter measurements. The turbidity values will be confirmed by evaluating turbidity at the compliance location within 30 minutes after the observed exceedance and comparing these results to the corresponding measurements from the background station. The original and additional measurements will be reviewed prior to additional response action for potentially spurious turbidity levels.
3. If the subsequent turbidity levels continue to exceed the compliance threshold, the WQM will evaluate potential causes of turbidity changes. This evaluation will include inspecting the probe(s) (i.e., for damage, fouling, malfunction, or other localized conditions) and visually inspecting the surrounding area for increased turbidity resulting from non-Project-related activities.
4. The WQM will measure turbidity using a different method (i.e., grab water column samples and analyze with an onboard portable turbidity meter if original measurement was collected with a turbidity probe deployed over the side of the vessel) to verify if there are problems with the probes.
5. If the turbidity exceedance can be reasonably attributed to a field equipment malfunction or damage, the equipment will be repaired/replaced, as appropriate and alternative field methods for monitoring turbidity employed. Until the situation is corrected, the WQM will conduct grab water column samples and analysis with an onboard portable turbidity meter and/or use in-situ measurements with an auxiliary turbidity probe to corroborate the conclusion of equipment malfunction.

6. If the turbidity exceedance is determined to be potentially attributable to in-water excavation and fill activities, the WQM will update the EI, the CM, and the Environmental Compliance Manager (ECM).
7. The CM and Contractor Superintendent (or designee) will evaluate the specific operations to develop and implement, as soon as possible, a Corrective Action Plan (CAP) that describes reasonable and feasible adaptive management measures to reduce turbidity. These measures may include, but are not limited to, changing the rate of advancement of the jet trencher, modifying hydraulic jetting pressures, slowing the rate of clamshell dredging, observing a one-hour slack-tide pause in dredging[4], and/or implementing other reasonable operational controls to reduce the concentration of suspended sediments.
8. The CM or Contractor Superintendent will provide a copy of the CAP to the EI, who in turn will provide a copy to the ECM.
9. The ECM will notify the NJDEP as soon as possible and no later than 12 hours after confirming that an exceedance has occurred, including a description of any actions taken to further control turbidity.
10. The adaptive management measures will continue to be implemented at least until WQMs confirm that no further turbidity exceedance potentially associated with the Project is observed at the compliance station. The WQM will continue collecting turbidity measurements approximately every 30 minutes at the compliance station(s) while turbidity monitoring indicates exceedances, and for two (2) hours following the last measured turbidity exceedance (during daylight hours). The routine monitoring schedule will resume thereafter.
11. The WQM will also collect whole-water grab samples for laboratory turbidity analyses from both the compliance and background stations once daily, as soon as possible after an exceedance is observed. The water samples will be collected in the densest part of any visible plume and at the same depths as the in-field turbidity measurements.

[4] Transco may employ a 1-hour pause in dredging during each slack-tide period (i.e., either side of high tide and low tide intervals).

12. If the adaptive management measures initially described in the CAP do not resolve the turbidity exceedances, the CAP will be modified to implement additional adaptive management measures like those described above.
13. If adaptive management techniques do not bring the measured turbidity levels into compliance, the activity associated with the turbidity increase will cease until an NJDEP-approved solution is developed or continuation of the activity is approved in writing by NJDEP.

If turbidity that causes a substantial visible contrast to natural conditions is observed at or near the compliance station at any time, the WQM will notify the EI and CM, then measure turbidity at multiple depths in the densest portion of the visible plume, as described above. The ECM will then attempt to determine the source and extent of the plume by moving up to one (1) mile from the monitoring station until substantial contrast on the water surface is no longer observed. The WQM will record these observations. If the visible plume yields an exceedance of the compliance threshold for turbidity at the compliance station, and the exceedance is potentially attributable to Project-related activities, the WQM will update the EI, CM, and ECM, and adaptive management measures will be implemented, as described above.

3.2.2 Contaminant Exceedances

The following actions will be taken if an apparent exceedance of a compliance threshold for contaminants is reported based on laboratory analysis and corrective actions have not already been implemented in response to a corresponding turbidity exceedance:

1. The lab data recipient (i.e., the ECM) will immediately notify the WQM, the EI, and the CM (or designee) and ask the laboratory to verify the validity of the data.
2. The ECM and/or WQM will review the prior daily monitoring report(s) for the time of the sample collection to help determine if the exceedance may be due to non-Project-related events (e.g., storm-related river discharge).
3. The CM and Contractor Superintendent (or designee) will review daily activity reports for the date and time of the reported exceedance to identify what construction conditions may have caused or contributed to the exceedance.

4. If the contaminant exceedance is determined to be potentially attributable to in-water excavation activities, the CM and Contractor Superintendent (or designee) will evaluate the specific operations to develop and implement, as soon as possible, a Corrective Action Plan (CAP) that describes reasonable and feasible adaptive management measures to reduce turbidity. These measures may include changing the rate of advancement of the jet trencher, modifying hydraulic jetting pressures, slowing the rate of clamshell dredging, observing a one-hour slack-tide pause in dredging[5], and/or implementing other reasonable operational controls to reduce the concentration of suspended sediments.
5. The CM or Contractor Superintendent will provide a copy of the CAP to the EI, who in turn will provide a copy to the ECM.
6. The ECM will notify the NJDEP as soon as possible and no later than 12 hours after confirming that an exceedance has occurred, including a description of any actions taken to further control contaminant levels.
7. The adaptive management measures will continue to be implemented at least until laboratory results for two consecutive monitoring intervals confirm that no further contaminant exceedance potentially associated with the Project is observed at the compliance station.
8. If the adaptive management measures initially described in the CAP do not resolve the turbidity exceedances, the CAP will be modified to implement additional adaptive management measures like those described above.
9. If adaptive management techniques do not bring the measured turbidity levels into compliance, the activity associated with the contaminant increase will cease until an NJDEP-approved solution is developed or continuation of the activity is approved in writing by NJDEP.

[5] Transco may employ a 1-hour pause in dredging during each slack-tide period (i.e., either side of high tide and low tide intervals).

4 REPORTING

The specific roles and individuals responsible for reporting water quality monitoring data will be finalized in conjunction with the various contractors prior to the start of in-water excavation and fill activities. The general reporting protocols are described in the following subsections.

4.1 Routine Monitoring Results

Monitoring results will be transmitted electronically by the WQM to the EI and ECM on a daily basis. The daily monitoring results will include:

- Time and date of monitoring activities;
- Depth of water body at the monitoring location and depth of measurements;
- General weather conditions, including wind direction and velocity;
- Tidal stage and direction of flow;
- DGPS coordinates for monitoring activities;
- Documentation of any days when monitoring was not attempted or accomplished due to meteorological or oceanographic conditions; and
- Documentation of any decision to discontinue monitoring activities, including an explanation for the modification and a description of any pertinent consultation with the NJDEP.

Transco will provide NJDEP with a daily summary of turbidity monitoring results via electronic mail and/or an online portal (or equivalent) to be established by Transco within 24 hours of collection.

The laboratory will report results for turbidity and/or contaminant analysis to the ECM within 72 hours of pickup or delivery of samples an Electronic Data Deliverable. The complete data package and electronic data deliverable will be delivered electronically to the ECM within five business days.

The ECM will highlight exceedances and email the laboratory analytical results to NJDEP within 24 hours of laboratory data receipt (or next business day thereafter). All analytical results will be sent to NJDEP as soon as received from the laboratory, and no more than 48 hours after receipt.

4.2 Water Quality Exceedances Notification and Reporting

In the event of an exceedance of a compliance threshold:

- The WQM will notify the EI and the CM.
- If the exceedance of the compliance threshold is determined to be potentially attributable to in-water excavation and fill activities, the WQM will update the EI, the CM, and the ECM immediately.
- The ECM (or designee) will notify the NJDEP within 12 hours of the field-measured exceedance and/or receipt of laboratory result that confirms an exceedance occurred.
- Within 48 hours of the exceedance (or next business day thereafter), the ECM (or designee) will provide NJDEP with a written summary (via email or online portal) that describes the apparent cause of the exceedance, the water quality data associated with the exceedance, (e.g., visual turbidity observations and field turbidity measurements, or laboratory analysis of whole-water sample), the implemented adaptive management actions (see Section 3.2), and the effectiveness of these actions in bringing the measured turbidity levels into compliance. Transmitted data will also include temporal and positional information from the shipboard DGPS system of where the monitoring occurred and/or samples were collected.
- The summary will be supplemented by the results of any associated laboratory data within 48 hours after the ECM receives the laboratory results.

4.3 Final Report

Within 30 days of completion of in-water installation including backfill activities, a final paper and electronic report summarizing the results of the water quality monitoring program will be submitted to the NJDEP. The final report will include:

- A summary of monitoring activities;
- Coordinates of monitoring locations;
- Description of the methods used for turbidity monitoring;
- A map indicating the location of the in-water excavation activities and general monitoring locations (background and compliance);

- A summary of significant modifications to the monitoring including the reasons for the modifications;
- A list of the days that monitoring was not attempted or accomplished due to meteorological or oceanographic conditions;
- A summary of corrective actions taken and follow-up testing/observations; and
- A summary of the data quality review for laboratory testing results.

One paper copy and one electronic copy of the final report will also be submitted to the Federal Energy Regulatory Commission. Electronic copies will be sent to other agencies upon request.

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5 REFERENCES

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