



Appendix 9-B: Hudson River Public Water Supply Protection and Contingency Plan

HUDSON RIVER PUBLIC WATER SUPPLY PROTECTION AND CONTINGENCY PLAN

1.0 INTRODUCTION

1.1 Introduction

CHPE, LLC (CHPE) has prepared this Public Water Supply Protection and Contingency Plan (Plan) to ensure the protection of Public Water Supplies (PWS) during the installation of the Champlain Hudson Power Express transmission system (Project) in the Hudson River. It complies with Certificate Conditions (CC) set forth by the New York State Public Service Commission (Commission), specifically CCs 102 to 106 and CC 150.

In accordance with CC 102 and 150, the New York State Department of Health (NYSDOH) was contacted to identify PWS intakes within the vicinity of the Hudson River Marine Segment. Table 1 below shows the seven water intakes identified within the Hudson River by NYSDOH. All of the identified PWS intakes are within one mile of the CHPE alignment in the Hudson River and therefore consultation is required pursuant to CC 150.

Table 1: Public Water Systems Drawing upon the Hudson River

Water Department	Approximate Distance to CHPE Alignment	Notification Required
Poughkeepsie City / Town Treatment Plant	220 feet	Yes
Rhinebeck Village Water	1,310 feet	Yes
Hyde Park Regional	1,020 feet	Yes
Highland Water District	1,095 feet	Yes
Port Ewen Water District	659 feet	Yes
Castle Point Medical Center	2,600feet	Yes
New York City System	1,979 feet	Yes

1.2 Consultation

In accordance with CC 150, CHPE completed consultation with the PWS operators as shown on Table 2.¹ For Castle Point Medical Center, CHPE sent an email to the contact identified by the NYSDOH on October 3, 2023 and made multiple attempts to make contact via telephone. A

¹ CHPE notes that these consultations have resulted in a number of commitments and measures to be taken for individual PWS intakes during construction, based on the needs or circumstances of those intakes. This Plan is intended to generally reflect the Segment-wide approach to PWS intake protections and compliance with the Certificate requirements, but it is by no means an exhaustive accounting of measures CHPE will take to protect these important resources. CHPE appreciates the ongoing cooperation of the PWS intake owners and intends to honor additional commitments made with those intakes on an individual basis to ensure the reasonable concerns of the intake owners are appropriately addressed.”

certified letter was sent on October 30, 2023. CHPE did speak with the Chief Engineer and Assistant Chief Engineer on August 18, 2022. In addition, the NYSDOH indicated that the system was “inactive” as of April 21, 2023 and that the facility was not drawing water from the Hudson River. CHPE will notify this facility in the same manner as other PWS.

Table 2: Consultation with Public Water Systems Drawing upon the Hudson River

Water Department	Formal Consultation Completed
Poughkeepsie City / Town Treatment Plant	Initial Consultation: May 1, 2023 (Village) / May 2, 2023 (City) Secondary Consultation: November 1, 2023
Rhinebeck Village Water	Initial Consultation: May 2, 2023 Secondary Consultation: November 2, 2023
Hyde Park Regional	Initial Consultation: April 26, 2023 Secondary Consultation: November 1, 2023
Highland Water District	Initial Consultation: April 25, 2023 Secondary Consultation: November 29, 2023
Port Ewen Water District	Initial Consultation: July 17, 2023 Secondary Consultation: November 16, 2023
Castle Point Medical Center	Invitation to Consultation: October 3, 2023
New York City System	Invitation to Consultation: October 6, 2023 Initial Consultation: October 23, 2023

During the initial conversations, the Project’s installation process was described as well as the geographic proximity of the installation route to the intake. The PWS operators were specifically asked about:

- The location of intake structures(s),
- Plant operations,
- Raw water quality parameters of concern including turbidity, and
- Appropriate notification procedures.

Other topics during initial consultation included pre-construction and post-construction water testing as laid out in CC 106 and consultation as to what operational controls, if any, would be appropriate given the PWS facilities capabilities as required under CC 105.

During secondary consultation, CHPE discussed their proposed approach to this contingency plan. Topics covered included notification procedures, pre- and post-installation sampling, areas of concern, and the emergency response plan.

For the New York City System, no secondary consultation was completed as NYC Department of Environmental Protection staff confirmed that the Chelsea Pump Station facility, which is the only

one to draw water from the Hudson River, had not operated since 1989 and that there were no plans to activate it within the next three years.

1.3 Hudson River Drinking Water Intermunicipal Council

In addition to this formal consultation, CHPE completed substantial consultation spanning several years with the Hudson River Drinking Water Intermunicipal Council (Hudson 7), whose membership consists of the Town of Esopus, Town of Hyde Park, Town of Lloyd, City of Poughkeepsie, Town of Poughkeepsie, Town of Rhinebeck and Village of Rhinebeck. In a letter dated December 1, 2020, the Hudson 7 raised concerns about the Facility's impact on their intakes.² In response to this letter, CHPE representatives attended meetings throughout 2021 (several of which were public, including on January 21, 2021 and February 25, 2021) with the Hudson 7 and their representatives. During these meetings, the CHPE team responded to questions related to installation of the Project and provided access to the extensive records related to water quality issues.

On October 20, 2021, CHPE sent a letter to the Hudson 7 requesting establishment of a working group, committing to certain actions, and providing certain information and, on December 3, 2021, the Hudson 7 agreed with CHPE's working group proposal. Starting in mid-January of 2022, CHPE began a series of meetings reviewing the Hudson 7's proposed testing protocols and holding technical conversations. Participants reached an agreement to conduct two additional Voluntary Water Studies in addition to the Total Suspended Sediment trial³(TSS Trial): 1) a Sediment Study and 2) a Pump Study. These additional studies were entirely optional, not required by CHPE's Article VII Certificate, and done with the intent of addressing the Hudson 7's concerns and advancing early stakeholder coordination and cooperation during project development.

The Pump Study is described below in Section 2.3. The results showed that water quality values pre-installation and during installation were comparable and consistent with applicable water quality standards. A copy of the final report is provided as Appendix 7-G of this EM&CP.

The Sediment Study involved the collection of sediment data in the vicinity of the five intakes, to understand the potential contaminants that might be mobilized by the jet plow and reach the intakes. Laboratory analysis found that there were no detectable concentrations of pesticides or volatiles (i.e., benzene, ethylbenzene, toluene, and xylenes) and no exceedances of the New York State reference values for metals, mercury, or semi-volatiles in the samples collected from the upper portion of the cores (i.e., the first four feet of the sample). The sample collected at the closest point of the route to the Hyde Park facility showed an exceedance of the reference values for dioxin and PCBs which would not impact drinking water, but rather the sludge material that

² DMM Public Comment 179 in Docket 10-T-0139.

³ CC 159ff required CHPE to complete a pre-installation trial in a manner consistent with Attachment 1 to the certificate.

results from water purification and would thus require a different method of disposal. In addition, the Hyde Park water intake is a significant distance from the proposed route (approximately 1,100 feet) and the results of the pump study, which are discussed in a separate report, suggest that construction activities will not result in elevated values at the intake. A copy of the final report is provided as Appendix 7-H of this EM&CP and in the Sediment Study section of the Project Website at: <https://chpexpress.com/water-testing/>.

The CHPE team made multiple requests in early 2023 to the Hudson 7 working group for a meeting to finalize the two reports and address the mitigation recommendations that they had previously proposed. However, on March 6, 2023, the Hudson 7 informed CHPE that it was their determination that it would be more productive for CHPE to work with each municipality on specific EM&CP measures. CHPE has honored this request.

2.0 PRE-CONSTRUCTION FIELD ACTIVITIES AND RESULTS

2.1 PWS Locations

In accordance with CC 102, CHPE reviewed nautical charts and multiple marine surveys conducted over the course of the Project's development to identify potential PWS structures in the vicinity of the transmission route. A marine route survey was performed by Ocean Surveys, Inc. in the Fall of 2012 along all submerged segments of the CHPE alignment, including the Hudson River. The purpose of this study was to evaluate lake and river bottom conditions along the CHPE alignment and locate existing submarine utilities. Survey equipment used to locate utilities included multibeam and side scan sonar and magnetometer scans. Further surveys along the planned submarine cable route were performed during 2022 and 2023, which were supplemented as necessary by diving crews in an attempt to physically and visually locate existing utilities and submarine structures along the CHPE alignment.

CHPE also consulted with PWS operators to confirm the location of their intakes. Based on the utility location field work and information provided by the PWS operators, CHPE is confident that the location of all PWS intakes which draw water from the Hudson River have been accurately mapped and will be provided on mapping during installation.

2.2 Suspended Sediment / Water Quality Pre-installation Trial

Pursuant to CC 159, CHPE completed suspended sediment monitoring to assess the levels of sediment resuspension from the jet plow operations during the pre-installation trials in the Hudson River. The intent of the TSS sampling during the trials was to monitor sediment plumes from the jet plow operations for potential exceedance of total suspended solids (TSS) standards set forth in the Project's 401 Water Quality Certificate (WQC).

The pre-installation jet plow trial occurred along a 2,640-foot route⁴ in Hudson River on September 9, 2022. Laboratory analysis of TSS from water samples collected during the jet plow trial showed low to slightly elevated levels of TSS, but none approached exceedance of ambient concentrations by 200 mg/L as per the condition described in the WQC, and all but two samples showed increases in TSS less than 10 mg/L. An increase of 55 mg/L was the maximum observed value above background for TSS levels during the jet plow trial; however, TSS levels were generally within 10 mg/L of ambient levels. It appears likely that any sediments that are resuspended due to the plow operations would only be observed as TSS at the 500-foot distance from the barge within a small width of cross-sectional area (estimated from a few feet [“ft”] to 30-35 ft wide, depending on conditions, when observable) and primarily during the times surrounding peak tidal currents within the tidal cycle. A copy of the final report is provided in Appendix 7-C of this EM&CP.

2.3 Pump Test in the Hudson River

As described above, CHPE and the Hudson 7 agreed to a study whereby during the previously described suspended sediment study a pump be placed within proximity of the installation in order to simulate the operation of a PWS during the jet plow operation. After CHPE and the Hudson 7 agreed upon a study site location, a pump was placed on a barge located 160 feet from the pre-installation trial, which represented the closest distance at that time between an intake and the cable route. Subsequently, CHPE has shifted the transmission cables so that the closest distance is 220 feet and most are significantly further, as shown in Table 1.

Sampling took place for approximately two (2) hours ahead of the trial start, then continued for two hours post-trial. Field testing for turbidity and pH was conducted every fifteen minutes at the pump, and water samples to be submitted for laboratory analysis were collected every 30 minutes. In addition, samples were collected from five locations within the river at intervals of approximately one-quarter mile, and these samples were also submitted for laboratory analysis. The suite of laboratory analyses employed was determined in consultation with the Hudson 7 and is fully described in Appendix 7-G of this EM&CP and in the Pump Study section of <https://chpexpress.com/water-testing/>.

Based on the guidance thresholds recommended by the Hudson 7 prior to the initiation of the study, the values for turbidity, pH, total organic compounds, and volatile organics were below the threshold levels established by the Hudson 7 and New York State. The findings for semi-volatile organics, metals, and PCBs also fell within the acceptable range of values according to existing state guidance, including state water quality standards. Elevated values were shown to decrease to “non-detect” levels within 1.5 to two hours after the jet plow operation. The results strongly suggest that the potential time period of concern in terms of water quality is less than one and a half hours.

⁴ The Certificate required that the TSS Trial be conducted over a distance of 1,000 feet but the Hudson 7 requested that the study encompass a half-mile distance.

2.4 EM&CP Notification

Pursuant to CC 103, the PWS facilities identified in Table 1 were provided with notice that the EM&CP associated with this Plan is available for review.

3.0 PROTECTIVE MEASURES

3.1 Pre-Construction

The following protective measures will be completed prior to construction occurring within one mile of the PWS facilities.

3.1.1 Notification

In accordance with CC 104, the PWS operators will be notified by CHPE at least thirty days prior to commencement of underwater cable installation operations (i.e., grapnel run and cable installation). This notification will occur via mail to the plant operator and the municipal contact.

In addition, the PWS operators asked to be notified of the location of the construction vessels one week, two days, and one day prior to the expected date of work within one mile of each PWS intake. The PWS operators requested that this notification be provided via email and phone. See Section 4 below for the overall communication plan.

3.1.2 Background Water Quality Assessment

In accordance with CC 106(a), CHPE informed the PWS facilities that funding was available for a third party selected and contracted by CHPE to collect:

- One (1) pre-construction raw water sample collected no more than twelve (12) hours prior to in-water operations occurring in proximity to the intake structure. Samples collected shall be analyzed for total metal concentrations with United States Environmental Protection Agency (EPA) Method 200.8.
- Two (2) sets of post-construction raw water and finished water (post-treatment) samples from the PWS facility. The first set shall be collected immediately following operations occurring in proximity to the intake structure and the second set shall be collected approximately twelve (12) hours after conclusion of operations.

CHPE confirmed that sampling could occur at the Poughkeepsie City / Town Treatment Plant, Rhinebeck Village Water, Hyde Park Regional, Highland Water District, and Port Ewen Water District facilities. Each of these facilities indicated that there was an access point for collecting

raw and finished water samples from within the plant. The New York City System indicated that sampling would not be necessary and Castle Point Medical Center did not respond to requests for consultation regarding their public water system, although the NYSDOH has also indicated that this facility is not in operation in terms of drawing water from the Hudson River.

CHPE confirmed that the third-party contractor would coordinate access within the PWS facility with participating PWS operators at least 30 days prior to the expected collection date.

CHPE intends to collect these pre-construction samples as close as possible to high tide within twelve hours prior to jet plow installation within one mile of the PWS facility. The exact timing will be determined based on progress of the installation work and in coordination with the PWS operators.

3.2 Construction

The following protective measures will be completed while construction is occurring within one mile of the PWS facilities.

3.2.1 *Water Quality Monitoring*

During construction of the Project, CHPE will employ construction oversight staff as required by the Certificate and to ensure that all regulatory requirements, plans, and specifications are appropriately met. At least one Aquatic Inspector will supervise underwater installation procedures. It is the Aquatic Inspectors' job to monitor compliance with regulatory and permit requirements for the underwater portions of the cable installation. They will monitor construction activities on, above, or below the State's waters. If construction and installation appear to be in violation of the Certificate of Environmental Compatibility and Public Need, the Aquatic Inspector may direct the field crews to stop the specific potentially harmful activity immediately and attempt to assist in preventive or remedial action.

During cable installation, CHPE will sample five hundred (500) feet up-current and five hundred (500) feet down-current of the installation vessel(s). Samples will be collected twice daily at near-surface, mid-depth, and near bottom at each sampling location. The ADCP, OBS, and CTD instruments will be calibrated to measure TSS concentrations through the quantitative relationships with turbidity established in the pre-installation trial described in Section 2.2 of this Plan.

If TSS concentrations monitored or measured at a down-current sampling location exceed TSS concentrations at an up-current background station by more than two hundred (200) mg/L, the Aquatic Inspector will be notified immediately and will also attempt to notify the New York State Department of Environmental Conservation (NYSDEC) and Department of Public Service (DPS) within twenty-four (24) hours of any such TSS exceedance. CHPE will employ one or more of the following measures: changing the rate of installation, modifying hydraulic pressures (if in jetting

mode), or implementing other reasonable operational controls to reduce suspended sediments. If CHPE proposes to employ any additional mitigation measures, they will first consult with the DPS, NYSDEC, and the Aquatic Inspector. All actions will be consistent with the applicable Certificate Conditions as well as the Water Quality Certificate Condition 14.

3.2.2 Operational Measures

As a precautionary measure, all but one of the PWS operators for operating facilities has indicated that they intend to cease drawing water from the river while the construction activities are within proximity to the intakes. The PWS facilities have storage and/or alternative sources of water that would allow for the systems to shut down for at least a day. CHPE has no authority to compel the PWS operators to take this action. The PWS Operators did not indicate that installation during nighttime would be a concern.

One PWS facility has stated that they will observe how the construction proceeds and make an informed decision at that time whether a shutdown is necessary. If they do not stop drawing water, CHPE will have a third-party contractor available to employ portable water testing equipment to measure the following parameters:

- Turbidity
- pH
- Hydrocarbons

This monitoring will commence approximately two hours prior to when the jet plow is within a half-mile upriver of the intake and cease approximately two hours after the jet plow is one-half mile downriver of the intake. Testing will be completed at approximately one-half hour intervals.

3.3 Post-Construction Activities

The following protective measures will be completed after cable installation has progressed more than one mile past the intake of each PWS facility.

3.3.1 Post-Construction Water Quality Assessment

In accordance with CC 106(b), CHPE will contract with a third party to collect one (1) raw water sample and one (1) finished sample when construction operations are in proximity to the PWS facility, as well as one (1) raw and (1) finished sample within twelve (12) hours after the conclusion of operations in proximity to the intake structure. The timing of this collection will correspond to the position of the tide at the time of the pre-installation trial to the extent practical, to allow for a more consistent comparison. As with pre-installation samples, the third-party contractor will coordinate access with the PWS operators at least 30 days prior to the expected collection date.

In accordance with CC 106(c), raw water samples collected will be analyzed for total metal concentrations with EPA Method 200.8 and post-construction samples will be reported using a twenty-four hour turn around to the extent possible based on the timing of collection.

In accordance with CC 106(d), if DPS Staff in consultation with NYSDOH determine that the raw water sample results suggest significant water quality impacts associated with any pre-construction or construction operations, the finished water samples will be analyzed for total metal concentrations with EPA Method 200.8. These results will be reported using a twenty-four-hour turnaround.

In accordance with CC 106(e), if the analysis of the finished water sample results indicates that there has been a maximum contaminant level (MCL) violation caused by the installation activities, the CHPE will employ the mitigation measures prescribed in Section 3.2.1 and Condition 14(c) of the WQC in all locations where cable installation operations are within one (1) mile of a water intake structure. Prior to employing any mitigation measures not otherwise provided for in accordance with Condition 14(c) of the WQC, CHPE will consult with the DPS Staff, NYSDEC, and the Aquatic Inspector. In the event that DPS Staff determines that the mitigation techniques are unable to mitigate the MCL violation(s), underwater cable installation shall be suspended, and the CHPE will consult with DPS Staff, NYSDOH, and NYSDEC regarding alternative cable installation techniques and propose such changes to the approved EM&CP in accordance with Condition 158 as may be necessary.

4.0 PWS PLANNING DOCUMENTS

CHPE requested the emergency preparedness plans from all of the PWS operators. The following plans were reviewed in developing this document:

- Poughkeepsie Water Treatment Facility Emergency Preparedness Plan
- Highland Water District Emergency Response Plan
- Village of Rhinebeck Water System Emergency Response Plan
- Port Ewen Water Supply Emergency Response Plan
- Hyde Park Emergency Response Plan

In addition, the Town of Esopus submitted a document entitled “Champlain Hudson Power Express – Drinking Water Intake Peer Review” authored by T&B Engineering and Landscape Architecture, PC (Tighe & Bond Report)⁵. This document was reviewed in the development of this document. Additionally, CHPE intends to meet with County Emergency Management offices to review regional responses.

⁵ DMM 1365, <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={70F6668A-0000-CA3A-81D2-8E8942B16B5F}>.

5.0 COMMUNICATION PLAN

Communication can be broken down into three categories: Scheduling Notification, Operational Notification, and Emergency Notification. Each of these communication provisions are provided below.

It should be noted that the discussion below provides the minimum notifications that will be provided. It is anticipated that communications with the PWS operators, municipal officials, and key stake holders will involve numerous touch points that can include email, texts, phone calls and in person visits. This level of communication will ensure that the PWS operators are fully aware of the location of vessels as they approach intakes.

5.1 Scheduling Notification

The following are the anticipated notifications prior to commencing jet plow operations within one-half mile of the drinking water intakes.

- CHPE will notify operators via email at least thirty (30) days prior to when cable installation is scheduled to be within one-mile of an intake. CHPE will request confirmation that the notification has been received.
- CHPE will notify operators one week prior to the expected date of work within one mile of each PWS intake via email. CHPE will confirm the proposed sampling schedule and, to the extent possible, provide the expected date and time of when construction work will be in proximity to the intake. CHPE will request confirmation that the notification has been received and also telephone the operators.
- CHPE will notify operators two days prior to the expected date of work within one mile of each PWS intake via email. CHPE will request confirmation that the notification has been received and also telephone the operators.
- CHPE will notify operators via email the day before the work will occur within one mile of the intake. CHPE will request confirmation that the notification has been received and also telephone the operators.

5.2 Operational Notification

The following are the anticipated notifications during background sample collection, at the start of jet plow operations, and during jet plow operations within one-half mile of the drinking water intakes:

- The third-party consultant collecting raw water samples will notify CHPE via email upon collection of the background samples.
- CHPE will notify the operators when the installation vessel is within one mile of the PWS intake and request that operators confirm that the PWS has been shut down as a precautionary measure if that had previously been agreed upon.

- CHPE will notify the operators via email when the installation vessel is at least one-half mile away from the PWS intake. CHPE will request confirmation from the operators that notification has been received.

5.3 Emergency Notification

The following are the baseline notifications during a threshold exceedance or emergency:

- CHPE will notify the PWS operator if the cable installation has stopped within one-half mile of their intake for any reason and update the operator when the cable installation operation has resumed. CHPE will also notify and update the PWS operator immediately downstream.
- CHPE will notify the PWS operator if there has been exceedance of the thresholds established in the WQC when within one mile of their intake. CHPE will provide a statement about how CHPE will alter their operations in accordance with their WQC and Certificate Conditions as soon as practicable. CHPE will also notify and update the PWS operator immediately downstream.

CHPE will also provide the PWS operators with the telephone number for a 24-hour contact to allow for communications in the event there is an issue related to the PWS operation. CHPE commits to working cooperatively with the PWS operators to resolve issues that may arise.

Additional notifications will occur as required under each facility's emergency response plan, as discussed below.

6.0 POTENTIAL AREAS OF CONCERN

The installation activities for the Project have the potential to impact the identified PWS via two mechanisms:

- Major Line Break: impact to the intake and/or associated distribution piping to the PWS through anchor drop and/or cable installation.
- Source Contamination: disturbance of sediments may result in turbidity and/or contaminant level(s) that exceed existing water quality criteria.

A discussion of the likely level of risk and proposed monitoring are discussed below.

6.1 Major Line Break

Under this scenario, the installation vessel would either lay the cables or drop anchor on the intake or the distribution line that connects the intake to the plant. This scenario is considered to be highly unlikely as the installation vessels will operate continuously and will necessarily follow the transmission route, which is at least 220 feet from any intake. All cable installation

and burial vessels will be dynamically positioned and hence are not required to anchor during the work. However, CHPE does not have any control over other maritime vessels in the Hudson River and how they will respond to the presence of the installation vessels in the water.

6.1.2 Monitoring

All CHPE vessels will monitor their position using highly accurate positioning systems that will allow operators to know their position within a matter of feet. All vessels with construction equipment will remain at least 250 feet from any intake and/or the associated distribution line that connects to the PWS facility. The survey system onboard the vessel will have all features on the river including the positions of all intakes.

6.2 Source Contamination

Under this scenario, the installation of the transmission cables would result in waters entering the plant where the suspended sediment and/or contaminant levels are above those normally experienced at the PWS. This scenario is also considered to be highly unlikely based on the pre-installation trials completed in the Hudson River. At this point CHPE has confirmed that the Poughkeepsie City / Town Treatment Plant, Port Ewen Water District, Highland Water District, and Rhinebeck Village Water facilities will voluntarily enact operational controls (e.g., system shut down) while construction is occurring within close proximity to the intake.

6.2.1 Monitoring

During construction activities, turbidity and total suspended solid parameters will be continuously monitored. Turbidity is the measure of anything present in the water that impedes transmission of light through the water and is typically caused by suspended sediments in the water column. While the Hudson River's background turbidity levels fluctuate through the normal current activity and the depositing of water from tributaries, increases in background levels of turbidity can be an indicator that sediment and potential contaminant materials adhered to the sediment material have been released. Therefore, a comparison of "upstream" with "downstream" turbidity levels serves as an indicator as to whether the construction activities could be having an impact on the PWS.

Laboratory samples will be collected twice per day during installation and at the PWS samples will be collected both before and after construction has occurred in proximity to the PWS. However, due to the processing times the laboratory results will not be available immediately.

7.0 EMERGENCY RESPONSE PLAN

This section discusses the anticipated response plan should the jet plow installation cause an extended interference with a drinking water source. While neither of the previously discussed areas of concern are considered to be probable to occur based on best available data, this plan lays out how CHPE will respond in coordination with local officials should such an unlikely event occur.

In order to organize the anticipated responses, CHPE has established two levels based on the number of days that a PWS facility needs to remain off-line. For a level 1 situation, the expected interference is expected to last for less than one day and be consistent with other situation where conditions require a PWS to stop operations for a limited period of time. For the second level, the expected duration is longer and therefore the individual facility's emergency response plan will be enacted.

7.1 Level 1 – 0 to 1 Day Offline

Under this scenario, the PWS determines that monitoring parameters are outside of the plant's operational level. The PWS will continue to utilize its existing storage capacity to meet municipal needs. The list of parties that will be notified is provided in Attachment 1.

CHPE will engage a third-party contractor to work with the PWS operator to conduct monitoring using field equipment. Such monitoring will occur on at least an hourly basis and the results will be communicated to the PWS operator.

It is anticipated that each PWS facility will enact its own internal protocols for when source contamination has occurred. CHPE will work in a cooperative manner to assist in supporting these procedures, in a manner determined by the individual PWS operator.

CHPE will coordinate with the PWS operator to report the situation to the Dutchess County Department of Health or the Ulster County Health Department. CHPE will coordinate notifying the New York State Department of Health (NYSDOH) in a manner that is compliant with Part 5, subpart 5-1 of the New York State Sanitary Code with the PWS operation. Contact information can be found in Attachment 1.

7.2 Phase 2 – > 1 Day Offline

If, in the opinion of the PWS operator, the water storage levels reach a critical level so that the facility will not be able to meet the demands of normal consumption, CHPE will coordinate with the operator and municipal officials to enact the facility's emergency response plan.

For each PWS facility, a description of the expected activities is provided below.

7.2.1 *Poughkeepsie Water Treatment Facility*

Poughkeepsie Water Treatment Facility Emergency Preparedness Plan (Poughkeepsie Plan) identifies key contacts and establishes the protocol for determining who will serve as the Emergency Coordinator based on the type of emergency. Based on the identified concerns discussed above, the Water Plant Administrator would likely serve as the Emergency Coordinator.

CHPE will assist as requested by the Emergency Coordinator to prepare / distribute public notifications as required under the Poughkeepsie Plan. CHPE will be prepared to contact their contracted bulk water haulers (refer to Attachment A) should additional water supplies be required.

7.2.2 *Highland Water District*

The Highland Water District Emergency Response Plan (Highland Plan) establishes the chain of command for managing the emergency and making key decisions. The Water and Sewer Administrator would serve as the Emergency Coordinator.

The Highland Plan identifies two bulk suppliers as alternative suppliers.

CHPE will assist as requested by Emergency Response Lead in notifying priority users. A list of priority users is provided in Attachment 1, which is drawn from the Highland Plan. CHPE will also assist as requested in distributing public notifications as laid out in Highland Plan.

7.2.3 *Village of Rhinebeck Water System*

The Village of Rhinebeck Water System Emergency Response Plan (Rhinebeck Plan) establishes the chain-of-command during an emergency that impacts the ability of the PWS to supply potable water. Based on the concerns identified above, the Chief Operator would serve as the Emergency

Response Lead and would be responsible for declaring an emergency, enacting the Rhinebeck Plan, and managing external communications (media, regulators, municipalities). The Assistant Operator would serve as the alternative Emergency Response Lead and direct the operational response.

The Rhinebeck PWS has a two-million-gallon water storage tank located at an elevated point above the plant with an average day demand of approximately 463,000 gpd and peak day demand of 779,000 gpd. The Rhinebeck Plan identifies two bulk suppliers as alternative suppliers.

The Village of Rhinebeck Code §115-14 states that the Water Department reserves the right to limit the amount of water that is supplied to consumers should an emergency situation warrant such measures. Section 2.2 of the Rhinebeck plan defines the type of restriction that should be enacted based on water storage levels. For example, If the water level in the storage tank is less than 75% but can be maintained above 50% then Stage I restrictions should be implemented while Stage III would come into place if the water level in the storage tank cannot be maintained above 25%.

CHPE will assist as requested by the Emergency Response Lead in providing notification related to water use restriction. CHPE will be prepared to contact their contracted bulk water haulers (refer to Attachment A) and confirm watering points in Rhinebeck.

CHPE will assist as requested by the Emergency Response Lead in notifying priority users. A list of priority users is provided in Attachment 1, which is drawn from Appendix A of the Rhinebeck Plan. CHPE will also assist as requested in the distribution of public notifications as laid out in Section 2.7 of the Rhinebeck Plan.

CHPE anticipates that Emergency Response Lead will follow the protocols laid out in Section 3.1 – Source Contamination in the event of source contamination and Section 3.3 – Pump Station Failure in the event of a major line break. CHPE will assist as requested by Emergency Response Lead.

7.2.4 Port Ewen Water District

The Port Ewen Water Supply Emergency Response Plan (Esopus Plan) provides for actions to be taken in the event of a Prolonged Water Outage, Transmission and/or Distribution System Failure, and Contamination of Supply (including MCL violations). The Esopus Plan established who should be contacted in the event of one of situations.

The Esopus Plan identifies two bulk suppliers as alternative suppliers.

CHPE will assist as requested by Emergency Response Lead in notifying priority users. A list of priority users is provided in Attachment 1, which is drawn from the Esopus Plan and contact with

the plant operator. CHPE will also assist as requested in distributing public notifications as laid out in Esopus Plan.

7.2.5 Hyde Park Regional Water

The Hyde Park Emergency Response Plan (Hyde Park Plan) was developed as a guideline for the operators and administration in order to minimize disruption of normal services to its consumers and to provide public health protection and safety during an emergency. Emergency response planning should be a coordinated and planned process. Proper planning can lessen the impact of an emergency. This plan was designed to address various emergency hazards that may occur in rural and small water systems.

The Hyde Park Plan provides for emergency contacts at the local and state level, local contact notification list, utilities contact list, and media notification list.

During periods of a drought, a major leak, a system failure, or excessive consumption beyond the capacity of the system, etc., the water system must have the capability to conserve and restrict water usage. The document lays out the different restrictive stages, the triggers for each, and the associated restrictions.

7.2.6 NYC Chelsea Pump Station

Based on consultation completed with New York City Department of Environmental Protection Regional Manager Jim Knessler and Croton Regional Surveyor Adolf Jonietz, the Chelsea Pump Station will not be in operation during the time of installation and for at least two years after installation. In the unlikely event that there is an impact on the intake and associated distribution line, CHPE will work cooperatively with the City of New York to complete the necessary repairs.

7.4 Water Suppliers

CHPE will contract with at least two bulk potable water contractors who will have the ability to meet the required potable water volume to the applicable water suppliers and end users at least three months in advance of cable installation for on-call services. The list of the selected contractors will be provided to the New York State Department of Public Service, as well as to any PWS operator upon request. CHPE will also confirm their method of supplying water, including whether they have pumping capabilities.

ATTACHMENT 1
NOTIFICATION PARTIES

Champlain Hudson Power Express General Notification/Contact List

Name	Affiliation	E-Mail Address	Phone #	Mailing Address
OWNER - Champlain Hudson LLC				
	Senior Project Manager- CHPE LLC		Office: Cell:	600 Broadway, Albany, NY 12207
	Environmental Coordinator - CHPE LLC		Office: Cell:	600 Broadway, Albany, NY 12207
	Media Relations Director - CHPE LLC		Office: Cell:	600 Broadway, Albany, NY 12207
PRIME CONTRACTOR - NKT				
	Project Manager - NKT		Office: Cell:	
	Project Engineer - NKT		Office: Cell:	
	Project Executive - NKT		Office: Cell:	
REGULATORY AGENCIES				
Steven Gladding	NYSDOH	Steven.Gladding@health.ny.gov	Office: 518-402-7650	
	NYSDOH		Office: Cell:	
	NYSDOH		Office: Cell:	
	Dutchess County Department of Health		Office: Cell:	
24-hour Hot Line	Dutchess County Department of Health		518-486-3404	
	Ulster County Health Department		Office: Cell:	
	Ulster County Health Department		Office: Cell:	
	Project Manager - NYSDPS		Office: Cell:	
	Project Manager - NYSDEC		Office: Cell:	
	NYSDEC - Region 3		Office: Cell:	
	USACE		Office: Cell:	USACE, New York District
NYSHD-CERTIFIED POTENTIAL BULK WATER SUPPLIERS				
Gilmore Transportation			845-229-7743	46 Marshall Rd Hyde Park, NY 12538
Troncillito Brothers			845-236-4616	33 Miki Lane Marlboro, NY 12542
Shawangunk Bulk Spring Water			845-744-2103	1084 Indian Springs Rd. Pine Bush, NY
Turco Trucking and Repair			845-246-2491	1 Peach Lane Saugerties, NY 12477
Cokertown Springs, Inc.			845-706-8500	4 Albie Rd. Red Hook, NY 1257
NYSHD-CERTIFIED POTENTIAL BOTTLED WATER SUPPLIERS				
Dowser, LLC			845-569-0099	1 Pepsi Way Newburgh, NY 12550
Evian Natural Spring Water			914-872-8701	100 Hillside Avenue White Plains, NY
Adirondack Beverages			518-370-3621	701 Corporations Park Scotia, NY 12302
Frosty Springs Bottling Co.			518-643-8723	842 Mannix Road Peru, NY 12972

Champlain Hudson Power Express				
Rhinebeck - Notification/Contact List				
Name	Affiliation	E-Mail Address	Phone #	Mailing Address
OPERATORS				
Bryan Alix	Chief Plant Operator	water@villageofrhinebeckny.gov	Office: 845-876-7331 Cell: 518-947-9500	
	Assistant Plant Operator			
LOCAL GOVERNMENT				
Gary Bassett	Village of Rhinebeck - Mayor	MayorBassett@villageofrhinebeckny.gov	Office: 845-876-7051 Alt: 845-235-3965	76 East Market St Rhinebeck, NY 12572
Elizabeth Spinzia	Village of Rhinebeck - Town Supervisor	espinzia@rhinebeckny.gov	Office: 845- Cell: 845-	80 East Market Street, Rhinebeck, NY 12572
PRIORITY USERS				
Rhinebeck High School			845-871-5550	
Chancellor Livingston School			845-871-5570	
Bulkeley School			845-871-5550	
Northern Dutchess Hospital			845-876-3001	
Baptist Home			845-876-2071	
Fernduff Nursing Home			845-876-2011	
Rhinebeck Fire Department			845-876-3133	
OTHERS				
Beekman Arms			845-876-7077	
Rhinecliff Properties			845-876-0590	
Terrapin			845-876-3330	
Bill Clark-Fairground's Plaza			845-705-2713	

Champlain Hudson Power Express				
Highland - Notification/Contact List				
Name	Affiliation	E-Mail Address	Phone #	Mailing Address
OPERATORS				
Mark Schaff	Senior Operator	mschaaf@townofloyd.com	Office: 845-691-2400 Alt: 845-691-7944	
Frank Palamteer	Senior Maintenance	fplalamteer@townofloyd.com	Office: 845-691-2400 Alt: 845-514-6416	
LOCAL GOVERNMENT				
David Plavchak	Town of Lloyd Supervisor	dplavchak@townofloyd.com	Office: 845-691-2144, x101	12 Church Street, Highland, NY 12528
Adam Litman	Town of Lloyd Water and Sewer Administrator		Office: 845-219-4770	12 Church Street, Highland, NY 12528
Kevin Klotz	Town of Lloyd Water and Sewer Administrator		Office: 845-240-8428	12 Church Street, Highland, NY 12528
PRIORITY USERS				
Northern Medicine Group			845-691-7251	
Highland Schools			845-691-1000	
Hudson Valley Nursing			845-691-7201	
Wingate Nursing			845-691-6800	
Valley Vista			845-691-7400	
Village View Senior Homes			845-691-8399	
OTHERS				

Champlain Hudson Power Express				
Port Ewan - Notification/Contact List				
Name	Affiliation	E-Mail Address	Phone #	Mailing Address
OPERATORS				
Nicholas Jay Butler	Superintendent	Nbutler@esopus.com Portewenwatersewer@esopus.com	Office: 845-331-5900 Alt: 845-663-6433	
Michael Dauner	Operator / Foreman	MikeDauner48@gmail.com	Office: 845-331-5900 Alt: 845-532-7034	
Timothy Bryon	Operator	Tenxtimmy@aol.com	Office: 845-331-5900 Alt: 845-389-3456	
Andre Otayek	Operator		Office: 845-331-5900 Alt: 845-937-3089	
Shawne DeGroat	Operator	Sadusmc78@gmail.com	Office: 845-331-5900 Alt: 845-514-0393	
Billy McNamara	Operator	Wmcnamara@esopus.com		
Michael Miller	Operator	Mmiller@esopus.com		
LOCAL GOVERNMENT				
Danielle Freer	Town of Esopus Supervisor	dfreer@esopus.com	Office: 845-331-0676 Alt: 845-649-8593	PO Box 700 Port Ewan, NY 12466
Jared Guess	Town of Esopus Deputy Supervisor	jguess@esopus.com	Office: 845-331-0676	PO Box 700 Port Ewan, NY 12466
PRIORITY USERS				
Robert Graves Elementary School			845-338-1945	
BOCES			845-331-6880	
Dyno Nobel			845-338-2144	
OTHERS				

Champlain Hudson Power Express				
Hyde Park - Notification/Contact List				
Name	Affiliation	E-Mail Address	Phone #	Mailing Address
OPERATORS				
Michael J. Keating, P.E.	Dutchess County Water And Wastewater Authority Executive Director	mkeating@dutchessny.gov	845-486-6509	1 LaGrange Avenue Poughkeepsie, NY 12603
Rich Winchester	Operations Director	rwinchester@dutchessny.gov	845-486-3601	
Alain Petit, Jr.	Chief Operator	apetit@dutchessny.gov	845-229-2524 845-431-6677	
Ken Underwood	Operator	kunderwood@dutchessny.gov	845-229-2524 845-431-6677	
LOCAL GOVERNMENT				
Alfred Torreggiani	Town of Hyde Park Supervisor	atorreggiani@hydeparkny.us	845-229-5111, Press 8	4383 Albany Post Road Hyde Park, NY 12538
Lynn Ruggiero	Town of Hyde Park Councilperson	lruggiero@hydeparkny.us	845-229-5111, Press 8	4383 Albany Post Road Hyde Park, NY 12538
PRIORITY USERS				
Northern Dutchess	Hospitals		(845)876-3001	
Vassar Brothers			(845)454-8500	
St. Francis			(845)483-5000	
Culinary Institute			(845)452-9600	
Hyde Park Plaza			(845)629-8537	
Golden Apartments			(845)229-5546	
Hyde Park Condos			(845)229-4301	
Hyde Park Heights			(261)871-1055	
Stop & Shop			(845)229-9615	
Hyde Park Central School District			(845)229-4005	
Cosimo's Town Center			(845)564-5571	
Hyde Park Town Center North			(845)564-5571	
Rainbow Healing			(845)229-5669	
G&G Medical Bldg			(845)229-2005	
Roe Medical Building			(845)224-8246	
Anderson Center for Autism			(845)889-9403	
Renaissance Rehab			(845)889-4500	
Heritage Point			(845)392-6873	

Champlain Hudson Power Express				
New York System - Notification/Contact List				
Name	Affiliation	E-Mail Address	Phone #	Mailing Address
OPERATORS				
Jim Knessler	NYC DEP Regional Manager	JKeesler@dep.nyc.gov	Office: 845-808-1777 Alt: 347-672-1046	
Adolf Jonietz	NYC DEP Croton Regional Surveyor	jonietza@dep.nyc.gov	Office: 845-808-1780 Alt: 347-382-0897	