Lead and Copper Sampling Plan

SYSTEM NAME

PWSID NUMBER

|  |
| --- |
| PLAN DATE |
| **1. Sampling Plan Certification** |

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| --- | --- | --- |
| ***I have verified and certify the information listed in this Plan is true and accurate to the best of my knowledge and belief:*** | | |
| Plan Preparer Signature |  | Date |
| Plan Preparer Name (Please Print) |  | Title |
| Water System Owner Signature |  | Date |
| Water System Owner Name (Please Print) |  | Title |
| Licensed Operator Signature |  | Date |
| Licensed Operator Name (Please Print) |  | License Number |
| **Use additional spaces below for future updates/revisions** Date Plan Revised: | | |
| ***I have verified and certify the information listed in this Plan is true and accurate to the best of my knowledge and belief:*** | | |
| Plan Preparer Signature |  | Date |
| Plan Preparer Name (Please Print) |  | Title |
| Water System Owner Signature |  | Date |
| Water System Owner Name (Please Print) |  | Title |
| Licensed Operator Signature |  | Date |
| Licensed Operator Name (Please Print) |  | License Number |

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| **2. General Water System Information** |

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| System Name: | | PWSID: |
| Water System Type: Community (CWS) ; Non-transient Non-community (NTNCWS) ;  Transient Daycare ; Non-Public Daycare | | |
| NTNCWS Only: School ; Daycare ; Hospital ; Other | | |
| System Source Type: Ground Water (GW) ; Surface Water (SW) ; GW Under Direct Influence (GUDI) ;  SW Purchased ; GW Purchased | | |
| Number of Service Connections[[1]](#footnote-1): | System Size Under LCR: Large ; Medium ; Small | |
| Total Population Served (excluding transient populations): | | |

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| **2.a Contact Information** | |
| System owner contact information: | |
| Name: | Title: |
| Phone: | Email: |
| Licensed operator contact information | |
| Name: | Title: |
| Phone: | Email: |
| License (VSWS, T1, W1, etc.): | License Number: |
| Plan Preparer contact information | |
| Name: | Title: |
| Phone: | Email: |
| Additional Licensed operator contact information (*if applicable*) | |
| Name: | Title: |
| Phone: | Email: |
| License (VSWS, T1, W1 etc.): | License Number: |

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| **2.b List of Sources and Treatment Facilities** *Add additional rows and information as necessary* | | | |
| Treatment Facility/ID# (TP)a | Supplying Source(s)/ID# (WL, IN)a | | Corrosion Control Usedc |
| TP \_ \_ \_ \_ \_ \_ \_  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_  No Treatmentb CH \_ \_ \_ \_ \_ \_ \_  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_ | **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_    **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_ | **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_    **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_ | Chemical feed(s) operated for CCT  pH Adj. Process/Chem: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Orthophosphate/Orthophosphate Blend  Silica  Alkalinity Adj. Process/Chem: \_\_\_\_\_\_\_\_\_  None |
| TP \_ \_ \_ \_ \_ \_ \_  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_  No Treatmentb CH \_ \_ \_ \_ \_ \_ \_  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_ | **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_    **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_ | **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_    **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_ | Chemical feed(s) operated for CCT  pH Adj. Process/Chem: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Orthophosphate/Orthophosphate Blend  Silica  Alkalinity Adj. Process/Chem: \_\_\_\_\_\_\_\_\_  None |
| Wholesalers | Interconnections /ID# (CC)a | | Corrosion Control Used by Supplierc |
| PWSID: NJ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_  PWSID: NJ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ \_\_ | **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_    **\_ \_ \_ \_ \_ \_ \_ \_ \_**  Year Round  Emergency  Seasonal \_ \_/\_ \_ to \_ \_/\_ \_ | % of water received from interconnection(s):  \_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_ | Chemical feed(s) operated for CCT  pH Adj. Process/Chem: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Orthophosphate/Orthophosphate Blend  Silica  Alkalinity Adj. Process/Chem: \_\_\_\_\_\_\_\_\_  None |
| Additional Corrosion Control Treatment Locationsd | | | Corrosion Control Used |
|  | | | Chemical feed(s) operated for CCT  pH Adj. Process/Chem: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Orthophosphate/Orthophosphate Blend  Silica  Alkalinity Adj. Process/Chem: \_\_\_\_\_\_\_\_\_  None |

a Facility IDs are available in Drinking Water Watch. Note that emergency interconnections may not be in DWW; therefore, insert the name of the facility in lieu of the Facility ID.

b If multiple supplying sources combine prior to distribution system, but with no treatment enter the Facility ID for the common header (CH).

c If the supplying source is an interconnection (CC) indicate what CCT the wholesaler operates in addition to what the purchaser has installed.

d An example of an additional treatment location would be a booster pump station for orthophosphate in the distribution system.

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| **2.c Contact Information for bulk purchasers and wholesalers:** *Check here if not applicable* | |
| SYSTEM NAME PWSID #  Bulk Purchaser ; Wholesaler  Year Round ; Seasonal ; Emergency | |
| Name: | Title: |
| Phone: | Email: |
| SYSTEM NAME PWSID #  Bulk Purchaser ; Wholesaler  Year Round ; Seasonal ; Emergency | |
| Name: | Title: |
| Phone: | Email: |
| SYSTEM NAME PWSID #  Bulk Purchaser ; Wholesaler  Year Round ; Seasonal ; Emergency | |
| Name: | Title: |
| Phone: | Email: |
| SYSTEM NAME PWSID #  Bulk Purchaser ; Wholesaler  Year Round ; Seasonal ; Emergency | |
| Name: | Title: |
| Phone: | Email: |
| **We will notify the Bulk purchasers listed above, and NJDEP, if any change in source water and/or change in CCT will last for 30 or more consecutive days.** | |

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| **3. Distribution Map**  *For NTNCWS, a detailed sketch, or floorplan (for schools) may be included in lieu of a map.* | |
| Clearly identify the following water system components identified on the Distribution Map in Appendix A: | |
| Required: | If applicable: |
| * Entry Points to the Distribution System (EPTDS), permanent and emergency * Standard PBCU Sampling Sites * Alternate PBCU Sampling Sites * All taps used for consumption/food preparation (NTNCWS only) | Reduced PBCU Sampling Sites  Delineation of Pressure Zones # of Pressure Zones:  Booster Stations (CCT only)  Storage Tanks  Lead Service Lines (or delineation of area served by lead service lines)  Delineation of areas receiving CCT  Delineation of areas receiving no/different CCT from seasonal EPTDS  Blow offs/flushing points |

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| **4. Current Monitoring Schedule** |
| **Standard** (January 1st- June 30th and July 1st – December 31st)  Minimum number of sites required  **Reduced** (June- September)  Annual  Triennial (sampling events will not be more than 3 years apart)  Minimum number of sites required  *It is strongly recommended to collect lead and copper samples early in the monitoring period to allow for any required actions (i.e. initial water quality parameter monitoring) to be conducted within the required timeframe, if applicable.* |

| **5. Materials Evaluation for Community Water System**  *Additionally, complete the Lead and Copper Sampling Pool Certification (Form BWSE-14)* | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Resources used for evaluating materials throughout the entire distribution system (Check all that apply)** | | | | |
| **Distribution System Resources:**  Distribution system maps and record drawings  Capital improvement plans and/or master plans for distribution system development  Utility records including meter installation records, customer complaint investigations and all historical documentation which indicate and/or confirm the location of lead service connections  Results from service line sampling where lead service lines are suspected to exist but their presence is not confirmed  Results from community survey  Other: | **Residential or non-residential building resources:**  County appraisal district records  Contacts within the water system, municipal office or other local officials;  Survey results from area plumbers who are asked about when and where copper pipe with lead solder was used;  Documented interviews of residents- letters, phone survey, personal contact, etc.; and/or  Documented interviews of local contractors, developers, and builders.  Other: | | | |
| Material[[2]](#footnote-2) | | Number present,[[3]](#footnote-3) (Tier/Sample Category)  *Check all that apply* | | |
| Lead Service Lines (LSL) including goosenecks  *Check here if total number is unknown and complete confirmation strategy below.*  Note that if LSL and other Tier 1 sites are present, ≥ 50% of sampling locations must be from sites served by LSLs. | | Single Family (Tier 1/i) | |  |
| Multi Family[[4]](#footnote-4) (Tier 2/iv) | |  |
| Schools (Tier 2/x) | |  |
| Non-Residential (Tier 2/x) | |  |
|  | |  |
| Containing Lead pipes | | Single Family (Tier 1/iii) | |  |
| Multi Family (Tier 2/vi) | |  |
| Schools (Tier 2/xii) | |  |
| Non-Residential (Tier 2/xii) | |  |
|  | |  |
| Copper pipes with lead solder installed after 1982 | | Single Family (Tier 1/ii) | |  |
| Multi Family (Tier 2/v) | |  |
| Schools (Tier 2/xi) | |  |
| Non-Residential (Tier 2/xi) | |  |
|  | |  |
| Copper pipes with lead solder installed before 1983 | | Single Family (Tier 3/vii) | |  |
| Multi Family (Tier N/ix) | |  |
| Schools (Tier N/xiii)) | |  |
| Non-Residential (Tier N/xiii) | |  |
|  | |  |
| Copper from piping, service lines and home plumbing with no lead solder | | Single Family (Tier N/viii) | |  |
| Multi Family (Tier N/ix) | |  |
| Schools (Tier N/xiv) | |  |
| Non-Residential (Tier N/xiv) | |  |
|  | |  |
| Galvanized piping, service lines, and home plumbing with no lead and/or copper materials. | | Single Family (Tier N/viii) | |  |
| Multi Family (Tier N/ix) | |  |
| Schools (Tier N/xiv) | |  |
| Non-Residential (Tier N/xiv) | |  |
|  | |  |
| Ferrous piping material such as cast iron and steel. | | Single Family (Tier N/viii) | |  |
| Multi Family (Tier N/ix) | |  |
| Schools (Tier N/xiv) | |  |
| Non-Residential (Tier N/xiv) | |  |
|  | |  |
| Distribution system main materials. *Check all that apply* | | Lead |  | |
| Galvanized |  | |
| Asbestos |  | |
| Ductile Iron |  | |
| Other |  | |
| We have not evaluated our entire distribution system. Our strategy for identifying and confirming materials within the distribution system is detailed below. *CWS are not required to inspect the interior plumbing of potential sites; however, it is strongly recommended to inquire about the materials of a customer’s plumbing on the sample instructions/chain of custody.*  We will take the following steps to identify materials within the distribution system:  Request that our customers complete questions about their homes on our sampling instructions/chain of custody  Conduct a separate survey of our customers’ interior plumbing materials  Conduct a separate survey of our customers’ interior plumbing materials and include a lead swab testing kit  Send lead swab testing kits to all our customers who have not had the plumbing materials confirmed  Distribution main materials: We will collect information where possible during our normal operations, i.e., checking service line materials when reading water meters or performing maintenance activities.  Continued review of those resources indicated at the beginning of this section.  We will utilize the following strategy to identify the presence and location of lead service lines and lead goosenecks: | | | | |
| **We certify that we have conducted a thorough materials evaluation of our entire distribution system.** | | | | |

| **5. Materials Evaluation for Non-transient Non-community Water Systems**  *Additionally, complete the Materials Evaluation Survey for NTNCWS (Form BWSE-17)*  *Schools may substitute their Plumbing Profile (developed for BOE Lead Sampling) in lieu of form BWSE-17* | | | | |
| --- | --- | --- | --- | --- |
| **Strategy and resources used for evaluating materials throughout the entire building/distribution system**  **(Check all that apply)** | | | | |
| **Distribution System Resources:**  Distribution system maps and record drawings  Capital improvement plans and/or master plans for distribution system development  Meter installation records, customer complaint investigations and all historical documentation which indicate and/or confirm the location of lead service connections  Results from service line sampling where lead service lines are suspected to exist but their presence is not confirmed  Other: | **Residential or non-residential building resources:**  County appraisal district records  Contacts within the water system, municipal office or other local officials;  Survey results from area plumbers who are asked about when and where copper pipe with lead solder was used;  Documented interviews of residents- letters, phone survey, personal contact, etc.; and/or  Documented interviews of local contractors, developers, and builders.  Evaluated by Licensed Plumber  Other: | | | |
| Material | | Number present[[5]](#footnote-5)  *Check all that apply* | | |
| Lead Service Lines (including goosenecks) | | Building(s) (Tier 1/x) | |  |
| Outlet(s) (Tier 1/x) | |  |
|  | |  |
| Copper pipes with lead solder installed after 1982 | | Building(s) (Tier 1/xi) | |  |
| Outlet(s) (Tier 1/xi) | |  |
|  | |  |
| Containing lead pipes | | Building(s) (Tier 1/xii) | |  |
| Outlet(s) (Tier 1/xii) | |  |
|  | |  |
| Copper pipes with lead solder installed before 1983 | | Building(s) (Tier 2/xiii) | |  |
| Outlet(s) (Tier 2/xiii) | |  |
|  | |  |
| Copper from piping, service lines and building plumbing with no lead solder | | Building(s) (Tier N/xiv) | |  |
| Outlet(s) (Tier N/xiv) | |  |
|  | |  |
| Galvanized piping, service lines, and building plumbing with no lead and/or copper materials | | Building(s) (Tier N/xiv) | |  |
| Outlet(s) (Tier N/xiv) | |  |
|  | |  |
| Ferrous piping material such as cast iron and steel | | Building(s) (Tier N/xiv) | |  |
| Outlet(s) (Tier N/xiv) | |  |
|  | |  |
| If applicable, distribution system main materials *Check all that apply* | | Lead |  | |
| Galvanized |  | |
| Asbestos |  | |
| Ductile Iron |  | |
| Other |  | |
| **We certify that we have conducted a thorough materials evaluation of our entire building/distribution system.** | | | | |

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| **6. Designation of Sample Sites** | | | | |
| **Number of Standard Sites in Pool:** |  |  | Number of Tier 1: |  |
|  |  | Number of Tier 2: |  |
|  |  | Number of Tier 3: |  |
| Check if sampling from more than 50% LSL Tier 1 sites | |  | Number of Non-Tier: |  |
| Check if using multifamily Tier 2 as Tier 1 |  |  |  |  |
| **Number of Reduced Sites in Pool:** |  |  | Number of Tier 1: |  |
| (If applicable) |  |  | Number of Tier 2: |  |
|  |  |  | Number of Tier 3: |  |
|  |  |  | Number of Non-Tier: |  |
| We will refer to the NJDEP Fact Sheet: Protocol for a Public Water System Selecting Reduced Lead and Copper Tap Sites available at <http://www.nj.gov/dep/watersupply/pdf/lead-reduced-sites-fs.pdf>  Check if on standard monitoring[[6]](#footnote-6) | | | | |
| **Number of Alternate Sites in Pool:** |  |  | Number of Tier 1: |  |
|  | Number of Tier 2: |  |
|  | Number of Tier 3: |  |
|  | Number of Non-Tier: |  |
|  |  |  |
| Due to the composition of the housing within our distribution system, all of our sampling locations are confined to a relatively small area(s)[[7]](#footnote-7).  We have a unique situation that requires samples from lower Tier sites due to the structure of our distribution system.[[8]](#footnote-8)  Details:  **A copy of the *PbCu Sample Location Spreadsheet* (Form BWSE-18) is enclosed in Appendix B.**  *The PbCu Sample Location Spreadsheet (BWSE-18) will be submitted electronically to* [*watersupply@dep.nj.gov*](mailto:watersupply@dep.nj.gov) *with any change in site Tier, sample category, and addition/inactivation.* | | | | |

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| **7. Sampling Protocols** |
| **7.a Customer Participation[[9]](#footnote-9)** *Check here if not applicable (i.e., NTNCWS)* |
| Check all applicable boxes and attach a copy of materials/information provided to customers:  Phone Calls Emails  Mailings Door to Door  Other:  **Copies of customer participation materials are enclosed in Appendix C.** |

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| **7.b Sampling Instructions**  **We will use the sample instructions available at** <http://www.nj.gov/dep/watersupply/dwc-lead-public.html>  **Sampling instructions/Laboratory sampling procedures are enclosed in Appendix D** |
| **Indicate who collects the lead and copper samples at this system:** |
| Customer/Resident |
| Licensed Operator (LO)/System Personnel  The system ensures the LO/System Personnel is adhering to these sampling sites and the 6-hour minimum stagnation time by:  Notification of the designated sampling site locations.  Provides approved sample instructions.  Restricts access to the system at least 6 hours prior to sampling.  Provides the LO/System Personnel access to the building prior to normal business hours.  Meets the LO/System Personnel prior to opening the day of the sampling.  Identifies/labels the drinking water outlets prior to the day of the sampling.  Other: |
| Certified Lab (NTNCWSonly)  Lab Name: Contact Name:  Phone: Email:  Laboratory is notified of the designated sampling site locations by:  Licensed Operator accompanying them  System personnel accompanying them  Being provided a floor plan with copy of BWSE-18  The system ensures the laboratory is adhering to these sampling sites and the 6-hour minimum stagnation time by: |
| General Sample Collection Procedures |
| * Each first draw sample for lead and copper must be 1 liter in volume and have stood motionless in the plumbing system of each sampling site for at least six hours. * Wide-mouth bottles should be used for all lead and copper samples. * Samples will be collected from cold water taps * Samples are not to be taken from taps fitted with POU/POE devices that remove inorganic contaminants (if applicable). * Removal of and/or cleaning of the aerators prior or during lead and copper sample collection will not be performed or recommended. * Locations not in use, or that have not been used for a significant period of time (i.e., while school is closed for the season, vacant building, etc.), will not be sampled. * Pre-stagnation flushing (flushing the tap for a specified period of time prior to starting the minimum 6-hour stagnation time) will not be conducted or recommended. |
| Sample Collection Documentation  Check all that apply |
| The customer completes a form documenting sample site location, time, point of use/entry treatment, etc.  We will use the sample instructions available at <http://www.nj.gov/dep/watersupply/dwc-lead-public.html>  This documentation is part of the sampling instructions enclosed in Appendix D  A copy of this documentation is enclosed in Appendix E  The chain of custody provided by the certified laboratory is completed. A copy of the chain of custody is enclosed in Appendix E.  Other: |

|  |  |  |  |
| --- | --- | --- | --- |
| 24/hour Facility (e.g. hospital or prison)  Written approval from NJDEP for non-first draw sample collection attached  *Check here if not applicable* | | | |
| Sample Point (PbCu#): | Time of day resulting in longest standing time: | | Procedure to ensure max standing times:  Lock door  Turn off valve  Bag and place sign over fixture  Other: |
| Start (AM ; PM ): |  |
| End (AM ; PM ): |  |
| Expected Standing time (hours): |  |
| Sample Point (PbCu#): | Time of day resulting in longest standing time: | | Procedure to ensure max standing times:  Lock door  Turn off valve  Bag and place sign over fixture  Other: |
| Start (AM ; PM ): |  |
| End (AM ; PM ): |  |
| Expected Standing time (hours): |  |
| Sample Point (PbCu#): | Time of day resulting in Longest standing time: | | Procedure to ensure max standing times:  Lock door  Turn off valve  Bag and place sign over fixture  Other: |
| Start (AM ; PM ): |  |
| End (AM ; PM ): |  |
| Expected Standing time (hours): |  |
| Sample Point (PbCu#): | Time of day resulting in Longest standing time: | | Procedure to ensure max standing times:  Lock door  Turn off valve  Bag and place sign over fixture  Other: |
| Start (AM ; PM ): |  |
| End (AM ; PM ): |  |
| Expected Standing time (hours): |  |
| Sample Point (PbCu#): | Time of day resulting in Longest standing time: | | Procedure to ensure max standing times:  Lock door  Turn off valve  Bag and place sign over fixture  Other: |
| Start (AM ; PM ): |  |
| End (AM ; PM ): |  |
| Expected Standing time (hours): |  |
| *Add additional rows as necessary* | | | |
| **7.c. Change of Sample Site Protocol** | | | |
| A change of sample site will only be made if the previous site no longer meets the Tier requirements, access to the site is no longer available, and/or if a new site with a higher Tier criteria is now accessible. In these situations, an alternate site of the highest Tier criteria, and in proximity to the original site, will be sampled.  If a change of site occurs:   * *Lead and Copper Sample Site Change Form* (BWSE-56) will be submitted within 10 days following the end of the monitoring period.   If the previous site no longer meets the Tier criteria (i.e. is now a lower Tier than what the sampling pool is comprised of) and/or a new site with a higher Tier criteria is identified, the water system will also:   * Update the Lead and Copper Sampling Plan * Submit the new information on the *PBCU Sample Location Spreadsheet* (Form BWSE-18)electronically to [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov) | | | |

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| **7.d. Additional Sample Site Collection**  *Check all that apply* |
| Lead samples will be collected in response to customer requests:  Collect lead and/or copper samples in response to customer requests at any time.  Collect flushed samples for lead and/or copper in response to customer requests.  **OR**  Collect lead and/or copper samples only in response to customer requests if we incur a lead ALE.  ***The water system is required to tell customers how they can have their water tested when the lead action level***  ***has been exceeded, pursuant to 40 CFR 141.85(c).***  Collect first draw confirmation samples at individual sites that exceed an action level.  Collect flushed confirmation samples at individual sites that exceed an action level.  Collect first draw confirmation samples at individual sites that exceed \_\_\_\_ppb for lead or \_\_\_\_ppb for copper.  Collect flushed confirmation samples at individual sites that exceed \_\_\_\_ppb for lead or \_\_\_\_ppb for copper.  We routinely distribute more sample bottles than the required number of sites to ensure the required number of sampling sites is met. These additional sites are listed as standard in the sampling pool and are listed on the *PBCU Sample Location Spreadsheet* (Form BWSE-18).  Sampling instructions outlined above in 7.b will be followed. |
| Reporting of Additional Results |
| When additional first-draw samples are collected within the monitoring period and are of the same and/or higher Tier than what the sampling pool is comprised of, the results will be submitted via E2 to be calculated towards the 90th percentile value.  When additional samples are collected outside the compliance window for the monitoring period, and/or are of a lower Tier than what the sample pool is comprised of, and/or are flushed samples, the results will be submitted via the *Non-Compliance Lead and Copper Tap Monitoring* *Form* (BWSE-16). |

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| **8. Sample Invalidation Procedures** | | | |
| Contact information of the responsible person to determine if request should be made to NJDEP | | | |
| Name |  | Title |  |
| Email |  | Phone |  |
|  |  |  |  |
| Criteria for Invalidating a sample | | | |
| * The laboratory establishes that improper sample analysis caused erroneous results * The NJDEP determines that the sample was taken from a site that did not meet the site selection criteria * The sample container was damaged in transit * There is substantial reason to believe that the sample was subject to tampering | | | |
| Procedure for Contacting the NJDEP | | | |
| Call the Bureau of Safe Drinking Water (609) 292-5550  Email [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov) | | | |
| Protocol for collecting replacement sample | | | |
| * We will take the replacement sample as soon as possible but no longer than 20 days after the date the NJDEP invalidates the sample or by the end of the monitoring period, whichever occurs later. * The replacement sample will be taken at the same location as the invalidated sample or if not possible, at an approved alternate site that was not already sampled for in the monitoring period. * We will report the results of all replacement samples to the NJDEP via E2 for calculating the 90th percentile. * Sampling procedures outlined above in 7.b will be followed. | | | |

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| **9. Plan of Action After a Lead and/or Copper Action Level Exceedance (ALE)** |
| **9.a. Notification to NJDEP & Bulk Purchasers** |
| We will notify the NJDEP within 48 hours of becoming aware of an ALE by calling the Bureau of Safe Drinking Water (BSDW) at (609) 292-5550.  We will notify bulk purchasers within 48 hours of becoming aware of an ALE via:  Phone  Email  If the ALE results in a change of source of supply or CCT that will last for 30 or more consecutive days, we will notify NJDEP and bulk purchasers within 6 hours of the determination/change for emergencies or within 5 days prior for scheduled changes via:  Call the Bureau of Safe Drinking Water (609) 292-5550  Call bulk purchasers  Email watersupply@dep.nj.gov  Email bulk purchasers  Bulk purchaser contact information is located in Section 2.c. |
| **9.b. Return to standard lead and copper tap monitoring, if currently on reduced** |
| We will return to standard monitoring, every 6-months, at the standard number of sampling sites immediately following a lead and/or copper ALE, starting January 1st or July 1st, whichever is sooner. |
| **9.c. Water Quality (WQP) Monitoring (Initial only)** |
| WQP Monitoring Schedule and Required Analytes |
| Our WQP monitoring requirements are outlined in a WQP sampling plan under separate cover because we are required to conduct:  Follow-Up WQP Monitoring only  Optimal WQP Monitoring only  Combination of Initial/Follow-up/Optimal Monitoring  \*Skip to Section 9.d.\*  **OR**  Our WQP monitoring requirements are outlined below in the remainder of section 9.c because we are required to conduct Initial WQP Monitoring only (i.e., all EPTDS do not have CCT installed and/or do not receive water from a wholesaler who has CCT installed)  \*Continue below\* |

| **Initial WQP Monitoring**  *All EPTDS do not have CCT installed and/or do not receive water from a wholesaler who has CCT installed; therefore, this monitoring is required 6-months from the beginning of the monitoring period in which an ALE occurs.* | | | | |
| --- | --- | --- | --- | --- |
| **Location** | **Frequency** | **Number of Sites** | **Analytes** | **Additional Analytes for CCT Recommendation[[10]](#footnote-10)** | |

| **EPTDS** | Twice within 6 months from the beginning of the monitoring period in which the system exceeds the AL |  | * pH * Alkalinity * Calcium * Conductivity * Temperature | * Iron * Manganese * Aluminum * Chloride * Sulfate |
| --- | --- | --- | --- | --- |

| **DS** | Twice within the 6 months from the beginning of the monitoring period in which the system exceeds the AL |  | * pH * Alkalinity * Calcium * Conductivity * Temperature | * Iron * Manganese * Aluminum * Chloride * Sulfate |
| --- | --- | --- | --- | --- |
| The water system is required to conduct initial monitoring for only select EPTDS that do not have CCT.  The Facility IDs for these EPTDS are: | | | | |
| Within 6 months after the end of the monitoring period in which the system exceeds an action level, a Corrosion Control Treatment Recommendation will be submitted to the NJDEP, with the Initial WQP data as supporting documentation. | | | | |

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| **WQP Sample Collection & Analysis**  *Check one of the four boxes below that is applicable for the water system and complete required information* | | | | | | | | | | | | |
| A Certified Lab collects and analyzes all WQP samples. | | | | | | | | | | | | |
| Lab Name: | |  | | | Contact Name: | | | | |  | | |
| Phone: | |  | | | Email: | | | | |  | | |
| The system has provided the lab with a list of all sampling sites. The lab must consult with the system prior to sampling any site that is not listed in this plan of action. The water system will ensure that the certified lab analyzes the following required WQPs in the field:  Temperature;  pH  The Licensed Operator is an employee of the certified lab and will be collecting and analyzing the samples on behalf of the certified laboratory listed above. | | | | | | | | | | | | | |
| The Licensed Operator has his/her own Lab certification for analysis of the following WQPs:  pH (in field)  Temperature (in field)  Alkalinity  Conductivity  Calcium  Orthophosphate  Silica | | | | | | | | | | | | |
| An Approved Party collects and analyzes all WQP samples. | | | | | | | | | | | | |
| Name/License #: | | |  | | | | Title: | | |  | | |
| Phone: | | |  | | | | Email: | | |  | | |
| Name/License #: | | |  | | | | Title: | | |  | | |
| Phone: | | |  | | | | Email: | | |  | | |
| The Approved Party is not a Licensed Operator, but was trained by: | | | | | | | | | | | | |
| Name/License #: | | |  | | | | Title: | | |  | | |
| Phone: | | |  | | | | Email: | | |  | | |
| An Approved Party collects and analyzes some WQP samples and a Certified Lab analyzes some WQP samples. | | | | | | | | | | | | |
| Certified Lab Information: | | | | | | | | | | | | |
| Lab Name: | | | |  | | | | | Contact Name: | | |  |
| Phone: | | | |  | | | | | Email: | | |  |
| WQP Analysis for:  pH (in field)  temperature (in field)  alkalinity  conductivity  calcium  orthophosphate  silica | | | | | | | | | | | | |
| Approved Party Information | | | | | | | | | | | | |
| Name/License #: | | |  | | | | Title: | | |  | | |
| Phone: | | |  | | | | Email: | | |  | | |
| The Approved Party is not a Licensed Operator, but was trained by: | | | | | | | | | | | | |
| Name/License #: | | |  | | | | Title: | | |  | | |
| Phone: | | |  | | | | Email: | | |  | | |
| WQP Analysis for:  pH (in field)  temperature (in field)  alkalinity  conductivity  calcium  orthophosphate  silica | | | | | | | | | | | | |
| **Approved Party Sample Collection Procedures**  *Check here if not applicable (i.e. certified laboratory collects all WQPs)* | | | | | | | | | | | | | |
| **Sample Collection Procedures**   * Remove aerator * Fully flush tap (minimum of 30 seconds) * Make observations about color, suspended solids, and flush time on Chain of Custody   We collect calcium samples in addition to other WQP samples; therefore, two 500 mL sample bottles will be filled at EPTDS and DS sites.  We collect silica samples; therefore, plastic sample containers will be used. | | | | | | | | | | | | | |
| **Approved Party Sample Analysis Procedures**  *Check here if not applicable (i.e. certified laboratory analyzes all WQPs)* | | | | | | | | | | | | | |
| * The following required WQPs will be analyzed in the field:  Temperature  pH * The following EPA methods/instrumentation will be used for analysis: | | | | | | | | | | | | | |
| pH:  temperature:  alkalinity:  calcium: | | | | | | conductivity:  orthophosphate:  silica: | | | | | | | |
| **Sample Reporting**  *Check all that apply* | | | | | | | | | | | | | |
| Our certified lab will submit WQP results electronically via E2  Our Approved Party will submit WQP results on the *WQP Monitoring Report Form for Approved Party* by emailing it to [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov). This form, along with instructions, can be found on our webpage at <http://www.nj.gov/dep/watersupply/dws-sampreg.html>.  Our Licensed Operator will submit the daily chemical dosages for CCT chemical feeds on the Monthly Operator Report within 10 days following the end of the month in which the data was collected. | | | | | | | | | | | | | |
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| **9.d. Source Water Treatment Steps** | | | | | | | | | | | | | |
| * We will complete lead and copper source monitoring within 180 days of the end of the monitoring period in which the water system incurred an ALE. * Source water monitoring is required at each EPTDS (excluding emergency EPTDS unless in operation). Refer to table 2b for sample locations.   Check all that apply:  Ground water source samples will be collected at the point of entry to the distribution system which is representative of each well after treatment. Source water sampling will not be collected at the raw water tap unless the system does not have treatment.  Surface water source samples will be collected at each point of entry to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source after treatment.  Permanent, active interconnection source samples will be collected at the point of interconnect. | | | | | | | | | | | | | |
| Source Water Sample Collector | | | | | | | | | | | | | |
| Licensed Operator/System Personnel | | | | | | | | | | | | | |
| Name/License #: | | |  | | | | | Title: | | |  | | |
| Phone: | | |  | | | | | Email: | | |  | | |
|  | | |  | | | | |  | | |  | | |
| Certified Lab (see contact information below) | | | | | | | | | | | | | |
| Source Water Sample Certified Lab | | | | | | | | | | | | | |
| Lab Name: | | | | | | | | | | | | | |
| Contact Name: | | |  | | | | | Title: | | |  | | |
| Phone: | | |  | | | | | Email: | | |  | | |
| Source Water Treatment Recommendation | | | | | | | | | | | | | |
| Based on the source water monitoring results, we will submit a source water treatment plan to the NJDEP no longer than 180 days after the end of the monitoring period during which the lead and/or copper AL was exceeded. | | | | | | | | | | | | | |

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| **9.e. Corrosion Control Treatment (CCT) Steps** |
| We will recommend optimal corrosion control treatment (OCCT) within 6 months after the end of the monitoring period during which an ALE occurred. The recommendation will include completed, applicable excel forms from EPA’s OCCT Recommendation document. Additional WQPs will be collected and analyzed, as necessary, to complete the evaluation and forms. The recommendation will be for pH/alkalinity adjustment and/or orthophosphate/silicate based inhibitor. *The OCCT Evaluation Recommendations and Templates are available at:* <https://www.epa.gov/dwreginfo/optimal-corrosion-control-treatment-evaluation-technical-recommendations>.  We will include in the OCCT recommendation to the NJDEP a schedule outlining when we anticipate installation of the CCT, since the CCT must be installed as soon as possible but no later than 24 months after the NJDEP designates such treatment in accordance with the Lead and Copper Rule.  The system currently operates CCT; therefore, we will evaluate the existing CCT for optimization and a summary of corrective measures taken to optimize the treatment is to be signed by the licensed operator and submitted to the NJDEP within 30 days of becoming aware of the ALE. |
| **9.f. Public Education** |
| If we exceed the lead AL, we will:   * Submit all written public education to NJDEP for approval prior to distributing to customers. * Distribute the NJDEP approved written public education within 60 days of the end of the monitoring period in which the lead AL was exceeded * We will submit the *Public Education Certification Form* (BSDW-55) within 10 days after implementation of any public education requirements.   We are a CWS that will:   * Provide to all bill paying customers * Contact local health agencies directly by phone or in person. The agencies and contacts are:   + Agency Name:   Contact Name: Title:  Phone: Email:  o Agency Name:  Contact Name: Title:  Phone: Email:  *Add additional bullets and information as necessary.*   * Provide to organizations within the water system’s service area, including but not limited to schools/ pre-schools, head start programs, licensed child care centers, hospitals/medical clinics, pediatricians, Obstetricians-Gynecologists, etc. These include:   + Organization Name:   Phone: Email:   * + Organization Name:   Phone: Email:  *Add additional bullets and information as necessary.*   * Provide required language under 40 CFR Part 141.85(b)(2)(iii) in water bill quarterly   Post information under 40 CFR Part 141.85(1) on system website (required for systems serving >100,000)  Submit a press release to newspapers, television and radio stations (required for systems serving > 3,300)  We are a NTNC water system that will:   * Post informational posters in public places and common areas in each building of the system * Provide to each person served by the water system via:  Email  Hand Delivery  Other: * Provide to parents and guardians (schools and child cares only)   We will continue to distribute public education materials for as long as the water system continues to exceed the lead AL, in accordance with 40 CFR 141.85(b). We will discontinue implementation of this public education program if we do not exceed the lead AL during the most recent 6-month monitoring period.  We will use the Public Education Templates available at <http://www.nj.gov/dep/watersupply/dws-sampreg.html>  We will use the Public Education Materials enclosed in Appendix F. |

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| **9.g. Lead Service Line (LSL) Replacement Requirements**  *Check here if not applicable (i.e., no LSL and/or lead goosenecks) ☐* | | | |
| Total number of LSL:  Total number of LSL unknown, but number of known LSL is:  Total number of lead goosenecks:  Total number of lead goosenecks unknown, but number of known lead goosenecks is:  Total number of LSL & lead goosenecks combined:  If there is not an accurate number and location of all lead service lines, this system will conduct the steps outlined in Section 5 to identify them going forward.  This system owns the entire service line (main to house)  This system owns a portion of the service line (main to curb)  This system does not own any portion of the service line  **An inventory of all LSLs including when they are replaced, if it was partial or whole, and which portion is owned by the water system and homeowner is:**  **Enclosed in Appendix G**  **Available upon request.**  **Note that the LSL Inventory must be submitted to the NJDEP when LSL replacement is triggered under a lead ALE.**  The LSL inventory will be maintained by: | | | |
| Name/ |  | Title: |  |
| Phone: |  | Email: |  |
| We currently operate CCT; therefore, will replace annually 7% of the initial number of lead service lines and/or goosenecks in the distribution system that are owned by the water system, beginning on the first day following the end of the monitoring period in which the lead AL is exceeded. | | | |
| Partial LSL Replacement  *not applicable (customer owns entire LSL or water system owns entire LSL)* | | | |
| * Customer notification 45 days prior to a partial replacement * Customer notification of temporary increase in lead levels * Guidance for customers on how to minimize these exposures * Sampling within 72 hours of a partial replacement   + Sample collection from the service line will be 1L in volume and have stood motionless in the service line for at least 6 hours. The sample will be collected in one of the following 3 ways:   • At the tap after flushing the volume of water between the tap and the lead service line  • Tapping directly into the service line  • Allowing the water to run until there is a significant change in temperature (for single family homes only)  EPA’s *Notification and Reporting Requirements for Partial Lead Service Line Replacement under the Lead and Copper Rule* is available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=901U0200.txt> | | | |
| **10. Monitoring and Reporting Violation** | | | |
| * We will notify NJDEP within **48 hours** after the system learns of monitoring and reporting violations. * We will implement Tier 3 public notification requirements and submit a copy of public notice and *Public Notice Certification* (Form BSDW-53) within 10 days of issuance to NJDEP.   + We are a CWS and will incorporate the Tier 3 public notice into our Consumer Confidence Report * We will ensure sample collection from minimum number of required sites in subsequent monitoring periods. * We will return to standard monitoring if all the required samples were not collected. | | | |

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| **11. Consumer Notice of Lead Tap Water Monitoring Results** |
| We are a CWS that will distribute the consumer notice to those individual customers whose taps were sampled by mail within 30 days of when we learn of the results for each result received.  We are a NTNCWS that will distribute consumer notices by posting where it can be viewed by consumers within 30 days of when we learn of the results.  We will submit a copy of the completed Certification Form - *Consumer Notice of Lead Tap Water Monitoring Results* (Form BSDW-54) to the NJDEP within 3 months following the end of the monitoring period in which the samples were collected. Form BSDW-54 is available at <http://www.nj.gov/dep/watersupply/pdf/bsdw54.pdf>  We will use the lead consumer notice templates for CWS and NTNC water systems available at<http://www.nj.gov/dep/watersupply/dws-sampreg.html>  We will use the Lead Consumer Notice materials enclosed in Appendix H. |

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| **12. Division of Water Supply & Geoscience Contact Information** | |
| Bureau of Safe Drinking Water | (609) 292-5550 |
| Bureau of Water System Engineering | (609) 292-2957 |
| Bureau of Water Allocation and Well Permitting | (609) 984-6831 |
| Bureau of Water Resources & Geoscience | (609) 292-2576 |

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| **APPENDIX** *Check all that apply and are enclosed* |
| Appendix A: Distribution System Map |
| Appendix B: Completed BWSE – 18 Form |
| Appendix C: Customer Participation Materials |
| Appendix D: Customer Sampling Instructions/Laboratory Sampling Procedures |
| Appendix E: Sample Collection Documentation/ Chain of Custody |
| Appendix F: Public Education Materials |
| Appendix G: Lead Service Line Inventory and Replacement |
| Appendix H: Lead Consumer Notice Materials |

1. For NTNC water systems the number of service connections is equal to the number of buildings served [↑](#footnote-ref-1)
2. 2 If the system is unsure of the materials throughout the entire distribution system, and/or if the system knows that Lead Service Lines (including lead goosenecks) are present; however, are unsure of how many or where these lines are then the system must provide a strategy in the space at the bottom of the chart for identifying and confirming the materials and locations moving forward. Following any confirmation/modification to the distribution system and/or interior plumbing materials, the Lead and Copper Sampling Plan must be updated accordingly and the sampling pool re-evaluated to ensure that the required targeted Tier sampling sites are being sampled. [↑](#footnote-ref-2)
3. The numbers present listed in this column shall be representative of the entire distribution system, not just the sites listed in the sampling pool. [↑](#footnote-ref-3)
4. When multi-family residences compromise at least 20% of the structures served by a water system, the system may include Tier 2 multi-family residences sampling sites in its Tier 1 sampling pool. The combined sites must be representative of the system’s distribution system. [↑](#footnote-ref-4)
5. Indicate the number of buildings that contain the described material. If the system serves building(s) that are composed of different materials, also indicate the number of drinking water and/or food prep outlets served by the described material. [↑](#footnote-ref-5)
6. Systems on standard monitoring do not have to identify reduced sites; however, the system is required to update their monitoring plan with this information upon reduction to annual monitoring. [↑](#footnote-ref-6)
7. Developments/structures of the same Tier criteria are located within the same area. [↑](#footnote-ref-7)
8. The water that supplies lower Tier sites flows through the structure of higher Tier sites. [↑](#footnote-ref-8)
9. Note that the NJDEP has a *DEP Statement for Customer Participation* available on our website that water systems can enclose with their outreach materials to help encourage customer participation. [↑](#footnote-ref-9)
10. The additional parameters are necessary for a full evaluation of the water system’s water quality and CCT evaluation and will be submitted and reviewed along with the system’s CCT Recommendation. Refer to EPA’s *Optimal Corrosion Control Treatment Evaluation Technical Recommendations for Primacy Agencies and Public Water Systems,* March 2016. [↑](#footnote-ref-10)