



Cowan Associates, Inc. 120 Penn Am Drive Quakertown, PA 18951

K.L. FULFORD ASSOCIATES, INC. 412 Fairview Street Emmaus, PA 18049

BOROUGH LINE

## TRUMBAUERSVILLE WATERWORKS PUBLIC INFORMATION PRESENTATION AUGUST 13, 2024

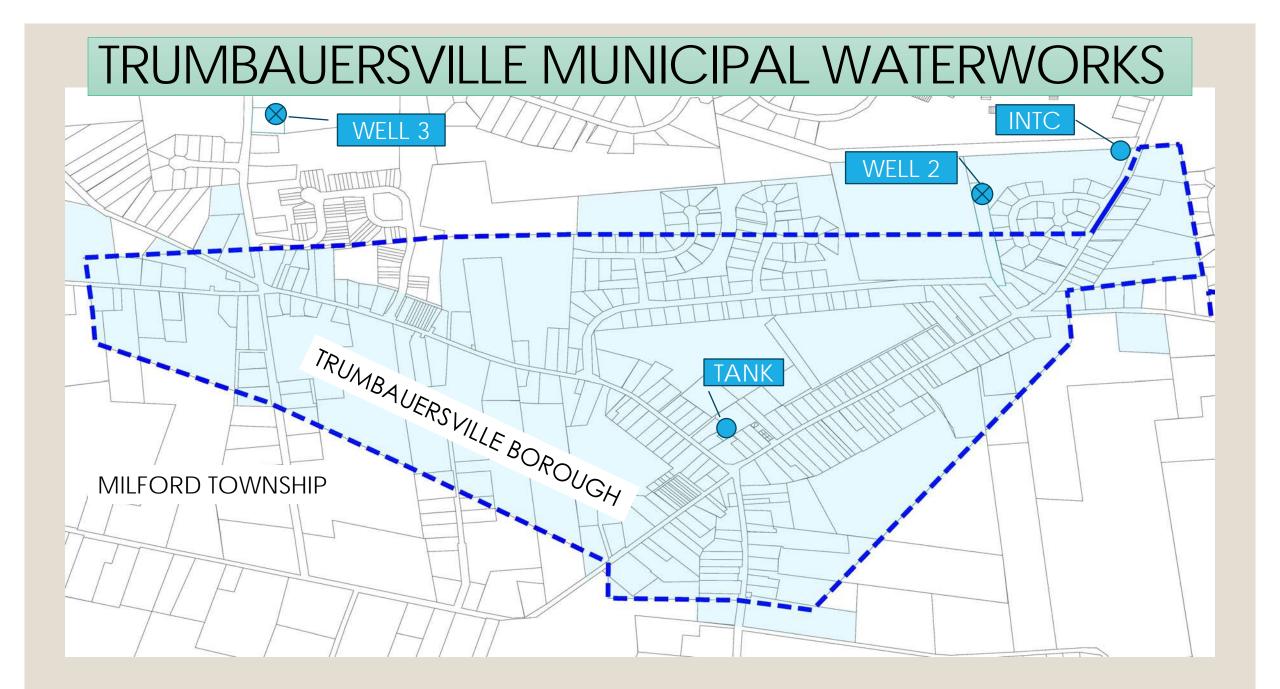
Presenters: Crystal B. Hessler, PE Ken L. Fulford, Operator

LEGEND

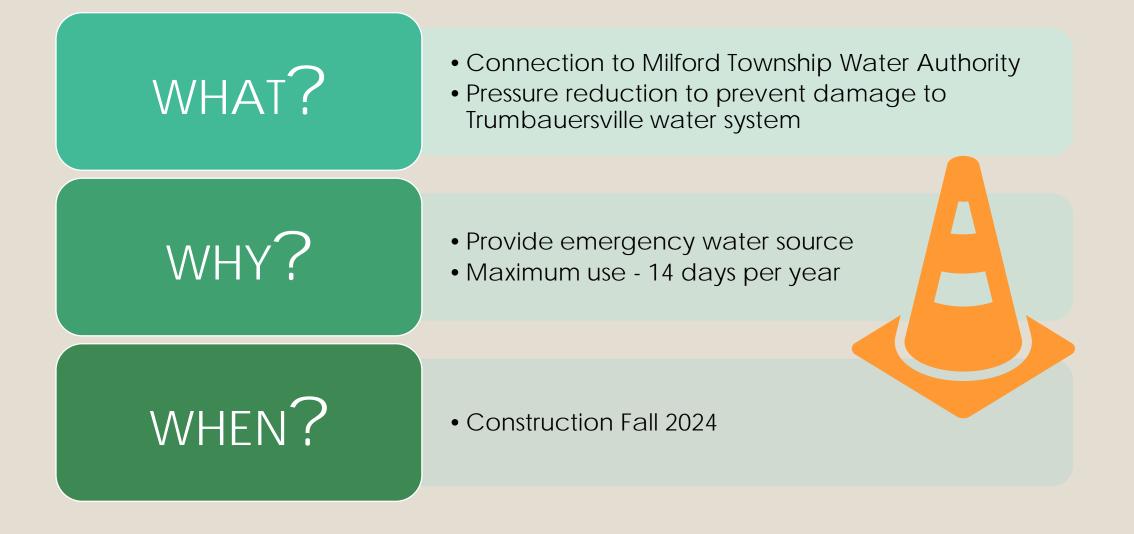
F.H. - FIRE HYDRANT

9-0 ROADWAY

BOROUGH OF TRUMBAUERSVILLE BUCKS CO, PENNA. P.W.A. DOCKET NO. PA. 2032-F. WATER SUPPLY & FIRE ALARM



## TRUMBAUERSVILLE ROAD INTERCONNECTION



## WELL #3 UPGRADES



- Replace arsenic treatment system
- Replace well pump and controls
- Upgrade outdated electrical system
- Connect to sanitary sewer

S Y S T E I

## WHY?

- Safe drinking water quality compliance
- Arsenic treatment for 100% Well 3 water
- Provide reliable system operations

## WHEN?

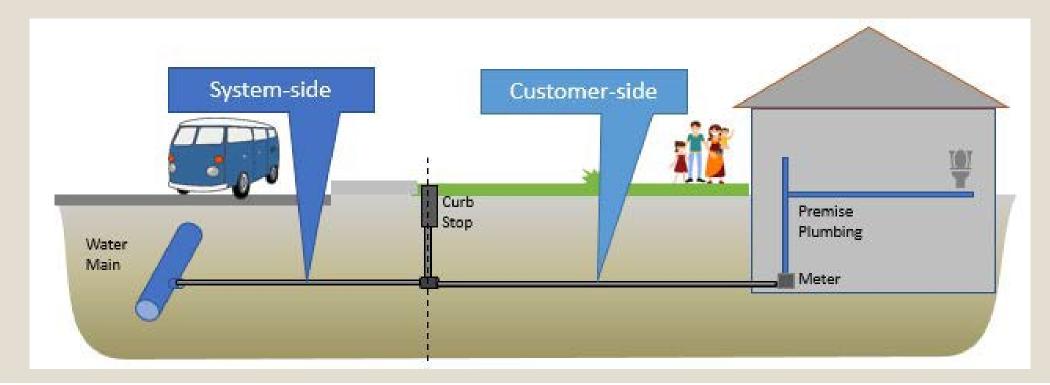
Construction Completion 2025

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ECOWATE

## SERVICE LINE INVENTORY

- Required by PaDEP Lead and Copper Rule
- Document construction material of all existing service lines
- Service line from water main to house
- Due to PaDEP October 16, 2024



# WELL #2 ONGOING EVALUATION

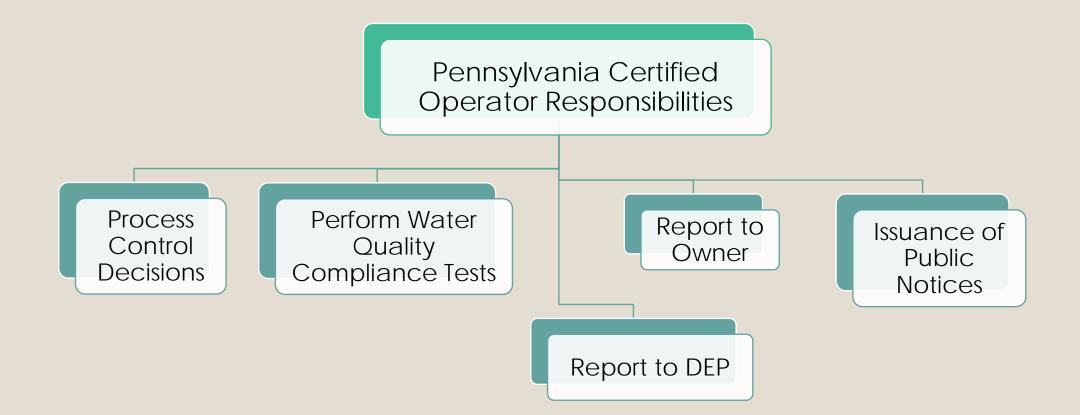
### Well Pump Replacement

Improved Arsenic Removal Capacity

Treatment for volatile organic chemicals, including TCE

Changes and upgrades require PaDEP approval

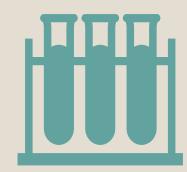
### WATER SYSTEM OPERATION



### WATER QUALITY MONITORING



EPA and PaDEP establish Maximum Contaminant Levels



Routine monitoring for Regulated Contaminants – Public Water Systems



### **Monitoring Requirement**

| Contaminant                   | Contaminant<br>Code | Contaminant<br>Group | Current/Next<br>Sampling<br>Period               | Sample<br>Location  | No. of<br>Samples | Monitoring<br>Reporting<br>Frequency |
|-------------------------------|---------------------|----------------------|--------------------------------------------------|---------------------|-------------------|--------------------------------------|
| TOTAL CHLORINE                | 1000                | DDBP                 | EACH MONTH                                       | DISTRIBUTION        | 1                 | MONTHLY, IF<br>USED                  |
| FREE CHLORINE                 | 1013                | DDBP                 | EACH MONTH                                       | DISTRIBUTION        | 1                 | MONTHLY, IF<br>USED                  |
| LEAD/COPPER GROUP CONTAMINANT | 5000                | LCR                  | 06/01/2025 THROUGH<br>09/30/2025                 | DISTRIBUTION        | 10                | THREE YEARS                          |
| TOTAL COLIFORM PRESENCE       | 3100                | TCR                  | EACH MONTH                                       | DISTRIBUTION        | 1                 | MONTHLY                              |
| HALOACETIC ACIDS (HAA5)       | 2456                | DDBP                 | SEPTEMBER15 IN THE<br>3RD QUARTER                | DISTRIBUTION<br>702 | 1                 | ANNUAL                               |
| TRIHALOMETHANES (TTHM)        | 2950                | DDBP                 | SEPTEMBER15 IN THE<br>3RD QUARTER                | DISTRIBUTION<br>702 | 1                 | ANNUAL                               |
| FREE CHLORINE                 | 1013                | DDBP                 | REPORTED MONTHLY                                 | ENTRY POINT<br>101  |                   | DAILY GRAB<br>SAMPLE                 |
| ARSENIC (IOC)                 | 1005                | 100                  | EACH CALENDAR<br>QUARTER                         | ENTRY POINT<br>101  | 1                 | QUARTERLY                            |
| BARIUM (IOC)                  | 1010                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101  | 1                 | NINE YEARS                           |
| CADMIUM (IOC)                 | 1015                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101  | 1                 | NINE YEARS                           |
| CHROMIUM (IOC)                | 1020                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101  | 1                 | NINE YEARS                           |

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09AUG24

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|----------------------|---------------------|----------------------|--------------------------------------------------|--------------------|-------------------|--------------------------------------|
| CYANIDE (FREE) (IOC) | 1024                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101 | 1                 | NINE YEARS                           |
| FLUORIDE (IOC)       | 1025                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101 | 1                 | NINE YEARS                           |
| MERCURY (IOC)        | 1035                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101 | 1                 | NINE YEARS                           |
| NICKEL (IOC)         | 1036                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101 | 1                 | NINE YEARS                           |
| SELENIUM (IOC)       | 1045                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101 | 1                 | NINE YEARS                           |
| ANTIMONY (IOC)       | 1074                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101 | 1                 | NINE YEARS                           |
| BERYLLIUM (IOC)      | 1075                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101 | 1                 | NINE YEARS                           |
| THALLIUM (IOC)       | 1085                | IOC                  | 01/01/2029 THROUGH<br>12/31/2031;EXPIRES<br>2028 | ENTRY POINT<br>101 | 1                 | NINE YEARS                           |

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|-------------------------------|---------------------|----------------------|-----------------------------------------------------|--------------------|-------------------|--------------------------------------|
| NITRATE                       | 1040                | NTRT                 | DURING QUARTER<br>WITH HIGHEST<br>HISTORICAL RESULT | ENTRY POINT<br>101 | 1                 | ANNUAL                               |
| NITRITE                       | 1041                | NTRT                 | DURING QUARTER<br>WITH HIGHEST<br>HISTORICAL RESULT | ENTRY POINT<br>101 | 1                 | ANNUAL                               |
| PERFLUOROOCTANESULFONIC ACID  | 2805                | PFAS                 | EACH CALENDAR<br>QUARTER                            | ENTRY POINT<br>101 | 1                 | QUARTERLY,<br>INITIAL                |
| PERFLUOROOCTANOIC ACID        | 2806                | PFAS                 | EACH CALENDAR<br>QUARTER                            | ENTRY POINT<br>101 | 1                 | QUARTERLY,<br>INITIAL                |
| GROSS ALPHA PARTICLE ACTIVITY | 4002                | RAD                  | 01/01/2027 THROUGH<br>12/31/2027                    | ENTRY POINT<br>101 | 1                 | NINE YEARS                           |
| COMBINED URANIUM              | 4006                | RAD                  | 01/01/2024 THROUGH<br>12/31/2024                    | ENTRY POINT<br>101 | 1                 | SIX YEARS                            |
| RADIUM-226                    | 4020                | RAD                  | 01/01/2027 THROUGH<br>12/31/2027                    | ENTRY POINT<br>101 | 1                 | SIX YEARS                            |
| RADIUM-228                    | 4030                | RAD                  | 01/01/2027 THROUGH<br>12/31/2027                    | ENTRY POINT<br>101 | 1                 | SIX YEARS                            |
| ENDRIN (SOC)                  | 2005                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026        | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| LINDANE (SOC)                 | 2010                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026        | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |

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|-------------------------------|---------------------|----------------------|----------------------------------------------|--------------------|-------------------|--------------------------------------|
| METHOXYCHLOR (SOC)            | 2015                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| TOXAPHENE (SOC)               | 2020                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| DALAPON (SOC)                 | 2031                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| DIQUAT (SOC)                  | 2032                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| ENDOTHALL (SOC)               | 2033                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| GLYPHOSATE (SOC)              | 2034                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| DI(2-ETHYLHEXYL)ADIPATE (SOC) | 2035                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| OXAMYL (VYDATE) (SOC)         | 2036                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |

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|--------------------------------|---------------------|----------------------|----------------------------------------------|--------------------|-------------------|--------------------------------------|
| SIMAZINE (SOC)                 | 2037                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| DI(2-ETHYLHEXYL)PHTHALATE (SOC | 2039                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| PICLORAM (SOC)                 | 2040                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| DINOSEB (SOC)                  | 2041                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| HEXACHLOROCYCLOPENTADIENE(SOC) | 2042                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| CARBOFURAN (SOC)               | 2046                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| ATRAZINE (SOC)                 | 2050                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| ALACHLOR (SOC)                 | 2051                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |

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|-----------------------------|---------------------|----------------------|----------------------------------------------|--------------------|-------------------|--------------------------------------|
| 2,3,7,8-TCDD (DIOXIN) (SOC) | 2063                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| HEPTACHLOR (SOC)            | 2065                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| HEPTACHLOR EPOXIDE (SOC)    | 2067                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| 2,4-D (SOC)                 | 2105                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| 2,4,5-TP SILVEX (SOC)       | 2110                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| HEXACHLOROBENZENE (SOC)     | 2274                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| BENZO(A)PYRENE (SOC)        | 2306                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |
| PENTACHLOROPHENOL (SOC)     | 2326                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                          |

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6

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|--------------------------------|---------------------|----------------------|----------------------------------------------|--------------------|-------------------|-------------------------------------------------|
| PCBS (SOC)                     | 2383                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                                     |
| 1,2-DIBROMO-3-CHLOROPROP(SOC)  | 2931                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                                     |
| ETHYLENE DIBROMIDE (EDB) (SOC) | 2946                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                                     |
| CHLORDANE (SOC)                | 2959                | SOC                  | REQUIRED DURING<br>SECOND QUARTER OF<br>2026 | ENTRY POINT<br>101 | 1                 | THREE YEARS                                     |
| VINYL CHLORIDE (VOC)           | 2976                | VOC                  |                                              | ENTRY POINT<br>101 | 1                 | REQUIRED IF<br>2-CARBON<br>COMPOUND<br>DETECTED |
| 20 REGULATED VOCS              | VOC1                | VOC                  | EACH CALENDAR<br>QUARTER                     | ENTRY POINT<br>101 | 1                 | QUARTERLY                                       |

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## WATER QUALITY NOTICES

 Detected Contaminants are published in the annual Consumer Confidence Report



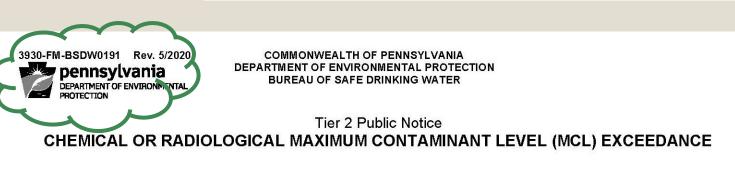
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF SAFE DRINKING WATER

2023 ANNUAL DRINKING WATER QUALITY REPORT

Trumbauersville Municipal Waterworks

PWSID #: 1090091

- When Exceedances occur, Customers are notified
- Tier 2 Notices No Immediate Health Risk



Violation of the MCL for a chemical or radiological contaminant requires a Tier 2 notice. Tier 2 notices should answer the most common questions people will have about the violation.

• Notification are reviewed and approved by PaDEP

## WATER QUALITY

- Sources of Detected Contaminants vary and can be difficult to confirm
  - Naturally Occurring Deposits
  - Poor Disposal Practices of the Past
  - Unknown, Unreported Sources
- Regardless of Source Treatment is the Solution

Borough Officials, System Operator, Water Engineers and PaDEP are working together to ensure your water is <u>not</u> contaminated, poisoned or unsafe.