

April 1, 2016

To Whom It May Concern:

The Borough of Mendham is soliciting written quotations from qualified testing laboratories to perform required sampling and testing of monitoring wells located at the former landfill site at the Department of Public Works and the monitoring wells located at the Sewage Treatment Facility. Vendors are advised that all quotations must include all costs associated with collecting the samples, performing all tests and analyses and reporting all lab results.

It is anticipated that a contract will be offered for a term of one year commencing on July 1, 2016.

Attached is information which is sufficiently detailed to allow interested laboratories to provide a quotation. All quotations are to be sent to Mr. Richard Merkt, Borough Administrator, Borough of Mendham, 2 West Main Street, Mendham, NJ 07945 no later than April 30, 2016.



*The Phoenix House*

*circa 1820*

# *The Borough of Mendham*

*2 West Main Street, Mendham, New Jersey 07945*

*Incorporated May 15, 1906*

**Telephone: 973-543-7152**

**Fax: 973-543-7202**

**BOROUGH OF MENDHAM  
MORRIS COUNTY, NEW JERSEY**

## **SAMPLING AND TESTING OF MONITORING WELLS**

Laboratory Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone No.: \_\_\_\_\_ Fax # \_\_\_\_\_ Email Address: \_\_\_\_\_

Signed By: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

BOROUGH OF MENDHAM  
MORRIS COUNTY, NEW JERSEY

SAMPLING AND TESTING OF MONITORING WELLS

PROPOSAL SHEET

I. NJPDES No. NJ0055239 – FORMER SANITARY LANDFILL:

|    | <u>Description</u>                                      | <u>Quantity</u> | <u>Unit Cost</u> | <u>Total</u> |
|----|---------------------------------------------------------|-----------------|------------------|--------------|
| 1. | January Sampling & Testing                              | 4               | _____            | _____        |
| 2. | April Sampling & Testing                                | 4               | _____            | _____        |
| 3. | July Sampling & Testing                                 | 4               | _____            | _____        |
| 4. | October Sampling & Testing                              | 4               | _____            | _____        |
| 5. | LF-2 Water Level Only<br>January, April, July & October | 1               | _____            | _____        |
|    | (Unit Cost) x (1 Well) x (4 Occasions) =                |                 |                  | _____        |

II. NJPDES No. NJ0102806 – SEWAGE TREATMENT PLANT:

|    | <u>Description</u>                        | <u>Quantity</u> | <u>Unit Cost</u> | <u>Total</u> |
|----|-------------------------------------------|-----------------|------------------|--------------|
| 1. | Sampling & Testing<br>Quarterly           | 3               | _____            | _____        |
|    | (Unit Cost) x (3 Wells) x (4 Occasions) = |                 |                  | _____        |

TOTAL ANNUAL COST FOR I. AND II.                      \$ \_\_\_\_\_

NOTE: TRIP AND FIELD BLANKS ARE TO BE INCLUDED IN THE ABOVE PRICES AS REQUIRED AS WELL AS ALL COLLECTION CHARGES.

**BOROUGH OF MENDHAM MONITORING WELLS**  
PHYSICAL DATA

| <u>Permit #</u> | <u>Elevation of Top<br/>Of Casing<br/>With Cap Off</u> | <u>Elevation of Original<br/>Ground Level</u> | <u>Estimated<br/>Depth to Water Table<br/>From Top of Casing<br/>Prior to Sampling</u> | <u>Estimated<br/>Depth to Water Table<br/>From Original<br/>Ground Level Prior<br/>To Sampling</u> |
|-----------------|--------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 25-26780-9 LF-1 | 474.05'                                                | 471.35'                                       | 41.00'                                                                                 | 38.00'                                                                                             |
| 25-26779-5 LF-2 | 476.00'                                                | 474.55'                                       | 22.00'                                                                                 | 20.00'                                                                                             |
| 25-26781-7 LF-3 | 496.00                                                 | 494.62'                                       | 40.00'                                                                                 | 39.00'                                                                                             |
| 25-28109-7 LF-4 | 467.05'                                                | 465.20'                                       | 37.00'                                                                                 | 35.00'                                                                                             |
| 25-38955-6 LF-5 | 458.53'                                                | 456.50'                                       | 29.00'                                                                                 | 27.00'                                                                                             |
| 25-26782-5 SP-1 | 447.33'                                                | 445.23'                                       | 33.00'                                                                                 | 31.00'                                                                                             |
| 25-26783-3 SP-2 | 438.90'                                                | 436.90'                                       | 16.00'                                                                                 | 14.00'                                                                                             |
| 25-26784-1 SP-3 | 434.50'                                                | 432.50'                                       | 17.00'                                                                                 | 15.00'                                                                                             |

**All well casings are 8" diameter**

| <u>Permit #</u> | <u>Estimated Depth</u>  |
|-----------------|-------------------------|
| 25-26780-9 LF-1 | 60 ft. (from well log)  |
| 25-26779-5 LF-2 | 60 ft. (from well log)  |
| 25-26781-7 LF-3 | 60 ft. (from well log)  |
| 25-28109-7 LF-4 | 132 ft. (from well log) |
| 25-38955-6 LF-5 | 40 ft.                  |
| 25-26782-5 SP-1 | 50 ft. (estimate)       |
| 25-26783-3 SP-2 | 50 ft. (estimate)       |
| 25-26784-1 SP-3 | 50 ft. (estimate)       |

Groundwater Monitoring Requirements  
Former Mendham Borough Landfill  
Five (5) Monitoring Wells  
(LF-2 Water Level Only)

| <u>Parameter</u>                   | <u>Limitation</u> | <u>Sampling Month</u> | <u>Sample Type</u> | <u>Reporting Month</u> |
|------------------------------------|-------------------|-----------------------|--------------------|------------------------|
| Acid Extractables by GC/MS         | (2)*<br>(3)* ppb  | Apr.                  | (1)*<br>Grab       | May                    |
| Ammonia-Nitrogen                   | 0.5 mg/l          | Apr.                  | Grab               | May                    |
| Arsenic (7)*                       | 0.05 mg/l         | Apr.                  | Grab               | May                    |
| Barium                             | 1.0 mg/l          | Apr.                  | Grab               | May                    |
| Base/Neutral Extractables by GC/MS | (2)*<br>(3)* ppb  | Apr.                  | Grab               | May                    |
| Cadmium (7)*                       | 0.01 mg/l         | Apr.                  | Grab               | May                    |
| Chemical Oxygen Demand             | ---               | Apr. Oct.             | Grab               | May, Nov.              |
| Chloride                           | 250 mg/l          | Jan. Apr. Jul. Oct.   | Grab               | Feb. May, Aug. Nov.    |
| Chromium (Hex) (7)*                | 0.05 mg/l         | Apr.                  | Grab               | May                    |
| Copper (7)*                        | 1.0 mg/l          | Apr.                  | Grab               | May                    |
| Cyanide                            | 0.2 mg/l          | Apr.                  | Grab               | May                    |
| Dissolved Oxygen                   | (5)*              | Jan. Apr. Jul. Oct.   |                    | Feb. May, Aug. Nov.    |
| Eh                                 | (5)*              | Jan. Apr. Jul. Oct.   |                    | Feb. May, Aug. Nov.    |
| Fecal Coliform                     | (4)*              | Apr. Oct.             | Grab               | May, Nov.              |
| Fluoride                           | 2.0 mg/l          | Apr.                  | Grab               | May                    |
| Total Hardness                     | ---               | Jan. Apr. Jul. Oct.   | Grab               | Feb. May, Aug. Nov.    |
| Iron                               | ---               | Apr.                  | Grab               | May                    |
| Lead (7)*                          | 0.05 mg/l         | Jan. Apr. Jul. Oct.   | Grab               | Feb. May, Aug. Nov.    |
| Manganese                          | ---               | Apr.                  | Grab               | May                    |
| Mercury (7)*                       | 0.002 mg/l        | Apr.                  | Grab               | May                    |

Groundwater Monitoring Requirements  
Former Mendham Borough Landfill  
Five (5) Monitoring Wells

| <u>Parameter</u>                                                                          | <u>Limitation</u> | <u>Sampling Month</u> | <u>Sample Type</u> | <u>Reporting Month</u> |
|-------------------------------------------------------------------------------------------|-------------------|-----------------------|--------------------|------------------------|
| Nitrate Nitrogen                                                                          | 10.0 mg/l         | Apr.                  | Grab               | May                    |
| pH                                                                                        | (5)* SU           | Jan. Apr. Jul. Oct.   | Grab               | Feb. May, Aug. Nov.    |
| Phenols                                                                                   | 0.3 mg/l          | Apr.                  | Grab               | May                    |
| Selenium (7)*                                                                             | 0.01 mg/l         | Apr.                  | Grab               | May                    |
| Silver (7)*                                                                               | 0.05 mg/l         | Apr.                  | Grab               | May                    |
| Sodium                                                                                    | 50 mg/l           | Jan. Apr. Jul. Oct.   | Grab               | Feb. May, Aug. Nov.    |
| Specific Conductance                                                                      | (umho/cm)<br>(5)* | Jan. Apr. Jul. Oct.   | Grab               | Feb. May, Aug. Nov.    |
| Sulfate                                                                                   | 250 mg/l          | Apr.                  | Grab               | May                    |
| Total Dissolved Solids (TDS)                                                              | ---               | Jan. Apr. Jul. Oct.   | Grab               | Feb. May, Aug. Nov.    |
| Total Volatile Organics by GC/MS                                                          | (3)*<br>(6)* ppb  | Apr.                  | Grab               | May                    |
| Zinc (7)*                                                                                 | 5.0 mg/l          | Apr.                  | Grab               | May                    |
| Elevation of top of monitor well casing (to be determined once but reported as indicated) |                   | Jan. Apr. Jul. Oct.   | N/A                | Feb. May, Aug. Nov.    |
| Depth to Water Table from top of casing prior to sampling                                 |                   | Jan. Apr. Jul. Oct.   | N/A                | Feb. May, Aug. Nov.    |

NOTES:

- (1)\* "Grab" means an individual sample of appropriate volume collected after proper evacuation of the well and over a period not exceeding 15 minutes.

Groundwater Monitoring Requirements  
Former Mendham Borough Landfill  
Five (5) Monitoring Wells

- (2)\* 40 CFR Part 136-Method 625 shall be used to identify and monitor for the acid extractable compounds and/or base/neutral extractable toxic pollutants as identified in method 625. Each annual sampling round shall include the identification of 10 (acid extractables) and/or 15 (base/neutrals) unknown peaks with peak areas greater than 10% of the nearest internal standard. For non-target compounds, a forward library search using EPA/NBS/NIH Mass Spectral Library (Library) must be performed. If the spectra do not meet the criteria of identification of the Library, the compound shall be reported as "unknown". If possible, an additional classification of the unknown compound shall be presented (e.g., unknown aromatic, unknown hydrocarbon, etc.). For estimating concentration, the laboratory shall assume a response factor of one and estimate the concentration by comparison to the peak height of the nearest internal standard of the reconstructed chromatogram.
- (3)\* A. The method detection limits specified in 40 CFR Part 136-Methods 624 and/or 625 shall be achieved, and the quality assurance and quality control methodologies specified in 40 CFR Part 136 shall be utilized. In the event that a laboratory cannot achieve the required detection limit, the permittee must be able to document why these limits cannot be achieved (i.e., the specific instrument limitation). Alternate quantitation limits are subject to Departmental approval. Any alternate quantitation limit must be the lowest level that can be reliably achieved within the limits of precision and accuracy specified in 40 CFR Part 136. Documentation of these quality assurance and quality control measures, including the results of field, trip and method blanks, must be submitted within 30 days of a written request from the Department.
- B. After the first round of sampling, the permittee may propose for Departmental approval another analytical methodology (e.g., gas chromatography instead of mass spectral analysis). Such a proposal shall be accompanied by a statement explaining how the methodology adequately monitors all the compounds of concern.
- C. The Department reserves the right to direct the permittee to use other analytical methodologies (e.g. mass spectral analysis) by giving the permittee written notice to do so.
- D. The ground-water protection standard for these compounds is "background" as described in Paragraph 15 above.
- (4)\* A. By membrane filtration, not to exceed four per 100 ml in more than one sample when less than 20 are examined per month, or by fermentation tube, with a standard 10 ml portion, not to be present in three or more portions in more than one sample when less than 20 are examined per month.

Groundwater Monitoring Requirements  
Former Mendham Borough Landfill  
Five (5) Monitoring Wells

B. Prevailing criteria adopted pursuant to the Federal Safe Drinking Water Act (PL 93-523).

(5)\* These parameters are to be field determined. The calibration specifications for the field equipment used shall be provided to the Department.

(6)\* 40 CFR Part 136-Method 624 shall be used to identify and monitor for the volatile organic compounds identified in Appendix B of the NJPDES Regulations (N.J.A.C. 7:14A-1 et seq.). Each annual sampling round shall include the identification of 15 unknown peaks with peak areas greater than 10% of the nearest internal standard. For non-target compounds, a forward library search using the EPA/NBS/NIH Mass Spectral Library (Library) must be performed. If the spectra do not meet the criteria of identification of the Library, the compound shall be reported as "unknown". If possible, an additional classification of the unknown compound shall be presented (e.g., unknown aromatic, unknown hydrocarbon, etc.). For estimating concentration, the laboratory shall assume a response factor of one and estimate the concentration by comparison to the peak height of the nearest internal standard of the reconstructed chromatogram.

(7)\* The priority pollutant metals shall be analyzed for using Inductively Coupled Plasma or Atomic Absorption methods (direct aspiration or furnace techniques). The EPA 200 Method Series as listed in the Federal Register, Vol. 49, No. 209 shall be used. The method detection limits shall be equal or lower than those specified in the EPA 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes" document. In the event that a laboratory cannot achieve the required detection limit, the permittee must be able to document why these limits cannot be achieved (i.e., the specific instrument limitations). Alternate quantitation limits are subject to Departmental approval.

It shall be solely the contractor's responsibility to maintain an adequate supply of the required report forms.

The attention of all bidders is directed to the attached copy of the appropriate portion of NJPDES regulations, Section 6.12.

Groundwater Monitoring Requirements  
Mendham Borough Sewage Treatment Plant  
Three (3) Monitoring Wells

| <u>Parameter</u>                                                                           | <u>Limitation</u> | <u>Sampling Month</u> | <u>Sample Type</u> | <u>Reporting Month</u> |
|--------------------------------------------------------------------------------------------|-------------------|-----------------------|--------------------|------------------------|
| Ammonia-Nitrogen                                                                           | 0.5 ppm           | Mar. Jun. Sep. Dec.   | Grab               | Apr. Jul. Oct. Jan.    |
| Chemical Oxygen Demand (COD)                                                               | ---               | Mar. Jun. Sep. Dec.   | Grab               | Apr. Jul. Oct. Jan.    |
| Fecal Coliform, MPN/100 ml                                                                 | (1) *             | Mar. Jun. Sep. Dec.   | Grab               | Apr. Jul. Oct. Jan.    |
| Kjeldahl Nitrogen                                                                          | ---               | Mar. Jun. Sep. Dec.   | Grab               | Apr. Jul. Oct. Jan.    |
| Nitrate Nitrogen                                                                           | 10.0 ppm          | Mar. Jun. Sep. Dec.   | Grab               | Apr. Jul. Oct. Jan.    |
| pH                                                                                         | 5-9               | Mar. Jun. Sep. Dec.   | Grab               | Apr. Jul. Oct. Jan.    |
| Phosphorus as P                                                                            | ---               | Mar. Jun. Sep. Dec.   | Grab               | Apr. Jul. Oct. Jan.    |
| Total Dissolved Solids (TDS)                                                               | 500 ppm           | Mar. Jun. Sep. Dec.   | Grab               | Apr. Jul. Oct. Jan.    |
| Elevation of top of monitor well casing (to be determined once, but reported as indicated) |                   | Mar. Jun. Sep. Dec.   | N/A                | Apr. Jul. Oct. Jan.    |
| Depth to water table from original ground level prior to sampling                          |                   | Mar. Jun. Sep. Dec.   | N/A                | Apr. Jul. Oct. Jan.    |
| Depth to water table from top of casing prior to sampling                                  |                   | Mar. Jun. Sep. Dec.   | N/A                | Apr. Jul. Oct. Jan.    |

Notes: (1) \* A) By membrane filtration, not to exceed four per 100 ml in more than one sample when less than 20 are examined per month, or B) by fermentation tube, with a standard 10 ml portion, not to be present in three or more portions in more than one sample when less than 20 are examined per month, or C) prevailing criteria adopted pursuant to the Federal Safe Drinking Water Act (PL 93-523).

(2) Prevailing regulations adopted by USEPA pursuant to Sections 1412, 1415, and 1450 of

Groundwater Monitoring Requirements  
Mendham Borough Sewage Treatment Plant  
Three (3) Monitoring Wells

| <u>Parameter</u> | <u>Limitation</u> | <u>Sampling Month</u> | <u>Sample Type</u> | <u>Reporting Month</u> |
|------------------|-------------------|-----------------------|--------------------|------------------------|
|------------------|-------------------|-----------------------|--------------------|------------------------|

the Public Health Services Act as amended by the Safe Drinking Water Act (PL 93-523).

- (3) GC/MS scan for volatile organics with a method limit of detection of 10 ppb or better for each substance. The concentration shall be the 10<sup>-5</sup> Cancer Risk for specific volatile organic chemicals listed in Appendix F of the NJPDES regulations which have a value for the 10<sup>-6</sup> Cancer Risks. In no case shall the total concentration for all volatile organic chemicals exceed 50 ppb.

All results are to be reported on standard forms and submitted not later than the next succeeding month following the sampling month. The contractor shall complete the forms required on the "Monitoring Report - Transmittal Sheet" (Form T-VWX-014). Failure to submit sampling data on the forms required on the "Monitoring Report - Transmittal Sheet" shall be considered by the Department of Environmental Protection to be a violation of the permit sampling requirements and may place the Borough of Mendham subject to civil and administrative penalties pursuant to N.J.S.A. 58:10A-10. Samples Attached.

All ground water elevations must be determined prior to pumping and sampling the wells. Sampling of the wells shall be performed according to the methodology specified in Section 6.12 of the NJPDES regulations and the Department of Environmental Protection's Field Procedure Manual for Water Data Acquisition. The contractor shall sample for all parameters indicated above. Sampling shall be performed and reported during the months which are specified.

It shall be solely the contractor's responsibility to maintain an adequate supply of the required report forms.

The attention of all bidders is directed to the attached copy of an appropriate portion of NJPDES regulations, Section 6.12.

MONITORING REPORT — TRANSMITTAL SHEET

NJPDES NO.

REPORTING PERIOD

MO. YR.

MO. YR.

0 10 15 15 12 13 19

THRU

PERMITTEE: Name Borough of Mendham  
Address 2 West Main Street  
Mendham, New Jersey 07945

FACILITY: Name Mendham Borough Sanitary Landfill  
Address 37 Ironia Road  
Mendham, NJ 07945 (County) Morris  
Telephone (973) 543-7152

FORMS ATTACHED (Indicate Quantity of Each)

## SLUDGE REPORTS - SANITARY

☐ T-VWX-007 ☐ T-VWX-008 ☐ T-VWX-009

## SLUDGE REPORTS - INDUSTRIAL

☐ T-VWX-010A ☐ T-VWX-010B

## WASTEWATER REPORTS

☐ T-VWX-011 ☐ T-VWX-012 ☐ T-VWX-013

## GROUNDWATER REPORTS

☐ VWX-015(A,B) ☐ VWX-016 ☐ VWX-017

## NJPDES DISCHARGE MONITORING REPORT

☐ EPA FORM 3320-1OPERATING-EXCEPTIONS

YES NO

DYE TESTING ☐ ☐TEMPORARY BYPASSING ☐ ☐DISINFECTION INTERRUPTION ☐ ☐MONITORING MALFUNCTIONS ☐ ☐UNITS OUT OF OPERATION ☐ ☐OTHER ☐ ☐

(Detail any "Yes" on reverse side  
in appropriate space.)

NOTE: The "Hours Attended at Plant" on the  
reverse of this sheet must also be completed.

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

PRINCIPAL EXECUTIVE OFFICER or  
DULY AUTHORIZED REPRESENTATIVE

Name (Printed) \_\_\_\_\_

Name (Printed) \_\_\_\_\_

Grade &amp; Registry No. \_\_\_\_\_

Title (Printed) \_\_\_\_\_

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

## GROUND WATER ANALYSIS - MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID NO. \_\_\_\_\_

|                                   |  |           |
|-----------------------------------|--|-----------|
| FACILITY NAME                     |  | SW ID NO. |
| Mendham Borough Sanitary Landfill |  | 1418 A    |
| LAB NAME                          |  |           |

|             |    |                 |             |             |     |                  |     |         |
|-------------|----|-----------------|-------------|-------------|-----|------------------|-----|---------|
| NJPDES NO.  |    | WELL PERMIT NO. |             | SAMPLE DATE |     | NJ LAB CERT. NO. |     | WQM USE |
| YR. MO. DAY |    |                 |             |             |     |                  |     |         |
| (R)         | NJ | 0055239         | ( )-( )-( ) | ( )         | ( ) | ( )              | ( ) | ( )     |
| 1           | 2  | 8               | 9           | 16          | 17  | 22               | 23  | 27      |

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM          TO           
MO. YR. MO. YR.SUBMIT WITH SIGNED T-VWX-014

| SAMPLING MONTHS |   |   |   |   |   |   |   |   |   |   |   | ANALYSIS                                                                          | UNITS                     | PARAMETER | VALUE | REMARKS |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|-----------------------------------------------------------------------------------|---------------------------|-----------|-------|---------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| J               | F | M | A | M | J | J | A | S | O | N | D |                                                                                   |                           |           |       |         |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A               | E | A | P | A | U | U | U | E | C | O | E |                                                                                   |                           |           |       |         |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| N               | B | R | R | Y | N | I | G | P | T | V | C |                                                                                   |                           |           |       |         |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| X               |   | X |   |   |   |   |   |   |   |   |   | Elev. of top of well casing with cap off (as specified in well completion report) | feet Msl: to nearest 0.01 | 7         | 2     | 1       | 1 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## GROUND WATER ANALYSIS - VOLATILE ORGANICS REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID NO. \_\_\_\_\_

|                                   |  |           |
|-----------------------------------|--|-----------|
| FACILITY NAME                     |  | SW ID NO. |
| Mendham Borough Sanitary Landfill |  | 1418 A    |
| LAB NAME                          |  |           |

|            |    |                 |     |             |     |                  |     |         |
|------------|----|-----------------|-----|-------------|-----|------------------|-----|---------|
| NJPDES NO. |    | WELL PERMIT NO. |     | SAMPLE DATE |     | NJ LAB CERT. NO. |     | WQM USE |
| (T)        | NJ | ( )             | ( ) | YR.         | MO. | DAY              | ( ) |         |
| 1          | 2  | 3               | 4   | 5           | 6   | 7                | 8   | 28      |

 THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM    MO.    YR. TO    MO.    YR.
SUBMIT WITH SIGNED T-VWX-014

| SAMPLING MONTHS |   |   |   |   |   |   |   |   |   |   |   | ANALYSIS                  | UNITS | PARAMETER | VALUE | REMARKS |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---------------------------|-------|-----------|-------|---------|
| J               | F | M | A | M | J | J | A | S | O | N | D |                           |       |           |       |         |
| N               | B | R | R | R | N | L | G | P | T | V | C |                           |       |           |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Acrylonitrile             | ug/l  | 3 4 2 1 5 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Benzene                   | ug/l  | 3 4 0 3 0 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Bromoform                 | ug/l  | 3 2 1 0 4 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Carbon Tetrachloride      | ug/l  | 3 2 1 0 2 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Chlorobenzene             | ug/l  | 3 4 3 0 1 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Chlorodibromomethane      | ug/l  | 3 4 3 0 6 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Chloroform                | ug/l  | 3 2 1 0 6 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 1,1-Dichloroethane        | ug/l  | 3 4 4 9 6 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 1,2-Dichloroethane        | ug/l  | 3 4 5 3 1 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 1,1-Dichloroethylene      | ug/l  | 3 4 5 0 1 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 1,2-Dichloropropane       | ug/l  | 3 4 5 4 1 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Ethylbenzene              | ug/l  | 3 4 3 7 1 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Methylene Chloride        | ug/l  | 3 4 4 2 3 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 1,1,2,2-Tetrachloroethane | ug/l  | 3 4 5 1 6 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Tetrachloroethylene       | ug/l  | 3 4 4 7 5 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Toluene                   | ug/l  | 3 4 0 1 0 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 1,1,1-Trichloroethane     | ug/l  | 3 4 5 0 6 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 1,1,2-Trichloroethane     | ug/l  | 3 4 5 1 1 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Trichloroethylene         | ug/l  | 3 9 1 8 0 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Vinyl Chloride            | ug/l  | 3 9 1 7 5 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Acrolein                  | ug/l  | 3 4 2 1 0 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Chloroethane              | ug/l  | 3 4 3 1 1 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 2-Chloroethyl Vinyl Ether | ug/l  | 3 4 5 7 6 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Bromodichloromethane      | ug/l  | 3 2 1 0 1 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 1,3-trans-Dichloropropene | ug/l  | 3 4 6 9 9 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Methyl Bromide            | ug/l  | 3 4 4 1 3 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | Methyl Chloride           | ug/l  | 3 4 4 1 8 |       |         |
| X               |   |   |   |   |   |   |   |   |   |   |   | 1,2-trans-Dichloroethene  | ug/l  | 3 4 5 4 6 |       |         |

VALUE CODING AND REMARK CODES ON <sup>1</sup> REVERSE

29

33 34

40 41

GROUND WATER ANALYSIS - MONITORING WELL REPORT  
ACID, BASE/NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID NO. \_\_\_\_\_

|               |                                   |           |        |
|---------------|-----------------------------------|-----------|--------|
| FACILITY NAME | Mendham Borough Sanitary Landfill | SW ID NO. | 1418 A |
| LAB NAME      |                                   |           |        |

|          |    |             |                 |             |                  |               |    |    |    |  |
|----------|----|-------------|-----------------|-------------|------------------|---------------|----|----|----|--|
| (U)<br>1 | NJ | NJPDES NO.  | WELL PERMIT NO. | SAMPLE DATE | NJ LAB CERT. NO. | WQM USE<br>28 |    |    |    |  |
|          |    | YR. MO. DAY |                 |             |                  |               |    |    |    |  |
|          |    | 0055239     |                 |             |                  |               |    |    |    |  |
|          |    | 2           | 8               | 9           | 16               | 17            | 22 | 23 | 27 |  |

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM          MO.          YR. TO          MO.          YR.

SUBMIT WITH SIGNED T-VWX-014

| SAMPLING MONTHS |   |   |   |   |   |   |   |   |   |   |   | REMARKS                   |           |   |   |   |   |       |  |  |  |  |  |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---------------------------|-----------|---|---|---|---|-------|--|--|--|--|--|
| J               | F | M | A | M | J | J | A | S | O | N | D |                           |           |   |   |   |   |       |  |  |  |  |  |
| A               | E | A | P | A | U | U | U | E | C | O | E |                           |           |   |   |   |   |       |  |  |  |  |  |
| N               | B | R | R | R | Y | N | L | G | P | T | V |                           |           |   |   |   |   |       |  |  |  |  |  |
| ANALYSIS        |   |   |   |   |   |   |   |   |   |   |   | UNITS                     | PARAMETER |   |   |   |   | VALUE |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Chrysene                  | ug/l      | 3 | 4 | 3 | 2 | 0     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | 1,2,5,6 Dibenzoanthracene | ug/l      | 3 | 4 | 5 | 5 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | 1,2-Dichlorobenzene       | ug/l      | 3 | 4 | 5 | 3 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | 1,3-Dichlorobenzene       | ug/l      | 3 | 4 | 5 | 6 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | 1,4-Dichlorobenzene       | ug/l      | 3 | 4 | 5 | 7 | 1     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | 3,3-Dichlorobenzidine     | ug/l      | 3 | 4 | 6 | 3 | 1     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Diethyl Phthalate         | ug/l      | 3 | 4 | 3 | 3 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Dimethyl Phthalate        | ug/l      | 3 | 4 | 3 | 4 | 1     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Di-n-butyl Phthalate      | ug/l      | 3 | 9 | 1 | 1 | 0     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | 2,4-Dinitrotoluene        | ug/l      | 3 | 4 | 6 | 1 | 1     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | 2,6-Dinitrotoluene        | ug/l      | 3 | 4 | 6 | 2 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Di-n-octyl Phthalate      | ug/l      | 3 | 4 | 5 | 9 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | 1,2-Diphenylhydrazine     | ug/l      | 3 | 4 | 3 | 4 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Fluoranthene              | ug/l      | 3 | 4 | 3 | 7 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Fluorene                  | ug/l      | 3 | 4 | 3 | 8 | 1     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Hexachlorobenzene         | ug/l      | 3 | 9 | 7 | 0 | 0     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Hexachlorobutadiene       | ug/l      | 3 | 4 | 3 | 9 | 1     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Hexachlorocyclopentadiene | ug/l      | 3 | 4 | 3 | 8 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Hexachloroethane          | ug/l      | 3 | 4 | 3 | 9 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Indeno(1,2,3-CD)pyrene    | ug/l      | 3 | 4 | 4 | 0 | 3     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Isophorone                | ug/l      | 3 | 4 | 4 | 0 | 8     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Naphthalene               | ug/l      | 3 | 4 | 6 | 9 | 6     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Nitrobenzene              | ug/l      | 3 | 4 | 4 | 4 | 7     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | N-Nitrosodimethylamine    | ug/l      | 3 | 4 | 4 | 3 | 8     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | N-Nitrosodi-n-propylamine | ug/l      | 3 | 4 | 4 | 2 | 8     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | N-Nitrosodiphenylamine    | ug/l      | 3 | 4 | 4 | 3 | 3     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Phenanthrene              | ug/l      | 3 | 4 | 4 | 6 | 1     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | Pyrene                    | ug/l      | 3 | 4 | 4 | 6 | 9     |  |  |  |  |  |
|                 |   |   | X |   |   |   |   |   |   |   |   | 1,2,4-Trichlorobenzene    | ug/l      | 3 | 4 | 5 | 5 | 1     |  |  |  |  |  |

VALUE CODING AND REMARK CODES ON REVERSE

29

33 34

40 41

## GROUND WATER ANALYSIS - MONITORING WELL REPORT

## ACID, BASE/NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID NO. \_\_\_\_\_

|               |                                   |           |        |
|---------------|-----------------------------------|-----------|--------|
| FACILITY NAME | Mendham Borough Sanitary Landfill | SW ID NO. | 1418 A |
| LAB NAME      |                                   |           |        |

|                |                 |                            |                  |         |
|----------------|-----------------|----------------------------|------------------|---------|
| NJPDES NO.     | WELL PERMIT NO. | SAMPLE DATE<br>YR. MO. DAY | NJ LAB CERT. NO. | WQM USE |
| (U) NJ 0055239 | ( )-( )-( )     | ( )-( )-( )                | ( )-( )-( )      | ( )     |
| 1 2 8          | 9 16            | 17 22                      | 23 27            | 28      |

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM          MO.    YR. TO          MO.    YR.

SUBMIT WITH SIGNED T-VWX-014

| SAMPLING MONTHS |   |   |   |   |   |   |   |   |   |   |   | ANALYSIS                     | UNITS | PARAMETER | VALUE | REMARKS |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|------------------------------|-------|-----------|-------|---------|
| J               | F | M | A | M | J | J | A | S | O | N | D |                              |       |           |       |         |
| N               | E | R | R | Y | N | L | G | P | T | V | C |                              |       |           |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 2-Chlorophenol               | ug/l  | 3 4 5 8 6 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 2,4-Dichlorophenol           | ug/l  | 3 4 6 0 1 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 2,4-Dimethylphenol           | ug/l  | 3 4 6 0 6 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 4,6-Dinitro-o-cresol         | ug/l  | 3 4 6 5 7 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 2,4-Dinitrophenol            | ug/l  | 3 4 6 1 6 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 2-Nitrophenol                | ug/l  | 3 4 5 9 1 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 4-Nitrophenol                | ug/l  | 3 4 6 4 6 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | p-Chloro-m-cresol            | ug/l  | 3 4 4 5 2 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Pentachlorophenol            | ug/l  | 3 9 0 3 2 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Phenol                       | ug/l  | 3 4 6 9 4 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 2,4,6-Trichlorophenol        | ug/l  | 3 4 6 2 1 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Acenaphthene                 | ug/l  | 3 4 2 0 5 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Acenaphthylene               | ug/l  | 3 4 2 0 0 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Anthracene                   | ug/l  | 3 4 2 2 0 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Benzidine                    | ug/l  | 3 9 1 2 0 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Benzo(a)anthracene           | ug/l  | 3 4 5 2 6 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Benzo(a)pyrene               | ug/l  | 3 4 2 4 7 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Benzo(k)fluoranthene         | ug/l  | 3 4 2 4 2 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Benzo(ghi)perylene           | ug/l  | 3 4 5 2 1 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Benzo(b)fluoranthene         | ug/l  | 3 4 2 3 0 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Bis(2-chloroethoxy)methane   | ug/l  | 3 4 2 7 8 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Bis(2-chloroethyl) Ether     | ug/l  | 3 4 2 7 3 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Bis(2-chloroisopropyl) Ether | ug/l  | 3 4 2 8 3 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | Bis(2-ethylhexyl) Phthalate  | ug/l  | 3 9 1 0 0 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 4-Bromophenyl phenyl Ether   | ug/l  | 3 4 6 3 6 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | N-Butylbenzyl Phthalate      | ug/l  | 3 4 2 9 2 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 2-Chloronaphthalene          | ug/l  | 3 4 5 8 1 |       |         |
|                 |   |   | X |   |   |   |   |   |   |   |   | 4-Chlorophenyl Phenyl Ether  | ug/l  | 3 4 6 4 1 |       |         |

VALUE CODING AND REMARK CODES ON REVERSE

29

33 34

40 41

# GROUND WATER ANALYSIS - MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID NO.

FACILITY NAME Mendham Borough Sanitary Landfill

SW ID NO.  
1418A

LAB NAME

[illegible]

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM               TO                
MO. YR. MO. YR.

SUBMIT WITH SIGNED T-VWX-014

[illegible]

VALUE CODING AND REMARK CODES ON REVERSE

## GROUND WATER ANALYSIS - MONITORING WELL REPORT

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID NO.

FACILITY NAME Mendham Borough Sanitary Landfill

SW ID NO.  
1418 A

$\left( \begin{smallmatrix} \text{U} \\ 1 \end{smallmatrix} \right)$ 
 NJ  $\left( \begin{smallmatrix} \text{NJPDES NO.} \\ 0 \mid 0 \mid 5 \mid 5 \mid 2 \mid 3 \mid 9 \end{smallmatrix} \right)$

WELL PERMIT NO.

$$\left( \begin{array}{|c|} \hline \\ \hline \end{array} \right) - \left( \begin{array}{|c|c|c|c|} \hline \\ \hline \end{array} \right) - \left( \begin{array}{|c|} \hline \\ \hline \end{array} \right)$$

9                      16

SAMPLE DATE  
YR. MO. DAY

17 22

NJ LAB CERT.NO.

A number line starting at 23 and ending at 27. There are tick marks at 23, 24, 25, 26, and 27. The segment between 23 and 24 is shaded with diagonal lines.

WQM USE

28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM                      TO                       
MO. YR. MO. YR.

SUBMIT WITH SIGNED T-VWX-014

SAMPLING MONTHS

## ANALYSIS

UNITS

PARAMETER

VALUE

R  
E  
M[illegible]

VALUE CODING AND REMARK CODES ON REVERSE

29

33 34

40 41

MONITORING REPORT - TRANSMITTAL SHEET

NJPDDES NO.

REPORTING PERIOD

MO. YR.

MO. YR.

010102806

THRU

PERMITTEE: Name Borough of MendhamAddress 2 West Main StreetMendham, New Jersey 07945FACILITY: Name Mendham Borough Sewage Treatment PlantAddress 35 Ironia RoadMendham, NJ 07945 (County) MorrisTelephone (973) 543-7152FORMS ATTACHED (Indicate Quantity of Each)

## SLUDGE REPORTS - SANITARY

☐ T-VWX-007 ☐ T-VWX-008 ☐ T-VWX-009

## SLUDGE REPORTS - INDUSTRIAL

☐ T-VWX-010A ☐ T-VWX-010B

## WASTEWATER REPORTS

☐ T-VWX-011 ☐ T-VWX-012 ☐ T-VWX-013

## GROUNDWATER REPORTS

☐ VWX-015(A,B) ☐ VWX-016 ☐ VWX-017

## NPDES DISCHARGE MONITORING REPORT

☐ EPA FORM 3320-1OPERATING-EXCEPTIONS

YES NO

DYE TESTING ☐ ☐TEMPORARY BYPASSING ☐ ☐DISINFECTION INTERRUPTION ☐ ☐MONITORING MALFUNCTIONS ☐ ☐UNITS OUT OF OPERATION ☐ ☐OTHER ☐ ☐*(Detail any "Yes" on reverse side  
in appropriate space.)**NOTE: The "Hours Attended at Plant" on the  
reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

PRINCIPAL EXECUTIVE OFFICER or  
DULY AUTHORIZED REPRESENTATIVE

Name (Printed) \_\_\_\_\_

Name (Printed) \_\_\_\_\_

Grade &amp; Registry No. \_\_\_\_\_

Title (Printed) \_\_\_\_\_

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

# GROUND WATER ANALYSIS - MONITORING WELL REPORT

OWNER'S WELL ID NO.

|               |                                        |           |        |
|---------------|----------------------------------------|-----------|--------|
| FACILITY NAME | Mendham Borough Sewage Treatment Plant | SW ID NO. | 1418 A |
| LAB NAME      |                                        |           |        |

NJ (R) NJPDES NO. 0102806  
 1 2 8  
 WELL PERMIT NO. [ ] - [ ] - [ ]  
 9 16  
 SAMPLE DATE  
 YR. MO. DAY [ ] [ ] [ ] [ ] [ ] [ ]  
 17 22  
 NJ LAB CERT. NO. [ ] [ ] [ ] [ ] [ ] [ ]  
 23 27  
 WQM USE [ ]  
 28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM               TO                
MO. YR. MO. YR.

SUBMIT WITH SIGNED T-VWX-014

| SAMPLING MONTHS |   |   |   |   |   |   |   |   |   |   |   | ANALYSIS                                                                             | UNITS                        | PARAMETER | VALUE | R<br>E<br>M |   |   |  |  |  |  |  |  |  |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|--------------------------------------------------------------------------------------|------------------------------|-----------|-------|-------------|---|---|--|--|--|--|--|--|--|
| J               | F | M | A | M | J | J | A | S | O | N | D |                                                                                      |                              |           |       |             |   |   |  |  |  |  |  |  |  |
| A               | E | A | P | A | U | U | U | E | C | O | E |                                                                                      |                              |           |       |             |   |   |  |  |  |  |  |  |  |
| N               | B | R | R | Y | N | L | G | P | T | V | C |                                                                                      |                              |           |       |             |   |   |  |  |  |  |  |  |  |
|                 | X |   |   | X |   |   |   | X |   |   |   | Elev. of top of well casing with cap off<br>(as specified in well completion report) | feet Msl: to<br>nearest 0.01 | 7         | 2     | 1           | 1 | 0 |  |  |  |  |  |  |  |
|                 | X |   |   | X |   |   |   | X |   |   |   | Elev. of original ground level<br>(as specified in well completion report)           | feet Msl: to<br>nearest 0.01 | 7         | 2     | 0           | 0 | 9 |  |  |  |  |  |  |  |
|                 | X |   |   | X |   |   |   | X |   |   |   | Depth to water table from top of casing<br>prior to sampling (with cap off)          | feet: to<br>nearest 0.01     | 8         | 2     | 5           | 4 | 6 |  |  |  |  |  |  |  |
|                 | X |   |   | X |   |   |   | X |   |   |   | Depth to water table from original<br>ground level prior to sampling                 | feet: to<br>nearest 0.01     | 7         | 2     | 0           | 1 | 9 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Arsenic, Dissolved                                                                   | ug/l as As                   | 0         | 1     | 0           | 0 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Barium, Dissolved                                                                    | ug/l as Ba                   | 0         | 1     | 0           | 0 | 5 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Biochemical Oxygen Demand - 5 Day                                                    | mg/l                         | 0         | 0     | 3           | 1 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Cadmium, Dissolved                                                                   | ug/l as Cd                   | 0         | 1     | 0           | 2 | 5 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Chloride, Dissolved                                                                  | ug/l as Cl                   | 8         | 2     | 2           | 9 | 5 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Chromium, Dissolved                                                                  | ug/l as Cr                   | 0         | 1     | 0           | 3 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Chromium, Dissolved, Hexavalent                                                      | ug/l as Cr                   | 0         | 1     | 2           | 2 | 0 |  |  |  |  |  |  |  |
|                 | X |   |   | X |   |   |   | X |   |   |   | Chemical Oxygen Demand (COD), Dissolved                                              | mg/l                         | 0         | 0     | 3           | 4 | 1 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Coliform, Fecal                                                                      | n/100 ml                     | 7         | 4     | 0           | 5 | 5 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Color                                                                                | pt-co                        | 0         | 0     | 0           | 8 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Copper, Dissolved                                                                    | ug/l as Cu                   | 0         | 1     | 0           | 4 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Cyanide, Total                                                                       | mg/l as CN                   | 0         | 0     | 7           | 2 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Endrin, Total                                                                        | ug/l                         | 3         | 9     | 3           | 9 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Fluoride, Dissolved                                                                  | mg/l as F                    | 0         | 0     | 9           | 5 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Gross Alpha, Dissolved                                                               | pc/l                         | 0         | 1     | 5           | 0 | 3 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Gross Beta, Dissolved                                                                | pc/l                         | 0         | 3     | 5           | 0 | 3 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Hardness, Total as CaCO3                                                             | mg/l                         | 0         | 0     | 9           | 0 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Iron, Dissolved                                                                      | mg/l as Fe                   | 0         | 1     | 0           | 4 | 6 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Lead, Dissolved                                                                      | ug/l as Pb                   | 0         | 1     | 0           | 4 | 9 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Lindane, Total                                                                       | ug/l                         | 3         | 9     | 7           | 8 | 2 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Manganese, Dissolved                                                                 | ug/l                         | 0         | 1     | 0           | 5 | 6 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   | Mercury, Dissolved                                                                   | ug/l                         | 7         | 1     | 8           | 9 | 0 |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   |                                                                                      |                              |           |       |             |   |   |  |  |  |  |  |  |  |
|                 |   |   |   |   |   |   |   |   |   |   |   |                                                                                      |                              |           |       |             |   |   |  |  |  |  |  |  |  |

## GROUND WATER ANALYSIS - MONITORING WELL REPORT

OWNER'S WELL ID NO.

SW ID NO. 1418 A

LAB NAME

NJPDES NO. S NJ 0102806 WELL PERMIT NO.   -   -   SAMPLE DATE  
 YR. MO. DAY             NJ LAB CERT. NO.             WQM USE    
 1 2 8 9 16 17 22 23 27 28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM               TO                
MO. YR. MO. YR.

SUBMIT WITH SIGNED T-VWX-014

[illegible]

VALUE CODING AND REMARK CODES ON REVERSE

29

33 34

40 41

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

OWNER'S WELL ID NO.

(U) NJPDES NO. 0102806 WELL PERMIT NO. - - - - - SAMPLE DATE YR. MO. DAY - - - - - NJ LAB CERT. NO. - - - - - WQM USE - - - - -  
 1 2 8 9 16 17 22 23 27 28

THE SCHEDULE INDICATED BELOW IS TO BE OBSERVED FROM                      TO                       
MO. YR. MO. YR.

SUBMIT WITH SIGNED T-VWX-014

[illegible]

VALUE CODING AND REMARK CODES ON REVERSE