

14 July 2005 RAC II-2005-107

Ms. Sharon Trocher Work Assignment Manager U.S. Environmental Protection Agency 290 Broadway, 20th Floor New York, NY 10007-1866

SUBJECT:

USEPA RAC II CONTRACT NUMBER 68-W-98-214 WORK ASSIGNMENT NUMBER 109-RALR-0238 VESTAL WATER SUPPLY WELL, OPERABLE UNIT 1 MAY 2005 PERFORMANCE MONITORING REPORT

Dear Ms. Trocher:

I am pleased to provide the May 2005 Monthly Performance Monitoring Report for the Vestal Water Supply Well treatment facility.

A. Monthly Operations

The treatment system at the Vestal Water Supply Well operated in auto mode for the entire month. A summary of the operation and maintenance activities performed during May is as follows:

- Routine inspections of the facility were performed;
- Pumps were checked and lubricated;
- Air filters were cleaned or replaced;
- Grass was mowed four times;
- The pump house was painted; and
- The monthly influent and effluent samples were collected.



B. Operational Data

The following table presents operational data for the year 2005, arranged by month:

| Month | Operating Days | Average flow Meter% | Average flow rate (gpm) | Amount of groundwater treated (mg) |
|------------------|-------------------|------------------------|-------------------------|------------------------------------|
| January | 31 | 47 | 541 | 24.2 |
| February | 28 | 46 | 529 | 21.3 |
| March | 31 | 45 | 517.5 | 22.4 |
| April | 17 | 48 | 552 | 13.5 |
| May | 31 | * | * | * |
| Volume of ground | 81.4* | | | |
| Volume of ground | 2684.8* | | | |

^{*}The float control valve is not closing completely, preventing the flow meter from operating correctly. A replacement will be ordered.

gpm - gallons per minute mg - millions of gallons

C. Comparison of Influent and Effluent Concentrations with Discharge Criteria

The treatment plant influent and effluent analytical data received from the EPA-DESA laboratory for the month of May 2005 are included in Attachment 1. A summary of the data for the compounds detected in the plant influent and effluent is as follows:

| | Influent Concentration (ug/L) | | | | | | | | Effluent Concentration | | | | | |
|---|-------------------------------|-------|-------|---------|--------|--------|-----|-----|---------------------------|-------------------|--|--|--|-------|
| Compound | Criteria (ug/L) | | Jun | Jun Jul | Aug | Sep | Oct | Nov | Dec | (ug/L) January | | | | |
| Vinyl Chloride | 2 | 3.5 | 3.9 | 3.4 | 4.4 | 4.1 | | | | | | | | 0.5 U |
| Chloroethane | | 0.5 | 0.6 | 0.5 | 0.73 | 0.59 | | | | | | | | 0.5 U |
| 1,1-Dichloroethene* | 5 | 13 | 9.3 | 8.4 | 11 | 12 | | | | | | | | 0.5 U |
| 1,1,2 Trichloro- 1,2,2-Trifluoroethane | | 3.1 | 2.9 | 2.6 | 3.2 | 2.6 | | | | | | | | 0.5 U |
| Acetone | | 1.0 U | 2.3 | 1.0 U | 1.0U | 1.0U | | | | | | | | 1.0 U |
| Trans 1,2-Dichloroethene* | 5 | 0.5 U | 0.5 U | 0.5 U | 0.5U | 0.5U | | | | | | | | 0.5 U |
| Methyl Tert-Butyl Ether | _ | 4.7 | 4.3 | 4.3 | 3.9 | 4.2 | | | | | | | | 2.2 |
| 1,1-Dichloroethane | 5 | 18 | 17 | 17 | 24 | 17 | | | | | | | | 2.0 |
| Cis-1,2-Dichloroethene* | 5 | 50 | 46 | 46 | 54 | 47 | | | | | | | | 6.6 |
| Chloroform | 7 | 0.5 U | 0.5 U | 0.5 U | 0.5U | 0.5U | | | | | | | | 0.5 U |
| 1,1,1-Trichloroethane* | 5 | 110 | 120 | 110 | 140 | 110 | | | | | | | | 5.3 |
| Trichloroethene* | 5 | 43 | 40 | 40 | 47 | 39 | | | | | | | | 3.1 |
| Total Volatile Organics* | 100 | 245.8 | 246.3 | 232.2 | 288.23 | 236.49 | | | | | | | | 19.2 |

Note:

ug/L = micrograms per liter

* = Site Contaminant of Concern

U = Below Reporting Limit

NS = Not Sampled

D. Next Month's Activities

The following activities are planned for June 2005:

- · Repair chlorinator pipe;
- Repair actuator valve;
- Restore phone service (interrupted during flooding); and
- Perform monthly performance monitoring sampling.

E. Summary and Recommendations

Based on the treatment plant influent and effluent data summarized above, it can be concluded the treated water continues to meet the discharge limits. Please feel free to contact me at (973) 630-8412 if you should have any questions.

Sincerely,

Wendy DeMaio

Project Manager

Attachment

cc: M. Dunham (NYSDEC)

Wendy DeMaia



<u>Case Narrative:</u> Vestal 1-1. #05050021

The Laboratory has met all data quality objectives, e.g., Target Reporting Limits, Accuracy and Precision, established for this project except were noted below.

Comment(s):

None

Reporting Limit(s):

The Laboratory was able to achieve the Contract Required Quantitation Limits (CRQLs) for each analyte requested.

Method(s):

Low Level Volatile Organic Analysis, ESAT-SOP-132 (GC/MS Method).

Approval: Date: 7-5-05

Data Report: Vestal Well 1-1 [05/05]

Project Number: 05050021

Program: Y206E

Project Leader: L. Arabia

| Remark Codes | Explanation |
|-----------------|--|
| U | THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTING LIMIT |
| J | THE IDENTIFICATION OF THE ANALYTE IS ACCUPTABLE. THE REPORTED VALUE IS AN USTIMATE |
| UJ | THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTING LIMIT. THE REPORTING LIMIT IS AN ESTIMATE. |
| N | THERE IS PRESUMPTIVE EVIDENCE THAT THE ANALYTE IS PRESENT; THE ANALYTE IS REPORTED AS A TENTATIVE IDENTIFICATION. |
| NJ | THERE IS PRESUMPTIVE EVIDENCE THAT THE ANALYTE IS PRESENT; THE ANALYTE IS REPORTED AS A TENTATIVE IDENTIFICATION. THE REPORTED VALUE IS AN ESTIMATE. |
| R | THE PRESENCE OR ABSENCE OF THE ANALYTE CANNOT BE DETERMINED FROM THE DATA DUE TO SEVERE QUALITY CONTROL PROBLEMS. THE DATA ARE REJECTED AND CONSIDERED UNUSABLE. |
| К | THE IDENTIFICATION OF THE ANALYTE IS ACCEPTABLE; THE REPORTED VALUE MAY BE BIASED HIGH. THE ACTUAL VALUE IS EXPECTED TO BE LESS THAN THE REPORTED VALUE. |
| L | THE IDENTIFICATION OF THE ANALYTE IS ACCEPTABLE; THE REPORTED VALUE MAY BE BIASED LOW. THE ACTUAL VALUE IS EXPECTED TO BE GREATER THAN THE REPORTED VALUE. |
| NV | NOT VALIDATED |
| INC | RESULT NOT ENTERED |

Date Received: 5/13/2005

Project Number: 05050021

*Sorted By Sample ID

AG01192

Field/Station ID: INFLUENT

IIID. IIII ECEIII

Matrix: Aqueous

Sample Description:

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| Ana | ılysis Type: VC | DA GCMS LOW LEVEL DRINKING WATER | | Remark | |
|--|--|--|---|--|---------------------|
| 9 | CAS Number | Analyte Name | Result | Codes | <u>Units</u> |
| | 5.43.41 | DICHKOROBIHI TOROMEHIANIE Z ZAZENIE Z SER PO | | siis usa ila | 800/2 (2011) |
| C | 000074873 | CHLOROMETHANE | | 0.50U | ug/L |
| The second of the second of | 00075014 | VINITAL OND PRESENT THE PERSON OF THE PROPERTY. | | | MISSING THE |
| | 00074839 | BROMOMETHANE. | 44 | 0.50U | ug/L |
| Control of the Contro | 00075003 | CHROKOPHEASON AND A SHARE OF THE SHARE SHARE | | 100 | CONTRACT |
| | 00075694 00075354 | TRICHLOROFLUOROMETHANE I,I-DICHLOROEI HENE | | 0.50U | ug/L |
| and the second of the second of the second | 6-13-1 | 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | 2.6 | Company of the Compan | ug/L |
| | 00075150 | CARBONDISTATION CONTRACTOR CONTRA | 2.0 | NOTE SE | ag.L |
| - 1 The State of the Land of the Control of the Land o | 00067641 | ACETONE | | 1.00 | ug/L |
| | 9-20-9 | METHINE ACPUATE AND A THE STATE OF THE STATE | 144 (C) (M | osobio 4 | The Co |
| 0 | 00075092 | METHYLENE CHLORIDE | | 0.50U | ug/L |
| MW- 0 | 00056605 | TRANSHZADIGHTOROBTHENE ASSESSMENT AND ASSESSMENT ASSESSMENT AND ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT AND ASSESSMENT ASSESS | Company of the | 0:500 in the same | opple: |
| | 01634044 | METHYL TERT-BUTYL ETHER | 4.2 | | ug/L |
| A COMMENT OF THE PROPERTY OF THE PROPERTY OF | 00075343 | LI-DICHLOROETHANE | . D | 4 Table 1 | ug/L |
| | 00156592 | CIS-1,2-DICHLOROETHENE | 47 | · Marian Maria | ug/L |
| | 94-20-7 00078933 | 2,2-DICHLOROPROPANE 2-BUTANONE | s mile in the initial | 0.50U 1.0U | ug/L ug/L |
| | 00078933 | SEMONO (CHEO) COMO SERVE SERVE | | | ug/L |
| and the second s | 00067663 | CHLOROFORM | | 0.50U | ug/L |
| 1.44.1 | CONTRACTOR OF CONTRACTOR OF THE PARTY OF THE | трансконгоковновах за техност за техност | Mark 19 | 2000 AND AND THE RESENTED AND THE RESERVE AND | de/E |
| A STATE OF THE PROPERTY OF THE | 10-82-7 | CYCLOHEXANE | 444 | 0.50U | ug/L |
| and the second | 00056795 | CANCONHICHE CHICHEST THE SECTION OF STREET | | | moto |
| | 00563586 | 1,1-DICHLOROPROPENE | 4-4 | 0.50U | ug/L |
| The second secon | 00071437 | SUR ENEGRASISM AND | | | 00/15/25/25/25 |
| | 00107062 25323891 | 1,2-DICHLOROETHANE | | 0.50U | ug/L |
| 294 Marie and St. | 08-87-2 | METHYLCYCLOHEXANE | | 0.50U | ug/L |
| | 10078835 | SES ESTOSTOSTOTOTO DE ATTENESSOS DE SESSOS DE ATTENESSOS DE LA COMPANIONE DE LA COMPANIONE DE LA COMPANIONE DE | | | MINISTER SERVICE |
| 0(| 00074953 | DIBROMOMETHANE | | 0.50U | ug/L |
| | CONTRACTOR OF THE BOTTOM OF THE STATE OF THE | EKOMODIGEGORODGUEKKES SE SE SELSENER SE SE | | | military and the |
| | 10061015 | CIS-1,3-DICHLOROPROPENE | | 0.50U | ug/L |
| | 0,108101 | | and the second | A FOUR | NICE SERVICES |
| | 00108883 10061026 | TOLUENE | THE STREET SHEETS STAFF | 0.50U | ug/L |
| Schwildur zwar", worden automb | 00079005 | TRANS-1,3-DICHLOROPROPENE 1,1,2-TRICHLOROETHANE | | 0.50U 0.50U | ug/L ug/L |
| | 0079003 01 27184 | TETRACHLOROETHINE | A. C. | 0.50U | ug/L |
| The second second second second second | 0142289 | 1,3-DICHLOROPROPANE | Carried State Control | 0.50U | ug/L |
| | 0124481 | DIBROMOCHLOROMETRANE | | 0.500 | modes, |
| | 0106934 | 1,2-DIBROMOETHANE | | 0.50U | ug/L |
| A STATE OF THE STA | 0591786 | APPEARNONE THE PROPERTY OF THE | | SHOOP | 11g/4 |
| 00 | 0108907 | CHLOROBENZENE | | 0.50U | ug/L |

Refer to Page 1 for an explanation of Remark Codes

Report Date: 6/27/2005 4:05PM

Project Number: 05050021

*Sorted By Sample II

AG01192

Field/Station ID: INFLUENT

Date Received: 5/13/2005

Matrix: Aqueous

Sample Description:

| Analysis Type: V | OA GCMS LOW LEVEL DRINKING WATER | | Remark_ | |
|------------------------|--|--|------------------------|-----------|
| CAS Number | Analyte Name | Result | Codes | Units |
| 000630206 | FILE2-TETRACHLOROETHANE | | 0.50U | ue/L |
| 100-41-4 | ETHYLBENZENE | | 0.50U | ug/L |
| 001330207 | M/P-XYLENE | 11. 11. 11. 11. 11. 11. 11. 11. 11. 11. | O SOTE | mg/L |
| 000095476 | O-XYLENE | | 0.50U | ug/L |
| 000100425 | STYRENE | - - - - - - - - - - | 0.560 | ug/L |
| 000075252 | BROMOFORM | **** | 0.50U | ug/L |
| 0000988281 | ANOROPA PROVINCE CARE A SECURITION OF THE SECURITIES OF THE SECURITION OF THE SECURI | | | Bid Greek |
| 000108861 | BROMOBENZENE | | 0.50U | ug/L |
| 42 0000961845 | Mix againgh an mhanasan a seagailtean a seagailte | | | |
| 000079345 | 1,1,2,2-TETRACHLOROETHANE | | 0.50U | ug/L |
| | ACEROPS and the second | | | |
| 000095498 | 2-CHLOROTOLUENE | | 0.50U | ug/L |
| 106-43-4 | 4-CHLOROTOLULAR | | | 1000 |
| 000108678 | 1,3,5-TRIMETHYLBENZENE | Andreas Andrew | 0.500 | ug/L |
| 000098066 | TERT-BUTYLBONZENE | and Take a side a | 0.500 | ye/L. |
| 000095636 | 1,2,4-TRIMETHYLBENZENE | | 0.50U | ug/L |
| 135-98-8 | SEC-BUTTEBUZINEW OF THE SECURITIES OF THE | | State District Section | |
| 000541731 | 1,3-DICHLOROBENZENE | - | 0.50U | ug/L |
| 000106467 | LA-DICHLORGBENZENES | A to the second | 0.500 | . ug/L |
| 000095501 | 1,2-DICHLOROBENZENE | | 0.50U | ug/L |
| ,000099876 | 4-ISOPROPYLITOLUENE | and the company | 0.501 | ug/L |
| 000104518 | N-BUTYLBENZENE | | 0.50U | ug/L |
| 000096128 | 12-DIBROMO 3-CHLOROPROPANE | in du it in faith | 0.600 | ug/L |
| 000120821 | 1,2,4-TRICHLOROBENZENE | ee orde soot taken a | 0.50U | ug/L |
| 87-68-3 | HEXACHLOROBUTADIENE | A FOR COMMUNICATION AND ADDRESS OF THE PARTY | 0.500 | ug/l |
| 000091203 000087676 | NAPHTHALENE | | 0.50U | ug/L |
| 1330-20-7 | TOTAL XYLENES | en energia en en en | 0.50U | ng/I |
| 1530-20-7 | TOTAL ATLENES | en e | 0.000 828.000 | ug/L |

AG01193

Field/Station ID: EFFLUENT

Matrix: Aqueous

Sample Description:

Date Received: 5/13/2005

efer to Page 1 for an explanation of Remark Codes eport Date: 6/27/2005 4:05PM

Page 3 of 5

Project Number: 05050021

*Sorted By Sample 1D

AG01193

Field/Station ID: EFFLUENT

Date Received: 5/13/2005

Matrix: Aqueous

Sample Description:

| Analysis Type: V | OA GCMS LOW LEVEL DRINKING WATER | | Remark_ | |
|-----------------------------|--|--|--|---|
| CAS Number | Analyte Name | Result | Codes | <u>Units</u> |
| 75-43-4 | DICHLORODIFLUOROMETHANE | | 0.50U | ug/L |
| | CHLOROMETHANE THE PROPERTY OF | | 0.000 | 1071 |
| 000075014 | VINYL CHLORIDE | | 0.50U | ug/L |
| 000074839 | BROMOMETHANE | 100 TE 100 | 0.500 | LUGUE. |
| 000075003 | CHLOROETHANE | | 0.50U | ug/L |
| 000075694 | TRICHLOROFLUOROMETHANE | | 0.50U | ug/L |
| 000075354 | 1,1-DICHLOROETHENE | armati i bushi i bushi i | 0.50U 0.50U | ug/L |
| 76-13-1 000075150 | 1,1,2-TRICHLORG-1,2,2-TRIFLUOROETHANE CARBON DISULFIDE | Bara Cara de C | 0.50U | u g/L ug/L |
| 000073130 | | | 1.00 | ug/L |
| 79-20-9 | METHYL ACETATE | | 0.50U | ug/L |
| 000075092 | METHYLENB CHEORIDE | | 0.50U | ug/L |
| 000156605 | TRANS-1,2-DICHLOROETHENE | | 0.50U | ug/L |
| 001634044 | METHYL TERMSERVIL ETHER | 72 | September 18 | ug/E |
| 000075343 | 1,1-DICHLOROETHANE | 2.0 | | ug/L |
| 000156592 | CIS-1,2-DICHLOROEFHENE | 6.6 | A STATE OF THE STA | ug/L |
| 594-20-7 | 2,2-DICHLOROPROPANE | ###################################### | 0.50U | ug/L |
| | ZEPETKRONIR | | etical Office est | Control blacks |
| 000074975 | BROMOCHLOROMETHANE | 5-7 | 0.50U | ug/L |
| 000067663 | CHEOROFORD CONTROL OF THE CONTROL OF | | Section of the second | AND DESCRIPTION OF THE PERSON |
| 71-55-6 | 1,1,1-TRICHLOROETHANE | 5.3 | | ug/L |
| 10837 | Apvaluini (zros se se subspecie) de la secono | | | |
| 000056235 | CARBON TETRACHLORIDE | | 0.50U | ug/L |
| 000563586 | appendensorkorikomente de la la mode describerados. | | | |
| 000071432 | BENZENE | entropy of the second s | 0.50U | ug/L |
| 000107062 | 1,2-DICHLOROETHANE | | 0.500 | ug/L |
| 025323891 | TRICHLOROETHENE | 3.1 | C. S. (1841) 3 2 C. S. (2) | ug/L |
| 000078875 | 1,2-DICHLOROPROPANE | And the same of the same | 0.50U | ug/L |
| 000074953 | DIBROMOMETHANE | Material Control of the Section of t | 0.50U | ug/L |
| 000075274 | BROMODICHLOROMETHANE | Silling the state of the state | 0.50U | ug/L |
| 010061015 | CIS-13-DICHISOROPEOPENE | | OSOL | ug/L. |
| 000108101 | 4-METHYL-2-PENTANONE | | 1.0U | ug/L |
| 000108883 | TOLUEVE | | 0.50U | ug/L |
| 010061026 | TRANS-1,3-DICHLOROPROPENE | ************************************** | 0.50U | ug/L |
| 000079005 | 1.1.2-TRICHEOROETHANS | | 0.50U | ug/L |
| 000127184 | TETRACHLOROETHENE | | 0.50U | ug/L |
| 000142289 | a sed (edgerolyans | | 34 Sti) 15 | ie/E |

Refer to Page 1 for an explanation of Remark Codes

Report Date: 6/27/2005 4:05PM

Project Number: 05050021

*Sorted By Sample ID

AG01193

Field/Station ID: EFFLUENT

Date Received: 5/13/2005

Matrix: Aqueous

Sample Description:

| Analysis Type: V | OA GCMS LOW LEVEL DRINKING WATER | | Remark | |
|------------------------|--|--|---------------|--|
| CAS Number | Analyte Name | Result | Codes | Units |
| 000124481 | DIBROMOCHLOROMETHANE | | 0.50U | ug/L |
| 000106934 | 1-2-DIBROMOETHANB | alibar diningkan kemilikas | 0.50Hz | ugli |
| 000591786 | 2-HEXANONE | | 1. 0U | ug/L |
| - 000108907 | A CHISOROBENZENIEN COMPANIEN DE LE COMPANIENCE | NEXT OF SHARE CARREST AND SHARE | 0.500 | AL HELITA |
| 000630206 | 1,1,1,2-TETRACHLOROETHANE | | 0.50U | ug/L |
| 40041484 | | | \$2767.0H2523 | |
| 001330207 | M/P-XYLENE | | 0.50U | ug/L |
| 000095476 | O-XYLENE | | TO AUGUSTA | THE PARTY OF THE P |
| 000100425 | STYRENE | | 0.50U | ug/L |
| .000075252 | PERONOFORY | Burkeren | | |
| 000098828 | ISOPROPYLBENZENE BROMOBENZENE | - | 0.50U | ug/L |
| 000108861 000096184 | 1,2,3-TRICHLOROPROPANE | | 0.50U | |
| 000074345 | ALTERIOR ACTION OF THE NEW | | | ug/L |
| 000103651 | N-PROPYLBENZENE | Kanderatura para la sul de la companya de la compa | 0.50U | ug/L |
| 000095498 | 2-CHEOROTOLUEND 15 | | | udb. |
| 106-43-4 | 4-CHLOROTOLUENE | | 0.50U | ug/L |
| 000108678 | 1,3,5-TRIMETHYLBENZENE | en e jegenske og værere er vægge | 0.50U | ug/L |
| 000098066 | TERT-BUTYLBENZENE | | 0.50U | ug/L |
| 000095636 | 1,24-TRIMETHYLBENZENE | | 0.500 | ug/fs |
| 135-98-8 | SEC-BUTYLBENZENE | American construction in the state of the first and the state of the s | 0. 50U | ug/L |
| 000541731 | L&-DICHLORGBENZEND | and the second second | o sou | |
| 000106467 | 1,4-DICHLOROBENZENE | STATE OF STA | 0.50U | ug/L |
| 000095501 | PRINCIPAL MANAGEMENT OF THE PROPERTY OF THE PARTY OF THE | | | |
| 000099876 | 4-ISOPROPYLTOLUENE | | 0.50U | ng/L |
| 000104518 000096128 | 1,2-DIBROMO-3-CHLOROPROPANE | ne sutti katikali Tie-alaa | 0.50U | |
| 000120821 | 1,2-DIBROMO-3-CHLOROPROPANE | | 0.300 | ug/L |
| 87-68-3 | HEXACHLOROBUTADIENE | | 0.50U | ug/L |
| 000091203 | ANAPERATURE TO THE PARTY OF THE | | | |
| 000087616 | 1,2,3-TRICHLOROBENZENE | | 0.50U | ug/L |
| 1330-20-7 | STOTAL EXCEPTION OF THE STATE O | | | |

Project Approval:

Refer to Page 1 for an explanation of Remark Codes

Report Date: 6/27/2005 4:05PM

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Date: 7-5-15