

Mr. C. S. Haugh, P.E.  
Chief, Source Surveillance  
New York State Department of Environmental Conservation  
Division of Water  
Bureau of Watershed Programs  
625 Broadway, 4<sup>th</sup> Floor  
Albany, New York 12233-3506

AC-EA  
WR:2012:0079  
December 18, 2012

**SUBJECT:** State Pollutant Discharge Elimination System (SPDES) Discharge Monitoring Report (DMR) for the Period November 1 through November 30, 2012, SPDES Permit No. NY-0000973, West Valley Demonstration Project (WVDP)

Dear Mr. Haugh:

The West Valley Demonstration Project SPDES DMR for the reporting period November 1 through November 30, 2012, including the Net Iron and Total Dissolved Solids (TDS) concentration sheets, is provided as Attachment A.

All results for this report are within effluent discharge limits specified in the permit.

Please note there was no discharge at internal outfall 01B during this period.

As required in Title 6 of the New York Codes, Rules, and Regulations (6NYCRR) Part 750-2.5(e)(3), the New York Environmental Laboratory Accreditation Program (NYELAP) identification numbers for the laboratories performing analysis for this DMR are as follows:

1. TestAmerica Buffalo: NY Lab No. 10026; and
2. General Engineering Laboratories: NY Lab No. 11501.

Also, 6NYCRR Part 750-2.5(e)(3) requires reporting of Method Detection Limits (MDLs), where monitoring is not performed under ELAP. To that end, the MDLs for Setttable Solids and Total Residual Chlorine analyses, performed by the CHBWV wastewater treatment facility, are 0.1 ml/L and 0.01 mg/L, respectively.

The following table contains Whole Effluent Toxicity (WET) testing results for outfall 007, (Discharge 007-T) completed in October 2012. This testing was originally due to be completed during the July 1, 2012 through September 30, 2012 monitoring period. However, the wastewater treatment plant was not discharging from August 22, 2012 through October 1, 2012 therefore this sampling could not be conducted during that time period. Sampling was conducted on October 7-8, 2012 and on October 10-11, 2012 and was coordinated with routine chemical and physical parameters as required by the permit. Those results were reported in the October 2012 DMR.

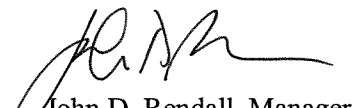
The WET testing report summary pages are included as attachment B, and the full report is being sent under separate cover to the NYSDEC Toxicity Testing Unit.

Whole Effluent Toxicity (WET) Testing  
SPDES Permit No. NY-0000973  
Outfall 007 – October 2012

| PARAMETER                                                             | VALUE | UNITS | NO.<br>EXCEPTIONS | FREQUENCY OF<br>ANALYSIS | SAMPLE TYPE |
|-----------------------------------------------------------------------|-------|-------|-------------------|--------------------------|-------------|
| Toxicity (acute),<br><i>Ceriodaphnia dubia</i>                        | 0.3   | TUa   | 0                 | 01/90                    | 24          |
| Toxicity (chronic)<br><i>Ceriodaphnia dubia</i>                       | 1.0   | TUc   | 0                 | 01/90                    | 24          |
| Toxicity (acute),<br><i>Pimephales promelas</i><br>(Fathead minnow)   | 0.3   | TUa   | 0                 | 01/90                    | 24          |
| Toxicity (chronic),<br><i>Pimephales promelas</i><br>(Fathead minnow) | 1.0   | TUc   | 0                 | 01/90                    | 24          |

If you have any questions, please contact Moira Maloney of the U.S. Department of Energy West Valley Demonstration Project (DOE-WVDP) at (716) 942-4255 or David Klenk of my staff at (716) 942-4061.

Very truly yours,



John D. Rendall, Manager  
Regulatory Strategy

JDR:DPK:bnj

Attachments: A) SPDES DMR for November 1 through November 30, 2012 Monitoring Period  
B) WET Testing Summary Pages

cc: M. A. Jackson, NYSDEC-Region 9 DOW  
E. W. Wohlers, Cattaraugus County Health Department  
M. N. Maloney, DOE-WVDP  
J. M. Dundas, DOE-WVDP  
M. P. Krentz, DOE-WVDP  
J. J. Baker, CHBWV  
H. H. Dukes, CHBWV  
W. N. Kean, WSMS  
D. P. Klenk, CHBWV  
J. D. Rendall, CHBWV  
R. L. Scharf, CHBWV  
A. W. Upshaw, CHBWV  
B. N. Jeffery (Letter Log), CHBWV  
L. E. Bennett, CHBWV (Public Reading Room)

BNJ5816.DPK

ATTACHMENT A

SPDES DISCHARGE MONITORING REPORT - NOVEMBER 1 THROUGH NOVEMBER 30, 2012  
NET IRON EFFLUENT CONCENTRATION CALCULATION  
WEST VALLEY DEMONSTRATION PROJECT, SPDES PERMIT NO. NY-0000973

$$\text{OUTFALL 001} = M1 = \frac{(X1 + X2) V1}{2} = 2508433.01 \text{ mg/month}$$

$$X1 = 0.480 \text{ mg/L}$$

$$X2 = 0.407 \text{ mg/L}$$

$$V1 = 5655993.26 \text{ L/month}$$

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$$\text{OUTFALL 007} = M7 = \frac{(X1 + X2) V7}{2} = 19885.58 \text{ mg/month}$$

$$X1 = 0.0225 \text{ mg/L}$$

$$X2 = 0.0374 \text{ mg/L}$$

$$V7 = 663959.16 \text{ L/month}$$

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$$\text{RAW WATER} = MRW = \frac{(X1 + X2 + X3 + X4 + X5) VRW}{5} = 1087983.92 \text{ mg/month}$$

$$X1 = 1.65 \text{ mg/L}$$

$$X2 = 0.922 \text{ mg/L}$$

$$X3 = 0.411 \text{ mg/L}$$

$$X4 = 0.392 \text{ mg/L}$$

$$X4 = 0.303 \text{ mg/L}$$

$$VRW = 1479042.84 \text{ L/month}$$

$$\text{IRON DISCHARGE CONCENTRATION} = \frac{M1 + M7 - MRW}{V1 + V7} = 0.23 \text{ mg/L}$$

ATTACHMENT A (Cont'd)

**SPDES DISCHARGE MONITORING REPORT - NOVEMBER 1 THROUGH NOVEMBER 30, 2012  
TOTAL DISSOLVED SOLIDS (TDS) CONCENTRATION CALCULATION - MONITORING POINT 116  
WEST VALLEY DEMONSTRATION PROJECT, SPDES PERMIT No. NY-0000973**

Date: November 12, 2012

$$\begin{aligned} C4 &= ((Q1)(C1) + (Q2)(C2) + (Q3)(C3)) / Q4 \\ &= ((0.1848 \text{ MGD})(954 \text{ mg/L}) + (0.364 \text{ MGD})(230 \text{ mg/L}) + (0.360 \text{ MGD})(79 \text{ mg/L})) / (0.909 \text{ MGD}) \\ &= 317 \text{ mg/L} \end{aligned}$$

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Date: November 19, 2012

$$\begin{aligned} C4 &= ((Q1)(C1) + (Q2)(C2) + (Q3)(C3)) / Q4 \\ &= ((0.1848 \text{ MGD})(934 \text{ mg/L}) + (0.238 \text{ MGD})(193 \text{ mg/L}) + (0.504 \text{ MGD})(105 \text{ mg/L})) / (0.927 \text{ MGD}) \\ &= 293 \text{ mg/L} \end{aligned}$$

- 
- Q1 = Flow at Outfall 001, million gallons per day (MGD).
- C1 = Total Dissolved Solids (TDS) concentration at Outfall 001, mg/L.
- Q2 = Flow in Franks Creek, MGD (without Outfall 001), measured at WNSP006 just prior to, and shortly after the discharge event.
- C2 = TDS concentration in Franks Creek measured at WNSP006 just prior to, and shortly after the discharge event.
- Q3 = Flow of augmentation water, MGD, if required.
- C3 = TDS concentration in augmentation water, MGD.
- Q4 = Q1 + Q2 + Q3, MGD (Flow in Franks Creek, including Outfall 001).
- C4 <= 500 mg/L (calculated TDS concentration at 116 in Franks Creek, which includes Outfall 001).

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

**NAME:** U.S. DEPT OF ENERGY  
**ADDRESS:** 1000 INDEPENDENCE AVE SW  
WASHINGTON, DC 20585  
**FACILITY:** WEST VALLEY DEMONSTRATION PROJ  
**LOCATION:** 10282 ROCK SPRINGS ROAD  
WEST VALLEY, NY 14171-9799  
**ATTN:** BRYAN C BOWER, DIRECTOR

|                      |                         |
|----------------------|-------------------------|
| NY0000973            | 001-M                   |
| <b>PERMIT NUMBER</b> | <b>DISCHARGE NUMBER</b> |

| MONITORING PERIOD |    |            |  |
|-------------------|----|------------|--|
| MM/DD/YYYY        |    | MM/DD/YYYY |  |
| FROM 11/01/2012   | TO | 11/30/2012 |  |

**DMR Mailing ZIP CODE:** 14171-9799  
**MAJOR**  
(SUBR 09)  
OUTFALL 001 MONTHLY PROC WW, GW, STO  
External Outfall  
**No Discharge** ☐

| PARAMETER                   |                           | QUANTITY OR LOADING |       |       | QUALITY OR CONCENTRATION |                     |                       |       | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|-----------------------------|---------------------------|---------------------|-------|-------|--------------------------|---------------------|-----------------------|-------|--------|-----------------------|-------------|
|                             |                           | VALUE               | VALUE | UNITS | VALUE                    | VALUE               | VALUE                 | UNITS |        |                       |             |
| Sulfate (as S)              | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | 88                  | 88                    | mg/L  | 0      | 01/BA                 | 24          |
| 00154 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | mg/L  |        | Once Per<br>Batch     | COMP24      |
| Oxygen demand, ultimate     | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | 9.24                | 11.3                  | mg/L  | 0      | 02/BA                 | CA          |
| 00181 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | 22<br>DAILY MX        | mg/L  |        | Twice Per<br>Batch    | CALCTD      |
| Oxygen, dissolved (DO)      | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | 12                       | *****               | 13                    | mg/L  | 0      | 02/BA                 | GR          |
| 00300 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | 3<br>MINIMUM             | *****               | Req. Mon.<br>MAXIMUM  | mg/L  |        | Twice Per<br>Batch    | GRAB        |
| BOD, 5-day, 20 deg. C       | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | 3.4                 | 4.5                   | mg/L  | 0      | 02/BA                 | 24          |
| 00310 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | 10<br>DAILY MX        | mg/L  |        | Twice Per<br>Batch    | COMP24      |
| pH                          | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | 7.5                      | *****               | 7.5                   | SU    | 0      | 01/BA                 | GR          |
| 00400 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | 6.5<br>MINIMUM           | *****               | 8.5<br>MAXIMUM        | SU    |        | Once Per<br>Batch     | GRAB        |
| Solids, total suspended     | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | <4.0                | <4.0                  | mg/L  | 0      | 02/BA                 | 24          |
| 00530 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | 30<br>MO AVG        | 45<br>DAILY MX        | mg/L  |        | Twice Per<br>Batch    | COMP24      |
| Solids, settleable          | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | <0.1                | <0.1                  | mL/L  | 0      | 02/BA                 | GR          |
| 00545 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | 3<br>DAILY MX         | mL/L  |        | Twice Per<br>Batch    | GRAB        |

|                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                     |                                |                               |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------|-------------------------------|
| <b>NAME/TITLE PRINCIPAL EXECUTIVE OFFICER</b><br><br>John D. Rendall, Manager<br><b>TYPED OR PRINTED</b> | I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. | <b>TELEPHONE</b><br><br>716-942-4602                                |                                | <b>DATE</b><br><br>12/13/2012 |
|                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT</b> | <b>AREA Code</b><br><br>NUMBER | <b>MM/DD/YYYY</b>             |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: U.S. DEPT OF ENERGY  
ADDRESS: 1000 INDEPENDENCE AVE SW  
WASHINGTON, DC 20585

FACILITY: WEST VALLEY DEMONSTRATION PROJ  
LOCATION: 10282 ROCK SPRINGS ROAD  
WEST VALLEY, NY 14171-9799

ATTN: BRYAN C BOWER, DIRECTOR

|               |                  |
|---------------|------------------|
| NY0000973     | 001-M            |
| PERMIT NUMBER | DISCHARGE NUMBER |

| MONITORING PERIOD |            |            |            |
|-------------------|------------|------------|------------|
| MM/DD/YYYY        |            | MM/DD/YYYY |            |
| FROM              | 11/01/2012 | TO         | 11/30/2012 |

DMR Mailing ZIP CODE: 14171-9799  
MAJOR  
(SUBR 09)  
OUTFALL 001 MONTHLY PROC WW, GW, STO  
External Outfall

No Discharge ☐

| PARAMETER                        |                    | QUANTITY OR LOADING |       |       | QUALITY OR CONCENTRATION |                     |                       |       | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|----------------------------------|--------------------|---------------------|-------|-------|--------------------------|---------------------|-----------------------|-------|--------|-----------------------|-------------|
|                                  |                    | VALUE               | VALUE | UNITS | VALUE                    | VALUE               | VALUE                 | UNITS |        |                       |             |
| Oil & Grease                     | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | 3.0                 | 3.0                   | mg/L  | 0      | 01/BA                 | GR          |
| 00556 1 0<br>Effluent Gross      | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | .15<br>DAILY MX       | mg/L  |        | Once Per Batch        | GRAB        |
| Nitrogen, nitrite total (as N)   | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | <0.02               | <0.02                 | mg/L  | 0      | 01/BA                 | 24          |
| 00615 1 0<br>Effluent Gross      | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | .1<br>DAILY MX        | mg/L  |        | Once Per Batch        | COMP24      |
| Nitrogen, nitrate total (as N)   | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | 0.037               | 0.037                 | mg/L  | 0      | 01/BA                 | 24          |
| 00620 1 0<br>Effluent Gross      | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | mg/L  |        | Once Per Batch        | COMP24      |
| Nitrogen, Kjeldahl, total (as N) | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | 0.91                | 1.0                   | mg/L  | 0      | 02/BA                 | 24          |
| 00625 1 0<br>Effluent Gross      | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | mg/L  |        | Twice Per Batch       | COMP24      |
| Sulfide, dissolved, (as S)       | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | <0.05               | <0.05                 | mg/L  | 0      | 01/BA                 | 24          |
| 00746 1 0<br>Effluent Gross      | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | .4<br>DAILY MX        | mg/L  |        | Once Per Batch        | COMP24      |
| Arsenic, total recoverable       | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | 0.0029              | 0.0029                | mg/L  | 0      | 01/BA                 | 24          |
| 00978 1 0<br>Effluent Gross      | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | .15<br>DAILY MX       | mg/L  |        | Once Per Batch        | COMP24      |
| Cobalt, total recoverable        | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | <0.0006             | <0.0006               | mg/L  | 0      | 01/BA                 | GR          |
| 00979 1 0<br>Effluent Gross      | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | .005<br>DAILY MX      | mg/L  |        | Once Per Batch        | GRAB        |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                              |  |            |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--|------------|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER | I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. | TELEPHONE                                                    |  | DATE       |
| John D. Rendall, Manager               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 716-942-4602                                                 |  | 12/13/2012 |
| TYPED OR PRINTED                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT |  | AREA Code  |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

**NAME:** U.S. DEPT OF ENERGY  
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WASHINGTON, DC 20585  
**FACILITY:** WEST VALLEY DEMONSTRATION PROJ  
**LOCATION:** 10282 ROCK SPRINGS ROAD  
WEST VALLEY, NY 14171-9799  
**ATTN:** BRYAN C BOWER, DIRECTOR

|                      |                         |
|----------------------|-------------------------|
| NY0000973            | 001-M                   |
| <b>PERMIT NUMBER</b> | <b>DISCHARGE NUMBER</b> |

| MONITORING PERIOD |               |
|-------------------|---------------|
| MM/DD/YYYY        | MM/DD/YYYY    |
| FROM 11/01/2012   | TO 11/30/2012 |

**DMR Mailing ZIP CODE:** 14171-9799  
MAJOR  
(SUBR 09)  
OUTFALL 001 MONTHLY PROC WW, GW, STO  
External Outfall

No Discharge ☐

| PARAMETER                                |                           | QUANTITY OR LOADING |                       |       | QUALITY OR CONCENTRATION |                     |                       |       | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|------------------------------------------|---------------------------|---------------------|-----------------------|-------|--------------------------|---------------------|-----------------------|-------|--------|-----------------------|-------------|
|                                          |                           | VALUE               | VALUE                 | UNITS | VALUE                    | VALUE               | VALUE                 | UNITS |        |                       |             |
| Selenium, total recoverable              | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | <0.0004             | <0.0004               | mg/L  | 0      | 01/BA                 | GR          |
| 00981 1 0<br>Effluent Gross              | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | .004<br>DAILY MX      | mg/L  |        | Once Per<br>Batch     | GRAB        |
| Iron, total (as Fe)                      | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | 0.44                | 0.48                  | mg/L  | 0      | 02/BA                 | 24          |
| 01045 1 0<br>Effluent Gross              | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | mg/L  |        | Twice Per<br>Batch    | COMP24      |
| Aluminum, total (as Al)                  | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | 0.45                | 0.45                  | mg/L  | 0      | 01/BA                 | 24          |
| 01105 1 0<br>Effluent Gross              | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | 2<br>MO AVG         | 4<br>DAILY MX         | mg/L  |        | Once Per<br>Batch     | COMP24      |
| Vanadium, total recoverable              | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | <0.0015             | <0.0015               | mg/L  | 0      | 01/BA                 | GR          |
| 01128 1 0<br>Effluent Gross              | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | .014<br>DAILY MX      | mg/L  |        | Once Per<br>Batch     | GRAB        |
| Nitrogen, ammonia, total (as NH3)        | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | <0.013              | 0.017                 | mg/L  | 0      | 02/BA                 | 24          |
| 34726 1 0<br>Effluent Gross              | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | 1.5<br>MO AVG       | 2.1<br>DAILY MX       | mg/L  |        | Twice Per<br>Batch    | COMP24      |
| Flow, in conduit or thru treatment plant | <b>SAMPLE MEASUREMENT</b> | 0.185               | 0.235                 | MGD   | *****                    | *****               | *****                 | ***** | 0      | 02/BA                 | CN          |
| 50050 1 0<br>Effluent Gross              | <b>PERMIT REQUIREMENT</b> | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | MGD   | *****                    | *****               | *****                 | ***** |        | Twice Per<br>Batch    | CONTIN      |
| Chlorine, total residual                 | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | 0.03                | 0.03                  | mg/L  | 0      | 01/BA                 | GR          |
| 50060 1 0<br>Effluent Gross              | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | .1<br>DAILY MX        | mg/L  |        | Once Per<br>Batch     | GRAB        |

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                     |                  |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------|
| <b>NAME/TITLE PRINCIPAL EXECUTIVE OFFICER</b> | <small>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</small> | <b>TELEPHONE</b>                                                    | <b>DATE</b>      |
| John D. Rendall, Manager                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 716-942-4602                                                        | 12/13/2012       |
| <b>TYPED OR PRINTED</b>                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT</b> | <b>AREA Code</b> |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
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|----------------------|-------------------------|
| NY0000973            | 001-M                   |
| <b>PERMIT NUMBER</b> | <b>DISCHARGE NUMBER</b> |

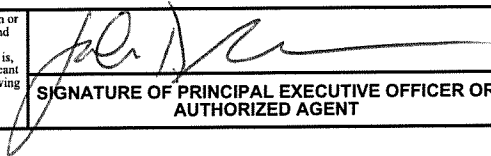
  

| MONITORING PERIOD |      |            |    |
|-------------------|------|------------|----|
| MM/DD/YYYY        |      | MM/DD/YYYY |    |
| 11/01/2012        | FROM | 11/30/2012 | TO |

**DMR Mailing ZIP CODE:** 14171-9799  
MAJOR  
(SUBR 09)  
OUTFALL 001 MONTHLY PROC WW, GW, STO  
External Outfall

No Discharge ☐

| PARAMETER                                                              |                    | QUANTITY OR LOADING |       |       | QUALITY OR CONCENTRATION |                     |                       |       | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|------------------------------------------------------------------------|--------------------|---------------------|-------|-------|--------------------------|---------------------|-----------------------|-------|--------|-----------------------|-------------|
|                                                                        |                    | VALUE               | VALUE | UNITS | VALUE                    | VALUE               | VALUE                 | UNITS |        |                       |             |
| Solids, total dissolved<br>70295 1 0<br>Effluent Gross                 | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | 944                 | 954                   | mg/L  | 0      | 02/BA                 | GR          |
|                                                                        | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | mg/L  |        | Twice Per<br>Batch    | GRAB        |
| Mercury, total (as Hg)<br>71900 1 0<br>Effluent Gross                  | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | 5.49                | 5.49                  | ng/L  | 0      | 01/BA                 | GR          |
|                                                                        | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | 50<br>MO AVG        | Req. Mon.<br>DAILY MX | ng/L  |        | Once Per<br>Batch     | GRAB        |
| Surfactants (linear alkylate sulfonate)<br>81646 1 0<br>Effluent Gross | SAMPLE MEASUREMENT | *****               | ***** | ***** | *****                    | 0.039               | 0.039                 | mg/L  | 0      | 01/BA                 | GR          |
|                                                                        | PERMIT REQUIREMENT | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | mg/L  |        | Once Per<br>Batch     | GRAB        |

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                       |                  |             |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------|-------------|
| <b>NAME/TITLE PRINCIPAL EXECUTIVE OFFICER</b> | <small>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</small> |  | <b>TELEPHONE</b> | <b>DATE</b> |
| John D. Rendall, Manager                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                       | 716-942-4602     | 12/13/2012  |
| TYPED OR PRINTED                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT</b>                   | AREA Code        | NUMBER      |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

**NAME:** U.S. DEPT OF ENERGY  
**ADDRESS:** 1000 INDEPENDENCE AVE SW  
WASHINGTON, DC 20585  
**FACILITY:** WEST VALLEY DEMONSTRATION PROJ  
**LOCATION:** 10282 ROCK SPRINGS ROAD  
WEST VALLEY, NY 14171-9799  
**ATTN:** BRYAN C BOWER, DIRECTOR

|                      |                         |
|----------------------|-------------------------|
| NY0000973            | 007-M                   |
| <b>PERMIT NUMBER</b> | <b>DISCHARGE NUMBER</b> |

| MONITORING PERIOD |            |            |            |
|-------------------|------------|------------|------------|
| MM/DD/YYYY        |            | MM/DD/YYYY |            |
| FROM              | 11/01/2012 | TO         | 11/30/2012 |

**DMR Mailing ZIP CODE:** 14171-9799  
MAJOR  
(SUBR 09)  
SANITARY, NC COOLING WATER, UTILITY WA  
External Outfall

No Discharge ☐

| PARAMETER                   |                           | QUANTITY OR LOADING |       |       | QUALITY OR CONCENTRATION |                     |                      |       | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|-----------------------------|---------------------------|---------------------|-------|-------|--------------------------|---------------------|----------------------|-------|--------|-----------------------|-------------|
|                             |                           | VALUE               | VALUE | UNITS | VALUE                    | VALUE               | VALUE                | UNITS |        |                       |             |
| Oxygen demand, ultimate     | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | <5.34               | <5.34                | mg/L  | 0      | 01/30                 | CA          |
| 00181 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | 22<br>DAILY MX       | mg/L  |        | Monthly               | CALCTD      |
| Oxygen, dissolved (DO)      | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | 10                       | *****               | 11                   | mg/L  | 0      | 02/30                 | GR          |
| 00300 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | 3<br>MINIMUM             | *****               | Req. Mon.<br>MAXIMUM | mg/L  |        | Twice Per Month       | GRAB        |
| BOD, 5-day, 20 deg. C       | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | <2.6                | 3.1                  | mg/L  | 0      | 02/30                 | 24          |
| 00310 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | 10<br>DAILY MX       | mg/L  |        | Twice Per Month       | COMP24      |
| pH                          | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | 6.8                      | *****               | 6.8                  | SU    | 0      | 02/30                 | GR          |
| 00400 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | 6.5<br>MINIMUM           | *****               | 8.5<br>MAXIMUM       | SU    |        | Twice Per Month       | GRAB        |
| Solids, total suspended     | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | <4.0                | <4.0                 | mg/L  | 0      | 02/30                 | 24          |
| 00530 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | 30<br>MO AVG        | 45<br>DAILY MX       | mg/L  |        | Twice Per Month       | COMP24      |
| Solids, settleable          | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | <0.1                | <0.1                 | mL/L  | 0      | 02/30                 | GR          |
| 00545 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | .3<br>DAILY MX       | mL/L  |        | Twice Per Month       | GRAB        |
| Oil & Grease                | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | <1.4                | <1.4                 | mg/L  | 0      | 02/30                 | GR          |
| 00556 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | 15<br>DAILY MX       | mg/L  |        | Twice Per Month       | GRAB        |

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                     |                  |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------|
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| John D. Rendall, Manager                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 716-942-4602                                                        | 12/13/2012       |
| <b>TYPED OR PRINTED</b>                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT</b> | <b>AREA Code</b> |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

**NAME:** U.S. DEPT OF ENERGY  
**ADDRESS:** 1000 INDEPENDENCE AVE SW  
WASHINGTON, DC 20585  
**FACILITY:** WEST VALLEY DEMONSTRATION PROJ  
**LOCATION:** 10282 ROCK SPRINGS ROAD  
WEST VALLEY, NY 14171-9799  
**ATTN:** BRYAN C BOWER, DIRECTOR

|                      |                         |
|----------------------|-------------------------|
| NY0000973            | 007-M                   |
| <b>PERMIT NUMBER</b> | <b>DISCHARGE NUMBER</b> |

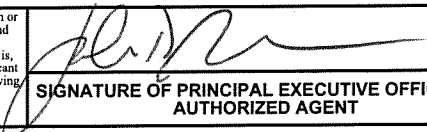
  

| MONITORING PERIOD |            |            |            |
|-------------------|------------|------------|------------|
| MM/DD/YYYY        |            | MM/DD/YYYY |            |
| FROM              | 11/01/2012 | TO         | 11/30/2012 |

**DMR Mailing ZIP CODE:** 14171-9799  
**MAJOR**  
(SUBR 09)  
SANITARY, NC COOLING WATER, UTILITY WA  
External Outfall

No Discharge ☐

| PARAMETER                                                               |                           | QUANTITY OR LOADING |                       |       | QUALITY OR CONCENTRATION |                     |                       |       | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|-------------------------------------------------------------------------|---------------------------|---------------------|-----------------------|-------|--------------------------|---------------------|-----------------------|-------|--------|-----------------------|-------------|
|                                                                         |                           | VALUE               | VALUE                 | UNITS | VALUE                    | VALUE               | VALUE                 | UNITS |        |                       |             |
| Nitrogen, nitrite total (as N)<br>00615 1 0<br>Effluent Gross           | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | 0.04                | 0.04                  | mg/L  | 0      | 01/30                 | 24          |
|                                                                         | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | .1<br>DAILY MX        | mg/L  |        | Monthly               | COMP24      |
| Nitrogen, Kjeldahl, total (as N)<br>00625 1 0<br>Effluent Gross         | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | <0.15               | <0.15                 | mg/L  | 0      | 01/30                 | 24          |
|                                                                         | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | mg/L  |        | Monthly               | COMP24      |
| Iron, total (as Fe)<br>01045 1 0<br>Effluent Gross                      | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | 0.030               | 0.037                 | mg/L  | 0      | 02/30                 | 24          |
|                                                                         | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | mg/L  |        | Twice Per Month       | COMP24      |
| Nitrogen, ammonia, total (as NH3)<br>34726 1 0<br>Effluent Gross        | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | 0.020               | 0.030                 | mg/L  | 0      | 02/30                 | 24          |
|                                                                         | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | 1.49<br>MO AVG      | 2.1<br>DAILY MX       | mg/L  |        | Twice Per Month       | COMP24      |
| Flow, in conduit or thru treatment plant<br>50050 1 0<br>Effluent Gross | <b>SAMPLE MEASUREMENT</b> | 0.008               | 0.020                 | MGD   | *****                    | *****               | *****                 | ***** | 0      | 01/30                 | CN          |
|                                                                         | <b>PERMIT REQUIREMENT</b> | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | MGD   | *****                    | *****               | *****                 | ***** |        | Monthly               | CONTIN      |
| Chlorine, total residual<br>50060 1 0<br>Effluent Gross                 | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | 0.01                | 0.01                  | mg/L  | 0      | 01/30                 | GR          |
|                                                                         | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | .1<br>DAILY MX        | mg/L  |        | Monthly               | GRAB        |
| Solids, total dissolved<br>70295 1 0<br>Effluent Gross                  | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    | 628                 | 730                   | mg/L  | 0      | 02/30                 | GR          |
|                                                                         | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | mg/L  |        | Twice Per Month       | GRAB        |

|                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                       |        |                            |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER<br><br>John D. Rendall, Manager<br><br>TYPED OR PRINTED | I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. | TELEPHONE                                                                                                                                             |        | DATE                       |
|                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <br>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT |        | 716-942-4602<br>12/13/2012 |
|                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | AREA Code                                                                                                                                             | NUMBER | MM/DD/YYYY                 |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

**NAME:** U.S. DEPT OF ENERGY  
**ADDRESS:** 1000 INDEPENDENCE AVE SW  
WASHINGTON, DC 20585

**FACILITY:** WEST VALLEY DEMONSTRATION PROJ  
**LOCATION:** 10282 ROCK SPRINGS ROAD  
WEST VALLEY, NY 14171-9799

**ATTN:** BRYAN C BOWER, DIRECTOR

|                      |                         |
|----------------------|-------------------------|
| NY0000973            | 007-M                   |
| <b>PERMIT NUMBER</b> | <b>DISCHARGE NUMBER</b> |

| MONITORING PERIOD |  |    |            |  |
|-------------------|--|----|------------|--|
| MM/DD/YYYY        |  | TO | MM/DD/YYYY |  |
| FROM 11/01/2012   |  |    | 11/30/2012 |  |

**DMR Mailing ZIP CODE:** 14171-9799  
MAJOR  
(SUBR 09)  
SANITARY, NC COOLING WATER, UTILITY W/  
External Outfall

No Discharge ☐

| PARAMETER                   |                           | QUANTITY OR LOADING |       |       | QUALITY OR CONCENTRATION |                     |                 |       | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|-----------------------------|---------------------------|---------------------|-------|-------|--------------------------|---------------------|-----------------|-------|--------|-----------------------|-------------|
|                             |                           | VALUE               | VALUE | UNITS | VALUE                    | VALUE               | VALUE           | UNITS |        |                       |             |
| Mercury, total (as Hg)      | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | 20.8                | 20.8            | ng/L  | 0      | 01/30                 | GR          |
| 71900 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | 200<br>DAILY MX | ng/L  |        | Monthly               | GRAB        |

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                     |                  |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------|
| <b>NAME/TITLE PRINCIPAL EXECUTIVE OFFICER</b> | I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. | <b>TELEPHONE</b>                                                    | <b>DATE</b>      |
| John D. Rendall, Manager                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 716-942-4602                                                        | 12/13/2012       |
| <b>TYPED OR PRINTED</b>                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT</b> | <b>AREA Code</b> |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

**NAME:** U.S. DEPT OF ENERGY  
**ADDRESS:** 1000 INDEPENDENCE AVE SW  
WASHINGTON, DC 20585  
**FACILITY:** WEST VALLEY DEMONSTRATION PROJ  
**LOCATION:** 10282 ROCK SPRINGS ROAD  
WEST VALLEY, NY 14171-9799  
**ATTN:** BRYAN C BOWER, DIRECTOR

|                      |                         |
|----------------------|-------------------------|
| NY0000973            | 01B-M                   |
| <b>PERMIT NUMBER</b> | <b>DISCHARGE NUMBER</b> |

| MONITORING PERIOD |            |            |            |
|-------------------|------------|------------|------------|
| MM/DD/YYYY        |            | MM/DD/YYYY |            |
| FROM              | 11/01/2012 | TO         | 11/30/2012 |

**DMR Mailing ZIP CODE:** 14171-9799  
MAJOR  
(SUBR 09)  
MERCURY PRETREATMENT  
Internal Outfall

No Discharge ☒

| PARAMETER                   |                           | QUANTITY OR LOADING |                       |       | QUALITY OR CONCENTRATION |                     |                |       | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|-----------------------------|---------------------------|---------------------|-----------------------|-------|--------------------------|---------------------|----------------|-------|--------|-----------------------|-------------|
|                             |                           | VALUE               | VALUE                 | UNITS | VALUE                    | VALUE               | VALUE          | UNITS |        |                       |             |
| Flow rate                   | <b>SAMPLE MEASUREMENT</b> |                     |                       |       | *****                    | *****               | *****          | ***** |        |                       |             |
| 00056 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | Req. Mon.<br>MO AVG | Req. Mon.<br>DAILY MX | gal/d | *****                    | *****               | *****          | ***** |        | Weekly                | CONTIN      |
| Mercury, total (as Hg)      | <b>SAMPLE MEASUREMENT</b> | *****               | *****                 | ***** | *****                    |                     |                |       |        |                       |             |
| 71900 1 0<br>Effluent Gross | <b>PERMIT REQUIREMENT</b> | *****               | *****                 | ***** | *****                    | Req. Mon.<br>MO AVG | 50<br>DAILY MX | ng/L  |        | Twice Per<br>Batch    | GRAB        |

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                     |                  |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------|
| <b>NAME/TITLE PRINCIPAL EXECUTIVE OFFICER</b> | <small>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</small> | <b>TELEPHONE</b>                                                    | <b>DATE</b>      |
| John D. Rendall, Manager                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 716-942-4602                                                        | 12/13/2012       |
| <b>TYPED OR PRINTED</b>                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT</b> | <b>AREA Code</b> |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

**NAME:** U.S. DEPT OF ENERGY  
**ADDRESS:** 1000 INDEPENDENCE AVE SW  
WASHINGTON, DC 20585  
**FACILITY:** WEST VALLEY DEMONSTRATION PROJ  
**LOCATION:** 10282 ROCK SPRINGS ROAD  
WEST VALLEY, NY 14171-9799  
**ATTN:** BRYAN C BOWER, DIRECTOR

|                      |                         |
|----------------------|-------------------------|
| NY0000973            | 116-M                   |
| <b>PERMIT NUMBER</b> | <b>DISCHARGE NUMBER</b> |

| MONITORING PERIOD |  |    |            |  |
|-------------------|--|----|------------|--|
| MM/DD/YYYY        |  | TO | MM/DD/YYYY |  |
| FROM 11/01/2012   |  |    | 11/30/2012 |  |

**DMR Mailing ZIP CODE:** 14171-9799  
MAJOR  
(SUBR 09)  
PSEUDO MON. POINT @FRANKS CRK  
Internal Outfall

No Discharge ☐

| PARAMETER                        |                           | QUANTITY OR LOADING |       |       | QUALITY OR CONCENTRATION |                     |                 |       | NO. EX | FREQUENCY OF ANALYSIS  | SAMPLE TYPE |
|----------------------------------|---------------------------|---------------------|-------|-------|--------------------------|---------------------|-----------------|-------|--------|------------------------|-------------|
|                                  |                           | VALUE               | VALUE | UNITS | VALUE                    | VALUE               | VALUE           | UNITS |        |                        |             |
| Solids, total dissolved          | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | 305                 | 317             | mg/L  | 0      | 02/DS                  | CA          |
| 70295 Z 0<br>Instream Monitoring | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | 500<br>DAILY MX | mg/L  |        | Twice Per<br>Discharge | CALCTD      |

|                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                              |                  |                           |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|
| <b>NAME/TITLE PRINCIPAL EXECUTIVE OFFICER</b><br><br>John D. Rendall, Manager<br>TYPED OR PRINTED | I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. | <b>TELEPHONE</b><br>716-942-4602                                                                                                                             |                  | <b>DATE</b><br>12/13/2012 |
|                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT</b><br> | <b>AREA Code</b> | <b>NUMBER</b>             |
|                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                              |                  | <b>MM/DD/YYYY</b>         |

**COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)**  
IF PSEUDO MONITORING POINT REPORT IS NOT REQUIRED DURING THE MONITORING PERIOD, EITHER CHECK THE NO DISCHARGE BOX OR ENTER 'NODI A' IN PLACE OF A MEASUREMENT TO INDICATE A GENERAL PERMIT EXEMPTION.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

Form Approved  
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

**NAME:** U.S. DEPT OF ENERGY  
**ADDRESS:** 1000 INDEPENDENCE AVE SW  
WASHINGTON, DC 20585  
**FACILITY:** WEST VALLEY DEMONSTRATION PROJ  
**LOCATION:** 10282 ROCK SPRINGS ROAD  
WEST VALLEY, NY 14171-9799  
**ATTN:** BRYAN C BOWER, DIRECTOR

|                      |                         |
|----------------------|-------------------------|
| NY0000973            | SUM-N                   |
| <b>PERMIT NUMBER</b> | <b>DISCHARGE NUMBER</b> |

| MONITORING PERIOD |      |            |    |
|-------------------|------|------------|----|
| MM/DD/YYYY        |      | MM/DD/YYYY |    |
| 11/01/2012        | FROM | 11/30/2012 | TO |

**DMR Mailing ZIP CODE:** 14171-9799  
MAJOR  
(SUBR 09)  
SUM OF OUTFALLS 1 & 7  
Internal Outfall

No Discharge ☐

| PARAMETER                 |                           | QUANTITY OR LOADING |       |       | QUALITY OR CONCENTRATION |                     |               |       | NO.<br>EX | FREQUENCY<br>OF ANALYSIS | SAMPLE<br>TYPE |
|---------------------------|---------------------------|---------------------|-------|-------|--------------------------|---------------------|---------------|-------|-----------|--------------------------|----------------|
|                           |                           | VALUE               | VALUE | UNITS | VALUE                    | VALUE               | VALUE         | UNITS |           |                          |                |
| Iron, total (as Fe)       | <b>SAMPLE MEASUREMENT</b> | *****               | ***** | ***** | *****                    | 0.23                | 0.23          | mg/L  | 0         | 01/30                    | CA             |
| 01045 2 0<br>Effluent Net | <b>PERMIT REQUIREMENT</b> | *****               | ***** | ***** | *****                    | Req. Mon.<br>MO AVG | 1<br>DAILY MX | mg/L  |           | Monthly                  | CALCTD         |

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                     |  |                   |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--|-------------------|
| <b>NAME/TITLE PRINCIPAL EXECUTIVE OFFICER</b> | <small>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</small> | <b>TELEPHONE</b>                                                    |  | <b>DATE</b>       |
| John D. Rendall, Manager                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 716-942-4602                                                        |  | 12/13/2012        |
| TYPED OR PRINTED                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT</b> |  | <b>MM/DD/YYYY</b> |

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

**Attachment B**  
**WET Testing Summary Pages**

NEW ENGLAND BIOASSAY, A DIVISION OF GZA GEOENVIRONMENTAL, INC.  
EPA TOXICITY TEST SUMMARY SHEET

Facility Name: West Valley Demonstration Project Test Start Date: 10/9/12  
NPDES Permit Number: NY0000973 Pipe Number: 007

| <u>Test Type</u>                             | <u>Test Species</u>                              | <u>Sample Type</u>                                | <u>Sample Method</u>                          |
|----------------------------------------------|--------------------------------------------------|---------------------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> Acute               | <input type="checkbox"/> Fathead Minnow          | <input type="checkbox"/> Prechlorinated           | <input type="checkbox"/> Grab                 |
| <input type="checkbox"/> Chronic             | <input checked="" type="checkbox"/> Ceriodaphnia | <input checked="" type="checkbox"/> Dechlorinated | <input checked="" type="checkbox"/> Composite |
| <input checked="" type="checkbox"/> Modified | <input type="checkbox"/> Daphnia Pulex           | <input type="checkbox"/> Chlorine Spiked in Lab   | <input type="checkbox"/> Flowthru             |
| (chronic reporting                           | <input type="checkbox"/> Mysid Shrimp            | <input type="checkbox"/> Chlorinated on site      | <input type="checkbox"/> Other                |
| acute values)                                | <input type="checkbox"/> Sheepshead              | <input type="checkbox"/> Unchlorinated            |                                               |
| <input type="checkbox"/> 24hr screening      | <input type="checkbox"/> Menidia                 |                                                   |                                               |
|                                              | <input type="checkbox"/> Sea Urchin              |                                                   |                                               |
|                                              | <input type="checkbox"/> Champia                 | TRC: <u>0.031</u> mg/L                            |                                               |
|                                              | <input type="checkbox"/> Selenastrum             |                                                   |                                               |
|                                              | <input type="checkbox"/> Other _____             |                                                   |                                               |

Dilution Water

☒ receiving water collected at a point upstream of or away from the discharge, free from toxicity or other sources of contamination; (Receiving water name: ErdmanBrook)  
☐ alternate surface water of known quality and a hardness, etc. to generally reflect the characteristics of the receiving water; (Surface water name: \_\_\_\_\_)  
☐ synthetic water prepared using either Millipore Mill-Q or equivalent deionized water and reagent grade chemicals; or deionized water combined with mineral water;  
☐ or artificial sea salts mixed with deionized water;  
☐ deionized water and hypersaline brine; or  
☐ other \_\_\_\_\_

Effluent sampling date (s): 10/7-8/12 10/10-11/12

Effluent concentrations tested (in%): 0 6.25 12.5 25 50 100

\* Permit limit concentration: TUa ≤ 0.3, TUc ≤ 1.0

Was effluent salinity adjusted? No

If yes, to what value? N/A ppt

With sea salts? N/A Hypersaline brine solution? N/A

Actual effluent concentrations tested after salinity adjustment (%): 0 6.25 12.5 25 50 100

Reference Toxicant test date: 10/4/12

Test Acceptability Criteria

Mean Control Survival: 100%

Mean Control Reproduction: 28.4 young/female

Mean Diluent Survival: 100%

Mean Diluent Reproduction: 29.7 young/female

|        | <u>Limits</u> |               | <u>Results</u>   |
|--------|---------------|---------------|------------------|
| LC50   | <u>N/A</u>    | LC50          | <u>&gt;100%</u>  |
|        |               | Upper Value   | <u>± ∞</u>       |
|        |               | Lower Value   | <u>100%</u>      |
|        |               | Data Analysis |                  |
|        |               | Method Used   | <u>Graphical</u> |
| TUa    | <u>0.3</u>    | TUa           | <u>0.3</u>       |
| A-NOEC | <u>N/A</u>    | A-NOEC        | <u>100%</u>      |
| C-NOEC | <u>N/A</u>    | C-NOEC        | <u>100%</u>      |
|        |               | LOEC          | <u>&gt;100%</u>  |
| TUc    | <u>1.0</u>    | TUc           | <u>1.0</u>       |
| IC25   | <u>N/A</u>    | IC25          | <u>&gt;100%</u>  |
| IC50   | <u>N/A</u>    | IC50          | <u>&gt;100%</u>  |



NEW ENGLAND BIOASSAY, A DIVISION OF GZA GEOENVIRONMENTAL, INC.  
EPA TOXICITY TEST SUMMARY SHEET

Facility Name: West Valley Demonstration Project Test Start Date: 10/9/12  
NPDES Permit Number: NY0000973 Pipe Number: 007

|                                              |                                                    |                                                   |                                               |
|----------------------------------------------|----------------------------------------------------|---------------------------------------------------|-----------------------------------------------|
| <u>Test Type</u>                             | <u>Test Species</u>                                | <u>Sample Type</u>                                | <u>Sample Method</u>                          |
| <input type="checkbox"/> Acute               | <input checked="" type="checkbox"/> Fathead Minnow | <input type="checkbox"/> Prechlorinated           | <input type="checkbox"/> Grab                 |
| <input type="checkbox"/> Chronic             | <input type="checkbox"/> Ceriodaphnia              | <input checked="" type="checkbox"/> Dechlorinated | <input checked="" type="checkbox"/> Composite |
| <input checked="" type="checkbox"/> Modified | <input type="checkbox"/> Daphnia Pulex             | <input type="checkbox"/> Chlorine Spiked in Lab   | <input type="checkbox"/> Flowthru             |
| (chronic reporting                           | <input type="checkbox"/> Mysid Shrimp              | <input type="checkbox"/> Chlorinated on site      | <input type="checkbox"/> Other                |
| acute values)                                | <input type="checkbox"/> Sheepshead                | <input type="checkbox"/> Unchlorinated            |                                               |
| <input type="checkbox"/> 24hr screening      | <input type="checkbox"/> Menidia                   |                                                   |                                               |
|                                              | <input type="checkbox"/> Sea Urchin                |                                                   |                                               |
|                                              | <input type="checkbox"/> Champia                   | TRC: <u>0.031</u> mg/L                            |                                               |
|                                              | <input type="checkbox"/> Selenastrum               |                                                   |                                               |
|                                              | <input type="checkbox"/> Other _____               |                                                   |                                               |

Dilution Water

☒ receiving water collected at a point upstream of or away from the discharge, free from toxicity or other sources of contamination; (Receiving water name: Erdman Brook)  
☐ alternate surface water of known quality and a hardness, etc. to generally reflect the characteristics of the receiving water; (Surface water name: \_\_\_\_\_)  
☐ synthetic water prepared using either Millipore Mill-Q or equivalent deionized water and reagent grade chemicals; or deionized water combined with mineral water;  
☐ or artificial sea salts mixed with deionized water;  
☐ deionized water and hypersaline brine; or  
☐ other \_\_\_\_\_

Effluent sampling date (s): 10/7-8/12 10/10-11/12

Effluent concentrations tested (in%): 0 6.25 12.5 25 50 100

\* Permit limit concentration: TUa ≤ 0.3, TUc ≤ 1.0

Was effluent salinity adjusted? No

If yes, to what value? N/A ppt

With sea salts? N/A Hypersaline brine solution? N/A

Actual effluent concentrations tested after salinity adjustment (%): 0 6.25 12.5 25 50 100

Reference Toxicant test date: 10/1/12

Test Acceptability Criteria

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| Mean Control Survival: <u>97.5%</u> | Mean Control Weight: <u>0.634 mg</u> |
| Mean Diluent Survival: <u>10%</u>   | Mean Diluent Weight: <u>0.079 mg</u> |

|        |               |               |                  |
|--------|---------------|---------------|------------------|
|        | <u>Limits</u> |               | <u>Results</u>   |
| LC50   | <u>N/A</u>    | LC50          | <u>&gt;100%</u>  |
|        |               | Upper Value   | <u>± ∞</u>       |
|        |               | Lower Value   | <u>100%</u>      |
|        |               | Data Analysis |                  |
|        |               | Method Used   | <u>Graphical</u> |
| TUa    | <u>0.3</u>    | TUa           | <u>0.3</u>       |
| A-NOEC | <u>N/A</u>    | A-NOEC        | <u>100%</u>      |
| C-NOEC | <u>N/A</u>    | C-NOEC        | <u>100%*</u>     |
|        |               | LOEC          | <u>&gt;100%*</u> |
| TUc    | <u>1.0</u>    | TUc           | <u>1.0*</u>      |
| IC25   | <u>N/A</u>    | IC25          | <u>&gt;100%*</u> |
| IC25   |               | IC50          | <u>&gt;100%*</u> |