



NUCLEAR FUEL SERVICES, INC.
a subsidiary of The Babcock & Wilcox Company

■ 1205 banner hill road ■ erwin, tn 37650 ■ phone 423.743.9141
■ www.nuclearfuelservices.com

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

21G-11-0181
GOV-05-01-01
ACF-11-0280

September 14, 2011

Mr. Patrick Cromer
Enforcement and Compliance Section
Tennessee Department of Environment and Conservation
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534

References: 1) Nuclear Fuel Services, Inc. (NFS) NPDES Permit No. TN0002038
2) Letter from Stephanie Fisher to permittee, received on 10-27-08

Dear Mr. Cromer:

As required by Part I, D.1 of NPDES Permit #TN0002038, we hereby submit the Monthly Discharge Monitoring Report (DMR), EPA Form 3320-1, for August 2011 as Attachment I.

Laboratory analyses for required permit parameters were performed on eleven (11) Waste Water Treatment Facility (WWTF) batches discharged during this reporting period. All values were indicated by these analyses to be within their respective permit conditions.

If you or your staff have any questions, require additional information, or wish to discuss this, please contact me or Ms. Joyce Griffith, Environmental Scientist, at (423) 735-5584. Please reference our unique document identification number (21G-11-0181) in any correspondence concerning this letter.

Sincerely,

NUCLEAR FUEL SERVICES, INC.

B. Marie Moore, Manager
Environmental Protection & Industrial Safety

CAH/rmm
Attachment (1): August 2011 DMR

nuclear fuel services, inc., a subsidiary of The Babcock & Wilcox Company

Received from Reg 2
on 11/1/11

NMS501

RAH2

B.M. Moore to Mr. Patrick Cromer
September 14, 2011

21G-11-0181
GOV-05-01-01
ACF-11-0280

cc: U.S. Nuclear Regulatory Commission
Region II
245 Peachtree Center Ave., NE
Suite 1200
Atlanta, GA 30303-1257

Mr. Jeff Horton, Manager
Johnson City Basin
TN Division of Water Pollution Control
2305 Silverdale Road
Johnson City, TN 37601-2162

B.M. Moore to Mr. Patrick Cromer
September 14, 2011

21G-11-0181
GOV-05-01-01
ACF-11-0280

Attachment I

August 2011 DMR

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

NAME Nuclear Fuel Services
 ADDRESS P.O. Box 337
 Erwin, TN 37650
 FACILITY Nuclear Fuel Services
 LOCATION 1205 Banner Hill Road
 Erwin, TN 37650
 Attn: Ms. B. Marie Moore

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

| | |
|---------------|------------------|
| TN0002038 | 001 G |
| PERMIT NUMBER | DISCHARGE NUMBER |

DMR Mailing ZIP CODE: 37650
 MAJOR
 (SUBR 06) EMH
 TREATED PROCESS WASTEWATER
 External Outfall

Form Approved
 OMB No. 2040-0004

| MONITORING PERIOD | |
|-------------------|---------------|
| MM/DD/YYYY | MM/DD/YYYY |
| FROM 08/01/2011 | TO 08/31/2011 |

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, CHEM. (HIGH LEVEL) (COD) 00340 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | 238 | mg/L | 0 | 11 / 11 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | 370 DAILY MX | mg/L | | Monthly | GRAB |
| pH 00400 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | 6.97 | ***** | 8.60 | SU | 0 | 11 / 11 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | 6 MINIMUM | ***** | 9 MAXIMUM | SU | | Once Per Batch | GRAB |
| SOLIDS, TOTAL SUSPENDED 00530 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | 11.36 | 26 | mg/L | 0 | 11 / 11 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | 30 MO AVG | 40 DAILY MX | mg/L | | Once Per Batch | GRAB |
| SOLIDS, SETTLEABLE 00545 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | < 0.1 | mL/L | 0 | 11 / 11 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | 0.5 DAILY MX | mL/L | | Once Per Batch | GRAB |
| NITROGEN, AMMONIA TOTAL (as N) 00610 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | 7.55 | 13 | mg/L | 0 | 11 / 11 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | 20 MO AVG | 30 DAILY MX | mg/L | | Once Per Batch | GRAB |
| NITRITE PLUS NITRATE TOTAL 1 DET. (as N) 00630 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | 59.56 | lb/d | ***** | ***** | ***** | ***** | 0 | 11 / 11 | GRAB |
| | PERMIT REQUIREMENT | ***** | 420 DAILY MX | lb/d | ***** | ***** | ***** | ***** | | Once Per Batch | GRAB |
| FLUORIDE, TOTAL (as F) 00951 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | < 3.2 | < 5 | mg/L | 0 | 11 / 11 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | 15 MO AVG | 20 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 | | |
| B. Marie Moore, Manager Environmental Protection & Industrial Safety | | | | | | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | | AREA CODE | NUMBER | MM/DD/YYYY |
| TYPED OR PRINTED | | | | | | | 423-743-9141 | | 09/14/2011 | | |

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

MON AVG ONLY APPLIES IF MERCURY IS OCCURS FOUR OR MORE DAYS A WEEK. IF ANY INDIVIDUAL ANALYTICAL TEST RESULT FOR MERCURY IS LESS THAN THE MIN (0.0002 MG/L) A VALUE OF ZERO MAY BE USED. THE TRC LIMIT IS ONLY APPLICABLE WHEN CHLORINE IS USED IN THE TREATMENT PROCESS.

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

NAME Nuclear Fuel Services
 ADDRESS P.O. Box 337
 Erwin, TN 37650
 FACILITY Nuclear Fuel Services
 1205 Banner Hill Road
 LOCATION Erwin, TN 37650
 Attn: Ms. B. Marie Moore

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

| | |
|---------------|------------------|
| TN0002038 | 001 G |
| PERMIT NUMBER | DISCHARGE NUMBER |


Form Approved OMB No. 2040-0004

DMR Mailing ZIP CODE: 37650
 MAJOR (SUBR 06) EMH
 TREATED PROCESS WASTEWATER
 External Outfall

| MONITORING PERIOD | |
|-------------------|---------------|
| MM/DD/YYYY | MM/DD/YYYY |
| FROM 08/01/2011 | TO 08/31/2011 |

No Discharge

| PARAMETER | | QUANTITY OR LOADING | | | Quality or Concentration | | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|--------------------|---------------------|--------------------|--------|--------------------------|----------|---------------|-------|--------|-----------------------|-------------|
| | | VALUE | VALUE | UNITS | VALUE | VALUE | VALUE | UNITS | | | |
| CADMIUM, TOTAL (as Cd) 01027 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | < 0.001 | mg/L | 0 | 01 / 30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | 0.01 DAILY MX | mg/L | | Monthly | GRAB |
| COPPER, TOTAL (as Cu) 01042 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | < 0.003 | mg/L | 0 | 01 / 30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | 1 DAILY MX | mg/L | | Monthly | GRAB |
| LEAD, TOTAL (as Pb) 01051 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | < 0.0033 | mg/L | 0 | 01 / 30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | 0.1 DAILY MX | mg/L | | Monthly | GRAB |
| SILVER, TOTAL (as Ag) 01077 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | 0.00789 | mg/L | 0 | 01 / 30 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | 0.05 DAILY MX | mg/L | | Monthly | GRAB |
| URANIUM, NATURAL, TOTAL 22708 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | < 0.90 | < 0.90 | mg/L | 0 | 11 / 11 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | 2 MO AVG | 4 DAILY MX | mg/L | | Once Per Batch | GRAB |
| FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | 0.014281 | 0.014698 | Mgal/d | ***** | ***** | ***** | ***** | 0 | 11 / 11 | ESTIMA |
| | PERMIT REQUIREMENT | Req. Mon. MO AVG | Req. Mon. DAILY MX | Mgal/d | ***** | ***** | ***** | ***** | | Once Per Batch | ESTIMA |
| CHLORINE, TOTAL RESIDUAL 50060 1 0 EFFLUENT GROSS | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | N/A | mg/L | 0 | 0 / 0 | GRAB |
| | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | 2 DAILY MX | mg/L | | Once Per Batch | GRAB |

| | | | | |
|---|---|---|------------------|------------|
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER B. Marie Moore, Manager Environmental Protection & Industrial Safety | 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. | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  | TELEPHONE | DATE |
| | | | 423-743-9141 | 09/14/2011 |
| TYPED OR PRINTED | | | AREA CODE NUMBER | MM/DD/YYYY |

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

MON AVG ONLY APPLIES IF MERCURY IS OCCURS FOUR OR MORE DAYS A WEEK. IF ANY INDIVIDUAL ANALYTICAL TEST RESULT FOR MERCURY IS LESS THAN THE MIN (0.0002 MG/L) A VALUE OF ZERO MAY BE USED. THE TRC LIMIT IS ONLY APPLICABLE WHEN CHLORINE IS USED IN THE TREATMENT PROCESS.

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

NAME Nuclear Fuel Services
 ADDRESS P.O. Box 337
 Erwin, TN 37650
 FACILITY Nuclear Fuel Services
 LOCATION 1205 Banner Hill Road
 Erwin, TN 37650
 Attn: Ms. B. Marie Moore

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Form Approved
 OMB No. 2040-0004


| | |
|---------------|------------------|
| TN0002038 | 001 G |
| PERMIT NUMBER | DISCHARGE NUMBER |

DMR Mailing ZIP CODE: 37650
 MAJOR (SUBR 06) EMH
 F - FINAL
 TREATED PROCESS WASTEWATER
 External Outfall

| MONITORING PERIOD | | |
|-------------------|----|------------|
| MM/DD/YYYY | TO | MM/DD/YYYY |
| 08/01/2011 | | 08/31/2011 |

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) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | ***** | 0.000290 | mg/L | 0 | 11 / 11 | GRAB |
| 71900 1 0 EFFLUENT GROSS | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | ***** | 0.05 DAILY MX | mg/L | 0 | Once Per Batch | GRAB |
| MERCURY, TOTAL (as Hg) | SAMPLE MEASUREMENT | ***** | ***** | ***** | ***** | 0.000116 | ***** | mg/L | 0 | 11 / 11 | GRAB |
| 71900 2 0 EFFLUENT NET | PERMIT REQUIREMENT | ***** | ***** | ***** | ***** | 0.00037 MO AVG | ***** | mg/L | 0 | 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. | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE | DATE |
| B. Marie Moore, Manager Environmental Protection & Industrial Safety | |  | 423-743-9141 | 09/14/2011 |
| TYPED OR PRINTED | | | AREA CODE NUMBER | MM/DD/YYYY |

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

The chronic mercury limit shall apply only if the discharge of batches containing mercury occur four (4) or more consecutive days/ week during the monitoring period; otherwise, only the daily maximum limit for batches containing mercury shall apply. If any individual analytical test for mercury is less than the minimum qualification level (0.0002 mg/l), then a value of zero (0) may be used for the DMR calculations and reporting requirements. August 2011 did not have 4 consecutive days of discharge. The TRC limit is only applicable when chlorine is used in the treatment process.