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

21G-10-0187
GOV-05-01-01
ACF-10-0259

September 17, 2010

Ms. Julie Harse
State of Tennessee
Department of Environment & Conservation
Division of Water Pollution Control
Permit Section
64 L&C Annex
401 Church Street
Nashville, TN 37243

RECEIVED
SEP 20 2010
Permit Section

Reference:
1) NPDES Permit No. TN0002038
2) NFS letter dated February 24, 2010 (21G-10-038)
3) NFS letter dated August 26, 2010 (21G-10-0171)

Dear Ms. Harse:

In accordance with our telephone conversation on September 3, 2010, Nuclear Fuel Services, Inc. (NFS) is resubmitting the NPDES Permit Renewal Application Form 2C, Part V. This resubmittal is to combine the February 24, 2010 and the August 26, 2010 NFS submittals on one form.

If you or your staff have any questions, require additional information, or wish to discuss this, please contact me or Mr. Robert Holley, Environmental Safety Manager, at (423) 743-1777. Please reference our unique document identification number (21G-10-0187) in any correspondence concerning this letter.

Sincerely,

**NUCLEAR FUEL SERVICES, INC.**

B. Marie Moore,
Environmental Protection &
Industrial Safety Manager

JMG/rrm
Attachment: NPDES Permit Renewal Application Update

ENTERED ON: 9/20/2010
BY: MEB

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BY: MEB

# Nuclear Fuel Services, Inc.

# NPDES Permit Renewal Application Update

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (*use the same format*) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*): TN0002038

V. INTAKE AND EFFLUENT CHARACTERISTICS *(continued from page 3 of Form 2-C)*

OUTFALL NO. 001

PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION | 2. EFFLUENT a. MAXIMUM DAILY VALUE (2) MASS | 2. EFFLUENT b. MAXIMUM 30 DAY VALUE (*if available*) (1) CONCENTRATION | 2. EFFLUENT b. MAXIMUM 30 DAY VALUE (*if available*) (2) MASS | 2. EFFLUENT c. LONG TERM AVRG. VALUE (*if available*) (1) CONCENTRATION | 2. EFFLUENT c. LONG TERM AVRG. VALUE (*if available*) (2) MASS | 2. EFFLUENT d. NO. OF ANALYSES | 3. UNITS (*specify if blank*) a. CONCEN-TRATION | 3. UNITS (*specify if blank*) b. MASS | 4. INTAKE (*optional*) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION | 4. INTAKE (*optional*) a. LONG TERM AVERAGE VALUE (2) MASS | 4. INTAKE (*optional*) b. NO. OF ANALYSES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| a. Biochemical Oxygen Demand (*BOD*) | 59 | 5846 | Att5 | Att5 | Att5 | Att5 | 2 | mg/l | g | N/A | N/A | N/A |
| b. Chemical Oxygen Demand (*COD*) | 368.00 | 36.22 | 259.40 | 14.53 | 192.98 | 10.81 | 115 | mg/l | kg | N/A | N/A | N/A |
| c. Total Organic Carbon (*TOC*) | 138 | 13582 | Att5 | Att5 | Att5 | Att5 | 2 | mg/l | g | N/A | N/A | N/A |
| d. Total Suspended Solids (*TSS*) | 34.0 | 3.35 | 12.56 | 0.703 | 7.20 | 0.403 | 115 | mg/l | kg | N/A | N/A | N/A |
| e. Ammonia (*as N*) | 29.0 | 2.85 | 17.80 | 0.997 | 16.13 | 0.903 | 115 | mg/l | kg | N/A | N/A | N/A |
| f. Flow | VALUE 15,544 | | VALUE 15,057 | | VALUE 14,796 | | 115 | GPD | N/A | VALUE N/A | | N/A |
| g. Temperature (*winter*) | VALUE 20.3 | | VALUE 29.2 | | VALUE 26.6 | | 36 | °C | | VALUE N/A | | N/A |
| h. Temperature (*summer*) | VALUE 26.7 | | VALUE 29.3 | | VALUE 27.2 | | 40 | °C | | VALUE N/A | | N/A |
| i. pH | MINIMUM 6.7 | MAXIMUM 8.6 | MINIMUM 6.7 | MAXIMUM 8.6 | | | 115 | STANDARD UNITS | | | | |

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NO. (*if available*) | 2. MARK "X" a. BELIEVED PRESENT | 2. MARK "X" b. BELIEVED ABSENT | 3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION | 3. EFFLUENT a. MAXIMUM DAILY VALUE (2) MASS | 3. EFFLUENT b. MAXIMUM 30 DAY VALUE (*if available*) (1) CONCENTRATION | 3. EFFLUENT b. MAXIMUM 30 DAY VALUE (*if available*) (2) MASS | 3. EFFLUENT c. LONG TERM AVRG. VALUE (*if available*) (1) CONCENTRATION | 3. EFFLUENT c. LONG TERM AVRG. VALUE (*if available*) (2) MASS | 3. EFFLUENT d. NO. OF ANALYSES | 4. UNITS a. CONCEN-TRATION | 4. UNITS b. MASS | 5. INTAKE (*optional*) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION | 5. INTAKE (*optional*) a. LONG TERM AVERAGE VALUE (2) MASS | 5. INTAKE (*optional*) b. NO. OF ANALYSES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| a. Bromide (24959-67-9) | | X | | | | | | | | | | | | |
| b. Chlorine, Total Residual | | X | | | | | | | | | | | | |
| c. Color | | X | | | | | | | | | | | | |
| d. Fecal Coliform | | X | | | | | | | | | | | | |
| e. Fluoride (16984-48-8) | X | | 20 | 1.97 | 10 | 0.564 | 10 | 0.564 | 115 | mg/l | kg | N/A | N/A | N/A |
| f. Nitrate-Nitrite (*as N*) | X | | 1691.00 | 166.42 | 611.60 | 34.25 | 428.08 | 23.98 | 115 | mg/l | kg | N/A | N/A | N/A |



CONTINUE ON REVERSE

ITEM V-B CONTINUED FROM FRONT

| 1. POLLUTANT AND CAS NO. (*if available*) | 2. MARK "X" | | 3. EFFLUENT | | | | | | | 4. UNITS | | 5. INTAKE (*optional*) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a. BELIEVED PRESENT | b. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (*if available*) | | c. LONG TERM AVRG. VALUE (*if available*) | | d. NO. OF ANALYSES | a. CONCEN-TRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| g. Nitrogen, Total Organic (*as N*) | | X | | | | | | | | | | | | |
| h. Oil and Grease | | X | | | | | | | | | | | | |
| i. Phosphorus (as P), Total (7723-14-0) | | | | | | | | | | | | | | |
| j. Radioactivity | | | | | | | | | | | | | | |
| (1) Alpha, Total | X | | 982 | 9.6E7 | 271 | 1.52E7 | 186.13 | 1.0E7 | 115 | pCi/l | pCi | N/A | N/A | N/A |
| (2) Beta, Total | X | | 787 | 7.75E7 | 357 | 2.00E7 | 311.58 | 1.75E7 | 115 | pCi/l | pCi | N/A | N/A | N/A |
| (3) Radium, Total | | X | | | | | | | | | | | | |
| (4) Radium 226, Total | | X | | | | | | | | | | | | |
| k. Sulfate (*as $SO_4$*) (14808-79-8) | X | | 9990 | 983193 | Att6 | Att6 | Att6 | Att6 | 2 | mg/l | g | N/A | N/A | N/A |
| l. Sulfide (*as S*) | X | | <0.030 | 2.953 | Att6 | Att6 | Att6 | Att6 | 2 | mg/l | g | N/A | N/A | N/A |
| m. Sulfite (*as $SO_3$*) (14265-45-3) | | X | | | | | | | | | | | | |
| n. Surfactants | X | | 368.00 | 36.22 | 259.40 | 14.53 | Att6 | Att6 | 115 | mg/l | g | N/A | N/A | N/A |
| o. Aluminum, Total (7429-90-5) | X | | 2.190 | 215.535 | Att6 | Att6 | Att6 | Att6 | 2 | mg/l | g | N/A | N/A | N/A |
| p. Barium, Total (7440-39-3) | | X | | | | | | | | | | | | |
| q. Boron, Total (7440-42-8) | | X | | | | | | | | | | | | |
| r. Cobalt, Total (7440-48-4) | | X | | | | | | | | | | | | |
| s. Iron, Total (7439-89-6) | X | | 2.370 | 233.250 | Att6 | Att6 | Att6 | Att6 | 2 | mg/l | g | N/A | N/A | N/A |
| t. Magnesium, Total (7439-95-4) | X | | 2.080 | 204.709 | Att6 | Att6 | Att6 | Att6 | 2 | mg/l | g | N/A | N/A | N/A |
| u. Molybdenum, Total (7439-98-7) | | X | Att6 | Att6 | Att6 | Att6 | Att6 | Att6 | Att6 | Att6 | Att6 | N/A | N/A | N/A |
| v. Manganese, Total (7439-96-5) | X | | 0.028 | 2.756 | Att6 | Att6 | Att6 | Att6 | 2 | mg/l | g | N/A | N/A | N/A |
| w. Tin, Total (7440-31-5) | | X | | | | | | | | | | | | |
| x. Titanium, Total (7440-32-6) | | X | | | | | | | | | | | | |

 CONTINUE ON PAGE V-3

| EPA I.D. NUMBER (*copy from Item 1 of Form 1*) | OUTFALL NUMBER |
|---|---|
| TN0002038 | 001 |

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (*if available*) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | | 4. UNITS | | 5. INTAKE (*optional*) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (*if available*) | | c. LONG TERM AVRG. VALUE (*if available*) | | d. NO. OF ANALYSES | a. CONCEN-TRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| METALS, CYANIDE, AND TOTAL PHENOLS | | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-0) | X | | | <0.003 | 0.295 | Att7 | Att7 | Att7 | Att7 | 2 | mg/l | g | N/A | N/A | N/A |
| 2M. Arsenic, Total (7440-38-2) | X | | | 0.2500 | 14.042 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 3M. Beryllium, Total (7440-41-7) | X | | | <0.0005 | 0.049 | Att7 | Att7 | Att7 | Att7 | 2 | mg/l | g | N/A | N/A | N/A |
| 4M. Cadmium, Total (7440-43-9) | X | | | Att7 | Att7 | 0.0020 | 0.1070 | 0.0012 | 0.066 | 12 | mg/l | g | N/A | N/A | N/A |
| 5M. Chromium, Total (7440-47-3) | X | | | Att7 | Att7 | 0.0020 | 0.1177 | 0.0015 | 0.084 | 4 | mg/l | g | N/A | N/A | N/A |
| 6M. Copper, Total (7440-50-8) | X | | | Att7 | Att7 | 0.0135 | 0.7547 | 0.0073 | 0.409 | 12 | mg/l | g | N/A | N/A | N/A |
| 7M. Lead, Total (7439-92-1) | X | | | Att7 | Att7 | 0.0250 | 1.3976 | 0.0056 | 0.313 | 12 | mg/l | g | N/A | N/A | N/A |
| 8M. Mercury, Total (7439-97-6) | X | | | 0.0079 | 0.7775 | 0.0017 | 0.0952 | 0.0006 | 0.032 | 115 | mg/l | g | N/A | N/A | N/A |
| 9M. Nickel, Total (7440-02-0) | X | | | Att7 | Att7 | 0.0093 | 0.4960 | 0.0067 | 0.372 | 4 | mg/l | g | N/A | N/A | N/A |
| 10M. Selenium, Total (7782-49-2) | X | | | <0.005 | 0.492 | Att7 | Att7 | Att7 | Att7 | 2 | mg/l | g | N/A | N/A | N/A |
| 11M. Silver, Total (7440-22-4) | X | | | Att7 | Att7 | 0.0100 | 0.5449 | 0.0053 | 0.286 | 12 | mg/l | g | N/A | N/A | N/A |
| 12M. Thallium, Total (7440-28-0) | X | | | 0.002 | 0.167 | Att7 | Att7 | Att7 | Att7 | 2 | mg/l | g | N/A | N/A | N/A |
| 13M. Zinc, Total (7440-66-6) | X | | | 0.040 | 3.897 | Att7 | Att7 | Att7 | Att7 | 2 | mg/l | g | N/A | N/A | N/A |
| 14M. Cyanide, Total (57-12-5) | X | | | 0.039 | 3.838 | Att7 | Att7 | Att7 | Att7 | 2 | mg/l | g | N/A | N/A | N/A |
| 15M. Phenols, Total | X | | | 0.003 | 0.342 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| DIOXIN | | | | | | | | | | | | | | | |
| 2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6) | | | X | DESCRIBE RESULTS | | | | | | | | | | | |



CONTINUE ON REVERSE

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| 1. POLLUTANT AND CAS NUMBER (*if available*) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | | 4. UNITS | | 5. INTAKE (*optional*) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (*if available*) | | c. LONG TERM AVRG. VALUE (*if available*) | | d. NO. OF ANALYSES | a. CONCEN-TRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION – VOLATILE COMPOUNDS | | | | | | | | | | | | | | | |
| 1V. Accrolein (107-02-8) | X | | | <0.0013 | 0.1230 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 2V. Acrylonitrile (107-13-1) | X | | | <0.0010 | 0.0984 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 3V. Benzene (71-43-2) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 4V. Bis (*Chloro-methyl*) Ether (542-88-1) | X | | | <0.0248 | 2.4408 | Att7 | Att7 | Att7 | Att7 | 2 | mg/l | g | N/A | N/A | N/A |
| 5V. Bromoform (75-25-2) | X | | | <0.0003 | 0.0246 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 6V. Carbon Tetrachloride (56-23-5) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 7V. Chlorobenzene (108-90-7) | X | | | <0.0003 | 0.0246 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 8V. Chlorodi-bromomethane (124-48-1) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 9V. Chloroethane (75-00-3) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 10V. 2-Chloro-ethylvinyl Ether (110-75-8) | X | | | <0.0015 | 0.1476 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 11V. Chloroform (67-66-3) | X | | | 0.0036 | 0.3571 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 12V. Dichloro-bromomethane (75-27-4) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 13V. Dichloro-difluoromethane (75-71-8) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 14V. 1,1-Dichloro-ethane (75-34-3) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 15V. 1,2-Dichloro-ethane (107-06-2) | X | | | <0.0003 | 0.0246 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 16V. 1,1-Dichloro-ethylene (75-35-4) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 17V. 1,2-Dichloro-propane (78-87-5) | X | | | <0.0003 | 0.0246 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 18V. 1,3-Dichloro-propylene (542-75-6) | X | | | <0.0003 | 0.0246 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 19V. Ethylbenzene (100-41-4) | X | | | <0.0003 | 0.0246 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 20V. Methyl Bromide (74-83-9) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 21V. Methyl Chloride (74-87-3) | X | | | <0.0020 | 0.1968 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |

 CONTINUE ON PAGE V-5

CONTINUED FROM PAGE V-4

| 1. POLLUTANT AND CAS NUMBER (*if available*) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | | 4. UNITS | | 5. INTAKE (*optional*) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (*if available*) | | c. LONG TERM AVRG. VALUE (*if available*) | | d. NO. OF ANALYSES | a. CONCEN-TRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION – VOLATILE COMPOUNDS (*continued*) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | | X | | <0.0020 | 0.1968 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 23V. 1,1,2,2-Tetrachloroethane (79-34-5) | X | | | <0.0003 | 0.0246 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 24V. Tetrachloro-ethylene (127-18-4) | X | | | Att7 | Att7 | 0.0005 | 0.0265 | 0.0004 | 0.021 | 4 | mg/l | g | N/A | N/A | N/A |
| 25V. Toluene (108-88-3) | X | | | 0.0017 | 0.162 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 26V. 1,2-Trans-Dichloroethylene (156-60-5) | X | | | <0.0003 | 0.0295 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 27V. 1,1,1-Trichloro-ethane (71-55-6) | X | | | <0.0003 | 0.0320 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 28V. 1,1,2-Trichloro-ethane (79-00-5) | X | | | <0.0003 | 0.0254 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 29V Trichloro-ethylene (79-01-6) | X | | | <0.0003 | 0.0246 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 30V. Trichloro-fluoromethane (75-69-4) | X | | | <0.0003 | 0.0287 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| 31V. Vinyl Chloride (75-01-4) | X | | | <0.0005 | 0.0492 | Att7 | Att7 | Att7 | Att7 | 6 | mg/l | g | N/A | N/A | N/A |
| GC/MS FRACTION – ACID COMPOUNDS | | | | | | | | | | | | | | | |
| 1A. 2-Chlorophenol (95-57-8) | X | | | <0.0021 | 0.2067 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 2A. 2,4-Dichloro-phenol (120-83-2) | X | | | <0.0019 | 0.1873 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 3A. 2,4-Dimethyl-phenol (105-67-9) | X | | | <0.0019 | 0.1882 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 4A. 4,6-Dinitro-O-Cresol (534-52-1) | X | | | <0.0029 | 0.2825 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 5A. 2,4-Dinitro-phenol (51-28-5) | X | | | <0.0040 | 0.4709 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 6A. 2-Nitrophenol (88-75-5) | X | | | <0.0019 | 0.1882 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 7A. 4-Nitrophenol (100-02-7) | X | | | <0.0019 | 0.1882 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 8A. P-Chloro-M-Cresol (59-50-7) | X | | | <0.0029 | 0.2893 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 9A. Pentachloro-phenol (87-86-5) | X | | | <0.0002 | 0.0188 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 10A. Phenol (108-95-2) | X | | | <0.0024 | 0.2362 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 11A. 2,4,6-Trichloro-phenol (88-05-2) | X | | | <0.0019 | 0.1882 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |


CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (*if available*) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | | 4. UNITS | | 5. INTAKE (*optional*) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (*if available*) | | c. LONG TERM AVRG. VALUE (*if available*) | | d. NO. OF ANALYSES | a. CONCEN-TRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | X | | | <0.0003 | 0.0290 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 2B. Acenaphtylene (208-96-8) | X | | | <0.0006 | 0.0605 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 3B. Anthracene (120-12-7) | X | | | <0.0006 | 0.0605 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 4B. Benzidine (92-87-5) | X | | | <0.0029 | 0.2812 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 5B. Benzo (*a*) Anthracene (56-55-3) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 6B. Benzo (*a*) Pyrene (50-32-8) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 7B. 3,4-Benzo-fluoranthene (205-99-2) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg.l | g | N/A | N/A | N/A |
| 8B. Benzo (*ghi*) Perylene (191-24-2) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 9B. Benzo (*k*) Fluoranthene (207-08-9) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 10B. Bis (*2-Chloro-ethoxy*) Methane (111-91-1) | X | | | <0.0029 | 0.2834 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 11B. Bis (*2-Chloro-ethyl*) Ether (111-44-4) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 12B. Bis (*2-Chloroisopropyl*) Ether (102-80-1) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 13B. Bis (*2-Ethyl-hexyl*) Phthalate (117-81-7) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 15B. Butyl Benzyl Phthalate (85-68-7) | X | | | <0.0015 | 0.1452 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 16B. 2-Chloro-naphthalene (91-58-7) | X | | | <0.0003 | 0.0281 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 18B. Chrysene (218-01-9) | X | | | <0.0006 | 0.0608 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | | N/A | N/A | N/A |
| 19B. Dibenzo (*a,h*) Anthracene (53-70-3) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 20B. 1,2-Dichloro-benzene (95-50-1) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 21B. 1,3-Di-chloro-benzene (541-73-1) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |

 CONTINUE ON PAGE V-7

CONTINUED FROM PAGE V-6

| 1. POLLUTANT AND CAS NUMBER (*if available*) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | | 4. UNITS | | 5. INTAKE (*optional*) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (*if available*) | | c. LONG TERM AVRG. VALUE (*if available*) | | d. NO. OF ANALYSES | a. CONCEN-TRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (*continued*) | | | | | | | | | | | | | | | |
| 22B. 1,4-Dichloro-benzene (106-46-7) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 23B. 3,3-Dichloro-benzidine (91-94-1) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 24B. Diethyl Phthalate (84-66-2) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 25B. Dimethyl Phthalate (131 -11-3) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 26B. Di-N-Butyl Phthalate (84-74-2) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 27B. 2,4-Dinitro-toluene (121-14-2) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 28B. 2,6-Dinitro-toluene (606-20-2) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 29B. Di-N-Octyl Phthalate (117-84-0) | X | | | <0.0029 | 0.2812 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 30B. 1,2-Diphenyl-hydrazine (*as Azo-benzene*) (122-66-7) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 31B. Fluoranthene (206-44-0) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 32B. Fluorene (86-73-7) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 33B. Hexachloro-benzene (118-74-1) | X | | | <0.0015 | 0.1447 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 34B. Hexachloro-butadiene (87-68-3) | X | | | <0.0015 | 0.1447 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 35B. Hexachloro-cyclopentadiene (77-47-4) | X | | | <0.0029 | 0.2812 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 36B Hexachloro-ethane (67-72-1) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 38B. Isophorone (78-59-1) | X | | | <0.0029 | 0.2812 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 39B. Naphthalene (91-20-3) | X | | | <0.0003 | 0.0281 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 40B. Nitrobenzene (98-95-3) | X | | | <0.0029 | 0.2812 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 41B. N-Nitro-sodimethylamine (62-75-9) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 42B. N-Nitrosodi-N-Propylamine (621-64-7) | X | | | <0.0022 | 0.2163 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |



CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (*if available*) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | | 4. UNITS | | 5. INTAKE (*optional*) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (*if available*) | | c. LONG TERM AVRG. VALUE (*if available*) | | d. NO. OF ANALYSES | a. CONCEN-TRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (*continued*) | | | | | | | | | | | | | | | |
| 43B. N-Nitro-sodiphenylamine (86-30-6) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 44B. Phenanthrene (85-01-8) | X | | | <0.0002 | 0.0187 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 45B. Pyrene (129-00-0) | X | | | <0.0003 | 0.0281 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| 46B. 1,2,4-Tri-chlorobenzene (120-82-1) | X | | | <0.0019 | 0.1872 | Att7 | Att7 | Att7 | Att7 | 4 | mg/l | g | N/A | N/A | N/A |
| GC/MS FRACTION – PESTICIDES | | | | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | | | X | | | | | | | | | | | | |
| 2P. α-BHC (319-84-6) | | | X | | | | | | | | | | | | |
| 3P. β-BHC (319-85-7) | | | X | | | | | | | | | | | | |
| 4P. γ-BHC (58-89-9) | | | X | | | | | | | | | | | | |
| 5P. δ-BHC (319-86-8) | | | X | | | | | | | | | | | | |
| 6P. Chlordane (57-74-9) | | | X | | | | | | | | | | | | |
| 7P. 4,4'-DDT (50-29-3) | | | X | | | | | | | | | | | | |
| 8P. 4,4'-DDE (72-55-9) | | | X | | | | | | | | | | | | |
| 9P. 4,4'-DDD (72-54-8) | | | X | | | | | | | | | | | | |
| 10P. Dieldrin (60-57-1) | | | X | | | | | | | | | | | | |
| 11P. α-Enosulfan (115-29-7) | | | X | | | | | | | | | | | | |
| 12P. β-Endosulfan (115-29-7) | | | X | | | | | | | | | | | | |
| 13P. Endosulfan Sulfate (1031-07-8) | | | X | | | | | | | | | | | | |
| 14P. Endrin (72-20-8) | | | X | | | | | | | | | | | | |
| 15P. Endrin Aldehyde (7421-93-4) | | | X | | | | | | | | | | | | |
| 16P. Heptachlor (76-44-8) | | | X | | | | | | | | | | | | |


CONTINUE ON PAGE V-9

| EPA I.D. NUMBER (*copy from Item 1 of Form 1*) | OUTFALL NUMBER |
|---|---|
| TN0002038 | 001 |

CONTINUED FROM PAGE V-8

| 1. POLLUTANT AND CAS NUMBER (*if available*) | 2. MARK "X" | | | 3. EFFLUENT | | | | | | | 4. UNITS | | 5. INTAKE (*optional*) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (*if available*) | | c. LONG TERM AVRG. VALUE (*if available*) | | d. NO. OF ANALYSES | a. CONCEN-TRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION – PESTICIDES (*continued*) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | | | X | | | | | | | | | | | | |
| 18P. PCB-1242 (53469-21-9) | | | X | | | | | | | | | | | | |
| 19P. PCB-1254 (11097-69-1) | | | X | | | | | | | | | | | | |
| 20P. PCB-1221 (11104-28-2) | | | X | | | | | | | | | | | | |
| 21P. PCB-1232 (11141-16-5) | | | X | | | | | | | | | | | | |
| 22P. PCB-1248 (12672-29-6) | | | X | | | | | | | | | | | | |
| 23P. PCB-1260 (11096-82-5) | | | X | | | | | | | | | | | | |
| 24P. PCB-1016 (12674-11-2) | | | X | | | | | | | | | | | | |
| 25P. Toxaphene (8001-35-2) | | | X | | | | | | | | | | | | |

**ATTACHMENT 5**
**FORM 2C**
**Section V, Part A**
**Outfall 001**

1. Because BOD and TOC are not required to be monitored in the current permit, the Maximum Daily Values represented on this form are the maximum values of the following two (2) WWTF batch grab samples:

| Batch No. | Date |
|---|---|
| 10-047 | 5/20/10 |
| 10-053 | 6/3/10 |

   Appendix 5-1 and Appendix 5-2 summarize the data for the above parameters.

2. The Maximum Daily Summer Temperature is derived from wastewater treatment facility batches dated: Jun. 2009 – Sep. 2009. The Maximum Daily Winter Temperature is derived from wastewater treatment facility batches dated: Dec. 2009 – Mar. 2009.

3. Average Mass Values were calculated using the 2009 Long Term Average Flow Rate of 14, 796 GPD.

4. Maximum Mass Values were calculated using the established WWTF maximum flow rate of 26,000 GPD.

**ATTACHMENT 5 A**
**FORM 2C**
**Section III, Part A**
**NFS SIC Code Classification**

Even though NFS is classified as a SIC Code 2819 (Inorganic Chemicals, Not Elsewhere Classified) establishment, it is not subject to 40 CFR Part 415 (categorical standards for the "Inorganic Chemicals Manufacturing Point Source" category). This basis for this determination is found in two Development Documents published by EPA for the Inorganic Chemicals Point Source Category, a "Phase I" document in 1982 and a Phase II document in 1984.

A review of these documents, mainly the Phase II document, it clearly establishes that the NFS facility is not covered by 40 CFR Part 415.

1. The Inorganic Chemical manufacturing category was one of the 21 point source categories that EPA agreed to issue categorical standards for as a part of the settlement of a citizen suit (NRDC v. Train, 8 ERC 2120 (D.D.C. 1976 as subsequently modified)).

2. The NRDC settlement agreement also specifically identified which SIC codes that EPA had to address in its rulemaking. SIC Code 2819 was listed. In its Phase I Inorganic Chemicals rulemaking, EPA addressed 60 of the 184 potential types of inorganic chemical manufacturing groups. In its Phase II Inorganic Chemical Rulemaking, EPA evaluated the remaining 124 potential subcategories. Based on this evaluation, 24 received (sub)categorical standards while 107 were excluded from categorical regulation based upon criteria set forth in the NRDC Settlement Agreement.

3. While SIC Code 2819 includes "...nuclear cores – inorganic, nuclear fuel reactor cores-inorganic and nuclear fuel scrap reprocessing...", EPA later excluded all of these potential subcategories from Part 415 "since [a]any materials in the wastewater are source material as these terms are defined in the Atomic Energy Act of 1954, as amended." The Supreme Court decided, in Train v. Colorado PIRG, 426 U.S.I. (1976), that these materials, at least when regulated by the NRC, are not "pollutants" under the Clean Water Act." (See Phase II Development Document at 490.)

## APPENDIX 5-1

# 2010 BOD Sampling

| Batch No. | BOD | | |
|---|---|---|---|
| | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | 19 | 1075 | 1890 |
| 53 | 59 | 3327 | 5846 |
| **Total** | 79 | 4402 | 7736 |
| **Avg** | 39 | 2201 | 3868 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg Mass - estimated using year 2009 LTA of 14,796 GPD

Max Mass - calculated using the established WWTF Maximum flow rate of 26,000 GPD.

# APPENDIX 5-2

## 2010 TOC Sampling

| Batch No. | TOC | | |
|---|---|---|---|
| | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | 138 | 7729 | 13582 |
| 53 | 109 | 6105 | 10728 |
| **Total** | 247 | 13834 | 24309 |
| **Avg** | 124 | 6917 | 12155 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg Mass - Average mass calculated using the 2009 LTA of 14,796 GPD

Max Mass - Maximum mass calculated using the established WWTF Maximum flow rate of 26,000 GPD.

**ATTACHMENT 6**
**FORM 2C**
**Section V, Part B**
**Outfall 001**

1. Because monitoring is not required under the current permit, the Maximum Daily Values used in this application for sulfate (as $SO_3$), sulfide (as S), total aluminum, total iron, total magnesium, and total manganese are based upon the maximum analytical values of the following two (2) WWTF grab sample batches:

| Batch No. | Date |
|---|---|
| 10-047 | 5/20/10 |
| 10-053 | 6/3/10 |

   Appendices 6-1 through 6-6 summarize the data for each of the above parameters.

2. Fluoride, nitrate-nitrite (as N), total alpha and total beta values are derived from 2009 analytical data.

3. Chemical oxygen demand data is used as a measure of surfactant or organic matter in NFS effluent

4. Molybdenum at NFS is only present as the result of corrosion in metal piping. No significant corrosion is present in processes that discharge to the WWTF.

5. Average Mass Values were calculated using the 2009 Long Term Average Flow Rate of 14, 796 GPD.

6. Maximum mass values were calculated using the established WWTF maximum flow rate of 26,000 GPD.

## APPENDIX 6-1

## 2010 Sulfate Sampling

| Batch No. | Sulfate | | |
|---|---|---|---|
| | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | 9990 | 559513 | 983193 |
| 53 | 7770 | 435176 | 764706 |
| **Total** | 17760 | 994689 | 1747899 |
| **Avg** | 8880 | 497345 | 873950 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF maximum flow rate of 26,000 GPD.

## APPENDIX 6-2

## 2010 Sulfide Sampling

| Batch No. | Sulfide | | | |
|---|---|---|---|---|
| | | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | < | 0.030 | 1.680 | 2.953 |
| 53 | < | 0.030 | 1.680 | 2.953 |
| **Total** | U | 0.060 | 3.360 | 5.905 |
| **Avg** | U | 0.030 | 1.680 | 2.953 |

**Notes:**

Batch 10-47 collected 5/20/10
Batch 10-53 collected 6/3/10
< - Below Instrument Detection Limits of 0.030 mg/l
U - Indicates the target analyte was analyzed for but not detected above the detection limit.
Avg Mass - estimated using year 2009 LTA of 14,796 GPD.
Max Mass - calculated using the established WWTF maximum flow rate of 26,000 GPD.

## APPENDIX 6-3

## 2010 Aluminum Sampling

| Batch No. | Aluminum | | |
|---|---|---|---|
| | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | 1.380 | 77.290 | 135.816 |
| 53 | 2.190 | 122.656 | 215.535 |
| **Total** | 3.570 | 200 | 351 |
| **Avg** | 1.785 | 100 | 176 |

Notes:

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF maximum flow rate of 26,000 GPD.

## APPENDIX 6-4

## 2010 Iron Sampling

| Batch No. | Iron | | |
|---|---|---|---|
| | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | 2.370 | 132.737 | 233.250 |
| 53 | 2.210 | 123.776 | 217.503 |
| Total | 4.580 | 256.513 | 450.753 |
| Avg | 2.290 | 128.257 | 225.377 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF maximum flow rate of 26,000 GPD.

## Appendix 6-5

## 2010 Magnesium Sampling

| Batch No. | Magnesium | | |
|---|---|---|---|
| | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | 2.080 | 116.495 | 204.709 |
| 53 | 0.454 | 25.427 | 44.682 |
| Total | 2.534 | 141.922 | 249.391 |
| Avg | 1.267 | 70.961 | 124.695 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF maximum flow rate of 26,000 GPD.

## Appendix 6-6

## 2010 Manganese Sampling

| Batch No. | Manganese | | |
|---|---|---|---|
| | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | 0.028 | 1.568 | 2.756 |
| 53 | < 0.005 | 0.280 | 0.492 |
| **Total** | 0.033 | 1.848 | 3.248 |
| **Avg** | 0.017 | 0.924 | 1.624 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

< - Below Instrument Detection Limit of 0.005 mg/l

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF maximum flow rate of 26,000 GPD.

ENTERED ON: 9/20/2010
BY: MEB

**ATTACHMENT 7**
**FORM 2C**
**Section V, Part C**
**Outfall 001**

1. Because monitoring is not required under the current permit, the Maximum Daily Values used in this application for: antimony, beryllium, selenium, silver, thallium, cyanide, zinc, toluene, vinyl chloride, volatile compounds, acid compounds, and base/neutral compounds are based upon the maximum analytical values of the following two (2) WWTF grab sample batches collected on May 20, 2010 and June 3, 2010:

| Batch No. | Date |
|---|---|
| 10-047 | 5/20/10 |
| 10-053 | 6/3/10 |

   Appendices 7-1- 7-18 summarize the data for the permit parameters.

2. Average Mass Values were calculated using the 2009 Long Term Average Flow Rate of 14, 796 GPD.

3. Maximum mass values were calculated using the established WWTF maximum flow rate of 26,000 GPD.

4. Changes have been made to the following attribute data since the August 26, 2010 Part C submittal:

   a. Metals, Cyanide & Total Phenols
      i. Arsenic
      ii. Cadmium
      iii. Thallium
      iv. Phenol
   b. GC/MS Fraction-Volatile Compounds
      i. Methylene Chloride
      ii. Trichloroethylene
   c. GC/MS Fraction-Acid Compounds
      i. 2-Chlorophenol
      ii. Pentachlorophenol
   d. GC/MS Fraction-Base/Neutral Compounds
      i. Number of analyses for all Base/Neutral Compounds is 4
      ii. Dimethyl Phthalate
      iii. 2,6-Dinitrotoluene

## APPENDIX 7-1

## 2010 Antimony Sampling

| Batch No. | Antimony | | | |
|---|---|---|---|---|
| | Concentration (mg/l) | | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | < | 0.003 | 0.168 | 0.295 |
| 53 | < | 0.003 | 0.168 | 0.295 |
| **Total** | U | 0.006 | 0.336 | 0.591 |
| **Avg** | U | 0.003 | 0.168 | 0.295 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

< - Below Instrument Detection Limit of 0.003 mg/l

U - Indicates the target analyte was analyzed for but not detected above the detection limit.

# Appendix 7-2
# 2009 Quarterly Metals Sampling

## 2009 Arsenic

| Quarter | Results | | | QL | Avg. Quarterly Flow |
|---|---|---|---|---|---|
| | | (mg/l) | (g) | (mg/l) | (gal/day) |
| 1st | | 0.0172 | 1.0120 | 0.0500 | 15544 |
| 2nd | < | 0.0050 | 0.2755 | 0.0500 | 14557 |
| 3rd | < | 0.0500 | 2.6751 | 0.05 | 14134 |
| 4th | < | 0.2500 | 14.0425 | 0.2500 | 14839 |
| **Total** | J | 0.3222 | 18.0051 | | 59074 |
| **Avg.** | J | 0.0806 | 4.5013 | | 14769 |

## 2009 Chromium

| Quarter | Results | | | QL | Avg. Quarterly Flow |
|---|---|---|---|---|---|
| | | (mg/l) | (g) | (mg/L) | (gal/day) |
| 1st | < | 0.0020 | 0.1177 | 0.0020 | 15544 |
| 2nd | < | 0.0020 | 0.1102 | 0.0002 | 14557 |
| 3rd | < | 0.0010 | 0.0535 | 0.0010 | 14134 |
| 4th | < | 0.0010 | 0.0562 | 0.0010 | 14839 |
| **Total** | J | 0.0060 | 0.3376 | | 59074 |
| **Avg.** | J | 0.0015 | 0.0844 | | 14769 |

## 2009 Nickel

| Quarter | Results | | | QL | Avg. Quarterly Flow |
|---|---|---|---|---|---|
| | | (mg/l) | (g) | (mg/l) | (gal/day) |
| 1st | | 0.0073 | 0.4319 | 0.0010 | 15544 |
| 2nd | J | 0.0041 | 0.2237 | 0.0010 | 14557 |
| 3rd | | 0.0093 | 0.4960 | 0.0015 | 14134 |
| 4th | | 0.0060 | 0.3365 | 0.0015 | 14839 |
| **Total** | J | 0.0267 | 1.4880 | | 59074 |
| **Avg.** | J | 0.0067 | 0.3720 | | 14769 |

**Notes:**

J - The associated numerical value is an estimated quantity, which consists of detects and nondetects. For purposes of the average, the nondetect values were calcuated as being at the quantitation limit the actual concentrations were probably lower.

QL - Quantitation Limit

The contract laboratory reported only the IDL not its quantitation level.
The quantitation levels used on this form were calculated by mulplying the IDL by 10, an is the limit of quantitation (see 18th Edition Standard Methods for the Examination of Water and Wastewater, 1992). Where the laboratory reported non-detects or "less than" values, the quantitation level was used.

## Appendix 7-3

## 2010 Beryllium Sampling

| Batch No. | Beryllium | | | |
|---|---|---|---|---|
| | | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | < | 0.0005 | 0.028 | 0.049 |
| 53 | < | 0.0005 | 0.028 | 0.049 |
| **Total** | U | 0.0010 | 0.0560 | 0.0984 |
| **Avg** | U | 0.0005 | 0.0280 | 0.0492 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

< - Below Instrument Detection Limits of 0.0005 mg/l

U - Indicates the target analyte was analyzed for but not detected above the detection limit.

# Attachment 7-4

## 2009 Cadmium Sampling

| Month | Maximum | | | IDL (mg/l) | QL (mg/l) | Average Flow (GPD) |
|---|---|---|---|---|---|---|
| | | Concentration (mg/l) | Mass (g/day) | | | |
| Jan-09 | <U | 0.0010 | 0.0567 | 0.0010 | 0.0100 | 14976 |
| Feb-09 | <U | 0.0010 | 0.0569 | 0.0010 | 0.0100 | 15040 |
| Mar-09 | <U | 0.0010 | 0.0569 | 0.0010 | 0.0100 | 15022 |
| Apr-09 | J | 0.0015 | 0.0816 | 0.0010 | 0.0100 | 14870 |
| May-09 | J | 0.0015 | 0.0878 | 0.0010 | 0.0100 | 15057 |
| Jun-09 | J | 0.0010 | 0.0592 | 0.0001 | 0.0100 | 15040 |
| Jul-09 | J | 0.0020 | 0.1070 | 0.0001 | 0.0100 | 14420 |
| Aug-09 | <U | 0.0010 | 0.0560 | 0.0010 | 0.0100 | 14788 |
| Sep-09 | <U | 0.0010 | 0.0551 | 0.0010 | 0.0100 | 14557 |
| Oct-09 | <U | 0.0010 | 0.0555 | 0.0010 | 0.0100 | 14668 |
| Nov-09 | <U | 0.0010 | 0.0554 | 0.0010 | 0.0100 | 14627 |
| Dec-09 | J | 0.0013 | 0.0735 | 0.0010 | 0.0100 | 14486 |
| **Total** | J | 0.0143 | 0.8015 | | | 177551 |
| **Avg** | J | 0.0012 | 0.0668 | | | 14796 |

**Notes:**

< - Below the instrument detection limit (0.0025 mg/l)

J - The assocated numerical value is an estimated quantity, which consists of detects and nondetects.

For purposes of the average the nondetect values were calculated as being at the quantitation limit, the actual concentrations were probably lower.

IDL - Instrument Detection Limit

QL - Quantitation Limit

The contract laboratory reported only the IDL not its quantitation level.

The quantitation levels used on this form were calculated by mulplying the IDL by 10, an is the limit of quantitation (see 18th Edition Standard Methods for the Examination of Water and Wastewater, 1992). Where the laboratory reported non-detects or "less than" values, the quantitation level was used.

## Appendix 7-5

# 2009 Copper Sampling

| Month | Maximum | | | IDL (mg/l) | QL (mg/l) | Average Flow (GPD) |
|---|---|---|---|---|---|---|
| | | Concentration (mg/l) | Mass (g/day) | | | |
| Jan-09 | J | 0.0073 | 0.4072 | 0.0030 | 0.0300 | 14839 |
| Feb-09 | J | 0.0044 | 0.2525 | 0.0030 | 0.0300 | 15192 |
| Mar-09 | < | 0.0061 | 0.3382 | 0.0030 | 0.0300 | 14769 |
| Apr-09 | < | 0.0034 | 0.1873 | 0.0030 | 0.0300 | 14557 |
| May-09 | | 0.0135 | 0.7547 | 0.0030 | 0.0300 | 14769 |
| Jun-09 | J | 0.0060 | 0.3167 | 0.0030 | 0.0300 | 13923 |
| Jul-09 | | 0.0117 | 0.6260 | 0.0030 | 0.0300 | 14134 |
| Aug-09 | J | 0.0072 | 0.4138 | 0.0030 | 0.0300 | 15121 |
| Sep-09 | J | 0.0031 | 0.1738 | 0.0030 | 0.0300 | 15050 |
| Oct-09 | J | 0.0090 | 0.5055 | 0.0030 | 0.0300 | 14839 |
| Nov-09 | J | 0.0072 | 0.4055 | 0.0030 | 0.0300 | 14839 |
| Dec-09 | J | 0.0088 | 0.5201 | 0.0030 | 0.0300 | 15544 |
| **Total** | J | 0.0876 | 4.9015 | | | 177576 |
| **Avg** | J | 0.0073 | 0.4085 | | | 14798 |

**Notes:**

< - Below the instrument detection limit (0.0025 mg/l)

IDL - Instrument Detection Limit

QL - Quantitation Limit

The contract laboratory reported only the IDL not its quantitation level.
The quantitation levels used on this form were calculated by mulplying the IDL by 10, an is the limit of quantitation (see 18th Edition Standard Methods for the Examination of Water and Wastewater, 1992).

J - The associated numerical value is an estimated quantity, which consists of detects and nondetects. For purposes of the average the nondetect values were calcuated as being at the quantitation limit the actual concentrations were probably lower.

# Appendix 7-6

## 2009 Lead Sampling

| Month | Maximum | | | | IDL (mg/l) | QL (mg/l) | Average Flow (GPD) |
|---|---|---|---|---|---|---|---|
| | Concentration (mg/l) | | Mass (g/day) | | | | |
| Jan-09 | <U | 0.0025 | | 0.1404 | 0.0025 | 0.0250 | 14839 |
| Feb-09 | <U | 0.0025 | | 0.1438 | 0.0025 | 0.0250 | 15192 |
| Mar-09 | <U | 0.0250 | | 1.3976 | 0.0250 | 0.2500 | 14769 |
| Apr-09 | <U | 0.0125 | | 0.6888 | 0.0125 | 0.1250 | 14557 |
| May-09 | <U | 0.0025 | | 0.1398 | 0.0025 | 0.0250 | 14769 |
| Jun-09 | <U | 0.0025 | | 0.1318 | 0.0025 | 0.0250 | 13923 |
| Jul-09 | <U | 0.0033 | | 0.1766 | 0.0033 | 0.0330 | 14134 |
| Aug-09 | <U | 0.0033 | | 0.1889 | 0.0033 | 0.0330 | 15121 |
| Sep-09 | <U | 0.0033 | | 0.1880 | 0.0033 | 0.0330 | 15050 |
| Oct-09 | <U | 0.0033 | | 0.1854 | 0.0033 | 0.0330 | 14839 |
| Nov-09 | <U | 0.0033 | | 0.1854 | 0.0033 | 0.0330 | 14839 |
| Dec-09 | <U | 0.0033 | | 0.1942 | 0.0033 | 0.0330 | 15544 |
| **Total** | J | 0.0673 | J | 3.7604 | | | 177576 |
| **Avg** | J | 0.0056 | J | 0.3134 | | | 14798 |

**Notes:**

< - Below the instrument detection limit

J - The assocated numerical value is an estimated quantity, which consists of detects and nondetects. For purposes of the average the nondetect values were calculated as being at the quantitation limit, the actual concentrations were probably lower.

IDL - Instrument Detection Limit

QL - Quantitation Limit

The contract laboratory reported only the IDL not its quantitation limit. The quantitation levels used on this form were calculated by mulplying the IDL by 10, an is the limit of quantitation (see 18th Edition Standard Methods for the Examination of Water and Wastewater, 1992). Where the laboratory reported non-detects or 'less than" values, the quantitation level was used.

## APPENDIX 7-7

# 2010 Selenium Sampling

| Batch No. | Selenium | | | |
|---|---|---|---|---|
| | Concentration (mg/l) | | Avg. Mass (g/day) | Max Mass (mg/l) |
| 47 | < | 0.005 | 0.280 | 0.492 |
| 53 | < | 0.005 | 0.280 | 0.492 |
| **Total** | U | 0.010 | 0.560 | 0.984 |
| **Avg** | U | 0.005 | 0.280 | 0.492 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF maximum flow rate of 26,000 GPD.

< - Below Instrument Detection Limits of 0.005 mg/l

U - Indicates the target analyte was analyzed for but not detected above the detection limit.

## Appendix 7-8

## 2009 Silver Sampling

| Month | Maximum Concentration (mg/l) | | | Maximum Mass (g/day) | IDL (mg/l) | QL (mg/l) | Average Flow (GPD) |
|---|---|---|---|---|---|---|---|
| Jan-09 | <U | 0.0050 | | 0.27245 | 0.0050 | 0.05000 | 14839 |
| Feb-09 | <U | 0.0050 | | 0.27245 | 0.00500 | 0.05000 | 15192 |
| Mar-09 | <U | 0.0010 | | 0.05449 | 0.00100 | 0.01000 | 14769 |
| Apr-09 | <U | 0.0010 | | 0.05449 | 0.00100 | 0.01000 | 14557 |
| May-09 | <U | 0.0010 | | 0.05449 | 0.00100 | 0.01000 | 14769 |
| Jun-09 | <U | 0.0050 | | 0.27245 | 0.00500 | 0.05000 | 13923 |
| Jul-09 | <U | 0.0100 | | 0.54489 | 0.01000 | 0.10000 | 14134 |
| Aug-09 | <U | 0.0100 | | 0.54489 | 0.01000 | 0.10000 | 15121 |
| Sep-09 | <U | 0.0050 | | 0.27245 | 0.00500 | 0.05000 | 15050 |
| Oct-09 | <U | 0.0100 | | 0.54489 | 0.01000 | 0.10000 | 14839 |
| Nov-09 | <U | 0.0050 | | 0.27245 | 0.00500 | 0.05000 | 14839 |
| Dec-09 | <U | 0.0050 | | 0.27245 | 0.00500 | 0.05000 | 15544 |
| **Total** | J | 0.0630 | J | 3.43283 | | | 177576 |
| **Avg** | J | 0.0053 | J | 0.28607 | | | 14798 |

**NOTES:**

< - Below instrument detection limit (0.0015 mg/l)

J - The assoicated numerical value is an estimated quantity, which consists of detects and nondetects. quantitation limit, the actual concentrations were probably lower.

IDL - Instrument Detection Limit

QL - Quantitation Limit

and is limit of quantitation (see 18th Edition Standard Methods for the Examination of

Average Mass - estimated using year 2009 LTA of 14,798 GPD.

## APPENDIX 7-9

## 2010 Thallium Sampling

| Batch No. | Thallium | | | |
|---|---|---|---|---|
| | | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | | 0.002 | 0.095 | 0.167 |
| 53 | < | 0.002 | 0.084 | 0.148 |
| **Total** | J | 0.003 | 0.179 | 0.315 |
| **Avg** | J | 0.002 | 0.090 | 0.157 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

< - Below Instrument Detection Limits 0.0015 mg/l

J - The assoicated numerical value is an estimated quantity, which consists of detects and nondetects.

## APPENDIX 7-10

## 2010 Cyanide Sampling

| Batch No. | Cyanide | | |
|---|---|---|---|
| | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | 0.039 | 2.184 | 3.838 |
| 53 | 0.033 | 1.826 | 3.208 |
| **Total** | 0.072 | 4.010 | 7.047 |
| **Avg** | 0.036 | 2.005 | 3.523 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

## Appendix 7-11
## 2010 Zinc Sampling

| Batch No. | Zinc | | |
|---|---|---|---|
| | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | 0.040 | 2.218 | 3.897 |
| 53 | 0.028 | 1.568 | 2.756 |
| **Total** | J 0.068 | 3.786 | 6.653 |
| **Avg** | J 0.034 | 1.893 | 3.327 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

J - The associated numerical value is an estimated quantity, which consists of detects and nondetects. For purposes of the average the nondetect values were calcuated as being at the quantitation limit; the actual concentrations were probably lower.

# APPENDIX 7-12

## 2010 Phenol Sampling

| Batch No. | Phenol | | | |
|---|---|---|---|---|
| | Concentration (mg/l) | | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | < | 0.004 | 0.249 | 0.437 |
| 47 | | 0.003 | 0.194 | 0.342 |
| 53 | < | 0.001 | 0.053 | 0.094 |
| 53 | < | 0.001 | 0.054 | 0.096 |
| **Total** | U | 0.010 | 0.551 | 0.968 |
| **Avg** | U | 0.002 | 0.138 | 0.242 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

< - Below Instrument Detection Limits of 0.000952 mg/l

U - Indicates the target analyte was analyzed for but not detected above the detection limit.

## APPENDIX 7-13

## 2010 Toluene Sampling

| Batch No. | Toluene | | | |
|---|---|---|---|---|
| | | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | | 0.0011 | 0.064 | 0.112 |
| 47 | | 0.0017 | 0.092 | 0.162 |
| 47 | | 0.0013 | 0.072 | 0.126 |
| 53 | < | 0.0003 | 0.014 | 0.025 |
| 53 | < | 0.0003 | 0.014 | 0.025 |
| 53 | < | 0.0003 | 0.014 | 0.025 |
| **Total** | U | 0.0048 | 0.270 | 0.474 |
| **Avg** | U | 0.0008 | 0.045 | 0.079 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

< - Below Instrument Detection Limit of 0.000250 mg/l

U - Indicates the target analyte was analyzed for but not detected above the detection limit.

## APPENDIX 7-14

## 2010 Vinyl Chloride Sampling

| Batch No. | Vinyl Chloride | | | |
|---|---|---|---|---|
| | Concentration (mg/l) | | Avg. Mass (g/day) | Max Mass (g/day) |
| 47 | < | 0.0005 | 0.0280 | 0.0492 |
| 47 | < | 0.0003 | 0.0168 | 0.0295 |
| 47 | < | 0.0005 | 0.0280 | 0.0492 |
| 53 | < | 0.0005 | 0.0280 | 0.0492 |
| 53 | < | 0.0005 | 0.0280 | 0.0492 |
| 53 | < | 0.0005 | 0.0272 | 0.0492 |
| **Total** | U | 0.0028 | 0.1561 | 0.2756 |
| **Avg** | U | 0.0005 | 0.0260 | 0.0459 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

< - Below Instrument Detection Limits 0.0003 mg/l & 0.0005 mg/l

U - Indicates the target analyte was analyzed for but not detected above the detection limit.

## Attachment 7-15
## GC/MS Volatile Compound Sampling

| Compound | Concentration (mg/l) | | Avg. Mass (g/day) | Max Mass (g/day) |
|---|---|---|---|---|
| Acrolein | < | 0.0013 | 0.0700 | 0.1230 |
| Acrylonitrille | < | 0.0010 | 0.0560 | 0.0984 |
| Benzene | < | 0.0003 | 0.0168 | 0.0295 |
| Bis(Chloromethyl)Ether | *< | 0.0248 | 1.3890 | 2.4408 |
| Bromoform | < | 0.0003 | 0.0140 | 0.0246 |
| Bromomethane | < | 0.0003 | 0.0168 | 0.0295 |
| Carbon Tetrachloride | < | 0.0003 | 0.0168 | 0.0295 |
| Chlorobenzene | < | 0.0003 | 0.0140 | 0.0246 |
| Chlorodibromomethane | < | 0.0003 | 0.0168 | 0.0295 |
| Chloroethane | < | 0.0003 | 0.0168 | 0.0295 |
| 2-Chloroethylvinyl Ether | < | 0.0015 | 0.0840 | 0.1476 |
| Chloroform | | 0.0036 | 0.2032 | 0.3571 |
| Dichlorobromoethane | < | 0.0003 | 0.0168 | 0.0295 |
| Dichlorodifluoromethane | < | 0.0003 | 0.0168 | 0.0295 |
| 1,1-Dichloroethane | < | 0.0003 | 0.0168 | 0.0295 |
| 1,2-Dichloroethane | < | 0.0003 | 0.0140 | 0.0246 |
| 1,1-Dichloroethylene | < | 0.0003 | 0.0168 | 0.0295 |
| 1,2-Dichloropropane | < | 0.0003 | 0.0140 | 0.0246 |
| 1,3-Dichloropropylene | < | 0.0003 | 0.0140 | 0.0246 |
| Ethylbenzene | < | 0.0003 | 0.0140 | 0.0246 |
| Methyl Bromide | < | 0.0003 | 0.0168 | 0.0295 |
| Methylene Chloride | < | 0.0020 | 0.1120 | 0.1968 |
| 1,1,2,2-Tetrachloroethane | < | 0.0003 | 0.0140 | 0.0246 |
| trans-1,2- Dichloroethylene | < | 0.0003 | 0.0168 | 0.0295 |
| 1,1,1-Trichloroethane | < | 0.0003 | 0.0182 | 0.0320 |
| 1,1,2-Trichloroethane | < | 0.0003 | 0.0144 | 0.0254 |
| Trichloroethylene | < | 0.0003 | 0.0140 | 0.0246 |
| Trichlorofluoromethane | < | 0.0003 | 0.0164 | 0.0287 |

**Notes:**

Batch 10-47, collected 5/20/10

Batch 10-53, collected 6/3/10

* - Bis(chloromethyl)Ether was not identified in the Tentatively Identified Compound (TIC)

< - Below Instrument Detection Limits (mg/l). The Instrument Detection Limit is the value reported.

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

## Attachment 7-16
## GC/MS Fraction - Acid Compound Sampling

| Compound | Concentration (mg/l) | Avg. Mass (g/day) | Max Mass (g/day) |
|---|---|---|---|
| 2-Chlorophenol | < 0.0021 | 0.1176 | 0.2067 |
| 2,4-Dichlorophenol | < 0.0019 | 0.1066 | 0.1873 |
| 2,4-Dimethylphenol | < 0.0019 | 0.1071 | 0.1882 |
| 4,6-Dinitro-O-Cresol | < 0.0029 | 0.1607 | 0.2825 |
| 2,4-Dinitrophenol | < 0.0048 | 0.2680 | 0.4709 |
| 2-Nitrophenol | < 0.0019 | 0.1071 | 0.1882 |
| 4-Nitrophenol | < 0.0019 | 0.1071 | 0.1882 |
| P-Chloro-M-Cresol | < 0.0029 | 0.1647 | 0.2893 |
| Pentachlorophenol | < 0.0002 | 0.0107 | 0.0188 |
| Phenol | 0.0024 | 0.1344 | 0.2362 |
| 2,4,6-Trichlorophenol | < 0.0019 | 0.1071 | 0.1882 |

**Notes:**

Batches 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

< - Below Instrument Detection Limits (mg/l). The Instrument Detection Limit is the value reported.

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

# Attachment 7-17
## GC/MS Fraction - Base/Neutral Compound Sampling

| Compound | Concentration (mg/l) | | Avg. Mass (g/day) | Max Mass (g/day) |
|---|---|---|---|---|
| Acenphthene | < | 0.0003 | 0.0165 | 0.0290 |
| Acenaphtylene | < | 0.0006 | 0.0344 | 0.0605 |
| Anthracene | < | 0.0006 | 0.0344 | 0.0605 |
| Benzidine | < | 0.0029 | 0.1600 | 0.2812 |
| Benzo (a) Anthracene | < | 0.0002 | 0.0107 | 0.0187 |
| Benzo (a) Pyrene | < | 0.0002 | 0.0107 | 0.0187 |
| 3,4-Benzofluoranthene | < | 0.0002 | 0.0107 | 0.0187 |
| Benzo (ghi) Perylene | < | 0.0002 | 0.0107 | 0.0187 |
| Benzo (k) Fluoranthene | < | 0.0002 | 0.0107 | 0.0187 |
| Bis (2-Chloroethoxy) Methane | < | 0.0029 | 0.1613 | 0.2834 |
| Bis (2-Chloroethyl) Ether | < | 0.0019 | 0.1066 | 0.1872 |
| Bis (2-Chloroisopropyl) Ether | < | 0.0019 | 0.1066 | 0.1872 |
| Bis (2-Ethylhexyl) Phthalate | < | 0.0019 | 0.1066 | 0.1872 |
| 4-Bromophenyl Phenyl | < | 0.0019 | 0.1066 | 0.1872 |
| Butyl Benzyl Phthalate | < | 0.0015 | 0.0826 | 0.1452 |
| 2-Chloronaphthalene | < | 0.0003 | 0.0160 | 0.0281 |
| 4-Chlorophenyl Phenyl | < | 0.0019 | 0.1066 | 0.1872 |
| Chrysene | < | 0.0006 | 0.0346 | 0.0608 |
| Dibenzo (a,h) Anthracene | < | 0.0002 | 0.0107 | 0.0187 |
| 1,2-Dichlorobenzene | < | 0.0019 | 0.1066 | 0.1872 |
| 1,3-Dichlorobenzene | < | 0.0019 | 0.1066 | 0.1872 |
| 1,4-Dichlorobenzene | < | 0.0019 | 0.1066 | 0.1872 |
| 3,3-Dichlorobenzidine | < | 0.0019 | 0.1066 | 0.1872 |
| Diethyl Phthalate | < | 0.0019 | 0.1066 | 0.1872 |
| Dimethyl Phthalate | < | 0.0019 | 0.1066 | 0.1872 |
| Di-N-Butyl Phthalate | < | 0.0019 | 0.1066 | 0.1872 |
| 2,4-Dinitrotoluene | < | 0.0019 | 0.1066 | 0.1872 |
| 2,6-Dinitrotoluene | < | 0.0019 | 0.1066 | 0.1873 |
| Di-N-Octyl Phthalate | < | 0.0029 | 0.1600 | 0.2812 |
| 1,2-Diphenylhydrazine | < | 0.0019 | 0.1066 | 0.1872 |
| Fluoranthene | < | 0.0002 | 0.0107 | 0.0187 |
| Fluorene | < | 0.0002 | 0.0107 | 0.0187 |
| Hexachlorobenzene | < | 0.0015 | 0.0824 | 0.1447 |
| Hexchlorobutadiene | < | 0.0015 | 0.0824 | 0.1447 |
| Hexachlorocyclopentadiene | < | 0.0029 | 0.1600 | 0.2812 |
| Hexachloroethane | < | 0.0019 | 0.1066 | 0.1872 |
| Indeno (1,2,3-cd) Pyrene | < | 0.0002 | 0.0107 | 0.0187 |
| Isophorone | < | 0.0029 | 0.1600 | 0.2812 |
| Napthalene | < | 0.0003 | 0.0160 | 0.0281 |
| Nitrobenzene | < | 0.0029 | 0.1600 | 0.2812 |
| N-Nitrosodimethylamine | < | 0.0019 | 0.1066 | 0.1872 |
| N-Nitrosodi-N-Propylamine | < | 0.0022 | 0.1231 | 0.2163 |
| N-Nitrosodiphenylamine | < | 0.0019 | 0.1066 | 0.1872 |
| Phenanthrene | < | 0.0002 | 0.0107 | 0.0187 |
| Pyrene | < | 0.0003 | 0.0160 | 0.0281 |
| 1,2,4-Trichlorobenzene | < | 0.0019 | 0.1066 | 0.1872 |

**Notes:**

Batch 10-47 collected 5/20/10

Batch 10-53 collected 6/3/10

< - Below Instrument Detection Limits (mg/l). The Instrument Detection Limit is the value reported.

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

## Appendix 7-18

## 2009 Tetrachloroethylene Sampling

| Quarter | Results | | | QL (mg/l) | Avg. Quarterly Flow (gal/day) |
|---|---|---|---|---|---|
| | | (mg/l) | (g) | | |
| 1st Qrt. | <U | 0.0005 | 0.0265 | 0.0045 | 15544 |
| 2nd Qrt. | <U | 0.0005 | 0.0248 | 0.0045 | 14557 |
| 3rd Qrt. | <U | 0.0003 | 0.0161 | 0.0030 | 14134 |
| 4th Qrt. | <U | 0.0003 | 0.0169 | 0.0030 | 14839 |
| **Total** | J | 0.0015 | 0.0842 | | 59074 |
| **Avg.** | J | 0.0004 | 0.0210 | | 14769 |

**NOTES:**

< - Below instrument Detection Limits (mg/l)

The detection limits for Tetrachloroethylene 0.0005 mg/l & 0.0003 mg/l

J - The associated numerical value is an estimated quantity, which consists of nondetects. For purposes of the average the nondetect values were calculated as being at the quantitative limit, the actual concentrations were probably lower.

Avg. Mass - estimated using year 2009 LTA of 14,796 GPD.

Max Mass - calculated using the established WWTF flow rate of 26,000 GPD.

QL - Quantitation Limit

The contract laboratory reported only the IDL not its quantitation limit. The quantitation levels used on this form were calculated by mulplying the IDL by 10, an is the limit of quantitation (see 18th Edition Standard Methods for the Examination of Water and Wastewater, 1992). Where the laboratory reported non-detects or 'less than" values, the quantitation level was used.

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