



Tennessee Valley Authority, Post Office Box 2000, Soddy Daisy, Tennessee 37384-2000

March 15, 2012

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

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT – TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP) ANNUAL STORM WATER MONITORING REPORT FOR 2011

Please find enclosed the 2011 Annual Storm Water Monitoring Report for Sequoyah Nuclear Plant TMSP No. TNR050015. The 30 and 60 day letters previously submitted for storm water outfall numbers 1, 2, and 9 are also enclosed for your information. The alternative certification for Storm Water Outfalls 12 and 13 has been retracted due to increased industrial activity in the areas contributing to this drainage. Sequoyah began monitoring Storm Water Outfalls 12 and 13 during the third quarter of 2011 and will continue to monitor these outfalls in accordance with Sector O of the Tennessee Multi-Sector General Permit.

On July 12, 2011, one of the two diffuser gates of Outfall 101 at Sequoyah failed in the closed position, resulting in loss of flow through the west diffuser pipe. As the Diffuser Pond level continued to increase, the Cooling Tower Basin (containing condenser circulating water used in the secondary, non-nuclear side of the plant, for cooling) overflowed into the river through Storm Water Outfall 14. A copy of the written submission to Mr. Paul E. Davis regarding the diffuser pond release is enclosed.

If you have any questions or need additional information, please contact Brad Love by phone at (423) 843-6714 or by e-mail at bmlove@tva.gov of Sequoyah's Environmental staff.

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.

Sincerely,

John T. Carlin
Site Vice President
Sequoyah Nuclear Plant

Enclosures
cc (Enclosures):

Chattanooga Environmental Field Office
Division of Water Pollution Control
State Office Building, Suite 550
540 McCallie Avenue
Chattanooga, Tennessee 37402-2013

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

TEAS
NRA

| | | |
|---------------|-----------------------------------|--|
| SQN Unit 0 | QUARTERLY STORM WATER SAMPLING | 0-PI-ENV-000-019.Q Rev. 0009 Page 15 of 17 |
|---------------|-----------------------------------|--|

Appendix D
(Page 1 of 1)

CERTIFICATION AND SIGNATURE

"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



Date:

3/15/12

John T. Carlin
Site Vice President
Sequoyah Nuclear Plant

| | | |
|-----------------------|---|---|
| SQN Unit 0 | QUARTERLY STORM WATER SAMPLING | 0-PI-ENV-000-019.Q Rev. 0009 Page 16 of 17 |
|-----------------------|---|---|

**Appendix E
(Page 1 of 1)**

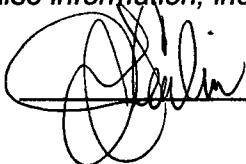
REPRESENTATIVE STORM WATER OF DISCHARGE POINTS

Storm Water Outfall # 8 is considered to be a representative discharge of Storm Water Outfall # 5 based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the Outfall. Storm Water Outfall # 5 consists of approximately 17 acres (740,523 ft²). The runoff coefficient for this area is equivalent to that for Storm Water Outfall # 8 based on the percentages of gravel, asphalt, and impervious surfaces. Storm Water Outfall # 5 drains into the effluent for Storm Water Outfall # 8 and there is no dilution of this storm water with any non-storm water source. Therefore, this effluent should be substantially identical to that effluent from Storm Water Outfall # 8.

Storm Water Outfall # 6 is considered to be a representative discharge of Storm Water Outfall # 7 based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the Outfall. Storm Water Outfall # 7 consists of approximately 6 acres (261,361 ft²). The runoff coefficient for this area is equivalent to that for Storm Water Outfall # 6 based on the percentages of gravel, asphalt, and impervious surfaces. Materials in the area are also equivalent to that for Storm Water Outfall # 6. These consist of empty drums, metal buildings, construction equipment, concrete structures, wood and plastic similar to that equipment stored for in the area of Storm Water Outfall # 6. This effluent should be substantially identical to that effluent from Storm Water Outfall # 6.

Storm Water Outfall # 4 is considered to be a representative discharge of Storm Water Outfall #10 based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the Outfall. Storm Water Outfall # 10 consists of approximately 10 acres (435,602ft²). The runoff coefficient for this area is equivalent to that for Storm Water Outfall # 4 based on the percentages of gravel, asphalt, and impervious surfaces. Material storage is also equivalent to that for Storm Water Outfall # 4. This consists of equipment for later use, metal buildings, concrete structures, wood and plastic similar to that equipment stored for in the area of Storm Water Outfall # 4. This effluent should be substantially identical to that effluent from Storm Water Outfall # 4.

"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  _____

Date: 3/15/12

John T. Carlin
Site Vice President
Sequoyah Nuclear Plant

| | | |
|---------------|-----------------------------------|--|
| SQN Unit 0 | QUARTERLY STORM WATER SAMPLING | 0-PI-ENV-000-019.Q Rev. 0009 Page 17 of 17 |
|---------------|-----------------------------------|--|

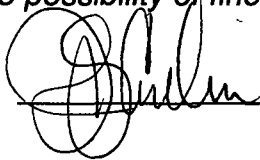
**Appendix F
(Page 1 of 1)**

ALTERNATIVE CERTIFICATION OF STORM WATER POINTS

Material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery or operations, significant materials from past industrial activity that are located in areas of the facility within the drainage area of the Storm Water Outfall Numbers 14 and 20 are not presently exposed to storm water and are not expected to be exposed to storm water for the certification period.

"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



Date:

3/15/12

John T. Carlin
Site Vice President
Sequoyah Nuclear Plant



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 1 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/15/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 16 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|---------------|
| John T. Carlin | Site Vice President |  | 3-15/2 |
| Printed Name | Sequoyah Nuclear Plant Official Title | Signature | Date |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. **Only one sample per calendar year is required** (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

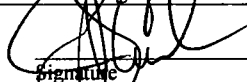
| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 2 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/16/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 9 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President |  | 3-15-12 |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. **Only one sample per calendar year is required** (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh20.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver -- When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 3 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/15/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 3 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President | | 3-15-12 |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



Department of Environment and Conservation - Division of Water Pollution Control
ANNUAL STORM WATER MONITORING REPORT
 for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

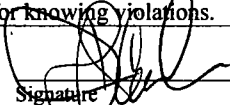
| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 4 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/5/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 2 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|-------------------------------|--|---------------------|
| John T. Carlin | Site Vice President | | |
| Printed Name | Sequoyah Nuclear Plant | Signature  | Date 3-15-12 |
| | Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. **Only one sample per calendar year is required** (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver - When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
 Submit the original completed and signed form to:**

**Enforcement and Compliance Section
 Division of Water Pollution Control
 6th Floor, L&C Annex, 401 Church Street
 Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 6 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/5/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 3 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President | | <u>3-15-12</u> |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. **Only one sample per calendar year is required** (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 8 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/5/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 2 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|--|--|----------------|
| John T. Carlin | Site Vice President | | <u>3-15-12</u> |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh20.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 9 |
| List all TMSP sectors which apply to discharge from this outfall: | 0 | Sample Date: | 1/15/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 6 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President | | <u>3-15-12</u> |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/stmrh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|---|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 11 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/5/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 4 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President | | 3/15/12 |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/stmh20.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver - When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 12 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 9/26/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 0.5 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President | | 3-15-12 |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver - When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

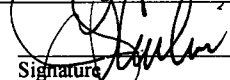
| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 13 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 9/26/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 0.6 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

John T. Carlin Site Vice President
Sequoyah Nuclear Plant
 Printed Name Official Title
 Signature: 
 Date: 3/15/12

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
 Submit the original completed and signed form to:**

**Enforcement and Compliance Section
 Division of Water Pollution Control
 6th Floor, L&C Annex, 401 Church Street
 Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 15 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/16/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 4 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President | | <u>3-15-12</u> |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh20.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
 for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 16 |
| List all TMSP sectors which apply to discharge from this outfall: | 0 | Sample Date: | 1/5/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 0.2 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President | | <u>3-15-12</u> |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. **Only one sample per calendar year is required** (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
 Submit the original completed and signed form to:**

**Enforcement and Compliance Section
 Division of Water Pollution Control
 6th Floor, L&C Annex, 401 Church Street
 Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 17 |
| List all TMSP sectors which apply to discharge from this outfall: | 0 | Sample Date: | 4/15/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 4 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President | | 3-15-12 |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/stmnh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 18 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/5/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 2 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President |  | 3-15-12 |
| Printed Name | Sequoyah Nuclear Plant Official Title | Signature | Date |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



ANNUAL STORM WATER MONITORING REPORT
 for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|---|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 19 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/5/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 1 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|--------------------------------|---|---------------|-----------------|
| John T. Carlin Printed Name | Site Vice President Sequoyah Nuclear Plant Official Title | Signature | 3-15-12 Date |
|--------------------------------|---|---------------|-----------------|

INSTRUCTIONS

1. The purpose of this form is to report storm water (SW) monitoring results under the TMSP. **Only one sample per calendar year is required** (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
2. If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
3. Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:

Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534



ANNUAL STORM WATER MONITORING REPORT
for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 21 |
| List all TMSP sectors which apply to discharge from this outfall: | 0 | Sample Date: | 1/5/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 1 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|--|----------------|
| John T. Carlin | Site Vice President | | 3/15/12 |
| Printed Name | Sequoyah Nuclear Plant Official Title | | |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
Submit the original completed and signed form to:**

**Enforcement and Compliance Section
Division of Water Pollution Control
6th Floor, L&C Annex, 401 Church Street
Nashville, TN 37243-1534**



DEPARTMENT OF ENVIRONMENT AND CONSERVATION - DIVISION OF WATER POLLUTION CONTROL
ANNUAL STORM WATER MONITORING REPORT
 for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 22 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/14/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | <0.1 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|-----------------------|---|-----------|---------|
| John T. Carlin | Site Vice President Sequoyah Nuclear Plant | | 3-12-10 |
| Printed Name | Official Title | Signature | Date |

INSTRUCTIONS

1. The purpose of this form is to report storm water (SW) monitoring results under the TMSP. **Only one sample per calendar year is required** (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/stwmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
2. If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
3. Low Concentration Waiver - When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
 Submit the original completed and signed form to:**

**Enforcement and Compliance Section
 Division of Water Pollution Control
 6th Floor, L&C Annex, 401 Church Street
 Nashville, TN 37243-1534**



Department of Environment and Conservation - Division of Water Pollution Control
ANNUAL STORM WATER MONITORING REPORT
 for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 23 |
| List all TMSP sectors which apply to discharge from this outfall: | 0 | Sample Date: | 1/16/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 5 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|----------------|---|-----------|---------|
| John T. Carlin | Site Vice President Sequoyah Nuclear Plant | | 3/15-12 |
| Printed Name | Official Title | Signature | Date |

INSTRUCTIONS

1. The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/strmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
2. If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
3. Low Concentration Waiver - When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
 Submit the original completed and signed form to:**

**Enforcement and Compliance Section
 Division of Water Pollution Control
 6th Floor, L&C Annex, 401 Church Street
 Nashville, TN 37243-1534**



DEPARTMENT OF ENVIRONMENT AND CONSERVATION - DIVISION OF WATER POLLUTION CONTROL
ANNUAL STORM WATER MONITORING REPORT
 for Storm Water Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

| | | | |
|--|--|-----------------|---------------------|
| Facility Name: | TVA - Sequoyah Nuclear Plant | TMSP Number: | TNR050015 |
| Contact Person: | Brad Love - Environmental Scientist | Phone Number: | 423-843-6714 |
| This report is submitted for the following calendar year (e.g. 2007): | 2011 | Outfall Number: | SW 24 |
| List all TMSP sectors which apply to discharge from this outfall: | O | Sample Date: | 1/5/2011 |
| LOW CONCENTRATION WAIVER (See Instructions Note 3): List all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived. | | | |
| Parameters: | | | |

DIRECTIONS: In the spaces below, provide the results of storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the permit and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be collected by grab technique.

| Parameter | Benchmark (mg/L) | Annual Sample Result (mg/L) | Parameter (continued) | Benchmark (mg/L) | Annual Sample Result (mg/L) |
|-----------------|------------------|-----------------------------|------------------------------|------------------|-----------------------------|
| Aluminum, Total | 0.75 | N/A | Magnesium, Total | 0.064 | N/A |
| Ammonia | 4.0 | N/A | Mercury, Total | 0.0024 | N/A |
| Arsenic, Total | 0.15 | N/A | Nickel, Total | 0.875 | N/A |
| BOD, 5-Day | 30 | N/A | Nitrate + Nitrite Nitrogen | 0.68 | N/A |
| Cadmium, Total | 0.0021 | N/A | Oil and Grease | 15 | N/A |
| Chromium, Total | 1.8 | N/A | pH | 5.0-9.0 | N/A |
| COD | 120 | N/A | Phenols | 0.016 | N/A |
| Copper, Total | 0.018 | N/A | Phosphorus, Total (as P) | 2.0 | N/A |
| Cyanide, Total | 0.022 | N/A | Selenium, Total | 0.005 | N/A |
| Fluoride | 1.8 | N/A | Silver, Total | 0.0038 | N/A |
| Iron, Total | 5.0 | 5 | Total Suspended Solids (TSS) | 150 | N/A |
| Lead, Total | 0.156 | N/A | Zinc, Total | 0.395 | N/A |

CERTIFICATION AND SIGNATURE Make all entries in ink. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|----------------|---|-----------|---------|
| John T. Carlin | Site Vice President Sequoyah Nuclear Plant Official Title | | 3-15-12 |
| Printed Name | | Signature | Date |

INSTRUCTIONS

- The purpose of this form is to report storm water (SW) monitoring results under the TMSP. Only one sample per calendar year is required (except Sectors J & H, for more details see the TMSP at <http://state.tn.us/environment/permits/stwmh2o.shtml>). Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one sample is collected at any outfall, submit the average results of all monitoring data (for calculating average, use 1/2 of a detection level, if parameter was not detected). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The completed form must be submitted by March 31 of the following year, e.g. monitoring required during 2007 calendar year is due by March 31, 2008.
- If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the benchmark concentration, the permittee must inform The Division of Water Pollution Control's (the Division's) local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its storm water pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the benchmark concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
- Low Concentration Waiver - When the average concentration for a pollutant calculated from monitoring data collected from the first four calendar years of monitoring is less than the benchmark concentration, a facility may waive monitoring requirements in the last annual monitoring period. This form should be used for certification of low concentration waiver provision.

**Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records.
 Submit the original completed and signed form to:**

**Enforcement and Compliance Section
 Division of Water Pollution Control
 6th Floor, L&C Annex, 401 Church Street
 Nashville, TN 37243-1534**



Tennessee Valley Authority, Post Office Box 2000, Soddy Daisy, Tennessee 37384-2000

February 25, 2011

Chattanooga Environmental Field Office
Division of Water Pollution Control
State Office Building, Suite 550
540 McCallie Avenue
Chattanooga, Tennessee 37402

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT - TENNESSEE STORM WATER MULTI-SECTOR GENERAL PERMIT FOR INDUSTRIAL ACTIVITIES PERMIT NO. TNR050015 SECTOR O EXCEEDANCE OF THE BENCHMARK MONITORING REQUIREMENT.

Please find enclosed the thirty day notification and the lab analysis for the exceedance of the benchmark monitoring requirement for total recoverable iron for Storm Water Outfall Numbers 1, 2, and 9.

Description of Event

Tennessee Storm Water Multi-Sector General Permit for Industrial Activities Sector O requires annual monitoring of total recoverable iron. Sequoyah Nuclear Plant sampled for total recoverable iron on January 15, 2011 and January 16, 2011. The storm water analytical monitoring results were received on February 4, 2011. The analytical monitoring results for Storm Water Outfalls Nos. 1, 2, and 9 exceeded the benchmark monitoring requirement for total recoverable iron as stated in Table O-2, Benchmark Monitoring Requirements for Steam Electric Power Generating Facilities. The storm water event was triggered by accumulated snowfall and associated snow melt runoff. The analytical results can be seen tabulated below in Table 1.

Table 1. Storm Water Annual Iron Exceedance Values

| Storm Water Outfall Number | Sample Date | Sample Analysis Received Date | Analytical Results (mg/L) | Benchmark Monitoring Requirement (mg/L) |
|----------------------------|-------------|-------------------------------|---------------------------|---|
| 1 | 1/15/2011 | 2/04/2011 | 16.0 | 5 |
| 2 | 1/16/2011 | 2/04/2011 | 9.0 | 5 |
| 9 | 1/15/2011 | 2/04/2011 | 5.7 | 5 |

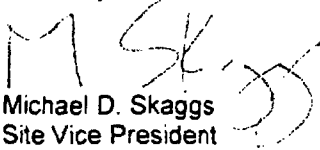
The Tennessee Storm Water Multi-Sector General Permit for Industrial Activities requires informing the division's local Environmental Field Office (EFO) within 30 days from the time storm water monitoring results were received describing the likely cause of the exceedance.

Likely Cause of the Exceedance

The likely cause of the exceedance of the benchmark monitoring requirement for total recoverable iron is elevated background iron concentration in the soil around the storm water outfalls (based on historical sampling) and the need for more effective best management practices (BMPs). Sequoyah is examining the use of more effective filtration methods at these outfalls.

If you have any questions or need additional information please contact Brad Love at (423) 843-6714 or Stephanie Howard at (423) 843-6700 of Sequoyah's Environmental staff.

Sincerely,


Michael D. Skaggs
Site Vice President
Sequoyah Nuclear Plant

Enclosures
cc (Enclosures):
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859
 Tax I.D. 62-0814289
 Est. 1970

REPORT OF ANALYSIS

February 04, 2011

Brad Love
 TVA-Sequoyah Nuclear Plant
 P.O.Box 2000
 Soddy-Daisy, TN 37384

Date Received : 02/03/11 09:15
 Description : Annual Storm Water NPDES Samples

Sample ID : SW 1

Collected By : Chris Randolph
 Collection Date : 01/15/11 15:15

ESC Sample # : L500219-01

Site ID :

Project # :

| Parameter | Result | Det. Limit | Units | Method | Prep | PID | Analyzed | AID |
|-----------|--------|------------|-------|--------|---------------|-----|---------------|-----|
| Iron | 16. | 0.10 | mg/l | 200.7 | 02/03/11 1504 | 528 | 02/04/11 1346 | ALT |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
 KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
 AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

Notes:

The reported analytical results relate only to the sample submitted
 This report shall not be reproduced, except in full, without the written approval from ESC.
 Reported: 02/04/11 15:41 Printed: 02/04/11 15:46



12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859
 Tax I.D. 62-0814289
 Est. 1970

REPORT OF ANALYSIS

February 23, 2011

Brad Love
 TVA-Sequoyah Nuclear Plant
 P.O.Box 2000
 Soddy-Daisy, TN 37384

Date Received : 02/03/11 09:15
 Description : Annual Storm Water NPDES Samples
 Sample ID : SW 2
 Collected By : Chris Randolph
 Collection Date : 01/16/11 12:22

ESC Sample # : L500219-02
 Site ID :
 Project # :

| Parameter | Result | Det. Limit | Units | Method | Prep | PID | Analyzed | AID |
|-----------|--------|------------|-------|--------|---------------|-----|---------------|-----|
| Iron | 9.0 | 0.10 | mg/l | 200.7 | 02/03/11 1504 | 528 | 02/04/11 1348 | ALT |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
 KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
 AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

Notes:

The reported analytical results relate only to the sample submitted
 This report shall not be reproduced, except in full, without the written approval from ESC.
 Reported: 02/04/11 15:41 Revised: 02/23/11 08:29



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
Tax I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

February 04, 2011

Brad Love
TVA-Sequoyah Nuclear Plant
P.O.Box 2000
Soddy-Daisy, TN 37384

Date Received : 02/03/11 09:15
Description : Annual Storm Water NPDES Samples
Sample ID : SW 9
Collected By : Chris Randolph
Collection Date : 01/15/11 12:02

ESC Sample # : L500219-07

Site ID :

Project # :

| Parameter | Result | Det. Limit | Units | Method | Prep | PID | Analyzed | AID |
|-----------|--------|------------|-------|--------|---------------|-----|---------------|-----|
| Iron | 5.7 | 0.10 | mg/l | 200.7 | 02/03/11 1504 | 528 | 02/04/11 1411 | ALT |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - .11742, NJ - TN002, WI - 998093910

Notes:

The reported analytical results relate only to the sample submitted
This report shall not be reproduced, except in full, without the written approval from ESC.
Reported: 02/04/11 15:41 Printed: 02/04/11 15:46



Tennessee Valley Authority, Post Office Box 2000, Soddy Daisy, Tennessee 37384-2000

March 29, 2011

Chattanooga Environmental Field Office
Division of Water Pollution Control
State Office Building, Suite 550
540 McCallie Avenue
Chattanooga, Tennessee 37402

**TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT - TENNESSEE
STORM WATER MULTI-SECTOR GENERAL PERMIT FOR INDUSTRIAL ACTIVITIES
PERMIT NO. TNR050015 SECTOR O EXCEEDANCE OF THE BENCHMARK
MONITORING REQUIREMENT.**

Please find enclosed the sixty day notification of the review of Sequoyah Nuclear Plant's Storm Water Pollution Prevention Plan (SWPPP) and summary of the Best Management Practices (BMPs) modifications and additions for the exceedance of the benchmark monitoring requirement for total recoverable iron at Storm Water Outfall Nos. 1, 2, and 9.

Description of Event

Tennessee Storm Water Multi-Sector General Permit for Industrial Activities Sector O requires annual monitoring of total recoverable iron. Sequoyah Nuclear Plant sampled for total recoverable iron on January 15, 2011 and January 16, 2011. The storm water analytical monitoring results were received on February 4, 2011. The analytical monitoring results for Storm Water Outfalls Nos. 1, 2, and 9 exceeded the benchmark monitoring requirement for total recoverable iron as stated in Table O-2, Benchmark Monitoring Requirements for Steam Electric Power Generating Facilities. The storm water event was triggered by accumulated snowfall and associated snow melt runoff. The analytical results can be seen tabulated below in Table 1.

Table 1. Storm Water Annual Iron Exceedance Values

| Storm Water Outfall Number | Sample Date | Sample Analysis Received Date | Analytical Results (mg/L) | Benchmark Monitoring Requirement (mg/L) |
|----------------------------|-------------|-------------------------------|---------------------------|---|
| 1 | 1/15/2011 | 2/04/2011 | 16.0 | 5 |
| 2 | 1/16/2011 | 2/04/2011 | 9.0 | 5 |
| 9 | 1/15/2011 | 2/04/2011 | 5.7 | 5 |

Sequoyah Nuclear Plant's SWPPP has been reviewed to determine the modifications and additions to the plan which would assist in reducing the iron effluent concentration at Storm Water Outfall Nos. 1, 2, and 9. A brief summary of the proposed modifications, including a timetable for implementation, follows.

Storm Water No. 1

Per the SQN SWPPP, there are no paved surfaces in this drainage area. Ground cover consists of rip-rap and grass.

The following modifications will be made by 6/10/11: Gravel will be added to the base of the hill prior to the culvert, rip rap will be added to the drainage ditch, and two check dams will be incorporated into the drainage ditch.

Storm Water No. 2

Per the SQN SWPPP, there are no paved surfaces in this drainage area. Ground cover consists of crushed stone, gravel, and grass. Drainage ditches are equipped with check dams as BMPs.

The following modifications will be made by 6/10/11: More gravel will be added in the drainage area. Straw bales will be placed along the perimeter of the chemical injection skid.

Storm Water No. 9

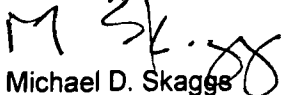
Per the SQN SWPPP, there are no paved surfaces in this drainage area. Ground cover consists of rip-rap and crushed stone.

The following modifications will be made by 06/10/11: Gravel will be added in the low lying and bare spots of the drainage area. Rip rap will be added to the drainage ditches and check dams will be incorporated. The existing straw bales will be replaced.

If you have any questions or need additional information, please contact Brad Love at (423) 843-6714 or Stephanie Howard at (423) 843-6700 of Sequoyah's Environmental staff.

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.

Sincerely,



Michael D. Skaggs
Site Vice President
Sequoyah Nuclear Plant

cc:
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555



Tennessee Valley Authority, Post Office Box 2000, Soddy Daisy, Tennessee 37384-2000

July 14, 2011

Mr. Paul E. Davis, Director
Division of Water Pollution Control
Department of Environment and Conservation
6th Floor, L & C Annex
401 Church Street, Nashville, TN 37243

Dear Mr. Davis:

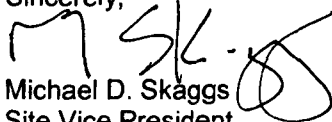
TENNESSEE VALLEY AUTHORITY (TVA) - SEQUOYAH NUCLEAR PLANT NPDES PERMIT NO. TN0026450 - WRITTEN SUBMISSION REGARDING DIFFUSER POND RELEASE

TVA is providing written notification for the subject release that occurred on July 12, 2011. The verbal notification for the diffuser pond release was provided by telephone notification to you via voice message on July 13, 2011, at 0023 and to Dr. Richard Urban with the Chattanooga Environmental Field Office (EFO) on July 13, 2011, at 0740. Please see the Attachment (enclosed) for details of the event. Site personnel visually surveyed the near-shore area by foot and observed no fish distress, fish mortality, abnormal bird migration, oil sheen, or floating solids during the early evening hours of the event.

If you have any questions or need additional information, please contact Stephanie Howard of Sequoyah's Environmental staff at (423) 843-6700.

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.

Sincerely,



Michael D. Skaggs
Site Vice President
Sequoyah Nuclear Plant

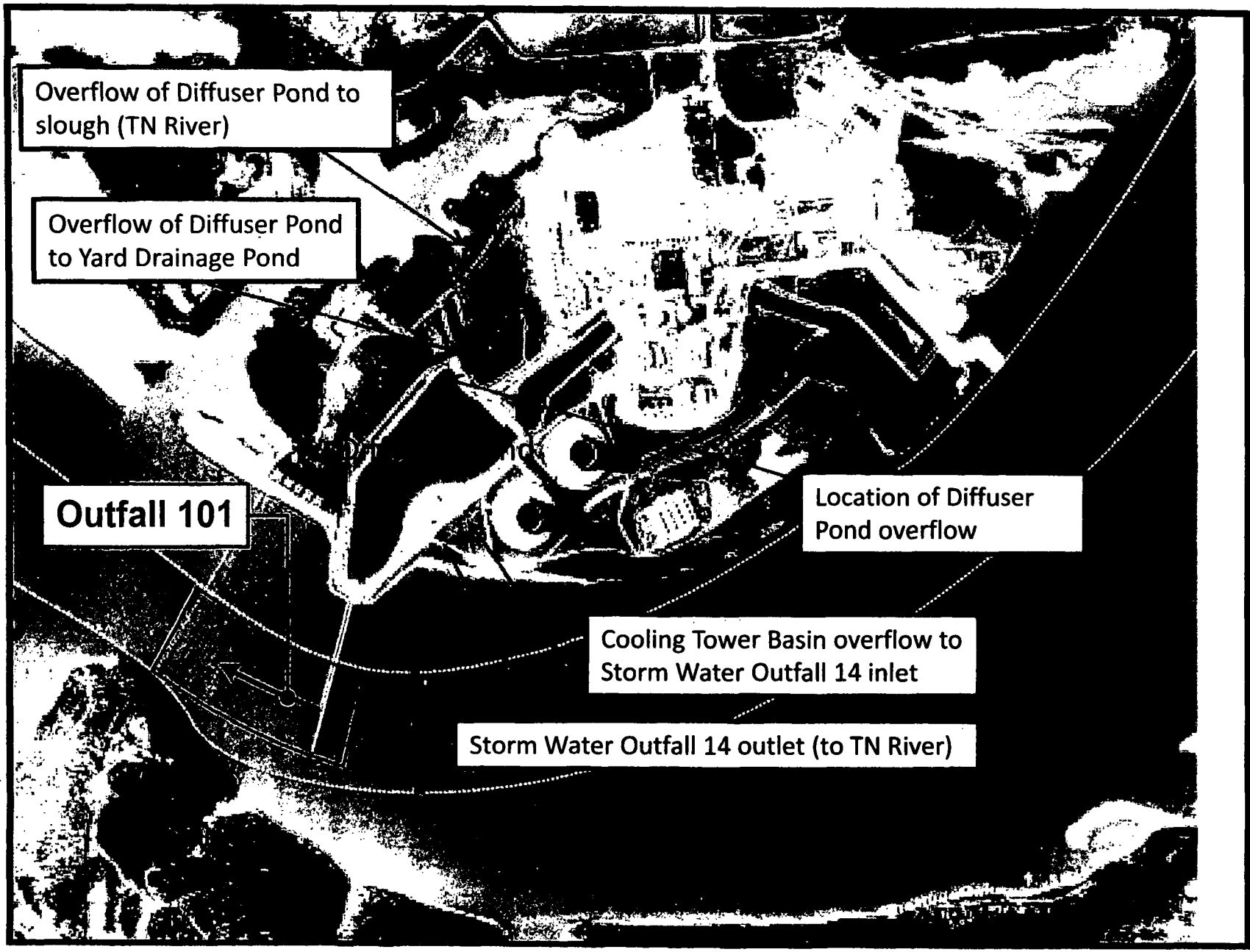
Enclosures

cc (Enclosures):

Chattanooga Environmental Field Office
Division of Water Pollution Control
State Office Building, Suite 550
540 McCallie Avenue
Chattanooga, Tennessee 37402-2013

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Sequoyah Nuclear Plant – Photo Showing Diffuser Pond Overflow



Attachment
Sequoyah Nuclear Plant Diffuser Pond Release
07/12/2011

Description of the Discharge and Determination of Cause:

At approximately 15:45 EST on 7/12/11, one of the two diffuser gates at Sequoyah failed in the closed position, resulting in loss of flow through the west diffuser pipe. The east diffuser pipe remained open and continued to discharge via Outfall 101. Plant personnel made several unsuccessful attempts to raise the diffuser gate utilizing divers, multiple rigging techniques, and cranes with various capacities.

At approximately 20:00 EST, the northwest corner of the Diffuser Pond overflowed into a drainage ditch to the Yard Drainage Pond. The drainage ditch is designed to route storm water from the construction and demolition landfill to the Yard Drainage Pond. The Diffuser Pond contains predominantly condenser circulating water (CCW) used in the secondary (non-nuclear) side for cooling along with yard drainage from the Yard Drainage Pond and low volume waste from the Low Volume Waste Treatment Pond (IMP 103).

Due to increasing water level in the Yard Drainage Pond, the flow also started to move westward through a heavily vegetated area approximately 0.10 mile to a slough at 21:30 EST. This slough is between the Sequoyah Training Center and site contractor parking lot. As pond levels continued to increase, the Cooling Tower Basin (containing CCW) overflowed into the river through Storm water Outfall 14 (SW 14) located near the cooling towers. The Diffuser Pond never breached the dike between the Diffuser Pond and the Tennessee River.

When it was determined that the diffuser gate could not be opened and pond levels continued to rise, both units were derated to 85% power. This allowed the safe removal of two CCW pumps from service, reducing input into the Diffuser Pond by approximately 374,000 gpm. The cooling towers remained in service during this event and are still in operation.

During the releases, site personnel visually monitored by boat and land Outfall 101 and the overflow to the slough for floating solids and debris and none were observed. Site personnel visually surveyed the near-shore area by foot and observed no fish distress, fish mortality, abnormal bird migration, oil sheen, or floating solids during the early evening hours of the event. This was confirmed by boat with TVA biologists on 7/13/11. At this time, SQN is unable to determine the volume of the releases.

Period of Discharge to the Tennessee River:

The Diffuser Pond started to discharge to the slough at 21:30 EST on 7/12/11 and continued until 01:00 EST on 7/13/11. The Cooling Tower Basin discharged to SW 14 for a maximum of four hours. The storm water outfall was observed at 21:00 EST on 7/12/11 to have no flow. However at 23:00 EST, flow was observed. At 00:50 EST on 7/13/11, flow at SW 14 had stopped.

Steps Being Taken to Reduce, Eliminate, and Prevent Recurrence

SQN has documented the release in the TVA Corrective Action Program and is in the process of determining corrective actions to reduce and prevent recurrence of these releases. Updates will be provided in the July DMR.

To date, two CCW pumps remain out of service in order to reduce flow entering the Diffuser Pond. This has been effective in both lowering the Diffuser Pond level and stopping the releases.

The Diffuser Pond gate closed due to the failure of pulley components during gate maintenance. On 7/13/11, an attempt to lift the gate was unsuccessful. SQN continued to work through this issue by installing new pulley components directly to the gate in an attempt to use the existing hoist system to lift it. The gate was lifted and removed at approximately 15:00 EST on 7/14/11. The Diffuser Pond water level continues to decrease to normal levels.

Additional Details:

The Diffuser Pond water was sampled just prior to entering the slough at 00:10 EST on 7/13/11. The temperature was 94.8 deg F. Oil and grease (O&G) and Total Suspended Solids (TSS) from this location were also collected and are currently pending analysis. It should be noted that the temperature from a grab sample taken at in the south end of the Diffuser Pond at 23:00 EST on 7/12/11 was 102 deg F.

In addition, plant personnel mobilized a boat and crew to monitor the slough for temperature, pH, TSS, O&G, and Total Residual Chlorine (TRC). Results of samples taken in the slough are:

| Sample Location | Date | Time (EST) | Temperature (°F) | TRC (mg/L) | pH |
|--|----------|------------|------------------|------------|------|
| Water at point of entry in slough | 07/13/11 | 00:48 | 91.8 | 0.09 | 6.75 |
| Sample at 30 yards from point of entry | 07/13/11 | 00:37 | 87.5 | 0.07 | 8.07 |
| Water at point of entry in slough | 07/13/11 | 01:39 | 88.1 | 0.08 | 7.21 |
| Sample at 30 yards from point of entry | 07/13/11 | 01:48 | 88.6 | 0.06 | 7.23 |

Note: These samples were taken to determine representative conditions in the slough and cannot be compared directly with the NPDES permit limits for Outfall 101.

Note: TSS and O&G samples were collected and sent to an offsite laboratory for analyses as a precautionary measure.

Note: The TRC values are within the permit limit of 0.1 mg/L. It is suspected that the results noted above are high due to manganese interference which is commonly seen in river sample matrix. A sample of the river was collected to determine background. The sample was 0.05 mg/L, confirming the interference. The TRC results above are uncorrected.