



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

March 16, 2001

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

Dear Storm Water Coordinator:

WATTS BAR NUCLEAR PLANT (WBN) - TENNESSEE MULTI-SECTOR GENERAL PERMIT
(TMSP) - PERMIT NO. TNR051343 - FOURTH YEAR STORM WATER MONITORING REPORT

In accordance with Sectors O and L of the WBN Permit, enclosed is the original form and one copy of the completed Storm Water Monitoring Report for each storm water outfall. These results are being submitted for the fourth year monitoring requirements.

The storm water samples were collected during three separate storm events in 2000. On 2/12/2000, 2 of 5 storm water outfalls were sampled during a qualifying event which occurred over 10 hours for a total of 1.05 inches of rainfall. On 6/13/2000, 1 of 5 storm water outfalls were sampled during a qualifying event which occurred over 2 hours for a total of 0.21 inches of rainfall. The third event on 6/28/2000, 4 of 5 storm water outfalls were sampled during a qualifying event which occurred over 6.7 hours for a total of 2.23 inches of rainfall. The analytical results for these three events are included with the outfalls.

Extended drought conditions between July and December produced weather conditions that prohibited the collection of storm water samples. During this time frame twelve qualifying events occurred that may have produced runoff from the five outfalls. Two attempts to sample were made, but no flow was observed. Also, the first half hour of runoff from eight of these events took place during non-work hours, or during hazardous conditions which prevented personnel from collecting samples, had they been present during these events. Consequently, WBN was unable to collect storm water samples for the third and fourth quarters in 2000.

Please contact me at (423) 365-8005 if you have any questions regarding these forms.

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 or imprisonment for knowing violations.

Sincerely,

Robert J. Crawford
Environmental Supervisor

Enclosure
cc: See Page 2

IE25

Tennessee Department of Environment & Conservation
Page 2
March 16, 2001

cc (Enclosure):

Tennessee Department of Environment and Conservation
Division of Water Pollution Control
Chattanooga Environmental Assistance Center
540 McCallie Avenue, Suite 550
Chattanooga, Tennessee 37402

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



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)
STORM WATER MONITORING REPORT

FACILITY NAME TVA - Watts Bar Nuclear Plant TMSP NUMBER TNR051343
ADDRESS P.O. Box 2000 PHONE NUMBER (423) 365-8005
CITY Spring City ZIP 37381 COUNTY Rhea CONTACT PERSON Robert J. Crawford

Indicate whether this storm water monitoring report (SWMR) is being submitted for the 2nd year's monitoring requirements or the 4th year's monitoring requirements: ☐ 2nd year ☒ 4th year

List the industry sector(s) which apply(ies) to this outfall's storm water discharge (i.e., A, B, C, D, etc.):

☐ 0 ☐ ☐

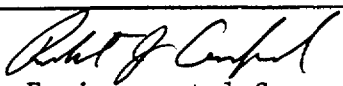
Outfall No.: S.W. 1

Note: Read instructions on back
before completing this form.

Designate the outfall with a three-character code (e.g., 001 or SW1, etc.). In the spaces below, provide the results of quarterly storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the Multi-Sector General Permit apply to this discharge. Look up your sector(s) in the permit, and check the parameters which apply.

Effluent Characteristic	Cut-Off Concentration	Units	Sample Type	Quarterly Monitoring Results (mg/l)				Average of four quarters
				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
Aluminum, Total Rec.	0.75	mg/l	Grab					
Ammonia	4.0	mg/l	Grab					
Arsenic, Total Rec.	0.17	mg/l	Grab					
BOD, 5-Day	30	mg/l	Grab					
Cadmium, Total Rec.	0.016	mg/l	Grab					
Chemical Oxy Demand	120	mg/l	Grab					
Chromium, Total Rec.	0.200	mg/l	Grab					
Copper, Total Rec.	0.064	mg/l	Grab					
Cyanide, Total	0.064	mg/l	Grab					
Fluoride	n/a	mg/l	Grab					
X Iron, Total Rec.	5.0	mg/l	Grab	*	0.84	*	*	0.84
Lead, Total Rec.	0.082	mg/l	Grab					
Magnesium, Total Rec.	0.064	mg/l	Grab					
Mercury, Total Rec.	0.0024	mg/l	Grab					
Nitrate plus Nitrate Ntr.	0.68	mg/l	Grab					
Oil and Grease	15	mg/l	Grab					
pH	5.0-9.0	s.u.	Grab	s.u.	s.u.	s.u.	s.u.	s.u.
Phosphorus	2.0	mg/l	Grab					
Phosphorus, Total (as P)	n/a	mg/l	Grab					
Selenium, Total Rec.	0.24	mg/l	Grab					
Silver, Total Rec.	0.032	mg/l	Grab					
Total Suspended Solids	200	mg/l	Grab					
Zinc, Total Rec.	0.117	mg/l	Grab					

Additional Characteristics (if requested)

				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
				*	6/13/00	*	*
Dates samples were collected: (Month/Day/Year)							
Names of laboratory(s) that analyzed samples <u>TVA - Environmental Chemistry Laboratory</u>							
Attach copy(ies) of the lab sheet(s) for the above data. * See certification							
I certify under penalty of law this document and all its attachments were prepared under my direction or 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.							
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER				DATE			
William R. Lagergren WBN Site Vice-President				 Environmental Supervisor			
TYPED OR PRINTED				SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			
				MONTH: 3 DAY: 16 YEAR: 01			

Instructions

- The purpose of this form is to report storm water discharge monitoring results under the Tennessee Storm Water Multi-Sector General Permit (TMSP). You must submit the form with results by March 31 of the year following the year monitoring is required. For example, monitoring required during 1998 is due by March 31, 1999.
- The permit is divided into 30 different industry sectors and in some cases, subsectors. Not all industry sectors or subsectors are required to perform monitoring of storm water discharges. Refer to the permit itself to determine which sectors of the permit apply to discharges from your facility, and to determine whether or not the storm water discharges at your facility must be sampled. If so, determine which parameters must be monitored.

Examples Textile Mill.....Sector V.....Not required to perform analytical monitoring

Automobile Salvage Yard.....Sector M.....Must sample its storm water discharges for Total Suspended Solids, Aluminum, Iron, and Lead.
- The Tennessee Multi-Sector General Permit requires a facility to monitor its storm water discharge(s) once per quarter during calendar year 1998 and once per quarter during calendar year 2000. An exception to this is noted below in instruction 4.
- For a given outfall, if results of the second year's monitoring for a parameter average less than the cut-off concentration, the facility can waive monitoring requirements for this parameter in the fourth year. To be eligible for this waiver, the facility must collect and analyze samples for all four quarters of the second year and must submit these results on time according to instruction 1. To take advantage of this option, the facility operator must submit, in lieu of the fourth year's monitoring results, a statement certifying industrial operations have not changed substantially since the second year's monitoring, and the same or improved storm water management controls are in place.
- For a new facility obtaining permit coverage during 1998, sampling must be conducted for the remaining quarters of the 1998 calendar year. For example, if a facility obtains permit coverage in June, 1998, it must conduct sampling in the second and third quarters of 1998 and submit those results by March 31, 1999. Such a facility may seek a waiver from monitoring in the year 2000 (as described above in instruction 4.) by monitoring in the first quarter(s) of 1999 since a total of four consecutive sampling events are required to obtain the waiver.
- In the spaces provided in the table, provide the results of quarterly storm water monitoring for the designated outfall. After the 4th quarter's results are tabulated, average the quarterly monitoring results, and record the average value in the last column of the table. For results reported as "less than" a certain concentration, use one half of that concentration for the purpose of averaging. For each quarter, give the date when the storm water event was sampled. If results were taken from more than one storm event for a given quarter, use the date of the last sample. Also give the name(s) of laboratories used to perform chemical analyses. Complete a separate form for each outfall sampled.
- If the results for a given parameter exceed the cutoff concentration for two consecutive samples, then you must report this occurrence to the appropriate field office (as referenced in your permit) within 30 days of your becoming aware of the exceedance.
- Be sure this form is complete, signed and dated before you submit it. Keep a copy of the completed form for your records.
- Submit the original form and one copy to the following address:

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



TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL CHEMISTRY LABORATORY
1101 Market Street, CC 1A-C
Chattanooga, Tennessee 37402-2801

NPDES Final Data Report

Customer Address: Ron Wicker
MOB 1T-WBN

Location Code: WBN

Field ID: PN3-SW-1

Sample Description: Stormwater Sample 1

Permit Number: TN0020168

Discharge Number:

Method of Transport: TVA Mail

Cont. Flow (MGD):

pH (Field):

Sample ID: AA06730

LIF ID: 00060094

Matrix: Water

Date Collected: 06/13/2000

Time Collected: 17:10 EDT

Date Received: 06/16/2000

Time Received: 7:20

Project Manager: Clay C. Cherry

Plant: WBN

Project Account Code: 0008GW0

Regulation: NPDES

Analyte	CAS Number ¹	Result	Units	MDL ²	Analysis Date	Analysis Time	Analyst	Method Reference
Iron, Total	7439-89-6	0.84	mg/L	0.01	06/20/2000	14:24	LRP	EPA 200.7
Metals Digestion for ICP		Complete			06/20/2000	11:00	MAA	

Sample Comments: None



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)
STORM WATER MONITORING REPORT

FACILITY NAME TVA - Watts Bar Nuclear Plant
ADDRESS P.O. Box 2000
CITY Spring City ZIP 37381 COUNTY Rhea

TMSP NUMBER TNR051343
PHONE NUMBER (423) 365-8005
CONTACT PERSON Robert J. Crawford

Indicate whether this storm water monitoring report (SWMR) is being submitted for the 2nd year's monitoring requirements or the 4th year's monitoring requirements:

☐ 2nd year ☒ 4th year

List the industry sector(s) which apply(ies) to this outfall's storm water discharge (i.e., A, B, C, D, etc.):

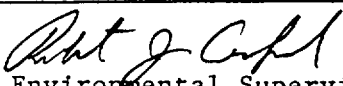
Note: Read instructions on back
before completing this form.

Outfall No.: S.W. 2

Designate the outfall with a three-character code (e.g., 001 or SW1, etc.). In the spaces below, provide the results of quarterly storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the Multi-Sector General Permit apply to this discharge. Look up your sector(s) in the permit, and check the parameters which apply.

Effluent Characteristic	Cut-Off Concentration	Units	Sample Type	Quarterly Monitoring Results (mg/l)				Average of four quarters
				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
Aluminum, Total Rec.	0.75	mg/l	Grab					
Ammonia	4.0	mg/l	Grab					
Arsenic, Total Rec.	0.17	mg/l	Grab					
BOD, 5-Day	30	mg/l	Grab					
Cadmium, Total Rec.	0.016	mg/l	Grab					
Chemical Oxy Demand	120	mg/l	Grab					
Chromium, Total Rec.	0.200	mg/l	Grab					
Copper, Total Rec.	0.064	mg/l	Grab					
Cyanide, Total	0.064	mg/l	Grab					
Fluoride	n/a	mg/l	Grab					
X Iron, Total Rec.	5.0	mg/l	Grab	0.950	5.7	*	*	3.325
Lead, Total Rec.	0.082	mg/l	Grab					
Magnesium, Total Rec.	0.064	mg/l	Grab					
Mercury, Total Rec.	0.0024	mg/l	Grab					
Nitrate plus Nitrate Nitr.	0.68	mg/l	Grab					
Oil and Grease	15	mg/l	Grab					
pH	5.0-9.0	s.u.	Grab	s.u.	s.u.	s.u.	s.u.	s.u.
Phosphorus	2.0	mg/l	Grab					
Phosphorus, Total (as P)	n/a	mg/l	Grab					
Selenium, Total Rec.	0.24	mg/l	Grab					
Silver, Total Rec.	0.032	mg/l	Grab					
Total Suspended Solids	200	mg/l	Grab	15	*	*	*	15
Zinc, Total Rec.	0.117	mg/l	Grab					

Additional Characteristics (if requested)

				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Dates samples were collected: (Month/Day/Year)				2/12/00	6/28/00	*	*
Names of laboratory(s) that analyzed samples <u>TVA - Environmental Chemistry Laboratory</u>							
Attach copy(ies) of the lab sheet(s) for the above data.				* See certification			
I certify under penalty of law this document and all its attachments were prepared under my direction or 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.							
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER				DATE			
William R. Lagergren WBN Site Vice-President				 Environmental Supervisor			
TYPED OR PRINTED				SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			
				MONTH	DAY	YEAR	
				3	16	01	

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



TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL CHEMISTRY LABORATORY
1101 Market Street, CC 1A-C
Chattanooga, Tennessee 37402-2801

Customer Address: Rob Crawford

Sample ID: AA02834

LIF ID: 00020083

Matrix: Water

Date Collected: 02/12/2000

Time Collected: 3:04 EST

Date Received: 02/15/2000

Time Received: 8:19

Location Code: MISC

Field ID: WATTS BAR NUCLEAR

Sample Description: IRON, TSS

Project Manager: Clay C. Cherry

Analyte	CAS Number	Result	Units	MDL	Analysis Date	Analysis Time	Analyst	Method Reference
Iron, Total	7439-89-6	0.950	mg/L	0.01	02/18/2000	10:37	LRP	EPA 200.7
Non-Filterable Residue		15.	mg/L	1.	02/18/2000	11:37	ALB	EPA 160.2
Metals Digestion for ICP		Complete			02/17/2000	11:28	MAA	



TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL CHEMISTRY LABORATORY
1101 Market Street, CC 1A-C
Chattanooga, Tennessee 37402-2801

NPDES Final Data Report

Customer Address: Pgm Admin Environmental
MOB 1T-WBN

Sample ID: AA07250

LIF ID: 00060196

Matrix: Water

Location Code: WBN

Date Collected: 06/28/2000

Field ID: Watts Bar Nuclear Plant

Time Collected: 17:20 EDT

Sample Description: IRON

Date Received: 06/30/2000

Permit Number: TN0020168

Time Received: 8:15

Discharge Number: SW-2

Project Manager: Clay C. Cherry

Method of Transport: TVA MAIL

Plant: WBN

Cont. Flow (MGD):

Project Account Code: 000WQSM

pH (Field):

Regulation: NPDES

Analyte	CAS Number ¹	Result	Units	MDL ²	Analysis Date	Analysis Time	Analyst	Method Reference
Iron, Total	7439-89-6	5.7	mg/L	0.01	07/05/2000	13:45	LRP	EPA 200.7
Metals Digestion for ICP		Complete			07/05/2000	10:43	MAA	

Sample Comments: None



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)
STORM WATER MONITORING REPORT

FACILITY NAME TVA - Watts Bar Nuclear Plant TMSP NUMBER TNR051343
ADDRESS P.O. Box 2000 PHONE NUMBER (423) 365-8005
CITY Spring City ZIP 37381 COUNTY Rhea CONTACT PERSON Robert J. Crawford

Indicate whether this storm water monitoring report (SWMR) is being submitted for the 2nd year's monitoring requirements or the 4th year's monitoring requirements:

☐ 2nd year ☒ 4th year

List the industry sector(s) which apply(ies) to this outfall's storm water discharge (i.e., A, B, C, D, etc.):

☐ 0 ☐ L ☐


Note: Read instructions on back
before completing this form.

Outfall No.: S.W. 3

Designate the outfall with a three-character code (e.g., 001 or SW1, etc.). In the spaces below, provide the results of quarterly storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the Multi-Sector General Permit apply to this discharge. Look up your sector(s) in the permit, and check the parameters which apply.

Effluent Characteristic	Cut-Off Concentration	Units	Sample Type	Quarterly Monitoring Results (mg/l)				Average of four quarters
				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
Aluminum, Total Rec.	0.75	mg/l	Grab					
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Copper, Total Rec.	0.064	mg/l	Grab					
Cyanide, Total	0.064	mg/l	Grab					
Fluoride	n/a	mg/l	Grab					
X Iron, Total Rec.	5.0	mg/l	Grab	1.2	2.0	*	*	1.6
Lead, Total Rec.	0.082	mg/l	Grab					
Magnesium, Total Rec.	0.064	mg/l	Grab					
Mercury, Total Rec.	0.0024	mg/l	Grab					
Nitrate plus Nitrate Nitr.	0.68	mg/l	Grab					
Oil and Grease	15	mg/l	Grab					
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Selenium, Total Rec.	0.24	mg/l	Grab					
Silver, Total Rec.	0.032	mg/l	Grab					
X Total Suspended Solids	200	mg/l	Grab	14	12	*	*	13
Zinc, Total Rec.	0.117	mg/l	Grab					

Additional Characteristics (if requested)

				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Dates samples were collected: (Month/Day/Year)				2/12/00	6/28/00	*	*
Names of laboratory(s) that analyzed samples <u>TVA - Environmental Chemistry Laboratory</u>							
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I certify under penalty of law this document and all its attachments were prepared under my direction or 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.							
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER				 Environmental Supervisor		DATE	
William R. Lagergren WBN Site Vice-President						3	16
TYPED OR PRINTED				SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		MONTH	DAY YEAR

Instructions

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Compliance and Enforcement
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**TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL CHEMISTRY LABORATORY
1101 Market Street, CC 1A-C
Chattanooga, Tennessee 37402-2801**

Customer Address: Rob Crawford

Sample ID: AA02835

LIF ID: 00020083

Matrix: Water

Date Collected: 02/12/2000

Time Collected: 2:08 EST

Date Received: 02/15/2000

Time Received: 8:19

Location Code: MISC

Field ID: WATTS BAR NUCLEAR

Sample Description: IRON, TSS

Project Manager: Clay C. Cherry

Analyte	CAS Number	Result	Units	MDL	Analysis Date	Analysis Time	Analyst	Method Reference
Iron, Total	7439-89-6	1.2	mg/L	0.01	02/18/2000	10:48	LRP	EPA 200.7
Non-Filterable Residue		14.	mg/L	1.	02/18/2000	12:43	ALB	EPA 160.2
Metals Digestion for ICP		Complete			02/18/2000	11:26	MAA	



TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL CHEMISTRY LABORATORY
1101 Market Street, CC 1A-C
Chattanooga, Tennessee 37402-2801

NPDES Final Data Report

Customer Address: Pgm Admin Environmental
MOB 1T-WBN

Sample ID: AA07251

LIF ID: 00060196

Matrix: Water

Location Code: WBN

Date Collected: 06/28/2000

Field ID: Watts Bar Nuclear Plant

Time Collected: 17:28 EDT

Sample Description: TSS, IRON

Date Received: 06/30/2000

Permit Number: TN0020168

Time Received: 8:15

Discharge Number: SW-3

Project Manager: Clay C. Cherry

Method of Transport: TVA MAIL

Plant: WBN

Cont. Flow (MGD):

Project Account Code: 000WQSM

pH (Field):

Regulation: NPDES

Analyte	CAS Number ¹	Result	Units	MDL ²	Analysis Date	Analysis Time	Analyst	Method Reference
Non-Filterable Residue		12.	mg/L	1.	07/05/2000	9:18	HTH	EPA 160.2
Iron, Total	7439-89-6	2.0	mg/L	0.01	07/05/2000	13:47	LRP	EPA 200.7
Metals Digestion for ICP		Complete			07/05/2000	10:43	MAA	

Sample Comments: None



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)
STORM WATER MONITORING REPORT

FACILITY NAME TVA - Watts Bar Nuclear Plant
ADDRESS P.O. Box 2000
CITY Spring City zip 37381 COUNTY Rhea

TMSP NUMBER TNR051343
PHONE NUMBER (423) 365-8005
CONTACT PERSON Robert J. Crawford

Indicate whether this storm water monitoring report (SWMR) is being submitted for the 2nd year's monitoring requirements or the 4th year's monitoring requirements:

☐ 2nd year ☒ 4th year

List the industry sector(s) which apply(ies) to this outfall's storm water discharge (i.e., A, B, C, D, etc.):

☐ 0 ☐ L ☐

Note: Read instructions on back
before completing this form.

Outfall No.: S.W. 4

Designate the outfall with a three-character code (e.g., 001 or SW1, etc.). In the spaces below, provide the results of quarterly storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the Multi-Sector General Permit apply to this discharge. Look up your sector(s) in the permit, and check the parameters which apply.

Effluent Characteristic	Cut-Off Concentration	Units	Sample Type	Quarterly Monitoring Results (mg/l)				Average of four quarters
				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
Aluminum, Total Rec.	0.75	mg/l	Grab					
Ammonia	4.0	mg/l	Grab					
Arsenic, Total Rec.	0.17	mg/l	Grab					
BOD, 5-Day	30	mg/l	Grab					
Cadmium, Total Rec.	0.016	mg/l	Grab					
Chemical Oxy Demand	120	mg/l	Grab					
Chromium, Total Rec.	0.200	mg/l	Grab					
Copper, Total Rec.	0.064	mg/l	Grab					
Cyanide, Total	0.064	mg/l	Grab					
Fluoride	n/a	mg/l	Grab					
X Iron, Total Rec.	5.0	mg/l	Grab	*	2.2	*	*	2.2
Lead, Total Rec.	0.082	mg/l	Grab					
Magnesium, Total Rec.	0.064	mg/l	Grab					
Mercury, Total Rec.	0.0024	mg/l	Grab					
Nitrate plus Nitrate Ntr.	0.68	mg/l	Grab					
Oil and Grease	15	mg/l	Grab					
pH	5.0-9.0	s.u.	Grab	s.u.	s.u.	s.u.	s.u.	s.u.
Phosphorus	2.0	mg/l	Grab					
Phosphorus, Total (as P)	n/a	mg/l	Grab					
Selenium, Total Rec.	0.24	mg/l	Grab					
Silver, Total Rec.	0.032	mg/l	Grab					
X Total Suspended Solids	200	mg/l	Grab	*	27	*	*	27
Zinc, Total Rec.	0.117	mg/l	Grab					

Additional Characteristics (if requested)

				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Dates samples were collected: (Month/Day/Year)				*	6/28/00	*	*
Names of laboratory(s) that analyzed samples <u>TVA - Environmental Chemistry Laboratory</u>							
Attach copy(ies) of the lab sheet(s) for the above data. * See certification							
I certify under penalty of law this document and all its attachments were prepared under my direction or 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.							
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER					DATE		
William R. Lagergren WBN Site Vice-President					3 / 16 / 01		
TYPED OR PRINTED					SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		

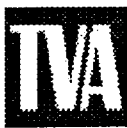
Instructions

- The purpose of this form is to report storm water discharge monitoring results under the Tennessee Storm Water Multi-Sector General Permit (TMSP). You must submit the form with results by March 31 of the year following the year monitoring is required. For example, monitoring required during 1998 is due by March 31, 1999.
- The permit is divided into 30 different industry sectors and in some cases, subsectors. Not all industry sectors or subsectors are required to perform monitoring of storm water discharges. Refer to the permit itself to determine which sectors of the permit apply to discharges from your facility and to determine whether or not the storm water discharges at your facility must be sampled. If so, determine which parameters must be monitored.

Examples Textile Mill.....Sector V.....Not required to perform analytical monitoring

Automobile Salvage Yard.....Sector M.....Must sample its storm water discharges for Total Suspended Solids, Aluminum, Iron, and Lead.
- The Tennessee Multi-Sector General Permit requires a facility to monitor its storm water discharge(s) once per quarter during calendar year 1998 and once per quarter during calendar year 2000. An exception to this is noted below in instruction 4.
- For a given outfall, if results of the second year's monitoring for a parameter average less than the cut-off concentration, the facility can waive monitoring requirements for this parameter in the fourth year. To be eligible for this waiver, the facility must collect and analyze samples for all four quarters of the second year and must submit these results on time according to instruction 1. To take advantage of this option, the facility operator must submit, in lieu of the fourth year's monitoring results, a statement certifying industrial operations have not changed substantially since the second year's monitoring, and the same or improved storm water management controls are in place.
- For a new facility obtaining permit coverage during 1998, sampling must be conducted for the remaining quarters of the 1998 calendar year. For example, if a facility obtains permit coverage in June, 1998, it must conduct sampling in the second and third quarters of 1998 and submit those results by March 31, 1999. Such a facility may seek a waiver from monitoring in the year 2000 (as described above in instruction 4.) by monitoring in the first quarter(s) of 1999 since a total of four consecutive sampling events are required to obtain the waiver.
- In the spaces provided in the table, provide the results of quarterly storm water monitoring for the designated outfall. After the 4th quarter's results are tabulated, average the quarterly monitoring results, and record the average value in the last column of the table. For results reported as "less than" a certain concentration, use one half of that concentration for the purpose of averaging. For each quarter, give the date when the storm water event was sampled. If results were taken from more than one storm event for a given quarter, use the date of the last sample. Also give the name(s) of laboratories used to perform chemical analyses. Complete a separate form for each outfall sampled.
- If the results for a given parameter exceed the cutoff concentration for two consecutive samples, then you must report this occurrence to the appropriate field office (as referenced in your permit) within 30 days of your becoming aware of the exceedance.
- Be sure this form is complete, signed and dated before you submit it. Keep a copy of the completed form for your records.
- Submit the original form and one copy to the following address:

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



TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL CHEMISTRY LABORATORY
1101 Market Street, CC 1A-C
Chattanooga, Tennessee 37402-2801

NPDES Final Data Report

Customer Address: Pgm Admin Environmental
MOB 1T-WBN

Location Code: WBN

Field ID: Watts Bar Nuclear Plant

Sample Description: TSS, IRON

Permit Number: TN0020168

Discharge Number: SW-4

Method of Transport: TVA MAIL

Cont. Flow (MGD):

pH (Field):

Sample ID: AA07252

LIF ID: 00060196

Matrix: Water

Date Collected: 06/28/2000

Time Collected: 17:40 EDT

Date Received: 06/30/2000

Time Received: 8:15

Project Manager: Clay C. Cherry

Plant: WBN

Project Account Code: 000WQSM

Regulation: NPDES

Analyte	CAS Number ¹	Result	Units	MDL ²	Analysis Date	Analysis Time	Analyst	Method Reference
Non-Filterable Residue		27.	mg/L	1.	07/05/2000	9:19	HTH	EPA 160.2
Iron, Total	7439-89-6	2.2	mg/L	0.01	07/05/2000	13:54	LRP	EPA 200.7
Metals Digestion for ICP		Complete			07/05/2000	10:43	MAA	

Sample Comments: None



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)
STORM WATER MONITORING REPORT

FACILITY NAME TVA - Watts Bar Nuclear Plant TMSP NUMBER TNR051343
ADDRESS P.O. Box 2000 PHONE NUMBER (423) 365-8005
CITY Spring City ZIP 37381 COUNTY Rhea CONTACT PERSON Robert J. Crawford

Indicate whether this storm water monitoring report (SWMR) is being submitted for the 2nd year's monitoring requirements or the 4th year's monitoring requirements:

☐ 2nd year ☒ 4th year

List the industry sector(s) which apply(ies) to this outfall's storm water discharge (i.e., A, B, C, D, etc.):

☐ O ☐ L ☐

Outfall No.: S.W. 5

Note: Read instructions on back
before completing this form.

Designate the outfall with a three-character code (e.g., 001 or SW1, etc.). In the spaces below, provide the results of quarterly storm water monitoring for the designated outfall. The parameters for which monitoring must be conducted depend on which industry sector(s) of the Multi-Sector General Permit apply to this discharge. Look up your sector(s) in the permit, and check the parameters which apply.

Effluent Characteristic	Cut-Off Concentration	Units	Sample Type	Quarterly Monitoring Results (mg/l)				Average of four quarters
				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
Aluminum, Total Rec.	0.75	mg/l	Grab					
Ammonia	4.0	mg/l	Grab					
Arsenic, Total Rec.	0.17	mg/l	Grab					
BOD, 5-Day	30	mg/l	Grab					
Cadmium, Total Rec.	0.016	mg/l	Grab					
Chemical Oxy Demand	120	mg/l	Grab					
Chromium, Total Rec.	0.200	mg/l	Grab					
Copper, Total Rec.	0.064	mg/l	Grab					
Cyanide, Total	0.064	mg/l	Grab					
Fluoride	n/a	mg/l	Grab					
X Iron, Total Rec.	5.0	mg/l	Grab	*	0.60	*	*	0.60
Lead, Total Rec.	0.082	mg/l	Grab					
Magnesium, Total Rec.	0.064	mg/l	Grab					
Mercury, Total Rec.	0.0024	mg/l	Grab					
Nitrate plus Nitrate Nitr.	0.58	mg/l	Grab					
Oil and Grease	15	mg/l	Grab					
pH	5.0-9.0	s.u.	Grab	s.u.	s.u.	s.u.	s.u.	s.u.
Phosphorus	2.0	mg/l	Grab					
Phosphorus, Total (as P)	n/a	mg/l	Grab					
Selenium, Total Rec.	0.24	mg/l	Grab					
Silver, Total Rec.	0.032	mg/l	Grab					
X Total Suspended Solids	200	mg/l	Grab	*	7	*	*	7
Zinc, Total Rec.	0.117	mg/l	Grab					

Additional Characteristics (if requested)

				1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Dates samples were collected: (Month/Day/Year)				*	6/28/00	*	*
Names of laboratory(s) that analyzed samples <u>TVA - Environmental Chemistry Laboratory</u>							
Attach copy(ies) of the lab sheet(s) for the above data.				* See certification			
I certify under penalty of law this document and all its attachments were prepared under my direction or 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.							
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER				DATE			
William R. Lagergren WBN Site Vice-President				3 / 6 / 00			
TYPE OR PRINTED				SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			

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



TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL CHEMISTRY LABORATORY
1101 Market Street, CC 1A-C
Chattanooga, Tennessee 37402-2801

NPDES Final Data Report

Customer Address: Pgm Admin Environmental
MOB 1T-WBN

Location Code: WBN

Field ID: Watts Bar Nuclear Plant

Sample Description: TSS, IRON

Permit Number: TN0020168

Discharge Number: SW-5

Method of Transport: TVA MAIL

Cont. Flow (MGD):

pH (Field):

Sample ID: AA07253

LIF ID: 00060196

Matrix: Water

Date Collected: 06/28/2000

Time Collected: 18:00 EDT

Date Received: 06/30/2000

Time Received: 8:15

Project Manager: Clay C. Cherry

Plant: WBN

Project Account Code: 000WQSM

Regulation: NPDES

Analyte	CAS Number ¹	Result	Units	MDL ²	Analysis Date	Analysis Time	Analyst	Method Reference
Non-Filterable Residue		7.	mg/L	1.	07/05/2000	9:21	HTH	EPA 160.2
Iron, Total	7439-89-6	0.60	mg/L	0.01	07/05/2000	13:56	LRP	EPA 200.7
Metals Digestion for ICP		Complete			07/05/2000	10:43	MAA	

Sample Comments: None