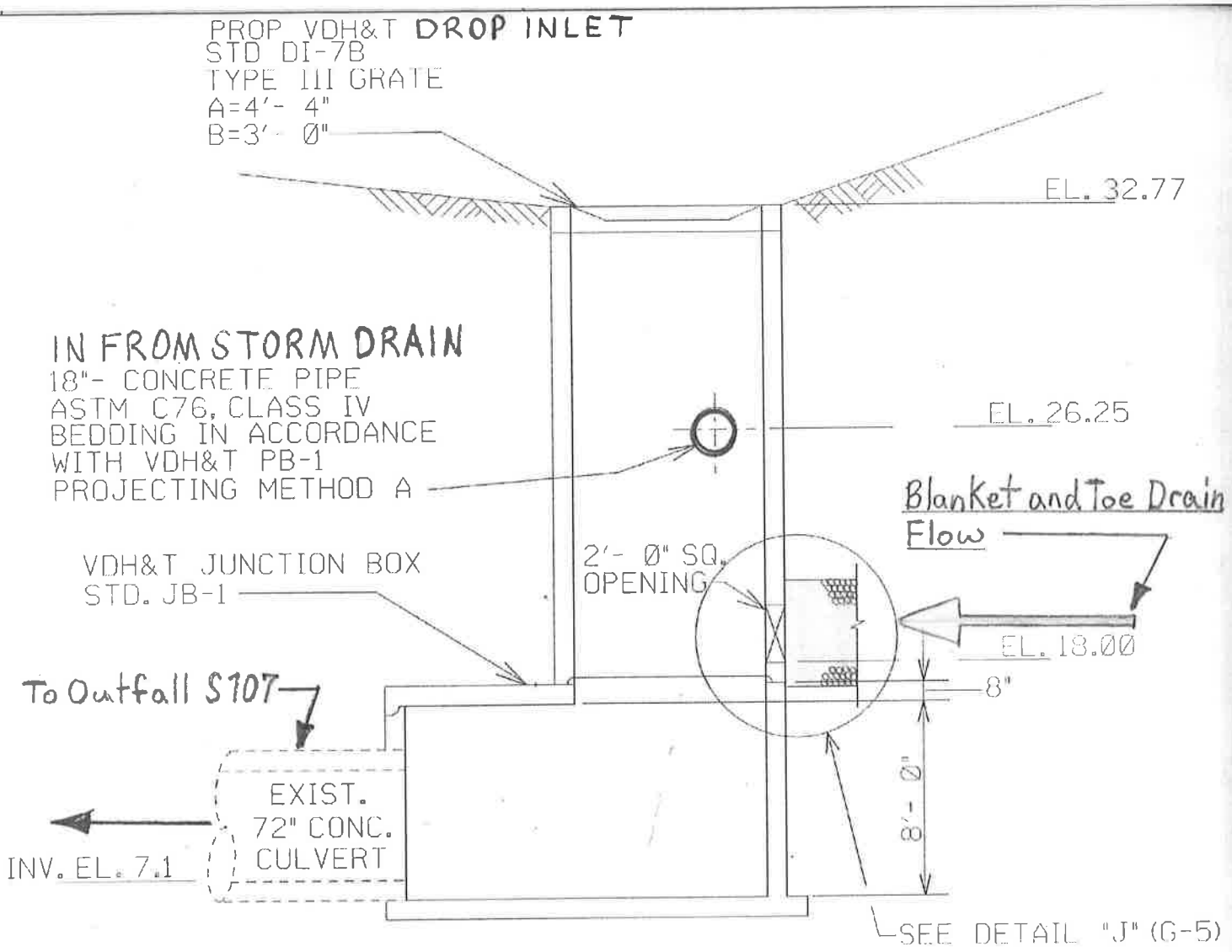
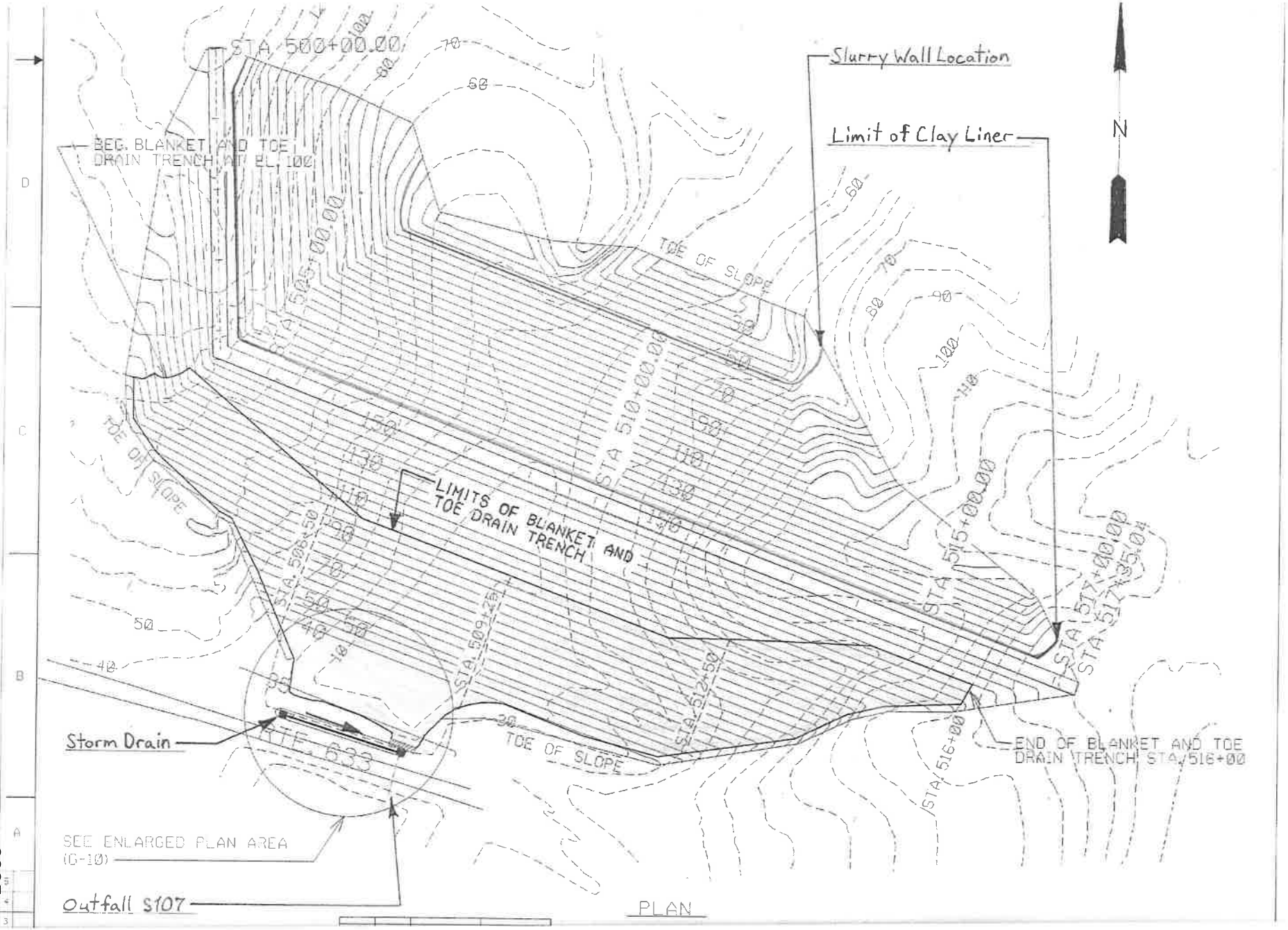


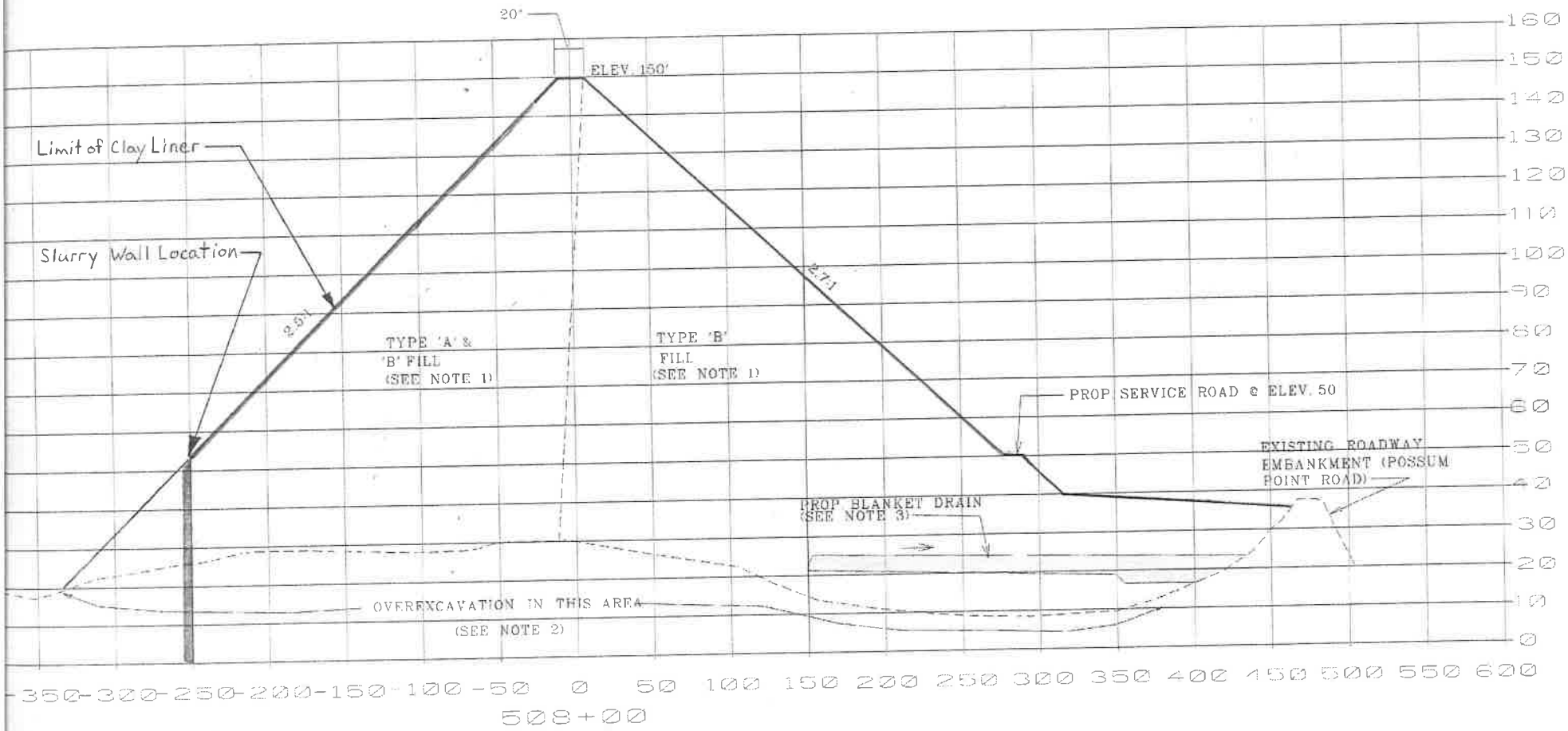
SECTION H - H (H-9)
NTS

NOTES:

1. CONTRACTOR SHALL LOCATE AND UNEARTH EXISTING 72" DIA. CULVERT.
2. EXISTING CULVERT SHALL BE CLEANED OF MATERIAL AND MATERIAL SHALL BE DISPOSED OF IN AN APPROVED MANNER. EXISTING "CONNECTING MANHOLE" SHALL BE REMOVED. SEE DWG 715932-C-103
3. AFTER EXISTING CULVERT IS CLEANED IT, SHALL BE INSPECTED FOR ITS FULL LENGTH BY THE CONSTRUCTION REPRESENTATIVE AND DESIGN ENGINEER.


STA 500+00.00
BEG. BLANKET AND TOE DRAIN TRENCH WITH EL. 100
Slurry Wall Location
Limit of Clay Liner
N
TOE OF SLOPE
STA 505+00.00
STA 510+00.00
STA 515+00.00
STA 517+00.00
STA 517+35.04
LIMITS OF BLANKET AND TOE DRAIN TRENCH
STA 506+50
STA 509+25
STA 512+50
STA 516+00
END OF BLANKET AND TOE DRAIN TRENCH STA 516+00
Storm Drain
RTE 633
SEE ENLARGED PLAN AREA (G-10)
Outfall S107
PLAN

8385



SECTION B-B (DWG. 715932-C-103)

SCALE: 1 - 50 H
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8386

DRAFT

Demonstration Plan for Outfall 010 Groundwater Separation

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00, Task 051

March 2016

Prepared by: GAI Consultants, Inc.
Richmond Office
4198 Cox Road, Suite 114
Glen Allen, Virginia 23060

Prepared for: Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060-3308

DRAFT

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Report Authors:

Brian W. Bullock, E.I.T.
Senior E.I.T.

John R. Klamut, P.E.
Engineering Manager

Table of Contents

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1.1 Introduction 1
1.2 Project Description 1

2.0 Regulatory Requirements 1

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4.2 Wet Weather and Dry Weather Considerations 2
4.3 Schedule 2

5.0 Permanent Solution 3
5.1 Description 3
5.2 Wet Weather and Dry Weather Considerations 3
5.3 Schedule 3
5.4 As-Built Drawings 3

Figure 1 Drainage Area Map
Figure 2 Outfall 010 Plugging (Interim Solution)
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Drawing S-01 Reinforced Concrete Pipe

Appendix A Original Design: Pond D Toe Drain: Plan View
Appendix B Original Design: Toe Drain Manhole Detail
Appendix C Original Design: Toe Drain / Manhole Connection Detail

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1.0 Project Overview

1.1 Introduction

Virginia Electric and Power Company d / b / a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) ash ponds at the Possum Point Power Station (Station), a 1,845 megawatt natural gas and oil-fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA).

1.2 Project Description

Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018, in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Discharge from the ash ponds at the Station is managed in accordance with the Station's VA Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071. The Station recently modified VPDES Permit No. VA0002071 to allow discharge from the ponds during closure and post-closure. The major modification date of the permit was January 14, 2016.

Part of Dominion's plan for closure of the Station's ash ponds includes management of stormwater and groundwater associated with Outfall 010. Groundwater includes the Ash Pond D toe drainage. The purpose of this document is to present Dominion's groundwater separation plan for the Pond D toe drain. The VPDES Permit allows for redirecting Outfall 010 discharges, and contributing stormwater, groundwater, and Pond D toe drainage to Ash Pond D. The VPDES Permit also allows for the separation of flows under permit condition in Part 1.F.23.

2.0 Regulatory Requirements

The following excerpt is the applicable condition in the Station's VPDES Permit No. VA0002071: Part 1. F. 23:

Outfall 010 Groundwater (Toe Drain) Removal and Re-designation to S107.

Upon successful demonstration to and written approval from DEQ confirming that all groundwater contributions to the Outfall 010 discharge have been removed, the requirements of Part I.A.15 of this permit shall become effective and supersede the requirements of Part 1.A.8. The groundwater contributions include both infiltration through the earthen berm as well as groundwater diverted around the impoundment. Should the permittee separate and remove all groundwater contributions to the discharge, then the discharge would be comprised of only industrially influenced stormwater. Stormwater – only discharges from this outfall would be designated as Outfall S107 and governed by the requirements of Part 1. A. 15, Part I.E and Part I.F18. Should the permittee pursue separation of the groundwater contributions to the discharge, a demonstration plan shall be submitted to DEQ for review and approval. This demonstration plan shall consider, at a minimum: observations of the outfall during dry-weather with variable antecedent precipitation conditions to confirm no discharge; seasonal wet-weather conditions to include potential inflow and infiltration contributions; other information as appropriate, such as design schematics, to support a conclusion that groundwater contributions have been removed from the discharge.

3.0 Original System Description

The existing discharge at Outfall 010 is comprised of stormwater runoff and groundwater flows from the Pond D impoundment area and toe drain. Outfall 010 discharges on the south side of Possum Point Road to an unnamed tributary of Quantico Creek via a Dominion owned 72-inch reinforced concrete culvert.

As illustrated by the original design drawings, attached in Appendix A, the storm sewer system contributing to Outfall 010 is comprised of two Virginia Department of Transportation (VDOT) Standard DI-7B drainage inlets running parallel on the north side of Possum Point Road. The upstream and downstream inlets are connected by 18-inch concrete pipe. The system discharges through the 72-inch-diameter culvert that runs from the downstream inlet, under Possum Point Road, to the unnamed tributary of Quantico Creek. As shown in Figure 1, the total contributing drainage area for surface water runoff to the two inlets is approximately twelve acres.

The horizontal drainage blanket and toe drain have been designed to collect infiltration through the earthen berm as well as groundwater which is diverted around the impoundment. The drainage blanket is comprised of a layer of VDOT No. 57 stone constructed under the Pond D embankment to prevent the buildup of pore water pressures in the downstream portion of the dam during the life of the disposal facility. This is a standard engineering practice for providing embankment stability. The toe drain contributions enter the storm sewer system through a two-foot square opening in the downstream drainage inlet. Refer to the Toe Drain Manhole Detail Sheet and Toe Drain Detail Sheet, attached in Appendix B and C respectively.

4.0 Interim Solution

4.1 Description

The Interim Solution consists of plugging the 72-inch reinforced concrete pipe (RCP) culvert and diverting the stormwater, groundwater, and Pond D Toe Drainage contributions to Ash Pond D in compliance with the Station's VPDES Permit (Refer to Figure 2 and the attached Drawing S-01 Reinforced Concrete Pipe). The 72-inch culvert has been cleaned of sediment with a cleanout nozzle and the water / sediment were removed concurrently by vac truck to an offsite facility for treatment and disposal. A temporary lumber and plywood bulkhead was constructed on the upstream end of the culvert at the existing inlet north of Possum Point Road. Plywood forms, held in place with steel reinforcement, were constructed for a one-foot-wide, cast-in-place concrete plug wall at the downstream end of the culvert. A sump pump was installed to collect Outfall 010 contributions and divert them to Ash Pond D. After the plug wall cured, flowable Portland Cement backfill was applied in lifts to fill the culvert.

A generator powered pump system was installed in the existing inlet north of Possum Point Road for all the collected water (stormwater, groundwater, and Ash Pond D Toe Drainage) to be diverted to Pond D.

4.2 Wet Weather and Dry Weather Considerations

The Interim Solution will operate during wet and dry weather conditions and all flow will be transferred to Pond D until the permanent solution is constructed that will mechanically separate the Pond D Toe Drainage from the stormwater.

4.3 Schedule

Dominion has submitted a Notice of Planned Change in February 2016 to implement the Interim Solution. The Interim Solution will remain in service until the Permanent Solution can be implemented.

5.0 Permanent Solution

5.1 Description

Dominion proposes to permanently separate the Pond D Toe Drainage from Outfall 010 and has developed a conceptual plan for moving forward with this separation. The conceptual plan is shown on Figures 3 and 4. It consists of a new culvert / outfall exclusively for stormwater. The Permanent Solution will allow the Station to tie the groundwater flow into the Prince William County Service Authority (PWCSA) sanitary sewer system or permanently divert the flow to internal Outfall 503 after treatment, as required. Once the Permanent Solution is installed, a revised demonstration plan will be submitted to the VADEQ for approval in accordance with VPDES Permit No. VA0002071 Part 1. F. 23.

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The mechanical separation of the flows will provide complete separation of the groundwater contributions during wet and dry weather conditions. Initially following installation there will be daily monitoring and visual inspections to ensure the system is functioning as designed. Prior to the installation of the Permanent Solution, the stormwater discharges will be monitored at a minimum frequency of once every five days, or no more than 48 hours after a runoff-producing rain event to confirm there are no groundwater contributions.

5.3 Schedule

Dominion would like to implement the Permanent Solution as soon as possible following this Notice of Planned Change. Until approval is granted from the PWCSA to discharge to the sanitary sewer system, or when the final treatment system for the Internal Outfall 503 (Final Configuration) is approved by the Virginia Department of Environmental Quality (VADEQ), Dominion will divert Pond D Toe Drainage to Ash Pond D.

5.4 As-Built Drawings

As-Built Drawings will be prepared and provided to the VADEQ to confirm that all groundwater contributions have been removed, per VPDES Permit No. VA0002071 Part 1. F. 23.

FIGURES

DRAWING

APPENDIX A

Original Design: Pond D Toe Drain Plan View

APPENDIX B

Original Design: Toe Drain Manhole Detail

APPENDIX C

Original Design: Toe Drain / Manhole Connection Detail

DRAFT

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Possum Point Power Station
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March 2016

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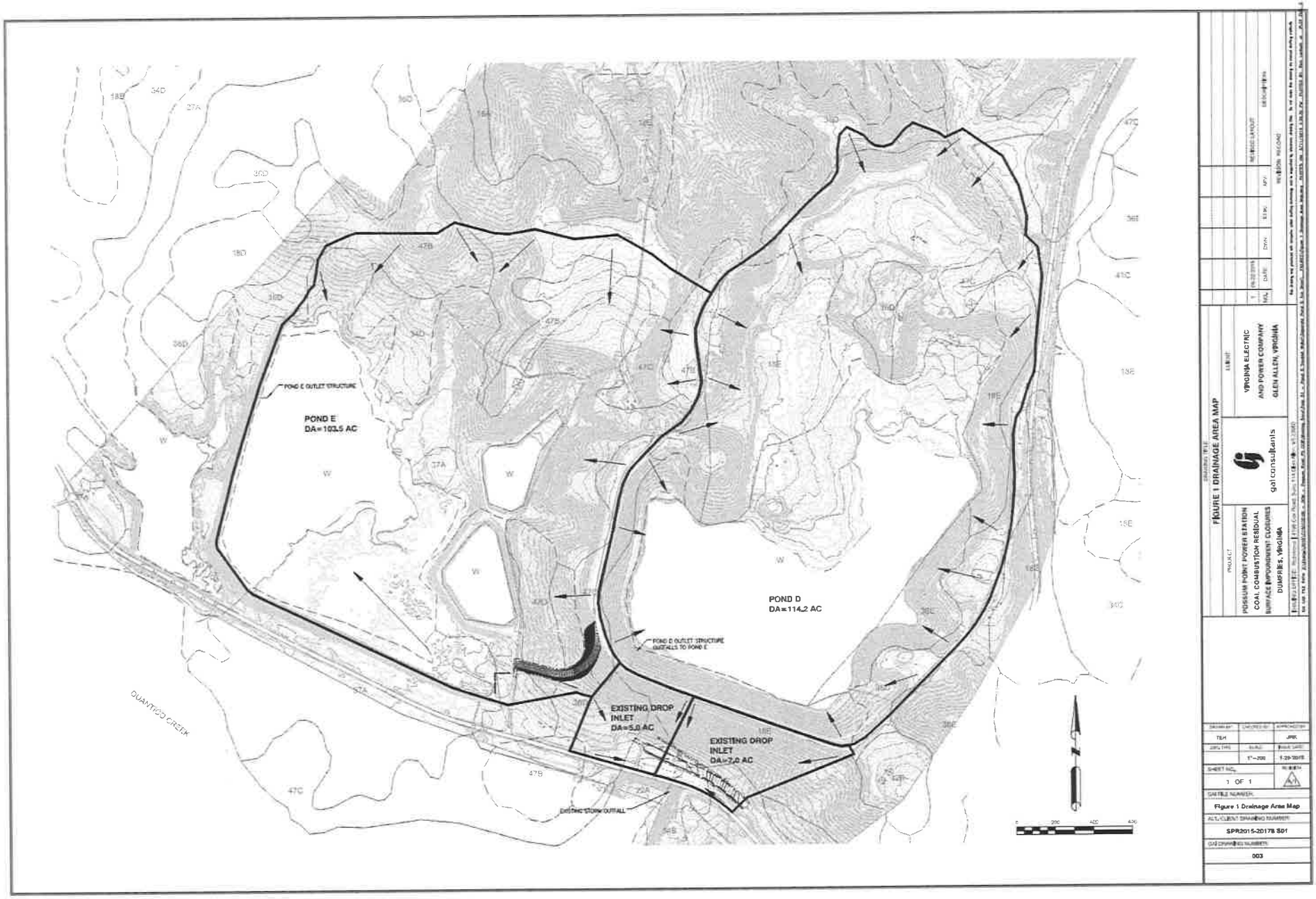
FIGURES


POND E
DA=103.5 AC
POND E OUTLET STRUCTURE
POND D
DA=114.2 AC
POND D OUTLET STRUCTURE OUTFALLS TO POND E
EXISTING DROP INLET
DA=5.0 AC
EXISTING DROP INLET
DA=7.0 AC
EXISTING STORM OUTFALL
QUANTICO CREEK
FIGURE 1 DRAINAGE AREA MAP
PROJECT
POSSUM POINT POWER STATION
COAL COMBUSTION RESIDUAL
SURFACE IMPOUNDMENT CLOSURES
DUMFRIES, VIRGINIA
gai consultants
CLIENT
VIRGINIA ELECTRIC
AND POWER COMPANY
GLEN ALLEN, VIRGINIA
REVISION RECORD
1 OF 1
Figure 1 Drainage Area Map
SPR2015-20178 S01
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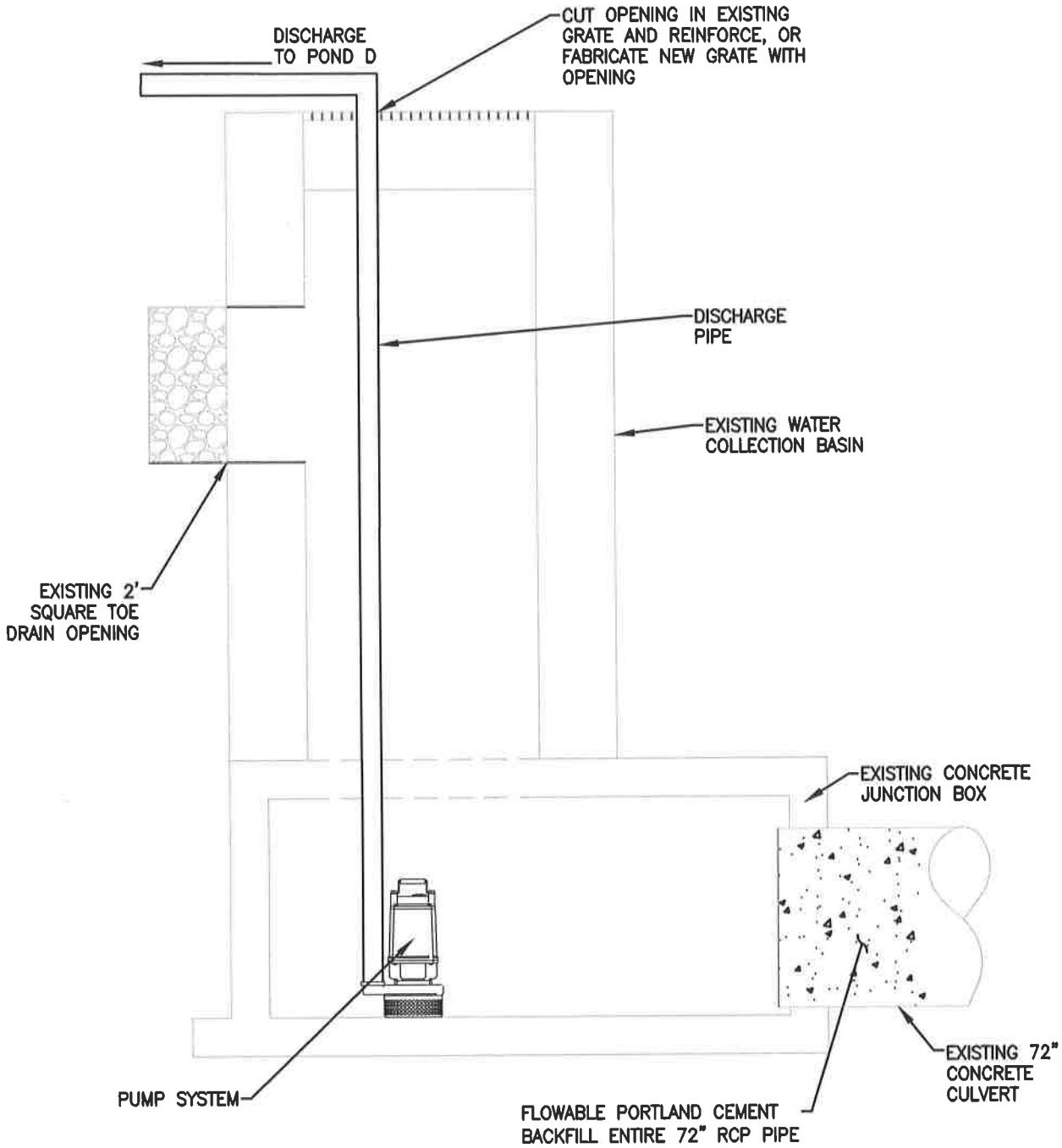

DRAWING TITLE	GAI DRAWING NUMBER:
OUTFALL 010 PLUGGING (INTERIM SOLUTION)	**FIGURE 2**

PROJECT

POSSUM POINT POWER STATION COAL COMBUSTION RESIDUAL SURFACE IMPOUNDMENT CLOSURES

CLIENT

VIRGINIA ELECTRIC & POWER COMPANY
GLEN ALLEN, VIRGINIA

gai consultants

GAI FILE NUMBER: **C150132-00-054-C-A2-001**

DRAWN BY:	CHECKED BY:	APPROVED BY:
LENHARL	DEBARJD	QUINLSC
SHEET NO.:	SCALE:	ISSUE DATE:
1 OF 1	N. T. S.	3/10/2016

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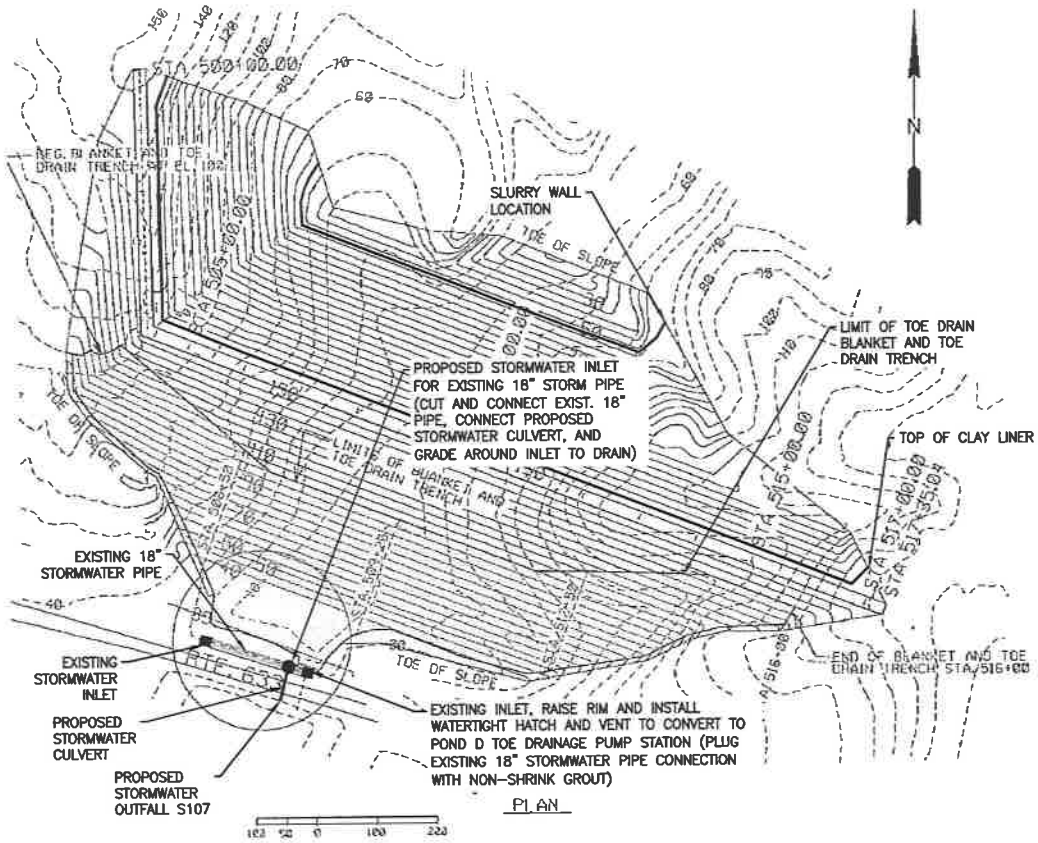

PLAN

SCALE: 1" = 200'

200 0 200 400

NO.:	DATE:	DWN:	CHK:	APV:	DESCRIPTION:

REVISION RECORD

DRAWING TITLE

POND D TOE DRAIN SEPARATION PLAN (PERMANENT SOLUTION)

PROJECT

POSSUM POINT POWER STATION
COAL COMBUSTION RESIDUAL
SURFACE IMPOUNDMENT CLOSURES
DUMFRIES, VIRGINIA

gai consultants

CLIENT

VIRGINIA ELECTRIC AND
POWER COMPANY
GLEN ALLEN, VIRGINIA

DRAWN BY:	CHECKED BY:	APPROVED BY:
LENHARL	DEBARJD	QUINLSC
REVISION	SCALE:	ISSUE DATE:
A/0	AS SHOWN	3/10/2016
	SHEET NO.:	
	1 OF 1	

GAI FILE NUMBER: C150132-00-054-00-C-B2-001

GAI DRAWING NUMBER: FIGURE 3

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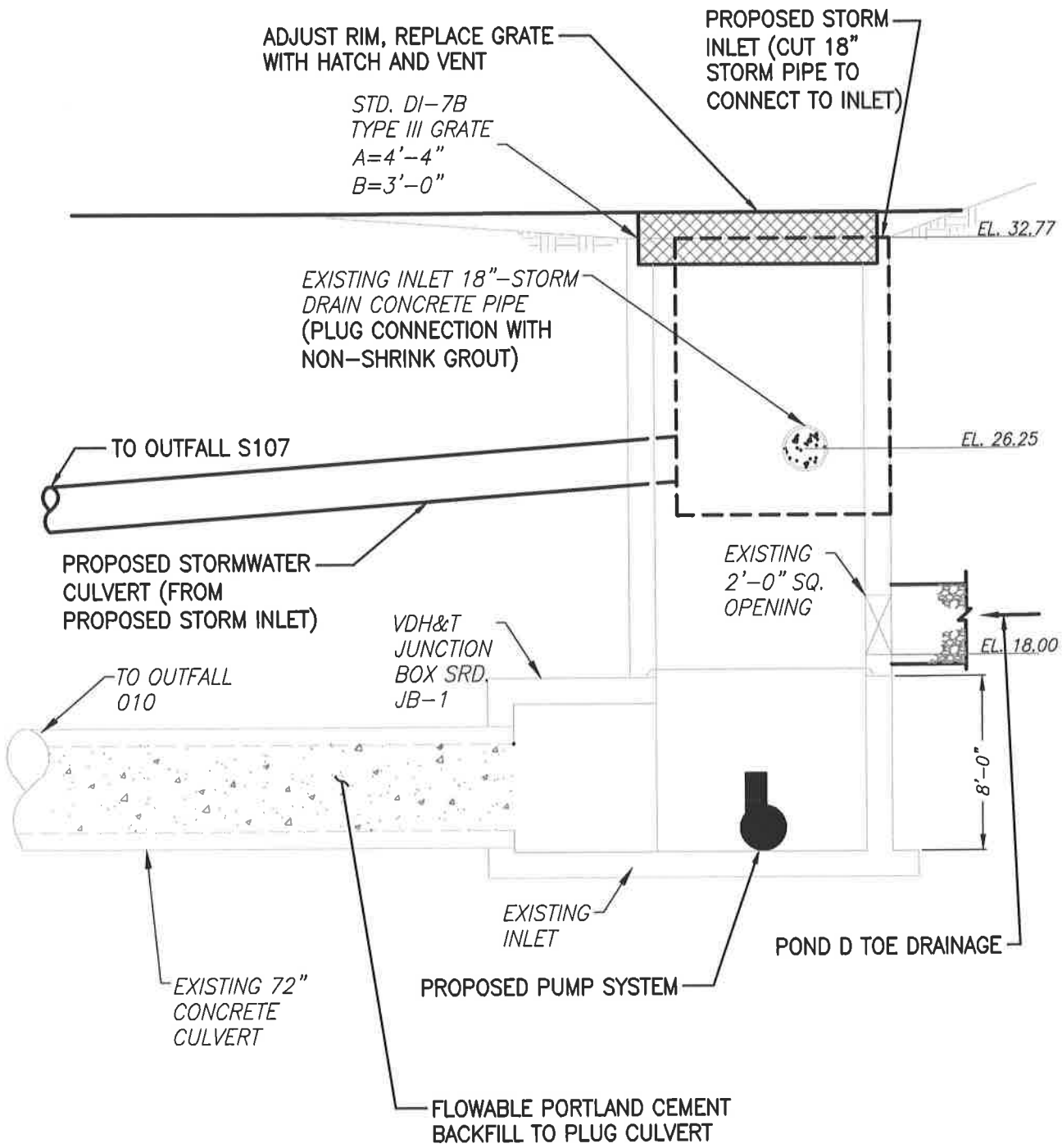

DRAWING TITLE		GAI DRAWING NUMBER:
POND D TOE DRAIN SEPARATION DETAIL (PERMANENT SOLUTION)		**FIGURE 4**
PROJECT		GAI FILE NUMBER:
POSSUM POINT POWER STATION COAL COMBUSTION RESIDUAL SURFACE IMPOUNDMENT CLOSURES	gai consultants	**C150132-00-054-C-A2-002**
		DRAWN BY: **LENHARL** / CHECKED BY: **DEBARJD** / APPROVED BY: **QUINLSC**
CLIENT		SHEET NO.: **1 OF 1** / SCALE: **NTS** / ISSUE DATE: **03/10/2016**
VIRGINIA ELECTRIC & POWER GLEN ALLEN, VIRGINIA		© 2016 GAI Consultants

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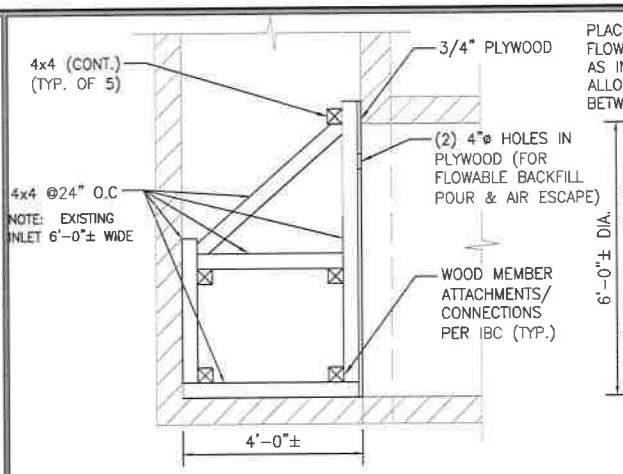
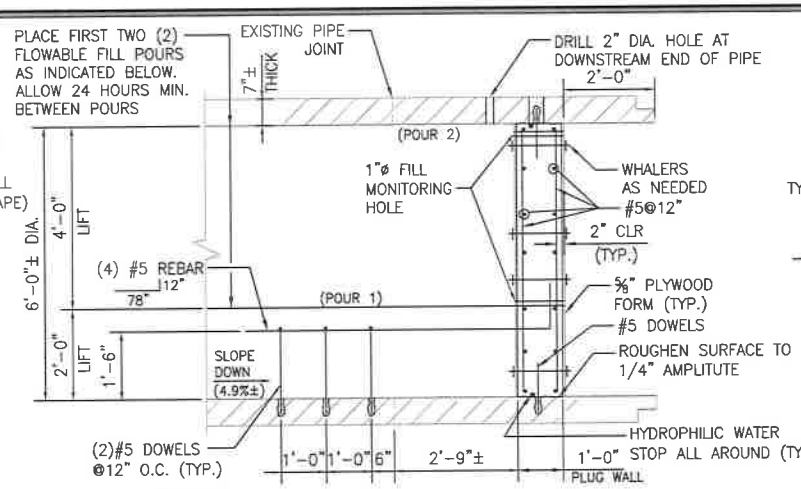
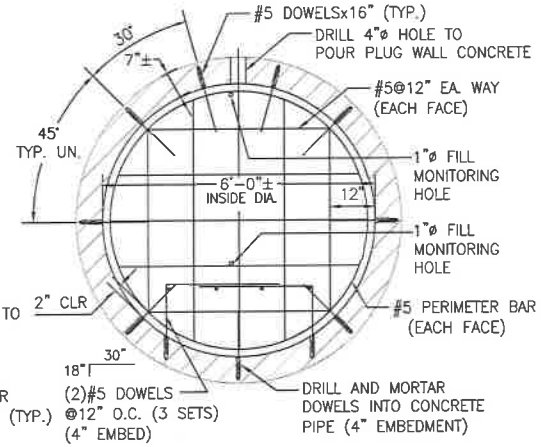
DRAWING







GENERAL CONDITIONS

GC1 REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

GC2 ALL WORK SHALL COMPLY WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC), ACI BUILDING CODE (ACI 318-02), ASTM STANDARDS AND ANY OTHER APPLICABLE CODES, RULES AND REGULATIONS BY AGENCIES HAVING JURISDICTIONS. WHERE CODES OVERLAP, COMPLY WITH THE MORE STRINGENT REQUIREMENTS.

GC3. EXISTING DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS.

GC4. ALL WORKMANSHIP MUST BE IN THE BEST PRACTICE OF THE TRADE AS DETERMINED BY THE OWNER/ENGINEER. ANY WORK NOT MEETING THESE STANDARDS WILL BE REJECTED.

GC5. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS APPROVED IN WRITING BY THE OWNER/ENGINEER.

GC6. CONTRACTOR IS TO DISPOSE OF ALL DEMOLITION MATERIALS AND LEAVE THE WORK IN A READY TO USE CONDITION.

GC7. CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, METHODS, LABOR PROCEDURES AND SAFETY PRECAUTIONS FOR COMPLETING THE WORK.

GC8. CONTRACTOR IS RESPONSIBLE FOR ALL WORK DURING CONSTRUCTION UNTIL FINAL APPROVAL BY OWNER/ENGINEER AND LOCAL OFFICIALS.

GC9. WHERE SPECIFIC MANUFACTURER'S PRODUCT IS CALLED OUT, ALL MATERIALS AND WORK MUST COMPLY WITH THE MANUFACTURER'S STRICT RECOMMENDATIONS FOR INSTALLATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN INSTRUCTIONS AND TO THEN FOLLOW THEM.

CONCRETE

C1. ALL CONCRETE WORK SHALL COMPLY WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."

C2. CONCRETE FOR REINFORCED WALLS SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150-05, TYPE III (HIGH EARLY STRENGTH) AND SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: 5000 PSI.
(3) DAY BREAK 3000 PSI BEFORE BACKFILLING

C3. CONCRETE FOR FLOWABLE BACKFILL SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150-05, TYPE II AND SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: FIRST LIFT : 3000 PSI
SECOND LIFT: 200 PSI

C4. FLOWABLE BACKFILL MAY BE PLACED WHEN COMPRESSIVE STRENGTH OF REINFORCED WALLS HAS REACHED 3000 PSI.

C5. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN TO THE OWNER/ENGINEER FOR APPROVAL. CONCRETE ACCEPTANCE SHALL BE ON THE BASIS OF "TRIAL MIXTURES" AS DESCRIBED IN ACI 318, SECTION 5.3. PROVIDE TRIAL MIXTURES FOR THREE DIFFERENT WATER-CEMENT RATIOS INDICATING 7-DAY AND 28-DAY COMPRESSIVE STRENGTH (FC); 1200 PSI GREATER THAN REQUIRED SHALL BE ACCEPTED.

C6. THE CONTRACTOR SHALL TAKE ONE SET OF EIGHT (8) STANDARD TEST CYLINDERS FOR EACH DAYS PLACEMENT AND THE OWNER'S TESTING AGENCY WILL PERFORM COMPRESSION TESTS ON TWO (2) CYLINDERS AT 3 DAYS, 7 DAYS AND 28 DAYS, LEAVING TWO (2) CYLINDERS IN RESERVE.

C7. FINE AGGREGATE SHALL BE WASHED NATURAL SAND CONFORMING TO ASTM C33. COARSE AGGREGATE SHALL BE WELL GRADED CRUSHED STONE OR WASHED GRAVEL CONFORMING TO ASTM C33 WITH A MAXIMUM SIZE OF 3/8" SIZE (AASHTO NO. 10).

C8. MAXIMUM SLUMP SHALL BE:
4" FOR REINFORCED WALLS.
12" FOR FLOWABLE BACKFILL (PER ASTM C 1611)

C9. ADD AIR ENTRAINING ADMIXTURE CONFORMING TO ASTM C260 TO PRODUCE MAXIMUM AIR BY VOLUME OF 5% FOR REINFORCED WALLS.

C10. ALL CONCRETE SHALL BE TRUCK MIXED.

C11. ALL PLACEMENT OF CONCRETE AND REINFORCEMENT SHALL BE ACCORDING TO ACI 318 (INCLUDING ACI 305 FOR HOT WEATHER AND ACI 306 FOR COLD WEATHER CONDITIONS); AND CRSI RECOMMENDED PRACTICES FOR 'PLACING REINFORCING BARS'.

C12. REINFORCING BARS SHALL BE NEW ASTM A615, GRADE 60.

C13. ALL REINFORCING SHALL BE INSPECTED BY THE OWNER'S TESTING AGENCY BEFORE CONCRETE IS PLACED.

C14. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.

C15. PROVIDE HYRDROPHILIC WATERSTOPS BY GREENSTREAK, INC, HYDROTITE TYPE CJ-3030-M, OR APPROVED EQUIVALENT.

C16. PROVIDE HILTI TYPE HIT-HY 200 INJECTABLE MORTAR FOR DRILLED DOWEL REINFORCEMENT, OR APPROVED EQUIVALENT.

NO.:	DATE:	DWN:	CHK:	APV:	DESCRIPTION:
0	02/18/16	CRM	CMH	RBB	ISSUED FOR CONSTRUCTION

REVISION RECORD

DRAWING TITLE: REINFORCED CONCRETE PIPE

PROJECT: POSSUM POINT POWER STATION

gai consultants

CLIENT:

DRAWN BY:	CHECKED BY:	APPROVED BY:
CRM	CMH	RBB
REVISION A/0	SCALE: 3/8"=1'-0"	ISSUE DATE: 02/16/2016
	SHEET NO.: 1 OF 1	

GAI FILE NUMBER: C150132-00-S-B2-S001_S00000_R000

GAI DRAWING NUMBER: S-01

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This drawing was produced with computer aided drafting technology and is supported by electronic drawing files. Do not revise this drawing via manual drafting methods.

ISSUING OFFICE: Pittsburgh | 385 E. Waterfront Drive, Homestead, PA 15120

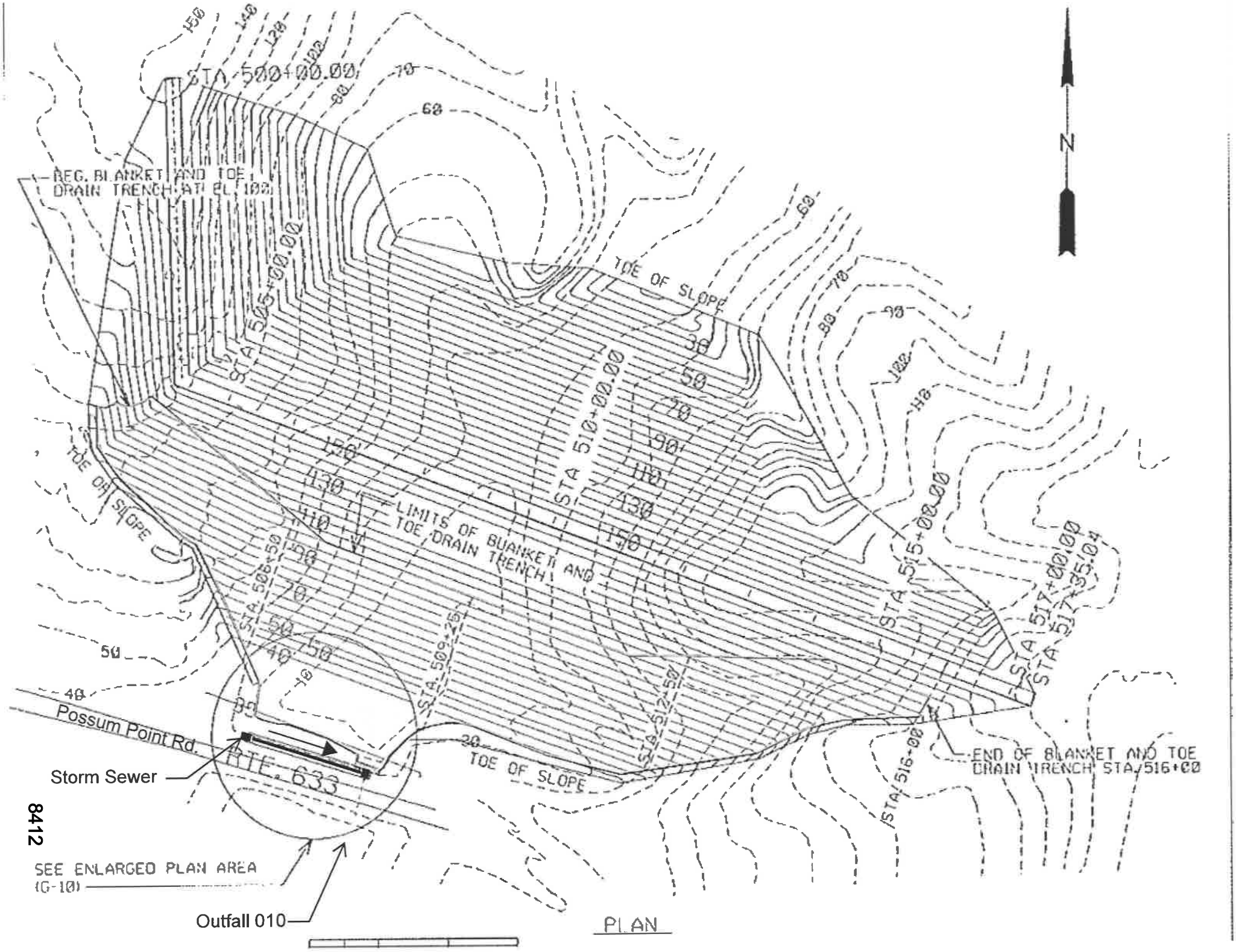
GAI CAD FILE PATH: Z:\Energy\2015\C150132.00 - DOM - Possum Point PS CCB\CAD\Structural\C150132-00-S-B2-S001_S00000_R000.dwg

PLOTTED ON: 2/29/2016 8:16:05 AM PLOTTED BY: Christopher Muntz PLOT FILE: GAI.stb

8410

APPENDIX A

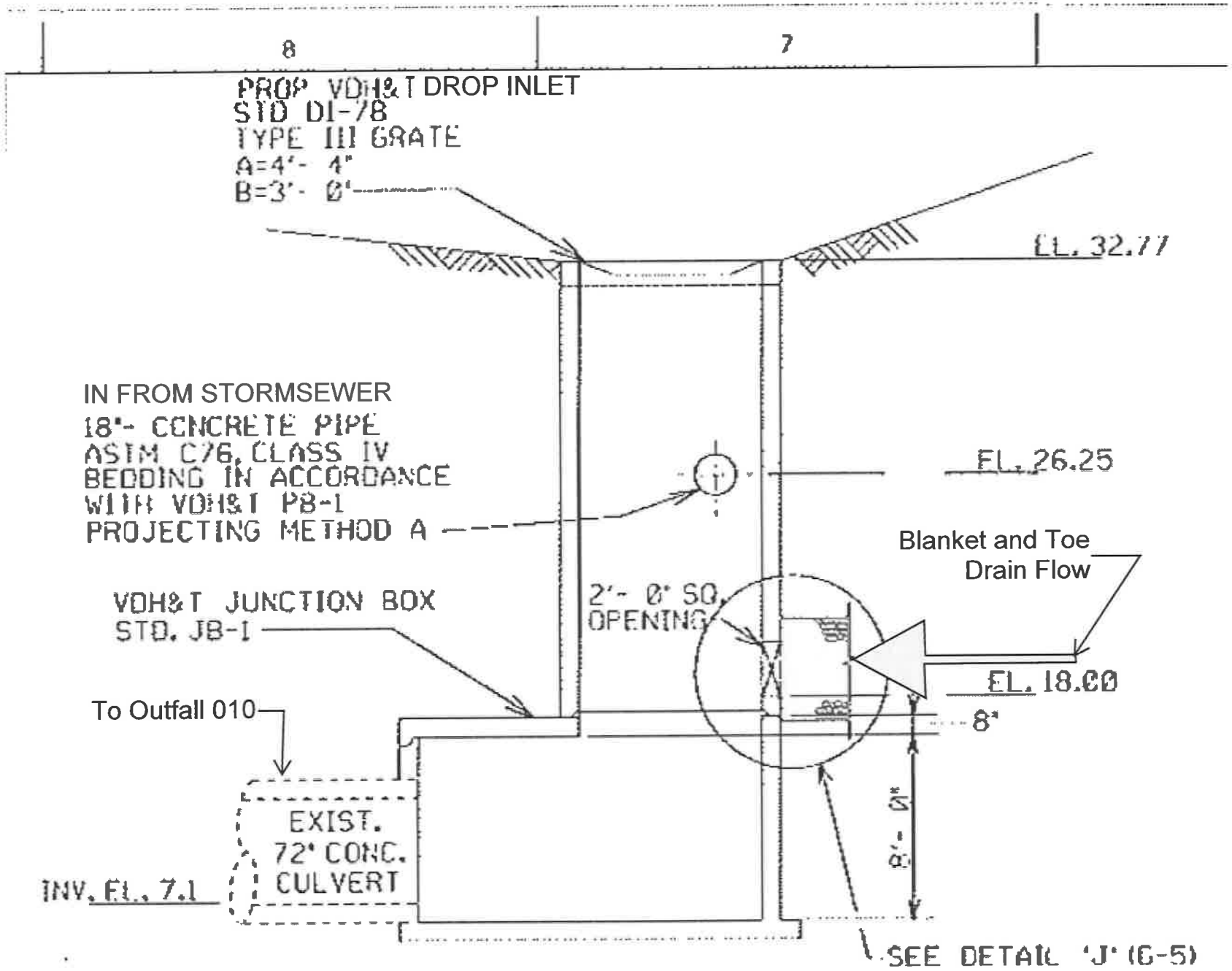
Original Design: Pond D Toe Drain Plan View


STA 500+00.00
REG. BLANKET AND TOE DRAIN TRENCH AT EL 102
STA 505+00.00
TOE OF SLOPE
STA 510+00.00
LIMITS OF BLANKET AND TOE DRAIN TRENCH
STA 515+00.00
STA 517+00.00
STA 517+35.04
STA 506+50
STA 509+25
STA 512+50
STA 516+00
END OF BLANKET AND TOE DRAIN TRENCH STA 516+00
Possum Point Rd.
RTE. 633
Storm Sewer
SEE ENLARGED PLAN AREA (G-10)
Outfall 010
PLAN
N

8412

APPENDIX B

Original Design: Toe Drain Manhole Detail

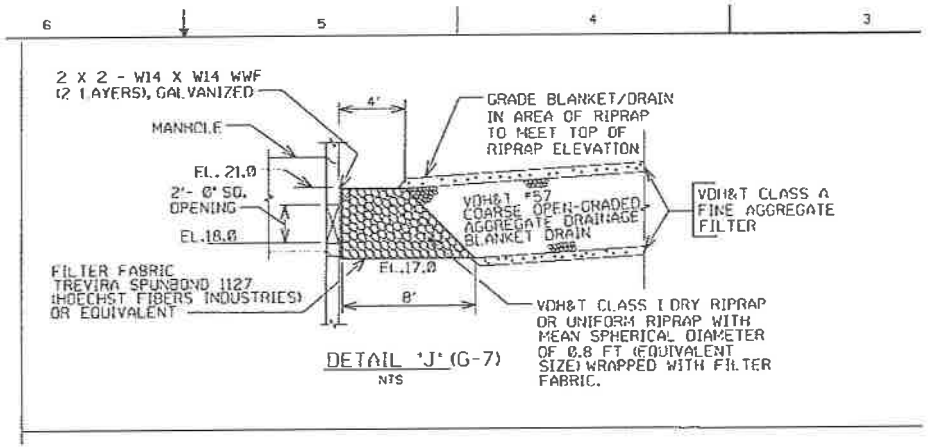


SECTION H - H (H-9)
NTS

8414

APPENDIX C

Original Design: Toe Drain / Manhole Connection Detail



DETAIL 'J' (G-7)
NTS

8416

DRAFT

Demonstration Plan for Outfall 010 Groundwater Separation

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00, Task 051
March 2016

Prepared by: GAI Consultants, Inc.
Richmond Office
4198 Cox Road, Suite 114
Glen Allen, Virginia 23060

Prepared for: Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060-3308

DRAFT

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Glen Allen, Virginia 23060-3308

Prepared by:
GAI Consultants, Inc.
Richmond Office
4198 Cox Road, Suite 114
Glen Allen, Virginia 23060-3328

Report Authors:

Brian W. Bullock, E.I.T.
Senior E.I.T.

John R. Klamut, P.E.
Engineering Manager

Table of Contents

1.0 Project Overview 1
1.1 Introduction 1
1.2 Project Description 1

2.0 Regulatory Requirements 1

3.0 Original System Description 2

4.0 Interim Solution 2
4.1 Description 2
4.2 Wet Weather and Dry Weather Considerations 2
4.3 Schedule 2

5.0 Permanent Solution 3
5.1 Description 3
5.2 Wet Weather and Dry Weather Considerations 3
5.3 Schedule 3
5.4 As-Built Drawings 3

Figure 1 Drainage Area Map
Figure 2 Outfall 010 Plugging (Interim Solution)
Figure 3 Pond D Toe Drain Separation Plan (Permanent Solution)
Figure 4 Pond D Toe Drain Separation Detail (Permanent Solution)

Drawing S-01 Reinforced Concrete Pipe

Appendix A Original Design: Pond D Toe Drain: Plan View
Appendix B Original Design: Toe Drain Manhole Detail
Appendix C Original Design: Toe Drain / Manhole Connection Detail

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1.0 Project Overview

1.1 Introduction

Virginia Electric and Power Company d / b / a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) ash ponds at the Possum Point Power Station (Station), a 1,845 megawatt natural gas and oil-fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA).

1.2 Project Description

Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018, in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Discharge from the ash ponds at the Station is managed in accordance with the Station's VA Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071. The Station recently modified VPDES Permit No. VA0002071 to allow discharge from the ponds during closure and post-closure. The major modification date of the permit was January 14, 2016.

Part of Dominion's plan for closure of the Station's ash ponds includes management of stormwater and groundwater associated with Outfall 010. Groundwater includes the Ash Pond D toe drainage. The purpose of this document is to present Dominion's groundwater separation plan for the Pond D toe drain. The VPDES Permit allows for redirecting Outfall 010 discharges, and contributing stormwater, groundwater, and Pond D toe drainage to ~~Ash Pond D~~Outfall 503. The VPDES Permit also allows for the separation of flows under permit condition in Part 1.F.23.

2.0 Regulatory Requirements

The following excerpt is the applicable condition in the Station's VPDES Permit No. VA0002071: Part 1. F. 23:

Outfall 010 Groundwater (Toe Drain) Removal and Re-designation to S107.

Upon successful demonstration to and written approval from DEQ confirming that all groundwater contributions to the Outfall 010 discharge have been removed, the requirements of Part I.A.15 of this permit shall become effective and supersede the requirements of Part 1.A.8. The groundwater contributions include both infiltration through the earthen berm as well as groundwater diverted around the impoundment. Should the permittee separate and remove all groundwater contributions to the discharge, then the discharge would be comprised of only industrially influenced stormwater. Stormwater – only discharges from this outfall would be designated as Outfall S107 and governed by the requirements of Part 1. A. 15, Part I.E and Part I.F18. Should the permittee pursue separation of the groundwater contributions to the discharge, a demonstration plan shall be submitted to DEQ for review and approval. This demonstration plan shall consider, at a minimum: observations of the outfall during dry-weather with variable antecedent precipitation conditions to confirm no discharge; seasonal wet-weather conditions to include potential inflow and infiltration contributions; other information as appropriate, such as design schematics, to support a conclusion that groundwater contributions have been removed from the discharge.

3.0 Original System Description

Historically, t~~T~~he ~~existing~~ discharge at Outfall 010 has~~is~~ been comprised of stormwater runoff and groundwater flows from the Pond D impoundment area and toe drain. Outfall 010 dischargeds on the south side of Possum Point Road to an unnamed tributary of Quantico Creek via a Dominion owned 72-inch reinforced concrete culvert.

Comment [jac1]: Does Dominion own the 72 inch pipe or is it VDH&T owned? Needs verification.

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As illustrated by the original design drawings, attached in Appendix A, the storm sewer system contributing to Outfall 010 is comprised of two Virginia Department of Transportation (VDOT) Standard DI-7B drainage inlets running parallel on the north side of Possum Point Road. The upstream and downstream inlets are connected by 18-inch concrete pipe. The collected stormwater enters a collection basin where it combines with the Pond D toe drainage. Water from the collection basin was ~~system~~ then dischargesd through the 72-inch-diameter culvert that runs from the downstream inlet, under Possum Point Road, to the unnamed tributary of Quantico Creek. As shown in Figure 1, the total contributing drainage area for surface water runoff to the two inlets is approximately twelve acres.

The horizontal drainage blanket and toe drain have been designed to collect infiltration through the earthen berm as well as groundwater which is diverted around the impoundment. The drainage blanket is comprised of a layer of VDOT No. 57 stone constructed under the Pond D embankment to prevent the buildup of pore water pressures in the downstream portion of the dam during the life of the disposal facility. This is a standard engineering practice for providing embankment stability. The toe drain contributions enter the stormwater~~-sewer-system~~collection basin through a two-foot square opening in the downstream drainage inlet. Refer to the Toe Drain Manhole Detail Sheet and Toe Drain Detail Sheet, attached in Appendix B and C respectively.

4.0 Interim Solution

4.1 Description

The Interim Solution consists of plugging the 72-inch reinforced concrete pipe (RCP) culvert and diverting the stormwater, groundwater, and Pond D Toe Drainage contributions to Ash Pond D for eventual discharge through Outfall 503 in compliance with the Station's VPDES Permit (Refer to Figure 2 and the attached Drawing S-01 Reinforced Concrete Pipe). The 72-inch culvert has been cleaned of sediment with a cleanout nozzle and the water / sediment were removed concurrently by vac truck to an offsite facility for treatment and disposal. A temporary lumber and plywood bulkhead was constructed on the upstream end of the culvert at the existing inlet north of Possum Point Road. Plywood forms, held in place with steel reinforcement, were constructed for a one-foot-wide, cast-in-place concrete plug wall at the downstream end of the culvert. A sump pump was installed to collect Outfall 010 contributions and divert them to Ash Pond D. After the plug wall cured, flowable Portland Cement backfill was applied in lifts to fill the culvert.

A generator powered pump system was installed in the existing inlet north of Possum Point Road for all the collected water (stormwater, groundwater, and Ash Pond D Toe Drainage) to be diverted to Pond D. Installation of the concrete plug was completed and the discharge from Outfall 010 ceased on XXXXX, 2016.

4.2 Wet Weather and Dry Weather Considerations

The Interim Solution will operate during wet and dry weather conditions and all flow will be transferred to Pond D until the permanent solution is constructed that will mechanically separate the Pond D Toe Drainage from the stormwater.

4.3 Schedule

~~Dominion has submitted a Notice of Planned Change in February 2016 to implement the Interim Solution.~~ The Interim Solution will remain in service until the Permanent Solution can be implemented.

Comment [KR2]: I don't think we need to include this sentence. We provided email description and phone notifications.

5.0 Permanent Solution

5.1 Description

Dominion proposes to permanently separate the Pond D Toe Drainage from Outfall 010 and has developed a conceptual plan for moving forward with this separation. The conceptual plan is shown on Figures 3 and 4. It consists of a new culvert / outfall exclusively for stormwater. The Permanent Solution will allow the Station to tie the groundwater (toe drain) flow into the Prince William County Service Authority (PWCSA) sanitary sewer system or permanently divert the flow to internal Outfall 503 ~~after treatment, as required~~in its final configuration. Once the Permanent Solution is installed we will begin monitoring Outfall S107 in accordance with Part I.A.15 of the permit., ~~a revised demonstration plan will be submitted to the VADEQ for approval in accordance with VPDES Permit No. VA0002071 Part 1. F. 23~~Dominion will begin .

Comment [KR3]: I think that this plan demonstrates that we have already successfully separated the toe drain from Outfall 010. The next step is to reintroduce the stormwater portion back to a new Outfall S107 and begin monitoring.

5.2 Wet Weather and Dry Weather Considerations

The mechanical separation of the flows will provide complete separation of the groundwater contributions during wet and dry weather conditions. During the initial period ~~Initially~~ following installation there will be daily ~~monitoring and~~ visual inspections to ensure the system is functioning as designed and monitoring of the discharge will commence in accordance with Part I.A.15 of the permit.~~.~~ ~~Prior to the installation of the Permanent Solution, the stormwater discharges will be monitored at a minimum frequency of once every five days, or no more than 48 hours after a runoff-producing rain event to confirm there are no groundwater contributions.~~

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~~5.3~~Schedule

Dominion would like to implement the Permanent Solution as soon as possible following DEQ approval of this ~~Notice of Planned Change~~Demonstration Plan. Until approval is granted from the PWCSA to discharge to the sanitary sewer system, or when the final treatment system for the Internal Outfall 503 (Final Configuration) is approved by the Virginia Department of Environmental Quality (VADEQ), Dominion will continue to divert Pond D Toe Drainage to Outfall 503 as allowed by the VPDES permit. ~~Ash Pond D.~~

~~5.4~~5.3As-Built Drawings

As-Built Drawings will be prepared and provided to the VADEQ to confirm that all groundwater contributions have been removed, per VPDES Permit No. VA0002071 Part 1. F. 23.

FIGURES

DRAWING

C150132.00, Task 051 / March 2016

gai consultants
transforming ideas into reality.

APPENDIX A

Original Design: Pond D Toe Drain Plan View

C150132.00, Task 051 / March 2016

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transforming ideas into reality.

APPENDIX B

Original Design: Toe Drain Manhole Detail

APPENDIX C

Original Design: Toe Drain / Manhole Connection Detail

C150132.00, Task 051 / March 2016

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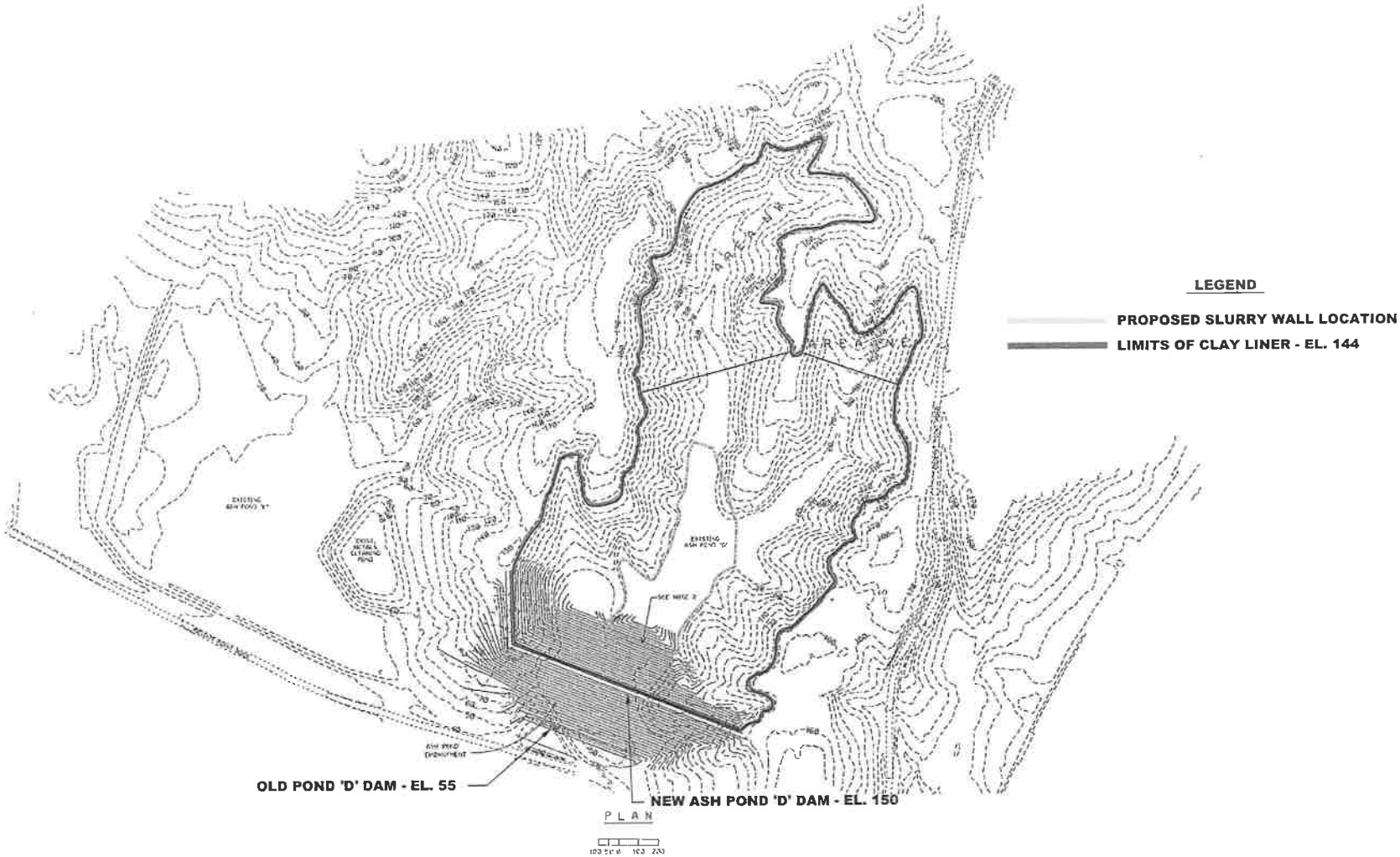
1988 GROUND WATER PROTECTION PLAN
POSSUM POINT ASH POND 'D'



8428

Virginia Department of Conservation & Recreation

Date Prepared: Dec. 8, 2015
Prepared By: Mike Winters, PE

ANNUAL INSPECTION REPORT FOR VIRGINIA REGULATED IMPOUNDING STRUCTURES

Reference: Impounding Structures Regulations, 4VAC 50-20-10 et seq., including 4VAC 50-20-105, Virginia Soil and Water Conservation Board

Owner's Information

Name of Dam: Possum Point Power Station - Ash Pond D Dam
Inventory Number: 15320
Owner's Name: Dominion, Attn: Mike Winters, P.E.
Location-**County**/City: Prince William County
Owner's Address: 5000 Dominion Boulevard
Owner's Address: Glen Allen VA 23060
Hazard Classification: Significant
Name of reservoir: Possum Point Ash Pond D
Purpose of reservoir: impounds coal ash
Telephone No.: (mobile) 804-347-9451 (Business) 804-273-2376
Other means of communication: michael.j.winters@dom.com

Owner's Engineer

Name of Engineering Firm and Engineer: Dominion Power Generation Engineering – Michael Winters, PE
Professional Engineer Virginia License Number: 33623
Mailing Address: 5000 Dominion Boulevard
Glen Allen VA 23060

Telephone No.: (Business) (office) 804-273-2376; (mobile) 804-347-9451

Directions: Make note of all pertinent conditions and changes since the last inspection, or, if this is the first inspection, since the filing of a design report.

Date of This Inspection 10/02/2015
Date of Last Inspection 4/10/2014

1. EMBANKMENT

a. Any alteration made to the embankment? No

b. Erosion on embankment? None observed

c. Settlement, misalignment or cracks in embankment? No cracking or misalignment. Surficial slough observed on the upstream slope.

d. Seepage? If so, seepage flow rate and location (describe any turbidity and observed color within the flow): No uncontrolled seepage. Toe drain flow clear and consistent with historical observations.

2. UPSTREAM SLOPE

a. Woody vegetation discovered? No
b. Rodent burrows discovered? No
c. Remedial work performed? No

3. DECANT STRUCTURE TOWER (SEE PHOTOS)

a. Deterioration of concrete? No – concrete in excellent condition
b. Exposure of rebar reinforcement? No
c. Is there a need to repair or replace the trash rack? N/A
d. Any problems with debris? No
e. Was the drawdown valve operated? No. Reservoir level about 6 feet below lowest outlet.

4. ABUTMENT CONTACTS (SEE PHOTOS)

a. Any seepage? If so, estimate the flow rate and describe the location of the seep or damp areas (describe any turbidity and observed color within the flow):

None at contacts. Historical wet spots present beyond abutment contacts from perched groundwater on subsurface clay layer. Discovered during dam design exploration and prior to construction. No change this inspection.

5. EARTHEN EMERGENCY SPILLWAY

a. Obstructions to flow? If so, describe plans to correct: Trees and brush. The reservoir can store the design storm. Therefore, there are no plans to remove trees and brush from the emergency spillway at this time.

b. Rodent burrows discovered? None observed.

c. Any deterioration in the approach or discharge channel? None observed.

6. CONCRETE EMERGENCY SPILLWAY **N/A**

a. Deterioration of concrete?

b. Exposed steel reinforcement?

c. Any leakage below concrete spillway?

d. Obstructions to flow? If so, lists plans to correct:

7. DOWNSTREAM SLOPE (SEE PHOTOS)

a. Woody vegetation discovered? No

b. Rodent burrows discovered? No

c. Are seepage drains flowing? Yes – toe drain flowing

d. Any seepage or wet areas? Wet on bench at El 150 ft., 15-feet long. The wet area is above the upstream water surface. Therefore, the source is either slope runoff or shallow seepage from the bench above.

8. DECANT TOWER OUTLET PIPE (SEE PHOTOS)

a. Any water flowing outside of discharge pipe through the Impounding Structure? No

b. Describe any deflection or damage to the pipe: None observed

9. STILLING BASIN (@ U/S END OF DITCH TO POND E – SEE PHOTOS)

a. Deterioration of concrete structures? No

b. Exposure of rebar reinforcement? No

c. Deterioration of the basin slopes? N/A

d. Repairs made? N/A

e. Any obstruction to flow? No

10. GATES (VALVED OUTLETS IN DECANT TOWER – SEE PHOTOS)

a. Gate malfunctions or repairs? **No**

b. Corrosion or damage? **No**

c. Were any gates operated? If so, how often and to what extreme?

No. Reservoir level about 6 feet below lowest outlet.

11. RESERVOIR/WATERSHED

a. New developments upstream of dam? No

b. Slides or erosion of lake banks around the rim? No

c. General comments to include silt, algae or other influence factors: No comments

12. INSTRUMENTS

a. List all instruments: Piezometers and observation wells

b. Any readings of instruments? none

c. Any installation of new instruments? No

13. DOWNSTREAM/HAZARD ISSUES

a. New development in downstream inundation zone? No

b. Note the maximum storm water discharge or peak elevation during the previous year. N/A

c. Was general maintenance performed on dam? If so, when? Mowed bi-annually.

d. List actions that need to be accomplished before the next inspection:

14. OVERALL CONDITION ASSESSMENT OF IMPOUNDING STRUCTURE AND APPURTENANCES

(Check one) [X] **SATISFACTORY** [ ] **FAIR** [ ] **POOR** [ ] **UNSATISFACTORY** [ ] **NOT RATED**

1. SATISFACTORY
No existing or potential dam safety deficiencies are recognized. Acceptable performance is expected under all loading conditions (static, hydrologic, seismic) in accordance with the applicable regulatory criteria or tolerable risk guidelines.
2. FAIR
No existing dam safety deficiencies are recognized for normal loading conditions. Rare or extreme hydrologic and/or seismic events may result in a dam safety deficiency. Risk may be in the range to take further action.
3. POOR
A dam safety deficiency is recognized for loading conditions which may realistically occur. Remedial action is necessary. POOR may also be used when uncertainties exist as to critical analysis parameters which identify a potential dam safety deficiency. Further investigations and studies are necessary.
4. UNSATISFACTORY
A dam safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution.
5. NOT RATED
The dam has not been inspected, is not under state jurisdiction, or has been inspected but, for whatever reason, has not been rated.

General Comments:

- Dam can store the PMF without discharge.

Recommendations:

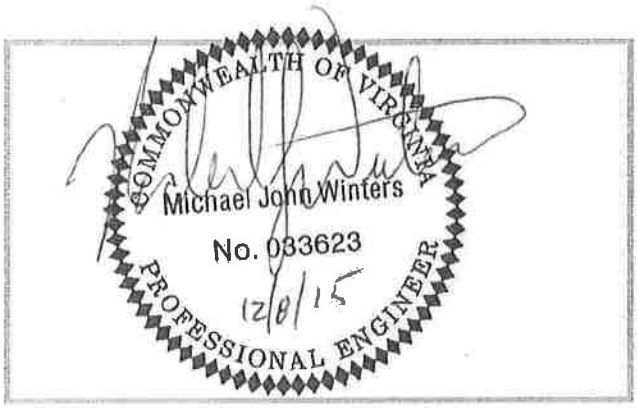
CERTIFICATION BY OWNER'S ENGINEER (required only when an inspection by an engineer is required)

I hereby certify that the information provided in this report has been examined by me and found to be true and correct in my professional judgment.

Signed: _____ Michael Winters _____ Virginia Number: 33623
Professional Engineer's Signature Print Name

This 8th day of December , 20 15 .

Engineer's Virginia Seal:



CERTIFICATION BY OWNER

I hereby certify that the information provided in this report has been examined by me.

Signed: _____ Michael Winters
Owner's Signature Print Name

This 8th day of December , 20 15 .

Mail the executed form to the appropriate
Department of Conservation and Recreation
Division of Dam Safety and Floodplain Management
Regional Engineer

Subject: Dominion Possum Point Power Station
Hydrologic Analysis for Inlets below Pond D Embankment
By: BerkeME Date: 01/14/2016 Project #: C150132.00
Chkd By: SchelAB Date: 02/2/2016

gai consultants

PURPOSE:

This calculation will estimate the 1- through 100-year peak flow rates and runoff volumes to the Eastern and Western Inlets at the Bottom of the Pond D Embankment and the 72-inch culvert.

METHOD:

The Hydraflow Hydrographs Extension for AutoCAD Civil 3D 2013 will be used to estimate a peak flow rate and runoff volume for each drainage area for multiple storm events. The two inlet flows will be combined to estimate peak flow rates to the existing 72-inch culvert under Possum Point Road for the design events.

INPUT DATA:

Rainfall Data (From NOAA Atlas 14, Volume 2, Version 3-Dumfries, VA):

1-yr, 24-hr event	=	2.57	in
2-yr, 24-hr event	=	3.12	in
5-yr, 24-hr event	=	4.04	in
10-yr, 24-hr event	=	4.84	in
25-yr, 24-hr event	=	6.06	in
100-yr, 24-hr event	=	8.35	in

Runoff Curve Numbers (from Table 2-2a, 2-2b, and 2-2c from TR-55 Manual):

Meadow	=	58
Gravel	=	85
Impervious/Roads	=	98

Land use was determined from the USDA mapping and aerial imagery. Soil type was determined to be Type B from the USDA Soil Map. Refer to the attached Drainage Area Map for aerial imagery and soil type boundaries.

HYDROLOGIC ANALYSIS:

The following pages contain the hydrologic analysis and include:

- a drainage area map
- precipitation data
- composite curve number determination (within the hydraflow software), and
- hydraflow input/output.

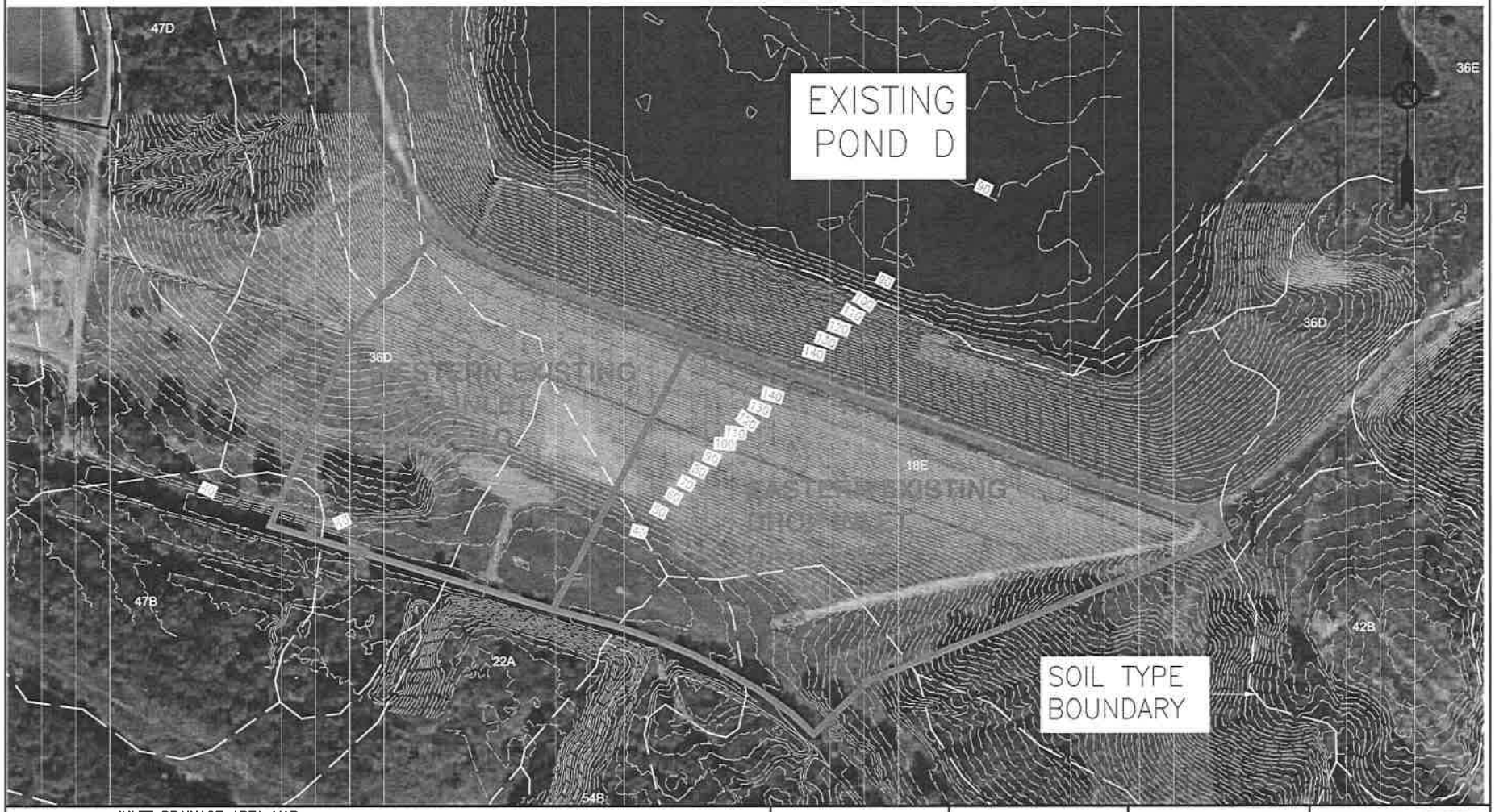
A composite curve number for the watershed was equal to 60. Due to the small size and steep nature of the embankment, a 5-minute time of concertation was assumed for each watershed.

SUMMARY OF RESULTS:

The following tables summarize peak flow rates and runoff volumes estimated at each inlet and the culvert.

	Estimated Flow Rate (cfs)			Estimated Runoff Volume (cf)		
Storm Event	**Western Inlet**	**Eastern Inlet**	**72" Culvert**	**Western Inlet**	**Eastern Inlet**	**72" Culvert**
1-year	0.8	1.1	2.0	3,723	5,201	8,924
2-year	2.6	3.7	6.3	7,266	10,149	17,415
5-year	6.7	9.4	16.2	15,038	21,007	36,045
10-year	11.1	15.5	26.6	23,257	32,488	55,745
25-year	18.6	26.0	44.6	37,731	52,705	90,436
100-year	34.5	48.2	82.6	69,231	96,709	165,940

DRAINAGE AREA MAP



DRAWING TITLE: INLET DRAINAGE AREA MAP

SCALE: 1" = 150'

150 0 150 300

DOMINION

POSSUM POINT POWER STATION

POND D CLOSURE

PITTSBURGH OFFICE • 385 EAST WATERFRONT DRIVE, HOMESTEAD, PA 15120-5005

gai consultants

DRAWN BY: BERKEME	APPROVED BY: -----
CHECKED BY:	DATE: ---------
DRAWING NUMBER:	
This drawing was produced with computer aided drafting technology and is supported by electronic drawing files. Do not revise this drawing via manual drafting methods.	REVISION
SCALE:	SHT. NO. ___ OF 4

GAI DRAWING FILE NO. POND DTOE DRAIN INLETS CEU

PRECIPITATION DATA

NOAA Atlas 14, Volume 2, Version 3
Location name: Dumfries, Virginia, US*
Latitude: 38.5352°, Longitude: -77.2816°
Elevation: 30 ft*
* source: Google Maps

POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

PF tabular | PF graphical | Maps & aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.357 (0.323-0.393)	0.428 (0.387-0.472)	0.509 (0.460-0.561)	0.568 (0.512-0.626)	0.643 (0.576-0.709)	0.699 (0.624-0.771)	0.755 (0.670-0.834)	0.810 (0.713-0.896)	0.880 (0.766-0.979)	0.934 (0.808-1.04)
10-min	0.570 (0.516-0.629)	0.685 (0.620-0.755)	0.815 (0.737-0.898)	0.909 (0.820-1.00)	1.03 (0.918-1.13)	1.11 (0.993-1.23)	1.20 (1.06-1.33)	1.28 (1.13-1.42)	1.39 (1.21-1.55)	1.47 (1.27-1.65)
15-min	0.713 (0.645-0.786)	0.861 (0.779-0.949)	1.03 (0.932-1.14)	1.15 (1.04-1.27)	1.30 (1.16-1.43)	1.41 (1.26-1.56)	1.52 (1.35-1.68)	1.62 (1.43-1.79)	1.75 (1.53-1.95)	1.85 (1.60-2.06)
30-min	0.978 (0.884-1.08)	1.19 (1.08-1.31)	1.47 (1.32-1.62)	1.67 (1.50-1.84)	1.93 (1.72-2.12)	2.12 (1.89-2.34)	2.32 (2.06-2.57)	2.52 (2.22-2.79)	2.79 (2.43-3.10)	2.99 (2.59-3.34)
60-min	1.22 (1.10-1.34)	1.49 (1.35-1.64)	1.88 (1.70-2.07)	2.17 (1.96-2.39)	2.56 (2.30-2.83)	2.88 (2.57-3.17)	3.20 (2.84-3.53)	3.54 (3.11-3.91)	4.00 (3.48-4.45)	4.37 (3.78-4.88)
2-hr	1.42 (1.28-1.58)	1.73 (1.56-1.92)	2.20 (1.98-2.43)	2.56 (2.30-2.83)	3.07 (2.74-3.39)	3.49 (3.10-3.85)	3.92 (3.46-4.34)	4.39 (3.84-4.86)	5.04 (4.36-5.61)	5.57 (4.77-6.23)
3-hr	1.53 (1.38-1.72)	1.87 (1.68-2.09)	2.37 (2.12-2.64)	2.77 (2.47-3.08)	3.33 (2.96-3.71)	3.80 (3.35-4.23)	4.30 (3.76-4.78)	4.82 (4.18-5.38)	5.58 (4.77-6.25)	6.20 (5.24-6.97)
6-hr	1.89 (1.70-2.12)	2.29 (2.06-2.56)	2.89 (2.59-3.23)	3.38 (3.02-3.78)	4.11 (3.64-4.59)	4.72 (4.15-5.28)	5.39 (4.69-6.02)	6.11 (5.26-6.84)	7.17 (6.08-8.07)	8.06 (6.73-9.11)
12-hr	2.29 (2.05-2.58)	2.76 (2.47-3.11)	3.51 (3.13-3.95)	4.14 (3.68-4.65)	5.10 (4.49-5.72)	5.94 (5.17-6.66)	6.87 (5.91-7.70)	7.90 (6.71-8.88)	9.46 (7.88-10.7)	10.8 (8.86-12.3)
24-hr	2.57 (2.34-2.89)	3.12 (2.83-3.50)	4.04 (3.66-4.52)	4.84 (4.37-5.40)	6.06 (5.43-6.74)	7.14 (6.35-7.90)	8.35 (7.37-9.21)	9.73 (8.50-10.7)	11.8 (10.2-13.0)	13.7 (11.6-15.0)
2-day	2.99 (2.70-3.33)	3.63 (3.29-4.04)	4.68 (4.24-5.21)	5.59 (5.04-6.21)	6.96 (6.24-7.70)	8.16 (7.27-9.00)	9.49 (8.38-10.5)	11.0 (9.62-12.1)	13.3 (11.4-14.6)	15.2 (13.0-16.7)
3-day	3.17 (2.88-3.53)	3.84 (3.49-4.28)	4.95 (4.48-5.50)	5.90 (5.32-6.54)	7.32 (6.56-8.09)	8.56 (7.63-9.43)	9.93 (8.78-10.9)	11.5 (10.1-12.6)	13.8 (11.9-15.1)	15.8 (13.5-17.3)
4-day	3.35 (3.05-3.72)	4.06 (3.69-4.52)	5.21 (4.73-5.79)	6.20 (5.61-6.87)	7.67 (6.89-8.48)	8.95 (8.00-9.87)	10.4 (9.19-11.4)	11.9 (10.5-13.1)	14.3 (12.4-15.7)	16.3 (14.0-17.9)
7-day	3.90 (3.57-4.28)	4.70 (4.30-5.16)	5.95 (5.44-6.53)	7.00 (6.39-7.69)	8.58 (7.80-9.40)	9.93 (8.97-10.9)	11.4 (10.2-12.5)	13.1 (11.6-14.2)	15.5 (13.6-16.9)	17.6 (15.2-19.1)
10-day	4.46 (4.11-4.87)	5.36 (4.93-5.86)	6.69 (6.15-7.30)	7.79 (7.15-8.49)	9.39 (8.57-10.2)	10.7 (9.76-11.7)	12.2 (11.0-13.2)	13.7 (12.3-14.9)	16.0 (14.2-17.3)	17.8 (15.7-19.4)
20-day	6.01 (5.59-6.49)	7.16 (6.65-7.73)	8.65 (8.04-9.33)	9.86 (9.15-10.6)	11.6 (10.7-12.4)	12.9 (11.9-13.9)	14.3 (13.2-15.4)	15.8 (14.5-17.0)	17.9 (16.2-19.2)	19.5 (17.6-21.0)
30-day	7.39 (6.89-7.92)	8.74 (8.17-9.38)	10.4 (9.71-11.2)	11.7 (10.9-12.6)	13.6 (12.6-14.5)	15.0 (13.9-16.0)	16.5 (15.2-17.6)	18.0 (16.6-19.2)	20.0 (18.3-21.4)	21.6 (19.7-23.1)
45-day	9.29 (8.72-9.86)	11.0 (10.3-11.6)	12.8 (12.0-13.6)	14.3 (13.4-15.1)	16.1 (15.1-17.1)	17.6 (16.4-18.6)	19.0 (17.7-20.1)	20.4 (18.9-21.6)	22.1 (20.5-23.5)	23.5 (21.7-25.0)
60-day	11.0 (10.4-11.7)	13.0 (12.2-13.7)	15.0 (14.1-15.9)	16.5 (15.6-17.4)	18.5 (17.4-19.5)	19.9 (18.7-21.0)	21.3 (19.9-22.5)	22.6 (21.1-23.9)	24.2 (22.6-25.7)	25.4 (23.6-26.9)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

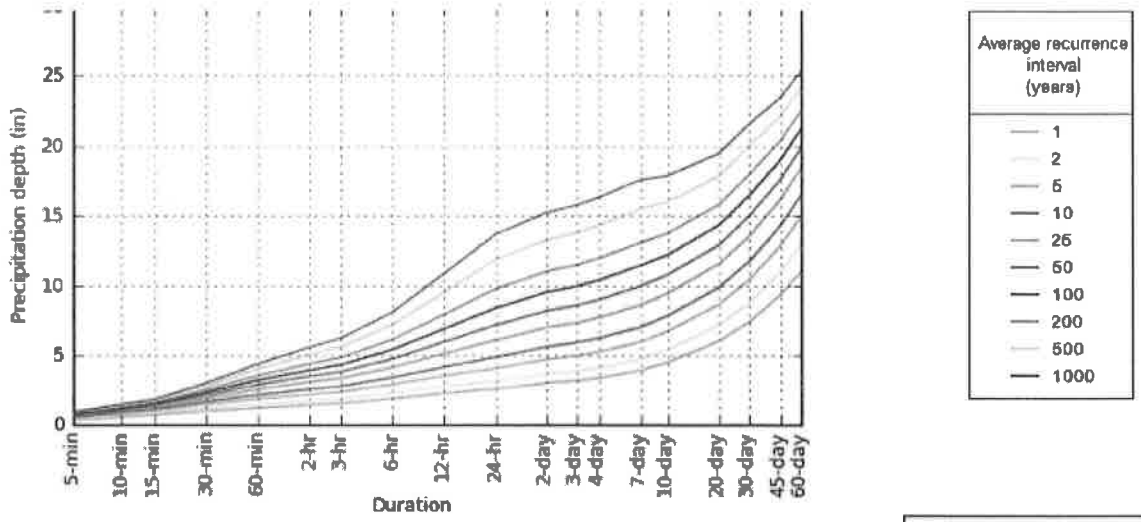
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

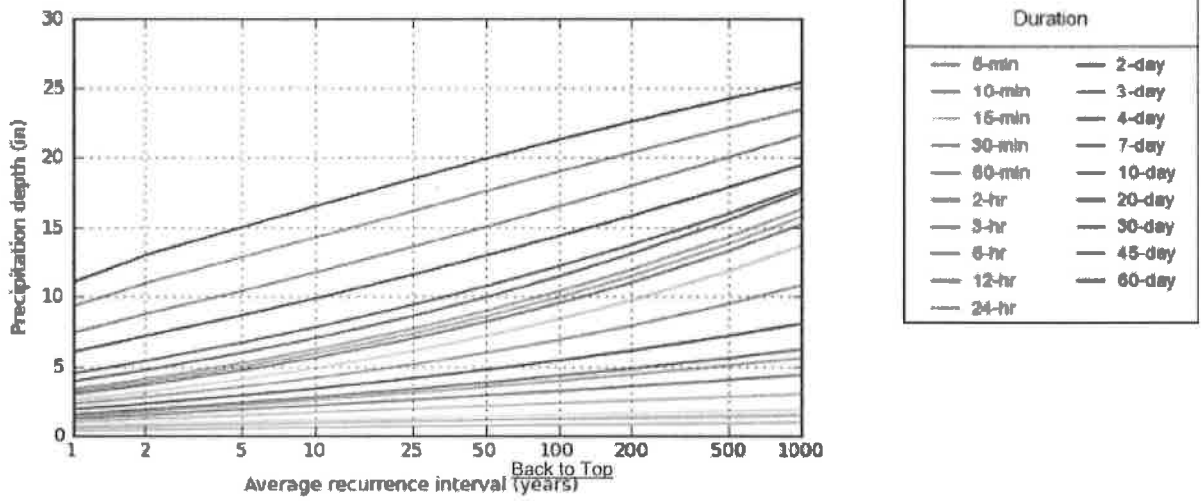
Please refer to NOAA Atlas 14 document for more information.

Back to Top

PF graphical

8438





Back to Top

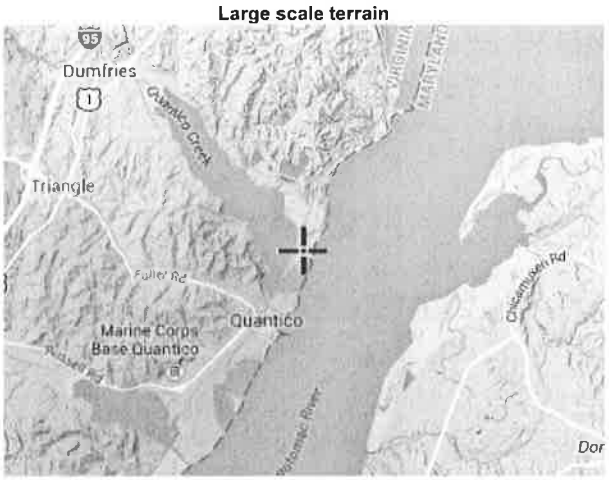
Maps & aerials

NOAA Atlas 14, Volume 2, Version 3

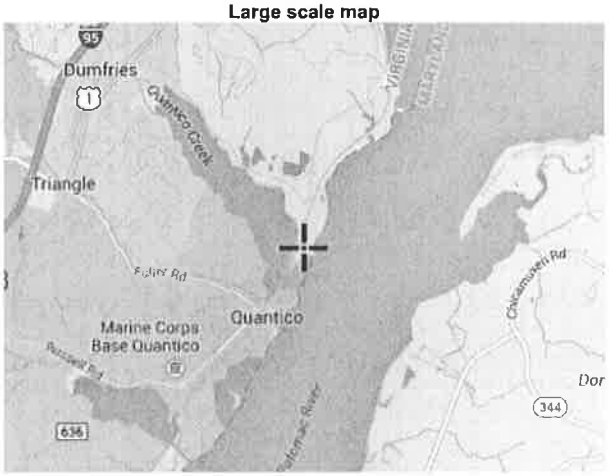
Created (GMT): Mon Mar 9 13:33:02 2015

Small scale terrain

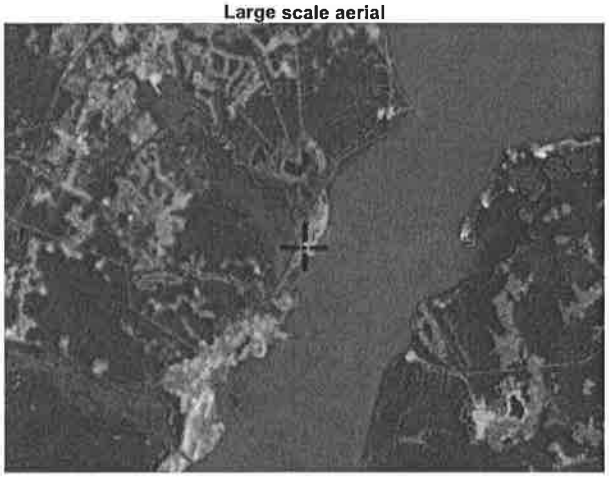
Large scale terrain



Large scale map



Large scale aerial



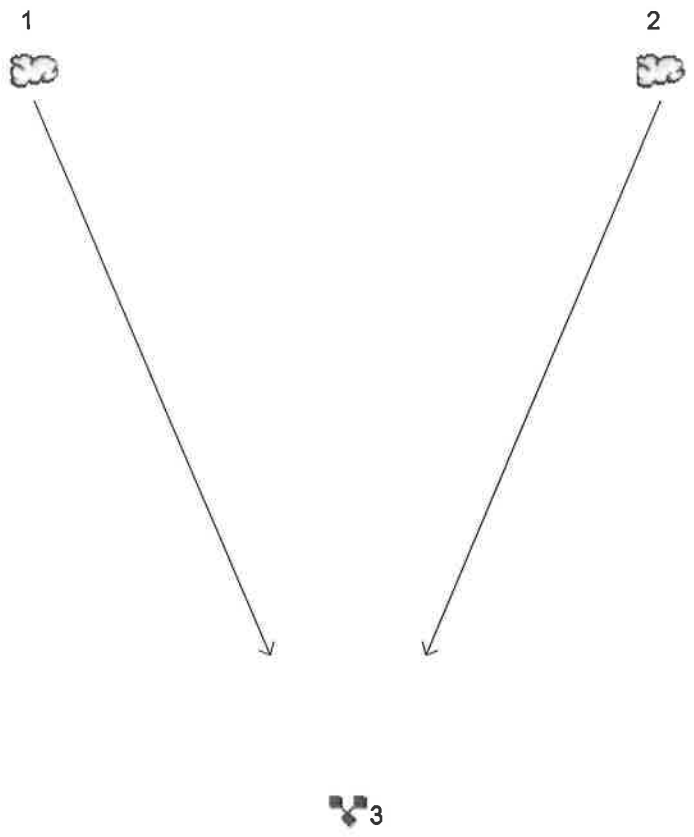
Back to Top

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
Office of Hydrologic Development
1325 East West Highway
Silver Spring, MD 20910

HYDRAFLOW INPUT/OUTPUT

Watershed Model Schematic

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.822	1	721	3,723	------	------	------	Western Inlet
2	SCS Runoff	1.148	1	721	5,201	------	------	------	Eastern Inlet
3	Combine	1.970	1	721	8,924	1, 2	------	------	72 Inch Culvert

Hydrograph Report

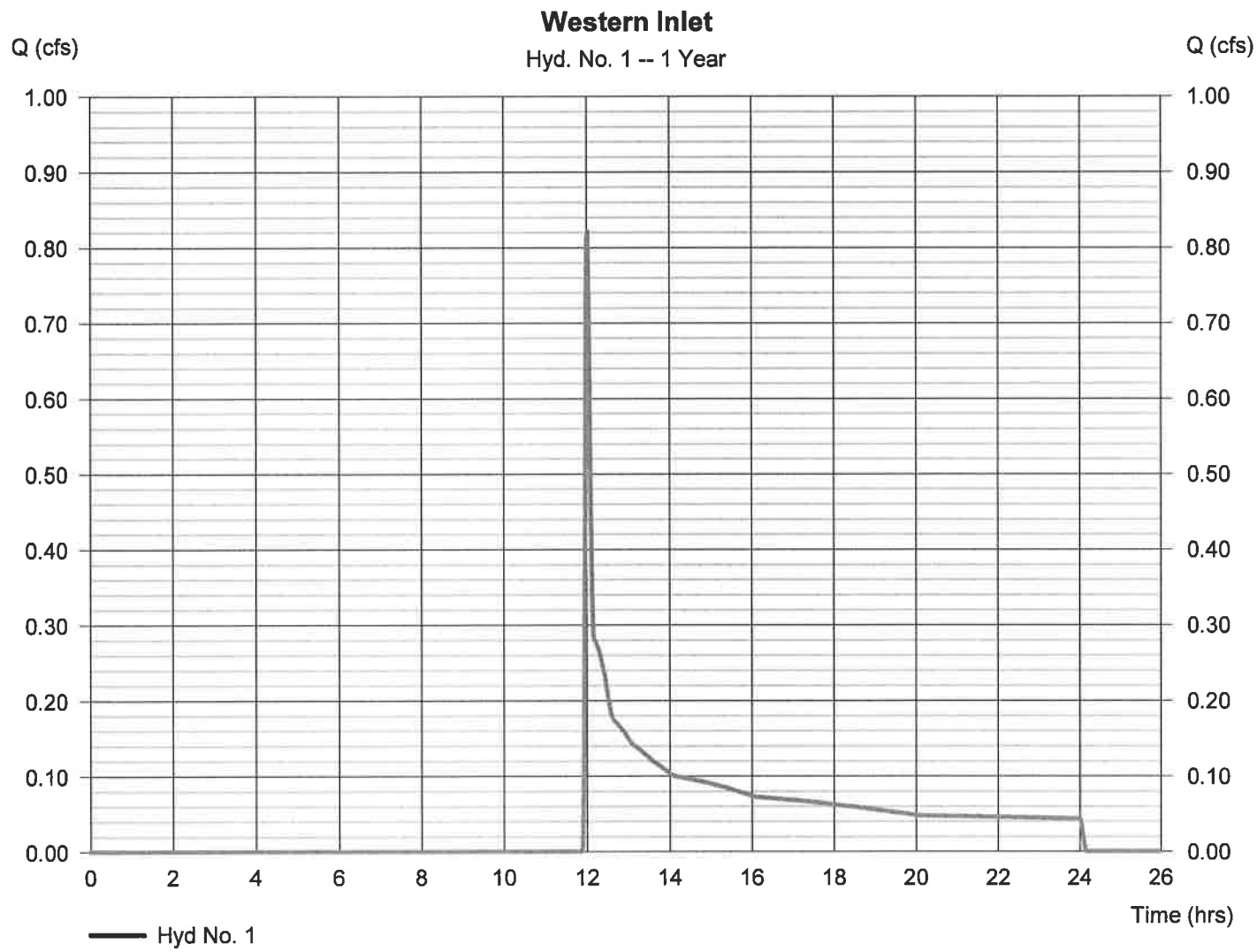
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 0.822 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 3,723 cuft
Drainage area	= 5.140 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.57 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(4.790 x 58) + (0.210 x 85) + (0.140 x 98)] / 5.140



Hydrograph Report

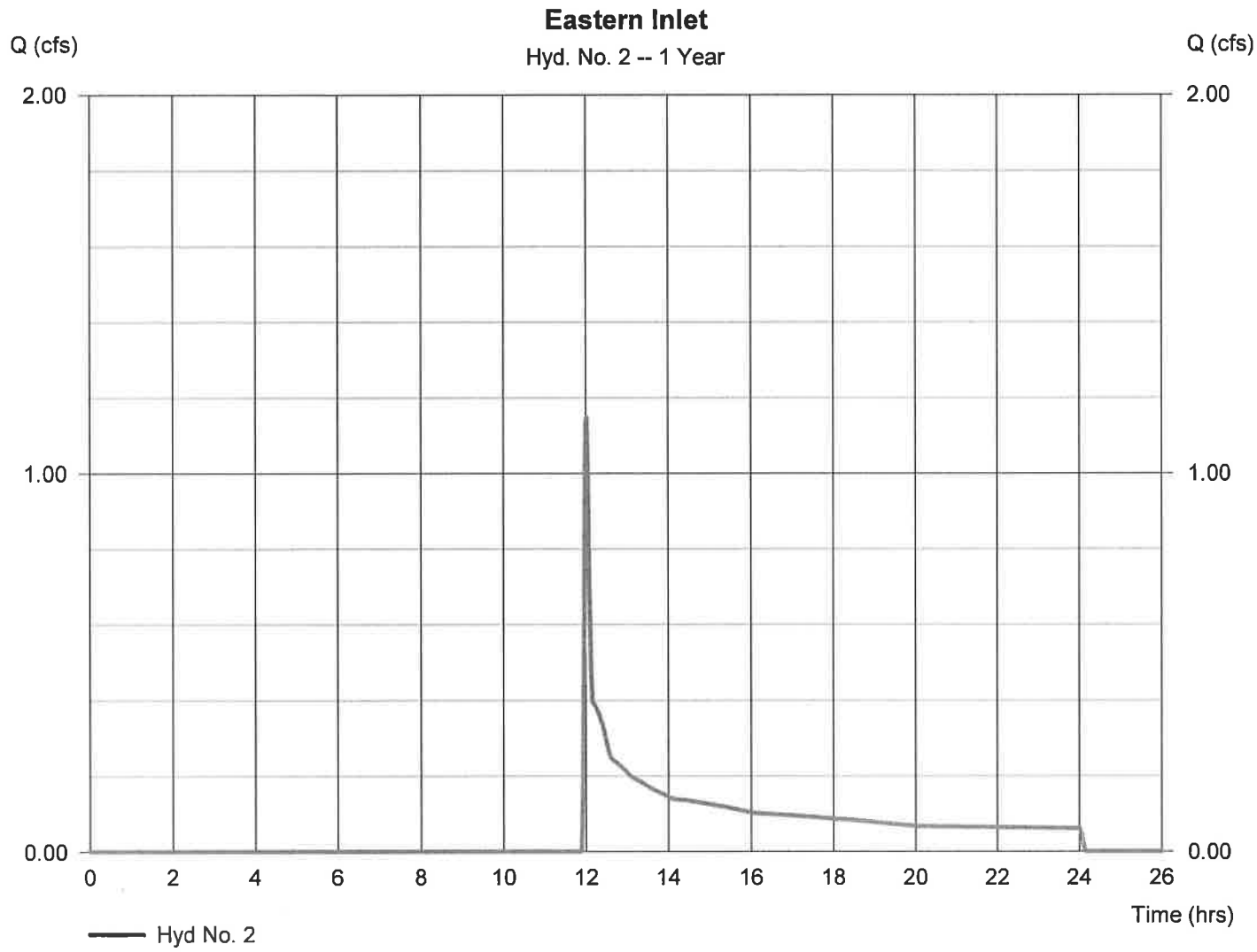
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 1.148 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 5,201 cuft
Drainage area	= 7.180 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.57 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.150 x 98) + (0.230 x 85) + (6.800 x 58)] / 7.180



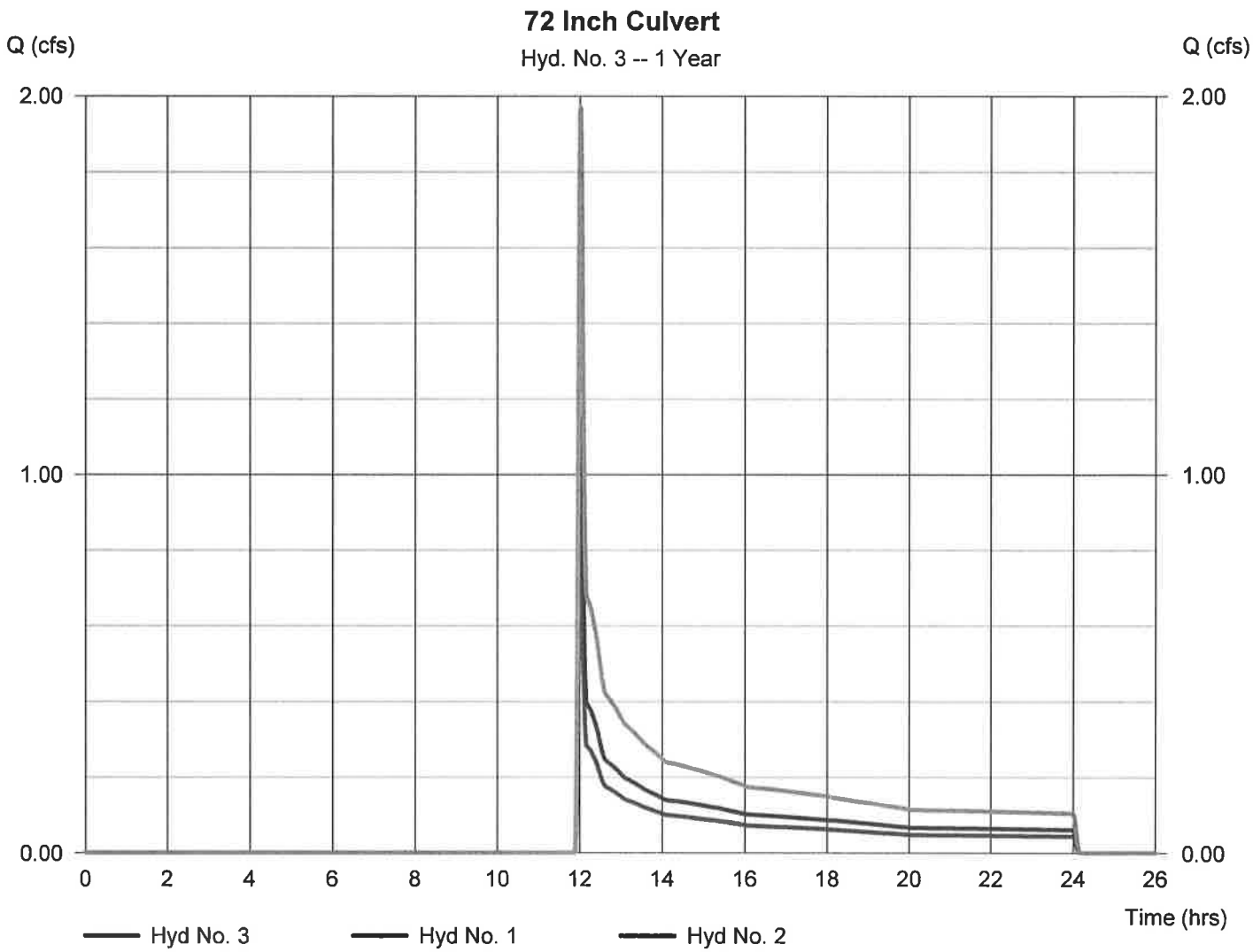
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type	= Combine	Peak discharge	= 1.970 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.02 hrs
Time interval	= 1 min	Hyd. volume	= 8,924 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 12.320 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	2.622	1	719	7,266	------	------	------	Western Inlet
2	SCS Runoff	3.663	1	719	10,149	------	------	------	Eastern Inlet
3	Combine	6.286	1	719	17,415	1, 2	------	------	72 Inch Culvert

Hydrograph Report

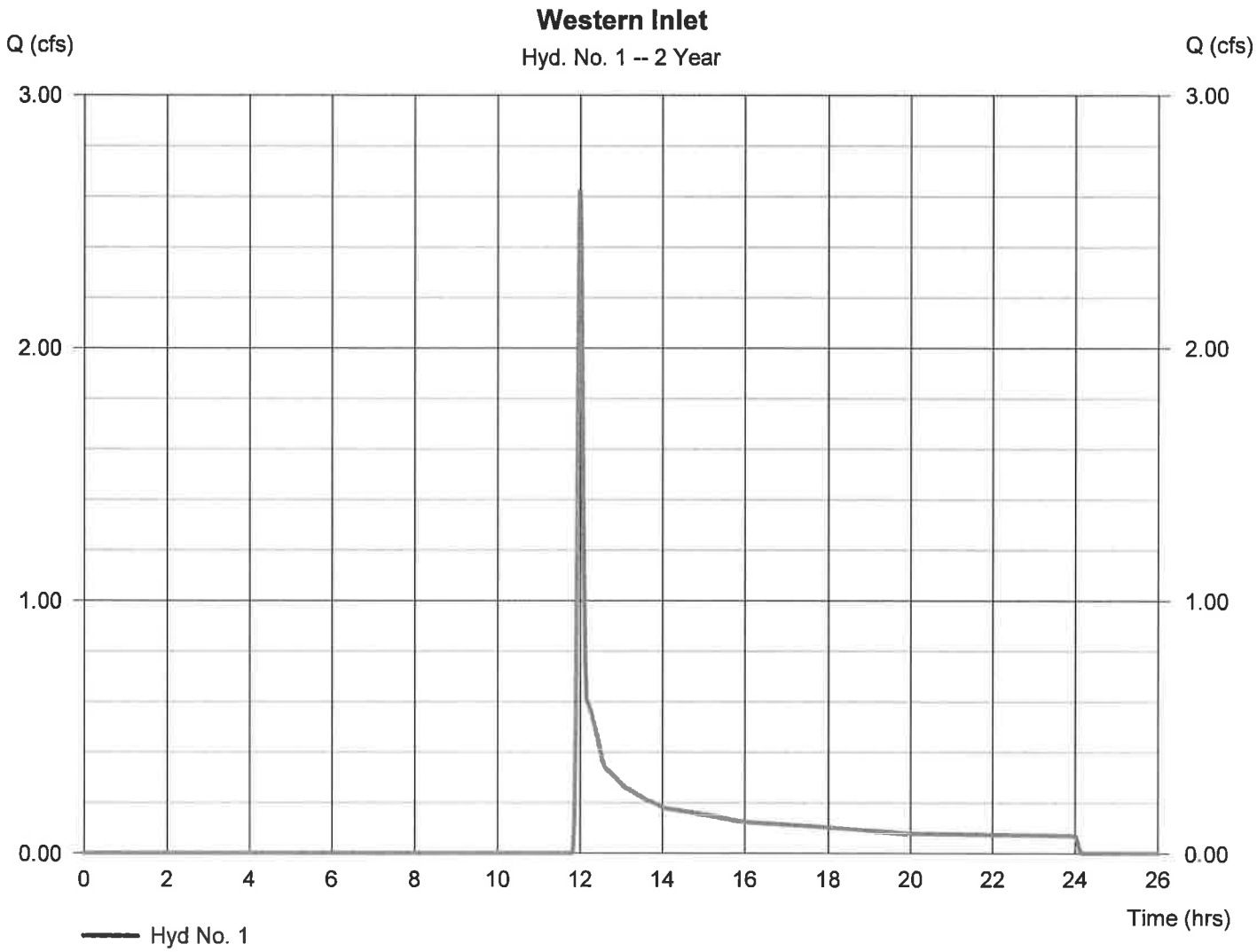
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 2.622 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 7,266 cuft
Drainage area	= 5.140 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.12 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(4.790 x 58) + (0.210 x 85) + (0.140 x 98)] / 5.140



Hydrograph Report

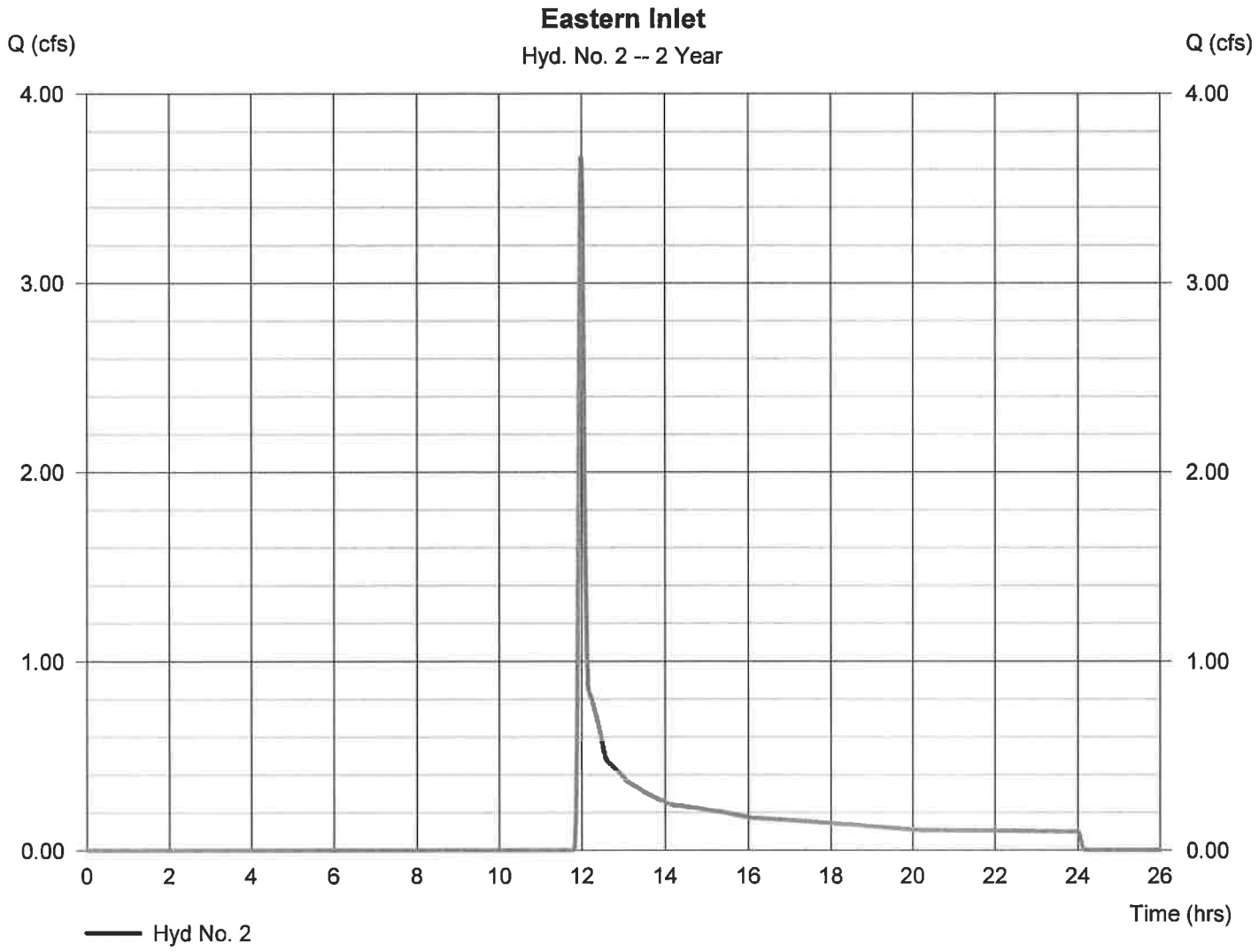
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 3.663 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 10,149 cuft
Drainage area	= 7.180 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.12 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.150 x 98) + (0.230 x 85) + (6.800 x 58)] / 7.180



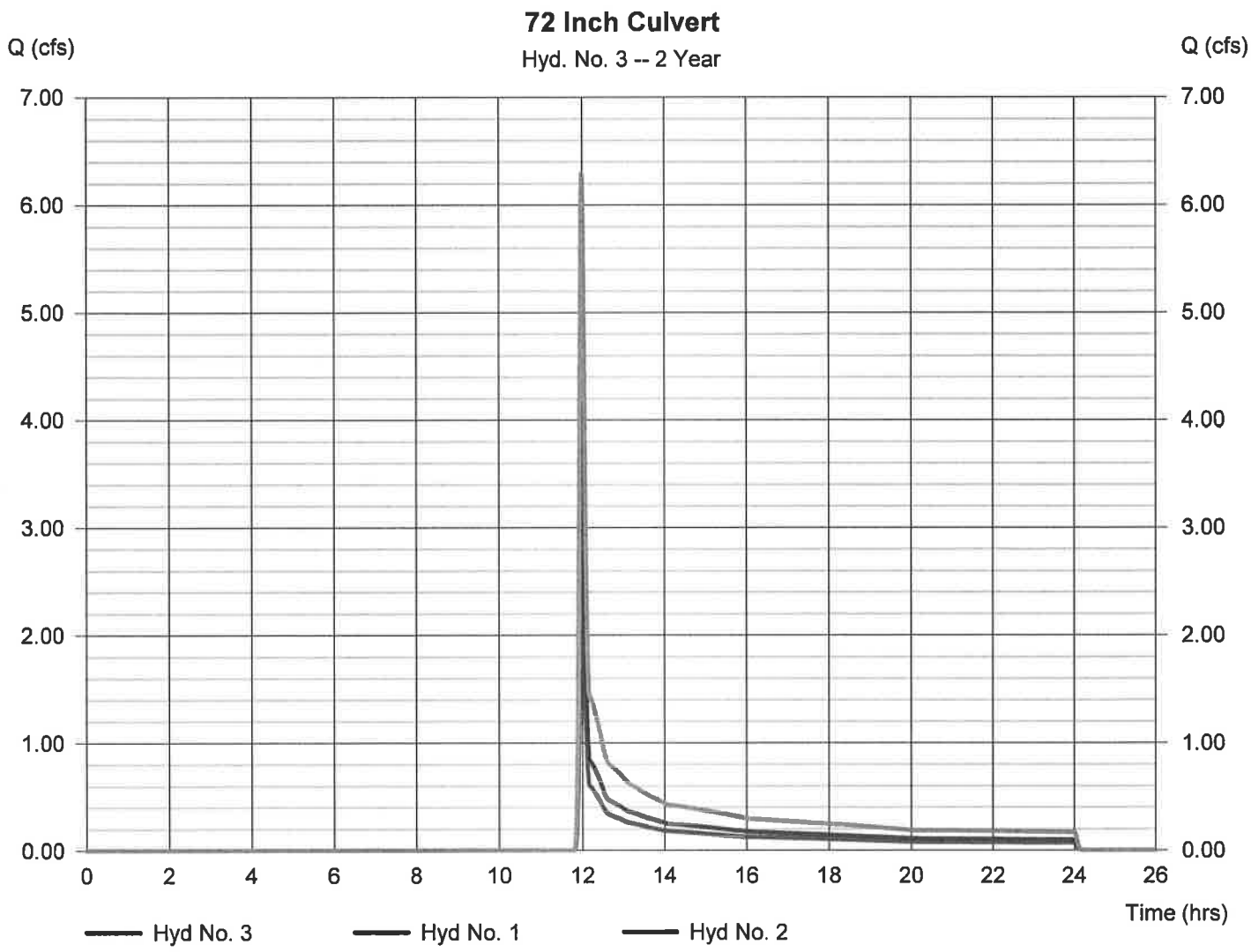
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type	= Combine	Peak discharge	= 6.286 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 17,415 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 12.320 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	6.746	1	718	15,038	------	------	------	Western Inlet
2	SCS Runoff	9.424	1	718	21,007	------	------	------	Eastern Inlet
3	Combine	16.17	1	718	36,045	1, 2	------	------	72 Inch Culvert

Hydrograph Report

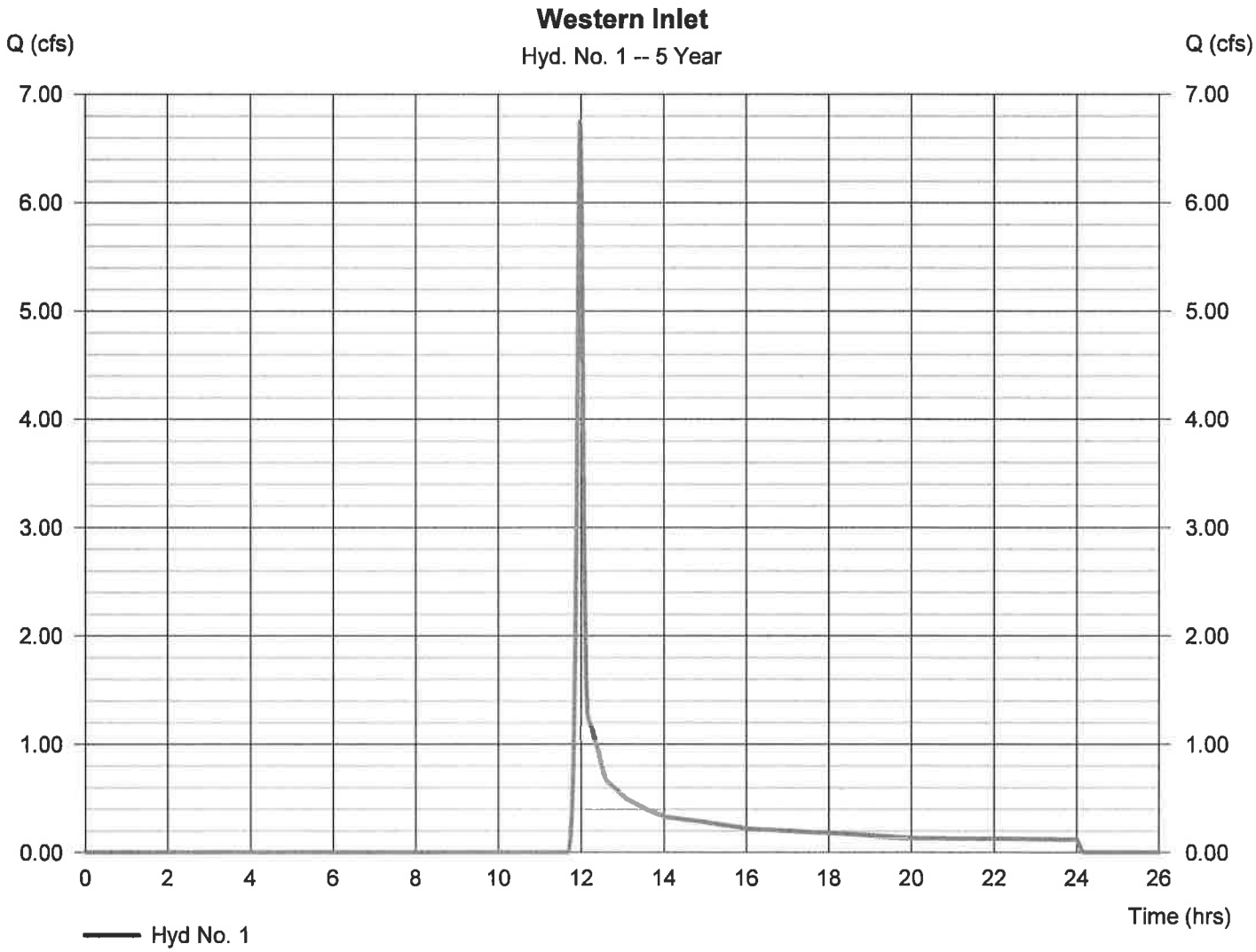
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 6.746 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 15,038 cuft
Drainage area	= 5.140 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.04 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(4.790 x 58) + (0.210 x 85) + (0.140 x 98)] / 5.140



Hydrograph Report

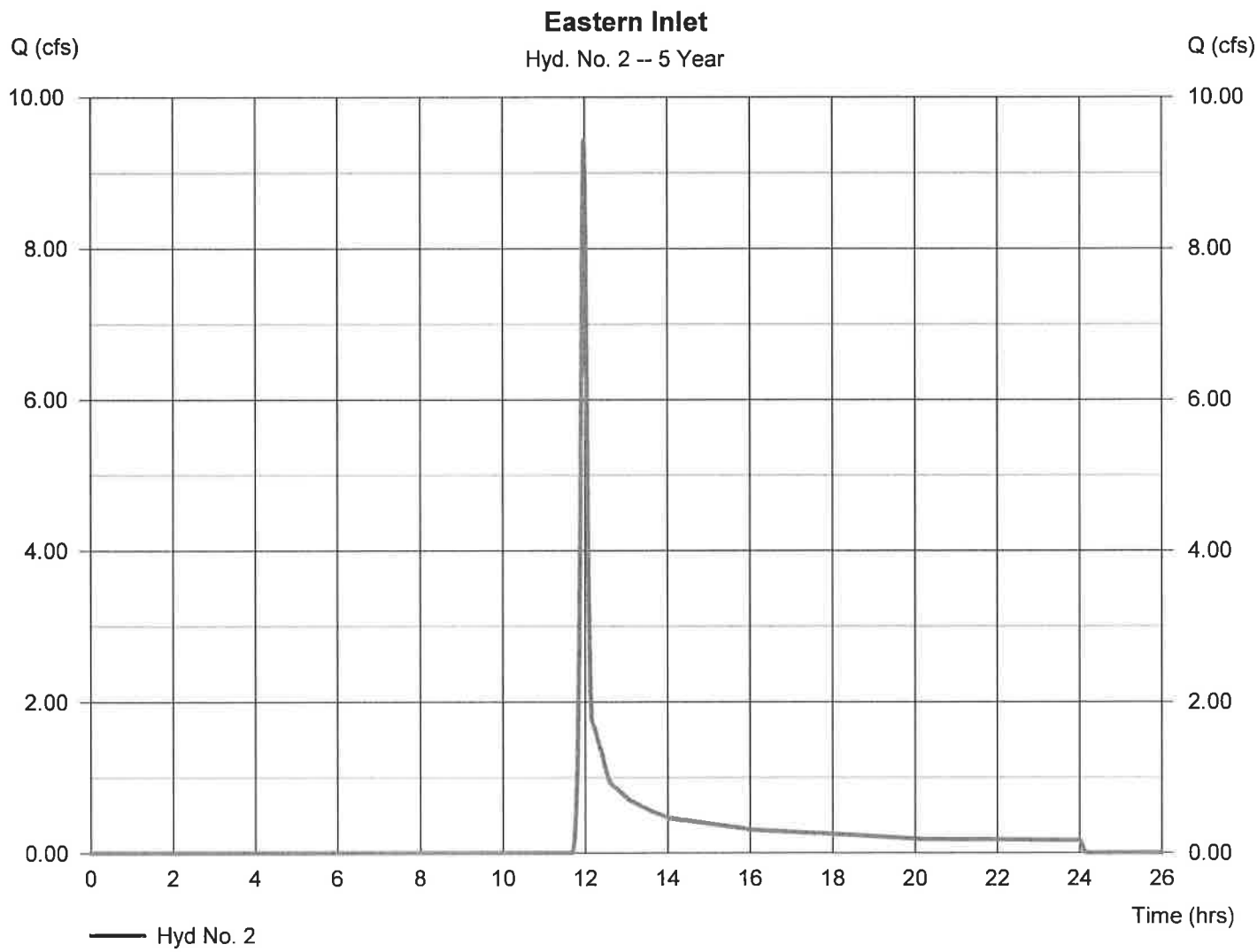
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 9.424 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 21,007 cuft
Drainage area	= 7.180 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.04 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.150 x 98) + (0.230 x 85) + (6.800 x 58)] / 7.180



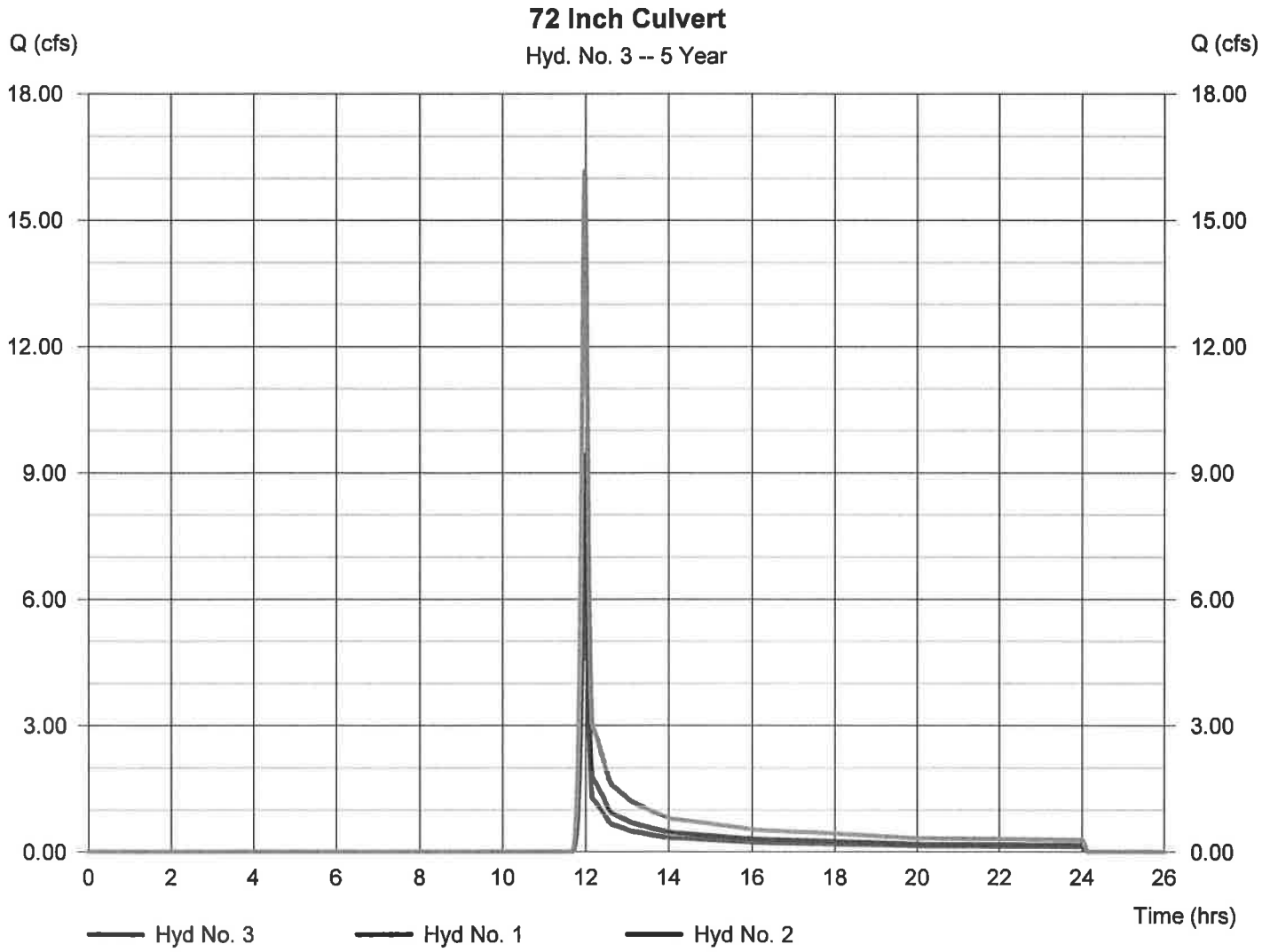
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type	= Combine	Peak discharge	= 16.17 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 36,045 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 12.320 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	11.11	1	718	23,257	------	------	------	Western Inlet
2	SCS Runoff	15.52	1	718	32,488	------	------	------	Eastern Inlet
3	Combine	26.63	1	718	55,745	1, 2	------	------	72 Inch Culvert

Hydrograph Report

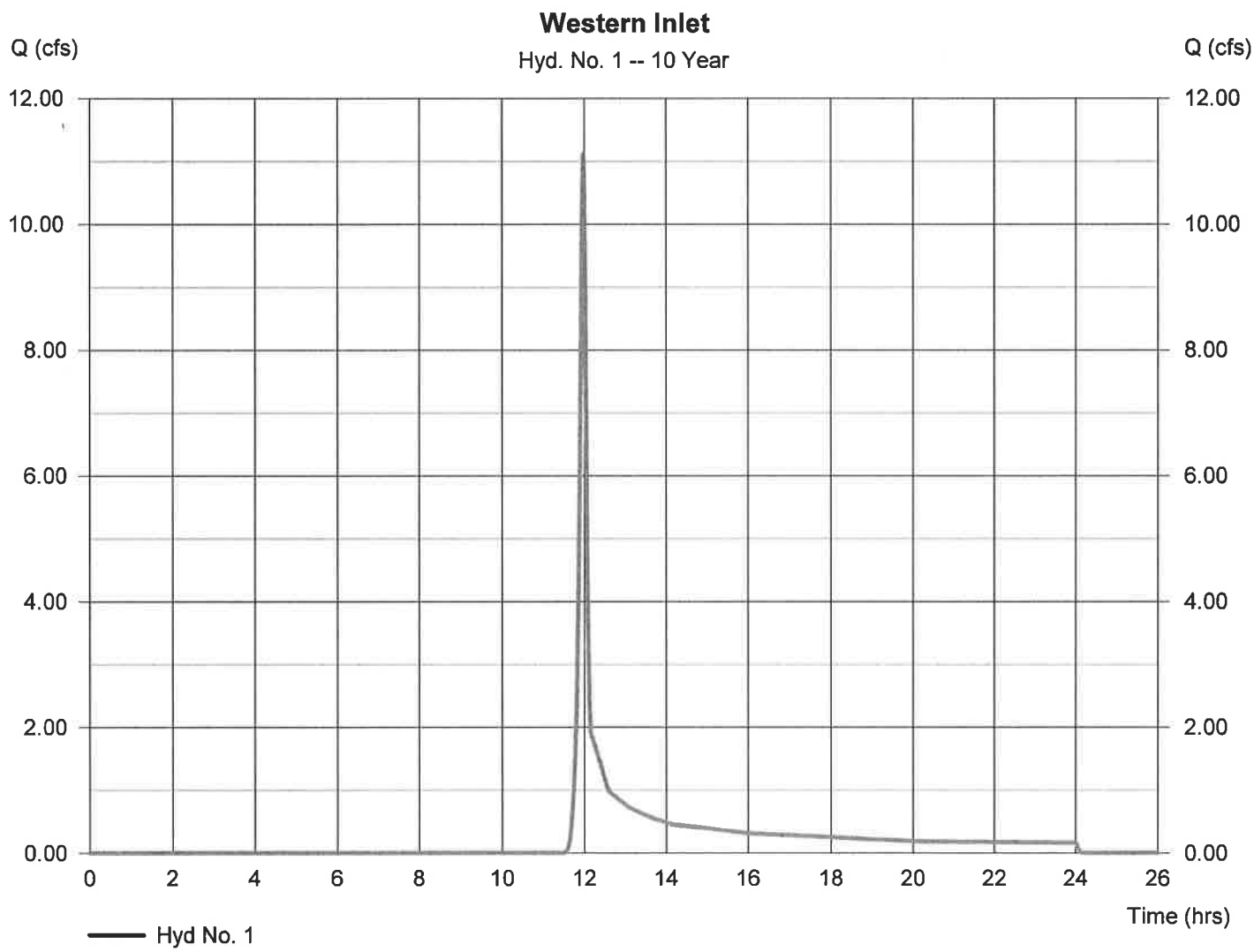
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 11.11 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 23,257 cuft
Drainage area	= 5.140 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.84 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(4.790 x 58) + (0.210 x 85) + (0.140 x 98)] / 5.140



Hydrograph Report

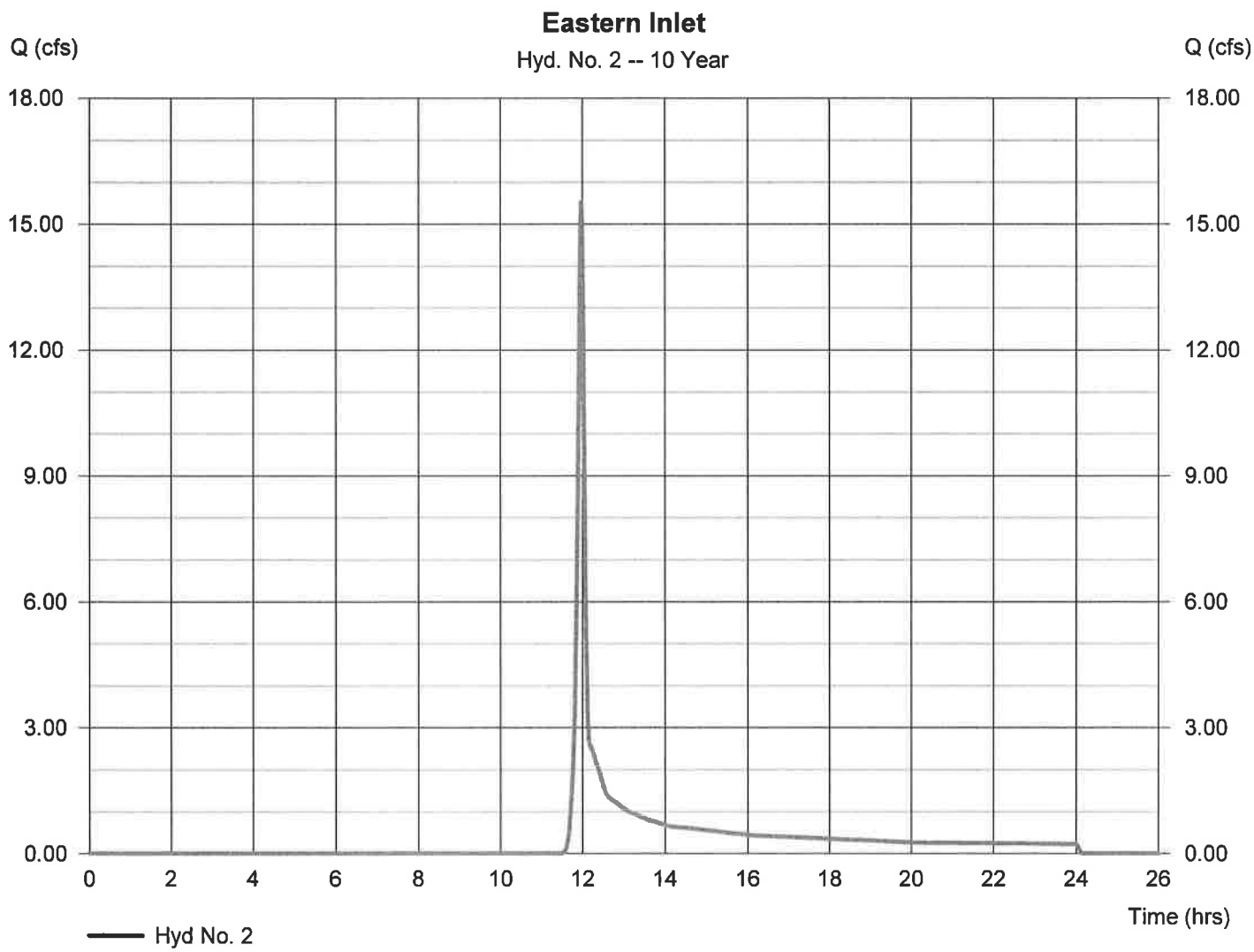
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 15.52 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 32,488 cuft
Drainage area	= 7.180 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.84 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.150 x 98) + (0.230 x 85) + (6.800 x 58)] / 7.180



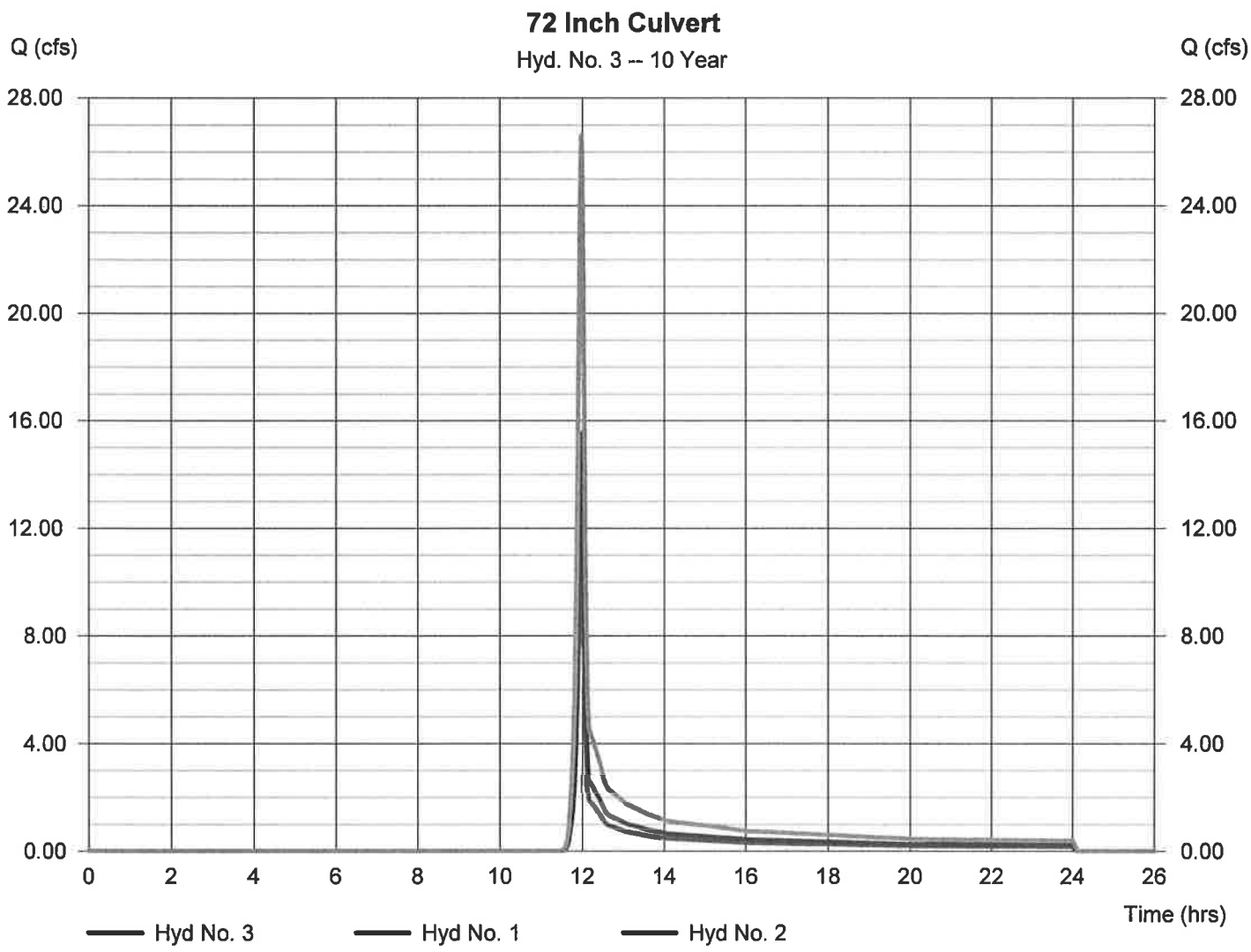
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type	= Combine	Peak discharge	= 26.63 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 55,745 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 12.320 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	18.62	1	718	37,731	------	------	------	Western Inlet
2	SCS Runoff	26.01	1	718	52,705	------	------	------	Eastern Inlet
3	Combine	44.63	1	718	90,436	1, 2	------	------	72 Inch Culvert

Hydrograph Report

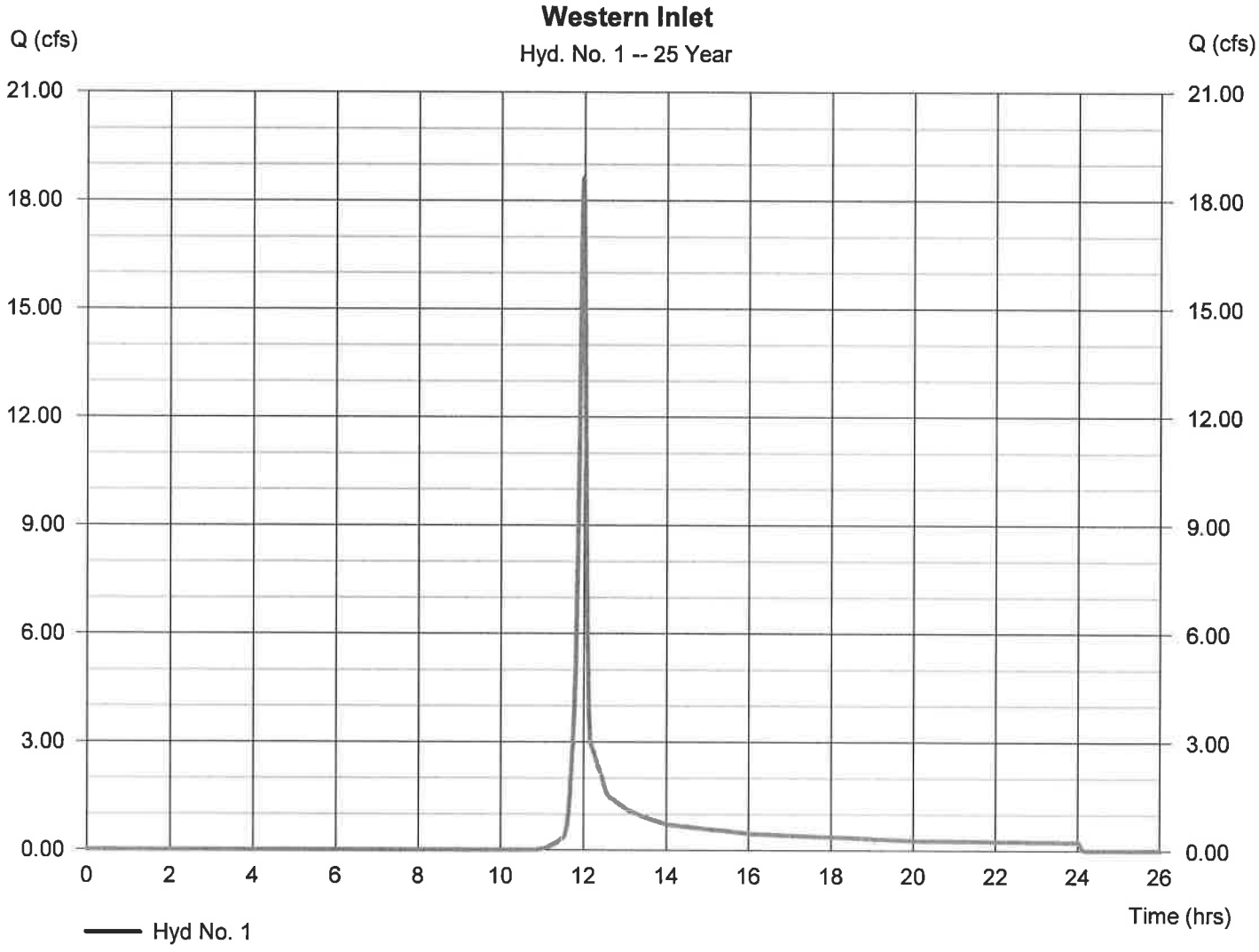
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 18.62 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 37,731 cuft
Drainage area	= 5.140 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(4.790 x 58) + (0.210 x 85) + (0.140 x 98)] / 5.140



Hydrograph Report

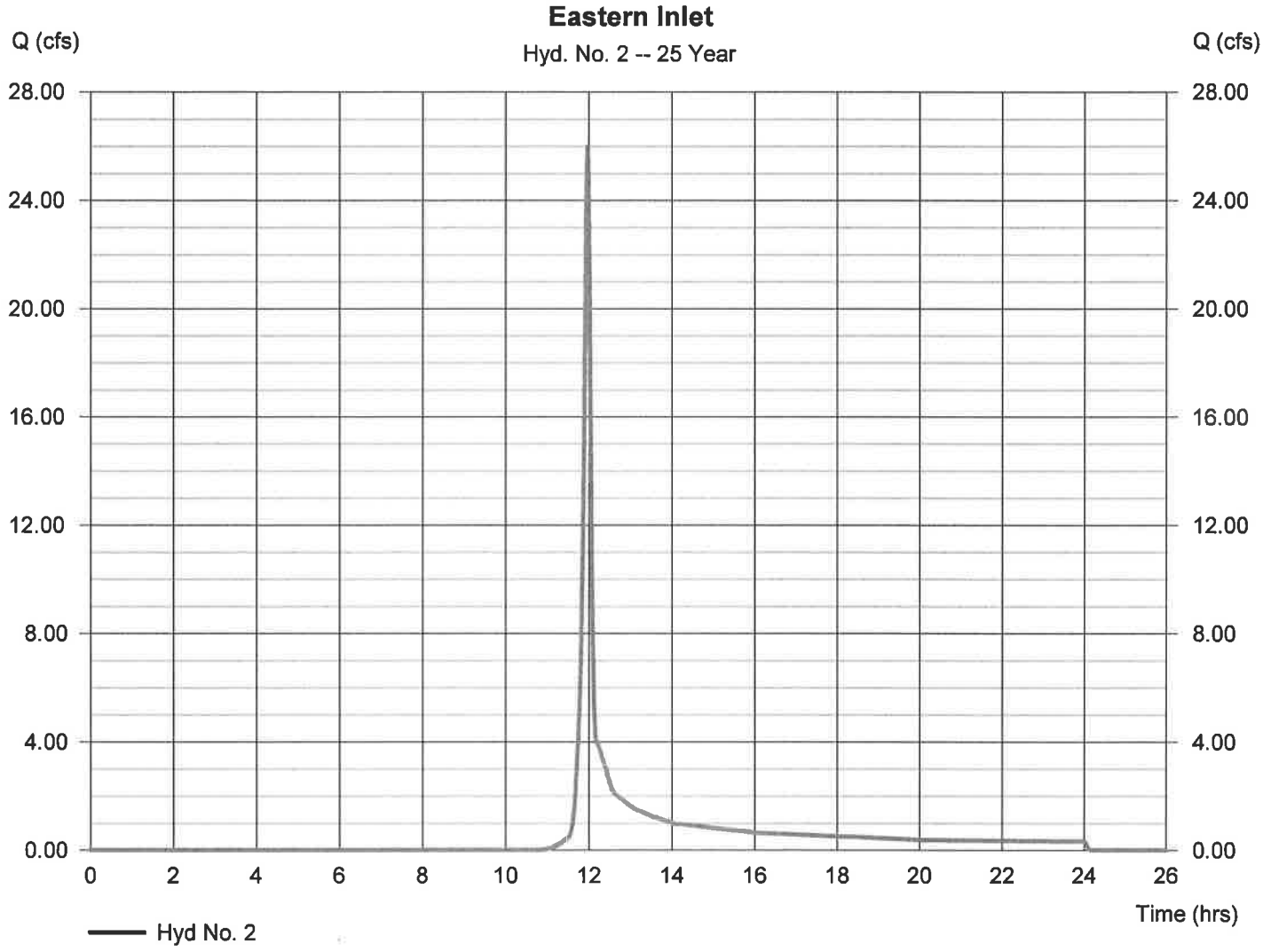
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 26.01 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 52,705 cuft
Drainage area	= 7.180 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.150 x 98) + (0.230 x 85) + (6.800 x 58)] / 7.180



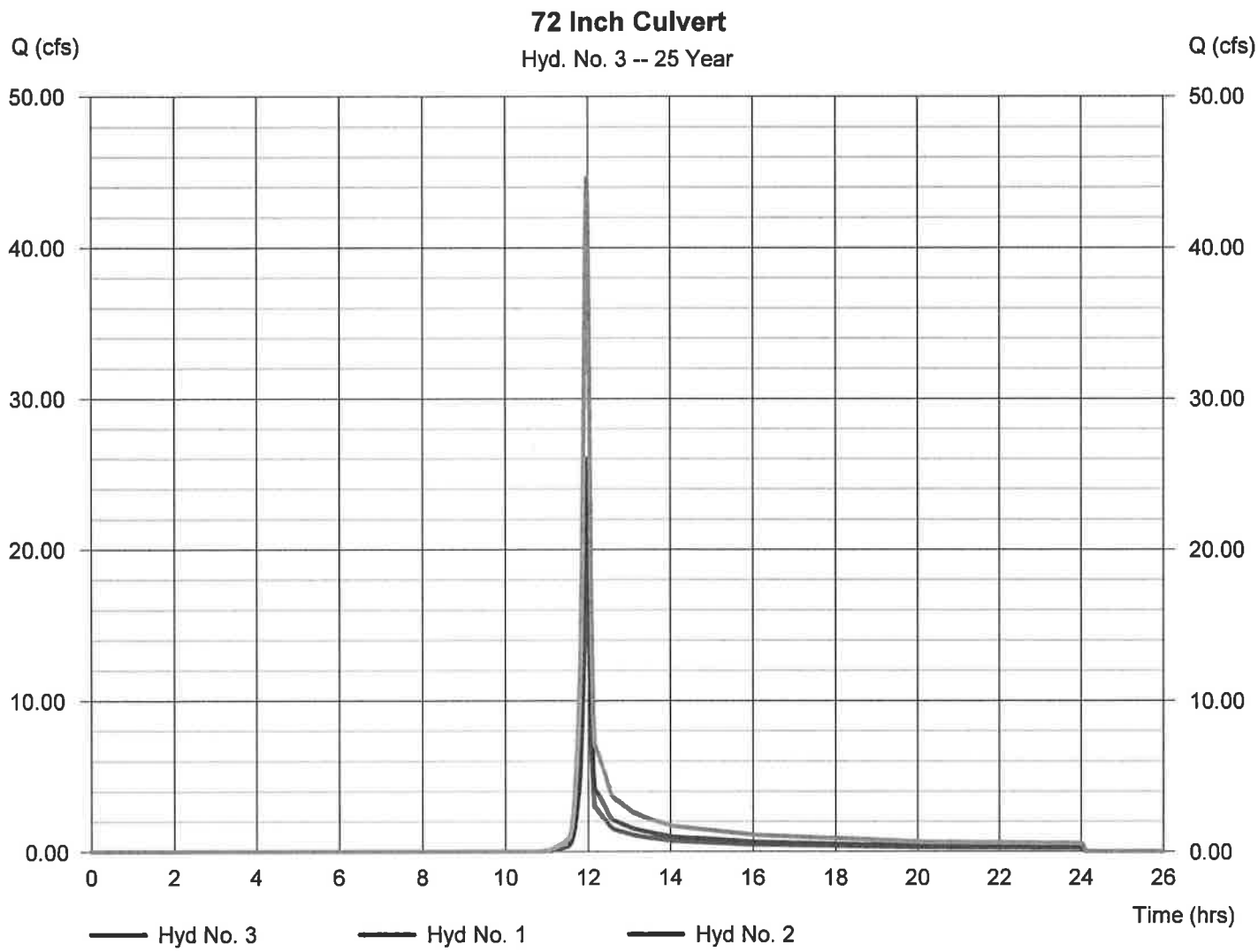
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type	= Combine	Peak discharge	= 44.63 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 90,436 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 12.320 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	34.47	1	718	69,231	------	------	------	Western Inlet
2	SCS Runoff	48.15	1	718	96,709	------	------	------	Eastern Inlet
3	Combine	82.62	1	718	165,940	1, 2	------	------	72 Inch Culvert

Hydrograph Report

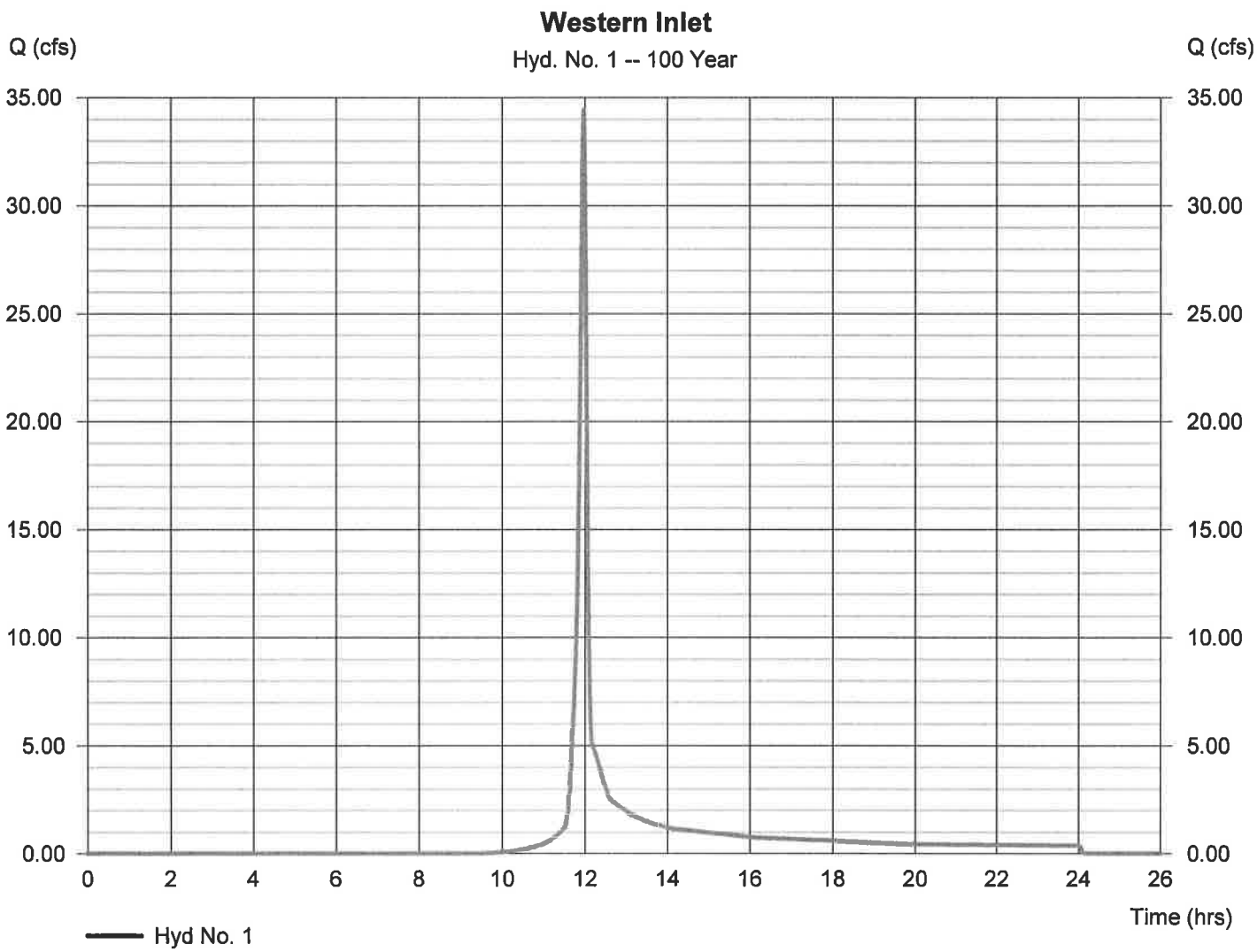
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 1

Western Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 34.47 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 69,231 cuft
Drainage area	= 5.140 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 8.35 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(4.790 x 58) + (0.210 x 85) + (0.140 x 98)] / 5.140



Hydrograph Report

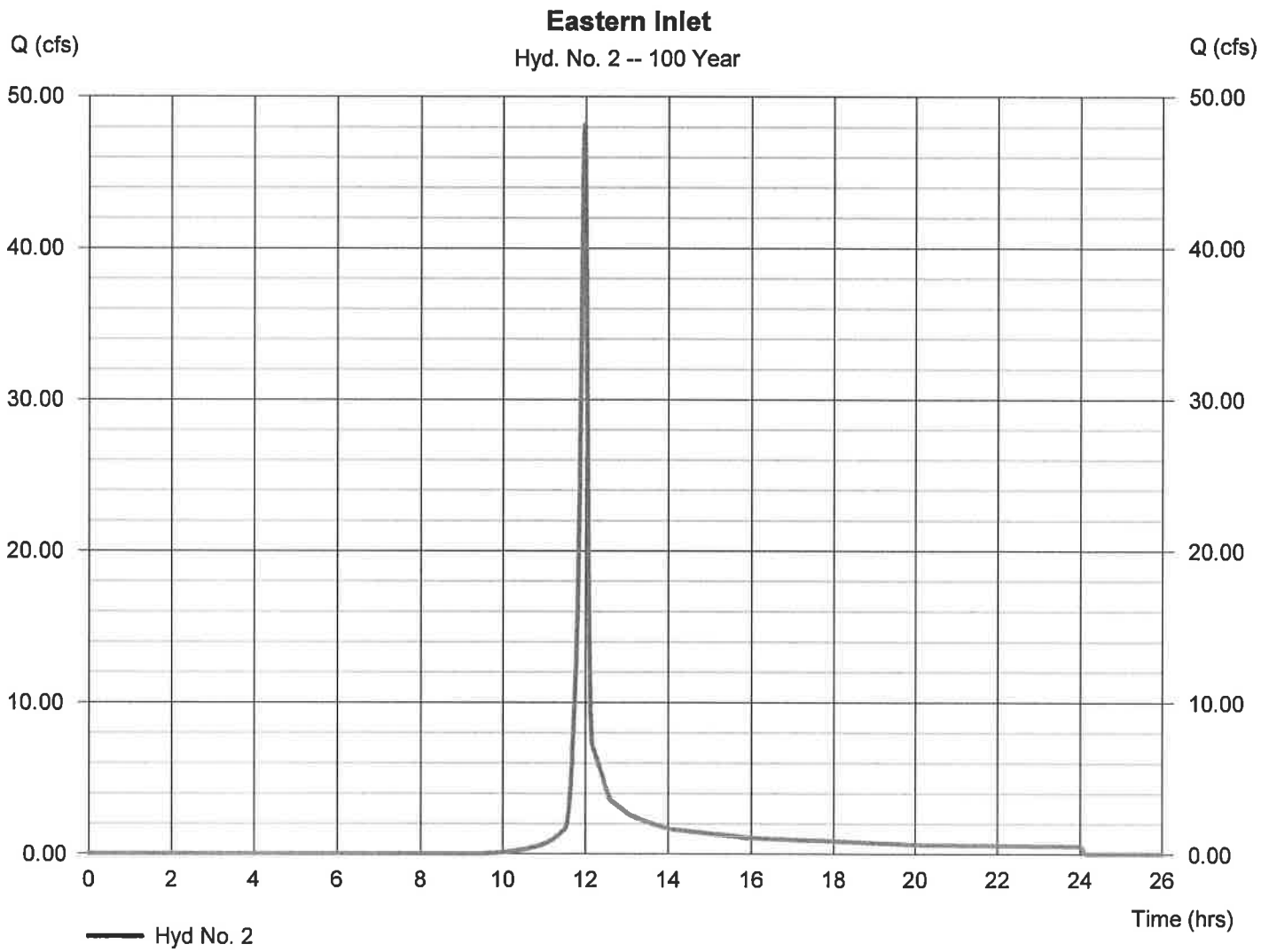
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 2

Eastern Inlet

Hydrograph type	= SCS Runoff	Peak discharge	= 48.15 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 96,709 cuft
Drainage area	= 7.180 ac	Curve number	= 60*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 8.35 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.150 x 98) + (0.230 x 85) + (6.800 x 58)] / 7.180



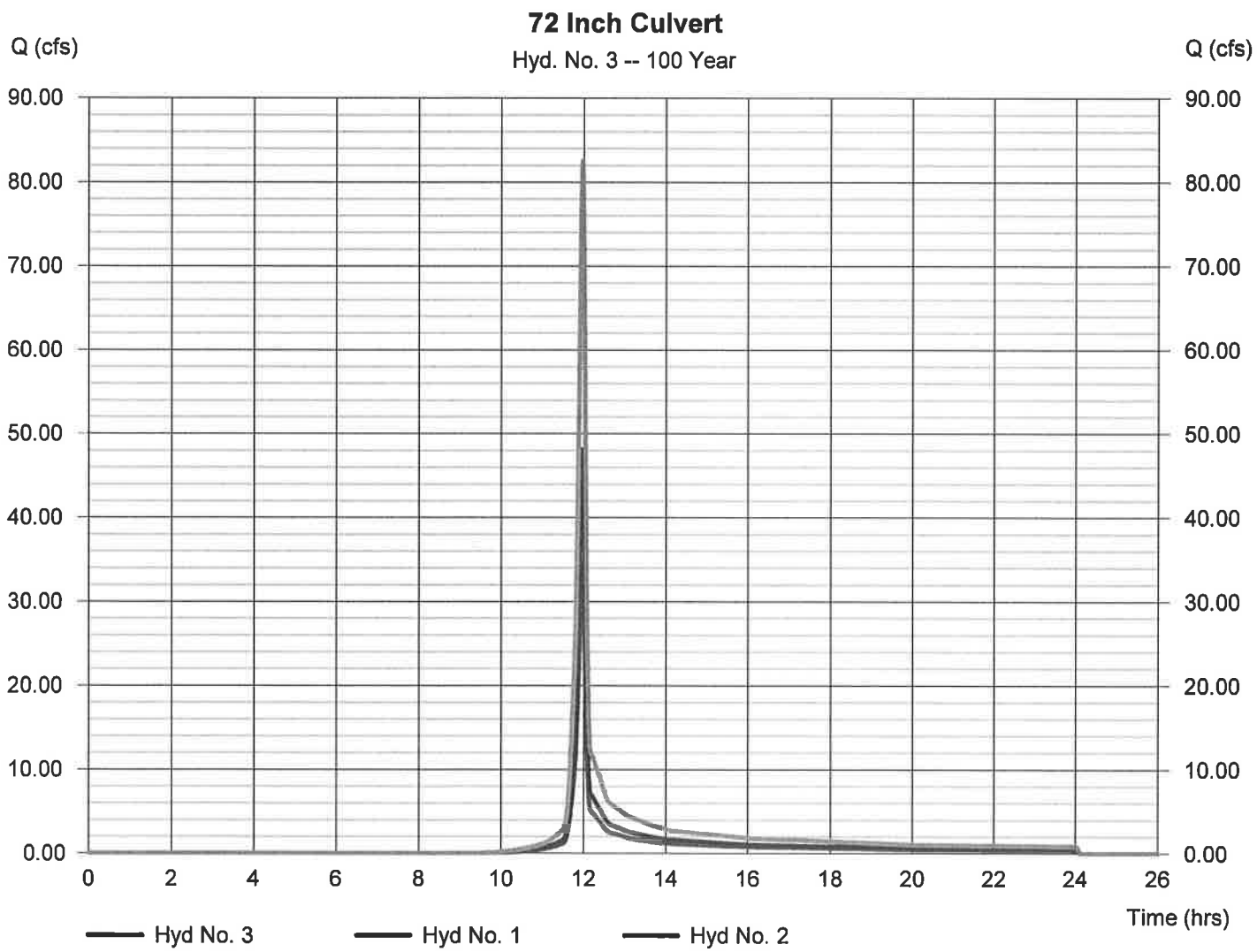
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2013 by Autodesk, Inc. v10 Tuesday, 02 / 2 / 2016

Hyd. No. 3

72 Inch Culvert

Hydrograph type	= Combine	Peak discharge	= 82.62 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 1 min	Hyd. volume	= 165,940 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 12.320 ac



Additional Information Related to DMR Data for Outfall 010

Analytical Results for Samples Collected from the Toe Drain Portion of Outfall 010

The discharge from Outfall 010 consists of two components: stormwater runoff and the toe drain associated with Ash Pond D. These components enter the infrastructure associated with Outfall 010 at distinct locations, mix, and the combined flow passes under Possum Point road and discharges to the unnamed tributary to Quantico Creek. On February 8, 2016, four-hour composite samples of the toe drain portion of the discharge were collected at the point where the toe drain enters the collection system, prior to mixing with any stormwater. These samples were collected concurrent with the four-hour composite samples collected from Outfall 010 for DMR compliance and were analyzed for all Outfall 010 parameters except whole effluent toxicity.

Results for the February 8, 2015 toe-drain samples were remarkably similar to the results for previous samples from this location (provided by email dated January 6, 2016) indicating very little temporal variability in the characteristics of this portion of the Outfall 010 discharge (see Table 1 attached). In addition, the concentrations of all measured parameters are well below the newly established VPDES limits and applicable water quality criteria, and are within the range of values measured in background groundwater samples at Possum Point.

Relationship to Samples Collected from Outfall 010 on January 21, 2016

Permit compliance samples from Outfall 010 were collected on February 8, 2016 concurrent with collection of the samples from the toe-drain portion of the discharge. The samples were collected at the point just prior to the discharge entering the unnamed tributary to Quantico Creek, and were analyzed for all DMR parameters except chronic toxicity. Each 7-day chronic test requires the collection of three (3) 24-hour composite samples over a 5-day period. As reported to DEQ by email dated February 18, 2016, all flow from Outfall 010 was stopped on Friday, February 12, 2016. Therefore, Dominion was unable to collect a sufficient number of samples to conduct the chronic tests.

Path Forward

As noted above, all flow from Outfall 010 was stopped on Friday, February 12, 2016 following the insertion of an inflatable plug in the downstream end of the 72 inch discharge pipe. Insertion of the plug isolated the toe drain and stormwater contributions to Outfall 010, which have been collected and pumped to Ash Pond D. Since February 12, Dominion has initiated efforts to permanently plug the 72" discharge pipe. This will be accomplished by construction of a one-foot wide concrete plug in the downstream end of the pipe. Following installation and curing of the plug the remainder of the pipe will be backfilled with concrete. All accumulated sediment has been removed from the 72" pipe and pouring of the concrete plug was initiated on March 2, 2016.

Additional Information Related to DMR Data for Outfall 010

Analytical Results for Samples Collected from the Toe Drain Portion of Outfall 010

The discharge from Outfall 010 consists of two components: stormwater runoff and the toe drain associated with Ash Pond D. These components enter the infrastructure associated with Outfall 010 at distinct locations, mix, and the combined flow passes under Possum Point road and discharges to the unnamed tributary to Quantico Creek. On December 14 and 18, 2015, duplicate samples of the toe drain portion of the discharge were collected at the point where the toe drain enters the collection system, prior to mixing with any stormwater. These samples were analyzed for the constituents for which DEQ had proposed monitoring in the~~a~~ draft VPDES permit. The results of these samples were provided to DEQ by email on January 6, 2016, and are attached.

Results for the two sets of toe drain samples are remarkably similar, indicating very little temporal variability in the characteristics of this portion of the Outfall 010 discharge. In addition, the concentrations of all measured parameters are well below the newly established VPDES limits and applicable water quality criteria, and are within the range of values measured in background groundwater samples at Possum Point.

Relationship to Samples Collected from Outfall 010 on January 21, 2016

Compliance samples reported with this DMR were collected from Outfall 010 on January 21, 2016, following the initial snowfall associated with a major winter storm event. The samples were collected at the point just prior to the discharge entering the unnamed tributary to Quantico Creek.

Results of the January 21, 2016 sample showed increased concentrations of a number of constituents (e.g., total copper, total nickel, and total zinc) when compared with the December 2015 toe drain samples. This suggests that stormwater [A1]contributions to the discharge may affect constituent concentrations in the final discharge. In addition, the discharge pipe for Outfall 010 contains a considerable amount of sediment, which could also have contributed to the observed results.

Path Forward

Dominion is undertaking efforts to stop [A2]all discharge from Outfall 010 and expects to complete this process before February 13, 2016. These efforts include installing a 72" inflated plug at the outlet of the 72" pipe. This plug will seal off any water movement out of the pipe. Pumps will be placed in the drop inlet feeding the 72" pipe to remove storm water and toe drain waters. The pump discharge will be routed to D Pond.

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DRAFT

Outfall 010/S107 Culvert Replacement Plan (15% Design Concept)

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00, Task 051

April 2016

Dominion

Prepared by: GAI Consultants, Inc.
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4198 Cox Road, Suite 114
Glen Allen, Virginia 23060

Prepared for: Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060-3308

DRAFT

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Table of Contents

1.0 Background 1

2.0 Regulatory Requirements 1

3.0 Original System Description 1

4.0 Proposed System Description 2
- 4.1 Storm Drain Design - Option 1 2
- 4.2 Storm Drain Design - Option 2 2
- 4.3 Storm Drain Design - Option 3 3

Appendix A Figures
- Figure 1 Drainage Area Map
- Figure 2 Option 1 - Storm Drain Design Layout
- Figure 3 Option 2 - Storm Drain Design Layout
- Figure 4 Option 3 – Storm Drain Design Layout
- Figure 5 VDOT Standard DI-7B Drop Inlet Detail
- Figure 6 VDOT Standard PG-3 Type 1 RipRap Channel Detail

Appendix B Hydrologic and Hydraulic Calculations

Appendix C Estimate of Probable Construction Cost

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1.0 Background

Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) ash ponds at Possum Point Power Station (Station), a natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA). Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018, in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Discharge from the ash ponds at the station is managed in accordance with the Station's VA Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071. The station recently modified VPDES Permit No. VA0002071 to allow discharge from the ponds during closure and post-closure. The modified permit was made effective in January 2016.

Part of Dominion's plan for closure of the station's ash ponds includes management of stormwater flows associated with the Ash Pond D closure activities. The purpose of this document is to present Dominion's plan to restore stormwater only flows to the previously outfall associated with the Pond D toe drain, referred to as Outfall 010 or S107. The VPDES permit allows for separation of groundwater flows under permit condition in Part 1.F.23.

2.0 Regulatory Requirements

The following excerpt is the applicable condition in the Station's VPDES Permit No. VA0002071: Part 1.F.23.:

> *Outfall 010 Groundwater (Toe Drain) Removal and Re-designation to S107.*
>
> *Upon successful demonstration to and written approval from DEQ confirming that all groundwater contributions to the Outfall 010 discharge have been removed, the requirements of Part I.A.15 of this permit shall become effective and supersede the requirements of Part 1.A.8. The groundwater contributions include both infiltration through the earthen berm as well as groundwater diverted around the impoundment. Should the permittee separate and remove all groundwater contributions to the discharge, then the discharge would be comprised of only industrially influenced stormwater. Stormwater – only discharges from this outfall would be designated as Outfall S107 and governed by the requirements of Part 1.A.15, Part I.E and Part I.F.18. Should the permittee pursue separation of the groundwater contributions to the discharge, a demonstration plan shall be submitted to DEQ for review and approval. This demonstration plan shall consider, at a minimum: observations of the outfall during dry-weather with variable antecedent precipitation conditions to confirm no discharge; seasonal wet-weather conditions to include potential inflow and infiltration contributions; other information as appropriate, such as design schematics, to support a conclusion that groundwater contributions have been removed from the discharge.*

3.0 Original System Description

Previous discharges at Outfall 010 is comprised of stormwater runoff and groundwater flows from the Pond D Embankment toe drain. Outfall 010 discharges on the south side of Possum Point Road to an unnamed tributary of Quantico Creek.

As illustrated by Figure 1 and Figure 2, attached in Appendix A, the storm sewer system is comprised of two Virginia Department of Transportation (VDOT) Standard DI-7B (Approximate Invert Elevation 33.00 feet) drainage inlets running parallel on the north-side of Possum Point Road. The upstream and

downstream inlets are connected by 18-inch concrete pipe. The system previously discharged through a 72-inch diameter culvert that runs from the downstream inlet, under Possum Point Road, to the unnamed tributary of Quantico Creek. However, the 72-inch culvert has been abandoned in place & water captured in the downstream inlet structure is pumped into Pond D. As shown on Figure 1 in Appendix A, the total contributing drainage area for the two inlets is approximately twelve (12) acres. The hydrologic and hydraulic calculations are included in Appendix B.

4.0 Proposed System Description

Three storm drain design options are being provided as a part of this conceptual design plan. Per VDOT design requirements, the proposed system will be designed to pass the anticipated peak flow rate from the 10-year, 24-hour storm event, considering the post construction-vegetated condition. Pipe installation will be completed in accordance with the VDOT 2008 Road and Bridge Standards. Conducting work inside of the VDOT owned right-of-way will require obtaining the proper VDOT Land Use Permits.

The options will include the installation of a VDOT standard DI-7B inlet (see Figure 5 in Appendix A). The proposed inlet structure will tie into the existing 18-inch storm sewer pipe approximately 30 feet west of the existing drop inlet. The remaining portion of the 18-inch pipe will be abandoned in place by backfilling with flowable fill. Option 1 will include a single barrel crossing consisting of a 36-inch corrugated plastic pipe (CPP) to be installed across Possum Point Road utilizing an open cut method. Option 2 will include replacing the existing 18-inch storm sewer pipe at a shallower depth and installing a single barrel 36-inch CPP pipe crossing Possum Point Road. Option 3 will utilize trenchless technology. A single-barrel crossing allowing for bore and jack installation under Possum Point Road.

4.1 Storm Drain Design - Option 1

The proposed layout of the Option 1 Storm Drain System is shown on Figure 2 in Appendix A. The crossing pipe will consist of a 36-inch diameter Corrugated Plastic Pipe (CPP), 90 feet in length. Open-cut pavement restoration will meet the requirements of the Land Use Permit. A Maintenance of Traffic (MOT) plan will need to be implemented utilizing traffic control devices per the Virginia Work Area Protection Manual. If road closure is necessary, night operations may be required in order to minimize the impact on the traveling public. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 10 feet per second (fps). Outlet Protection has been designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection will include be achieved through VDOT standard PG-3 Slope Protection with Class AI riprap (see Figure 6 in Appendix A). After successful installation the outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 1 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 1 Storm Drain System will be about $53,000 (see Appendix C).

4.2 Storm Drain Design - Option 2

The proposed layout of the Option 2 Storm Drain System is shown on Figure 3 in Appendix A. The crossing pipe will consist of a 36-inch diameter Corrugated Plastic Pipe (CPP), 90 feet in length. This option also includes replacing the existing 18-inch storm sewer pipe to reduce the depth of the system. The system will be designed to minimize the amount of cover. This will minimize the cost of and duration of the installation process. It will also minimize the depth of trench excavation required along Possum Point Road. The contractor should locate existing underground utilities along Possum Point Road and determine depths by potholing prior to construction. As with Option 1, open-cut pavement restoration will meet the requirements of the Land Use Permit. A Maintenance of Traffic (MOT) plan will need to be implemented utilizing traffic control devices per the Virginia Work Area Protection

Manual. If road closure is necessary, night operations may be required in order to minimize the impact on the traveling public. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 9 fps. Outlet Protection has been designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection will be achieved through VDOT standard PG-3 Slope Protection with Class AI riprap (see Figure 6 in Appendix A). After successful installation the outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 2 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 2 Storm Drain System will be about $52,000 (see Appendix C).

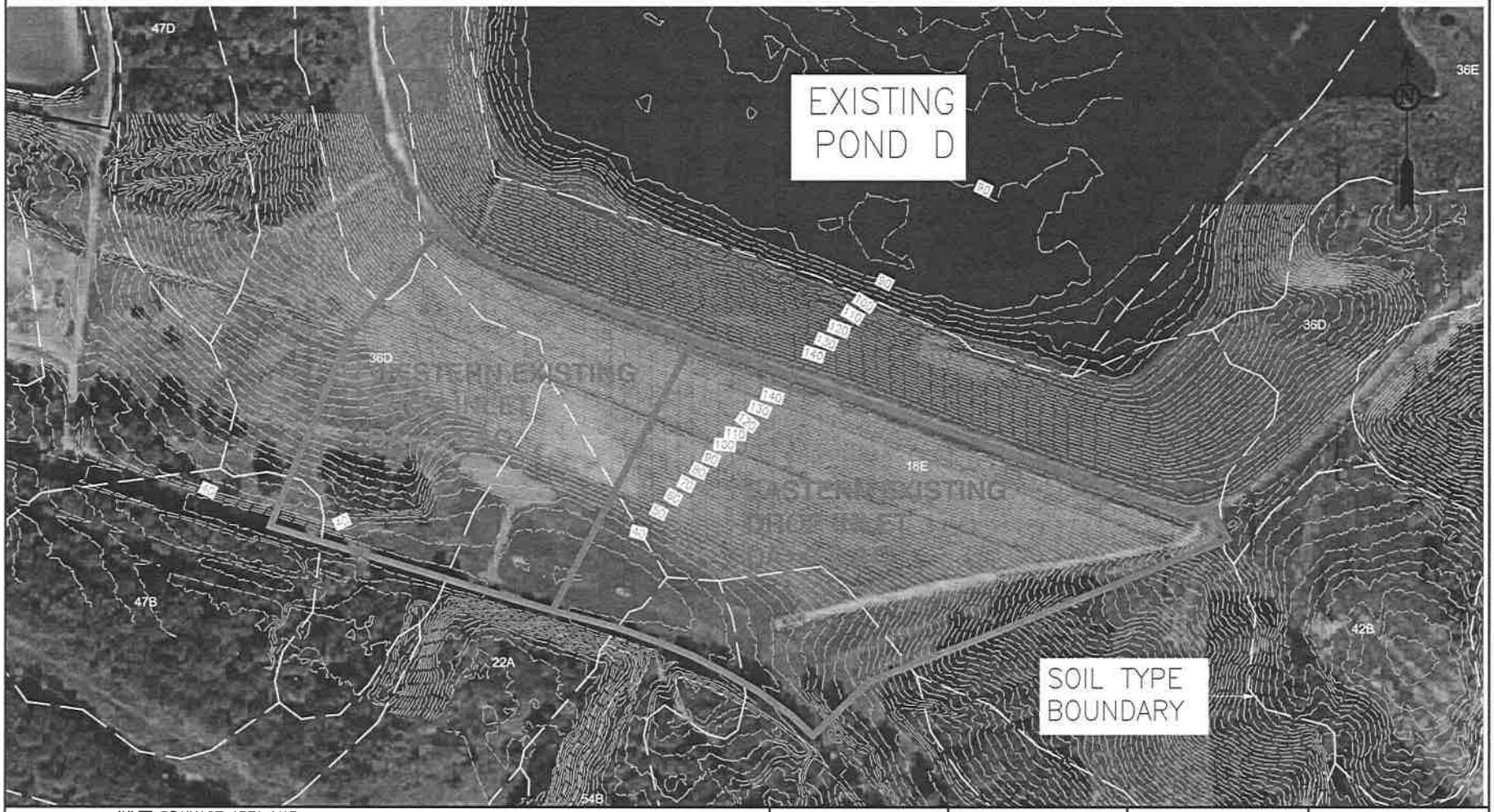
4.3 Storm Drain Design - Option 3

The proposed layout of the Option 3 Storm Drain System is shown on Figure 4 in Appendix A. Option 3 will utilize jack & boring technology to reduce the impact to the roadway. The crossing pipe will consist of a 24-inch diameter conduit, 110 feet in length. A VDOT Land Use Permit is still required when crossing a roadway using trenchless technology. Equipment laydown areas and the boring pit will be located outside the limits of the VDOT right-of-way and if a receiving pit is required, it will be located outside the limits of the wetlands on the downstream end. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 18 fps. Outlet Protection will be designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection is anticipated to be achieved through a riprap energy dissipator. For the purposes of this draft design concept, a detailed design of the energy dissipator has not been completed. After successful installation – the Outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 3 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 1 Storm Drain System will be about $175,000 (see Appendix C).

APPENDIX A
Figures

FIGURE 1
Drainage Area Map



DRAWING TITLE: INLET DRAINAGE AREA MAP

SCALE: 1" = 150'

150 0 150 300

DOMINION

POSSUM POINT POWER STATION

POND D CLOSURE

PITTSBURGH OFFICE • 385 EAST WATERFRONT DRIVE, HOMESTEAD, PA 15120-5005

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DRAWN BY: BERKEME	APPROVED BY: -----
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GAI DRAWING FILE NO. POND DTOE DRAIN INLETS CEU

8477

FIGURE 2
Option 1 - Storm Drain Design Layout

LEGEND

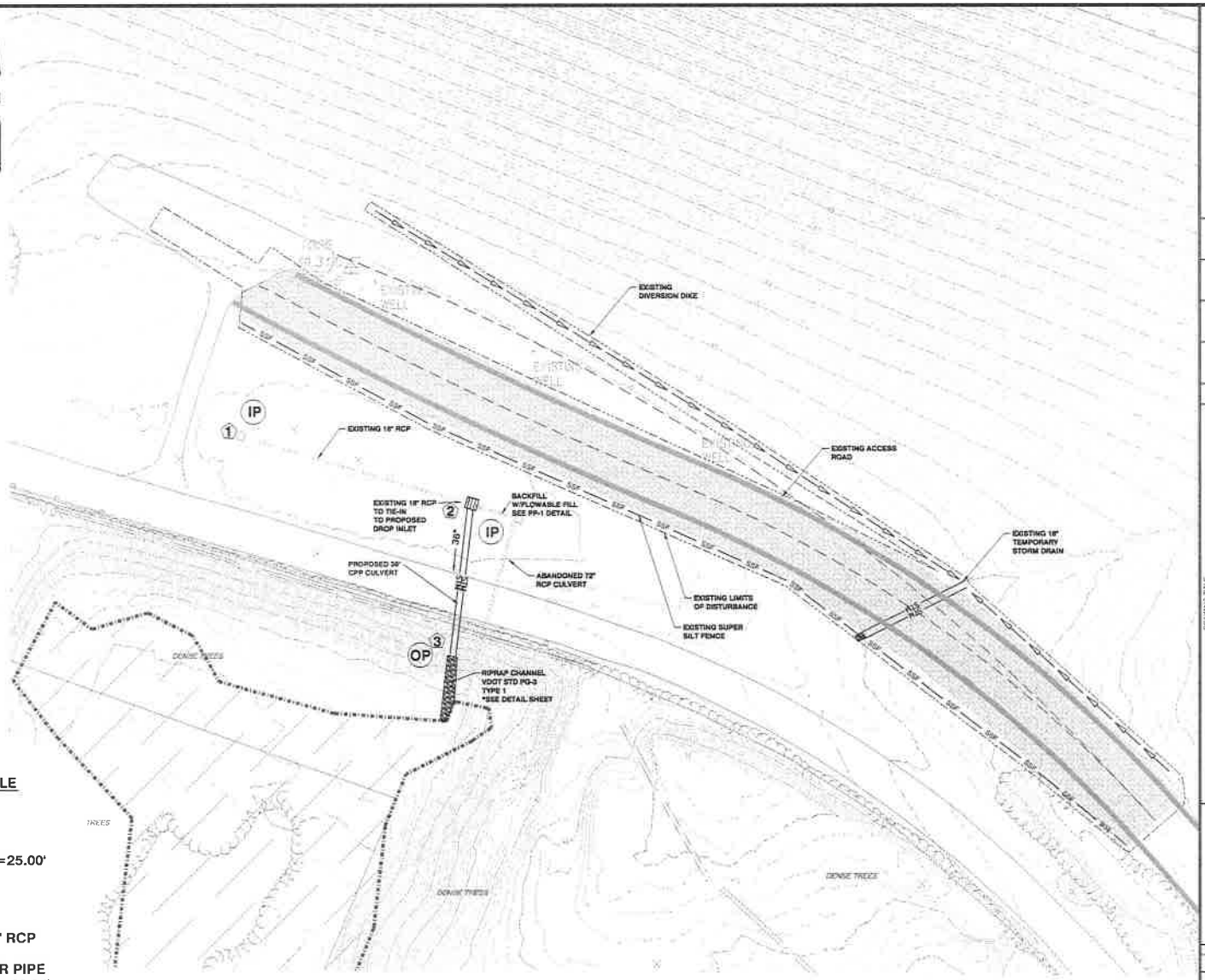
- DIVERSION DIKE
- SSF — SUPER SILT FENCE
- STM — STORM SEWER PIPE
- OP — OUTLET PROTECTION
- IP — INLET PROTECTION

SCALE: 1" = 30'

30 0 30 60

STORM SEWER NOTES

1. ALL STORM PIPE IS TO BE INSTALLED PER VDOT STANDARD PB-1.
2. PIPE MATERIAL SHALL CONFORM TO VDOT SPECIFICATION SECTION 232.
3. ALL STORM SEWER STRUCTURES ARE TO HAVE POURED BOTTOMS OR FORMED INVERTS.
4. ALL WORK SHALL BE COMPLETED OUTSIDE LIMITS OF WETLAND. CONTRACTOR SHALL NOT DISTURB WETLAND.



PIPE STRUCTURE SCHEDULE

1 — EXIST. VDOT STD DI-7B

1–2 — EXIST. 18" CONC. PIPE
INV. (IN)=28.00', INV (OUT)=25.00'

2 — 1 STD DI-7B
TYPE II GRATE
RIM=32.90', INV.=23.00'
CONNECT TO EXISTING 18" RCP

2–3 — 90' - 36" CPP STORM SEWER PIPE
INV. (IN)=23.00', INV. (OUT)=22.25'

3 — 40 LF VDOT STD PG-3 RIPRAP DITCH
TYPE 1
*SEE DETAIL SHEET

15% DESIGN CONCEPT

DRAWING TITLE
OUTFALL S107 PIPE REPLACEMENT PLAN - OPTION 1

PROJECT
POSSUM POINT POWER STATION
COAL ASH POND CLOSURE
PRINCE WILLIAM COUNTY
VIRGINIA

gai consultants

CLIENT
VIRGINIA ELECTRIC & POWER COMPANY
5000 DOMINION BOULEVARD
GLEN ALLEN, VIRGINIA

NO.	DATE	DWN	CHK	APV	DESCRIPTION

REVISION RECORD

REVISION | ALT. CLIENT DRAWING NUMBER | SHEET NO. 1 OF 3 | GAI FILE NUMBER C180132-00-000-C-WS-001

DRAFT

DRAWN BY	CHECKED BY	APPROVED BY
WORKMDL	KINDERK	
DWG TYPE	SCALE	ISSUE DATE
	AS SHOWN	04/25/2016

GAI DRAWING NUMBER
FIGURE 2

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FIGURE 3
Option 2 – Storm Drain Design Layout

LEGEND

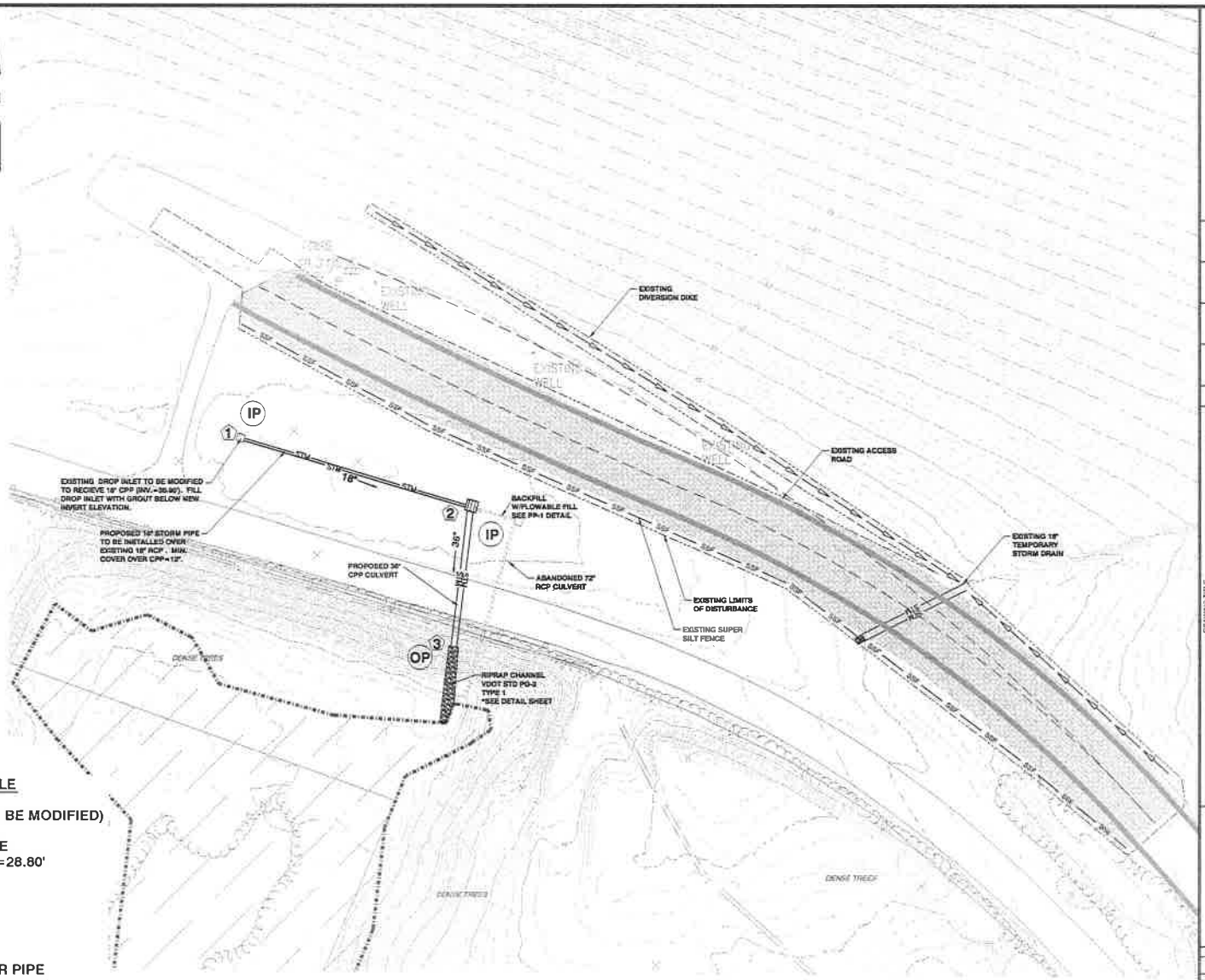
- DIVERSION DIKE
- SUPER SILT FENCE
- STORM SEWER PIPE
- OUTLET PROTECTION
- INLET PROTECTION

SCALE: 1" = 30'

30 0 30 60

STORM SEWER NOTES

1. ALL STORM PIPE IS TO BE INSTALLED PER VDOT STANDARD PB-1.
2. PIPE MATERIAL SHALL CONFORM TO VDOT SPECIFICATION SECTION 232.
3. ALL STORM SEWER STRUCTURES ARE TO HAVE POURED BOTTOMS OR FORMED INVERTS.
4. ALL WORK SHALL BE COMPLETED OUTSIDE LIMITS OF WETLAND. CONTRACTOR SHALL NOT DISTURB WETLAND.



PIPE STRUCTURE SCHEDULE

1 — EXIST. VDOT STD DI-7B (TO BE MODIFIED)

1–2 — PROPOSED 18" STORM PIPE
INV. (IN)=30.90', INV (OUT)=28.80'

2 — 1 STD DI-7B
TYPE II GRATE
RIM=32.90', INV.=26.90'

2–3 — 90' - 36" CPP STORM SEWER PIPE
INV. (IN)=26.90', INV. (OUT)=26.40'

3 — 40 LF VDOT STD PG-3 RIPRAP DITCH
TYPE 1
*SEE DETAIL SHEET

15% DESIGN CONCEPT

DRAWING TITLE: OUTFALL S107 PIPE REPLACEMENT PLAN - OPTION 2

PROJECT: POSSUM POINT POWER STATION, COAL ASH POND CLOSURE, PRINCE WILLIAM COUNTY, VIRGINIA

CLIENT: VIRGINIA ELECTRIC & POWER COMPANY, 5000 DOMINION BOULEVARD, GLEN ALLEN, VIRGINIA

gai consultants

ISSUING OFFICE: Richmond | 4198 Cox Road, Suite 114 | Glen Allen, VA 23060

NO.	DATE	DWN.	CHK.	APV.	DESCRIPTION

REVISION RECORD

ALT. CLIENT DRAWING NUMBER

SHEET NO. 2 OF 3

CAD FILE NUMBER: C150132-00-000-C-WS-002

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WORKMDL	KBNDERK	
DWG TYPE	SCALE	ISSUE DATE
	AS SHOWN	04/25/2016

GAI DRAWING NUMBER: FIGURE 3

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FIGURE 4
Option 3 – Storm Drain Design Layout

LEGEND

- DIVERSION DIKE
- SUPER SILT FENCE
- STM — STORM SEWER PIPE
- OP — OUTLET PROTECTION
- IP — INLET PROTECTION

SCALE: 1" = 30'

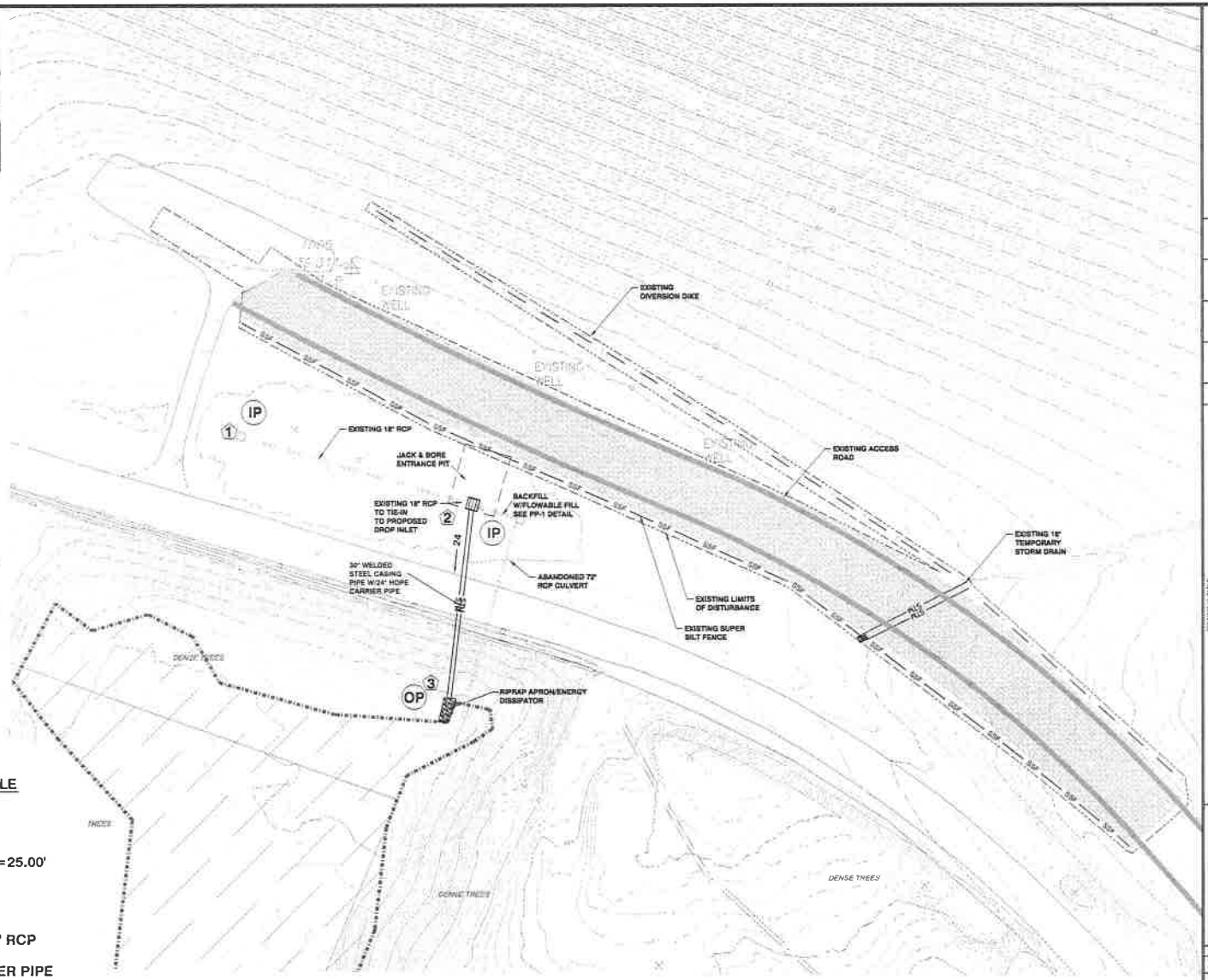
30 0 30 60

STORM SEWER NOTES

1. ALL STORM PIPE IS TO BE INSTALLED PER VDOT STANDARD PB-1.
2. PIPE MATERIAL SHALL CONFORM TO VDOT SPECIFICATION SECTION 232.
3. ALL STORM SEWER STRUCTURES ARE TO HAVE POURED BOTTOMS OR FORMED INVERTS.
4. ALL WORK SHALL BE COMPLETED OUTSIDE LIMITS OF WETLAND. CONTRACTOR SHALL NOT DISTURB WETLAND.

PIPE STRUCTURE SCHEDULE

1	EXIST. VDOT STD DI-7B
1—2	EXIST. 18" CONC. PIPE INV. (IN)=28.00', INV (OUT)=25.00'
2	1 STD DI-7B TYPE II GRATE RIM=32.90', INV.=11.90' CONNECT TO EXISTING 18" RCP
2—3	110' - 24" CPP STORM SEWER PIPE INV. (IN)=11.90', INV. (OUT)=8.00'
3	RIPRAP APRON/ENERGY DISSIPATOR



15% DESIGN CONCEPT

DRAWING TITLE: OUTFALL S107 PIPE REPLACEMENT PLAN - OPTION 3

PROJECT: POSSUM POINT POWER STATION, COAL ASH POND CLOSURE, PRINCE WILLIAM COUNTY, VIRGINIA

CLIENT: VIRGINIA ELECTRIC & POWER COMPANY, 1000 DOMINION BOULEVARD, GLEN ALLEN, VIRGINIA

gai consultants

BELONG CENTER: Richmond | 4198 Cox Road, Suite 114 | Glen Allen, VA 23060

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DWG TYPE	SCALE	ISSUE DATE
	AS SHOWN	04/25/2016

GAI DRAWING NUMBER: FIGURE 4

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NO.	DATE	DWN	CHK	APV	DESCRIPTION

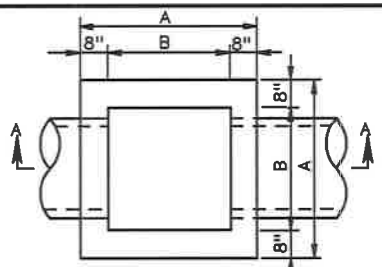
REVISION RECORD

ALT. CLIENT DRAWING NUMBER:

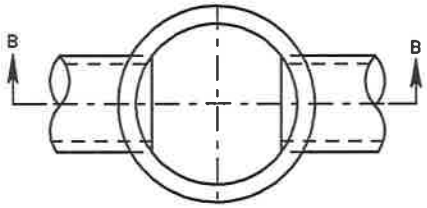
SHEET NO. 3 OF 3

GAI FILE NUMBER: C150132-00-000-C-WS-003

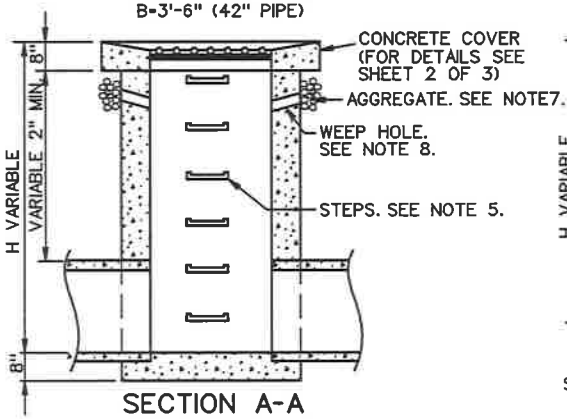
FIGURE 5
VDOT Standard DI-7B Drop Inlet Detail



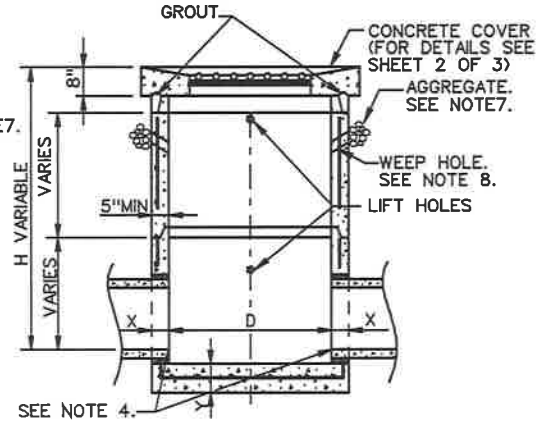
PLAN
(COVER REMOVED)
A=4'-4" (12" - 36" PIPE)
B=3'-0" (12" - 36" PIPE)
A=4'-10" (42" PIPE)
B=3'-6" (42" PIPE)



PLAN
(COVER REMOVED)



SECTION A-A
CAST IN PLACE
FOR USE WITH 12" TO 42" PIPES



SECTION B-B
PRECAST

NOTES

1. DEPTH OF INLET (H) TO BE SHOWN ON PLANS.
2. THE "H" DIMENSION SHOWN ON THE STANDARDS AND SPECIFIED ON THE PLANS WILL BE MEASURED FROM THE INVERT OF THE OUTFALL PIPE TO THE TOP OF THE STRUCTURE. PLAN "H" DIMENSIONS ARE APPROXIMATE ONLY FOR ESTIMATING PURPOSES AND THE ACTUAL DIMENSIONS SHALL BE DETERMINED BY THE CONTRACTOR FROM FIELD CONDITIONS. MAXIMUM DEPTH (H) TO BE 12'-8.
3. WHEN SPECIFIED ON THE PLANS THE INVERT IS TO BE SHAPED IN ACCORDANCE WITH STANDARD IS-1. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICEN FOR THE STRUCTURE.
4. IN THE EVENT THE INVERT OF THE OUTFALL PIPE IS HIGHER THAN THE BOTTOM OF THE STRUCTURE, THE INVERT OF THE STRUCTURE SHALL BE SHAPED WITH CEMENT MORTAR TO PREVENT STANDING OR PONDING OF WATER IN THE STRUCTURE. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
5. STEPS ARE TO BE PROVIDED WHEN H IS 4'-0" OR GREATER. FOR DETAILS SEE STANDARD ST-1.
6. REINFORCED CONCRETE FOOTING MAY BE PRECAST OR CAST-IN-PLACE. TWO LIFTING HOOKS OF FABRICATORS DESIGN TO BE PROVIDED IN PRECAST FOOTING
7. 4" DEPTH AGGREGATE #68,#78, OR #8 X 6" WIDTH.
8. 3" DIAMETER WEEP HOLE WITH 12"X12" PLASTIC HARDWARE CLOTH 1/4" MESH OR GALVANIZED STEEL WIRE, MINIMUM WIRE DIAMETER 0.03", NUMBER 4 MESH HARDWARE CLOTH ANCHORED FIRMLY TO THE OUTSIDE OF THE STRUCTURE.
9. THE TYPE OF INLET (PRECAST OR CAST IN PLACE), DETAILED HEREON, TO BE CONSTRUCTED, WILL BE AT THE OPTION OF THE CONTRACTOR.
10. FOR DETAILS OF CONCRETE COVER, COLLAR AND GRATE AND THE METHOD OF PLACING APPROACH GUTTER SEE SHEET 2 OF 3.
11. CAST-IN PLACE CONCRETE IS TO BE CLASS A3 (3000 PSI). PRECAST CONCRETE IS TO BE 4000 PSI.
12. CONCRETE QUANTITIES SHOWN ARE FOR INDICATED DEPTH (H) WITHOUT PIPES. THE AMOUNT DISPLACED BY PIPES MUST BE DEDUCTED TO OBTAIN TRUE QUANTITIES. FOR INLETS OF DIFFERENT DEPTHS ADD OR SUBTRACT THE APPROPIATE CUBIC YARDS OF CONCRETE FOR EACH FOOT OF DEPTH.
13. PAVED DITCHES ARE TO BE TRANSITIONED TO MEET INLET GUTTER AS SHOWN IN STANDARD PG-2A.
14. PROVIDE SAFETY SLABS WHEN SPECIFIED ON THE PLANS.

RECOMMENDED MINIMUM HEIGHT CHART		
PIPE SIZE	H DIMENSION	
	CONC.	CORR. METAL
12"	2'-6"	2'-5"
15"	2'-9¼"	2'-8"
18"	3'-0½"	2'-11"
21"	3'-3¾"	3'-2"
24"	3'-7"	3'-5"
27"	3'-10¼"	3'-8"
30"	4'-1½"	3'-11"
33"	4'-4¾"	4'-2"
36"	4'-8"	4'-5"
42"	5'-2½"	4'-11"

NOTES (CONT.)

15. DI-7--------NO GUTTER
    DI-7A-------SINGLE GUTTER WHEN DROP INLET IS ON A GRADE.
    DI-7B------ DOUBLE GUTTER WHEN DROP INLET IS IN A SAG BETWEEN TWO GRADES.
16. FOR DETAILS OF PRECAST DI-7 NOT SHOWN HEREON SEE PRECAST UNIT ASSEMBLY DIAGRAM, PAGE 103.01, FOR PRECAST GENERAL NOTES, PAGE 103.02 AND FOR APPLICABLE PRECAST BASE, RISER AND TOP DETAILS, PAGES 103.07 THRU 103.12.
17. GRATE BARS TO BE PARALLEL TO DITCH FLOW.

PIPE SIZE	12"	15"	18"	24"	30"	36"	42"
MINIMUM DEPTH H	2'-0"	2'-3¼"	2'-6½"	3'-1"	3'-7½"	4'-2"	4'-8½"
CONCRETE CUBIC YARDS	.947	1.045	1.143	1.339	1.535	1.731	1.927

INCREMENT PER FOOT OF ADDITIONAL DEPTH (H) { = 0.362 CU. YDS. (12" - 36" PIPE)
{ = 0.410 CU. YDS. (42" PIPE)

SPECIFICATION REFERENCE
241 503

STANDARD MEDIAN DROP INLET

12" TO 42" PIPE

VIRGINIA DEPARTMENT OF TRANSPORTATION

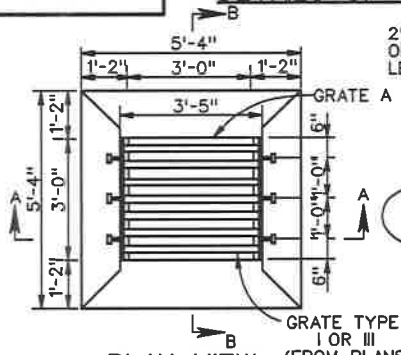
VDOT
ROAD AND BRIDGE STANDARDS

REVISION DATE	SHEET 1 OF 3
	104.22

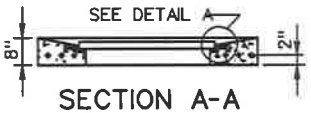
8485

DI-7, 7A, 7B

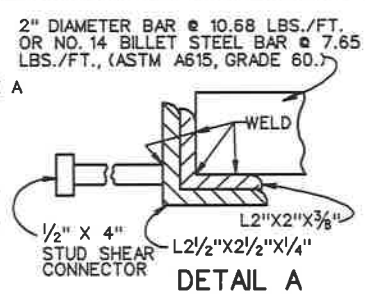
DETAILS OF CONCRETE COVER AND GRATE



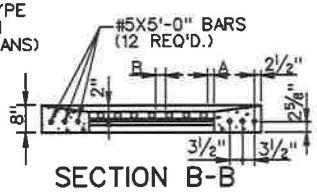
PLAN VIEW



SECTION A-A



DETAIL A



SECTION B-B

APPROXIMATE QUANTITIES	
CONCRETE CLASS A3	REINFORCING STEEL
0.423 C. Y.	63 LBS.

GRATE A:

BAR SPACING CHART		
GRATE TYPE	MAXIMUM DIMENSION	
	A	B
I	1 1/2"	3"
III	1"	1"

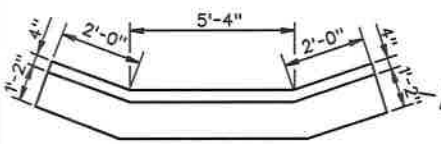
NOTES

1. GRATE A IS TO BE UTILIZED IN LOCATIONS NOT NORMALLY SUBJECT TO TRAFFIC.
2. GRATE B IS TO BE UTILIZED IN LOCATIONS NORMALLY SUBJECT TO TRAFFIC.
3. FOR DETAILS OF LOAD CARRYING GRATE (GRATE B), SEE T-DI-7, SHEET 103.08.
4. CONCRETE COVER AND GRATE ARE TO BE FURNISHED AS A SINGLE UNIT. OUTSIDE DIMENSIONS OF GRATE TO BE 3'-4" X 2'-11 3/4" (GRATE A) OR 3'-4" X 2'-11 1/2" (GRATE B).
5. ALTERNATE METHODS OF ANCHORING ANGLE IRON WILL BE ACCEPTABLE IF APPROVED BY THE ENGINEER.
6. GRATE AND COLLAR ARE TO BE GALVANIZED.
7. CONCRETE COVER MAY BE PRECAST OR CAST IN PLACE.
8. CONCRETE TO BE CLASS A3 IF CAST IN PLACE. 4000 PSI IF PRECAST.
9. GRATE BARS TO BE PARALLEL TO DITCH FLOW.

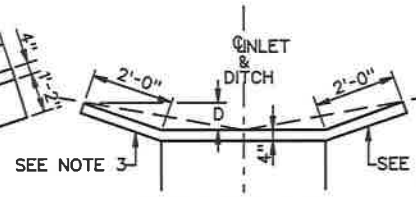
DETAILS OF GUTTER AND METHOD OF PLACEMENT

NOTES

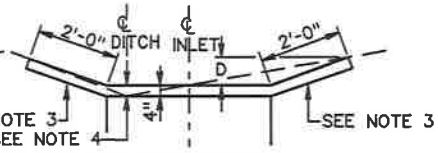
1. DI-7 NO GUTTERS.
   DI-7A NO GUTTER IN ONE DIRECTION.
   DI-7B GUTTER IN BOTH DIRECTIONS.
2. JOINTS BETWEEN GUTTERS AND CONCRETE COVER ARE TO BE DOWELED WITH #4 X 8" SMOOTH RODS @ APPROX. 12" C-C TO PREVENT SETTLEMENT. IN LIEU OF DOWELS A 2" X 4" NOTCH MAY BE PROVIDED.
   SEE STANDARD T-DI-3, 4 ALTERNATE DESIGN.
3. VARIABLE 2:1 OR FLATTER.
4. DITCH GRADE MUST BE ADJUSTED TO MEET DIFFERENCE IN ELEVATION. SEE LONGITUDINAL SECTION.
5. IF DEPTH (D) BECOMES LESS THEN 4", LENGTH OF WINGS ARE TO BE EXTENDED AS DIRECTED BY THE ENGINEER.
6. CURTAIN WALL TO BE LOCATED AT THE END OF THE PAVED DITCH SECTIONS OF THE DI-7A & DI-7B THAT ARE NOT ABUTTED BY OTHER DRAINAGE.
7. IF NORMAL DITCH GRADE IS TOO FLAT TO ALLOW FOR ADJUSTED GRADE TO INLET, A SPECIAL GUTTER DETAIL WILL BE REQUIRED ON PLANS.



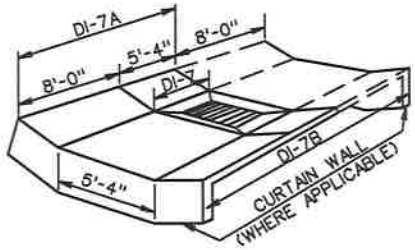
SECTION A-A

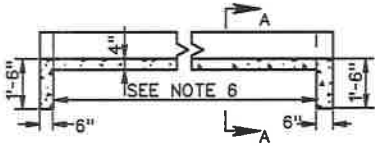


BOTH SLOPES FLAT

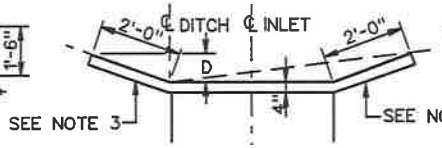


ONE STEEP SLOPE
ONE INTERMEDIATE SLOPE

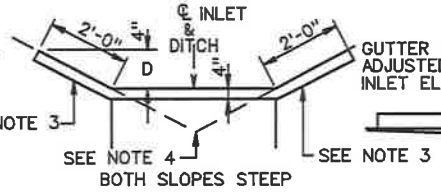




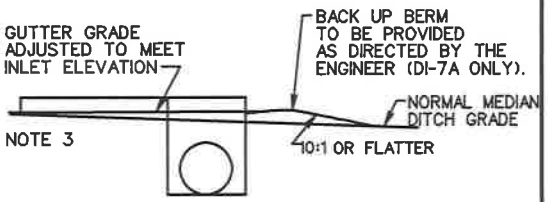
TYPICAL ELEVATION



ONE STEEP SLOPE-ONE FLAT SLOPE



BOTH SLOPES STEEP



LONGITUDINAL SECTION
(WHEN INLET IS LOCATED
ABOVE NORMAL DITCH GRADE)
SEE NOTE 8.

APPROXIMATE QUANTITY FOR ONE CURTAIN WALL, MEASURED FROM BOTTOM OF GUTTER	
CONCRETE CLASS A3	0.241 CU. YDS.

APPROXIMATE QUANTITIES			
CONCRETE CLASS A3	DI-7	DI-7A	DI-7B
(CU. YDS.)	NONE	1.211	2.148

8486

VDOT
ROAD AND BRIDGE STANDARDS

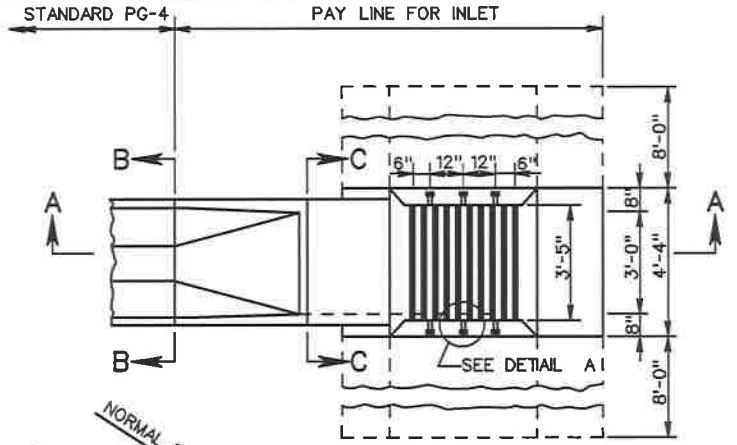
SHEET 2 OF 3 | REVISION DATE
104.23

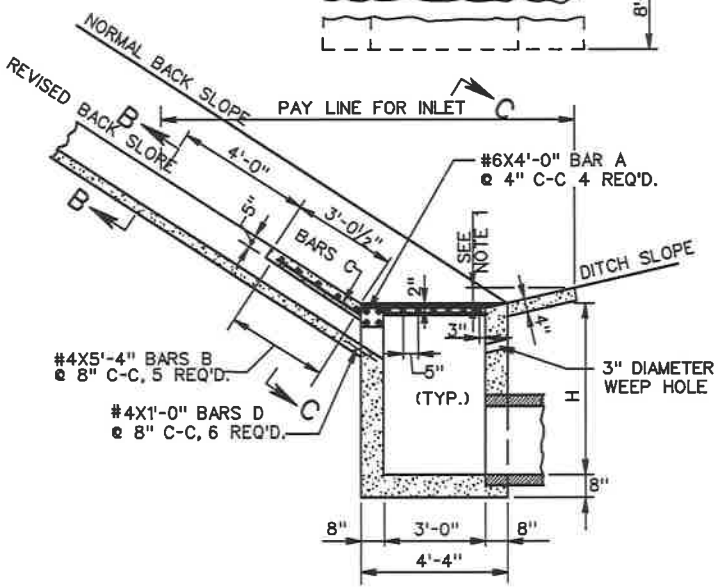
STANDARD MEDIAN DROP INLET

12" TO 42" PIPE

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE
241
503





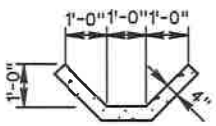
SECTION A-A

NOTES

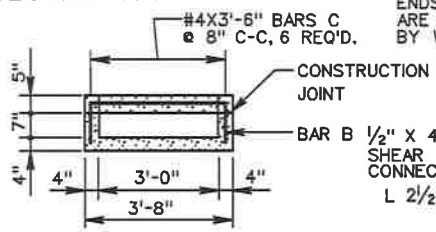
1. APRON IS TO BE CONSTRUCTED TO A DEPTH OF 1'-0" ON BACK SLOPE SIDE OF INLET (DI-7). ON ROADWAY SIDE, THE DEPTH IS TO BE 1'-0" OR TO THE SHOULDER ELEVATION, WHICHEVER IS LESSER.
2. ALTERNATE METHODS OF ANCHORING ANGLE IRON WILL BE ACCEPTABLE IF APPROVED BY THE ENGINEER.
3. COLLAR AND GRATE ARE TO BE GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS.
4. OUTSIDE DIMENSIONS OF GRATE ARE TO BE 3'-4" X 2'-11 ¾".
5. ALL CONCRETE IS TO BE CLASS A3.
6. NORMAL DITCH IS TO BE TRANSITIONED TO TIE SMOOTHLY INTO GUTTER. DITCH GRADE IS TO BE ADJUSTED AS NECESSARY TO MEET GRADE ELEVATION.
7. QUANTITIES SHOWN ARE BASED ON DEPTH H =5'-0".
8. THE AMOUNT OF CONCRETE DISPLACED BY PIPES MUST BE DEDUCTED TO OBTAIN TRUE QUANTITIES. FOR EACH FOOT OF DIFFERENCE IN DEPTH H ADD OR SUBTRACT INCREMENT AS SHOWN.
9. SEE STANDARD DI-7, DI-7A AND DI-7B FOR DETAILS AND DIMENSIONS NOT SHOWN HEREON.
10. GRATE BARS ARE TO BE INSTALLED SO THEY WILL BE ALIGNED PARALLEL TO THE DITCH FLOW.

APPROXIMATE QUANTITIES	
CLASS A3 CONCRETE	REINFORCING STEEL
CU. YDS.	LBS.
4.091	60

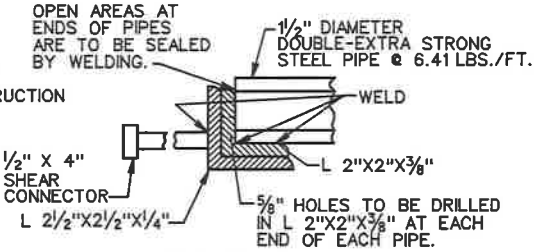
INCREMENT PER FOOT OF DEPTH (H)=0.362 CU. YDS.
CONCRETE TO BE ADDED WHEN DOUBLE GUTTER IS REQ'D.=1.112 CU. YDS.



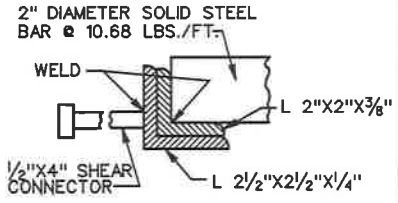
SECTION B-B



SECTION C-C



DETAIL A



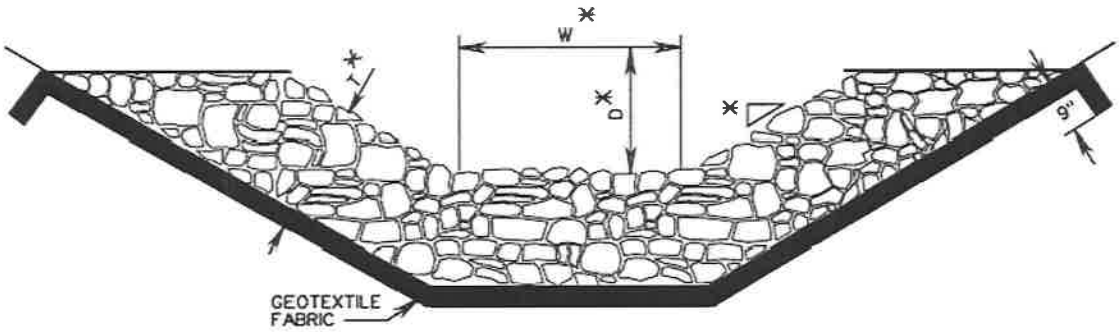
ALTERNATE DETAIL A

SPECIFICATION REFERENCE	STANDARD DI-7, 7A OR 7B WITH FLUME CONNECTION 12" TO 36" PIPE VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS	
502		REVISION DATE	SHEET 3 OF 3 104.24

8487

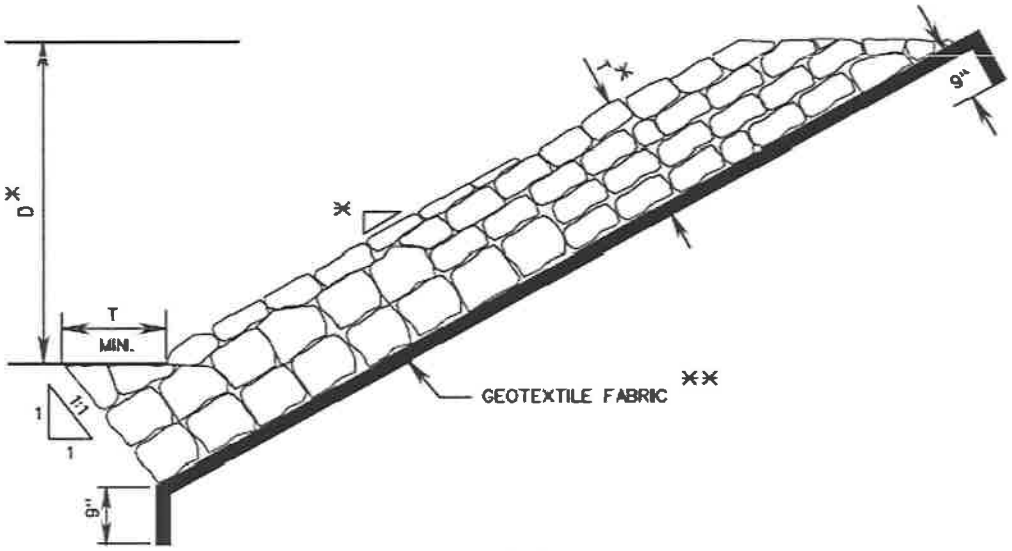
FIGURE 6
VDOT Standard PG-A Type 1 RipRap Channel Detail

PG-3



TYPE I
RIPRAP DITCH PROTECTION

RipRap Class	1
Thickness (T)	26"
Depth (D)	18"
Width (W)	24"
Slope	2:1



TYPE II
RIPRAP SLOPE PROTECTION

NOTES:

** RIP RAP BEDDING MATERIAL

GEOTEXTILE FABRIC TO BE PROVIDED UNDER ALL RIPRAP INSTALLATIONS CLASS AI, CLASS I AND CLASS II UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

RIPRAP INSTALLATIONS OF CLASS III SHALL HAVE AN INTERMEDIATE AGGREGATE BEDDING LAYER(S) AS SPECIFIED ON THE PLANS BASED ON GEOTECHNICAL RECOMMENDATIONS.

* SEE TYPICAL SECTION SHOWN ON PLANS FOR SIDE SLOPE, BOTTOM WIDTH AND DEPTH OF CHANNEL AND RIPRAP THICKNESS.

VDOT
ROAD AND BRIDGE STANDARDS

SHEET 1 OF 1 | REVISION DATE
109.02

STANDARD RIP RAP DITCH & SLOPE PROTECTION
PG-3

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE
245
414

8489

APPENDIX B
Hydrologic and Hydraulic Calculations

INTRODUCTION:

Modifications to the existing stormwater conveyance system (72-inch RCP culvert) have been made in order to separate groundwater & stormwater flows at Outfall 010/S107. The modifications include installing a VDOT Standard. DI-7 drop inlet upstream of the existing inlet structure. The proposed inlet structure will tie into an existing 18" storm sewer pipe – conveying stormwater flows to the same Unnamed Tributary of Quantico Creek as the original system. The proposed storm drain is designed to pass the anticipated peak flow rate from the 10-year, 24-hour storm event, considering the post construction / re-vegetated condition.

This calculation is intended to size the storm drain system based on peak flows determined from the Site Hydrology calculations. Analysis will utilize the Federal Highway Administration's program, HY-22.

METHODOLOGY:

The approximate locations of storm inlets and pipes are included on the plan drawings provided with this calculation package. From these locations, estimates were made for the ground surface elevations at the proposed inlet structure invert and outlet locations as well as roadway elevations.

ATTACHMENTS:

1. HY-22 Calculations
2. Pond D Construction Drawing
3. VDOT Standard PG-3 RipRap Ditch Detail

REFERENCES:

1. 2008 VDOT Road and Bridge Standards
2. VDOT Drainage Manual Chapter 7
3. GAI Submittal "Inlet Hydrology"

REQUIREMENTS / ASSUMPTIONS:

- Minimum cover above culverts is 1 ft.
- Circular culverts will be corrugated exterior, smooth interior HDPE.
- Storm drain outlet conditions are set using the existing receiving channel dimensions.

STORM DRAIN DESIGN:
The proposed storm drain system will convey approximately 12 acres of runoff from the Pond D embankment and construction staging area. The system will be comprised of two inlets with the combined peak flows being conveyed through a proposed 36" storm sewer pipe crossing Possum Point Road. Design flow to the system will be estimated assuming the post development condition for Pond D. In accordance with the VDOT Standard for a Secondary Roadway - The storm drain will be assessed for the 10-year design event.

The HY-22 Input and Output is included as Attachment 1 and is summarized below:

Design Flow (10 Year, 24 Hour Post Development) = 31.00 cfs

Option 1

Proposed Inlet Rim Elevation	=	32.90 ft
Outfall Pipe Slope	=	0.008 ft/ft

Outfall Pipe Length	=	90 ft
Outfall Pipe Diameter	=	3 ft
Number of Barrels	=	1.0

Outfall Pipe Inv. Elev.	=	23.00 ft
Outlet Elevation	=	22.25 ft
Roadway Elevation	=	36.00 ft
Minimum Cover Provided	=	10.0 ft
Outlet Conditions		

Receiving Channel	=	*Unnamed Trib. Of Quantico Creek*
Channel Depth	=	*3 ft*
Side Slopes	=	*2H:1V*
Bottom Width	=	*4 ft*

Option 2

Proposed Inlet Rim Elevation	=	32.90 ft
Outfall Pipe Slope	=	0.006 ft/ft

Outfall Pipe Length	=	90 ft
Outfall Pipe Diameter	=	3 ft
Number of Barrels	=	1.0

Outfall Pipe Inv. Elev.	=	26.90 ft
Outlet Elevation	=	26.40 ft
Roadway Elevation	=	36.00 ft
Minimum Cover Provided	=	6.0 ft
Outlet Conditions		
Receiving Channel	=	*Unnamed Trib. Of Quantico Creek*
Channel Depth	=	*3 ft*
Side Slopes	=	*2H:1V*
Bottom Width	=	*4 ft*

Option 3

Proposed Inlet Rim Elevation	=	32.90 ft
Outfall Pipe Slope	=	0.035 ft/ft
Outfall Pipe Length	=	100 ft
Outfall Pipe Diameter	=	2 ft
Number of Barrels	=	1.0
Outfall Pipe Inv. Elev.	=	11.90 ft
Outlet Elevation	=	8.00 ft
Roadway Elevation	=	36.00 ft
Minimum Cover Provided	=	22.0 ft
Outlet Conditions		

DRAFT

OUTLET PROTECTION DESIGN (Options 1 and 2):

VDOT Standard PG-3 Type 1 RipRap Channel Design:
The maximum velocity during the 10–Yr storm event was calculated to be about 10 ft/sec. Due to the Outfall being located on the Possum Point Road Fill Embankment – a RipRap lined channel was chosen over traditional Outlet Protection. As per VDOT Standard - Outlet protection stone to be Class 1 – 26" Dry RipRap Type 1.

CHANNEL SIZE:
The figure on the following sheet illustrates the typical cross-section of the proposed channel. The stone type & thickness has been designed in accordance with Chapter 7 of the VDOT Drainage.

Outlet Protection Channel Bottom Width (W)	=	24"
Outlet Protection Channel Side Slope	=	2:1
Outlet Protection Channel Depth (D)	=	18"'
Outlet Protection Channel Stone Thickness (T)	=	26"

Rock size = VDOT Class I (D_{50} = 1.1 ft)

DRAFT

ATTACHMENT 1

HY-22 CALCULATIONS

DRAFT

Calculation Detailed Summary

Element Details			
ID	26	Notes	
Label	Base Calculation Options		

Hydraulic Summary			
Flow Profile Method	Backwater Analysis	Average Velocity Method	Actual Uniform Flow Velocity
Number of Flow Profile Steps	5	Minimum Structure Headloss	0.00 ft
Hydraulic Grade Convergence Test	0.00 ft	Minimum Time of Concentration	0.080 hours

Inlets			
Neglect Side Flow?	False	Active Components for Combination Inlets In Sag	Grate and Curb
Neglect Gutter Cross Slope For Side Flow?	False	Active Components for Combination Inlets on Grade	Grate and Curb

HEC-22 Energy Losses			
Elevations Considered Equal Within	0.50 ft	Depressed Unsubmerged Factor	1.000
Consider Non-Piped Plunging Flow?	False	Half Bench Submerged Factor	0.950
Flat Submerged Factor	1.000	Half Bench Unsubmerged Factor	0.150
Flat Unsubmerged Factor	1.000	Full Bench Submerged Factor	0.750
Depressed Submerged Factor	1.000	Full Bench Unsubmerged Factor	0.070

Headloss (AASHTO)			
Expansion, Ke	0.350	Shaping Adjustment, Cs	0.500
Contraction, Kc	0.250	Non-Piped Flow Adjustment, Cn	1.300

Bend Angle vs. Bend Loss Curve

Bend Angle (degrees)	Bend Loss Coefficient, Kb
0.00	0.000
15.00	0.190
30.00	0.350
45.00	0.470
60.00	0.560
75.00	0.640
90.00	0.700

Gravity Hydraulics

Calculation Detailed Summary

Gravity Hydraulics	
Governing Upstream Pipe Selection Method	Pipe with Maximum QV

Catchment Summary

Label	Area (User Defined) (acres)	Time of Concentration (hours)	Rational C	Catchment CA (acres)
Western Inlet	5.100	0.100	0.500	2.550
Eastern Inlet	7.200	0.100	0.500	3.600

Catchment Intensity (in/h)	Catchment Rational Flow (cfs)
5.000	12.85
5.000	18.14

Conduit Summary

Label	Section Type	Branch ID	Subnetwork Outfall	Flow (cfs)
1 - 2	Circle	1	Outfall S107	12.85
2-3	Circle	1	Outfall S107	31.00
PG-3 Channel	(N/A)	1	Outfall S107	31.00

Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)	Depth (Out) (ft)
9.80	29.35	26.04	1.35	1.04
9.80	24.81	23.69	1.81	1.44
8.78	23.55	10.92	1.30	0.92

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
1	Catch Basin	Outfall S107	12.85	12.85
2	Catch Basin	Outfall S107	31.00	31.00
Outfall S107	Outfall	(N/A)	(N/A)	31.00
3	Cross Section	Outfall S107	31.00	31.00

Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
33.90	28.00	30.26	30.26
32.90	23.00	26.30	25.56
14.00	10.00	(N/A)	(N/A)
28.00	22.25	24.89	23.97

Inlet Summary

Label	Inlet Type	Catalog Inlet Type	Catalog Inlet	Flow (Captured) (cfs)
1	(N/A)	(N/A)	(N/A)	12.85
2	(N/A)	(N/A)	(N/A)	18.14

Calculation Detailed Summary

Inlet Summary

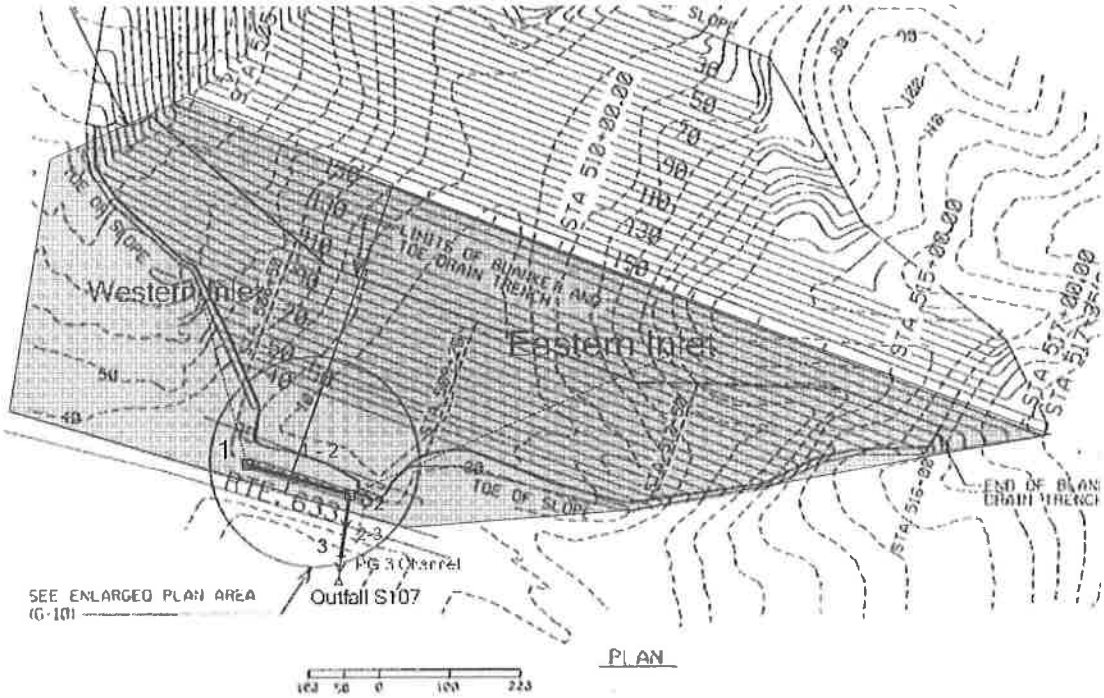
Flow (Total Bypassed) (cfs)	Bypass Target	Capture Efficiency (Calculated) (%)	Depth (Gutter) (in)	Spread / Top Width (ft)
0.00	(N/A)	100.0	(N/A)	(N/A)
0.00	(N/A)	100.0	(N/A)	(N/A)

Pond Summary

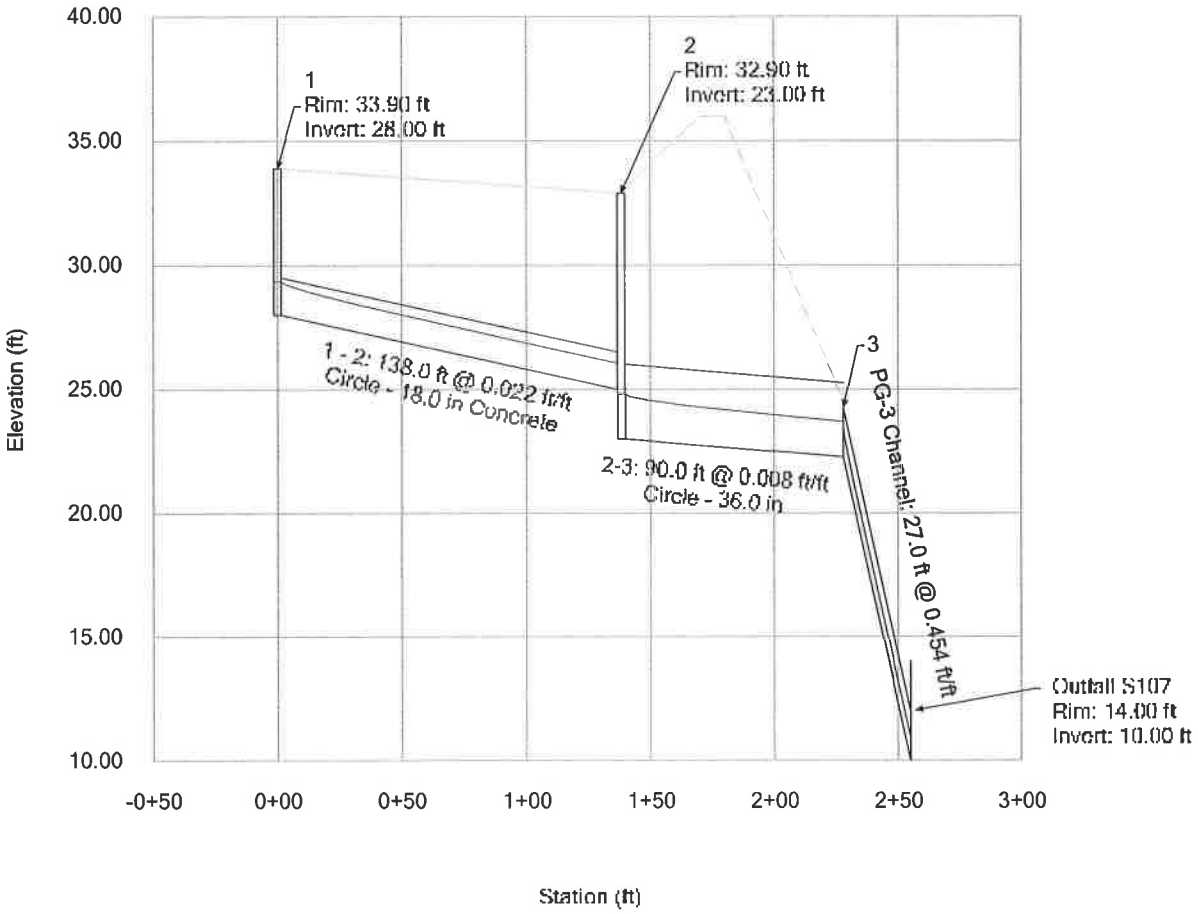
Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)

Hydraulic Grade (ft)	Volume (gal)

Scenario: Base



Profile Report
Engineering Profile - Profile - 1 (Outfall S107 Design_Option 1.stsw)



Calculation Detailed Summary

Element Details			
ID	26	Notes	
Label	Base Calculation Options		

Hydraulic Summary			
Flow Profile Method	Backwater Analysis	Average Velocity Method	Actual Uniform Flow Velocity
Number of Flow Profile Steps	5	Minimum Structure Headloss	0.00 ft
Hydraulic Grade Convergence Test	0.00 ft	Minimum Time of Concentration	0.080 hours

Inlets			
Neglect Side Flow?	False	Active Components for Combination Inlets In Sag	Grate and Curb
Neglect Gutter Cross Slope For Side Flow?	False	Active Components for Combination Inlets on Grade	Grate and Curb

HEC-22 Energy Losses			
Elevations Considered Equal Within	0.50 ft	Depressed Unsubmerged Factor	1.000
Consider Non-Piped Plunging Flow?	False	Half Bench Submerged Factor	0.950
Flat Submerged Factor	1.000	Half Bench Unsubmerged Factor	0.150
Flat Unsubmerged Factor	1.000	Full Bench Submerged Factor	0.750
Depressed Submerged Factor	1.000	Full Bench Unsubmerged Factor	0.070

Headloss (AASHTO)			
Expansion, Ke	0.350	Shaping Adjustment, Cs	0.500
Contraction, Kc	0.250	Non-Piped Flow Adjustment, Cn	1.300

Bend Angle vs. Bend Loss Curve

Bend Angle (degrees)	Bend Loss Coefficient, Kb
0.00	0.000
15.00	0.190
30.00	0.350
45.00	0.470
60.00	0.560
75.00	0.640
90.00	0.700

Gravity Hydraulics

Calculation Detailed Summary

Gravity Hydraulics	
Governing Upstream Pipe Selection Method	Pipe with Maximum QV

Catchment Summary

Label	Area (User Defined) (acres)	Time of Concentration (hours)	Rational C	Catchment CA (acres)
Western Inlet	5.100	0.100	0.500	2.550
Eastern Inlet	7.200	0.100	0.500	3.600

Catchment Intensity (in/h)	Catchment Rational Flow (cfs)
5.000	12.85
5.000	18.14

Conduit Summary

Label	Section Type	Branch ID	Subnetwork Outfall	Flow (cfs)
1 - 2	Circle	1	Outfall S107	12.85
2-3	Circle	1	Outfall S107	31.00
PG-3 Channel	(N/A)	1	Outfall S107	31.00

Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)	Depth (Out) (ft)
8.36	32.25	30.02	1.35	1.22
8.42	28.71	27.97	1.81	1.57
8.89	27.70	10.91	1.30	0.91

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
1	Catch Basin	Outfall S107	12.85	12.85
2	Catch Basin	Outfall S107	31.00	31.00
Outfall S107	Outfall	(N/A)	(N/A)	31.00
3	Cross Section	Outfall S107	31.00	31.00

Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
33.90	30.90	33.16	33.16
32.90	26.90	29.79	29.46
12.00	10.00	(N/A)	(N/A)
29.00	26.40	28.76	28.12

Inlet Summary

Label	Inlet Type	Catalog Inlet Type	Catalog Inlet	Flow (Captured) (cfs)
1	(N/A)	(N/A)	(N/A)	12.85
2	(N/A)	(N/A)	(N/A)	18.14

Calculation Detailed Summary

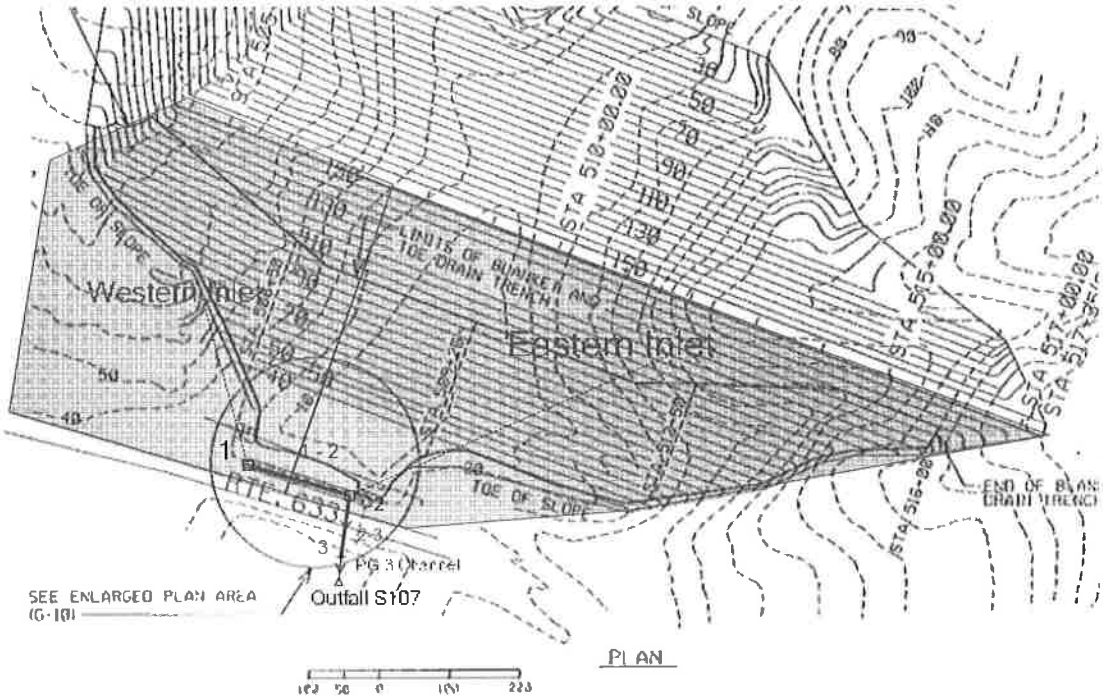
Inlet Summary

Flow (Total Bypassed) (cfs)	Bypass Target	Capture Efficiency (Calculated) (%)	Depth (Gutter) (in)	Spread / Top Width (ft)
0.00	(N/A)	100.0	(N/A)	(N/A)
0.00	(N/A)	100.0	(N/A)	(N/A)

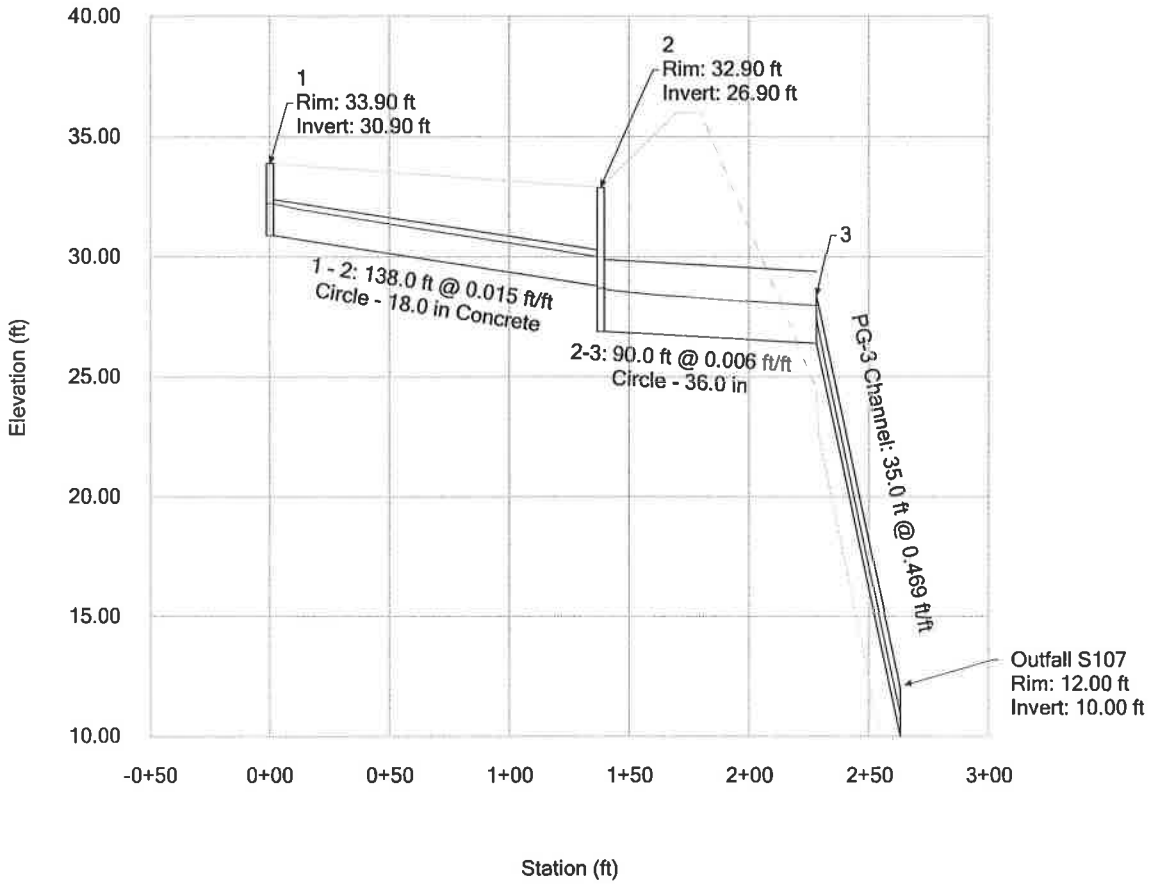
Pond Summary

Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
Hydraulic Grade (ft)	Volume (gal)			

Scenario: Base



Profile Report
Engineering Profile - Profile - 1 (Outfall S107 Design_Option 2.stsw)



Calculation Detailed Summary

Element Details			
ID	26	Notes	
Label	Base Calculation Options		

Hydraulic Summary			
Flow Profile Method	Backwater Analysis	Average Velocity Method	Actual Uniform Flow Velocity
Number of Flow Profile Steps	5	Minimum Structure Headloss	0.00 ft
Hydraulic Grade Convergence Test	0.00 ft	Minimum Time of Concentration	0.080 hours

Inlets			
Neglect Side Flow?	False	Active Components for Combination Inlets In Sag	Grate and Curb
Neglect Gutter Cross Slope For Side Flow?	False	Active Components for Combination Inlets on Grade	Grate and Curb

HEC-22 Energy Losses			
Elevations Considered Equal Within	0.50 ft	Depressed Unsubmerged Factor	1.000
Consider Non-Piped Plunging Flow?	False	Half Bench Submerged Factor	0.950
Flat Submerged Factor	1.000	Half Bench Unsubmerged Factor	0.150
Flat Unsubmerged Factor	1.000	Full Bench Submerged Factor	0.750
Depressed Submerged Factor	1.000	Full Bench Unsubmerged Factor	0.070

Headloss (AASHTO)			
Expansion, Ke	0.350	Shaping Adjustment, Cs	0.500
Contraction, Kc	0.250	Non-Piped Flow Adjustment, Cn	1.300

Bend Angle vs. Bend Loss Curve

Bend Angle (degrees)	Bend Loss Coefficient, Kb
0.00	0.000
15.00	0.190
30.00	0.350
45.00	0.470
60.00	0.560
75.00	0.640
90.00	0.700

Gravity Hydraulics

Calculation Detailed Summary

Gravity Hydraulics	
Governing Upstream Pipe Selection Method	Pipe with Maximum QV

Catchment Summary

Label	Area (User Defined) (acres)	Time of Concentration (hours)	Rational C	Catchment CA (acres)
Western Inlet	5.100	0.100	0.500	2.550
Eastern Inlet	7.200	0.100	0.500	3.600

Catchment Intensity (In/h)	Catchment Rational Flow (cfs)
5.000	12.85
5.000	18.14

Conduit Summary

Label	Section Type	Branch ID	Subnetwork Outfall	Flow (cfs)
1 - 2	Circle	1	3	12.85
2 - 3	Circle	1	3	31.00

Velocity (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)	Depth (Out) (ft)
9.80	29.35	26.04	1.35	1.04
18.12	13.78	9.17	1.88	1.17

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)
1	Catch Basin	3	12.85	12.85
2	Catch Basin	3	31.00	31.00
3	Outfall	(N/A)	(N/A)	31.00

Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
33.90	28.00	30.26	30.26
32.90	11.90	15.27	15.37
12.00	8.00	(N/A)	(N/A)

Inlet Summary

Label	Inlet Type	Catalog Inlet Type	Catalog Inlet	Flow (Captured) (cfs)
1	(N/A)	(N/A)	(N/A)	12.85
2	(N/A)	(N/A)	(N/A)	18.14

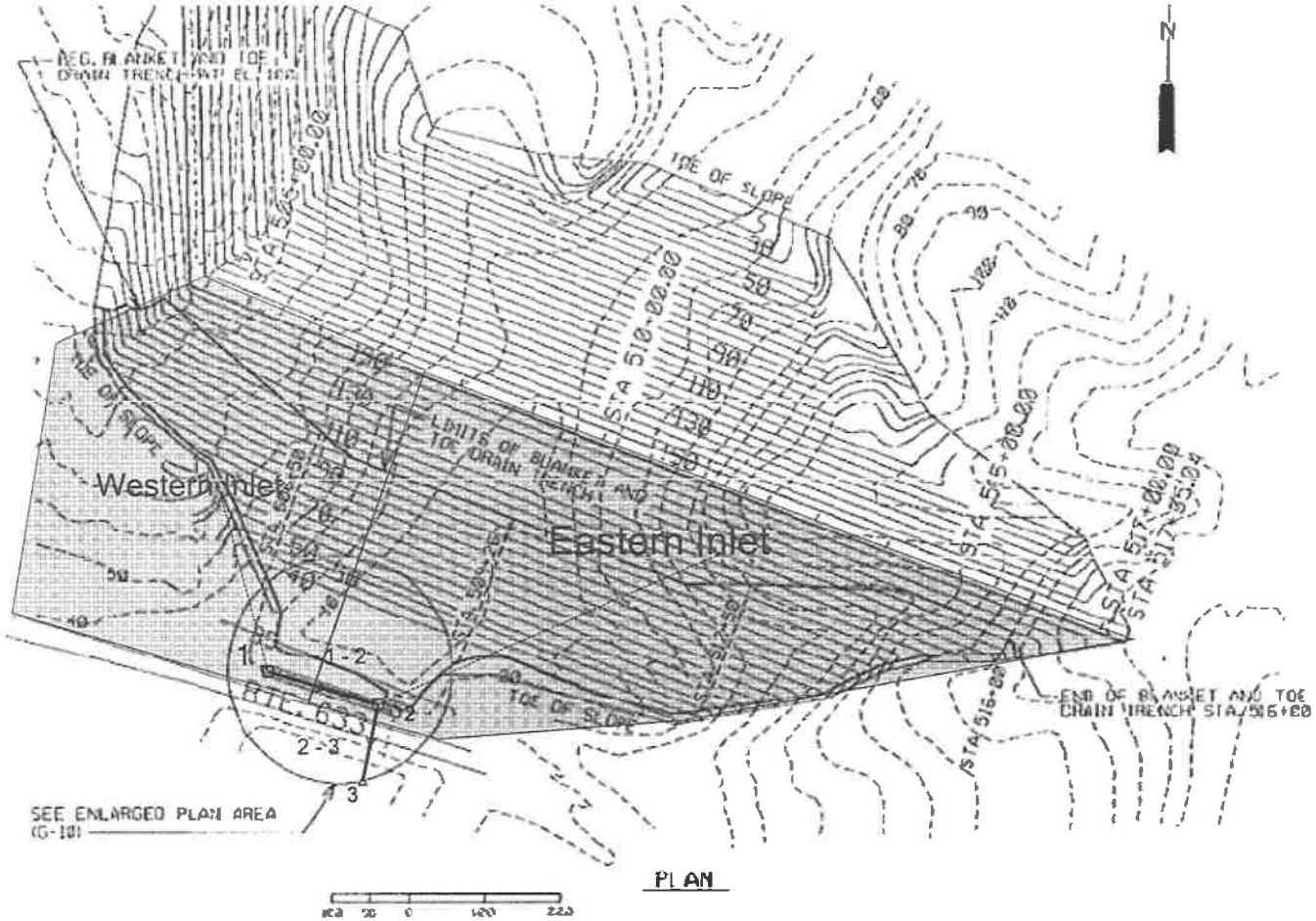
Flow (Total Bypassed) (cfs)	Bypass Target	Capture Efficiency (Calculated) (%)	Depth (Gutter) (in)	Spread / Top Width (ft)
0.00	(N/A)	100.0	(N/A)	(N/A)
0.00	(N/A)	100.0	(N/A)	(N/A)

Calculation Detailed Summary

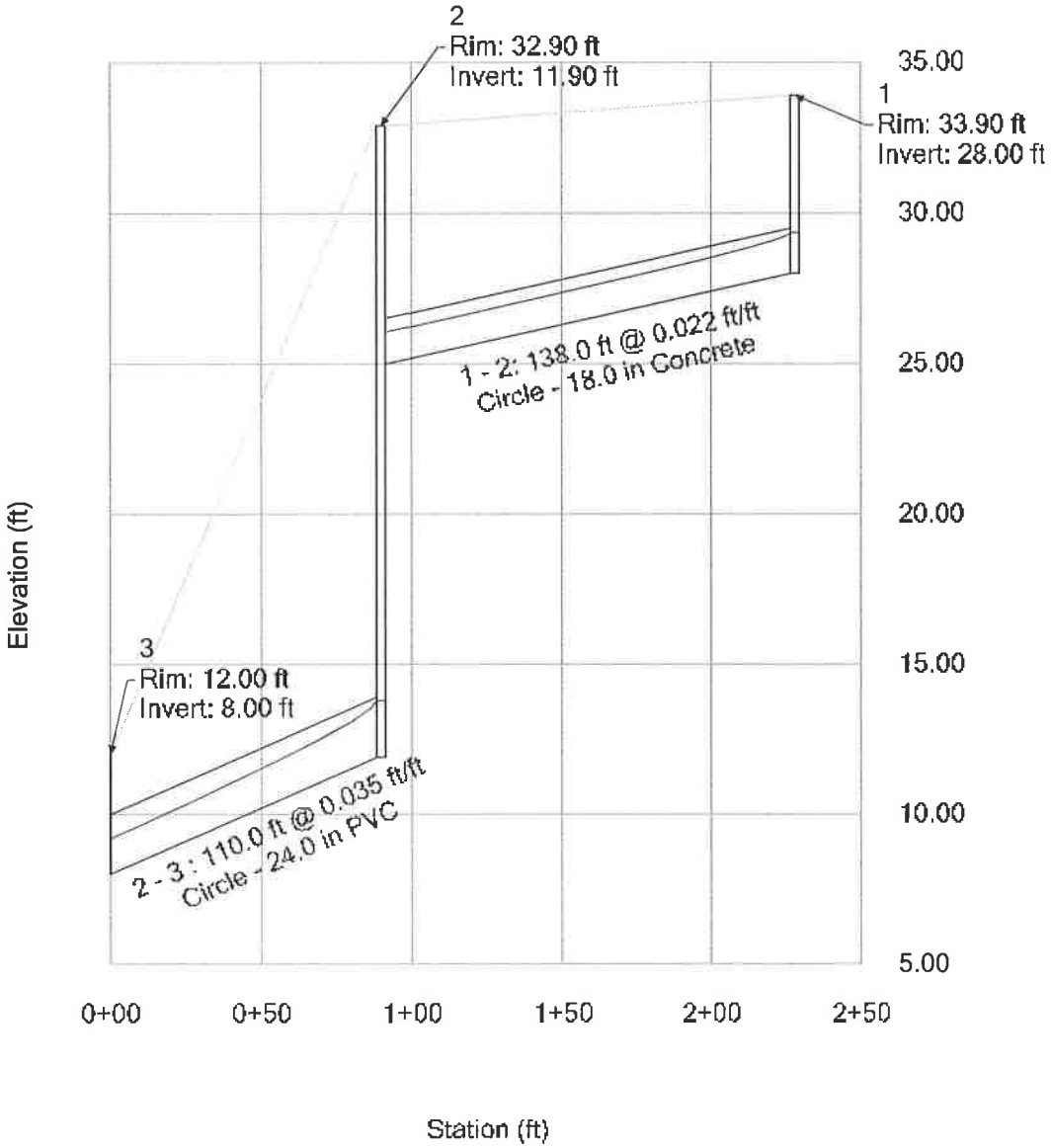
Pond Summary

Label	Element Type	Subnetwork Outfall	Flow (Total In) (cfs)	Flow (Total Out) (cfs)	Hydraulic Grade (ft)	Volume (gal)

Scenario: Base



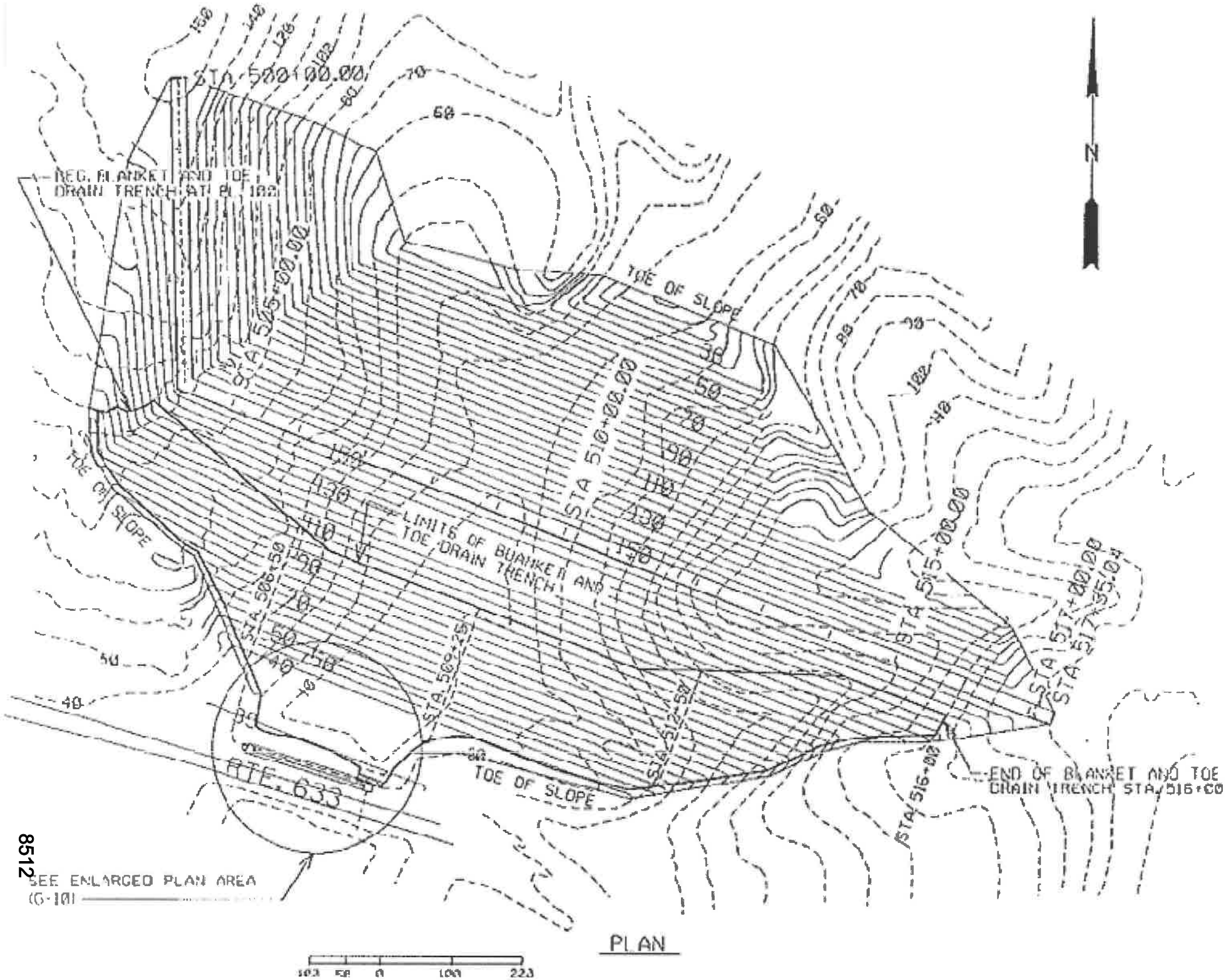
Profile Report
Engineering Profile - Profile - 1 (Outfall S107 Design_revised_option 33.stsw)



ATTACHMENT 2

POND D CONSTRUCTION DRAWING

DRAFT


STA 500+00.00
REG. BLANKET AND TOE DRAIN TRENCH AT PL 100
STA 505+00.00
TOE OF SLOPE
STA 510+00.00
LIMITS OF BLANKET AND TOE DRAIN TRENCH
STA 515+00.00
STA 517+00.00
STA 517+35.04
STA 516+00
STA 512+50
STA 509+25
STA 506+50
RTE. 633
END OF BLANKET AND TOE DRAIN TRENCH STA 516+00
SEE ENLARGED PLAN AREA (G-10)
N
PLAN
100 50 0 100 200

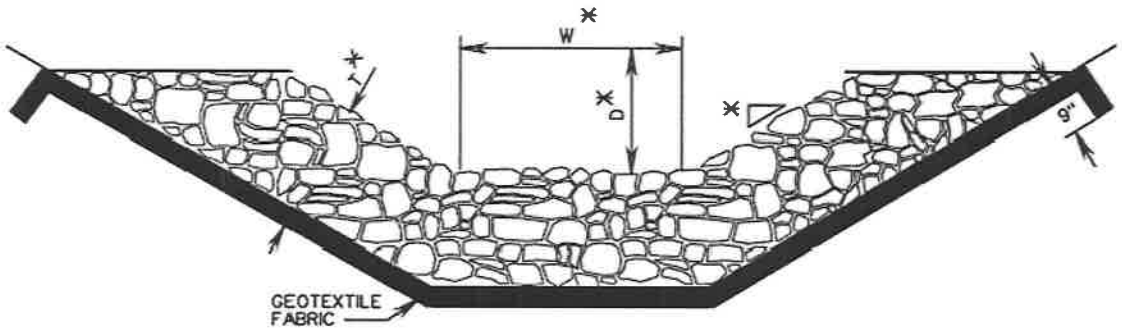
8512

ATTACHMENT 3

VDOT Standard PG-3 RipRap Ditch Detail

DRAFT

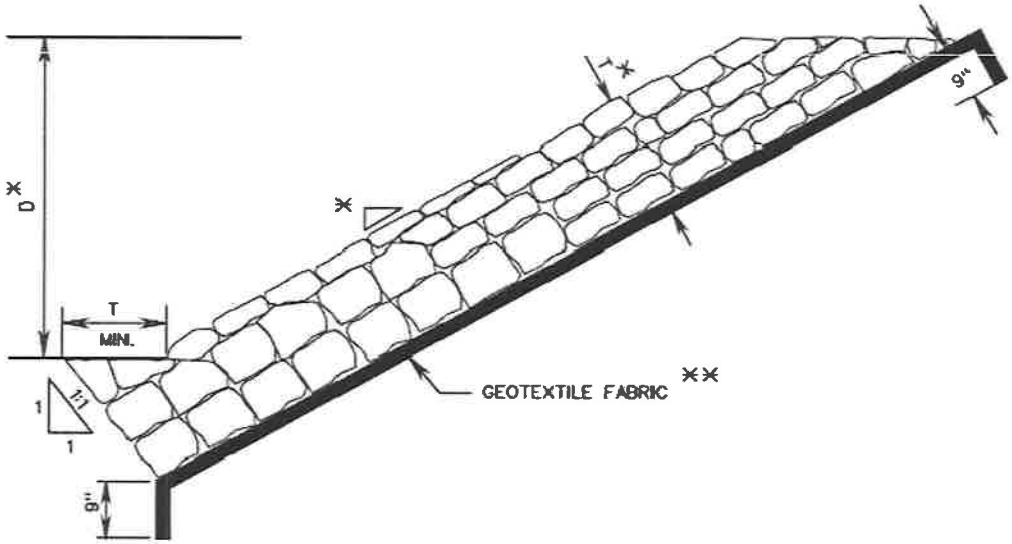
PG-3



TYPE I
RIPRAP DITCH PROTECTION

MINIMUM THICKNESS "T"

RIP RAP CLASS	MINIMUM "T"
CLASS AI	20"
CLASS I	26"
CLASS II	38"
CLASS III	53"



TYPE II
RIPRAP SLOPE PROTECTION

NOTES:

** RIP RAP BEDDING MATERIAL

GEOTEXTILE FABRIC TO BE PROVIDED UNDER ALL RIPRAP INSTALLATIONS CLASS AI, CLASS I AND CLASS II UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

RIPRAP INSTALLATIONS OF CLASS III SHALL HAVE AN INTERMEDIATE AGGREGATE BEDDING LAYER(S) AS SPECIFIED ON THE PLANS BASED ON GEOTECHNICAL RECOMMENDATIONS.

* SEE TYPICAL SECTION SHOWN ON PLANS FOR SIDE SLOPE, BOTTOM WIDTH AND DEPTH OF CHANNEL AND RIPRAP THICKNESS.

VDOT
ROAD AND BRIDGE STANDARDS

SHEET 1 OF 1 | REVISION DATE
109.02

STANDARD RIP RAP DITCH & SLOPE PROTECTION
PG-3

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE
245
414

8514

APPENDIX C
Estimate of Probable Construction Cost

Option 1 Opinion of Probable Cost					
Item #	Item	Units	Quantity	Unit Cost*	Item Cost
01366	Storm Sewer Pipe 36"	ft	90	$ 150.00	$ 13,500.00
07512	Drop Inlet DI-7B	Ea	1	$ 6,500.00	$ 6,500.00
26127	Dry RipRap Cl. 1 26"	Tons	42	$ 45.00	$ 1,890.00
27500	Geotextile Fabric	SY	60	$ 5.00	$ 300.00
00529	Flowable Backfill	CY	2	$ 230.00	$ 460.00
56200	Trech Excavation	CY	200	$ 25.00	$ 5,000.00
51910	Saw Cut	ft	46	$ 10.00	$ 460.00
24410	Demolition of Pavement	SY	13	$ 10.00	$ 130.00
27552	NS. Aggr. Material, #57 Coarse Aggregrate	Tons	66	$ 50.00	$ 3,300.00
00505	Bedding Matl. Aggr. No. 25 or 26	Tons	40	$ 50.00	$ 2,000.00
16224	Aggr. Matl. No. 10	Tons	250	$ 50.00	$ 12,500.00
16242	Bedding Matl. Ty. I or II No. 21A	Tons	9	$ 30.00	$ 270.00
10642	Asphalt Concrete Ty. BM-25.0A	Tons	2	$ 85.00	$ 170.00
10610	Asphalt Concrete Ty. IM-19.0A	Tons	2	$ 85.00	$ 170.00
10635	Asphalt Concrete Ty. SM-9.5A	Tons	2	$ 120.00	$ 240.00
27451	Inlet Protection, Type A	Ea	1	$ 260.00	$ 260.00
13320	Guardrail (Remove & Replace)	Ea	1	$ 1,000.00	$ 1,000.00
24282	Traffic Control	Ea	1	$ 5,000.00	$ 5,000.00
				Total Project Cost	$ 53,150.00

*Unit Cost as defined by the VDOT Statewide Average Price

Option 2 Opinion of Probable Cost					
Item #	Item	Units	Quantity	Unit Cost*	Item Cost
	Modify Existing DI	Ea	1	$ 500.00	$ 500.00
01186	Storm Sewer Pipe 18"	ft	140	$ 70.00	$ 9,800.00
01366	Storm Sewer Pipe 36"	ft	90	$ 150.00	$ 13,500.00
07512	Drop Inlet DI-7B	Ea	1	$ 6,500.00	$ 6,500.00
26127	Dry RipRap Cl. 1 26"	Tons	42	$ 45.00	$ 1,890.00
27500	Geotextile Fabric	SY	60	$ 5.00	$ 300.00
00529	Flowable Backfill	CY	2	$ 230.00	$ 460.00
51910	Saw Cut	ft	46	$ 10.00	$ 460.00
24410	Demolition of Pavement	SY	13	$ 10.00	$ 130.00
27552	NS. Aggr. Material, #57 Coarse Aggregrate	Tons	50	$ 50.00	$ 2,500.00
00505	Bedding Matl. Aggr. No. 25 or 26	Tons	25	$ 50.00	$ 1,250.00
16224	Aggr. Matl. No. 10	Tons	150	$ 50.00	$ 7,500.00
16242	Bedding Matl. Ty. I or II No. 21A	Tons	9	$ 30.00	$ 270.00
10642	Asphalt Concrete Ty. BM-25.0A	Tons	2	$ 85.00	$ 170.00
10610	Asphalt Concrete Ty. IM-19.0A	Tons	2	$ 85.00	$ 170.00
10635	Asphalt Concrete Ty. SM-9.5A	Tons	2	$ 120.00	$ 240.00
27451	Inlet Protection, Type A	Ea	1	$ 260.00	$ 260.00
13320	Guardrail (Remove & Replace)	Ea	1	$ 1,000.00	$ 1,000.00
24282	Traffic Control	Ea	1	$ 5,000.00	$ 5,000.00
				Total Project Cost	$ 51,900.00

*Unit Cost as defined by the VDOT Statewide Average Price

Option 3 Opinion of Probable Cost					
Item #	Item	Units	Quantity	Unit Cost*	Item Cost
01301	Bore & Jack 30" Pipe	ft	110	$ 1,500.00	$ 165,000.00
01246	Storm Sewer Pipe 24" (Not Pay Item)	ft	110	$ -	$ -
07512	Drop Inlet DI-7B	Ea	1	$ 8,200.00	$ 8,200.00
26127	Dry RipRap Cl. 1 26"	Tons	30	$ 45.00	$ 1,350.00
27500	Geotextile Fabric	SY	30	$ 5.00	$ 150.00
00529	Flowable Backfill	CY	2	$ 230.00	$ 460.00
56200	Pit Excavation - (Included with LF cost of B&J)	CY		$ -	$ -
				Total Project Cost	$ 175,160.00

*Unit Cost as defined by the VDOT Statewide Average Price

PP Outfall 010-S107Culvert Replacement Plan (15%) - Cima Comments

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Outfall 010/S107 Culvert Replacement Plan (15% Design Concept)

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00, Task 051

April 2016

Dominion

COMMENTS AS NOTED

4/27/16

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Prepared for: Virginia Electric and Power Company
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DRAFT

Outfall 010/S107 Culvert Replacement Plan (15% Design Concept)

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00, Task 051

April 2016

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Senior E.I.T.

John Klamut
Engineering Manager

Table of Contents

1.0 Background 1

2.0 Regulatory Requirements 1

3.0 Original System Description 1

4.0 Proposed System Description 2
- 4.1 Storm Drain Design - Option 1 2
- 4.2 Storm Drain Design - Option 2 2
- 4.3 Storm Drain Design - Option 3 3

Appendix A Figures
- Figure 1 Drainage Area Map
- Figure 2 Option 1 - Storm Drain Design Layout
- Figure 3 Option 2 - Storm Drain Design Layout
- Figure 4 Option 3 – Storm Drain Design Layout
- Figure 5 VDOT Standard DI-7B Drop Inlet Detail
- Figure 6 VDOT Standard PG-3 Type 1 RipRap Channel Detail

Appendix B Hydrologic and Hydraulic Calculations

Appendix C Estimate of Probable Construction Cost

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1.0 Background

Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) ash ponds at Possum Point Power Station (Station), a natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA). Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018, in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Discharge from the ash ponds at the station is managed in accordance with the Station's VA Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071. The station recently modified VPDES Permit No. VA0002071 to allow discharge from the ponds during closure and post-closure. The modified permit was made effective in January 2016.

Part of Dominion's plan for closure of the station's ash ponds includes management of stormwater flows associated with the Ash Pond D closure activities. The purpose of this document is to present Dominion's plan to restore stormwater only flows to the previous~~x~~ outfall associated with the Pond D toe drain, referred to as Outfall 010 or S107. The VPDES permit allows for separation of groundwater flows under permit condition in Part 1.F.23.

?

2.0 Regulatory Requirements

The following excerpt is the applicable condition in the Station's VPDES Permit No. VA0002071: Part 1.F.23.:

> *Outfall 010 Groundwater (Toe Drain) Removal and Re-designation to S107.*
>
> *Upon successful demonstration to and written approval from DEQ confirming that all groundwater contributions to the Outfall 010 discharge have been removed, the requirements of Part I.A.15 of this permit shall become effective and supersede the requirements of Part 1.A.8. The groundwater contributions include both infiltration through the earthen berm as well as groundwater diverted around the impoundment. Should the permittee separate and remove all groundwater contributions to the discharge, then the discharge would be comprised of only industrially influenced stormwater. Stormwater – only discharges from this outfall would be designated as Outfall S107 and governed by the requirements of Part 1.A.15, Part I.E and Part I.F.18. Should the permittee pursue separation of the groundwater contributions to the discharge, a demonstration plan shall be submitted to DEQ for review and approval. This demonstration plan shall consider, at a minimum: observations of the outfall during dry-weather with variable antecedent precipitation conditions to confirm no discharge; seasonal wet-weather conditions to include potential inflow and infiltration contributions; other information as appropriate, such as design schematics, to support a conclusion that groundwater contributions have been removed from the discharge.*

3.0 Original System Description

Previous discharges at Outfall 010 ~~is~~ are comprised of stormwater runoff and groundwater flows from the Pond D Embankment toe drain. Outfall 010 discharges on the south side of Possum Point Road to an unnamed tributary of Quantico Creek.

As illustrated by Figure 1 and Figure 2, attached in Appendix A, the storm sewer system is comprised of two Virginia Department of Transportation (VDOT) Standard DI-7B (Approximate Invert Elevation 33.00 feet) drainage inlets running parallel on the north-side of Possum Point Road. The upstream and

downstream inlets are connected by 18-inch concrete pipe. The system previously discharged through a 72-inch diameter culvert that runs from the downstream inlet, under Possum Point Road, to the unnamed tributary of Quantico Creek. However, the 72-inch culvert has been abandoned in place & water captured in the downstream inlet structure is pumped into Pond D. As shown on Figure 1 in Appendix A, the total contributing drainage area for the two inlets is approximately twelve (12) acres. The hydrologic and hydraulic calculations are included in Appendix B.

4.0 Proposed System Description

Three storm drain design options are being provided as a part of this conceptual design plan. Per VDOT design requirements, the proposed system will be designed to pass the anticipated peak flow rate from the 10-year, 24-hour storm event, considering the post construction-vegetated condition. Pipe installation will be completed in accordance with the VDOT 2008 Road and Bridge Standards. Conducting work inside of the VDOT owned right-of-way will require obtaining the proper VDOT Land Use Permits.

The options will include the installation of a VDOT standard DI-7B inlet (see Figure 5 in Appendix A). The proposed inlet structure will tie into the existing 18-inch storm sewer pipe approximately 30 feet west of the existing drop inlet. The remaining portion of the 18-inch pipe will be abandoned in place by backfilling with flowable fill. Option 1 will include a single barrel crossing consisting of a 36-inch corrugated plastic pipe (CPP) to be installed across Possum Point Road utilizing an open cut method. Option 2 will include replacing the existing 18-inch storm sewer pipe at a shallower depth and installing a single barrel 36-inch CPP pipe crossing Possum Point Road. Option 3 will utilize trenchless technology. A single-barrel crossing allowing for bore and jack installation under Possum Point Road.

4.1 Storm Drain Design - Option 1

WORDING ?

The proposed layout of the Option 1 Storm Drain System is shown on Figure 2 in Appendix A. The crossing pipe will consist of a 36-inch diameter Corrugated Plastic Pipe (CPP), 90 feet in length. Open-cut pavement restoration will meet the requirements of the Land Use Permit. A Maintenance of Traffic (MOT) plan will need to be implemented utilizing traffic control devices per the Virginia Work Area Protection Manual. If road closure is necessary, night operations may be required in order to minimize the impact on the traveling public. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 10 feet per second (fps). Outlet Protection has been designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection will include be achieved through VDOT standard PG-3 Slope Protection with Class AI riprap (see Figure 6 in Appendix A). After successful installation the outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 1 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 1 Storm Drain System will be about $53,000 (see Appendix C).

4.2 Storm Drain Design - Option 2

The proposed layout of the Option 2 Storm Drain System is shown on Figure 3 in Appendix A. The crossing pipe will consist of a 36-inch diameter Corrugated Plastic Pipe (CPP), 90 feet in length. This option also includes replacing the existing 18-inch storm sewer pipe to reduce the depth of the system. The system will be designed to minimize the amount of cover. This will minimize the cost of and duration of the installation process. It will also minimize the depth of trench excavation required along Possum Point Road. The contractor should locate existing underground utilities along Possum Point Road and determine depths by potholing prior to construction. As with Option 1, open-cut pavement restoration will meet the requirements of the Land Use Permit. A Maintenance of Traffic (MOT) plan will need to be implemented utilizing traffic control devices per the Virginia Work Area Protection

Manual. If road closure is necessary, night operations may be required in order to minimize the impact on the traveling public. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 9 fps. Outlet Protection has been designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection will be achieved through VDOT standard PG-3 Slope Protection with Class AI riprap (see Figure 6 in Appendix A). After successful installation the outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 2 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 2 Storm Drain System will be about $52,000 (see Appendix C).

4.3 Storm Drain Design - Option 3

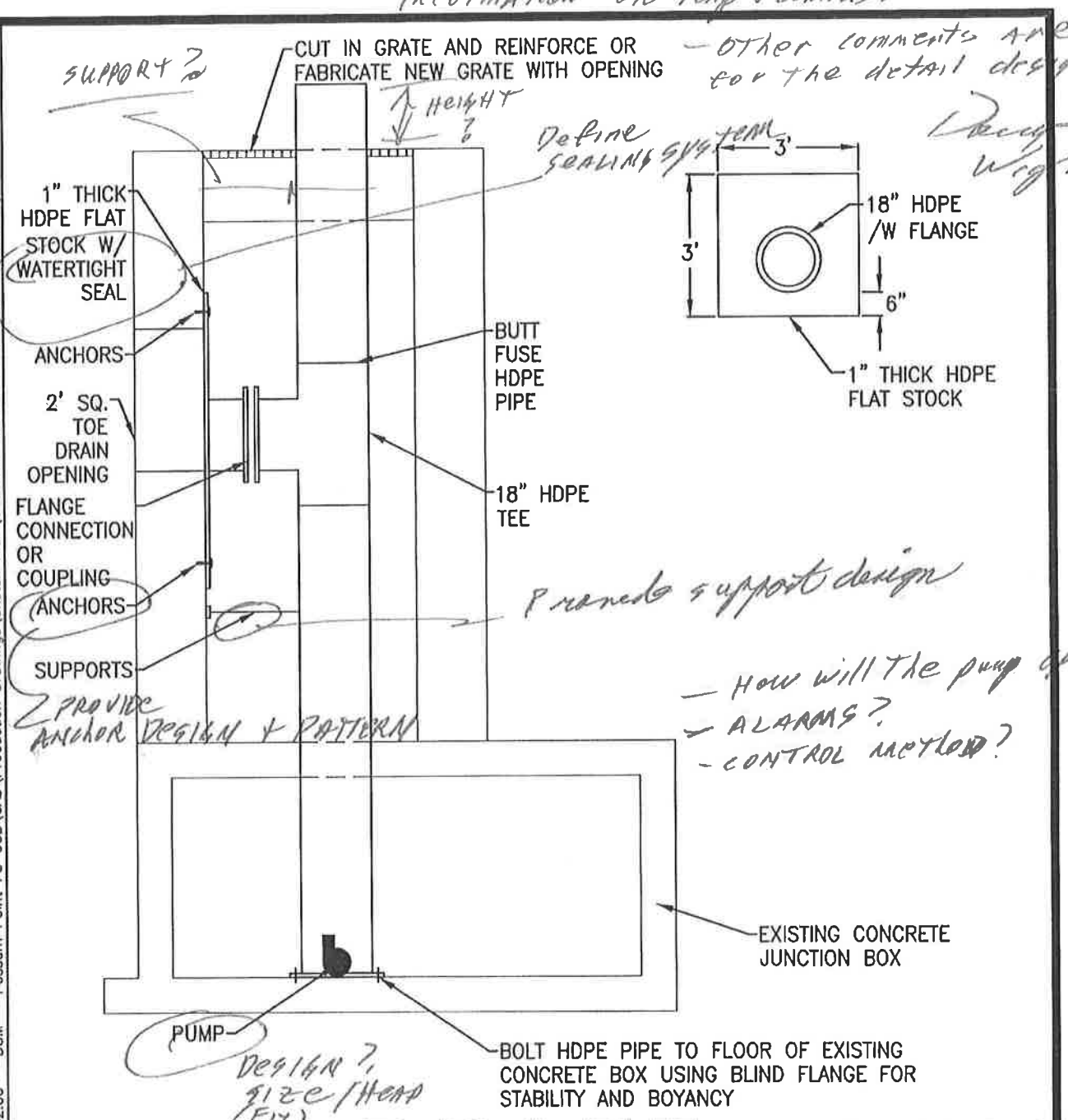
The proposed layout of the Option 3 Storm Drain System is shown on Figure 4 in Appendix A. Option 3 will utilize jack & boring technology to reduce the impact to the roadway. The crossing pipe will consist of a 24-inch diameter conduit, 110 feet in length. A VDOT Land Use Permit is still required when crossing a roadway using trenchless technology. Equipment laydown areas and the boring pit will be located outside the limits of the VDOT right-of-way and if a receiving pit is required, it will be located outside the limits of the wetlands on the downstream end. The storm drain pipe will outfall into the same Unnamed Tributary of Quantico Creek just west of the previous system. The 10-year discharge velocity from this culvert is estimated to be 18 fps. Outlet Protection will be designed in accordance with the VDOT 2008 Road and Bridge Standards. Outlet protection is anticipated to be achieved through a riprap energy dissipator. For the purposes of this draft design concept, a detailed design of the energy dissipator has not been completed. After successful installation – the Outfall will be redesignated as Outfall S107.

GAI has completed a preliminary construction cost estimate of the Option 3 Storm Drain System based on the major pay items anticipated. It is estimated that construction of the Option 1 Storm Drain System will be about $175,000 (see Appendix C).

- PROS & CONS OF EACH OPTION ?
- RECOMMENDATION FROM GAI ?

— concept is acceptable, with more information on pump + controls.

— other comments are for the detail design.



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DRAWING TITLE	GAI DRAWING NUMBER:
POND D TOE DRAINAGE SEPARATION (INTERIM SOLUTION)	FIGURE 1
PROJECT	GAI FILE NUMBER: C150132-00-054-C-A2-001-SKETCH
CLIENT	DRAWN BY: / CHECKED BY: / APPROVED BY:
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SUBJECT Possum Point Power Station - Inlet Water Elv.

BY BWB DATE 02/05/2016 PROJ. NO. C150132.00.057

CHKD. BY _____ DATE _____ SHEET NO. 1 OF 1

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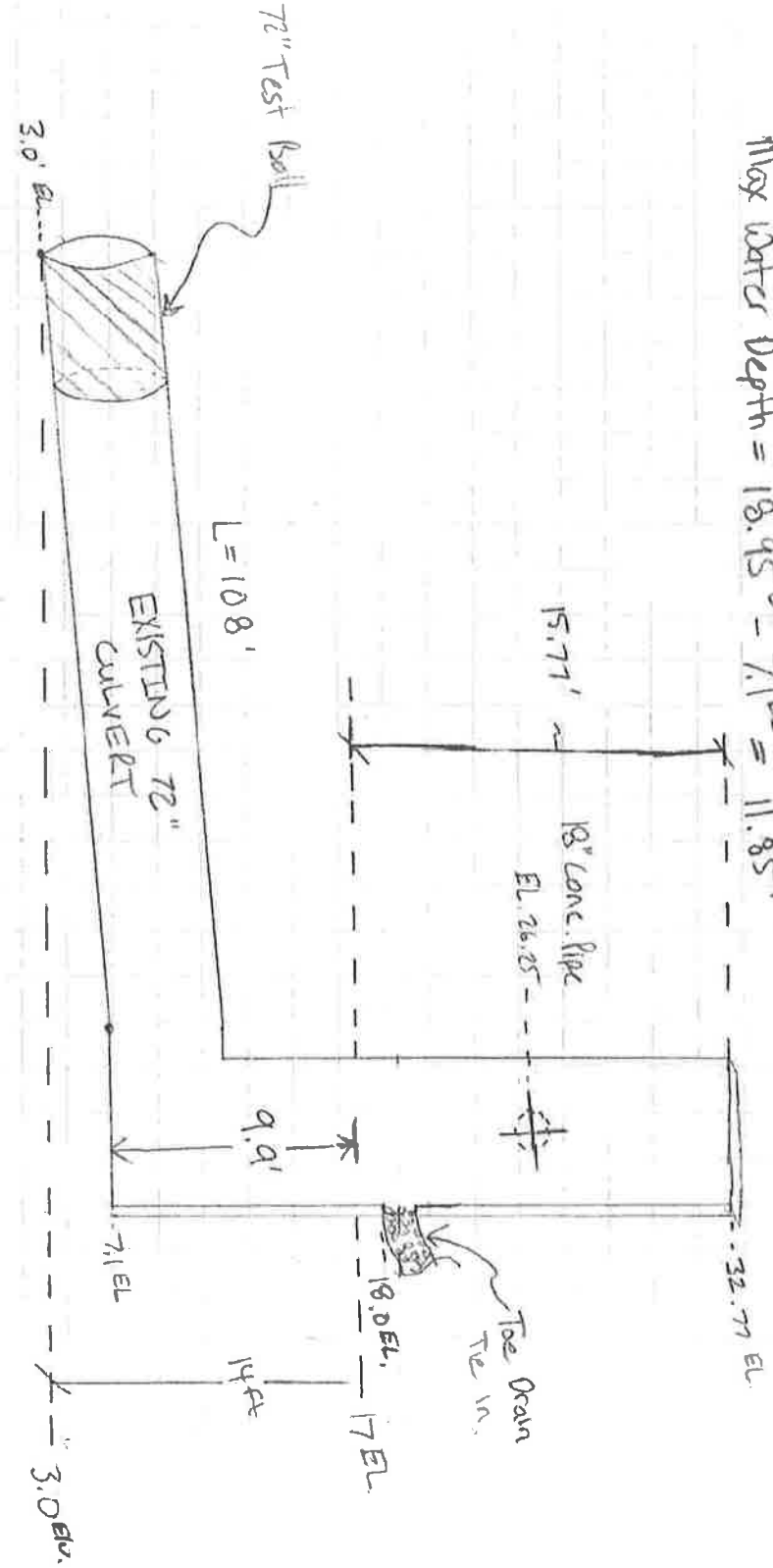
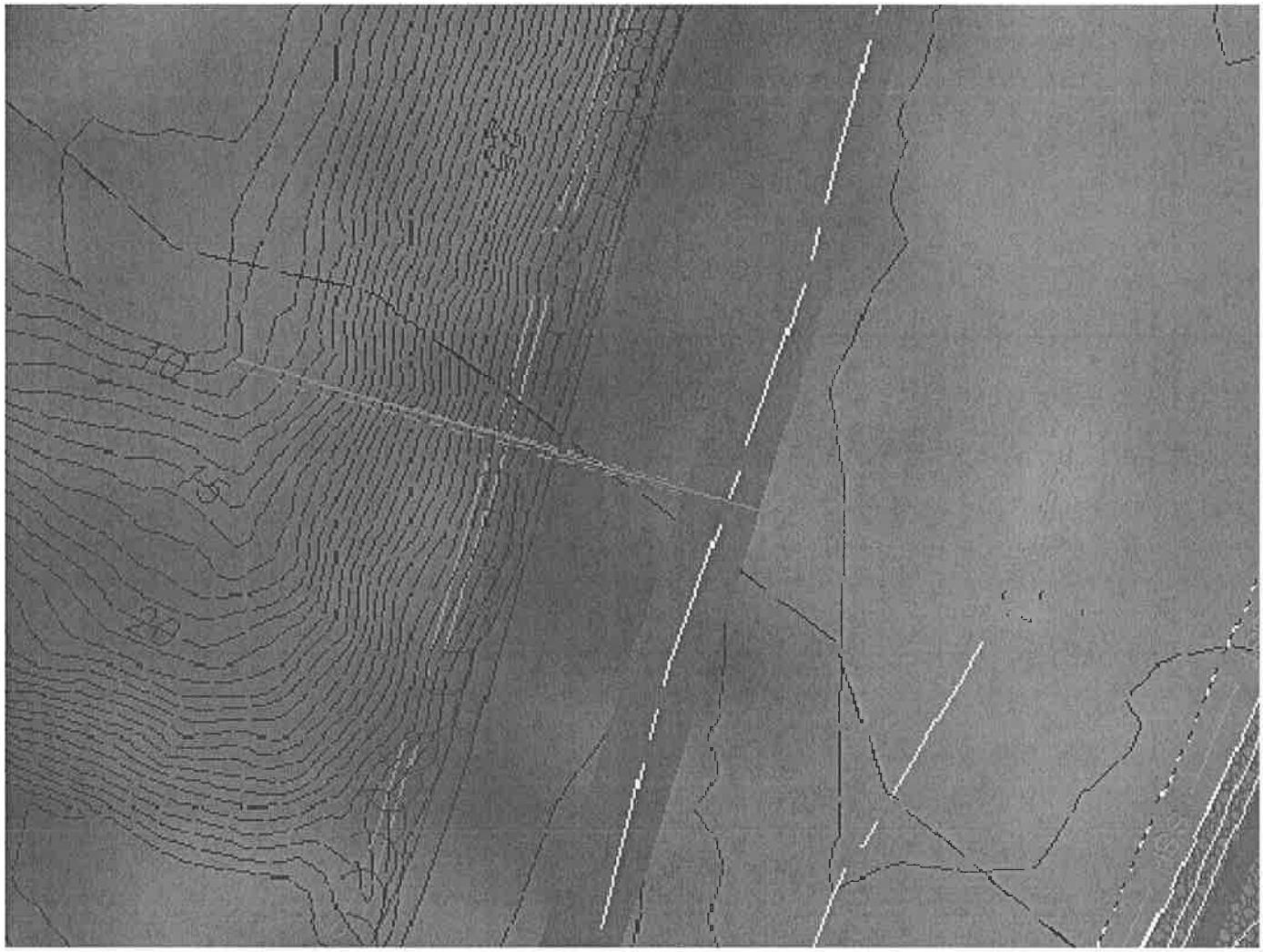
Per Manufacture's Specs: Test Ball Maximum Pressure = 14 PSI of Head.

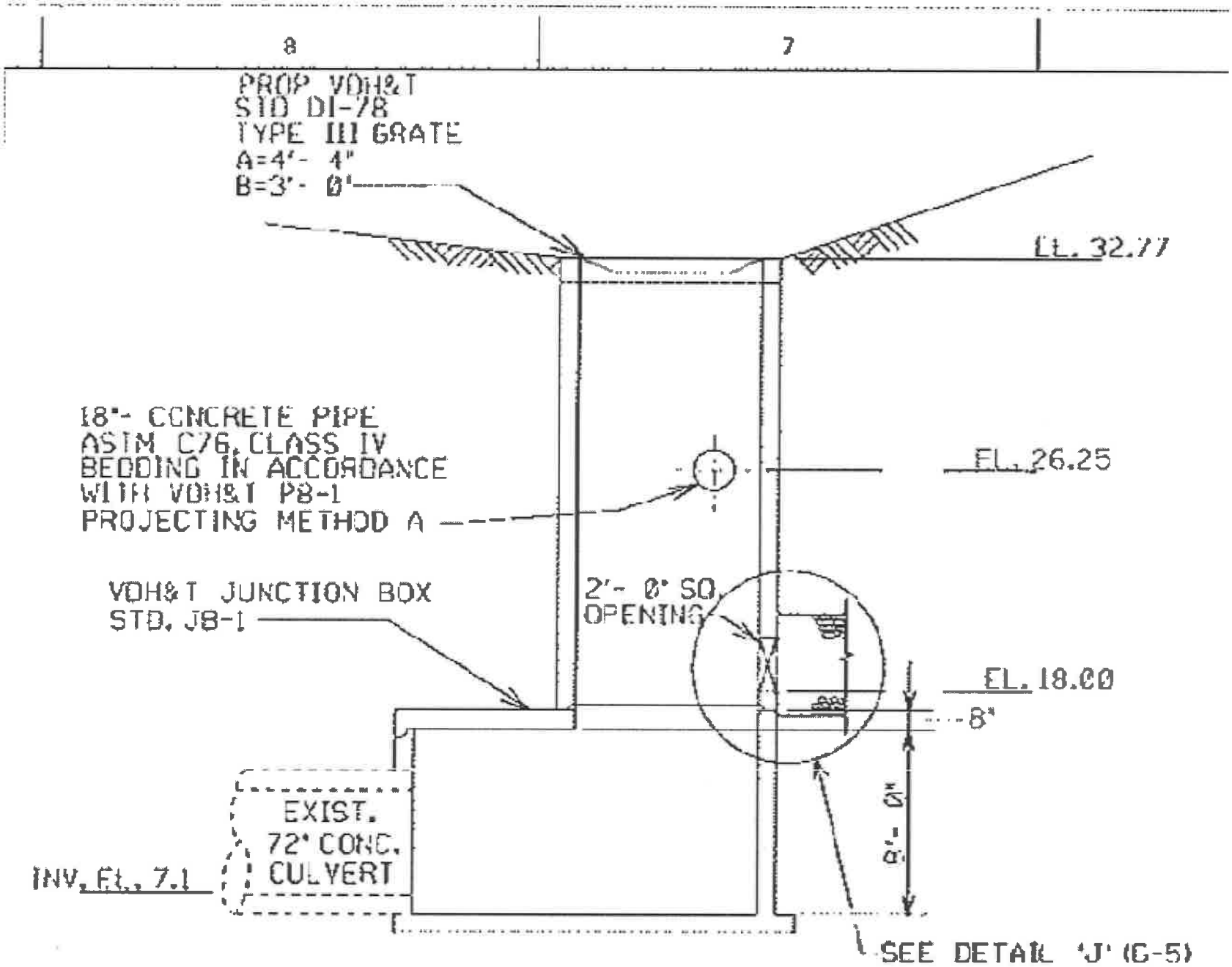
Max Water Depth = 18.95 EL - 7.1 EL = 11.85'





Part Number	Nominal Size	Usage Range	Maximum Back Pressure		Inflation Pressure	Product Weight	Deflated Length	Deflated Diameter	Inflation Thread	Chain / Eye bolts
*310728	48" - 72" (1200-1800 mm)	44"-72.25" (1118-1835 mm)	6 psi (0,41 bar)	14 ft. (4.3 M)	12 psi (0,83 bar)	290 lbs (132 kg)	100" (2540 mm)	43" (1092 mm)	1/2" (2)	3/4" (3)

8527



SECTION H - H (H-9)

NTS

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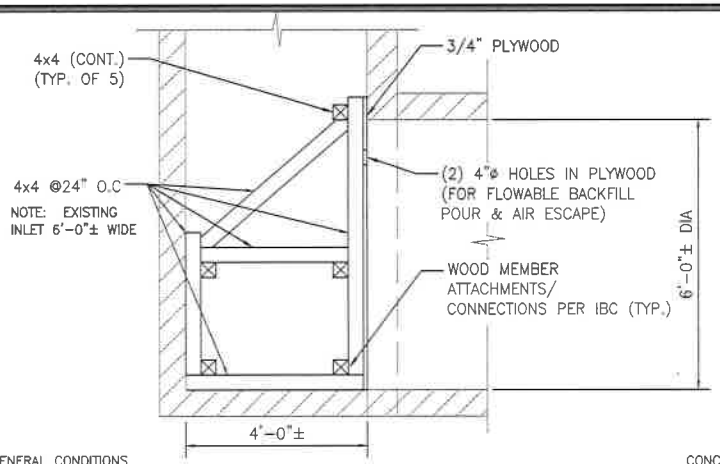

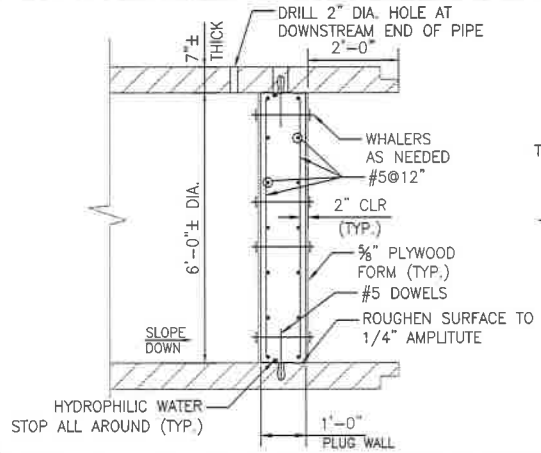

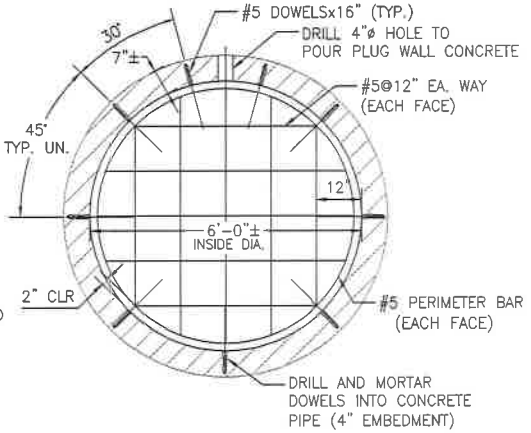

GENERAL CONDITIONS

GC1 REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

GC2 ALL WORK SHALL COMPLY WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC), ACI BUILDING CODE (ACI 318–02), ASTM STANDARDS AND ANY OTHER APPLICABLE CODES, RULES AND REGULATIONS BY AGENCIES HAVING JURISDICTIONS. WHERE CODES OVERLAP, COMPLY WITH THE MORE STRINGENT REQUIREMENTS.

GC3. EXISTING DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS.

GC4. ALL WORKMANSHIP MUST BE IN THE BEST PRACTICE OF THE TRADE AS DETERMINED BY THE OWNER/ENGINEER. ANY WORK NOT MEETING THESE STANDARDS WILL BE REJECTED.

GC5. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS APPROVED IN WRITING BY THE OWNER/ENGINEER.

GC6. CONTRACTOR IS TO DISPOSE OF ALL DEMOLITION MATERIALS AND LEAVE THE WORK IN A READY TO USE CONDITION.

GC7. CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, METHODS, LABOR PROCEDURES AND SAFETY PRECAUTIONS FOR COMPLETING THE WORK.

GC8. CONTRACTOR IS RESPONSIBLE FOR ALL WORK DURING CONSTRUCTION UNTIL FINAL APPROVAL BY OWNER/ENGINEER AND LOCAL OFFICIALS.

GC9. WHERE SPECIFIC MANUFACTURER'S PRODUCT IS CALLED OUT, ALL MATERIALS AND WORK MUST COMPLY WITH THE MANUFACTURER'S STRICT RECOMMENDATIONS FOR INSTALLATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN INSTRUCTIONS AND TO THEN FOLLOW THEM.

CONCRETE

C1. ALL CONCRETE WORK SHALL COMPLY WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."

C2. CONCRETE FOR REINFORCED WALLS SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150–05, TYPE III (HIGH EARLY STRENGTH) AND SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: 5000 PSI.
(3) DAY BREAK 3000 PSI BEFORE PUMPING

C3. CONCRETE FOR FLOWABLE BACKFILL SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150–05, TYPE II AND SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: 200 PSI

C4. FLOWABLE BACKFILL MAY BE PLACED WHEN COMPRESSIVE STRENGTH OF REINFORCED WALLS HAS REACHED 3000 PSI.

C5. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN TO THE OWNER/ENGINEER FOR APPROVAL. CONCRETE ACCEPTANCE SHALL BE ON THE BASIS OF "TRIAL MIXTURES" AS DESCRIBED IN ACI 318, SECTION 5.3. PROVIDE TRIAL MIXTURES FOR THREE DIFFERENT WATER–CEMENT RATIOS INDICATING 7–DAY AND 28–DAY COMPRESSIVE STRENGTH (FC); 1200 PSI GREATER THAN REQUIRED SHALL BE ACCEPTED.

C6. THE CONTRACTOR SHALL TAKE ONE SET OF EIGHT (8) STANDARD TEST CYLINDERS FOR EACH DAYS PLACEMENT AND THE OWNER'S TESTING AGENCY WILL PERFORM COMPRESSION TESTS ON TWO (2) CYLINDERS AT 3 DAYS, 7 DAYS AND 28 DAYS, LEAVING TWO (2) CYLINDERS IN RESERVE.

C7. FINE AGGREGATE SHALL BE WASHED NATURAL SAND CONFORMING TO ASTM C33. COARSE AGGREGATE SHALL BE WELL GRADED CRUSHED STONE OR WASHED GRAVEL CONFORMING TO ASTM C33 WITH A MAXIMUM SIZE OF 3/8" SIZE (AASHTO NO. 10).

C8. MAXIMUM SLUMP SHALL BE:
4" FOR REINFORCED WALLS.
12" FOR FLOWABLE BACKFILL (PER ASTM C 1611)

C9. ADD AIR ENTRAINING ADMIXTURE CONFORMING TO ASTM C260 TO PRODUCE MAXIMUM AIR BY VOLUME OF 5% FOR REINFORCED WALLS.

C10. ALL CONCRETE SHALL BE TRUCK MIXED.

C11. ALL PLACEMENT OF CONCRETE AND REINFORCEMENT SHALL BE ACCORDING TO ACI 318 (INCLUDING ACI 305 FOR HOT WEATHER AND ACI 306 FOR COLD WEATHER CONDITIONS); AND CRSI RECOMMENDED PRACTICES FOR 'PLACING REINFORCING BARS'.

C12. REINFORCING BARS SHALL BE NEW ASTM A615, GRADE 60.

C13. ALL REINFORCING SHALL BE INSPECTED BY THE OWNER'S TESTING AGENCY BEFORE CONCRETE IS PLACED.

C14. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.

C15. PROVIDE HYRDROPHILIC WATERSTOPS BY GREENSTREAK, INC, HYDROTITE TYPE CJ–3030–M, OR APPROVED EQUIVALENT.

C16. PROVIDE HILTI TYPE HIT–HY 200 INJECTABLE MORTAR FOR DRILLED DOWEL REINFORCEMENT, OR APPROVED EQUIVALENT.

NO.:	DATE:	DWN:	CHK:	APV:	DESCRIPTION:
0	02/18/16	CRM	CMH	RBB	ISSUED FOR CONSTRUCTION

REVISION RECORD

DRAWING TITLE: REINFORCED CONCRETE PIPE

PROJECT: POSSUM POINT POWER STATION

gai consultants

CLIENT:

DRAWN BY:	CHECKED BY:	APPROVED BY:
CRM	CMH	RBB
REVISION A/0	SCALE: 3/8"=1'-0"	ISSUE DATE: 02/16/2016
	SHEET NO.: 1 OF 1	

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DRAFT

Outfalls 010, 503 (Interim/Final), and 005 (Interim Discharge from Pond E Holding Basin) Sampling Plan

Virginia Electric and Power Company
d/b/a Dominion Virginia Power
Coal Combustion Residuals Pond Closure Project
Possum Point Power Station
Prince William County, Virginia

GAI Project Number: C150132.00, Task 050

December 2015

Dominion℠

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8530

Outfalls 010, 503 (Interim/Final), and 005 (Interim Discharge from Pond E Holding Basin) Sampling Plan

Virginia Electric and Power Company
d/b/a Dominion Virginia Power
Coal Combustion Residuals Pond Closure Project
Possum Point Power Station
Prince William County, Virginia

GAI Project Number: C150132.00, Task 050

December 2015

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John R. Klamut, PE, CFM
Engineering Manager

Table of Contents

1.0 Project Overview 1
1.1 Introduction 1
1.2 Project Description 1

2.0 Monitoring Objectives 2

3.0 Sampling Locations 2

4.0 Frequency of Sampling 2

5.0 Field Sampling Procedures 4

6.0 Analytical Testing Summary 5

7.0 Proposed Schedule 7

Table 1 Outfall Sample Locations
Table 2 Outfall Sampling Frequency
Table 3 Parameters for Analysis

Appendix A Outfall 503 (Interim/Final) Draft Permit Discharge Monitoring / Limits
Appendix B Outfall 005 (Interim Discharge from Pond E Holding Basin) Draft Permit Discharge Monitoring / Limits
Appendix C Outfall 010 (Pond D Toe Drain) Draft Permit Discharge Monitoring
Appendix D Sampler Installation Instructions
Appendix E Proline Prosonic Flow Meter Technical Information
Appendix F Suction Line Installation Instructions
Appendix G Flow Paced Sampling Programming Instructions
Appendix H Grab Sample Programming Instructions

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1.0 Project Overview

Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) (ash) ponds at the Possum Point Power Station (Station), an 1,845 megawatt, natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA).

1.1 Introduction

Dominion is currently working to close five existing ash ponds at the Station. The five ponds are designated A, B, C, D and E. Ponds A, B, and C were originally three contiguous ponds that have been inactive since the 1960s. All five ponds are scheduled for closure by April 2018 in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Ash Pond E has been decanted, dewatered, and is presently being dredged, all in accordance with applicable state and local requirements. The dredged ash materials and contact/pore waters are being relocated to Ash Pond D for storage. Ash Pond E will then be clean-closed and regraded. Ash Ponds A, B, and C are being dewatered, dredged, and clean-closed. The dredged ash materials and contact/pore waters are in the process of being relocated to Ash Pond D for storage. Following transfer of the dredged ash materials and associated waters from A, B, C and E, the remaining surface water in Ash Pond D will be decanted and the ash will be dewatered so that it can be regraded. Ash Pond D will then be capped and closed. A single regulated solid waste facility for the Station's ash will be maintained at closed Ash Pond D subject to all applicable state closure and post-closure care requirements.

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1.2 Project Description

This Sampling Plan addresses the procedures for sampling and analyzing water qualities for the following in accordance with the draft VA Pollutant Discharge Elimination System (VPDES) Permit VA0002071 and Program Fact Sheet for the Possum Point Station issued by the VA Department of Environmental Quality for public comment from October 30, 2015 through December 14, 2015:

- Four-hour and 24-hour flow paced sampling and analyses of discharged waters from Outfall 503 (Interim Configuration/Final Configuration);
- Four-hour and 24-hour flow paced sampling and analysis of discharged waters from Outfall 005 (Interim Discharge from Pond E Holding Basin); and
- Grab sampling and analysis of discharged water from Outfall 010 (Pond D Toe Drain).

Discharged waters from Outfall 503 (Interim Configuration) consist of comingled process water in Pond D (Pond D Comingled Water) as well as Ash Dewatering Water, and stormwater in contact with ash (Contact Water) from the closure activities of Ash Ponds A, B, C, D, and E. Pond D Comingled Water consists of a combination of stormwater as well as the following waters that have been comingled in Pond D as a result of the closure activities of Ash Ponds A, B, C, D, and E:

- Ash Dewatering Water;
- Contact Water;
- Metals cleaning waste (Outfall 501 Water); and
- Oil water (Outfall 502 Water).

Pond D Comingled Water must be drained from Pond D to allow for the closure of Ash Pond D. Pond D Comingled Water includes at least 145 million gallons that has accumulated in Pond D.

Discharged waters from Outfall 503 (Final Configuration) consist of Pond D Passive Underdrainage which refers to future subsurface waters draining from closed and capped Pond D soil/ash below the impermeable liner. These waters are expected to reduce over time and eventually stop flowing.

Discharged waters from Outfall 005 (Interim Configuration Discharge from Pond E Holding Basin) consist of decanted Pond D Comingled Water, Ash Dewatering Water, and/or Contact Water from the closure activities of Ash Ponds A, B, C, D, and E. These waters have been filtered for ash particulates and stored in a temporary holding basin within repurposed Pond E prior to discharge. Discharge of the waters are to one or more of the following Outfalls: 005, 001/002, 004.

Discharge waters from Outfall 010 consists of Toe Drainage from the existing dam for Pond D.

2.0 Monitoring Objectives

A draft VPDES Permit for Industrial Wastewater Discharges (Permit) has been issued to Dominion in October 2015. The draft Permit requires limits on Outfall 503 (Interim and Final Configurations) and discharged waters from Outfall 005 (Interim Configuration Discharge from Pond E Holding Basin) prior to discharging to one of four potential Outfalls: 001/002, 004, and 005. The limits for Outfall 503 (Interim / Final) and Outfall 005 (Interim Configuration Discharge from Pond E Holding Basin) are in the Draft Permit and are attached in Appendices A and B, respectively. Sampling at Outfall 010 (Pond D Toe Drain) is for monitoring purposes to compare with quantification levels. The constituents being monitored at Outfall 010 are in the Draft Permit and are attached in Appendix C.

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3.0 Sampling Locations

GAI Consultants, Inc. (GAI) proposed to collect water samples at the approximate locations defined in Table 1 and per the attached "Drawing C150132.00 Sample Locations - Water Sampling Location Map," or in alternate equivalent locations, e.g., upstream on the conveyance pipeline that discharges to respective Outfall. The proposed sample locations, discharge sources, treatment, average flow, and coordinates (latitude and longitude) are as follows:

Table 1
Outfall Sample Locations

Outfall	Discharge Sources	Treatment	Avg. Flow	Latitude longitude
005 Ash Pond E (Interim Configuration Discharge from Holding Basin)	Ash Pond Comingled Process Water Discharge (Internal Outfall 503)	Technology to be determined	0.98 MGD	38° 33′ 6.89″ N 77° 17′ 36.8″ W
503 (Interim Configuration)	Comingled Process Water or its Individual Sources	Technology to be determined	2.53 MGD	Location to be determined
503 (Final Configuration)	Closed Pond D Passive Underdrainage	Technology to be determined	2.53 MGD	Location to be determined
010	Ash Pond D Toe Drain	Monitoring required only	Variable	38° 32' 48.8718" N, -77° 17' 10.7838" W

4.0 Frequency of Sampling

Grab samples are proposed to be collected once a week or once a month as required at Outfall 010 per the approved VPDES Permit. Four-hour and 24-hour composite flow proportioned samples are proposed to be collected once a week or once a month as required at Outfall 503 (Interim and Final

Configurations) and Outfall 005 (Interim Configuration Discharge from Pond E Holding Basin) per the approved VPDES Permit. The frequency of sampling each constituent at each outfall is proposed as follows based on the Draft VPDES Permit:

Table 2
Outfall Sampling Frequency

Constituent	Outfall		
	503 (Interim/ Final)	005 (Interim Holding Basin)	010
pH	Weekly Grab	Weekly Grab	Monthly Grab
Specific Conductivity	N/A	N/A	
Total Suspended Solids	Weekly 4H-C	Weekly 4H-C	N/A
Total Solids	N/A	N/A	Monthly Grab
Chloride	Weekly 4H-C	Weekly 4H-C	
Fluoride	N/A	N/A	
Nitrate and Nitrite, as N		Weekly 4H-C	N/A
Total Nitrogen		Weekly Calculated	
Phenol		N/A	Monthly Grab
Potassium			
Sodium			
Sulfate			
Oils and Grease	Weekly 4H-C	Weekly 4H-C	N/A
Antimony, Total			
Arsenic, Total			
Cadmium, Total			
Chromium, Total			
Chromium III, Total			
Copper, Total			
Hardness, Total (as $CaCO_3$)			
Lead, Total			
Mercury, Total			
Nickel, Total			
Selenium, Total			
Silver, Total			
Thallium, Total			
Zinc, Total			
Chromium VI, Total			
Antimony, Dissolved	N/A	N/A	Monthly Grab
Arsenic, Dissolved			
Barium, Dissolved			
Cadmium, Dissolved			
Copper, Dissolved			
Iron, Dissolved			
Lead, Dissolved			
Manganese, Dissolved			
Mercury, Dissolved			
Nickel, Dissolved			
Selenium, Dissolved			
Silver, Dissolved			
Thallium, Dissolved			
Vanadium, Dissolved			
Zinc, Dissolved			

Table 2 (Continued)

Constituent	Outfall		
	503 (Interim/ Final)	005 (Interim Holding Basin)	010
48-hr Static Acute Toxicity test using *Ceriodaphnia dubia*	Monthly 24H-C	Monthly 24H-C	N/A
48-hr Static Acute Toxicity test using *Pimephales promelas*			
Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*			
Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*			
Total Kjeldahl Nitrogen	N/A	Weekly 4H-C	
Ammonia, as N			
Total Phosphorus			
Total Organic Carbon		N/A	Monthly Grab

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NOTES:

1. N / A = Not Applicable.
2. Weekly 4H-C = weekly 4-hour composite flow proportioned sampling.
3. Monthly 24H-C = monthly 24-hour composite flow proportioned sampling.

5.0 Field Sampling Procedures

GAI is utilizing the analytical services of Air Water & Soil Laboratories, Inc. (AW&SL) located in Richmond, VA for all constituents except for biological/toxicity testing. Coastal Bioanalysts, Inc. (CB) located in Gloucester, VA will perform the biological/toxicity tests. Plastic bottles, labels, and coolers will be shipped to GAI's Richmond, VA office from both labs. GAI employees, Ms. Allison McCurdy and Ms. Sarah Jennings will complete the labels before arriving onsite at the Station. Additionally, the sampling activities will be coordinated in advance with Dominion representatives.

A battery operated peristaltic pump with silicon pump head and low density polyethylene (LDPE) tubing will be used to draw samples. The LDPE tubing will be pre-cut and labeled for each sample and used once to avoid cross contamination. A stainless steel weight will be secured onto the inlet side of the tubing to draw water at the pre-measured depth. Dissolved metal samples will be filtered using the peristaltic pump, tubing, and a disposable Quick Filter prior to preservation. Nitrile gloves, steel-toed boots, hard hats, and eye protection will be worn in accordance with Dominion property regulations for personal protective equipment and GAI Corporate Health and Safety Standards. A Health and Safety Plan will be developed for the sampling activities and approved by the Project Manager and Corporate Health and Safety Manager prior to arriving at the site. Sampling activities will be coordinated in advance with Dominion personnel and the AW&SL and CB representatives will courier the samples to the lab. Chain of custody forms will be completed before delivering the sample bottles/coolers to the courier.

An Isco 6712, full-size, portable flow paced sampler (flow paced sampler) or equivalent will be used at Outfalls 503 (Interim/Final) and 005 (Interim Discharge from Pond E Holding Basin) for weekly continuous four-hour flow proportional composite sampling and monthly continuous 24-hour flow proportional composite sampling. All water collected from the flow paced sampler in the four-hour or 24-hour duration, as applicable, will be blended in a single container to draw samples for analysis. A

3/8-inch inside diameter by 25-foot-long polytetrafluoroethylene suction line with standard weighted polypropylene strainer will connect the sampling point to the flow paced sampler pump intake. Should anticipated line pressure of the Outfall pipe exceed the pump manufacturer's requirements, a pressure reducing valve shall be installed and calibrated on the sample point prior to connecting the suction line. A clamp-on Proline Prosonic flow meter model 91W will be utilized to measure the flow through the Outfall pipe and will send a four- to 20-milliamp signal to a 780 analog module to be analyzed and sent to the flow paced sampler for flow proportioned composite sampling. A single four-gallon polyethylene bottle would be used for collection by the flow paced sampler. A return line with isolation valve to discharge remaining waters leftover from the four-gallon bottle (after drawing samples for analysis) can be coordinated with the Contractor and installed. GAI anticipates that a peristaltic pump can be used to empty the four-gallon bottle after each sampling event via the return line. A 12 VDC source, deep-cycle marine battery will be used to power the flow paced sampler. Guidance documents on how to install the portable sampler, install the suction line, program the sampler to take continuous flow proportional samples and grab samples, etc. are in the Appendices. A trained manufacturer's representative shall be employed during initial installation and startup in advance of the sampling activities. Final equipment shall be selected and coordinated with the Station's contractor prior to placing an order.

6.0 Analytical Testing Summary

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GAI will field measure and record pH for each sample. AWS&L will analyze all constituents in Table 3 except for biological/toxicity testing which is to be performed by CB.

Table 3
Parameters for Analysis

Constituent	No. of Bottles per Sample ID	Preservant	Hold Time	Analytical Method
Chloride	(1) – 1 L plastic	<6 °C	28 days	EPA 300.0
Fluoride			28 days	EPA 300.0
pH			15 minutes	S4500HB-00
Specific Conductivity			28 Days	S2510B-97
Sulfate			28 Days	EPA 300.0
Total Solids			7 Days	SM2450B
Total Suspended Solids	(1) – 1 L plastic	<6 °C	7 days	S2540D-11
Phenol	(1) – 1 L amber + MS/MSD for every batch of 20 samples	<6 °C	7 days	EPA 625
Oils and Grease	(2) – 1 L amber	HCl	28 days	EPA 1664B
Antimony, Total	(1) – 500 mL plastic	HNO_3	6 months	EPA 200.8
Arsenic, Total				EPA 200.8
Cadmium, Total				EPA 200.8
Chromium, Total				EPA 200.8
Chromium III, Total				Calculation
Copper, Total				EPA 200.8
Hardness, Total (as $CaCO_3$)				EPA 200.7
Lead, Total	(1) – 500 mL plastic	HNO_3	6 months	EPA 200.8
Mercury, Total				EPA 245.1
Nickel, Total				EPA 200.8

Table 3 (Continued)

Constituent	No. of Bottles per Sample ID	Preservant	Hold Time	Analytical Method
Potassium	(1) – 500 mL plastic	HNO_3	6 months	EPA 200.7
Selenium, Total				EPA 200.8
Silver, Total				EPA 200.8
Sodium				EPA 200.7
Thallium, Total				EPA 200.8
Zinc, Total				EPA 200.8
Chromium VI, Total	(1) – 500 mL plastic	<6 °C	24 hours	SM3500-Cr B
Antimony, Dissolved[1]	(1) – 500 mL plastic	HNO_3	6 months	EPA 200.8
Arsenic, Dissolved[1]				EPA 200.8
Barium, Dissolved[1]				EPA 200.8
Cadmium, Dissolved[1]				EPA 200.8
Copper, Dissolved[1]				EPA 200.8
Iron, Dissolved[1]				EPA 200.7
Lead, Dissolved[1]				EPA 200.8
Manganese, Dissolved[1]				EPA 200.8
Mercury, Dissolved[1]				EPA 245.1
Nickel, Dissolved[1]				EPA 200.8
Selenium, Dissolved[1]				EPA 200.8
Silver, Dissolved[1]				EPA 200.8
Thallium, Dissolved[1]				EPA 200.8
Vanadium, Dissolved[1]				EPA 200.8
Zinc, Dissolved[1]				EPA 200.8
48-hr Static Acute Toxicity test using *Ceriodaphnia dubia*	(1) - 1 gal plastic	N / A	36 hours	40 CFR 136.3 EPA 2002.0
48-hr Static Acute Toxicity test using *Pimephales promelas*		N / A	36 hours	40 CFR 136.3 EPA 2000.0
Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*	(2-6) – 1 gal plastic	N / A	36 hours	40 CFR 136.3 EPA 1002.0
Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*		N / A	36 hours	40 CFR 136.3 EPA 1000.0
Total Nitrogen	(1) – 250 mL plastic	H_2SO_4	28 days	Calculation
Ammonia, as N	(1) – 250 mL plastic	H_2SO_4	28 days	EPA 350.1
Nitrate and Nitrite, as N				D6919-09
Total Kjeldahl Nitrogen				S4500NH3G-11
Total Phosphorus				SM4500-P E
Total Organic Carbon	(2) – 40 mL amber VOA vials	H_2SO_4	28 days	SM5310C

NOTES:

1. Samples for dissolved constituent analyses will be filtered in the field prior to preservation.
2. N / A = Not Applicable.
3. VOA = Volatile Organic Analysis.

7.0 Proposed Schedule

GAI proposes the following schedule to stage the various samples at the respective outfalls. Should Outfalls 503 (Interim Configuration) and 005 (Interim Discharge from Pond E Holding Basin) discharge simultaneously, a flow paced sampler will be required at each outfall, respectively:

Table 4
Parameters for Analysis

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Sample Days (when Monthly / Weekly Sample Events Overlap)	503 (Interim/ Final)	005 (Interim Holding Basin)	010
Monday	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	Monthly Grab samples for required monitoring parameters
Tuesday	Monthly 24-hr Acute Biological / Toxicity Sample	Monthly 24-hr Acute Biological / Toxicity Sample	N / A
Wednesday	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	N / A
Thursday	Weekly 4-hr composite sampling for Metals and remaining parameters	Weekly 4-hr composite sampling for Metals and remaining parameters	N / A
Friday	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	Monthly 24-hr composite sample for Chronic Biological / Toxicity Analysis	N / A

NOTES:

1. N / A = Not Applicable.
2. Three days of samples are required for each Chronic Biological / Toxicity test.

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APPENDIX A
Outfall 503 (Interim/Final) Draft Permit Discharge Monitoring / Limits

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APPENDIX B
Outfall 005 (Interim Discharge from Pond E Holding Basin) Draft Permit Discharge Monitoring / Limits

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APPENDIX C
Outfall 010 (Pond D Toe Drain) Draft Permit Discharge Monitoring

DRAFT

APPENDIX D
Sampler Installation Instructions

DRAFT

APPENDIX E
Proline Prosonic Flow Meter Technical Information

DRAFT

APPENDIX F
Suction Line Installation Instructions

DRAFT

APPENDIX G
Flow Paced Sampling Programming Instructions

DRAFT

APPENDIX H
Grab Sample Programming Instructions

Dominion Resource Services, Inc.
[illegible], Richmond, Glen Allen, VA 23060
[illegible]

Dominion

BY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 21, 2015

Ms. Susan D. Mackert
Environmental Specialist II
Virginia Department of Environmental Quality - Northern Regional Office
13901 Crown Court,
Woodbridge, VA 22193

Re: Dominion – Possum Point Power Station VPDES Permit No. VA0002071
Permit Modification Request - Addendum

Dear Ms. Mackert:

Virginia Electric & Power Company d/b/a Dominion Virginia Power (Dominion) is submitting the enclosed addendum to our December 22, 2014 request to modify the subject permit. Our addendum includes an application Form 2F for coverage of two storm water outfalls S107 and S108. Both outfalls receive stormwater from ash handling areas associated with the closure of Possum Point Power Station's ash ponds.

Should you require additional information, please contact Ian Whitlock at (804) 273-2991 or Jeff Marcell at (703) 609-3813.

Sincerely,

Cathy C. Taylor
Director, Electric Environmental Services

Enclosures

Mrs. Mackert
October 21, 2015

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.

NAME: David A. Craymer

OFFICIAL TITLE: V.P. Power Generation System Operations

PHONE NO: (804) 273-3685

SIGNATURE: _____

DATE SIGNED: 10/21/15

Mrs. Mackert
October 21, 2015

Please scan signed original + attachments and rename file as:

PP 2015 10-22 VPDES Permit Modification Request-Addendum

Please send renamed scanned document to:

David Craymer
Pam Faggert
Sidney Bragg
Cathy Taylor
Jason E. Williams
Jeffrey Heffelman
Jeff Marcell
Ken Roller
Oula Shehab-Dandan
Ian Whitlock
Clay Burns

Documentum: Possum Point P.S. / Water – NPDES / Permit-Applications

Please print or type in the unshaded areas	EPA ID Number *(copy from item 1 of Form 1)* *110000340774*	Form Approved. OMB No. 2040-0086

Form **2F** NPDES

United States Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number *(list)*	B. Latitude			C. Longitude			D. Receiving Water *(name)*
S107	38	32	43.8	77	16	37	Quantico Creek
S108	38	32	52	77	17	21	Unnamed Tributary to Quantico Creek

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
CCR Rule 40 CFR Part 257, Subpart D	*S107* *S108*	*Stormwater Associated with Industrial Activity*	*Closure of the station's existing, inactive ash ponds.*	*04/18/15*	*04/18/15*

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

Continued on Page 2

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
S107	0 acres	14.4 acres			
S108	0.4 acres	0.76 acres			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

Outfall S107 collects storm water from the berm of Ash Pond D via two drop inlets. It is characterized as a non-industrial stormwater outfall in the existing permit. Collected stormwater is discharged to Quantico Creek southeast of Ash Pond D. This outfall also collects groundwater infiltration from toe drains associated with Ash Pond D. The drainage area is approximately 14.4 acres, consists of grass and vegetative slopes, and is considered to be 100% pervious.

Outfall S108 is a new storm water outfall that discharges to an unnamed tributary of Quantico Creek, located south of Pond E. This outfall is located at the point of convergence for runoff from a VDOT culvert and the culverts containing the station's former ash sluice lines. The drainage area associated with this outfall will receive runoff from the area south of Pond E and located near the construction entrance. The drainage area is approximately 0.76 acres and consists of approximately 95% pervious surfaces.

The drainage areas for Outfalls S107 and S108 are located in close proximity to the station's ash ponds. Consequently, stormwater contributing to these outfalls may be impacted by ash management activities associated with the pond closure project. Given the location of these drainage areas Dominion is requesting that Outfalls S107 and S108 be permitted as storm water outfalls associated with industrial activity. As the pond closure project progresses ash management activities will eventually cease and only construction activities covered by a Virginia Construction Stormwater General Permit will occur within the drainage areas for S107 and S108.

Dominion has implemented BMPs in the drainage areas contributing to Outfalls S107 and S108 including grading of haul roads, the installation of straw bales and silt fences, and periodic inspections. In addition, the station's SWPPP (developed in accordance with the VPDES individual permit) will be updated to incorporate BMPs, to minimize the impact of ash management activities that may occur with the associated drainage areas.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
S107 S108	Discharge to Surface Water	4-A

V. Non Stormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name of Official Title *(type or print)*	Signature	Date Signed
David A. Craymer **VP Power Generation System Operations**	David A. Craymer	10/21/15

B. provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Outfall S107- There is a continuous discharge from this outfall due to groundwater contribution. This outfall will be inspected for non-storm water flows.

Outfall S108 – This outfall discharges primarily during rain events. This outfall will be inspected for non-storm water flows.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No spills or leaks of toxic or hazardous pollutants have occurred within the last three years within the drainage area associated with S107. On August 6, 2015, pump failure resulted in the overflow of an unknown volume of wastewater from a temporary water storage tank that was collecting groundwater and the effluent from the station's internal Outfall 502. The overflow event, which occurred within the drainage area for S108 is described in and On September 29-30, 2015, heavy rains resulted in excessive stormwater runoff within the drainage area contributing to Outfall S108. The runoff, which contained an unknown volume of coal ash, overwhelmed existing BMPs and was discharged via S108. The discharge and follow-up actions are described in an October 5, 2015 letter to DEQ.

VII. Discharge Information

A,B,C, & D: See instruction before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables VII-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E. Potential discharges not covered by analysis - is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes *(list all such pollutants below)* ☒ No *(go to Section IX)*

No analytical data exist for either stormwater outfall S107 or S108. The industrial activities that will occur in the drainage areas for these outfalls consists of the management of coal combustion residual (e.g., fly ash) that was generated during periods when the station burned coal to generate electricity. These types of activities, and associated pollutants, were considered during the development of Sector O requirements included in EPA's and Virginia's Industrial Stormwater General Permits. Related conditions have been incorporated into Possum Point's individual VPDES permit.

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes *(list all such pollutants below)* ☒ No *(go to Section IX)*

--

IX. Contact analysis Information

Were any of the analysis reported in item VII performed by a contact laboratory or consulting firm?

☐ Yes *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* ☒ No *(go to Section X)*

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

Continued from Page 3

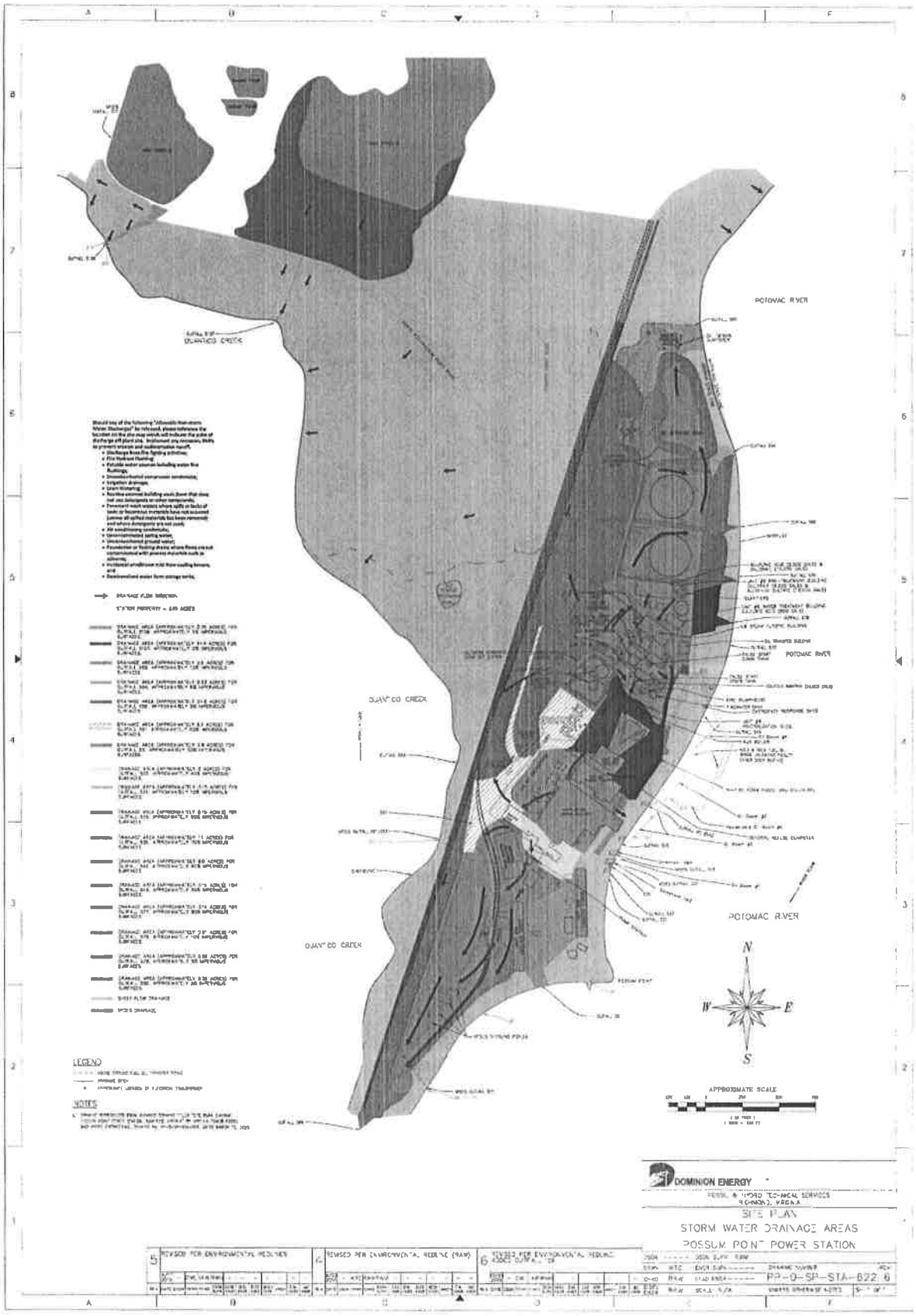
EPA ID Number *(copy from Item 1 of Form 1)*
110000340774

X. Certification

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.

A. Name & Official Title *(type or print)*	B. Area Code and Phone No.
David A. Craymer **VP Power Generation System Operations**	**(804) 273-3685**
C. Signature	D. Date Signed
	10/21/15

8554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APPROXIMATE SCALE
LEGEND
NOTES
DOMINION ENERGY
SITE PLAN
STORM WATER DRAINAGE AREAS
POSSUM POINT POWER STATION

BY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 22, 2015

Ms. Susan D. Mackert
Environmental Specialist II
Virginia Department of Environmental Quality - Northern Regional Office
13901 Crown Court,
Woodbridge, VA 22193

Re: Dominion – Possum Point Power Station VPDES Permit No. VA0002071
Permit Modification Request - Addendum

Dear Ms. Mackert:

Virginia Electric & Power Company d/b/a Dominion Virginia Power (Dominion) is submitting the enclosed addendum to our December 22, 2014 request to modify the subject permit. Our addendum includes an application Form 2F for coverage of two storm water outfalls S107 and S108. Both outfalls receive stormwater from ash handling areas associated with the closure of Possum Point Power Station's ash ponds.

Should you require additional information, please contact Ian Whitlock at (804) 273-2991 or Jeff Marcell at (703) 609-3813.

Sincerely,

Cathy C. Taylor
Director, Electric Environmental Services

Enclosures

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.

NAME: David A. Craymer

OFFICIAL TITLE: V.P. Power Generation System Operations

PHONE NO: (804) 273-3685

SIGNATURE: _____

DATE SIGNED: _____

Please scan signed original + attachments and rename file as:

PP 2015 10-22 VPDES Permit Modification Request-Addendum

Please send renamed scanned document to:

David Craymer
Pam Faggert
Sidney Bragg
Cathy Taylor
Jason E. Williams
Jeffrey Heffelman
Jeff Marcell
Ken Roller
Oula Shehab-Dandan
Ian Whitlock

Documentum: Possum Point P.S. / Water – NPDES / Permit-Applications

Mrs. Mackert
November 25, 2013

BY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 21, 2015

Ms. Susan D. Mackert
Environmental Specialist II
Virginia Department of Environmental Quality - Northern Regional Office
13901 Crown Court,
Woodbridge, VA 22193

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Director, Electric Environmental Services

Enclosures

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October 21, 2015

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NAME: David A. Craymer

OFFICIAL TITLE: V.P. Power Generation System Operations

PHONE NO: (804) 273-3685

SIGNATURE: _____

DATE SIGNED: _____

Mrs. Mackert
October 21, 2015

Please scan signed original + attachments and rename file as:

PP 2015 10-22 VPDES Permit Modification Request-Addendum

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Ian Whitlock
Clay Burns

Documentum: Possum Point P.S. / Water – NPDES / Permit-Applications

BY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 22, 2015

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13901 Crown Court,
Woodbridge, VA 22193

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Permit Modification Request - Addendum

Dear Ms. Mackert:

Virginia Electric & Power Company d/b/a Dominion Virginia Power (Dominion) is submitting the enclosed addendum to our December 22, 2014 request to modify the subject permit. Our addendum includes an application Form 2F for coverage of two ~~one new industrial~~ storm water outfalls ~~(~~S107~~8)~~ and ~~modification of an existing industrial outfall (~~S108. Both outfalls receive stormwater from ash handling areas ~~7). We are requesting that permit condition I.A.12 be modified to recognize that industrially influenced storm water may be discharged through existing storm water outfall S107. Storm water runoff from industrial activities associated with ash handling activities~~ associated with the closure of Possum Point Power Station's ash ponds. ~~located outside the ash ponds is represented by Outfalls S107 and S108. Outfall S107 collects storm water from the berm of Ash Pond D which discharges southeast of Pond D. Outfall S108 receives runoff from the area south of Pond E and near the construction entrance. In addition, we are providing information to supplement Attachment A of the Form 2F that was submitted with our earlier application, and we are also including proposed changes to a number of permit conditions for clarification.~~

Should you require additional information, please contact Ian Whitlock at (804) 273-2991 ~~and~~/or Jeff Marcell at (703) 609-3813.

Sincerely,

Cathy C. Taylor
Director, Electric Environmental Services

Enclosures

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NAME: David A. Craymer

OFFICIAL TITLE: V.P. Power Generation System Operations

PHONE NO: (804) 273-3685

SIGNATURE: _____

DATE SIGNED: _____

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Documentum: Possum Point P.S. / Water – NPDES / Permit-Applications

MEMO

Date:	February 10, 2016
Project No.	C150132.00
To:	Kenneth Roller, Dominion
From:	Scott Quinlan, GAI Consultants, Inc.
cc:	John Klamut, GAI Consultants, Inc.
Subject:	**Possum Point Outfall 010**

Kenneth,

Pursuant to our meeting with the Virginia Department of Environmental Quality (VaDEQ) on Wednesday, February 3rd, 2016, this serves as an overview of the plan for eliminating the discharge from ~~plugging~~ Outfall 010. Outfall 010 is located south of Pond D across Possum Point Road (see attached Figures 1 and 2).

The modified Virginia Pollutant Discharge Elimination System (VPDES) Permit allows for the redirection of Outfall 010 flows to Ash Pond D. Dominion is proposing to redirect Outfall 010 waters to Pond D with the use of inflatable plugs and sump pumps as an interim solution. This interim solution work is planned to be completed by February 12, 2016 and is expected to remain in place until a permanent solution is designed and permitted. The permanent solution will serve the purpose of separating Pond D Toe Drainage from Outfall 010 in accordance with the Permit Special Conditions in Part 1.F.23.

As a result of the work this week to install the inflatable plugs and sump pumps, Dominion has collected samples of the Outfall 010 discharges to allow for reporting of the monthly compliance monitoring in February. Manual flow paced sampling of Outfall 010 discharges began on February 7th and were completed on February 8th. Due to the limited availability of sampling throughout this week, Dominion is able to report all constituents in the modified VPDES permit except chronic toxicity. This is due to the fact that 3 samples are required over a 5 day period and the outfall will be plugged prior to being able to obtain the additional samples.

The interim solution includes the installation of dual submersible pumps in the existing inlet north of Possum Point Road (Refer to Figure 3). This inlet is upstream of the 72" reinforced concrete culvert that crosses the road and of which the downstream discharge is Outfall 010. The 72" culvert will be plugged on the upstream and downstream ends. Additional earth fill will be added at the outfall to contain the plug. A block and mortar bulkhead may be added prior to the upstream plug at the existing inlet at a later date. Thus, stormwater, ~~groundwater,~~ and the Pond D Toe Drain ~~age can~~ will be isolated and collected in the existing inlet and redirected (pumped) to Pond D. ~~Note each proposed submersible pump is rated at 500-gpm and operates with level floats on a lead-lag basis. Thus, the estimated 1-yr, 24-hr duration peak runoff rate will be accommodated (please refer to the attached calculations).~~

This interim solution ~~would~~will eliminate the discharge from Outfall 010 ~~therefore not require sampling of Outfall 010 discharges~~ since all storm and toe drain waters will be sent to Pond D. The waters ~~would~~ will then be treated and discharged to Internal Outfall 503 upon approval and commissioning of the treatment system.

Should you require further information please contact us at your earliest convenience.

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DRAFT

Demonstration Plan for Outfall 010 Groundwater Separation

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00

January 2016

Dominion

Prepared by: GAI Consultants, Inc.
Richmond Office
4198 Cox Road, Suite 114
Glen Allen, Virginia 23060

Prepared for: Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060-3308

DRAFT
Demonstration Plan for Outfall 010 Groundwater Separation

Virginia Electric and Power Company
Possum Point Power Station
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GAI Project Number: C150132.00

January 2016

Prepared for:
Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060-3308

Prepared by:
GAI Consultants, Inc.
Richmond Office
4198 Cox Road, Suite 114
Glen Allen, Virginia 23060-3328

Report Authors:

Brian Bullock
Senior E.I.T.

John Klamut
Engineering Manager

Table of Contents

1.0 Background 1

2.0 Original System Description 1

3.0 Regulatory Requirements 1

4.0 Interim Solution 2
- 4.1 Description 2
- 4.2 Wet Weather & Dry Weather Considerations 2
- 4.3 Schedule 2
- 4.4 As-Built Drawings 2

5.0 Long Term Solution (Overview) ..... 3~~2~~

Figure 1 – Interim Solution Toe Drain Separation Plan

Appendix A - Original Design Drawing: Plan View

Appendix B – Toe Drain Manhole Detail Sheet

Appendix C – Toe Drain Detail Sheet

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1.0 Background

Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) ash ponds at Possum Point Power Station (Station), a 1,845 megawatt natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA). Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018, in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D.

Discharge from the ash ponds at the station is managed in accordance with the Station's VA Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071. The station recently modified VPDES Permit No. VA0002071 to allow discharge from the ponds during closure and post-closure. The modified permit was made effective January 19, 2016.

Part of Dominion's plan for closure of the station's ash ponds includes management of groundwater associated with the Ash Pond D toe drain. The purpose of this document is to ~~identify~~ present Dominion's ~~a~~ groundwater separation plan for the outfall associated with the Pond D toe drain, referred to as Outfall 010. The VPDES permit allows for separation of groundwater flows under permit condition in Part 1.F.23.

2.0 Original System Description

The existing discharge at Outfall 010 is comprised of stormwater runoff and groundwater flows from the Pond D Embankment toe drain. Outfall 010 discharges on the south side of Possum Point Road to an unnamed tributary of Quantico Creek.

As illustrated by the original design drawings, attached in Appendix A, the storm sewer system is comprised of two VDOT Standard DI-7B (Approximate Invert Elevation 33.00 feet) drainage inlets running parallel on the north-side of Possum Point Road. The upstream and downstream inlets are connected by 18-inch concrete pipe. The system discharges through a 72-inch diameter culvert that runs from the downstream inlet, under Possum Point Road, to the unnamed tributary of Quantico Creek. The total contributing drainage area for the two inlets is approximately five acres.

The toe drain[KR1] contributions enter the storm sewer system through a two-foot square toe drain (Invert Elevation 18.00 feet). Refer to the Toe Drain Manhole Detail Sheet & Toe Drain Detail Sheet, attached in Appendix B & C respectively.

3.0 Regulatory Requirements

The following excerpt is the applicable condition in the Staion's VPDES Permit No. VA0002071: Part 1. F. 23.:

Outfall 010 Groundwater (Toe Drain) Removal and Re-designation to S107.

Upon successful demonstration to and written approval from DEQ confirming that all groundwater contributions to the Outfall 010 discharge have been removed, the requirements of Part I.A.15 of this permit shall become effective and supersede the requirements of Part 1.A.8. The groundwater contributions include both infiltration through the earthen berm as well as groundwater diverted around the impoundment. Should the permittee separate and remove all groundwater contributions to the discharge, then the discharge would be comprised of only industrially influenced stormwater. Stormwater – only discharges from this outfall would be designated as Outfall S107 and governed by

the requirements of Part 1. A. 15, Part I.E and Part I.F18. Should the permittee pursue separation of the groundwater contributions to the discharge, a demonstration plan shall be submitted to DEQ for review and approval. This demonstration plan shall consider, at a minimum: observations of the outfall during dry-weather with variable antecedent precipitation conditions to confirm no discharge; seasonal wet-weather conditions to include potential inflow and infiltration contributions; other information as appropriate, such as design schematics, to support a conclusion that groundwater contributions have been removed from the discharge.

4.0 Interim Solution

The active construction phase (i.e., "Interim Solution") will provide a temporary method of separating all groundwater contributions to the discharge. This will be done by creating a system within the current inlet structure ~~for~~ where groundwater from the toe drain ~~to~~will be captured and pumped to Pond D. While the interim solution is being utilized, stormwater runoff will remain to be conveyed through the existing stormsewer system.

4.1 Description

Refer to Figure 1, which shows the proposed interim plan. Groundwater separation will be acomplished by diverting all of the water which collects in the Pond D Toe Drain. The construction of the proposed diversion will involve installing a 3' square one-inch-thick HDPE flat stock, with an 18-inch diameter stub out, over the existing two-foot square toe drain. An 18" HDPE Tee will be fitted to the opposing 18" stub out. A 3' long capped section of 18" HDPE pipe will be secured to the bottom of the Tee joint. This will constitute the bottom of the HDPE system. A section of 18" HDPE pipe will be fuzed to the top of the Tee joint, extending through the top of the existing structure. The existing grate will be modified to allow this section to extend to the desired elevation.

The HDPE pipe system will be supported by a series of cantelivered supports anchored to the walls of the existing structure. As a redundancy – the system will also be supported by a vertical of HDPE pipe running from bottom of the inlet structure to the HDPE system.

A generator-powered automated pump will be utilized to pump the groundwater through the system to Pond D. The pump and generator will be run manually or automatically 24 hours per day by the site contractor.

4.2 Wet Weather & Dry Weather Considerations

The Interim Solution will operate during wet & dry weather conditions by mechanically separating the groundwater toe drain contributions from the inlet discharge. The mechanical separation of the flows will provide complete separation of the groundwater flows during wet and dry weather conditions. The system will be monitored at a minimum frequency of once every 5-days, or no more than 48-hours after a runoff producing rain event to confirm there are no groundwater contributions to the discharge[KR2].

4.3 Schedule

~~The Interim Solution is scheduled to be installed and operational in January 2016~~Dominion would like to implement the Interim Solution as soon as possible. The Interim Solution will remain in service until the Long Term Solution can be implemented.

4.4 As-Built Drawings

As-Built Drawings will be prepared and provided to DEQ to confirm that ~~support the conclusion that~~ all groundwater contributions have been removed, per VPDES Permit No. VA0002071 Part 1. F. 23.

5.0 Long Term Solution (Overview)[KR3]

Dominion intends to permanently remove the groundwater portion from the existing Outfall 010 and has developed a conceptual plan for moving forward with this separation. The post-construction phase (i.e., "Long Term Solution") will provide a method to tie the groundwater flow into the sanitary sewer system or permanently divert the flow to internal Outfall 503. This will include the construction of a permananet pump station, as well as relocating the existing storm sewer system to permanently separate it from the Pond D Embankment toe drain infrastructure. Once the Long Term Solution design is completed, a revised demonstratoin plan will be submitted to the DEQ for approval in accordance with VPDES PermitNo. VA0002071 Part 1. F. 23.

FIGURE: 1
Interim Solution: Toe Drain Separation Plan

APPENDIX A
Original Design Drawing: Plan View

APPENDIX B
Toe Drain Manhole Detail Sheet

APPENDIX C
Toe Drain Detail Sheet

Table
Possum Point Toe Drain compared with Draft Limits for Outfall 010

Parameters	Units	VDEQ Draft Limits		Pond D Toe Drain	
		Monthly Average	Daily Maximum	Pond D T D1 12/14/2015	Pond D T D2 12/14/2015
pH	S.U.	NA	NA	5.9	6.3
Total Suspended Solids	mg/L	30	100	<1.0	<1.0
Oil/Grease Hexane Extractable	mg/L	15	20	<5.0	<5.0
Antimony, Total	ug/L	TBD	TBD	<0.140	<0.140
Antimony, Dissolved	ug/L			<0.140	<0.140
Arsenic, Total	ug/L	220	220	<0.830	<0.830
Arsenic, Dissolved	ug/L			<0.830	<0.830
Cadmium, Total	ug/L	1.1	1.1	<0.100	<0.100
Cadmium, Dissolved	ug/L			<0.100	<0.100
Trivalent Chromium, Total	ug/L	73	73	<5	<5
Trivalent Chromium, Dissolved	ug/L			<10	<10
Hexavalent Chromium, Total	µg/L	16	16	<3	<3
Hexavalent Chromium, Dissolved	µg/L			<5	<5
Copper, Total	µg/L	8.4	8.4	1.61	1.53
Copper, Dissolved	µg/L			1.52	1.53
Lead, Total	µg/L	11	11	<0.100	<0.100
Lead, Dissolved	µg/L			<0.100	<0.100
Mercury, Total	µg/L	1.1	1.1	<0.2	<0.2
Mercury, Dissolved	µg/L			<0.2	<0.2
Nickel, Total	µg/L	19	19	5.16	4.36
Nickel, Dissolved	µg/L			5.49	5.39
Selenium, Total	µg/L	7.3	7.3	0.819	1.11
Selenium, Dissolved	µg/L			0.702	0.932
Silver, Total	µg/L	1.5	1.5	<0.0300	<0.0300
Silver, Dissolved	µg/L			<0.0300	<0.0300
Thallium, Total	µg/L	TBD	TBD	<0.100	<0.100
Thallium, Dissolved	µg/L			<0.100	<0.100
Zinc, Total	µg/L	77	77	7.67	7.60
Zinc, Dissolved	µg/L			7.91	8.78
Chloride	µg/L	340,000	340,000	41,800	38,600
Acute Toxicity – *C. dubia* (7)	see footnote (7)				
Acute Toxicity – *P. promelas* (7)					
Chronic Toxicity – *C. dubia* (8)	see footnote (8)				
Chronic Toxicity – *P. promelas* (8)					

Footnotes:

1) Values preceded by "<" represent results not detected at the Reporting Detection Limit (RDL) and listed as < RDL.

2) Values with suffix "±" represent results with an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte.

3) Constitulents with No Limit (NL) have been omitted from this table

4) NA- Not analyzed.

5) mg/L - milligrams per liter.

6) µg/L- micrograms per liter.

7) Reported as No Observed Effect Concentration (NOEC); 100% NOEC is required for Acute Toxicity tests.

8) Reported as Chronic Toxicity Units; A maximum of 2.85 Chronic Toxicity Units allowed for Chronic Toxicity Results.

9) TBD - To Be Determined

No Dilution
12-18

A. Effluent Limitations and Monitoring Requirements

9. Outfall 010 – Ash Pond D Toe Drain

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. During the period beginning with the permit's major modification date and lasting until the expiration date, the permittee is authorized to discharge from Outfall Number 010. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements	
	Monthly Average[1]	Daily Maximum[1]	Minimum	Maximum[1]	Frequency	Sample Type
Flow (MGD)	NL	NA	NA	NL	1/M	Estimate
pH	NA	NA	6.0 (S.U.)	9.0 (S.U.)	1/M	Grab
Total Suspended Solids (TSS)[3]	30 mg/L	100 mg/L	NA	NA	1/M	Grab
Oil and Grease (O&G)	15 mg/L	20 mg/L	NA	NA	1/M	Grab
Specific Conductivity	NA	NA	NA	NL (µhoms/cm)	1/M	Grab
Total Solids	NA	NA	NA	NL (mg/L)	1/M	Grab
Aluminum, Total Recoverable[4]	NL (µg/L)	NL (µg/L)	NA	NA	1/M	4H-C
Antimony, Total Recoverable	TBD µg/L	TBD µg/L	NA	NA	1/M	4H-C
Arsenic, Total Recoverable[3]	220 µg/L	220 µg/L	NA	NA	1/M	4H-C
Barium, Total Recoverable[4]	NL (µg/L)	NL (µg/L)	NA	NA	1/M	4H-C
Beryllium, Total Recoverable[4]	NL (µg/L)	NL (µg/L)	NA	NA	1/M	4H-C
Boron, Total Recoverable[4]	NL (µg/L)	NL (µg/L)	NA	NA	1/M	4H-C
Cadmium, Total Recoverable[3]	1.1 µg/L	1.1 µg/L	NA	NA	1/M	4H-C
Chloride	340,000 µg/L	340,000 µg/L	NA	NA	1/M	4H-C
Chromium III, Total Recoverable[3]	73 µg/L	73 µg/L	NA	NA	1/M	4H-C
Chromium VI, Total Recoverable[3]	16 µg/L	16 µg/L	NA	NA	1/M	4H-C
Cobalt, Total Recoverable[4]	NL (µg/L)	NL (µg/L)	NA	NA	1/M	4H-C
Copper, Total Recoverable[3]	8.4 µg/L	8.4 µg/L	NA	NA	1/M	4H-C
Iron, Total Recoverable[4]	NL (µg/L)	NL (µg/L)	NA	NA	1/M	4H-C
Lead, Total Recoverable[3]	11 µg/L	11 µg/L	NA	NA	1/M	4H-C
Mercury, Total Recoverable[3]	1.1 µg/L	1.1 µg/L	NA	NA	1/M	4H-C
Molybdenum, Total Recoverable[4]	NL (µg/L)	NL (µg/L)	NA	NA	1/M	4H-C
Nickel, Total Recoverable[3]	19 µg/L	19 µg/L	NA	NA	1/M	4H-C
Selenium, Total Recoverable[3]	7.3 µg/L	7.3 µg/L	NA	NA	1/M	4H-C
Silver, Total Recoverable[3]	1.5 µg/L	1.5 µg/L	NA	NA	1/M	4H-C
Thallium, Total Recoverable	TBD µg/L	TBD µg/L	NA	NA	1/M	4H-C
Vanadium, Total Recoverable[4]	NL (µg/L)	NL (µg/L)	NA	NA	1/M	4H-C
Zinc, Total Recoverable[3]	77 µg/L	77 µg/L	NA	NA	1/M	4H-C
Hardness, Total (as $CaCO_3$)	NL (mg/L)	NL (mg/L)	NA	NA	1/M	4H-C
Acute Toxicity – *C. dubia* (NOAEC)[2]	NA	NA	100%	NA	1/M	24H-C
Acute Toxicity – *P. promelas* (NOAEC)[2]	NA	NA	100%	NA	1/M	24H-C
Chronic Toxicity – *C. dubia* (TU_c)[2]	NA	NA	NA	1.44 TU_c	1/M	24H-C
Chronic Toxicity – *P. promelas* (TU_c)[2]	NA	NA	NA	1.44 TU_c	1/M	24H-C

DRAFT

Additional Information Related to DMR Data for Outfall 010

Analytical Results for Samples Collected from the Toe Drain Portion of Outfall 010

The discharge from Outfall 010 consists of two components: stormwater runoff and the toe drain associated with Ash Pond D. These components enter the infrastructure associated with Outfall 010 at distinct locations, mix, and the combined flow passes under Possum Point road and discharges to the unnamed tributary to Quantico Creek. On February 8, 2016, four-hour composite samples of the toe drain portion of the discharge were collected at the point where the toe drain enters the collection system, prior to mixing with any stormwater. These samples were collected concurrent with the four-hour composite samples collected from Outfall 010 for DMR compliance and were analyzed for all Outfall 010 parameters except whole effluent toxicity.

Results for the February 8, 2015 toe-drain samples were remarkably similar to the results for previous samples from this location (provided by email dated January 6, 2016) indicating very little temporal variability in the characteristics of this portion of the Outfall 010 discharge (see Table 1 attached). In addition, the concentrations of all measured parameters are well below the newly established VPDES limits and applicable water quality criteria, and are within the range of values measured in background groundwater samples at Possum Point.

Relationship to Samples Collected from Outfall 010 on January 21, 2016

Permit compliance samples from Outfall 010 were collected on February 8, 2016 concurrent with collection of the samples from the toe-drain portion of the discharge. The samples were collected at the point just prior to the discharge entering the unnamed tributary to Quantico Creek, and were analyzed for all DMR parameters except chronic toxicity. Each 7-day chronic test requires the collection of three (3) 24-hour composite samples over a 5-day period. As reported to DEQ by email dated February 18, 2016, all flow from Outfall 010 was stopped on Friday, February 12, 2016. Therefore, Dominion was unable to collect a sufficient number of samples to conduct the chronic tests.

Path Forward

As noted above, all flow from Outfall 010 was stopped on Friday, February 12, 2016 following the insertion of an inflatable plug in the downstream end of the 72 inch discharge pipe. Insertion of the plug isolated the toe drain and stormwater contributions to Outfall 010, which have been collected and pumped to Ash Pond D. Since February 12, Dominion has initiated efforts to permanently plug the 72" discharge pipe. This will be accomplished by construction of a one-foot wide concrete plug in the downstream end of the pipe. Following installation and curing of the plug the remainder of the pipe will be backfilled with concrete. All accumulated sediment has been removed from the 72" pipe and pouring of the concrete plug was initiated on March 2, 2016.

DOMINION SYSTEM LABORATORY

REPORT PRODUCED ON 10/07/2003

TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: BOB WILLIAMS

SL #	Sample Date	Description	Parameter	Result
307924	9/09/2003	ASHPOND D DELTA DRAIN	T-Hard. as CaCO3,PPM	150.48
			Phenol, PPM	0.05
			TOC, PPM	1.8
			Fluoride as F, PPM	0.151
			Chloride as Cl, PPM	107.53
			Sulfate as SO4, PPM	78.73
			Dis. As, ppb	< 3.
			Dis. Ba, PPM	< 0.04
			Dis. Cd, ppb	0.3
			Dis. Cu, ppb	12.
			Dis. Fe, PPM	2.06
			Dis. Pb, ppb	< 1.
			Dis. Mn, PPM	0.68
			Dis. Hg, ppb	< 0.2
			Dis. Ni, PPM	0.04
			Dis. K, PPM	7.85
			Dis. Se, ppb	< 3.
			Dis. Ag, ppb	< 0.1
			Dis. Na, PPM	36.6
			Dis. V, ppb	< 1.
			Dis. Zn, PPM	0.063
			Arsenic as As, ppb	< 3.
			Barium as Ba, PPM	0.06
			Cadmium as Cd, ppb	0.3
			Copper as Cu, ppb	17.
			Iron as Fe, PPM	2.06
			Lead as Pb, ppb	< 1.
			Manganese as Mn, PPM	0.56
			Mercury as Hg, ppb	< 0.2
			Nickel as Ni, PPM	0.07
			Potassium as K, PPM	8.40
			Selenium as Se, ppb	< 3.
			Silver as Ag, ppb	< 0.1
			Sodium as Na, PPM	38.4
			Vanadium as V, ppb	< 1.
			Zinc as Zn, PPM	0.061

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Internal Outfall 503 Sampling Plan

Virginia Electric and Power Company
Possum Point Power Station
Coal Combustion Residual Surface Impoundment Closures
Dumfries, Virginia

GAI Project Number: C150132.00, Task 050

February 2016

Dominion℠

Prepared by: GAI Consultants, Inc.
Richmond Office
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Prepared for: Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060-3308

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Table of Contents

1.0 Project Overview 1
1.1 Introduction 1
1.2 Project Description 1

2.0 Monitoring Objectives 2

3.0 Sampling Locations 2

4.0 Frequency of Sampling 2

5.0 Field Sampling Procedures 4
5.1 Grab Samples 4
5.2 Flow Proportional Composite Samples 4

6.0 Analytical Testing Summary 5

7.0 Proposed Schedule 7

8.0 Quality Assurance/Quality Control of Sample Data 8

9.0 Discharge Monitoring Reports 8

Table 1 Outfall Sample Locations 2
Table 2 Internal Outfall 503 Weekly Monitoring 3
Table 3 Internal Outfall 503 Monthly Monitoring 3
Table 4 Parameters for Analysis 5
Table 5 QL Comparison - Parameters for Analysis 6
Table 6 Proposed Schedule for Sampling Internal Outfall 503 7

Appendix A Outfall 503 (Interim/Final) Final Permit Discharge Monitoring / Limits
Appendix B ISCO 6172FR Flow Paced Sampler Catalog Cut
Appendix C ISCO 6172FR Flow Paced Sampler Installation Instructions
Appendix D ISCO 6172FR Flow Paced Sampler Programming Instructions and Information
Appendix E Greyline TTFM 1.0 Catalog Cut
Appendix F Greyline TTFM 1.0 Installation Instructions
Appendix G Sample Outfall 503 Discharge Monitoring Report

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1.0 Project Overview

Virginia Electric and Power Company (Dominion) is in the process of implementing a long-term strategy for closure of its existing coal combustion residuals (CCR) (ash) ponds at the Possum Point Power Station (Station), an 1,845 megawatt, natural gas and oil fired (previously coal-fired) steam electric generating station near Dumfries, Prince William County, Virginia (VA).

1.1 Introduction

Dominion is currently working to close five existing ash ponds at the Station: Ash Ponds A, B, C, D, and E. All five ponds are scheduled for closure by April 2018 in accordance with the relevant provisions of the United States Environmental Protection Agency's CCR Rule, which was published on April 17, 2015, and codified in 40 Code of Federal Regulations (CFR) Part 257, Subpart D. A drawing showing the site location is shown in Figure 1.

Ash Ponds A, B, and C were originally three contiguous ponds that have been inactive since the 1960s. Ash Ponds A, B, C, and E have been decanted and are being dewatered until all ash material has been removed, in accordance with applicable state and local requirements. Dredged ash material from the ponds was initially transported to Ash Pond D for storage. Diversion of dredged ash to Ash Pond D ceased in October 2015; since then, all remaining ash has been and will continue to be hauled to a permitted landfill for disposal.

Ash Pond D is scheduled to be decanted, dewatered, regraded, capped, and closed in the coming months. During the decanting and dewatering process, water from Ash Pond D will be treated and discharged to Outfall 001/002 via Internal Outfall 503. Following dewatering, Ash Pond D will be converted to a single regulated solid waste facility subject to all applicable state and federal closure and post-closure care requirements.

1.2 Project Description

This Sampling Plan addresses the planned procedures for sampling and analyzing water qualities for the following in accordance with the Final VA Pollutant Discharge Elimination System (VPDES) Permit VA0002071 issued by the VA Department of Environmental Quality (DEQ) with Major Modification Date of January 14, 2016 and expiring on April 2, 2018:

- Grab, four-hour flow paced, and 24-hour flow paced sampling and analyses of discharged waters from Internal Outfall 503 - [Comingled Process Water, Ash Dewatering Water, Contact Water (Interim) / Ash Pond D Underdrain / Outfall 010 / Interim Outfall 501 (Final)] - When Routed to Outfall 001 / 002 or Outfall 004.

Discharges from Internal Outfall 503 during the "Interim Configuration" during construction (from the closure activities of Ash Ponds A, B, C, D, and E) consist of comingled process water in Pond D (i.e., Pond D Comingled Water) as well as Ash Dewatering Water, and stormwater in contact with ash (i.e., Contact Water). Pond D Comingled Water consists of a combination of stormwater as well as the following waters that have been comingled in Pond D as a result of the closure activities of Ash Ponds A, B, C, D, and E:

- ash dewatering water;
- contact water;
- metals cleaning waste (Outfall 501 water); and
- oil water (Outfall 502 water).

Pond D Comingled Water must be drained from Pond D to allow for the closure of Ash Pond D. Pond D Comingled Water includes an estimated 158 million gallons that has accumulated in Pond D as identified from a 2015 bathymetric survey and a water surface elevation surveyed on February 16, 2016.

Discharged waters from Internal Outfall 503 for the "Final Configuration" (i.e., following the closure activities of Ash Ponds A, B, C, D, and E) consist of Ash Pond D Underdrainage and Outfall 501 Water with potential for Pond D Toe Drainage. Pond D Toe Drainage consists of underflow from the Pond D Impoundment. Ash Pond D Underdrainage refers to future subsurface waters draining from closed and capped Pond D soil/ash below the proposed impermeable liner. Underdrainage waters are expected to reduce over time and eventually stop flowing.

Discharges of waters from Internal Outfall 503 are planned to be routed to Outfall 001/002.

2.0 Monitoring Objectives

The Final VPDES Permit for Industrial Wastewater Discharges (Permit) includes effluent limitations and monitoring requirements for Internal Outfall 503 for "Interim" and "Final Configurations". The effluent limitations and monitoring requirements for Internal Outfall 503 - When Routed to Outfall 001/002 or Outfall 004 are provided in Appendix A.

3.0 Sampling Locations

GAI Consultants, Inc. (GAI) proposes to collect water samples at the approximate locations defined in Table 1 or in alternate equivalent locations, e.g., upstream on the conveyance pipeline that discharges to Outfall 503. The proposed sample locations, discharge sources, treatment, average flow, and approximate coordinates (latitude and longitude) are as follows:

Table 1
Outfall Sample Locations

Outfall	Discharge Sources	Potential Treatment	Maximum Flow	Latitude and Longitude
503 (Interim Configuration)	Comingled Process Water, Ash Dewatering Water, Contact Water	Aeration, Chemical Addition, Clarification, Filtration, Activated Alumina, and/or Ion Exchange	2.88 MGD[1]	Location to be Determined
503 (Final Configuration)	Ash Pond D Underdrain, Internal Outfall 501, Potentially Pond D Toe Drainage	Technology to be Determined	2.88 MGD[1]	Location to be Determined

Note:

1. MGD = Million gallons per day.

4.0 Frequency of Sampling

Four-hour and 24-hour composite flow proportioned samples as well as grab samples are proposed to be collected three times a week or once a month at Internal Outfall 503 as required by the Final Permit. The frequency of sampling each parameter at the outfall is shown below in Tables 2 through 4.

Table 2
Internal Outfall 503 Weekly Monitoring

Constituent	Sample Frequency and Collection Method
Flow (MGD)	3 / W Estimate
pH	3 / W Grab
Total Suspended Solids	3 / W 4H-C
Oils and Grease	
Antimony, Total	
Arsenic, Total	
Cadmium, Total	
Chloride	
Chromium, Total	
Chromium III, Total	
Chromium VI, Total	
Copper, Total	
Lead, Total	
Mercury, Total	
Nickel, Total	
Selenium, Total	
Silver, Total	
Thallium, Total	
Vanadium, Total	
Zinc, Total	
Hardness, Total (as CaCO3)	

Notes:

1. 3 / W = three days per week.
2. 4H-C = four-hour flow proportional composite sample.
3. Grab = an individual sample over a period of time not to exceed 15 minutes.
4. Estimate = Reported flow based on technical evaluation of sources belonging to the discharge.
5. MGD = Million gallons per day.
6. Total Chromium analysis is required to calculate Chromium III; although permit does not require monitoring/reporting of total Chromium.

Table 3
Internal Outfall 503 Monthly Monitoring

Constituent	Sample Frequency and Collection Method
Aluminum, Total	1 / M 4H-C
Barium, Total	
Beryllium, Total	
Boron, Total	
Cobalt, Total	
Iron, Total	
Molybdenum, Total	
Vanadium, Total	

Table 3 (Continued)

Constituent	Sample Frequency and Collection Method
48-hr Static Acute Toxicity Test using *Ceriodaphnia dubia*	1 / M 24H-C
48-hr Static Acute Toxicity Test using *Pimephales promelas*	
Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*	
Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*	

Notes:

1. 1 / M = Once per month.
2. 4H-C = four-hour flow proportional composite sample.
3. 24H-C = 24-hour flow proportional composite sample.

5.0 Field Sampling Procedures

GAI is proposing the analytical services of Air Water & Soil Laboratories, Inc. (AW&SL) located in Richmond, VA or Pace Analytical Services, Inc. (PACE) also located in Richmond, VA, for all constituents except for toxicity testing. These labs will be used until a PACE Mobile lab is Virginia-certified and available onsite. Coastal Bioanalysts, Inc. (CB) located in Gloucester, VA is proposed to perform the toxicity tests. The required turnaround time (TAT) for samples analyzed by AW&SL/PACE varies depending on the day of the week of sample collection, but in no case greater than three business days. The required TAT for the toxicity analyses by CB is eight business days. Plastic and glass bottles, labels, and coolers will be shipped to GAI's Richmond, VA office from both labs or as provided by the PACE onsite mobile lab trailer proposed onsite. GAI employees, in addition to other qualified samplers, will complete the bottle labels and relevant information in the chain-of-custody forms in advance of each sample event. Additionally, the sampling activities will be coordinated in advance with Dominion representatives.

5.1 Grab Samples

A smooth-nosed sample tap is proposed at the Internal Outfall 503 location. This sample tap will be used to collect grab samples and deliver them to the lab for analysis.

5.2 Flow Proportional Composite Samples

Four ISCO 6712FR refrigerated flow paced samplers will be used at Internal Outfall 503 (Interim/Final) to collect four-hour and 24-hour flow proportional composite samples. Each flow paced sampler is equipped with a single 5.3 gallon glass container to draw and collect flow paced samples for analysis. A three-eighths-inch inner diameter polytetrafluoroethylene suction line will connect to each of the four flow paced samplers. A high flowrate Watson-Marlow 620N peristaltic pump will be installed to feed Internal Outfall 503 discharges to a manifold for the four samplers. Refer to Appendices B, C, and D for more information regarding the flow paced samplers.

A Greyline clamp-on Transit Time Flow Meter (TTFM) Model 1.0 is proposed to measure Internal Outfall 503 discharges. The TTFM can relay a four- to 20-milliamp (zero- to five-volt) signal representing the totalizing flow at Internal Outfall 503. The flow paced samplers will be programmed to collect a sample at a given volume of flow through Internal Outfall 503. Refer to Appendices E and F for more information regarding the meter.

Following each sample event, the remaining collected waters in the flow paced sampler containers must be removed. A portable peristaltic pump and return line to discharge collected waters back to the discharge pipe (downstream of Internal Outfall 503) is proposed. After the flow paced sampler

containers have been emptied, distilled water and potentially Alconox, a non-phosphate detergent, may be applied to decontaminate the glass containers. Finally, the glass container will be rinsed three times with distilled water. The glass bottles will be wide mouthed for easy access/cleaning. Distilled water and Alconox solution waters will be collected in a portable container and discharged to a designated waste holding tank onsite that will be pumped out and sent to a treatment facility offsite.

Prior to each sample event, all peristaltic pump tubing will be replaced to reduce potential for cross-contamination. A sample blank will be collected at periodic intervals to assess the decontamination of each flow paced sampler utilized. This blank sample will be collected by filling the sampler containers with distilled water. The blank sample will be analyzed for all constituents analyzed for a given sample event.

GAI proposes a "dry-run" flow paced sampling event prior to the start of permit-required sampling.

The recommended power source for the refrigerated samplers is a designated 20-amp circuit. All automatic collection system components shall be housed in a heated enclosure in order to maintain a clean, temperature-controlled sampling environment.

Guidance documents on how to install the flow paced samplers, install the suction line, program the sampler, etc. are in Appendices C and D. A trained manufacturer's representative shall be employed to provide onsite technical support during the setup of the sampler and meter. Final equipment shall be selected and coordinated with the Station's contractor.

6.0 Analytical Testing Summary

GAI will measure pH from a grab sample and also estimate flow during each sample event. AW&SL or PACE will analyze all constituents in Table 4 except for toxicity testing which is to be performed by CB. Table 5 compares all Quantification Levels (QL) required by the DEQ and the proposed laboratory Limits of Quantitation (LOQ). To identify potential pathogen influence on toxicity samples, a UV-treated and non-UV-treated sample will be analyzed in the lab for each toxicity test unless otherwise directed by Dominion. Note that the toxicity sample volumes in Table 4 are for a single UV-treated or non-UV-treated test.

Table 4
Parameters for Analysis

Constituent	Number of Bottles per Sample ID	Preservation	Hold Time	Analytical Method
Flow (MGD)	N/A	N/A	N/A	N/A
pH (Field measurement)			15 Minutes	S4500HB-00
Total Suspended Solids	(1) - 1 L plastic	> 0 °C to 6 °C	7 Days	SM22-2540D-2011
Oil and Grease	(2) - 1 L glass amber	HCl	28 Days	EPA 1664A
Flow (MGD)	N/A	N/A	N/A	N/A
pH (Field measurement)			15 Minutes	S4500HB-00
Total Suspended Solids	(1) - 1 L plastic	> 0 °C to 6 °C	7 Days	SM22-2540D-2011
Oil and Grease	(2) - 1 L glass amber	HCl	28 Days	EPA 1664A
Aluminum, Total	(1) - 500 mL plastic	> 0 °C to 6 °C and HNO_3	6 Months	EPA 200.7 R4.4
Antimony, Total				EPA 200.8 R5.4
Arsenic, Total				EPA 200.8 R5.4
Barium, Total				EPA 200.7 R4.4
Beryllium, Total				EPA 200.7 R4.4
Boron, Total				EPA 200.7 R4.4
Cadmium, Total				EPA 200.8 R5.4
Chromium, Total				EPA 200.7 R4.4

Table 4 (Continued)

Constituent	Number of Bottles per Sample ID	Preservation	Hold Time	Analytical Method
Cobalt, Total	(1) - 500 mL plastic	> 0 °C to 6 °C and HNO_3	6 Months	EPA 200.7 R4.4
Copper, Total				EPA 200.8 R5.4
Iron, Total				EPA 200.7 R4.4
Lead, Total				EPA 200.8 R5.4
Mercury, Total				EPA 245.1 R3.0
Molybdenum, Total				EPA 200.7 R4.4
Nickel, Total				EPA 200.8 R5.4
Selenium, Total				EPA 200.8 R5.4
Silver, Total				EPA 200.8 R5.4
Thallium, Total				EPA 200.8 R5.4
Vanadium, Total				EPA 200.7 R4.4
Zinc, Total				EPA 200.7 R4.4
Hardness, Total (as $CaCO_3$)				SM22 2340B-2011
Chloride	(1) - 250 mL plastic	> 0 °C to 6 °C	28 Days	EPA 300.0 R2.1
Chromium VI, Total	(1) - 500 mL plastic	> 0 °C to 6 °C	24 Hours	SM22 3500-Cr B-2011
48-Hour Static Acute Toxicity Test using *Ceriodaphnia dubia*	(1) - 0.5-gallon plastic	> 0 °C to 6 °C	36 Hours	40 CFR 136.3 EPA 2002.0
48-Hour Static Acute Toxicity Test using *Pimephales promelas*				40 CFR 136.3 EPA 2000.0
Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*[4]	(1) - 2-gallon to 3-gallon plastic	> 0 °C to 6 °C	36 Hours	40 CFR 136.3 EPA 1002.0
Chronic Seven-Day Static Renewal Survival and Growth Test using *Pimephales promelas*[4]	(1) - 2-gallon to 3-gallon plastic	> 0 °C to 6 °C	36 Hours	40 CFR 136.3 EPA 1000.0

Notes:

1. N/A = Not Applicable.
2. For side by side UV treated and non-UV treated toxicity analyses, double the volumes in the Table above.
3. Chronic Toxicity sample volumes required are: Monday (2 gal), Wednesday (2 gal), Friday (3 gal).
4. Total Chromium analysis is required to calculate Chromium III; although permit does not require monitoring/reporting of total Chromium.

Table 5
QL Comparison - Parameters for Analysis

Constituent	DEQ QL	Lab LOQ	Units	QL Achievable by Lab (Y / N)
Total Suspended Solids	1.0	1.0	mg/L	Yes
Antimony, Total	5.0	1.00	ug/L	Yes
Arsenic, Total	5.0	1.00	ug/L	Yes
Cadmium, Total	0.88	0.3	ug/L	Yes
Chromium III, Total	5.0	5	ug/L	Yes
Chromium VI, Total	5.0	5	ug/L	Yes
Copper, Total	5.0	1.00	ug/L	Yes
Lead, Total	5.0	1.00	ug/L	Yes
Mercury, Total	0.1	0.1	ug/L	Yes
Nickel, Total	5.0	1.00	ug/L	Yes
Selenium, Total	5.0	1.00	ug/L	Yes

Table 5 (Continued)

Constituent	DEQ QL	Lab LOQ	Units	QL Achievable by Lab (Y / N)
Silver, Total	0.4	0.100	ug/L	Yes
Thallium, Total	0.47	0.3	ug/L	Yes
Zinc, Total	25	10.0	ug/L	Yes

Notes:

1. QL = Quantification Levels.
2. LOQ = Limit of Quantitation.
3. QL and LOQ are synonymous terms.

7.0 Proposed Schedule

GAI proposes the schedule provided in Table 6 to stage the various sample events at the Internal Outfall 503.

Table 6
Proposed Schedule for Sampling Internal Outfall 503

Day of Week	Sample Events
Monday	Flow Estimate
	3 / W 4H-C for Metals / Oils & Grease
	3 / W Grab for pH
	1 / M 4H-C for remaining Metals
	1 / M 24H-C for Chronic Toxicity (Day 1)
Wednesday	Flow Estimate
	3 / W 4H-C for Metals / Oils & Grease
	3 / W Grab for pH
	1 / M 24H-C for Chronic Toxicity (Day 2)
	1 / M 24H-C for Acute Toxicity
Friday	Flow Estimate
	3 / W 4H-C for Metals / Oils & Grease
	3 / W Grab for pH
	1 / M 24H-C for Chronic Toxicity (Day 3)

Notes:

1. Three days of samples are required for each Chronic Toxicity test. Toxicity samples will be collected on the first full week of the month so as to have results for issuance to DEQ the 10th day of the following month.
2. 3 / W = three days per week.
3. 1 / M = Once per month.
4. 4H-C = four-hour flow proportional composite sample.
5. 24H-C = 24-hour flow proportional composite sample.
6. Grab = An individual sample over a period of time not to exceed 15 minutes.

8.0 Quality Assurance/Quality Control of Sample Data

AW&SL and PACE are accredited laboratories by the Commonwealth of VA. Coastal Bioanalysts is accredited by the National Environmental Laboratory Program. The Lab Reports will be reviewed with the laboratory quality assurance / quality control (QA/QC) limits specified in each applicable laboratory Standard Operating Procedure (SOP) as well as the National Functional Guidelines (NFG), where applicable. Quality parameters monitored include but are not limited to holding times, sample receipt temperatures, method blank comparisons, matrix spike recoveries, laboratory control sample recoveries, etc., where applicable. If the laboratory data fall outside the laboratory SOP-specified QA/QC limits, data will be qualified or rejected based on the NFGs and professional judgement, as deemed necessary. Sensitivity of sample data will be monitored through the comparison of DEQ-required QLs and the LOQs provided with laboratory data. Completeness of the data will be monitored for each laboratory deliverable. In order to maintain the comparability of data, sampling procedures described in Section 5.0 will be followed, and standard analysis methods will be utilized, as listed in Table 5. Unless specifically requested, formal validation of the laboratory data will not be conducted under this sampling plan. Data quality issues encountered will be documented in accordance with the permit and will be communicated to the client and Laboratory. Should a re-analysis of the respective constituents be required, such will be communicated and requested by the laboratory immediately.

9.0 Discharge Monitoring Reports

Laboratory results will be tabulated by GAI in Excel format and submitted to Dominion within four business days upon receipt of the sample by the lab; except under extenuating circumstances (e.g., weather-related delays, etc.). A copy of the Excel table is provided in Appendix G. Dominion will complete formal Discharge Monitoring Reports and submit electronically (or other approved format) to the DEQ in accordance with the conditions of the Final Permit.

APPENDIX A

Outfall 503 (Interim/Final) Final Permit Discharge Monitoring/Limits

APPENDIX B
ISCO 6172FR Flow Paced Sampler Catalog Cut

APPENDIX C
ISCO 6172FR Flow Paced Sampler Installation Instructions

APPENDIX D

ISCO 6172FR Flow Paced Sampler Programming Instructions and Information

APPENDIX E
Greyline TTFM 1.0 Catalog Cut

APPENDIX F
Greyline TTFM 1.0 Installation Instructions

APPENDIX G
Sample Outfall 503 Discharge Monitoring Report

Please print or type in the unshaded areas	EPA ID Number *(copy from item I of Form 1)* **110000340774**	Form Approved. OMB No. 2040-0086

Form **2F** NPDES

United States Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number *(list)*	B. Latitude			C. Longitude			D. Receiving Water *(name)*
S035	**38**	**32**	**10**	**77**	**16**	**46**	**Potomac River**
S105	38	32	28.53	77	17	2.05	Quantico Creek
S107	38	32	43.8	77	16	37	Quantico Creek
S108	38	32	59.25	77	17	36.52	Unnamed Tributary to Quantico Creek
S109	38	33	11.32	77	17	36.13	Unnamed Tributary to Quantico Creek

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
Not Applicable					

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map Is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

Continued on Page 2

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
S35	0.135 acre	0.15 acre			
S105	2.4 acres	34.9 acres			
S107	0 acres	14.4 acres			
S108	0 acres	1.8 acre			
S109	0 acres	0.5 acre			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

The drainage area associated with Outfall S35 receives runoff from the north end of Unit #5 Cooling Tower B and drains approximately 0.15 acres consisting of approximately 90% impervious (building, roads) and 10% pervious (grass, gravel) surfaces. The drainage area is similar in nature to that associated with existing Outfall S5, and consequently, Dominion requests that Outfall S5 to be considered representative of Outfall S35. Intake structure maintenance activities may occur in the drainage area.

The drainage area associated with Outfall S105 originates from an area located on the east side of the railroad tracks and just west of the station's laydown area (see attached Site Plan). The drainage area consists of approximately 93% pervious and 7% impervious surfaces. Runoff contributing to Outfall S105 flows westward through culverts under the railroad and Possum Point Road, enters a drainage channel located to the south of the inactive Ash Pond A, and is eventually discharged to Quantico Creek.

Outfall S107 collects storm water from the berm of Ash Pond D via two drop inlets which is discharged to Quantico Creek southeast of Pond D. This outfall is designed to collect groundwater infiltration from the ash pond's berm for stabilization. The area is approximately 14.4 acres and estimated to be 100% pervious (grass, vegetative slopes).

In 2012, Dominion cleared the trees and brush from within 25 feet of the limits of the Ash Pond E embankment as required by Virginia Impounding Structure Regulations. As a result of this clearing, Dominion observed two areas along the downstream toe of the south embankment and west embankment that had poor surface drainage characteristics. Standing water is present in these areas during the wetter months of the year. Consequently, Dominion is undertaking a project to improve the surface drainage at the downstream toe portions of the south and west embankments of Ash Pond E by constructing grass-lined ditches. It is expected that the project will be completed during the first quarter of 2015. Outfalls S108 and S109 are proposed storm water outfalls originating from the south and west drainage areas, respectively. The drainage areas associated with theses outfalls are considered to be 100% pervious and will receive runoff from the areas south and west of Pond E, respectively. They are expected to be constructed in the first quarter of 2015. The drainage areas consist of 100% pervious surfaces.

The drainage areas for Outfalls S105, S107, S108, and S109 are located in close proximity to the station's ash ponds. The Possum Point Power Station does not currently generate coal ash, and none of the existing ponds have received ash for at least 10 years. Even so, given the location of these drainage areas Dominion is requesting that the associated discharges be permitted as storm water outfalls associated with industrial activity.

Continued on Page 3

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
S35 S105 S107 S108 S109	**Discharge to Surface Water**	**4-A**

V. Non Stormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name of Official Title *(type or print)*	Signature	Date Signed
Edward H. Baine **VP Power Generation System Operations**		

B. provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Outfall S035 was visually inspected on 11/12/ 2014 during dry weather and no discharge was observed.

Outfall S105 – the drainage channel for this outfall was visually inspected on November 3, 2014 during dry weather and no flow was observed.

Outfall S107- there is a continuous discharge from this outfall due to the uncontaminated groundwater contribution. Uncontaminated groundwater is an allowable non-storm water discharge (see permit condition I.E.1.b.1.i).

Oufall S108 & S109 – the improvements leading to the creation of these outfalls has yet to be realized. These outfalls will be inspected for non-storm water flows once they exist.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No spills or leaks of toxic or hazardous pollutants have occurred within the last three years within the drainage areas associated with S35, S105, S107, S108, and S109.

Continued on Page 3

Continued from Page 2

EPA ID Number *(copy from Item 1 of Form 1)*
110000340774

VII. Discharge Information

A,B,C, & D: See instruction before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables Vii-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E. Potential discharges not covered by analysis - is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes *(list all such pollutants below)* ☒ No *(go to Section IX)*

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes *(list all such pollutants below)* ☒ No *(go to Section IX)*

--

IX. Contact analysis Information

Were any of the analysis reported in item VII performed by a contact laboratory or consulting firm?

☐ Yes *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* ☒ No *(go to Section X)*

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

X. Certification

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.

A. Name & Official Title *(type or print)*	B. Area Code and Phone No.
Edward H. Baine **VP Power Generation System Operations**	**(804) 273-3592**
C. Signature	D. Date Signed

Continued on Page 3

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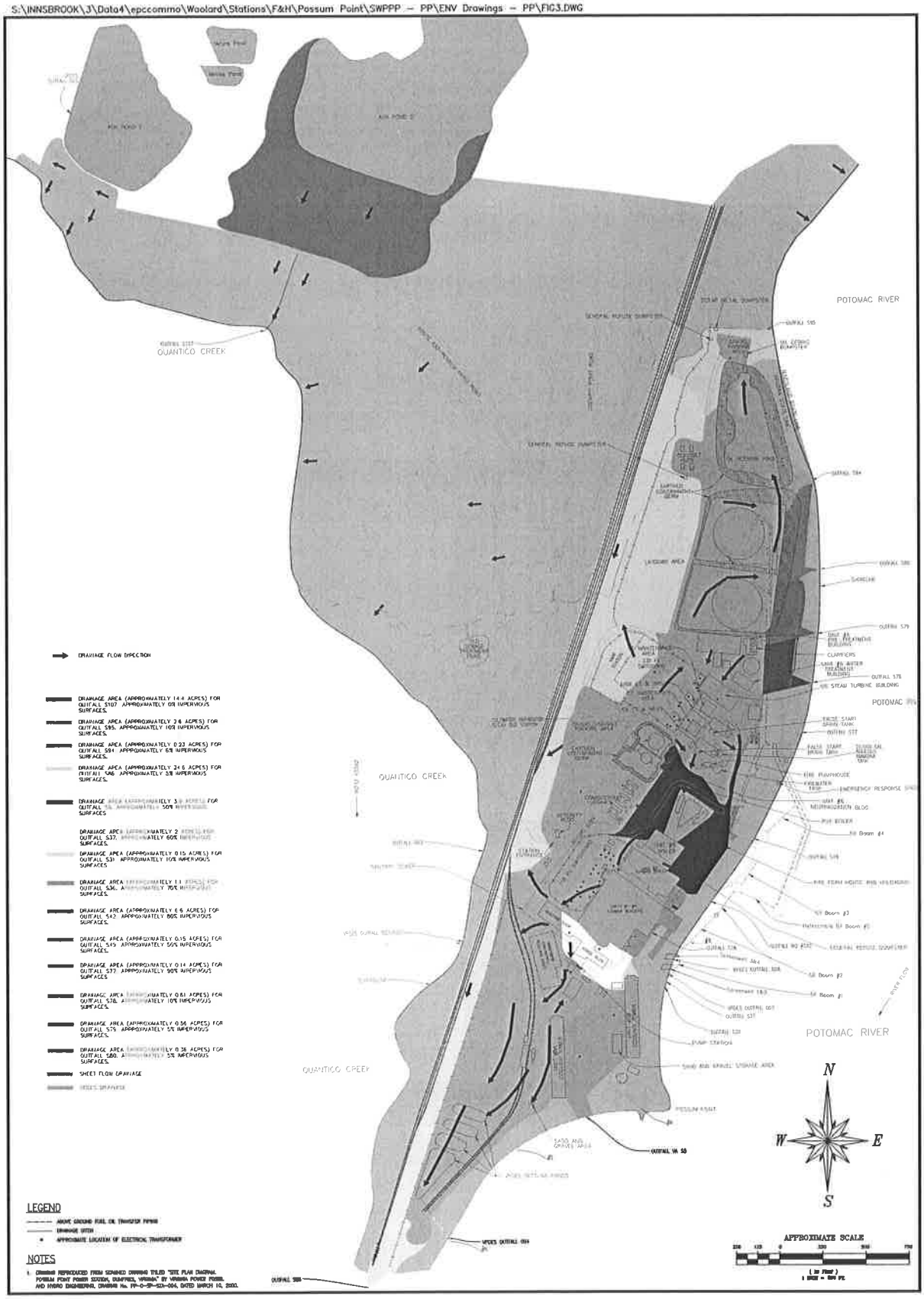


DOMINION ENERGY

SITE PLAN
DRAINAGE AREA
POSSUM POINT POWER STATIO

		0	ORIGINAL ISSUE	DSGN: ------ DSGN SUPV: ------ DRWN: TTT ENGR SUPV: ------ DRAWING NUMBER: PP-0-SP-SDA

8605

Information to Supplement June 30, 2014 Form 2F-ATTACHMENT A

The following information is provided as a supplement to ATTACHMENT A of our June 30, 2014 application and provides additional information relative to the decant structure associated with Ponds ABC at our Possum Point Power Station.

Decant Structure Description

Construction details for the Possum Point Power Station Ash Pond ABC decant structure are provided in the attached March 24, 1954 drawings. The decant structure is a concrete riser with internal dimensions of approximately 4 ft. by 4 ft. by 18-ft. high. The upstream side of the structure has a slot in which individual concrete members are placed one on top of the other to form a wall. These members are commonly referred to as stoplogs. The stoplogs are each approximately 12-inches high, 8-inches deep and 4 ft. - 6 inches long. The stoplogs extend from about 6 inches below the top of the structure to 14 ft. – 6 inches below the top of the structure (42 inches above the bottom of the structure). The outlet from the riser is a 30-inch diameter concrete pipe with the invert elevation about 1 ft. above the bottom of the structure. The top of structure elevation is approximately equal to the top of the earth dam. For safety purposes the top of the structure is fitted with a galvanized metal grating (this may be a source of zinc to the water).

Observations Related to Inflow to the Decant Structure

Since submittal of our June 30, 2014 application, Dominion has continued to perform weekly inspections of Ponds ABC and the associated decant structure. The inspections have been timed to coincide with storm events as they have been observed to occur throughout the period. During each inspection observations have included the depth of water pooled behind the decant structure, a description of the amount of water that was entering the decant structure, and the amount of rainfall that occurred prior to each inspection. Throughout the period of inspection water that was observed to enter the structure did so at an elevation at or above that of the pond surface. A summary of the information generated during the inspections is presented in Figure 1. A review of the observations indicates the following:

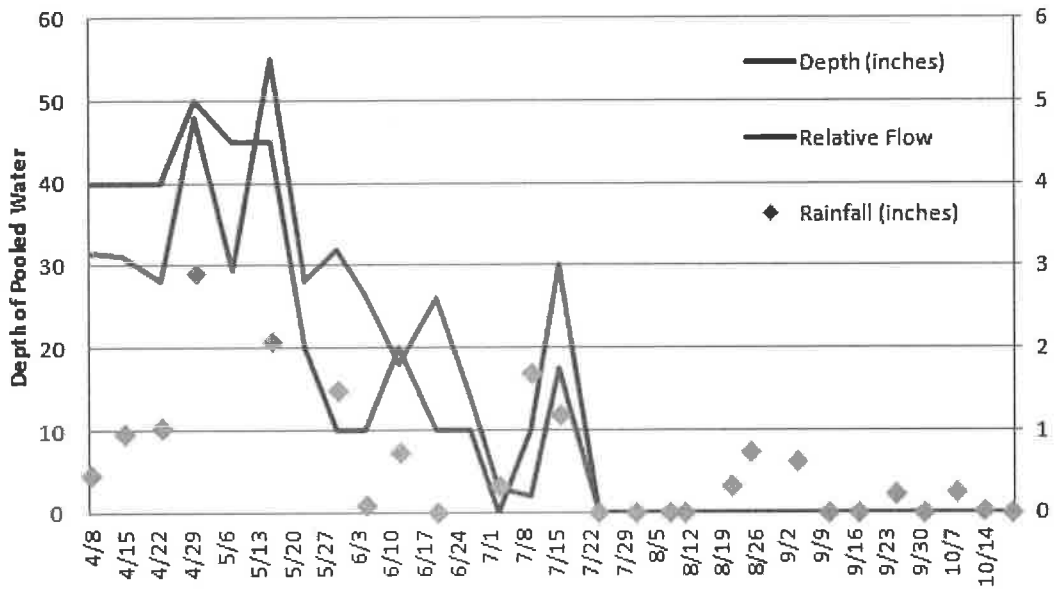
- The amount of water entering the decant structure has been directly related to the amount of precipitation prior to each inspection.
- During wetter periods (i.e., April – May) some flow into the decant structure was consistently observed; however, the amount of pooled water behind the structure (28 – 55 inches) and the degree of flow into the structure (e.g., no change, small flow, significant increase) varied in relation to the amount of rainfall that occurred between individual inspection events. It should be noted that the inspections were timed to correspond with precipitation events (i.e., periods when the in-flow to the structure would have been expected to increase) so the true change in pooled water elevation and the degree of flow between inspections could have been much more and less, respectively, than what was observed.
- During drier periods (i.e., June – November 17) no flow was observed entering the structure.
- As noted in the decant structure description above, there is some difference in elevation between the bottom of the discharge structure and the bottom elevation of the concrete discharge pipe (i.e., there is always some standing water in the bottom of the decant structure).

Implications for Permitting

Based on discussions with DEQ staff and a review of preliminary permitting documents, Dominion understands that DEQ is considering permitting the discharge from Ponds ABC as a continuous discharge and, as such, is considering applying the same 2:1 chronic assimilative capacity approach that was applied to the Possum Point Power Station process wastewater discharges. Dominion does not believe that this approach is appropriate given the storm water nature of the ABC pond discharge. Even so, we had our consultant LimnoTech perform screening level modeling to evaluate the chronic mixing that would be

anticipated for such a discharge (see attached). The results of this analysis demonstrate that an assimilative capacity of considerably greater than 2:1 is appropriate for application of Virginia's chronic water quality criteria to the discharge from the Pond ABC decant structure. As such, we recommend that should DEQ continue with their water quality-based effluent limits approach that the evaluation be based on the acute water quality criteria, which we believe are the limiting criteria in this situation.

Figure 1. Weekly Inspection Observations: Depth of Water Pooled Behind the Decant Structure, Relative Flow of Pooled Water into Discharge Structure, and Amount of Rainfall Prior to Inspection



The actual flow into the decant structure was not determined during the weekly inspections. However, descriptive information was provided on each report and has been used to provide an indication of the relative amount of flow that was entering the structure on any given day.

LimnoTech
Water Environment | Scientists Engineers

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Memorandum

From: Virginia Breidenbach, PE
Dave Dilks, PhD
To: Dominion Environmental Services

Date: December 10, 2014
Project: TSDOM

SUBJECT: **Screening Level Dilution Evaluation for Pond C Discharge to Quantico Creek**

Summary

This memorandum presents a screening level evaluation of dilution for the Pond C decant structure discharge to Quantico Creek under chronic toxicity conditions.

The results of this assessment indicate that for chronic toxicity, dilution factors greater than two are likely achieved for Pond C discharge flow rates up to approximately 270 gpm.

A description of the Pond C decant structure discharge, approach to the dilution evaluation, assumptions and data inputs, and evaluation results are discussed below.

Discharge Description

The Pond C outfall is located on the northeast bank of Quantico Creek within the Virginia Electric and Power Company Possum Point Power Station. The discharge consists of a 30" concrete pipe leading from the decant structure at Pond C. The pipe outfall is located approximately 20 feet from the creek bank. A small channel leads from the outfall to the creek. The outfall does not appear to be submerged.

The only recorded flow rate available for the discharge is an estimate of 2 gpm made from visual observation by a VDEQ staff person on a field visit conducted on April 11, 2014 (Demers and Mackert, April 15, 2014). No flow was observed from the outfall on site visits made by LimnoTech staff on November 3, 5, and 6, 2014.

Approach

The approach used to determine chronic toxicity dilution factors for the Pond C decant structure outfall was patterned after the most commonly used approach for assessing chronic mixing zones in rivers. The approach allows a fraction of the total available flow to be used for dilution, with this fraction being set equal to the fraction of the water body's cross-sectional area allotted to the chronic mixing zone. For Quantico Creek, this fraction of total available flow to be used for dilution was assumed to be the more stringent case specified in Virginia rules for estuarine and transition zone waters as no more than "five times in any direction the average depth along a line extending 1/3 of the way across the receiving water from the discharge point to the opposite shore" (9VAC25-260-20). Because Quantico Creek is tidally influenced, it is appropriate to use

the total dilution flow available over a tidal cycle (rather than just the upstream freshwater flow). The chronic toxicity dilution factor equation therefore becomes:

$$S = (Q_w + Q_{dil}) / Q_w \quad (1)$$

Where,

S = dilution factor

Q_w = wastewater flow from Pond C

Q_{dil} = total dilution flow

Total dilution flow is calculated as:

$$Q_{dil} = a\,(Q_{up} + Q_{TID}) \quad (2)$$

Where,

a = fraction of total available flow to be used for dilution

Q_{up} = upstream Quantico Creek flow from stream gage data

Q_{TID} = tidal flow

The fraction of total available flow to be used for dilution calculated as:

$$a = (5 * \text{local water depth}) / (\text{width of embayment}) \quad (3)$$

Tidal flow is calculated as:

$$Q_{TID} = (\text{average change in water depth over a tidal cycle}) * (\text{embayment surface area})/12.5 \text{ hours} \quad (4)$$

The dilution factor is adjusted to account for the fraction of wastewater flow that is returned within the tidal cycle, thus limiting available mixing. The resulting effective dilution factor is calculated as:

$$S_{effective} = S * (1 - r_c) \quad (5)$$

Where,

r_c = return rate of mass discharged in the previous tidal cycle

In this instance, a return rate of 0.5 was selected as a highly conservative estimate based on U.S. EPA guidance (U.S. EPA 1992) that states:

> "the r_c factor can be expected to vary in the range of ≤ 0.1 to ≈ 0.5 (highly conservative estimate). It is very small (≤ 0.1) for deep water discharges in the open coastal zone that are often associated with internal trapping of buoyant surface layer formation….It may be reasonably high (up to 0.5) for shallow

> water, vertically mixed discharges to strongly restricted estuaries with weak flushing."

It is emphasized that this approach is a screening level estimation and not a rigorous assessment. Virginia regulations specify mixing zone dimensions that extend upstream, downstream, and across-stream from the point of discharge. Experience has shown that this approach provides a conservative estimate of dilution when assessing the across-stream mixing zone boundary. It is not as clear how protective this approach is of the up- or downstream boundary. It is worth noting that the approach above was accepted by U.S. EPA Region III for developing NPDES permits for the District of Columbia's Blue Plains Wastewater Treatment Plant discharge to the Potomac River.

It should also be noted that the VPDES Permit Manual (VDEQ, 2014) states that for storm water discharges and intermittent discharges (< 4 days duration), water quality-based effluent limitations can be established using acute toxicity only.

Data Inputs and Assumptions

The data and assumptions used to calculate chronic toxicity dilution factors for the Pond C decant structure discharge are given in Table 1.

Table 1: Data Inputs with Sources for Chronic Toxicity Dilution Calculations

Parameter	Value	Units	Source
Surface area of Quantico Creek embayment	31,210,000	ft^2	GIS from aerial photo
Average change in water depth over tidal cycle	1.5	ft	NOAA chart dated August 2013 (http://www.charts.noaa.gov/OnLineViewer/12288.shtml)
Average water depth in vicinity of discharge at MLLW	1	ft	NOAA chart dated Aug 2013 (http://www.charts.noaa.gov/OnLineViewer/12288.shtml)
Embayment width at outfall location	2,800	ft	GIS from aerial photo
Q_{up} (S.F. Quantico Creek)	0.004	cfs	7Q10 streamflow for 1951-2003 SF Quantico Creek (USGS 01658500) reported by VDEQ (www.deq.state.va.us/Portals/0/.../Virginia_Stream_Flow_Data_2005.xls)
Drainage area (DA) at gage	7.62	mi^2	USGS 01658500 (http://waterdata.usgs.gov/va/nwis/inventory/?site_no=01658500&agency_cd=USGS)
Drainage area at Quantico Creek pour point	30.8	mi^2	GIS from digital elevation model
DA ratio	4.0		Calculated
Q_{up}	0.016	cfs	DA ratio * Q_{up}(S.F. Quantico Creek)
Q_w	2	gpm	VDEQ staff 4-16-14 site visit memo
r_c	0.5		Conservative value from U.S. EPA, 1992

Results

Estimated chronic toxicity dilution factors were calculated using the approach described above for a range of Pond C discharge flow rates, as indicated in Figure 1. As mentioned above, the only recorded flow rate for the outfall is 2 gpm, which was an estimate made via observation.

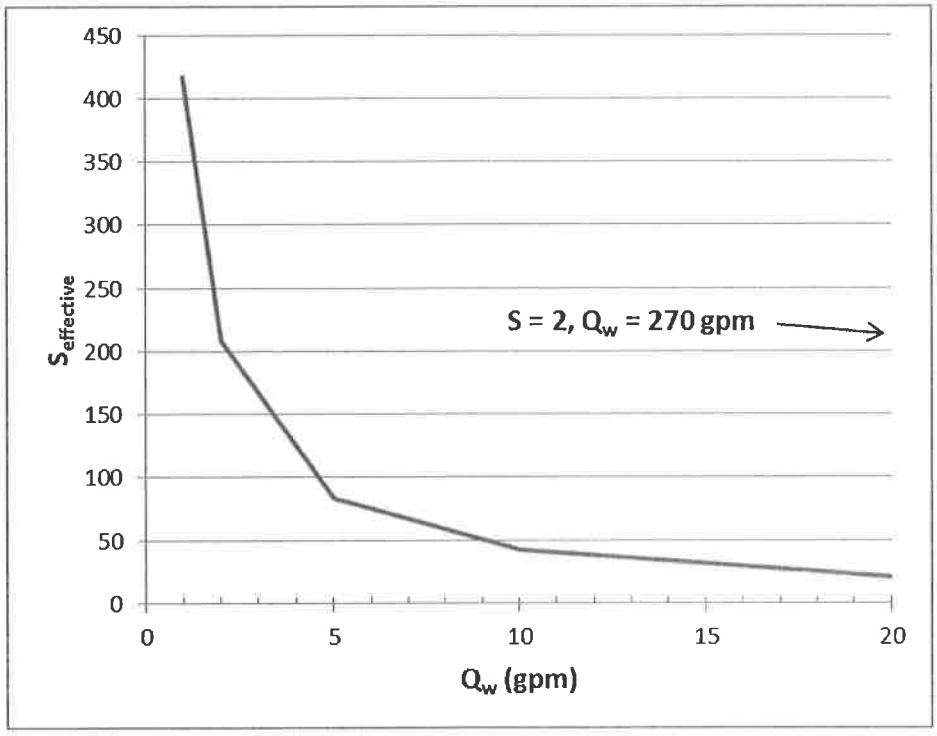


Figure 1: Chronic Toxicity Dilution Factors for Varying Pond C Decant Structure Discharge Rates

Dilution factors greater than two are estimated for discharge flow rates up to 270 gpm, while dilution factors greater than 50 are estimated for discharge flow rates up to approximately 8 gpm.

References

Commonwealth of Virginia Department of Environmental Quality Water Division (VDEQ). 2014. VPDES Permit Manual.

Demers, Dan and Susan Mackert to Tom Faha. Virginia Department of Environmental Quality Northern Regional Office. April 15, 2014. Updated April 16, 2014. Dominion – Possum Point Power Station VA0002071. [Memorandum]

United States Environmental Protection Agency Office of Water (U.S. EPA). 1992. Technical Guidance Manual for Performing Wasteload Allocations Book III: Estuaries, Part 3: Use Of Mixing Zone Models in Estuarine Waste Load Allocations. EPA-823-R-92-004.

Proposed Permit Modifications for Possum Point

I.F.1. Operation and Maintenance (O&M) Manual Requirement

The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the facility and associated treatment infrastructure that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31…

The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

…

c. Discussion of Best Management Practices ("BMPs") including any that may be applicable to storage areas for fossil fuel combustion byproducts described in Part 1.F.3~~, if applicable~~;

…

I.F.3. Materials Handling/Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in accordance with BMPs. For any active or inactive storage areas for fossil fuel combustion byproducts, these BMPs shall include, at a minimum, quarterly visual inspections of seeps or potential unanticipated releases such as leaks, spills, breaches or other releases. In the event that seeps are detected, then the permittee shall implement BMPs to minimize discharges of pollutants, if any, to surface waters. In the event that an unanticipated release is detected, then the permittee shall implement BMPs to minimize discharges of pollutants, if any, to surface waters and to implement corrective action to address the unanticipated release. All inspections and other BMPs that are implemented shall be

documented and made available to DEQ upon request. No other discharges of such product, materials, industrial wastes and/or other wastes to surface waters are permitted, ~~such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters,~~ except as expressly authorized.

Seek to replace I.F.10 (Debris Collection) with the analogous provision from the Chesterfield permit:

Discharge of Debris from Trash Racks
Debris collected on the intake trash racks shall not be returned to the waterway

II.R Disposal of Solids

Except in compliance with this permit, or another permit issued by the Board, s~~S~~olids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

I.A.12 Effluent Limitations and Monitoring Requirements (Stormwater)

Add S117 back into the permit.

Add Ponds A/B swale.

Redesignate S107 as industrial given potential for seepage.

I.D.3.a Site Characterization

Should data warrant, DEQ may require a Site Characterization Report for Ash Ponds A, B, C, D, E or the Oily Waste Treatment Basin…

Please print or type in the unshaded areas	EPA ID Number *(copy from item 1 of Form 1)* ***110000340774***	Form Approved. OMB No. 2040-0086

Form **2F** NPDES

United States Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number *(list)*	B. Latitude			C. Longitude			D. Receiving Water *(name)*
S107	**38**	**32**	**43.8**	**77**	**16**	**37**	**Quantico Creek**
S108	**38**	**32**	**52**	**77**	**17**	**21**	**Unnamed Tributary to Quantico Creek**

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
CCR Rule 40 CFR Part 257, Subpart D	***S107 S108***	***Stormwater Associated with Industrial Activity***	***Closure of the station's existing, inactive ash ponds.***	***04/18/15***	***04/18/15***

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map Is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

Continued on Page 2

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
S107	**0 acres**	**14.4 acres**			
S108	**0.4 acres**	**0.76 acres**			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

Outfall S107 collects storm water from the berm of Ash Pond D via two drop inlets. It is characterized as a non-industrial stormwater outfall in the existing permit. Collected stormwater is discharged to Quantico Creek southeast of Ash Pond D. This outfall also collects groundwater infiltration from toe drains associated with Ash Pond D. The drainage area is approximately 14.4 acres, consists of grass and vegetative slopes, and is considered to be 100% pervious.

Outfall S108 is a new storm water outfall that discharges to an unnamed tributary of Quantico Creek, located south of Pond E. This outfall is located at the point of convergence for runoff from a VDOT culvert and the culverts containing the station's former ash sluice lines. The drainage area associated with this outfall will receive runoff from the area south of Pond E and located near the construction entrance. The drainage area is approximately 0.76 acres and consists of approximately 95% pervious surfaces.

The drainage areas for Outfalls S107 and S108 are located in close proximity to the station's ash ponds. Consequently, stormwater contributing to these outfalls may be impacted by ash management activities associated with the pond closure project. Given the location of these drainage areas Dominion is requesting that Outfalls S107 and S108 be permitted as storm water outfalls associated with industrial activity. As the pond closure project progresses ash management activities will eventually cease and only construction activities covered by a Virginia Construction Stormwater General Permit will occur within the drainage areas for S107 and S108.

Dominion has implemented BMPs in the drainage areas contributing to Outfalls S107 and S108 including grading of haul roads, the installation of straw bales and silt fences, and periodic inspections. In addition, the station's SWPPP (developed in accordance with the VPDES individual permit) will be updated to incorporate BMPs, to minimize the impact of ash management activities that may occur with the associated drainage areas.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
S107 **S108**	**Discharge to Surface Water**	**4-A**

V. Non Stormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name of Official Title *(type or print)*	Signature	Date Signed
David A. Craymer **VP Power Generation System Operations**		

B. provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Outfall S107- There is a continuous discharge from this outfall due to groundwater contribution. This outfall will be inspected for non-storm water flows.

Outfall S108 – This outfall discharges primarily during rain events. This outfall will be inspected for non-storm water flows.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No spills or leaks of toxic or hazardous pollutants have occurred within the last three years within the drainage area associated with S107. On August 6, 2015, pump failure resulted in the overflow of an unknown volume of wastewater from a temporary water storage tank that was collecting groundwater and the effluent from the station's internal Outfall 502. The overflow event, which occurred within the drainage area for S108 is described in and On September 29-30, 2015, heavy rains resulted in excessive stormwater runoff within the drainage area contributing to Outfall S108. The runoff, which contained an unknown volume of coal ash, overwhelmed existing BMPs and was discharged via S108. The discharge and follow-up actions are described in an October 5, 2015 letter to DEQ.

VII. Discharge Information

A,B,C, & D: See instruction before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables Vii-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E. Potential discharges not covered by analysis - is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes *(list all such pollutants below)* ☒ No *(go to Section IX)*

No analytical data exist for either stormwater outfall S107 or S108. The industrial activities that will occur in the drainage areas for these outfalls consists of the management of coal combustion residual (e.g., fly ash) that was generated during periods when the station burned coal to generate electricity. These types of activities, and associated pollutants, were considered during the development of Sector O requirements included in EPA's and Virginia's Industrial Stormwater General Permits. Related conditions have been incorporated into Possum Point's individual VPDES permit.

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes *(list all such pollutants below)* ☒ No *(go to Section IX)*

--

IX. Contact analysis Information

Were any of the analysis reported in item VII performed by a contact laboratory or consulting firm?

☐ Yes *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* ☒ No *(go to Section X)*

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

Continued from Page 3

EPA ID Number *(copy from Item 1 of Form 1)*
110000340774

X. Certification

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.

A. Name & Official Title *(type or print)*	B. Area Code and Phone No.
David A. Craymer **VP Power Generation System Operations**	**(804) 273-3685**
C. Signature	D. Date Signed

Please print or type in the unshaded areas	EPA ID Number *(copy from item 1 of Form 1)* ***110000340774***	Form Approved. OMB No. 2040-0086

Form **2F** NPDES

United States Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number *(list)*	B. Latitude			C. Longitude			D. Receiving Water *(name)*
S035	**38**	**32**	**10**	**77**	**16**	**46**	**Potomac River**
S105	38	32	28.53	77	17	2.05	Quantico Creek
S107	38	32	43.8	77	16	37	Quantico Creek
S108	38	32	59.25	77	17	36.52	Unnamed Tributary to Quantico Creek
S109	38	33	11.32	77	17	36.13	Unnamed Tributary to Quantico Creek

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
Not Applicable					

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

Continued on Page 2

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
S35	**0.135 acre**	**0.15 acre**			
S105	2.4 acres	34.9 acres			
S107	0 acres	14.4 acres			
S108	0 acres	1.8 acre			
S109	0 acres	0.5 acre			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

The drainage area associated with Outfall S35 receives runoff from the north end of Unit #5 Cooling Tower B and drains approximately 0.15 acres consisting of approximately 90% impervious (building, roads) and 10% pervious (grass, gravel) surfaces. The drainage area is similar in nature to that associated with existing Outfall S5, and consequently, Dominion requests that Outfall S5 to be considered representative of Outfall S35. Intake structure maintenance activities may occur in the drainage area.

The drainage area associated with Outfall S105 originates from an area located on the east side of the railroad tracks and just west of the station's laydown area (see attached Site Plan). The drainage area consists of approximately 93% pervious and 7% impervious surfaces. Runoff contributing to Outfall S105 flows westward through culverts under the railroad and Possum Point Road, enters a drainage channel located to the south of the inactive Ash Pond A, and is eventually discharged to Quantico Creek.

Outfall S107 collects storm water from the berm of Ash Pond D via two drop inlets which is discharged to Quantico Creek southeast of Pond D. This outfall is designed to collect groundwater infiltration from the ash pond's berm for stabilization. The area is approximately 14.4 acres and estimated to be 100% pervious (grass, vegetative slopes).

In 2012, Dominion cleared the trees and brush from within 25 feet of the limits of the Ash Pond E embankment as required by Virginia Impounding Structure Regulations. As a result of this clearing, Dominion observed two areas along the downstream toe of the south embankment and west embankment that had poor surface drainage characteristics. Standing water is present in these areas during the wetter months of the year. Consequently, Dominion is undertaking a project to improve the surface drainage at the downstream toe portions of the south and west embankments of Ash Pond E by constructing grass-lined ditches. It is expected that the project will be completed during the first quarter of 2015. Outfalls S108 and S109 are proposed storm water outfalls originating from the south and west drainage areas, respectively. The drainage areas associated with theses outfalls are considered to be 100% pervious and will receive runoff from the areas south and west of Pond E, respectively. They are expected to be constructed in the first quarter of 2015. The drainage areas consist of 100% pervious surfaces.

The drainage areas for Outfalls S105, S107, S108, and S109 are located in close proximity to the station's ash ponds. The Possum Point Power Station does not currently generate coal ash, and none of the existing ponds have received ash for at least 10 years. Even so, given the location of these drainage areas Dominion is requesting that the associated discharges be permitted as storm water outfalls associated with industrial activity.

Continued on Page 3

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
S35 S105 S107 S108 S109	**Discharge to Surface Water**	**4-A**

V. Non Stormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name of Official Title *(type or print)*	Signature	Date Signed
Edward H. Baine **VP Power Generation System Operations**		

B. provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Outfall S035 was visually inspected on 11/12/ 2014 during dry weather and no discharge was observed.

Outfall S105 – the drainage channel for this outfall was visually inspected on November 3, 2014 during dry weather and no flow was observed.

Outfall S107- there is a continuous discharge from this outfall due to the uncontaminated groundwater contribution. Uncontaminated groundwater is an allowable non-storm water discharge (see permit condition I.E.1.b.1.i).

Oufall S108 & S109 – the improvements leading to the creation of these outfalls has yet to be realized. These outfalls will be inspected for non-storm water flows once they exist.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No spills or leaks of toxic or hazardous pollutants have occurred within the last three years within the drainage areas associated with S35, S105, S107, S108, and S109.

Continued on Page 3

Continued from Page 2

EPA ID Number *(copy from Item 1 of Form 1)*
110000340774

VII. Discharge Information

A,B,C, & D: See instruction before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables Vii-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E. Potential discharges not covered by analysis - is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes *(list all such pollutants below)* ☒ No *(go to Section IX)*

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes *(list all such pollutants below)* ☒ No *(go to Section IX)*

--

IX. Contact analysis Information

Were any of the analysis reported in item VII performed by a contact laboratory or consulting firm?

☐ Yes *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* ☒ No *(go to Section X)*

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

X. Certification

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.

A. Name & Official Title *(type or print)*	B. Area Code and Phone No.
Edward H. Baine **VP Power Generation System Operations**	**(804) 273-3592**
C. Signature	D. Date Signed

Continued on Page 3

Dominion Resources Services, Inc.
5000 Dominion Boulevard, Glen Allen, VA 23060
Web Address: www.dom.com

Dominion®

VA DEPARTMENT OF ENVIRONMENTAL QUALITY
JUL - 5 2012
REGIONAL OFFICE
WOODBRIDGE, VA

BY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

June 29, 2012

Mrs. Susan D. Mackert
Environmental Specialist II
Virginia Department of Environmental Quality - Northern Regional Office
13901 Crown Court,
Woodbridge, VA 22193

Re: Dominion – Possum Point Power Station – VPDES Permitted Storm Water Outfall Descriptions

Dear Mrs. Mackert:

The information included with this submittal is provided in response to your request made during the May 30, 2012 conference call regarding Possum Point Power Station's VPDES permit reissuance. A summary of each storm water outfall's drainage area is provided below. Also included in the following summary is Dominion's requests for storm water monitoring under the VPDES permit as they pertain to each storm water outfall. A site map with each outfall's drainage area is enclosed in this letter for your review.

Outfall 005 (Discharge Point S5): Receives runoff from approximately 3.9 acres located between Unit #5's two cooling towers. The drainage area consists of approximately 50% impervious (building, roads) and 50% pervious (grass, gravel) surfaces. This outfall discharges to the Potomac River near the southeast corner of Unit #5 Cooling Tower A. Outfall 005 and 031 are similar in their storm water exposures (cooling towers, roads, buildings). Since Outfall 005's drainage area is larger and is exposed to both cooling towers, Dominion requests Outfall 005 be representative of Outfall 031.

Outfall 031 (Discharge Point S31): Receives runoff from the north end of the Unit #5 Cooling Tower B and includes 2 drop inlets that drain approximately 0.15 acre. The area consists of approximately 90% impervious (building, roads) and 10% pervious (grass, gravel) surfaces. Dominion requests that Outfall 005 be representative of Outfall 031..

Outfall 036 (Discharge Point S36): The outfall receives runoff from a drainage area located at the area around Units 1&2 stacks and the road under Units 3&4 Precipitators and includes two drop inlets, one located under the Units 3&4 Precipitator and the other on the roof of Units 3&4 Screen Wells, which discharge to the Potomac River. The area consists of approximately

0.11 acre, which is approximately 70% impervious (road, roof) and 30% pervious (gravel). Due to the similar drainage area characteristics (i.e. roadway, parking lot and rooftops), Dominion requests Outfall 061 be representative of Outfall 036.

Outfall 037 (Discharge Point S37): Receives runoff from the area around the Administration (Admin.) building which is mainly vehicle parking and roofs associated with the Admin. building and the eastern half of the Maintenance Shop. The area consists of approximate 2.0 acres that is estimated to be 60% impervious (parking lot, roads, and roof tops) and 40% pervious (grass and gravel). Outfall 037 discharges to the Potomac River. Due to the similar size and characteristics (i.e. roads, parking lot and rooftops), Dominion requests that Outfall 061 be representative of Outfall 037.

Outfall 042 (Discharge Point S42): Receives runoff from approximately 6.6 acres. Storm water is collected through multiple drop inlets located around the perimeter of Unit #5 boiler and dust collector. The area is estimated to be 20% impervious (buildings, road, rooftops) and 80% pervious (gravel, grass). One of the drop inlets receives drainage conveyed via a ditch from the "Old" Combustion Turbines' oily-water separator. Outfall 042 discharges to the Potomac River. Outfalls 042, 049 and 077 have similar characteristics and locations, therefore Dominion requests that Outfall 042 be representative of Outfalls 049 and 077.

Outfall 049 (Discharge Point S49): Discharges to the Potomac River and collects drainage from the area east of the Unit #5 Boiler and north of the Oil Dock Foam House. This area includes one drop inlet and consist of approximately 0.15 acres. The drainage area's surface is estimated to be 50% impervious (road, roof) and 50% pervious (gravel). Dominion requests that Outfall 042 be representative of Outfall 049.

Outfall 061 (Discharge Point S61): Discharges to Quantico Creek and receives runoff from approximately 2.8 acres which includes the main entrance way to the plant, the gravel area west of the "Old" Combustion Turbine buildings, a portion of the roadway leading from the "Old" Combustion Turbines to the northwest end of the 115 kV Switchyard, the grassy area and railway located west of the 115 kV Switchyard, and the west end of the maintenance shop including the west ½ of the Maintenance Shop roof's drainage. The area is estimated to be 60% impervious (buildings, roads, rooftops) and 40% pervious (grass, gravel). Due to the similar drainage area size and industrial characteristics (roads, buildings, rooftops), Dominion requests Outfall 061 be representative of Outfall 036 and 037.

Outfall 077 (Discharge Point S77): Discharges to the Potomac River and collects drainage conveyed through a concrete pipe from the area surrounding the eastern edge of the No. 6 fuel oil pipe bench leading north to the Unit #5 Transfer Pump House. This area is approximately 0.14 acres that is estimated to be 10% impervious (road, rooftops) and 90% pervious (river bank, gravel). Dominion requests that Outfall 042 be representative of Outfall 077.

Outfalls 078, 079, 080 & 094 (Discharge Point S78, S79, S80, & S94 respectively): All four Outfalls discharge to the Potomac River via concrete flumes that drain the exterior berm of the Heavy Oil Tanks' containment. The size of each drainage area is 0.61, 0.56, 0.36, and 0.23 acres for Outfalls 078, 079, 080 and 094, respectively. All drainage areas are 100% pervious (vegetative slope) with no industrial activity. Since the drainage areas for the above listed outfalls do not include industrial activities, Dominion requests no storm water monitoring requirements be applied to Outfalls 078, 079, 080 & 094.

Outfall 086 (Discharge Point S86): This area collects drainage in ditches on both sides of the railroad and sheet flow from the following locations: the west side of the 230 kV Switchyard, all of the Measurement and Regulator (M&R) Station (measures natural gas flows), west of the light oil containment tanks, the "Old" Combustion Turbines' parking lot, and the Main Entrance and discharges to mouth of Quantico Creek. This area is approximately 34.6 acres and estimated 5 % impervious (road, parking lot) and 95% pervious (gravel, grass, vegetated slopes). Dominion believes the storm water collected at the Outfall 086 would be more representative of the runoff from the railroad than from the station's operations (please refer to enclosed site map). Since the monitoring would not be representative of storm water quality from station operations, Dominion requests storm water monitoring requirements not be applied to Outfall 086.

Outfall 095 (Discharge Point S95): The drainage area consists of multiple ditches and graded surfaces at the north end of the station and discharge to the Potomac River. The drainage area is approximately 2.6 acres, which is estimated to be 10% impervious (road, parking lot) and 90% pervious (gravel, grass, vegetated slopes). The main industrial activities associated with the area includes general refuse and scrap metal dumpsters.

Outfall 107 (Discharge Point S107): Collects storm water from the exterior berm associated with the Ash Pond D, which drains into two drop inlets and discharges to Quantico Creek. This outfall was also designed to collect uncontaminated groundwater infiltration from the Pond's berm for stabilization. This outfall was sampled to characterize the groundwater discharge. The area is approximately 14.4 acres and is estimated to be 100% pervious (grass, vegetative slopes). Since this Outfall's drainage area does not include industrial exposed materials or activities, Dominion requests the VPDES storm water monitoring requirements not be applied to Outfall 107.

In summary, Dominion is requesting Outfall 005 be representative of Outfall 031, Outfall 061 be representative of Outfalls 036 and 037, and Outfall 042 be representative of Outfalls 049 and 077. Due to the lack of storm water exposures and industrial activities in the drainage

areas, Dominion requests the following outfalls be identified as storm water conveyance with no storm water monitoring requirements: Outfalls 078, 079, 080, 094 and 107. Should you require additional information, please contact Rick Woolard at (804) 273-2991 and/or Jeff Marcell at (703) 609-3813.

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,

Cathy C. Taylor
Director, Electric Environmental Services

Enclosure

Dominion Resources Services, Inc.
5000 Dominion Boulevard, Glen Allen, VA 23060
Web Address: www.dom.com

Dominion®

BY U.S MAIL RETURN RECEIPT REQUESTED

VA DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN
JUN 12 2012
REGIONAL OFFICE
WOODBRIDGE, VA

June 11, 2012

Ms. Susan Mackert
DEQ-Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

RE: Dominion Possum Point Power Station
VPDES Permit No. VA0002071 Permit Reissuance Application Addendum #1

Dear Ms. Mackert:

Dominion is submitting this reissuance application addendum to request a change to Outfall 007. As discussed with you on May 30, 2012, Dominion is proposing to split the existing Outfall 007 into two separate outfalls. Outfall 007 currently discharges intake screen backwash water from Units 1-4. The outfall is located on the corner of the Units 1-2 intake structure. Backwash water from the Units 3-4 intake is currently delivered to the outfall by an above ground trough. The trough and associated access walkway have suffered storm damage. Dominion proposes to remove these structures and discharge the Units 3-4 screen backwash water at a new outfall located on the Unit 3-4 intake structure. The nature and total volume of the backwater water will not change.

The following revised application information is attached to assist your review:

1. EPA Form 2C page 1: Outfall 007 has been revised and Outfall 009 has been added.
2. Water Flow Balance Line Diagram: Outfall 009 has been added. The dashed line from the Seal Pit to Outfall 007 has been removed.
3. Discharge Outfalls Locations Aerial View: Outfall 009 has been added and Outfall 007 has been moved slightly to reflect accurate location.

If you have any questions or require additional information, please contact Oula Shehab-Dandan at (804) 273-2697 or via email at oula.k.shehab-dandan@dom.com.

I certify under penalty of law that this document and all information submitted 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 information, the information submitted is to the best of my knowledge, 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. I further certify that I am an authorized signatory as specified in the Ground Water Withdrawal Permit Regulation 9 VAC 25-610-10 et seq.

Sincerely,

Cathy C. Taylor

Cathy C. Taylor
Director, Electric Environmental Services

Attachments

Please type or print in the unshaded areas only

EPA ID Number *(Copy from Item 1 of Form 1)*
110000340774

Form Approved
OMB No. 2040-0086
Approval expires 3-31-98.

Form **2C** NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS
Consolidated Permits Program

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (*list*)	B. LATITIUDE			C. LONGITUDE			D. RECEIVING WATERS (*name*)
	1. Deg	2. Min	3. Sec	1. Deg	2. Min	3. Sec	
001	38	32	12	77	17	00	Quantico Creek
002	38	32	12	77	17	00	Quantico Creek
(201)	38	32	11	77	16	57	Internal discharge to Outfall 001/002
(202)	38	32	11	77	16	57	Internal discharge to Outfall 001/002
003	38	32	17	77	16	58	Quantico Creek
004	38	31	57	77	17	04	Mouth of Quantico Creek
005	38	32	10	77	12	36	Tributary to Quantico Creek
(501)	38	32	58	77	17	20	Internal discharge to Outfall 005
(502)	38	32	42	77	16	40	Internal discharge to Outfall 005
007	38	32	9	77	16	47	Potomac River
008	38	32	10	77	16	46	Potomac River
009	38	32	11	77	16	45	Potomac River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

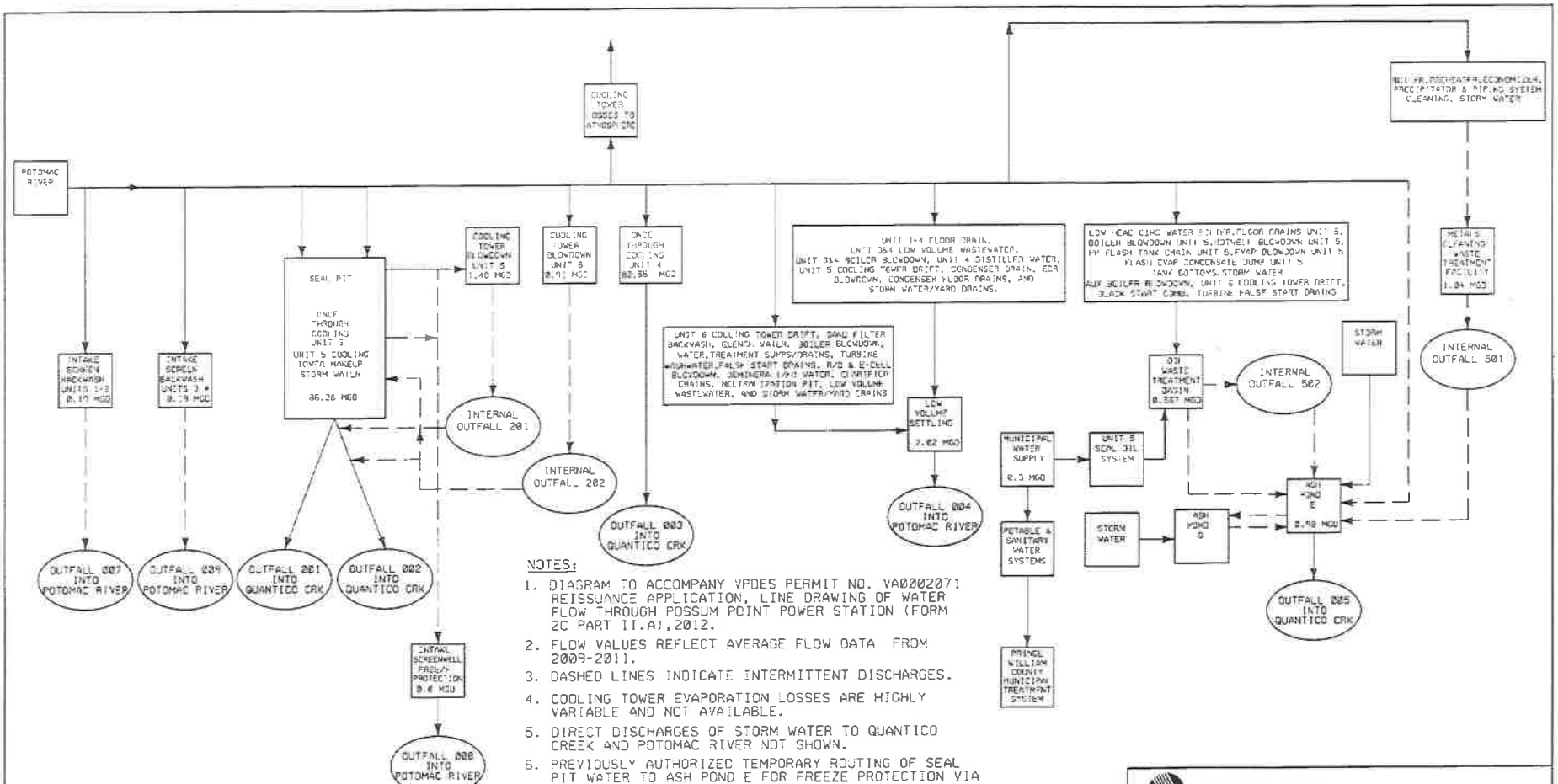
A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., *for certain mining activities*), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (*list*)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
001	**Condenser Cooling Water & Cooling Tower Blowdown** Sources: Unit 3 condenser Cooling Water, Outfall 201 (Unit 5 Blowdown), Outfall 202 (Unit 6 Blowdown), Storm Water	86.38 MGD	Mixing / Discharge to surface Water	1-O	4-A
002	**Condenser Cooling Water & Cooling Tower Blowdown** Sources: Unit 3 condenser Cooling Water, Outfall 201 (Unit 5 Blowdown), Outfall 202 (Unit 6 Blowdown)		Mixing / Discharge to surface Water	1-O	4-A
(201)	**Cooling Tower Blowdown** Source: Unit 5	1.48 MGD	Dechlorination/Sedimentation/ Mixing	2-E 1-O	1-U
(202)	**Cooling Tower Blowdown** Source: Unit 6	0.91 MGD	Dechlorination/Sedimentation/ Mixing	2-E 1-O	1-U
003	**Condenser Cooling Water** Source: Unit 4	82.55 MGD	Discharge to surface Water	4-A	–
004	**Low Volume Waste Settling Pond** Sources: Unit 5 Cooling Tower Drift, Yards Drains, Floor Drains, Unit 5 Circulating water, Units 1-4 Sand Filter Backwash, Filter Purge, Unit 6 Wash Water, EDR Backwash, Neutralization Sump, Storm Water	2.02 MGD	Sedimentation/ Flocculation/ Skimming/ Neutralization/ Chemical Precipitation/ Mixing/ Discharge to Surface Water	1-U X-X 2-C 4-A	1-G 2-K 1-O
005	**Ash Pond E** Source: Ash Pond D Discharge, Tank Bottoms, Storm Water, Potomac River Intake Water, Outfalls 501 and 502 discharges	0.98 MGD	Sedimentation/ Mixing/ Skimming/ Discharge to Surface Water	1-U 1-O	X-X 4-A
(501)	**Metals Cleaning Waste Treatment Basin** Source: Boiler Wash water, Air Preheater Rinse, Precipitator Rinse, Storm Water	1.04 MGD	Mixing/ Neutralization/ Chemical Precipitation/ Sedimentation/	1-O 2-C	2-K 1-U
(502)	**Oily Waste Treatment Basin** Source: Unit 5 wastewater from various operations, Oil Unloading and Handling System Wastewater, Tank Bottoms, Auxiliary Boiler blow down, Unit 6 Cooling Tower drift, False Start Drains, Storm Water	0.57 MGD	Mixing/ Sedimentation/ Skimming	1-O X-X	1-U
007	**Intake Screen Backwash Water** Source: Units 1-2 Cooling Water Intake Structures	0.19 MGD	Mixing / Discharge to surface Water	1-O	4-A
008	**Intake Screenwell Freeze Protection Water** Source: Non Contact Cooling Water	0.0 MGD	Mixing / Discharge to surface Water	1-O	4-A
009	**Intake Screen Backwash Water** Source: Units 3-4 Cooling Water Intake Structures	0.19MGD	Mixing / Discharge to surface Water	1-O	4-A

OFFICIAL USE ONLY (*effluent guidelines sub-categories*)

( )= internal outfall



NOTES:

1. DIAGRAM TO ACCOMPANY VPDES PERMIT NO. VA0002071 REISSUANCE APPLICATION, LINE DRAWING OF WATER FLOW THROUGH POSSUM POINT POWER STATION (FORM 2C PART II.A),2012.
2. FLOW VALUES REFLECT AVERAGE FLOW DATA FROM 2009-2011.
3. DASHED LINES INDICATE INTERMITTENT DISCHARGES.
4. COOLING TOWER EVAPORATION LOSSES ARE HIGHLY VARIABLE AND NOT AVAILABLE.
5. DIRECT DISCHARGES OF STORM WATER TO QUANTICO CREEK AND POTOMAC RIVER NOT SHOWN.
6. PREVIOUSLY AUTHORIZED TEMPORARY ROUTING OF SEAL PIT WATER TO ASH POND E FOR FREEZE PROTECTION VIA ASH SLUICE LINE NOT SHOWN.
7. PREVIOUSLY AUTHORIZED TEMPORARY ROUTING OF UNIT 5 LIFT STATION FLOW TO OILY WASTE POND TO LOW VOLUME SETTLING PONDS NOT SHOWN.

VIRGINIA POWER
NORTH CAROLINA POWER
FOSSIL & HYDRO ENGINEERING
RICHMOND, VIRGINIA

WATER FLOW BALANCE LINE DIAGRAM

POSSUM POINT POWER STATION

APPROVAL OF THE SUPT OF TECH SERVICES IS REQ'D PRIOR TO ISSUE OF THIS DWG

REV	DATE	DRWN	CHKD	APPD	ENGR
1	5/31/12	KTC	OD-D	RWM	
0	3/6/12	KTC	OD-D	RWM	— —

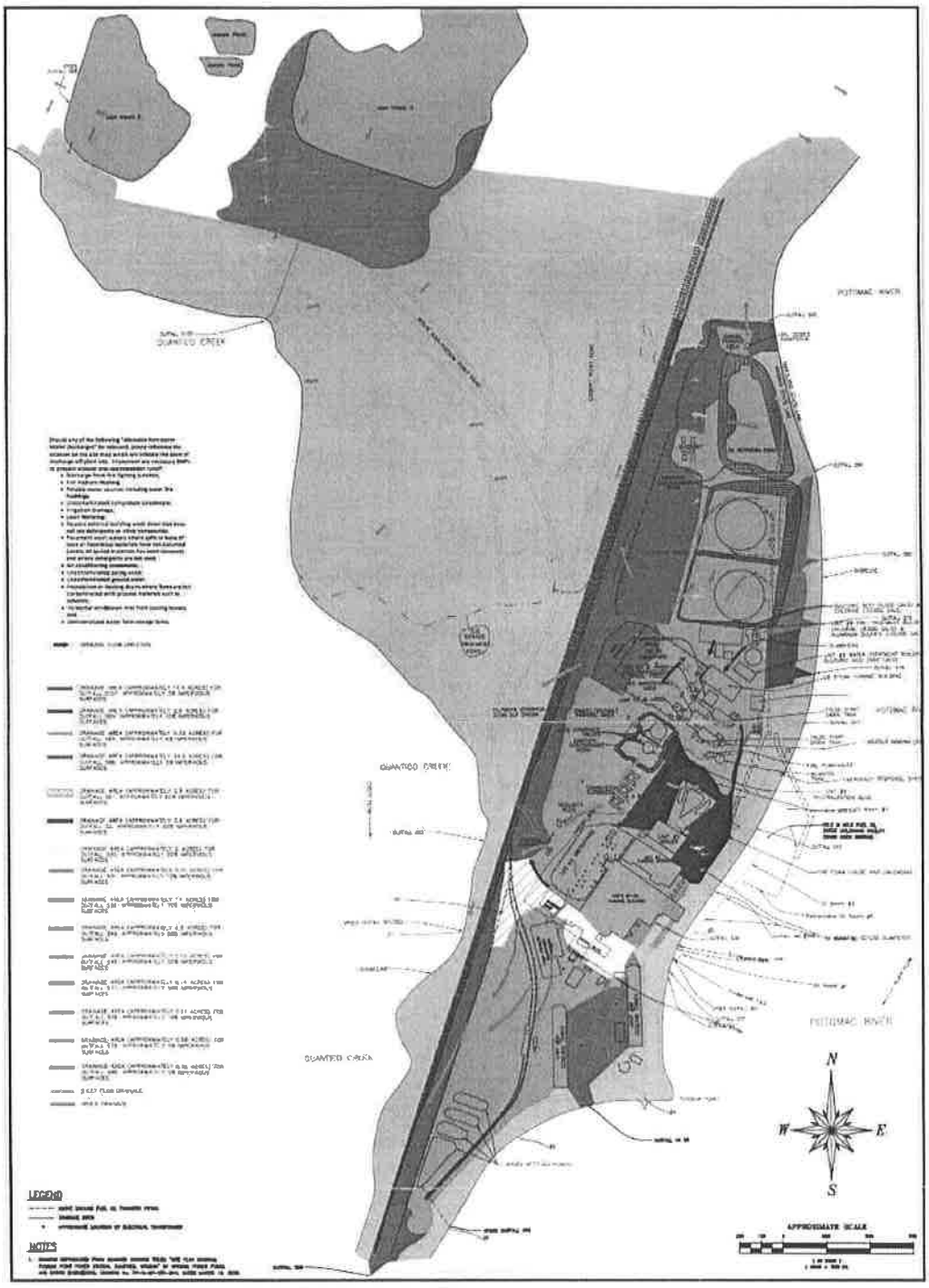
REVISED PER ENVIRONMENTAL REDLINE TO INCORPORATE STATION REVIEW.

ORIG. ISSUE FOR 600 SERIES ACAD CONVERSION. REV PER ENVIRONMENTAL REDLINE.

CAD FILE: DGNSPEC FOR FILE VERIFICATION DATE$$$$$$$

DRAWING NO. PP-0-SP-STA-600 REV. 1

8629

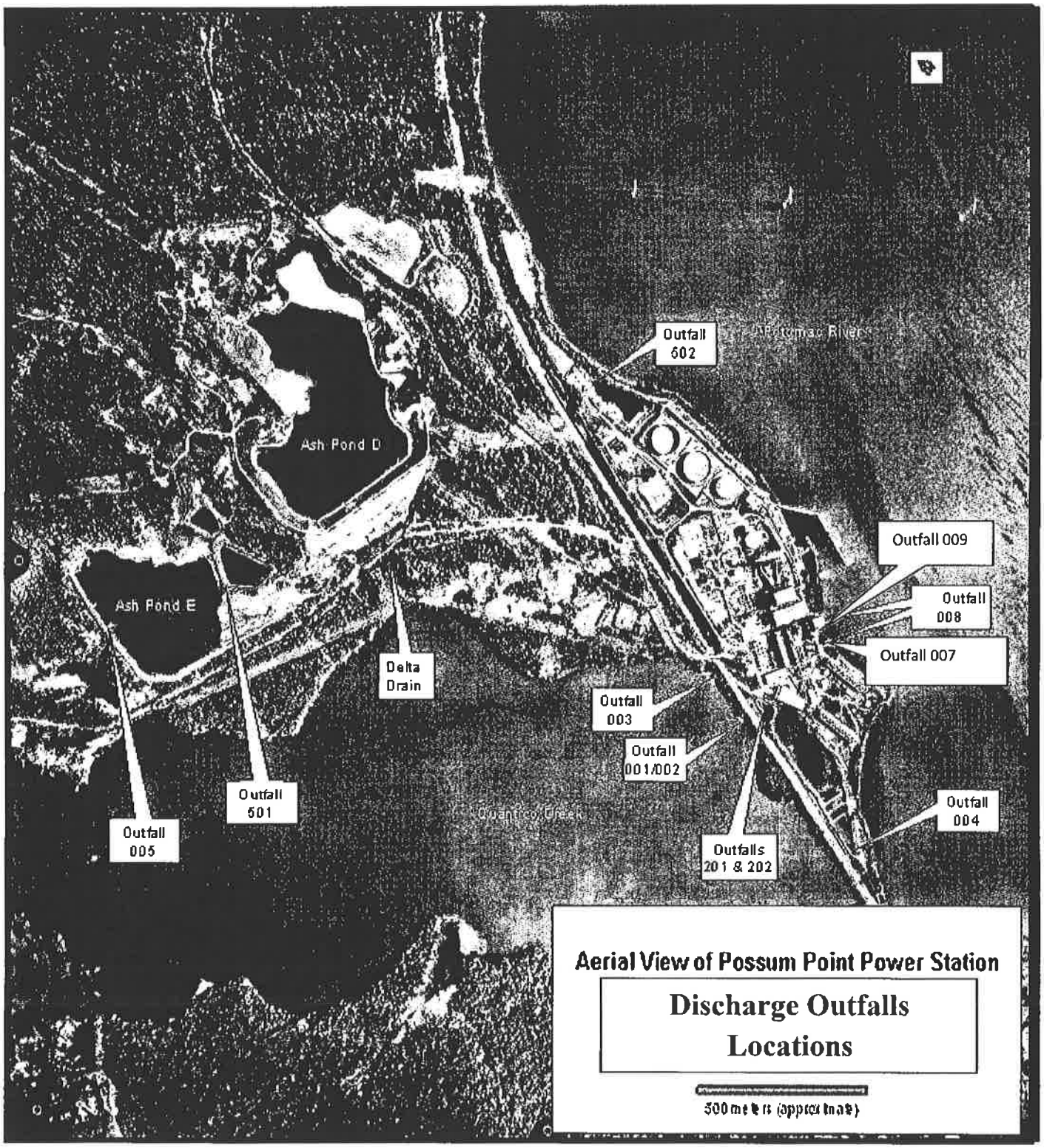


DOMINION ENERGY

SITE PLAN
DRAINAGE AREA
POSSUM POINT POWER STATION

0	ORIGINAL ISSUE CONVERTED TO 600 SERIES	DRAWING NUMBER PP-0-SP-STA-622	REV 0
		SCALE N/A	

8630


Outfall 602
Potomac River
Ash Pond D
Ash Pond E
Outfall 009
Outfall 008
Outfall 007
Delta Drain
Outfall 003
Outfall 001/002
Outfall 501
Outfall 005
Outfall 004
Outfalls 201 & 202
Aerial View of Possum Point Power Station
Discharge Outfalls Locations
500 meters (approximate)

Dominion Resources Services, Inc.
5000 Dominion Boulevard, Glen Allen, VA 23060
Web Address: www.dom.com

Dominion®

BY U.S. MAIL-RETURN RECEIPT REQUESTED

5. Phone rec'd

VA DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN
APR 10 2012
REGIONAL OFFICE
WOODBRIDGE, VA

April 5, 2012

Ms. Susan Mackert
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

RE: **Dominion Possum Point Power Station**
Application for Reissuance of VPDES Permit No. VA0002071

Dear Ms. Mackert:

I am pleased to submit our application for renewal of VPDES Permit No. VA0002071 for the Possum Point Power Station. The enclosed documents include completed application forms, maps, addendum, permit billing information, and public notice authorization.

This application was prepared based on current state requirements. The above referenced permit expires on October 23, 2012, and consequently, this application for reissuance must be filed by April 26, 2012.

As required by the Clean Water Act 316(b) regulations (40 CFR Part 125, Subpart J) and by Part I.E.12 of the 2007 VPDES permit, we submitted to the DEQ on October 13, 2008 the Impingement Mortality Characterization Study for Possum Point Power Station.

Also, we submitted the Thermal Mixing Zone Modeling Report for the Possum Point Power Station as required by Part I.E.9 on October 7, 2011. Results of the modeling indicate that the current mixing zone remains appropriate for station operations.

Should you have any questions and/or require additional information, please contact Oula Shehab-Dandan at 804-273-2697 or via email at oula.k.shehab-dandan@dom.com.

Sincerely,

Cathy C. Taylor

Cathy C. Taylor
Director, Electric Environmental Services

Attachment

Entered CEDS 4-11-12 SM

8632

Form 1

General Information

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

S		T/A	C
F	110000340774		D
1	2 13	14	15

LABEL ITEMS

- I. EPA I.D. NUMBER
- II. FACILITY NAME
- III. FACILITY MAILING ADDRESS
- IV. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; If any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI(except VI-B which must be completed regardless). Complete all items if no label has been proved. Refer to the instructions for detailed item descriptions and for the legal authorization under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental from listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

SPECIFIC QUESTIONS	MARK "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	MARK "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.?** (FORM 2A)	☐ 16	☒ 17	☐ 18	B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.?** (FORM 2B)	☐ 19	☒ 20	☐ 21
C. Is this facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	☒ 22	☐ 23	☒ 24	D. Is this proposal facility *(other than those described in A or B above)* which will result in a **discharge to waters of the U.S.?** (FORM 2D)	☐ 25	☒ 26	☐ 27
E. Does or will this facility treat, store, or dispose of **hazardous wastes?** (FORM 3) (See addendum to Form 1 and Form 2C)	☒ 28	☐ 29	☐ 30	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)	☐ 31	☒ 32	☐ 33
G. Do you or will you inject at this facility any produced water other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	☐ 34	☒ 35	☐ 36	H. Do you or will you inject at this facility fluids for **special processes** such as mining of sulfer by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	☐ 37	☒ 38	☐ 39
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area?** (FORM 5)	☐ 40	☒ 41	☐ 42	J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment are?** (FORM 5)	☐ 43	☒ 44	☐ 45

III. NAME OF FACILITY

C 1 | SKIP | Possum Point Power Station

15 | 16-29 | 30 ... 69

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*		
C 2 Cathy C Taylor	804	273	2929
15 16 ... 45	46 48	49 51	52 55

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

C 3 5000 Dominion Boulevard

15 16 ... 45

B. CITY OR TOWN	C. STATE	D. ZIP CODE
C 4 Glen Allen	VA	23060
15 16 ... 40	41 42	47 51

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

C 5 19000 Possum Point Road

15 16 ... 45

B. COUNTY NAME

Prince William County

46 ... 70

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE
C 6 Dumfries	VA	22026	
15 16 ... 40	41 42	47 51	52 54

CONTINUED ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST		B. SECOND	
4911	*(specify)* Electric Services	--	*(specify)* --
C. THIRD		**D. FOURTH**	
--	*(specify)* --	--	*(specify)* --

VIII. OPERATOR INFORMATION

A. NAME: Virginia Electric & Power Co.

B. Is the name listed in Item VIII-A also the owner? ☒ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box; if "Other," specify.)*

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC (other than federal or state)
O = OTHER (specify)

P *(specify)* --

D. PHONE *(area code & no.)*: A 804 273 2929

E. STREET OR PO BOX: 5000 Dominion Boulevard

F. CITY OR TOWN	G. STATE	H. ZIP CODE
Glen Allen	VA	23060

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☒ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	VA0002071	D. PSD *(Air Emissions from Proposed Sources)*	Title V --NRO70225
B. UIC (Underground Injection of Fluids	---	E. OTHER *(specify)*	*(Specify)* --
C. RCRA (Hazardous Wastes)	VAD000620476	E. OTHER *(specify)*	*(Specify)* --

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS *(provide a brief description)*

Possum Point is an existing gas and oil fired steam electric generating station. The majority of the facility is located in Prince William County near the town of Dumfries. The principal water discharges enter Quantico Creek. An oil unloading dock and two cooling intake structures originate from the Virginia shoreline of the Potomac River and extend into the Maryland waters of the Potomac River.

XIII. CERTIFICATION *(see instructions)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
C. D. Holley, VP Fossil & Hydro System Operations	C D Holley	04/05/2012

COMMENTS FOR OFFICIAL USE ONLY

C

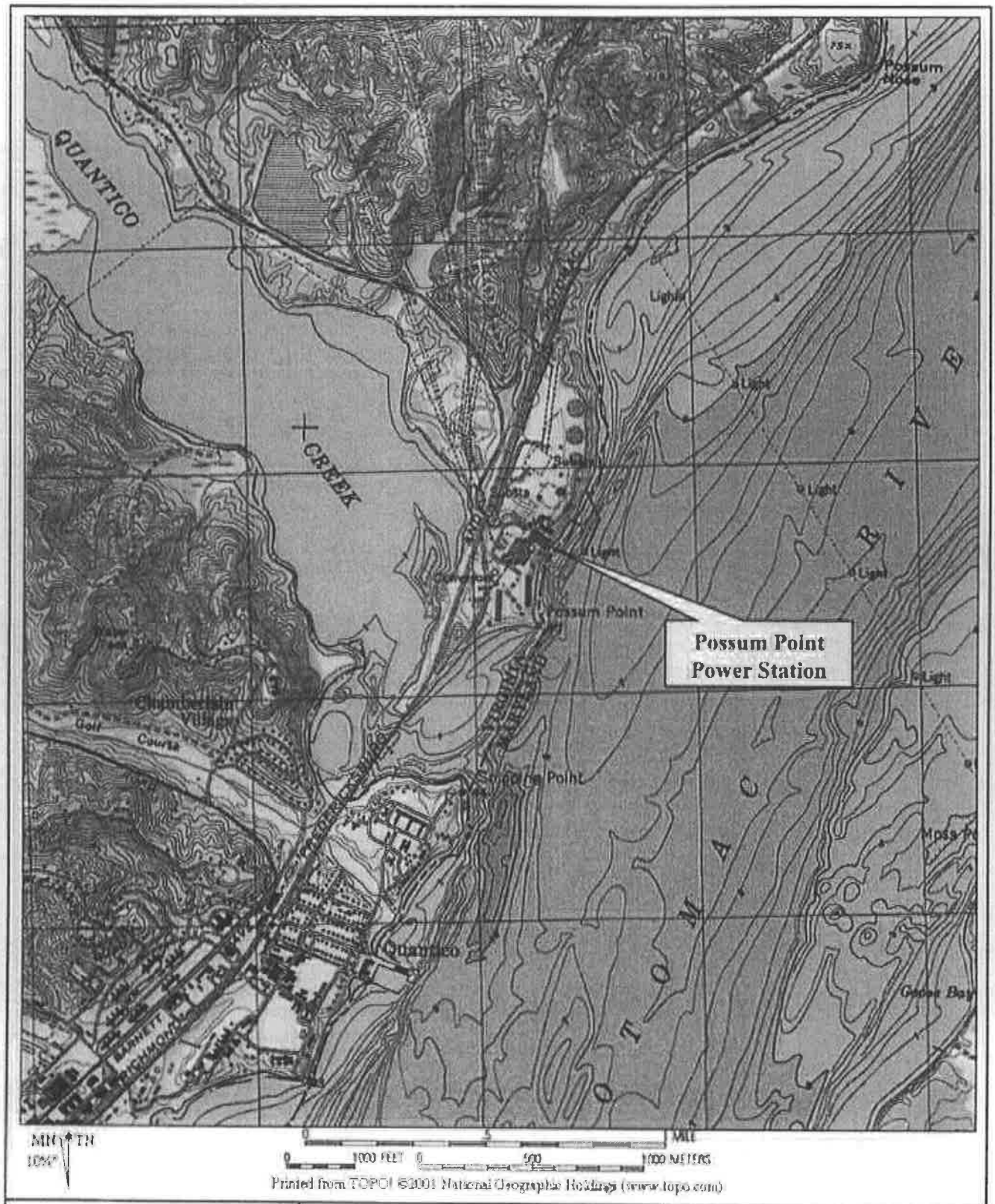
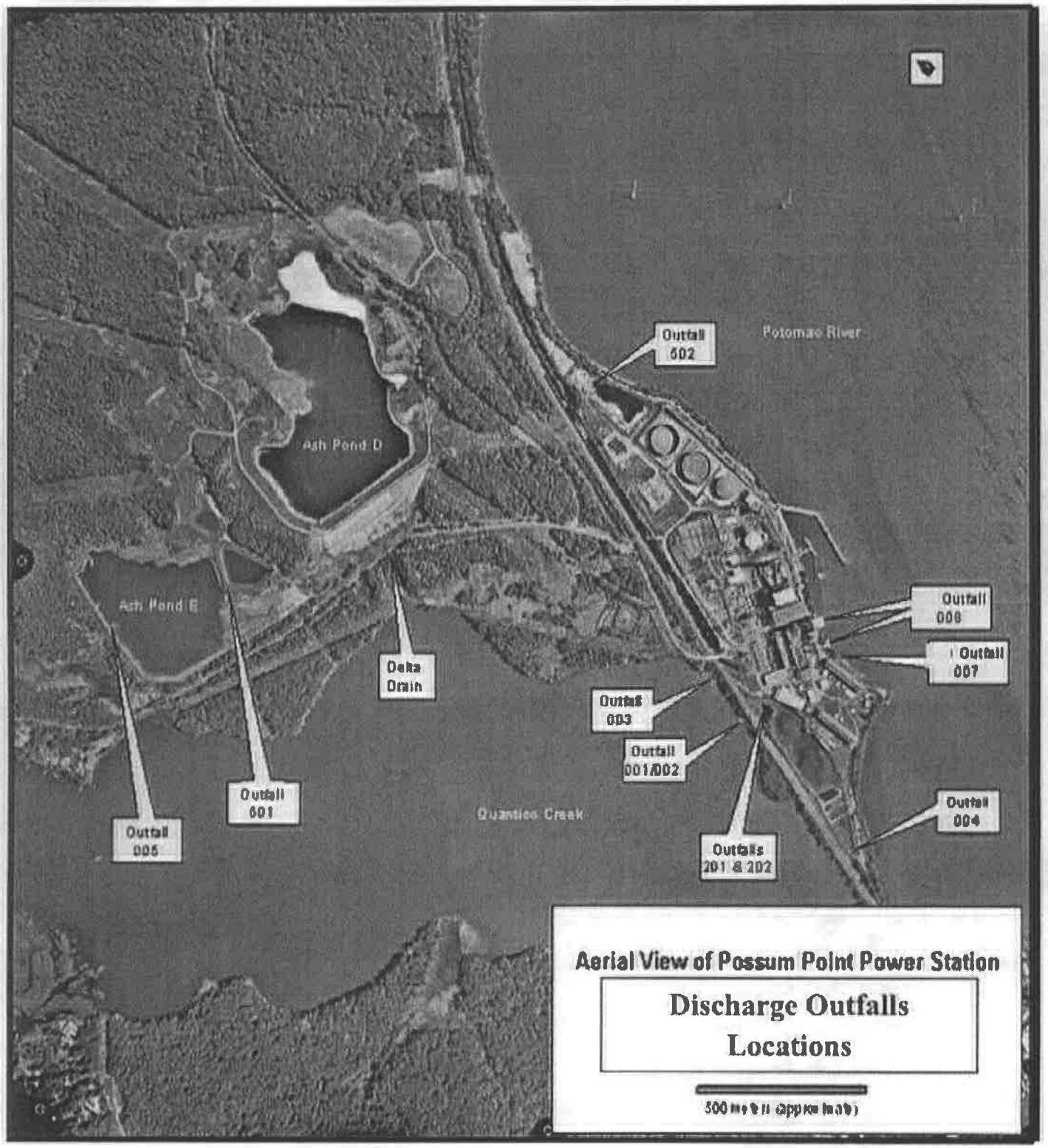


Figure 1
Site Location Map

Dominion Generation
Possum Point Power Station
Dumfries, Virginia

CREEK
QUANTICO
CREEK
RIVER
EDUCATION COMMAND
Quantico
Property Map
Possum Point Power Station
Excerpt from Quantico, VA - MD
USGS 7.5 minute quadrangle map
1 kilometer (approximate)


Potomac River
Outfall 002
Ash Pond D
Ash Pond E
Delta Drain
Outfall 006
Outfall 007
Outfall 003
Outfall 001/002
Outfall 001
Outfall 005
Quantico Creek
Outfall 004
Outfalls 201 & 202
Aerial View of Possum Point Power Station
Discharge Outfalls Locations

Form 2C

Application for Permit to Discharge Wastewater for Existing Manufacturing, Commercial Mining, and Silvicultural Operations

Please type or print in the unshaded areas only

EPA ID Number *(Copy from Item 1 of Form 1)*
110000340774

Form Approved
OMB No. 2040-0086
Approval expires 3-31-98.

Form **2C** NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS
Consolidated Permits Program

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER	B. LATITIUDE			C. LONGITUDE			D. RECEIVING WATERS (*name*)
(*list*)	1. Deg	2. Min	3. Sec	1. Deg	2. Min	3. Sec	
001	38	32	12	77	17	00	Quantico Creek
002	38	32	12	77	17	00	Quantico Creek
(201)	38	32	11	77	16	57	Internal discharge to Outfall 001/002
(202)	38	32	11	77	16	57	Internal discharge to Outfall 001/002
003	38	32	17	77	16	58	Quantico Creek
004	38	31	57	77	17	04	Mouth of Quantico Creek
005	38	32	10	77	12	36	Tributary to Quantico Creek
(501)	38	32	58	77	17	20	Internal discharge to Outfall 005
(502)	38	32	42	77	16	40	Internal discharge to Outfall 005
007	38	32	9	77	16	47	Potomac River
008	38	32	10	77	16	46	Potomac River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., *for certain mining activities*), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (*list*)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
001	**Condenser Cooling Water & Cooling Tower Blowdown** Sources: Unit 3 condenser Cooling Water, Outfall 201 (Unit 5 Blowdown), Outfall 202 (Unit 6 Blowdown), Storm Water	86.38 MGD	Mixing / Discharge to surface Water	1-O	4-A
002	**Condenser Cooling Water & Cooling Tower Blowdown** Sources: Unit 3 condenser Cooling Water, Outfall 201 (Unit 5 Blowdown), Outfall 202 (Unit 6 Blowdown)		Mixing / Discharge to surface Water	1-O	4-A
(201)	**Cooling Tower Blowdown** Source: Unit 5	1.48 MGD	Dechlorination/Sedimentation/ Mixing	2-E 1-O	1-U
(202)	**Cooling Tower Blowdown** Source: Unit 6	0.91 MGD	Dechlorination/Sedimentation/ Mixing	2-E 1-O	1-U
003	**Condenser Cooling Water** Source: Unit 4	82.55 MGD	Discharge to surface Water	4-A	--
004	**Low Volume Waste Settling Pond** Sources: Unit 5 Cooling Tower Drift, Yards Drains, Floor Drains, Unit 5 Circulating water, Units 1-4 Sand Filter Backwash, Filter Purge, Unit 6 Wash Water, EDR Backwash, Neutralization Sump, Storm Water	2.02 MGD	Sedimentation/ Flocculation/ Skimming/ Neutralization/ Chemical Precipitation/ Mixing/ Discharge to Surface Water	1-U X-X 2-C 4-A	1-G 2-K 1-O
005	**Ash Pond E** Source: Ash Pond D Discharge, Tank Bottoms, Storm Water, Potomac River Intake Water, Outfalls 501 and 502 discharges	0.98 MGD	Sedimentation/ Mixing/ Skimming/ Discharge to Surface Water	1-U 1-O	X-X 4-A
(501)	**Metals Cleaning Waste Treatment Basin** Source: Boiler Wash water, Air Preheater Rinse, Precipitator Rinse, Storm Water	1.04 MGD	Mixing/ Neutralization/ Chemical Precipitation/ Sedimentation/	1-O 2-C	2-K 1-U
(502)	**Oily Waste Treatment Basin** Source: Unit 5 wastewater from various operations, Oil Unloading and Handling System Wastewater, Tank Bottoms, Auxiliary Boiler blow down, Unit 6 Cooling Tower drift, False Start Drains, Storm Water	0.57 MGD	Mixing/ Sedimentation/ Skimming	1-O X-X	1-U
007	**Intake Screen Backwash Water** Source: Units 1-4 Cooling Water Intake Structures	0.37MGD	Mixing / Discharge to surface Water	1-O	4-A
008	**Intake Screenwell Freeze Protection Water** Source: Non Contact Cooling Water	0.0 MGD	Mixing / Discharge to surface Water	1-O	4-A

OFFICIAL USE ONLY (*effluent guidelines sub-categories*)

( )= internal outfall

8640

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ YES (*complete the following table*) ☐ NO (*go to Section III*)

1. OUTFALL NUMBER (*list*)	2. OPERATION(s) CONTRIBUTING FLOW (*list*)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (*specify average*)	b. MONTHS PER YEAR (*specify average*)	a. FLOW RATE (*in mgd*)		B. TOTAL VOLUME (*specify with units*)		C. DURATION (*in days*)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
201	Cooling Tower Blowdown (Intermittent based on Unit 5 operation)	2	2	1.48	5.8	1.48	5.8	<7
501	Metals Cleaning Waste Treatment Basin (Batch operation)	1	1	1.04	1.2	1.04	1.2	<5
502	Oily Waste Treatment Basin (Batch operation)	1	1	0.57	0.57	0.57	0.57	<3
008	Intake Screenwell Freeze Protection Water* (Seasonal)	--*	--	0.0	0.0	0.0	0.0	-
		*No Discharge in 2009-2011				Unit=(million gallons)	Unit=(million gallons	

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ YES (*complete Item III-B*) ☐ NO (*go to Section IV*)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (*or other measure of operation*)?

☐ YES (*complete Item III-C*) ☐ NO (*go to Section IV*)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (*list outfall numbers*)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (*specify*)	
---	---	---	---

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ YES (*complete the following table*) ☐ NO (*go to Item IV-B*)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED
---	---	---	---	---	---

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (*or other environmental projects which may affect your discharges*) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

 CONTINUE ON NEXT PAGE

CONTINUED FROM PAGE 2

EPA ID Number *(copy from Item 1 of Form 1)*
110000340774

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
See Addendum to Form 2C			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (*list all such pollutants below*) ☐ NO (*go to Item VI-B*)

See addendum to Form 2C for additional information concerning chemical usage at Possum Point Power Station

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES (*identify the test(s) and describe their purposes below*) ☐ NO (*go to Section VIII*)

The biological toxicity testing has been performed in accordance with the current VPDES permit. These results have been previously submitted to the DEQ and are available upon request.

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☐ YES (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☐ NO (*go to Section IX*)

A. NAME	B. ADDRESS	C. TELEPHONE (*area code & no.*)	D. POLLUTANTS ANALYZED (*list*)
Coastal Bioanalysts, Inc.	6400 Enterprise Court, Gloucester, VA 23061	(804) 694-8285	Whole Effluent Toxicity
Pace Analytical Services Inc.	1638 Roseytown Road Greensburg, PA 15601	(724) 850-5600	Gross Alpha, Gross Beta, Radium-226, Radium 228, Strontium 90,Tritium
Primary Laboratories, Inc.	7423 Lee Davis Road Mechanicsville, VA 23111	(804) 559-9004	BOD, Pesticides, Herbicides, Cyanide, Hydrogen Sulfide, Chromium, Bromide, Color, MBAS

IX. CERTIFICATION

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.

A. NAME & OFFICIAL TITLE (*type or print*)	B. PHONE NO. (*area code & no.*)
C. D. Holley VP Fossil & Hydro System Operations	(804) 273-3592
C. SIGNATURE C D Holley	D. DATE SIGNED 04/05/2012

8643

Addendum to Form 1 and Form 2C

POSSUM POINT POWER STATION
ADDENDUM to Form 1 and Form 2C
2012 VPDES PERMIT RENEWAL APPLICATION

Form 1, Part II.E

The Possum Point Power Station ("Station") may temporarily store hazardous wastes for short periods in an accumulation area located inside the warehouse. However, hazardous wastes, if any, are stored in exempt quantities and/or will not be stored on site for more than 90 days. The normal generator status for the Station is conditionally exempt, small quantity generator.

Form 1, Part VIII

Possum Point Power Station is owned by Virginia Electric and Power Company and operated by Dominion Generation. The parent company of Virginia Electric and Power Company is Dominion Resources, Inc.

Form 1, Part X

All Virginia air pollution related permits are issued under Registration No. 70225. The Station holds Title V and PSD permits. From time to time, the Station holds various federal, state, and local environmental permits for short-term or minor activities. Examples of short-term or minor permits include wetland permits, land disturbing permits, building permits, burn permits, and dredge permits. The Station currently holds several permits for specific activities related to intake dredging. These permits can be provided upon request.

Form 1, Part XI

The attached topographic map, entitled *Property Map*, shows the entire Station property. The property boundary is shown on the north perimeter of the Station and continues along the water's edge along Quantico Creek and the Potomac River. The Station does not have underground injection wells, drinking water wells, or hazardous waste management facilities, except a temporary accumulation area located inside the warehouse. To supplement the property map, an aerial photograph is attached showing the outfall locations.

Form 1, Part XIII

C. Doug Holley, Vice President, is the signatory for the application. However, please contact either Oula Shehab-Dandan at 804-273-2697 or Jeff Marcell at 703-441-3813 if questions arise or additional information is needed.

Form 2C, Part II.A

A Water Flow Balance Line Diagram illustrating water flow at the Station does not depict water input from precipitation or provide values for steam or evaporative losses or municipal water flow.

The values provided on the line diagram are either long-term average flows determined from actual monitoring data or estimates of average flows based upon equipment capacities and normal operating schedules. The line diagram reflects flow pathways as of March 2012.

Form 2C, Part II.B

Historically, Outfall 001 was the non-contact condenser cooling water discharge from Units 1 and 2. The Units 1 and 2 intake structure withdraws water from the Potomac River using three circulating water pumps. Historically, the water was used as condenser cooling water for Units 1, 2, and 3, and heated water was routed to the seal basin for discharge via Outfalls 001 and 002. The water in the seal basin discharges to Quantico Creek via Outfall 001 (southern pipe) and Outfall 002 (northern pipe). With the retirement of Units 1 and 2, only Unit 3 contributes cooling water to the seal basin. One intake pump is operated to maintain water level in the seal basin to support the withdrawal of makeup water from the seal basin for the Unit 5 cooling tower. Water for Unit 6 operations (cooling tower blowdown makeup, quench water, process water, etc.) is taken from circulating water withdrawn by the Units 1 and 2 intake pumps. There is no qualitative difference between the two cooling water discharges upon exiting the seal basin. For this reason, we refer to the discharge as Outfall 001/002 and perform sampling for the discharge in the seal basin. The average flow value reported in this application reflects the combined flows of the intake pumps minus the flow directed to Unit 6.

Outfall 201 is an internal discharge that consists of the intermittent Unit 5 cooling tower blowdown. The actual discharge point is inaccessible and is physically located downstream of the seal basin in the northern pipe of the Outfall 001/002 discharge. Makeup for the blowdown is the seal basin water and the circulating water flow from the Units 1 and 2 intake pumps. The Units 1 and 2 intake pumps must be operated to maintain sufficient seal basin water level and head pressure. VPDES samples for cooling tower blowdown are collected in the cooling tower basin prior to discharge.

Outfall 202 is an internal discharge that consists of the intermittent Unit 6 cooling tower blowdown. The actual discharge point is inaccessible and is physically located downstream of the seal basin in the northern pipe of the Outfall 001/002 discharge. Makeup for the blowdown is taken from the Unit 6 blowdown, which originates from the Units 1 and 2 intake structure. VPDES samples for cooling tower blowdown are collected from a specially installed sample tap immediately prior to discharge in the northern pipe of the Outfall 001/002 discharge.

Outfall 003 is the non-contact condenser cooling water discharge from Unit 4. This outfall is constructed in a manner that allows sampling at the end of the pipe.

Outfall 004 receives low volume waste streams from the Station, including wastewater contributions from Unit 6. The low volume waste pond complex currently has a design size and volume of 1.42 acres and 3.1 million gallons, respectively. The outfall structure is manually controlled and the pond system has a retention time in excess of 24 hours. Unit 6 contributes a dechlorinated wastewater flow to the low volume waste system. Chlorine monitoring data collected from the pond system show no detected chlorine in the Outfall 004 effluent. Unit 6 also contributes heated wastewater to the low volume waste system. Outfall 004 discharges into Quantico Creek within the thermal mixing zone for the Station. Based upon temperature data collected, there have been no exceedances of the 3 degrees C delta standard in Quantico Creek or the state water quality standard for temperature.

Outfall 005 is the Station's active ash pond and has a design size and volume of 40 acres and 260 million gallons, respectively. The pond was partially dredged in 2002 and the spoil was placed in Ash Pond D. The pond has a manually controlled discharge structure and a retention time in excess of 24 hours.

Outfall 501 is an internal discharge that receives metals cleaning wastewater. This system receives wastewater from metals cleaning operations of various systems, including boilers, air preheaters, electrostatic precipitators, economizers and heat exchangers, and piping systems. The cleaning agents include citric acid, EDTA, and water. The system is batch operated and has a retention time in excess of 24 hours.

Outfall 502 is the Oily Waste Treatment Basin and is an internal discharge that receives wastewater with variable amounts of oil residues from Unit 5, the oil unloading and handling system, and other systems. Outfall 502 also receives storm water runoff and low volume wastewater from Unit 5.

Outfall 007 consists of intake screen backwash. The source water for the intake screen backwash is intake water from the Potomac River that does not contact any process equipment. The backwash discharges to the Potomac River via the fish return line. This discharge results in no net increase of pollutants to the receiving stream (Potomac River).

Outfall 008 consists of discharge from the intake freeze protection system. The source water for the freeze protection system is derived from non-contact condenser cooling water. Outfall 008 is seasonal and only discharges during freezing/icy weather conditions in the winter. This discharge also results in no net increase of pollutants to the receiving stream (Potomac River).

Form 2C, Part II.C

Outfall 201 discharges when Unit 5 operates. On average, Unit 5 operates two days per week for approximately two months during the year.

Outfall 501 is a manual batch operation and typically operates about one day per week for approximately one month during the year.

Outfall 502 is also a manual batch operation. The discharge frequency for Outfall 502 is based primarily on Unit 5 operating demand and storm water runoff into the Oily Waste Treatment Basin. On average, Outfall 502 operates one day per week for approximately one month during the year.

Outfall 008 is a seasonal discharge. Outfall 008 only discharges in the winter when freeze protection is necessary due to icy weather conditions. Therefore, the discharge from Outfall 008 is highly variable. On average, Outfall 008 discharges seven days per week for approximately two months during the year. However during 2009-2011 there was no discharge from this outfall.

Form 2C, Part IV.A

Possum Point Power Station is not required by any federal, state, or local authority to meet any final implementation schedule for the construction, upgrading, or operation of wastewater treatment equipment or practices or any other programs which may affect the discharges described in this application. However, Possum Point Power Station has previously

implemented voluntary improvements and continues to eliminate various sources of oil entering the Oily Waste Treatment Basin.

Form 2C, Part IV.B

In accordance with Part I A.10, A.11, and A.12 of the existing VPDES permit (Permit No. VA0002071), the Station monitors groundwater at specified observation wells associated with Ash Ponds D and E and the Oily Waste Treatment Basin. The existing VPDES permit requires annual groundwater monitoring at each of the specified observation wells associated with Ash Ponds D and E and the Oily Waste Treatment Basin.

Form 2C, Parts V.A, B, & C

The values are based on Discharge Monitoring Report (DMR) data collected over the past three years (2009-2011), and special samples collected on September 14 and October 6, 2011. The monitoring data for all current internal and external discharges reported on DMRs are summarized and reported in Part V of Form 2C. In addition, Dominion collected grab samples of the discharge from Outfalls 001/002, 003, 004, and 005 and analyzed the samples in accordance with the sampling plan and waiver request submitted on June 13, 2011 and approved by DEQ on July 27, 2011. Please note that Outfall 008 did not discharge during the permit term, therefore, no Form 2C Part V was included in this permit application

Form 2C, Part V.D

Numerous chemicals are used in minor and bulk amounts at Possum Point Power Station. A list of the bulk chemicals and their location is included in Section 4 of the attached Storm Water Pollution Prevention Plan. The amount of chemicals used per year is variable, so the amounts provided on the bulk chemical list are estimates. Certain chemicals have multiple uses and the stated purpose, treatment function, and outfall association is not preclusive of other purposes, functions, or association with specific outfalls. Upon request, Material Safety Data Sheets can be provided for all the chemicals on the list.

Form 2C, Part VII

A summary of the biological toxicity test data for the past four years (2007-2011) may be provided upon request.

In accordance with Sections C.1 and C.2 of our existing VPDES permit, the Station is currently conducting the following tests:

1) Annual acute and chronic toxicity testing on Outfall 001/002;
2) Annual acute and chronic toxicity testing on Outfall 003; and
3) Annual acute and chronic toxicity testing on Outfalls 004 and 005.

Form 2C, Part IX

C. Doug Holley, Vice President, is the signatory for the application. However, please contact either Oula Shehab-Dandan at 804-273-2697 or Jeff Marcell at 703-441-3813 if questions arise or additional information is needed.

Additional Information

In accordance with Section E.11 of the existing VPDES permit, Ash Pond D is approved as the Station's repository for dredge spoil, and we wish to continue this practice in the future. Section E.11.a currently allows us to use Ash Pond D as a repository for dredge spoil material and residuals removed from facilities, areas, and systems related to operation and maintenance of Possum Point Power Station. In addition, Section E.11.b allows the Station to use Ash Pond D as a repository for dredge spoil material that is not related to operations at Possum Point Power Station provided the material originated from the Potomac River Basin meeting the definition of state waters in Virginia. We request the flexibility to continue placement of dredge spoil material in Ash Pond D on an as-needed basis and, therefore, request no changes to Section E.11 of the existing VPDES permit.

BULK CHEMICAL LIST FOR 2012 POSSUM POINT VPDES PERMIT RENEWAL APPLICATION

Commercial or Generic Name of Chemical	Approx. Usage/Yr	Purpose and Treatment	Associated Outfall
Sulfuric acid	~ 150 tons	pH control in flash evaporator brine, cooling towers, demineralizer plant, and neutralization pit	001/002, 004, 005, 201, 202, 502
Betz KlarAid PC 1192	~ 19 tons	Coagulent	004, 501
Carbohydrazide, (Betz CorTrol OS 5607)	~ 27 tons	pH control, oxygen scavenger, metal passivator	004, 005, 502
Neutralizing amines compounds (ammonia hydroxide, cyclohexylamine, Morpholine soln.)	~ 15 tons	pH control in boiler feedwater cycle, HRSG	004, 005, 502
Soda ash	~ 5 tons	pH control - various station systems, acid neutralization	001/002, 004, 005, 201, 202, 502
Hydrated calcium lime	~ 63 tons	Acid neutralization in metals treatment pond & coal pile	004, 005, 501
Detergents/cleaning agents, phosphate free or citrus based.	~ 3 tons	General cleaning of various station equipment	all
Silicon emulsion, 10% dimethyl silicone, food grade	~ 1 ton	Antifoam agent for closed circulation cooling towers	001/002, 201, 202
Trisodium phosphate	~2 tons	Boiler pH control, water hardness reducer	004, 005, 502
Sodium hydroxide (caustic)	~ 5 tons	Boiler and neutralization pit pH control, RO cleaner	004, 005, 502
Tetrasodium EDTA	NA***	RO cleaning	004
Tetraammonium EDTA	~10-40 tons*	Boiler chemical cleaning*	501**
Sodium nitrite	~1-5 tons*	Boiler chemical cleaning*	501**
Cronox 240 Inhibitor	~200-500 lbs.*	Boiler chemical cleaning*	501**
Citric Acid	~10-40 tons*	Boiler chemical cleaning* RO Cleaning	004, 501**
Sodium hypochlorite	~360 tons	Water treatment, cooling tower antifoulant	004, 201, 202
Aluminum sulfate	~430 tons	Water treatment coagulant	004
Phosphates (di, tri, tripoly)	~2 tons	pH adjustment. water treatment	004, 005, 502
Sodium bisulfite	~57 tons	Dechlorination	001/002, 004, 201, 202
Ammonia hydroxide	~73 tons	NOX control in SCR system, water treatment/RO chem.	004, 005

Commercial or Generic Name of Chemical	Approx. Usage/Yr	Purpose and Treatment	Associated Outfall
Phosphonates and polyacrylate polymers	NA***	Scale inhibitor & dispersant in water treatment system	004
Sodium dodecylbenzene sulfonate	NA***	RO cleaning	004
Sodium hydrosulfite	NA***	RO cleaning	004
Sodium dodecylsulfate	~25 lbs	RO cleaning	004
Hydrochloric Acid	~1.5 tons	E Cell cleaning agent, EDR, RO cleaning agent	004
Salt/brine	~7 tons	E Cell/RO cleaning agent, EDR	004
Depositrol PY5201	N/A***	Cooling tower treatment	001/002, 202
Spectrus BD1500	N/A***	Cooling tower treatment	001/002, 202
Polyfloc AE1115	~24 tons	Water treatment flocculant	001/002, 004, 202
Polyfloc AE1128P	N/A***	Water treatment flocculant	001/002, 004, 202
Polyfloc AE1117	N/A***	Water treatment flocculant	001/002, 004, 202
Nalclear 7768	N/A***	Water treatment flocculant	004
Klaraid CDP1336, CDP1346	N/A***	Water treatment coagulant	001/002, 004, 202
Hypersperse MDC700	~1 ton	Water treatment/RO chem.	004
Conntect 6000	~0.6 ton	HRSG, turbine chemical	004
Propylene glycol	~2.5 tons	Freeze protection	004
Hydrogen peroxide	N/A***	Cleaning agent	001/002, 202
Kleen MCT411	~0.5 ton	RO Cleaning agent	004
Kleen MCT511	~0.5 ton	RO Cleaning agent	004
Kleen MCT103	~0.5 ton	RO Cleaning agent	004
Kleen MCT882	~0.5 ton	RO Cleaning agent	004
Biomate MBC2881	~1200 lbs	RO Cleaning agent	004
RoClean P303	~0.5 ton	RO Cleaning agent	004
RoClean P111	~0.5 ton	RO Cleaning agent	004
Spectrus OX103 (oxidizer)	~8 tons	Cooling tower circulating water treatment	201

* Boilers are cleaned approx. every 3-5 years. Therefore, for most years the usage/year is 0.

** EDTA boiler cleaning wastewater is sent off-site for treatment and disposal. Trace amounts may be present in discharge. Citric Acid boiler cleaning wash water (non-hazardous) may be sent to Metals Pond Treatment Facility (Outfall 501)

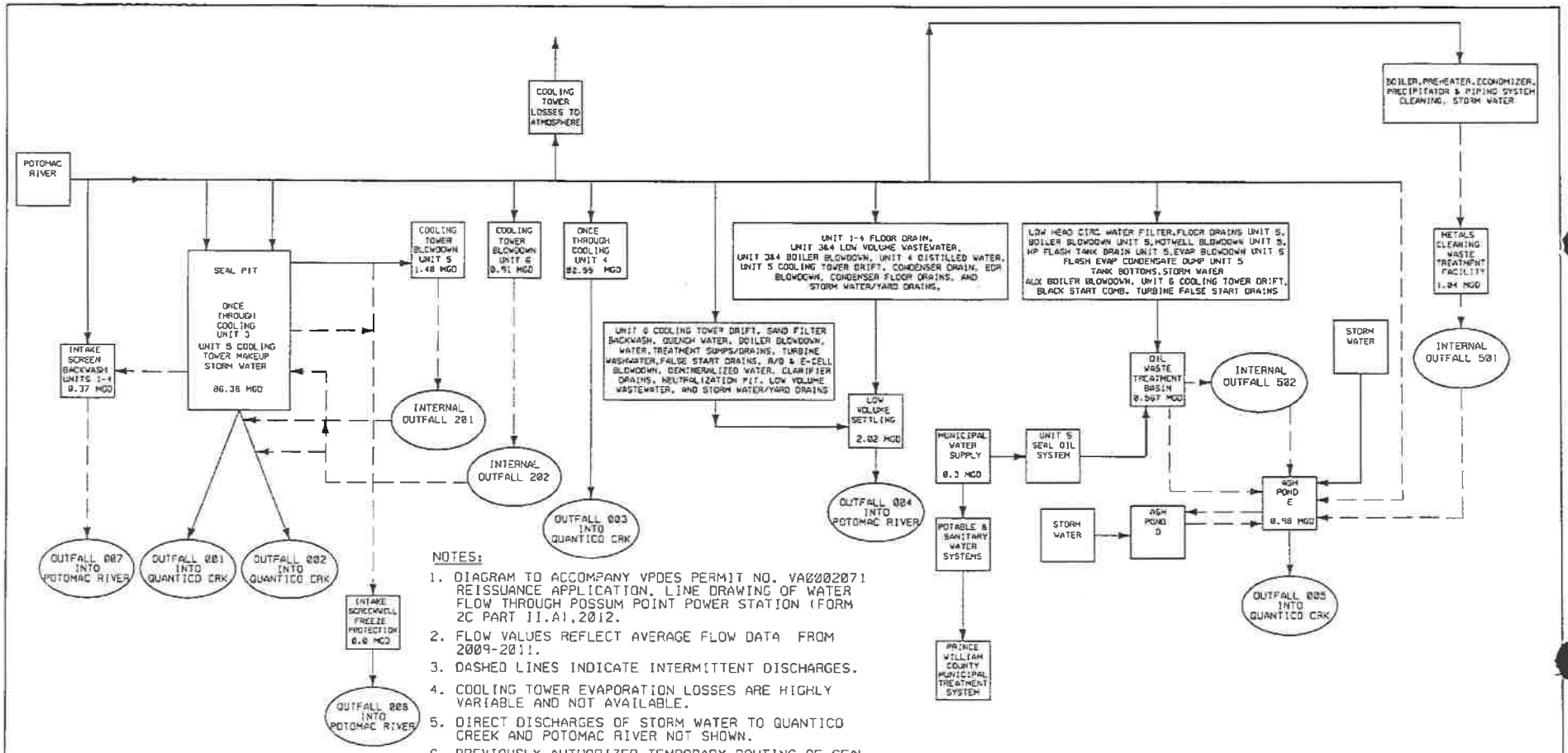
*** N/A = Not Available

STORAGE LOCATIONS OF BULK CHEMICALS AT POSSUM POINT POWER STATION

Commercial or Generic Name of Chemical	Location(s)	Spill Containment at Location(s)
Sulfuric acid	Warehouse, Unit 6 Water Treatment Bldg, Unit 6 Cooling Tower Bldg, Unit 6 Neutralization Pit, Unit 5 Basement	Yes
Betz KlarAid PC 1192	Metals Treatment Pond Area, Unit 5 Sand Filter Bldg	Yes
Carbohydrazide, (Betz CorTrol OS 5607)	Units 4 and 5 Basements	Yes
Neutralizing amines compounds	Warehouse, Unit 6 Steam Turbine Bldg, Units 3-5 Basements	Yes
Soda ash	Warehouse, Unit 6 Steam Turbine Bldg, Units 3-5 Basements, Unit 6 Neutralization Pit	Yes
Hydrated calcium lime	Warehouse	Yes
Detergents/cleaning agents, phosphate free or citrus based.	Facility-Wide (inside buildings)	Yes
Silicon emulsion, 10% dimethyl silicone, food grade	Warehouse, Unit 5 Cooling Tower Bldg, Unit 6 Cooling Tower Bldg	Yes
Trisodium phosphate	Warehouse, Unit 5 Cooling Tower Bldg, Units 3-5 Basements, Auxiliary Boiler Area	Yes
Sodium hydroxide (caustic)	Warehouse, Unit 6 Steam Turbine Bldg, Units 3-5 Basements	Yes
Tetrasodium EDTA	Temporarily stored on-site only as needed	Yes
Tetraammonium EDTA	Temporarily stored on-site only as needed	Yes
Sodium nitrite	Temporarily stored on-site only as needed	Yes
Cronox 240 Inhibitor	Temporarily stored on-site only as needed	Yes
Citric Acid	Temporarily stored on-site only as needed	Yes
Sodium hypochlorite	Warehouse, All Unit 6 Bldgs	Yes
Aluminum sulfate	Warehouse, Unit 6 Pretreatment Bldg	Yes

Commercial or Generic Name of Chemical	Location(s)	Spill Containment at Location(s)
Phosphates (di, tri, tripoly)	Warehouse, Unit 5 Cooling Tower Bldg, Units 3-5 Basements, Auxiliary Boiler Area	Yes
Sodium sulfite or Sodium bisulfite	Warehouse, All Unit 6 Bldgs, Unit 5 Sand Filter Bldg	Yes
Ammonia hydroxide	Warehouse, Unit 6 Water Treatment Bldg, Unit 6 Steam Turbine Bldg, Unit 6-A HRSG	Yes
Phosphonates and polyacrylate polymers	Warehouse, Units 3-5 Basements	Yes
Sodium dodecylbenzene sulfonate	Warehouse, Unit 6 Water Treatment Bldg	Yes
Sodium hydrosulfite	Warehouse, Unit 6 Water Treatment Bldg	Yes
Sodium dodecylsulfate	Warehouse, Unit 6 Water Treatment Bldg	Yes
Hydrochloric Acid	Unit 6 Water Treatment Bldg, Units 3 and 4 Basements	Yes
Salt/brine	Warehouse, Unit 6 Water Treatment Bldg, Units 3-5 Basements	Yes
Depositrol PY5201	Warehouse, Units 5 and 6 Cooling Tower Bldgs	Yes
Spectrus BD1500	Warehouse, Units 5 and 6 Cooling Tower Bldgs	Yes
Polyfloc AE1115	Warehouse, All Unit 6 Bldgs	Yes
Polyfloc AE1128P	Warehouse, All Unit 6 Bldgs	Yes
Polyfloc AE1117	Warehouse, All Unit 6 Bldgs	Yes
Nalclear 7768	Warehouse, All Unit 6 Bldgs	Yes
Klaraid CDP1336, CDP1346	Warehouse, All Unit 6 Bldgs	Yes
Hypersperse MDC700	Warehouse, All Unit 6 Bldgs	Yes
Conntect 6000	Warehouse, Unit 6-A and Unit 6-B HRSGs	Yes
Propylene glycol	Warehouse, Unit 6 Steam Turbine Bldg, Unit 5 Basement	Yes
Hydrogen peroxide	Warehouse, Units 5 and 6 Cooling Tower Bldgs	Yes
Kleen MCT411	Warehouse, Unit 6 Water Treatment Bldg	Yes
Kleen MCT511	Warehouse, Unit 6 Water Treatment Bldg	Yes
Kleen MCT103	Warehouse, Unit 6 Water Treatment Bldg	Yes

Commercial or Generic Name of Chemical	Location(s)	Spill Containment at Location(s)
Kleen MCT882	Warehouse, Unit 6 Water Treatment Bldg	Yes
Biomate MBC2881	Warehouse, Unit 6 Water Treatment Bldg	Yes
RoClean P303	Warehouse, Unit 6 Water Treatment Bldg	Yes
RoClean P111	Warehouse, Unit 6 Water Treatment Bldg	Yes
Spectrus OX103	Unit 5 Cooling Tower Bldg (when used)	Yes



NOTES:

1. DIAGRAM TO ACCOMPANY VPDES PERMIT NO. VA0002071 REISSUANCE APPLICATION. LINE DRAWING OF WATER FLOW THROUGH POSSUM POINT POWER STATION (FORM 2C PART II.A1,2012.
2. FLOW VALUES REFLECT AVERAGE FLOW DATA FROM 2009-2011.
3. DASHED LINES INDICATE INTERMITTENT DISCHARGES.
4. COOLING TOWER EVAPORATION LOSSES ARE HIGHLY VARIABLE AND NOT AVAILABLE.
5. DIRECT DISCHARGES OF STORM WATER TO QUANTICO CREEK AND POTOMAC RIVER NOT SHOWN.
6. PREVIOUSLY AUTHORIZED TEMPORARY ROUTING OF SEAL PIT WATER TO ASH POND E FOR FREEZE PROTECTION VIA ASH SLUICE LINE NOT SHOWN.
7. PREVIOUSLY AUTHORIZED TEMPORARY ROUTING OF UNIT 5 LIFT STATION FLOW TO OILY WASTE POND TO LOW VOLUME SETTLING PONDS NOT SHOWN.

VIRGINIA POWER
NORTH CAROLINA POWER
FOSSIL & HYDRO ENGINEERING
RICHMOND, VIRGINIA

WATER FLOW BALANCE LINE DIAGRAM

POSSUM POINT POWER STATION

APPROVAL OF THE SUPT OF TECH SERVICES IS REQ'D PRIOR TO ISSUE OF THIS DWG

REV	DATE	DRWN	CHKD	APPD	ENGR
0	3/6/12	KTC	OD-O	RWM	— —

ORIG. ISSUE FOR 600 SERIES ACAD CONVERSION. REV PER ENVIRONMENTAL REDLINE.

CAD FILE: DGNSPEC FOR FILE VERIFICATION DATE

DRAWING NO. PP-0-SP-STA-600 REV. 0

8655

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 001/002

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

1. Pollutant	2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAY VALUE			b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE	b. NO. OF ANALYSES
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION / (2) MASS	
a. Biological Oxygen Demand *(BOD)*		< 3.0	< 3069.954	--	--	--	--	1	PPM	LBS/DAY	-- / --	--
b. Chemical Oxygen Demand *(COD)*		14.66	15001.84188	--	--	--	--	1	PPM	LBS/DAY	-- / --	--
c. Total Organic Carbon *(TOC)*		25.8	26401.6044		--		--	1	PPM	LBS/DAY	-- / --	--
d. Total Suspended Solids *(TSS)*		12.4	12689.1432		--		--	1	PPM	LBS/DAY	-- / --	--
e. Ammonia *(as N)*		0.07	71.63226	--	--	--	--	1	PPM	LBS/DAY	-- / --	--
f. Flow		VALUE 122.7		VALUE 122.7		VALUE 86.38		36	MGD	--	VALUE --	-- / --
g. Temperature *(winter)*		VALUE 15.5		VALUE --		VALUE --		1	°C		VALUE --	-- / --
h. Temperature *(summer)*		VALUE 39.1		VALUE --		VALUE --		1	°C		VALUE --	-- / --
i. pH		7.7	8.4	--	--			36	STANDARD UNITS			

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

1. Pollutant and CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT							UNITS (specify if blank)		5. INTAKE (optional)		
	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	x		0.28	286.52904	--	--	--	--	1	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual	x		< 0.1	< 102.3318	< 0.1	< 102.3318	< 0.1	< 72.04092	72	PPM	LBS/DAY	--	--	--
c. Color	x		20	--	--	--	--	--	1	PCU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
e. Fluoride (16984-48-8)	x		0.11	112.56498	--	--	--	--	1	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite *(as N)*	x		2.47	2527.59546	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8656

ITEM V-B CONTINUED

OUTFALL NO. 001/002

1. Pollutant and CAS NO. (If available)	2. MARK 'X' a. Believed Present	b. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	4. UNITS (specify if blank) a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)	x		0.4	409.33	--	--	--	--	1	PPM	LBS/DAY	--	--	--
h. Oil & Grease	x		< 5	< 5116.59	--	--	--	--	1	PPM	LBS/DAY	--	--	--
i. Phosphorus (as P), Total (7723-14-0)	x		< 0.32	< 327.46176	--	--	--	--	1	PPM	LBS/DAY	--	--	--
j. Radioactivity														
(1) Alpha		x	0.646	--	--	--	--	--	1	pCi/L	--	--	--	--
(2) Beta		x	2.79	--	--	--	--	--	1	pCi/L	--	--	--	--
(3) Radium, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
(4) Radium 226, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
k. Sulfate (as SO_4) (14808-79-8)	x		28.06	28714.30	--	--	--	--	1	PPM	LBS/DAY	--	--	--
l. Sulfide (as S)	x		< 0.05	< 51.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
m. Sulfite (as SO_3) (14265-45-3)		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
n. Surfactants	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
o. Aluminum, Total (7429-90-5)	x		< 0.09	< 92.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
p. Barium Total (7440-39-3)	x		0.043	44.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
q. Boron, Total (7440-42-8)	x		0.02	20.47	--	--	--	--	1	PPM	LBS/DAY	--	--	--
r. Cobalt, Total (7440-48-4)	x		0.0007	0.72	--	--	--	--	1	PPM	LBS/DAY	--	--	--
s. Iron, Total (7439-89-6)	x		0.42	429.79	--	--	--	--	1	PPM	LBS/DAY	--	--	--
t. Magnesium, Total (7439-95-4)	x		8.04	8227.48	--	--	--	--	1	PPM	LBS/DAY	--	--	--
u. Molybdenum, Total (7439-98-7)	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
v. Manganese, Total (7439-96-5)	x		0.12	122.80	--	--	--	--	1	PPM	LBS/DAY	--	--	--
w. Tin, Total (7440-31-5)	x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
x. Titanium, Total (7440-32-6)	x		< 0.002	< 2.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8657

EPA I.D. NUMBER (copy from Item 1 of Form 1)	110000340774	OUTFALL NO. 001/002

CONTINUED FROM PAGE V-2

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

Part C.

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2M. Arsenic, Total (7440-38-2	x	x		< 0.003	< 3.07	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3M. Beryllium, Total (7440-41-7)	x	x		< 0.0002	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4M. Cadmium, Total (7440-43-9)	x	x		< 0.0003	< 0.31	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5M. Chromium, Total (7440-47-3)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6M. Copper, Total (7440-50-8)	x	x		0.011	11.26	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7M. Lead, Total (7439-92-1)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8M. Mercury, Total (7439-97-6)	x	x		< 0.0002	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9M. Nickel, Total (7440-02-0)	x	x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10M. Selenium, Total (7782-49-2)	x	x		< 0.003	< 3.07	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11M. Silver, Total (7440-22-4	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12M. Thallium, Total (7440-28-0)	x	x		< 0.0002	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13M. Zinc, Total (7440-66-6)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14M. Cyanide, Total (57-12-5)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15M. Phenols, Total	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESULTS		No Sample									

8658

CONTINUED FROM PAGE V-3

OUTFALL NO. 001/002

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2V. Acrylonitrile (107-13-1)	x	x		< 0.0015	< 1.53	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3V. Benzene (71-43-2)	x	x		< 0.0044	< 4.50	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)	x	x		< 0.0047	< 4.81	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6V. Carbon Tetrachloride (56-23-5)	x	x		< 0.0028	< 2.87	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7V. Chlorobenzene (108-90-7)	x	x		< 0.006	< 6.14	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8V. Chlorodibromomethane (124-48-1)	x	x		< 0.0031	< 3.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9V. Chloroethane (75-00-3)	x	x		< 0.0011	< 1.13	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10V. 2-Chloroethylvinyl Ether (110-75-8)	x	x		< 0.0012	< 1.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11V. Chloroform (67-66-3)	x	x		< 0.0016	< 1.64	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12V. Dichlorobromomethane (75-27-4)	x	x		< 0.0022	< 2.25	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)	x	x		< 0.0047	< 4.81	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15V. 1,2-Dichloroethane (107-06-2)	x	x		< 0.0028	< 2.87	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16V. 1,1-Dichloroethylene (75-35-4)	x	x		< 0.0028	< 2.87	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17V. 1,2-Dichloropropane (78-87-5)	x	x		< 0.006	< 6.14	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18V. 1,3-Dichloropropylene (542-75-6)	x	x		< 0.0059	< 6.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19V. Ethylbenzene (100-41-4)	x	x		< 0.0072	< 7.37	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20V. Methyl Bromide (74-83-9)	x	x		< 0.0014	< 1.43	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21V. Methyl Chloride (74-87-3)	x	x		< 0.0011	< 1.13	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8659

CONTINUED FROM PAGE V-4

OUTFALL NO. 001/002

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)	x	x		< 0.0028	< 2.87	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	x	x		< 0.0069	< 7.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24V. Tetrachloroethylene (127-18-4)	x	x		< 0.0041	< 4.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25V. Toluene (108-88-3)	x	x		< 0.006	< 6.14	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26V. 1,2-Trans-Dichloroethylene (156-60-5)	x	x		< 0.0016	< 1.64	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27V. 1,1,1-Trichloroethane (71-55-6)	x	x		< 0.0038	< 3.89	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28V. 1,1,2-Trichloroethane (79-00-5)	x	x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29V. Trichloroethylene (79-01-6)	x	x		< 0.0019	< 1.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30V. Trichlorofluoromethane (75-69-4)	x	x		< 0.0023	< 2.35	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31V. Vinyl Chloride (75-01-4)	x	x		< 0.0018	< 1.84	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2A. 2,4-Dichlorophenol (120-83-2)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3A. 2,4-Dimethylphenol (105-67-9)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4A. 4,6-Dinitro-OCresol (534-52-1)	x	x		< 0.05	< 51.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5A. 2,4-Dinitrophenol (51-28-5)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6A. 2-Nitrophenol (88-75-5)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7A. 4-Nitrophenol (100-02-7)	x	x		< 0.05	< 51.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8A. P-Chloro-MCresol (59-50-7)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9A. Pentachlorophenol (87-86-5	x	x		< 0.05	< 51.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10A. Phenol (108-95-2)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11A. 2,4,6-Trichlorophenol (88-05-2)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8660

CONTINUED FROM PAGE V-5

OUTFALL NO. 001/002

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2B. Acenaphtylene (208-96-8)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3B. Anthracene (120-12-7)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4B. Benzidine (92-87-5)	x	x		< 0.063	< 64.47	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5B. Benzo (a) Anthracene (56-55-3)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6B. Benzo (a) Pyrene (50-32-8)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7B. 3,4-Benzofluoranthene (205-99-2)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8B. Benzo (ghi) Perylene (191-24-2)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9B. Benzo (k) Fluoranthene (207-08-9)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11B. Bis (2-Chloroethyl) Ether (111-44-4)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14B. 4-BromophenylPhenyl Ether (101-55-3)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15B. Butyl Benzyl Phthalate (85-68-7)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16B. 2-Chloronaphthalene (91-58-7)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18B. Chrysene (218-01-9)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19B. Dibenzo (a,h) Anthracene (53-70-3)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20B. 1,2-Dichlorobenzene (95-50-1)	x	x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21B. 1,3-Di-chlorobenzene (541-73-1)	x	x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8661

CONTINUED FROM PAGE V-6

OUTFALL NO. 001/002

1. Pollutant and CAS NO. (*if available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)	x	x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23B. 3,3-Dichlorobenzidine (91-94-1)	x	x		< 0.02	< 20.47	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24B. Diethyl Phthalate (84-66-2)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25B. Dimethyl Phthalate (131-11-3)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26B. Di-N-Butyl Phthalate (84-74-2)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27B. 2,4-Dinitrotoluene (121-14-2)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28B. 2,6-Dinitrotoluene (606-20-2)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29B. Di-N-Octyl Phthalate (117-84-0)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	x	x		< 0.1	< 102.33	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31B. Fluoranthene (206-44-0)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
32B. Fluorene (86-73-7)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
33B. Hexachlorobenzene (118-74-1)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
34B. Hexachlorobutadiene (87-68-3)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
35B. Hexachlorocyclopentadiene (77-47-4)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
36B. Hexachloroethane (67-72-1)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
38B. Isophorone (78-59-1)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
39B. Naphthalene (91-20-3)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
40B. Nitrobenzene (98-95-3)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
41B. N-Nitrosodimethylamine (62-75-9)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
42B. N-Nitrosodi- N-Propylamine (621-64-7)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8662

CONTINUED FROM PAGE V-7

OUTFALL NO. 001/002

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
44B. Phenanthrene (85-01-8)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
45B. Pyrene (129-00-0	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
46B. 1,2,4-Trichlorobenzene (120-82-1)	x	x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GS/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	x	x		< 0.00005	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2P. α-BHC (319-84-6)	x	x		< 0.00005	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3P. β-BHC (319-85-7)	x	x		< 0.00005	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4P. γ-BHC (58-89-9)	x	x		< 0.00005	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5P. δ-BHC (319-86-8)	x	x		< 0.00005	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6P. Chlordane (57-74-9)	x	x		< 0.0002	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7P. 4,4'-DDT (50-29-3)	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8P. 4,4'-DDE (72-55-9)	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9P. 4,4'-DDD (72-54-8)	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10P. Dieldrin (60-57-1)	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11P. α-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12P. β-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13P. Endosulfan Sulfate (1031-07-8)	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14P. Endrin (72-20-8	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Aldehyde (7421-93-4)	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16P. Heptachlor (76-44-8)	x	x		< 0.00005	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8663

CONTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 001/002

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)	x	x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18P. PCB-1242 (53469-21-9)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19P. PCB-1254 (11097-69-1)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20P. PCB-1221 (11104-28-2)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21P. PCB-1232 (11141-16-5)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
22P. PCB-1248 (12672-29-6)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23P. PCB-1260 (11096-82-5)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24P. PCB-1016 (12674-11-2)	x	x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25P. Toxaphene (8001-35-2)	x	x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8664

Additional Testing Results on 10/06/2011 sample

OUTFALL NO 001/002

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
Uranium		x		0.00035	0.36	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2,4-D		x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Tl (dissolved)		x		0.0002	0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ti (dissolved)		x		< 0.002	< 2.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sn (dissolved)		x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Se (dissolved)		x		< 0.003	< 3.07	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sb (dissolved)		x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Pb (dissolved)		x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ni (dissolved)		x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mo (dissolved)		x		< 0.001	1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hg (dissolved)		x		< 0.0002	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cu (dissolved)		x		0.008	8.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cr (dissolved)		x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Co (dissolved)		x		< 0.0006	< 0.61	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cd (dissolved)		x		< 0.0003	< 0.31	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Be (dissolved)		x		< 0.0002	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ba (dissolved)		x		0.038	38.89	--	--	--	--	1	PPM	LBS/DAY	--	--	--
As (dissolved)		x		< 0.003	< 3.07	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ag (dissolved)		x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Zn (dissolved)		x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mn (dissolved)		x		0.04	40.93	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mg (dissolved)		x		7.82	8002.35	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Fe (dissolved)		x		< 0.05	< 51.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Al (dissolved)		x		< 0.09	< 92.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Dissolved Solids		x		305.5	312623.65	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Hardness as CaCO3		x		111.15	113741.80	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorides as Cl		x		23.08	23618.18	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Nitrate as N		x		1.44	1473.58	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hydrogen Sulfide		x		< 0.05	< 51.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chromium +6 as Cr6		x		< 0.005	< 5.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Nonylphenol		x		< 0.01	< 10.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Tributyltin			x	--	--	--	--	--	--	--	PPM	LBS/DAY	--	--	--
Kepone		x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Methoxychlor		x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mirex		x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Endrin Aldehyde		x		< 0.0001	< 0.10	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorpyrifos		x		< 0.0002	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Demeton		x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Diazinon		x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Guthion		x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Malathion		x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Parathion		x		< 0.001	< 1.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Silvex		x		< 0.002	< 2.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8665

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 003

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

1. Pollutant	2. EFFLUENT								3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAY VALUE			b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biological Oxygen Demand (BOD)		< 3.0	< 3562.848	--	--	--	--	1	PPM	LBS/DAY	--	--	--
b. Chemical Oxygen Demand (COD)		13.31	15807.16896	--	--	--	--	1	PPM	LBS/DAY	--	--	--
c. Total Organic Carbon (TOC)		5.7	6769.4112		--		--	1	PPM	LBS/DAY	--	--	--
d. Total Suspended Solids (TSS)		7.9	9382.1664		--		--	1	PPM	LBS/DAY	--	--	--
e. Ammonia (as N)		0.03	35.62848	--	--	--	--	1	PPM	LBS/DAY	--	--	--
f. Flow		VALUE 142.4		VALUE 142.4		VALUE 82.55		24	MGD	--	VALUE --		-- --
g. Temperature (winter)		VALUE 30.7		VALUE --		VALUE --		1	°C		VALUE --		-- --
h. Temperature (summer)		VALUE 42.6		VALUE --		VALUE --		1	°C		VALUE --		-- --
i. pH		7.5	8.3	--	--			24	STANDARD UNITS				

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

1. Pollutant and CAS NO. (If available)	2. MARK 'X'		3. EFFLUENT							UNITS (specify if blank)		5. INTAKE (optional)		
	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	x		0.81	961.96896	--	--	--	--	1	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual	x		< 0.1	< 118.7616	< 0.1	< 118.7616	< 0.1	< 68.8467	48	PPM	LBS/DAY	--	--	--
c. Color	x		17	--	--	--	--	--	1	PCU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
e. Fluoride (16984-48-8)	x		0.106	125.887296	--	--	--	--	1	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite (as N)	x		1.33	1579.52928	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8666

ITEM V-B CONTINUED

OUTFALL NO. 003

1. Pollutant and CAS NO. (If available)	2. MARK 'X' a. Believed Present	2. MARK 'X' b. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	a. MAXIMUM DAY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVG. VALUE (2) MASS	d. No. OF ANALYSES	UNITS (specify if blank) a. CONCENTRATION	UNITS b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	a. LONG TERM AVG. VALUE (2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)	x		0.3	356.28	--	--	--	--	1	PPM	LBS/DAY	--	--	--
h. Oil & Grease	x		< 5	< 5938.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--
i. Phosphorus (as P), Total (7723-14-0)	x		0.09	106.88544	--	--	--	--	1	PPM	LBS/DAY	--	--	--
j. Radioactivity														
(1) Alpha		x	< 2.23	--	--	--	--	--	1	pCi/L	--	--	--	--
(2) Beta		x	< 1.83	--	--	--	--	--	1	pCi/L	--	--	--	--
(3) Radium, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
(4) Radium 226, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
k. Sulfate (as SO_4) (14808-79-8)	x		26	30878.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
l. Sulfide (as S)	x		< 0.05	< 59.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--
m. Sulfite (as SO_3) (14265-45-3)		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
n. Surfactants	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
o. Aluminum, Total (7429-90-5)	x		< 0.09	< 106.89	--	--	--	--	1	PPM	LBS/DAY	--	--	--
p. Barium Total (7440-39-3)	x		0.043	51.07	--	--	--	--	1	PPM	LBS/DAY	--	--	--
q. Boron, Total (7440-42-8)	x		< 0.02	< 23.75	--	--	--	--	1	PPM	LBS/DAY	--	--	--
r. Cobalt, Total (7440-48-4)	x		< 0.0006	< 0.71	--	--	--	--	1	PPM	LBS/DAY	--	--	--
s. Iron, Total (7439-89-6)	x		0.36	427.54	--	--	--	--	1	PPM	LBS/DAY	--	--	--
t. Magnesium, Total (7439-95-4)	x		8.04	9548.43	--	--	--	--	1	PPM	LBS/DAY	--	--	--
u. Molybdenum, Total (7439-98-7)	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
v. Manganese, Total (7439-96-5)	x		0.12	142.51	--	--	--	--	1	PPM	LBS/DAY	--	--	--
w. Tin, Total (7440-31-5)	x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
x. Titanium, Total (7440-32-6)	x		< 0.002	< 2.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8997

EPA I.D. NUMBER (copy from Item 1 of Form 1)	110000340774	OUTFALL NO. 003

CONTINUED FROM PAGE V-2

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

Part C.

1. Pollutant and CAS NO. (*if available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	x	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2M. Arsenic, Total (7440-38-2	x	x		< 0.003	< 3.56	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3M. Beryllium, Total (7440-41-7)	x	x		< 0.0002	< 0.24	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4M. Cadmium, Total (7440-43-9)	x	x		< 0.0003	< 0.36	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5M. Chromium, Total (7440-47-3)	x	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6M. Copper, Total (7440-50-8)	x	x		0.01	11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7M. Lead, Total (7439-92-1)	x	x		0.001	1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8M. Mercury, Total (7439-97-6)	x	x		< 0.0002	< 0.24	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9M. Nickel, Total (7440-02-0)	x	x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10M. Selenium, Total (7782-49-2)	x	x		< 0.003	< 3.56	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11M. Silver, Total (7440-22-4	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12M. Thallium, Total (7440-28-0)	x	x		< 0.0002	< 0.24	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13M. Zinc, Total (7440-66-6)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14M. Cyanide, Total (57-12-5)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15M. Phenols, Total	x	x		0.01	11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESULTS	No Sample										

8668

CONTINUED FROM PAGE V-3

OUTFALL NO. 003

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2V. Acrylonitrile (107-13-1)	x	x		< 0.0015	< 1.78	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3V. Benzene (71-43-2)	x	x		< 0.0044	< 5.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)	x	x		< 0.0047	< 5.58	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6V. Carbon Tetrachloride (56-23-5)	x	x		< 0.0028	< 3.33	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7V. Chlorobenzene (108-90-7)	x	x		< 0.006	< 7.13	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8V. Chlorodibromomethane (124-48-1)	x	x		< 0.0031	< 3.68	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9V. Chloroethane (75-00-3)	x	x		< 0.0011	< 1.31	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10V. 2-Chloroethylvinyl Ether (110-75-8)	x	x		< 0.0012	< 1.43	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11V. Chloroform (67-66-3)	x	x		< 0.0016	< 1.90	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12V. Dichlorobromomethane (75-27-4)	x	x		< 0.0022	< 2.61	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)	x	x		< 0.0047	< 5.58	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15V. 1,2-Dichloroethane (107-06-2)	x	x		< 0.0028	< 3.33	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16V. 1,1-Dichloroethylene (75-35-4)	x	x		< 0.0028	< 3.33	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17V. 1,2-Dichloropropane (78-87-5)	x	x		< 0.006	< 7.13	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18V. 1,3-Dichloropropylene (542-75-6)	x	x		< 0.0059	< 7.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19V. Ethylbenzene (100-41-4)	x	x		< 0.0072	< 8.55	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20V. Methyl Bromide (74-83-9)	x	x		< 0.0014	< 1.66	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21V. Methyl Chloride (74-87-3)	x	x		< 0.0011	< 1.31	--	--	--	--	1	PPM	LBS/DAY	--	--	--

6998

CONTINUED FROM PAGE V-4

OUTFALL NO. 003

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)	x	x		< 0.0028	< 3.33	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	x	x		< 0.0069	< 8.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24V. Tetrachloroethylene (127-18-4)	x	x		< 0.0041	< 4.87	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25V. Toluene (108-88-3)	x	x		< 0.006	< 7.13	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26V. 1,2-Trans-Dichloroethylene (156-60-5)	x	x		< 0.0016	< 1.90	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27V. 1,1,1-Trichloroethane (71-55-6)	x	x		< 0.0038	< 4.51	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28V. 1,1,2-Trichloroethane (79-00-5)	x	x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29V Trichloroethylene (79-01-6)	x	x		< 0.0019	< 2.26	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30V. Trichlorofluoromethane (75-69-4)	x	x		< 0.0023	< 2.73	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31V. Vinyl Chloride (75-01-4)	x	x		< 0.0018	< 2.14	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2A. 2,4-Dichlorophenol (120-83-2)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3A. 2,4-Dimethylphenol (105-67-9)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4A. 4,6-Dinitro-OCresol (534-52-1)	x	x		< 0.05	< 59.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5A. 2,4-Dinitrophenol (51-28-5)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6A. 2-Nitrophenol (88-75-5)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7A. 4-Nitrophenol (100-02-7)	x	x		< 0.05	< 59.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8A. P-Chloro-MCresol (59-50-7)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9A. Pentachlorophenol (87-86-5	x	x		< 0.05	< 59.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10A. Phenol (108-95-2)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11A. 2,4,6-Trichlorophenol (88-05-2)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8970

CONTINUED FROM PAGE V-5

OUTFALL NO. 003

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2B. Acenaphtylene (208-96-8)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3B. Anthracene (120-12-7)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4B. Benzidine (92-87-5)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5B. Benzo (a) Anthracene (56-55-3)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6B. Benzo (a) Pyrene (50-32-8)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7B. 3,4-Benzofluoranthene (205-99-2)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8B. Benzo (ghi) Perylene (191-24-2)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9B. Benzo (k) Fluoranthene (207-08-9)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11B. Bis (2-Chloroethyl) Ether (111-44-4)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14B. 4-BromophenylPhenyl Ether (101-55-3)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15B. Butyl Benzyl Phthalate (85-68-7)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16B. 2-Chloronaphthalene (91-58-7)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18B. Chrysene (218-01-9)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19B. Dibenzo (a,h) Anthracene (53-70-3)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20B. 1,2-Dichlorobenzene (95-50-1)	x	x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21B. 1,3-Di-chlorobenzene (541-73-1)	x	x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8671

CONTINUED FROM PAGE V-6

OUTFALL NO. 003

1. Pollutant and CAS NO. (*if available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)	x	x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23B. 3,3-Dichlorobenzidine (91-94-1)	x	x		< 0.02	< 23.75	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24B. Diethyl Phthalate (84-66-2)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25B. Dimethyl Phthalate (131-11-3)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26B. Di-N-Butyl Phthalate (84-74-2)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27B. 2,4-Dinitrotoluene (121-14-2)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28B. 2,6-Dinitrotoluene (606-20-2)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29B. Di-N-Octyl Phthalate (117-84-0)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	x	x		< 0.1	< 118.76	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31B. Fluoranthene (206-44-0)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
32B. Fluorene (86-73-7)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
33B. Hexachlorobenzene (118-74-1)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
34B. Hexachlorobutadiene (87-68-3)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
35B. Hexachlorocyclopentadiene (77-47-4)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
36B. Hexachloroethane (67-72-1)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
38B. Isophorone (78-59-1)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
39B. Naphthalene (91-20-3)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
40B. Nitrobenzene (98-95-3)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
41B. N-Nitrosodimethylamine (62-75-9)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
42B. N-Nitrosodi- N-Propylamine (621-64-7)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8672

CONTINUED FROM PAGE V-7

OUTFALL NO. 003

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
44B. Phenanthrene (85-01-8)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
45B. Pyrene (129-00-0	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
46B. 1,2,4-Trichlorobenzene (120-82-1)	x	x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GS/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	x	x		< 0.00005	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2P. α-BHC (319-84-6)	x	x		< 0.00005	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3P. β-BHC (319-85-7)	x	x		< 0.00005	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4P. γ-BHC (58-89-9)	x	x		< 0.00005	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5P. δ-BHC (319-86-8)	x	x		< 0.00005	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6P. Chlordane (57-74-9)	x	x		< 0.0002	< 0.24	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7P. 4,4'-DDT (50-29-3)	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8P. 4,4'-DDE (72-55-9)	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9P. 4,4'-DDD (72-54-8)	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10P. Dieldrin (60-57-1)	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11P. α-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12P. β-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13P. Endosulfan Sulfate (1031-07-8)	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14P. Endrin (72-20-8	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Aldehyde (7421-93-4)	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16P. Heptachlor (76-44-8)	x	x		< 0.00005	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8673

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 003

CONTINUED FROM PAGE V-8

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)	x	x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18P. PCB-1242 (53469-21-9)	x	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19P. PCB-1254 (11097-69-1)	x	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20P. PCB-1221 (11104-28-2)	x	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21P. PCB-1232 (11131-16-5)	x	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
22P. PCB-1248 (12672-29-6)	x	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23P. PCB-1260 (11096-82-5)	x	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24P. PCB-1016 (12674-11-2)	x	x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25P. Toxaphene (8001-35-2)	x	x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8674

Additional Testing Results on 10/06/2011 sample

OUTFALL NO. 003

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
Uranium		x		< 0.00021	< 0.25	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2,4-D		x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Tl (dissolved)		x		0.0002	0.24	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ti (dissolved)		x		< 0.002	< 2.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sn (dissolved)		x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Se (dissolved)		x		< 0.003	< 3.56	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sb (dissolved)		x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Pb (dissolved)		x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ni (dissolved)		x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mo (dissolved)		x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hg (dissolved)		x		< 0.0002	< 0.24	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cu (dissolved)		x		0.005	5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cr (dissolved)		x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Co (dissolved)		x		< 0.0006	< 0.71	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cd (dissolved)		x		< 0.0003	< 0.36	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Be (dissolved)		x		< 0.0002	< 0.24	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ba (dissolved)		x		0.038	45.13	--	--	--	--	1	PPM	LBS/DAY	--	--	--
As (dissolved)		x		< 0.003	< 3.56	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ag (dissolved)		x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Zn (dissolved)		x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mn (dissolved)		x		0.06	71.26	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mg (dissolved)		x		7.36	8740.85	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Fe (dissolved)		x		< 0.05	< 59.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Al (dissolved)		x		< 0.09	< 106.89	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Dissolved Solids		x		222.8	264600.84	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Hardness as CaCO3		x		102.6	121849.40	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorides as Cl		x		23.2	27552.69	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Nitrate as N		x		1.34	1591.41	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hydrogen Sulfide		x		< 0.05	< 59.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chromium +6 as Cr6		x		< 0.005	< 5.94	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Nonylphenol		x		< 0.01	< 11.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Tributyltin			x	--	--	--	--	--	--	--	PPM	LBS/DAY	--	--	--
Kepone		x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Methoxychlor		x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mirex		x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Endrin Aldehyde		x		< 0.0001	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorpyrifos		x		< 0.0002	< 0.24	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Demeton		x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Diazinon		x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Guthion		x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Malathion		x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Parathion		x		< 0.001	< 1.19	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Silvex		x		< 0.002	< 2.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 004

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

1. Pollutant	2. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	3. UNITS (specify if blank) a. CONCENTRATION	b. MASS	4. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Biological Oxygen Demand (BOD)	< 3.0	< 117.34	--	--	--	--	1	PPM	LBS/DAY	--	--	--
b. Chemical Oxygen Demand (COD)	10.39	406.40	--	--	--	--	1	PPM	LBS/DAY	--	--	--
c. Total Organic Carbon (TOC)	5.7	222.95	--	--	--	--	1	PPM	LBS/DAY	--	--	--
d. Total Suspended Solids (TSS)	23.5	919.19	19.8	715.02	4.3	72.44	172	PPM	LBS/DAY	--	--	--
e. Ammonia (as N)	0.18	7.04	0.18	6.50	0.06	1.01	11	PPM	LBS/DAY	--	--	--
f. Flow	VALUE 4.7		VALUE 4.33		VALUE 2.02		172	MGD	--	VALUE --		-- --
g. Temperature (winter)	VALUE 13.7		VALUE --		VALUE --		1	°C		VALUE --		-- --
h. Temperature (summer)	VALUE 34.6		VALUE --		VALUE --		1	°C		VALUE --		-- --
i. pH	7.38	8.96	--	--			172	STANDARD UNITS				

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

1. Pollutant and CAS NO. (if available)	2. MARK 'X' b. Believed Present	c. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	UNITS (specify if blank) a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)	x		5.1	199.48	--	--	--	--	1	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual	x		< 0.1	< 3.91	< 0.1	< 3.61	< 0.1	< 1.68	140	PPM	LBS/DAY	--	--	--
c. Color	x		13	--	--	--	--	--	1	PCU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
e. Fluoride (16984-48-8)	x		0.171	6.69	--	--	--	--	1	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite (as N)	x		2.25	88.01	2.25	81.25	1.02	17.18	11	PPM	LBS/DAY	--	--	--

8876

ITEM V-B CONTINUED

OUTFALL NO. 004

1. Pollutant and CAS NO. *(If available)*	2. MARK 'X' a. Believed Present	b. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE *(if available)* (1) CONCENTRATIO	(2) MASS	c. LONG TERM AVG. VALUE *(if available)* (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	UNITS *(specify if blank)* a. CONCENTRATION	b. MASS	5. INTAKE *(optional)* a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION														
g. Nitrogen, Total Organic *(as N)*	x		0.18	7.04	0.18	6.50	0.064	1.08	11	PPM	LBS/DAY	--	--	--
h. Oil & Grease	x		< 5	< 195.57	< 5	< 180.56	< 5	< 84.23	72	PPM	LBS/DAY	--	--	--
i. Phosphorus (as P), Total (7723-14-0)	x		0.17	6.65	0.17	6.14	0.06	1.01	11	PPM	LBS/DAY	--	--	--
j. Radioactivity														
(1) Alpha		x	< 0.734	--	--	--	--	--	1	pCi/L	--	--	--	--
(2) Beta		x	< 2.9	--	--	--	--	--	1	pCi/L	--	--	--	--
(3) Radium, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
(4) Radium 226, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
k. Sulfate *(as SO_4)* (14808-79-8)	x		44.22	1729.65	--	--	--	--	1	PPM	LBS/DAY	--	--	--
l. Sulfide *(as S)*	x		< 0.05	< 1.96	--	--	--	--	1	PPM	LBS/DAY	--	--	--
m. Sulfite (as SO_3) (14265-45-3)		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
n. Surfactants	x		< 0.01	< 0.39	--	--	--	--	1	PPM	LBS/DAY	--	--	--
o. Aluminum, Total (7429-90-5)	x		< 0.09	< 3.52	--	--	--	--	1	PPM	LBS/DAY	--	--	--
p. Barium Total (7440-39-3)	x		0.044	1.72	--	--	--	--	1	PPM	LBS/DAY	--	--	--
q. Boron, Total (7440-42-8)	x		0.03	1.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
r. Cobalt, Total (7440-48-4)	x		< 0.0006	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
s. Iron, Total (7439-89-6)	x		7.00	273.80	--	--	--	--	1	PPM	LBS/DAY	--	--	--
t. Magnesium, Total (7439-95-4)	x		8.36	327.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
u. Molybdenum, Total (7439-98-7)	x		0.002	0.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--
v. Manganese, Total (7439-96-5)	x		0.04	1.56	--	--	--	--	1	PPM	LBS/DAY	--	--	--
w. Tin, Total (7440-31-5)	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
x. Titanium, Total (7440-32-6)	x		< 0.002	< 0.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8677

EPA I.D. NUMBER (copy from Item 1 of Form 1)	110000340774	OUTFALL NO. 004

CONTINUED FROM PAGE V-2

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

Part C.

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2M. Arsenic, Total (7440-38-2	x	x		< 0.003	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3M. Beryllium, Total (7440-41-7)	x	x		< 0.0002	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4M. Cadmium, Total (7440-43-9)	x	x		< 0.0003	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5M. Chromium, Total (7440-47-3)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6M. Copper, Total (7440-50-8)	x	x		0.007	0.27	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7M. Lead, Total (7439-92-1)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8M. Mercury, Total (7439-97-6)	x	x		< 0.0002	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9M. Nickel, Total (7440-02-0)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10M. Selenium, Total (7782-49-2)	x	x		< 0.003	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11M. Silver, Total (7440-22-4	x	x		< 0.0001	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12M. Thallium, Total (7440-28-0)	x	x		0.0006	0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13M. Zinc, Total (7440-66-6)	x	x		< 0.01	< 0.39	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14M. Cyanide, Total (57-12-5)	x	x		< 0.01	< 0.39	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15M. Phenols, Total	x	x		0.01	0.39	--	--	--	--	1	PPM	LBS/DAY	--	--	--
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESULTS No Sample											

8678

CONTINUED FROM PAGE V-3

OUTFALL NO. 004

1. Pollutant and CAS NO. (If available)	2. MARK 'X' a. Testing Required	b. Believed Present	c. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	4. UNITS (specify if blank) a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Accrolein (107-02-8)	x	x		< 0.01	< 0.39	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2V. Acrylonitrile (107-13-1)	x	x		< 0.0015	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3V. Benzene (71-43-2)	x	x		< 0.0044	< 0.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)	x	x		< 0.0047	< 0.18	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6V. Carbon Tetrachloride (56-23-5)	x	x		< 0.0028	< 0.11	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7V. Chlorobenzene (108-90-7)	x	x		< 0.006	< 0.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8V. Chlorodibromomethane (124-48-1)	x	x		< 0.0031	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9V. Chloroethane (75-00-3)	x	x		< 0.0011	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10V. 2-Chloroethylvinyl Ether (110-75-8)	x	x		< 0.0012	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11V. Chloroform (67-66-3)	x	x		0.01682	0.66	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12V. Dichlorobromomethane (75-27-4)	x	x		< 0.0022	< 0.09	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)	x	x		< 0.0047	< 0.18	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15V. 1,2-Dichloroethane (107-06-2)	x	x		< 0.0028	< 0.11	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16V. 1,1-Dichloroethylene (75-35-4)	x	x		< 0.0028	< 0.11	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17V. 1,2-Dichloropropane (78-87-5)	x	x		< 0.006	< 0.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18V. 1,3-Dichloropropylene (542-75-6)	x	x		< 0.0059	< 0.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19V. Ethylbenzene (100-41-4)	x	x		< 0.0072	< 0.28	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20V. Methyl Bromide (74-83-9)	x	x		< 0.0014	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21V. Methyl Chloride (74-87-3)	x	x		< 0.0011	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8679

CONTINUED FROM PAGE V-4

OUTFALL NO. 004

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)	x	x		< 0.0028	< 0.11	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	x	x		< 0.0069	< 0.27	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24V. Tetrachloroethylene (127-18-4)	x	x		< 0.0041	< 0.16	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25V. Toluene (108-88-3)	x	x		< 0.006	< 0.23	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26V. 1,2-Trans-Dichloroethylene (156-60-5)	x	x		< 0.0016	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27V. 1,1,1-Trichloroethane (71-55-6)	x	x		< 0.0038	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28V. 1,1,2-Trichloroethane (79-00-5)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29V Trichloroethylene (79-01-6)	x	x		< 0.0019	< 0.07	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30V. Trichlorofluoromethane (75-69-4)	x	x		< 0.0023	< 0.09	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31V. Vinyl Chloride (75-01-4)	x	x		< 0.0018	< 0.07	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2A. 2,4-Dichlorophenol (120-83-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3A. 2,4-Dimethylphenol (105-67-9)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4A. 4,6-Dinitro-OCresol (534-52-1)	x	x		< 0.05	< 1.96	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5A. 2,4-Dinitrophenol (51-28-5)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6A. 2-Nitrophenol (88-75-5)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7A. 4-Nitrophenol (100-02-7)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8A. P-Chloro-MCresol (59-50-7)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9A. Pentachlorophenol (87-86-5	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10A. Phenol (108-95-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11A. 2,4,6-Trichlorophenol (88-05-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8680

CONTINUED FROM PAGE V-5

OUTFALL NO. 004

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2B. Acenaphtylene (208-96-8)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3B. Anthracene (120-12-7)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4B. Benzidine (92-87-5)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5B. Benzo (a) Anthracene (56-55-3)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6B. Benzo (a) Pyrene (50-32-8)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7B. 3,4-Benzofluoranthene (205-99-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8B. Benzo (ghi) Perylene (191-24-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9B. Benzo (k) Fluoranthene (207-08-9)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11B. Bis (2-Chloroethyl) Ether (111-44-4)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14B. 4-BromophenylPhenyl Ether (101-55-3)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15B. Butyl Benzyl Phthalate (85-68-7)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16B. 2-Chloronaphthalene (91-58-7)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18B. Chrysene (218-01-9)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19B. Dibenzo (a,h) Anthracene (53-70-3)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20B. 1,2-Dichlorobenzene (95-50-1)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21B. 1,3-Di-chlorobenzene (541-73-1)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8681

CONTINUED FROM PAGE V-6

OUTFALL NO. 004

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23B. 3,3-Dichlorobenzidine (91-94-1)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24B. Diethyl Phthalate (84-66-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25B. Dimethyl Phthalate (131-11-3)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26B. Di-N-Butyl Phthalate (84-74-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27B. 2,4-Dinitrotoluene (121-14-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28B. 2,6-Dinitrotoluene (606-20-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29B. Di-N-Octyl Phthalate (117-84-0)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	x	x		< 0.0001	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31B. Fluoranthene (206-44-0)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
32B. Fluorene (86-73-7)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
33B. Hexachlorobenzene (118-74-1)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
34B. Hexachlorobutadiene (87-68-3)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
35B. Hexachlorocyclopentadiene (77-47-4)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
36B Hexachloroethane (67-72-1)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
38B. Isophorone (78-59-1)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
39B. Naphthalene (91-20-3)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
40B. Nitrobenzene (98-95-3)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
41B. N-Nitrosodimethylamine (62-75-9)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
42B. N-Nitrosodi- N-Propylamine (621-64-7)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8682

CONTINUED FROM PAGE V-7

OUTFALL NO. 004

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
44B. Phenanthrene (85-01-8)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
45B. Pyrene (129-00-0	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
46B. 1,2,4-Trichlorobenzene (120-82-1)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GS/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	x	x		< 0.00005	< 0.0020	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2P. α-BHC (319-84-6)	x	x		< 0.00005	< 0.0020	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3P. β-BHC (319-85-7)	x	x		< 0.00005	< 0.0020	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4P. γ-BHC (58-89-9)	x	x		< 0.00005	< 0.0020	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5P. δ-BHC (319-86-8)	x	x		< 0.00005	< 0.0020	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6P. Chlordane (57-74-9)	x	x		< 0.0002	< 0.0078	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7P. 4,4'-DDT (50-29-3)	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8P. 4,4'-DDE (72-55-9)	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9P. 4,4'-DDD (72-54-8)	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10P. Dieldrin (60-57-1)	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11P. α-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12P. β-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13P. Endosulfan Sulfate (1031-07-8)	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14P. Endrin (72-20-8	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Aldehyde (7421-93-4)	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16P. Heptachlor (76-44-8)	x	x		< 0.00005	< 0.0020	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8683

CONTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 004

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)	x	x		< 0.0001	< 0.0039	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18P. PCB-1242 (53469-21-9)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19P. PCB-1254 (11097-69-1)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20P. PCB-1221 (11104-28-2)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21P. PCB-1232 (11141-16-5)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
22P. PCB-1248 (12672-29-6)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23P. PCB-1260 (11096-82-5)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24P. PCB-1016 (12674-11-2)	x	x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25P. Toxaphene (8001-35-2)	x	x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8684

Additional Testing Results on 10/06/2011 sample

OUTFALL NO. 004

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT								. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
Uranium		x		< 0.00021	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2,4-D		x		< 0.01	< 0.39	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Tl (dissolved)		x		0.0005	0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ti (dissolved)		x		< 0.002	< 0.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sn (dissolved)		x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Se (dissolved)		x		< 0.003	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sb (dissolved)		x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Pb (dissolved)		x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ni (dissolved)		x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mo (dissolved)		x		0.002	0.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hg (dissolved)		x		< 0.0002	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cu (dissolved)		x		0.004	0.16	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cr (dissolved)		x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Co (dissolved)		x		< 0.0006	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cd (dissolved)		x		< 0.0003	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Be (dissolved)		x		< 0.0002	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ba (dissolved)		x		0.033	1.29	--	--	--	--	1	PPM	LBS/DAY	--	--	--
As (dissolved)		x		< 0.003	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ag (dissolved)		x		< 0.0001	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Zn (dissolved)		x		0.013	0.51	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mn (dissolved)		x		0.02	0.78	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mg (dissolved)		x		8.17	319.57	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Fe (dissolved)		x		0.09	3.52	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Al (dissolved)		x		< 0.09	< 3.52	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Dissolved Solids		x		272.5	10658.73	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Hardness as CaCO3		x		104.31	4080.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorides as Cl		x		55.34	2164.60	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hydrogen Sulfide		x		< 0.05	< 1.96	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chromium +6 as Cr6		x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Nonylphenol		x		< 0.005	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Tributyltin			x	--	--	--	--	--	--	--	PPM	LBS/DAY	--	--	--
Kepone		x		< 0.0001	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Methoxychlor		x		< 0.0001	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mirex		x		< 0.0001	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Endrin Aldehyde		x		< 0.0001	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorpyrifos		x		< 0.0002	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Demeton		x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Diazinon		x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Guthion		x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Malathion		x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Parathion		x		< 0.001	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Silvex		x		< 0.002	< 0.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8685

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 005

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

1. Pollutant	2. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if availale) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	3. UNITS (specify if blank) a. CONCENTRATION	b. MASS	4. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Biological Oxygen Demand (BOD)	< 12.6	< 369.90	--	--	--	--	1	PPM	LBS/DAY	--	--	--
b. Chemical Oxygen Demand (COD)	16.9	496.13	--	--	--	--	1	PPM	LBS/DAY	--	--	--
c. Total Organic Carbon (TOC)	6.8	199.63	--	--	--	--	1	PPM	LBS/DAY	--	--	--
d. Total Suspended Solids (TSS)	13.4	393.38	12	253.20	6.27	51.25	70	PPM	LBS/DAY	--	--	--
e. Ammonia (as N)	< 0.05	< 1.47	< 0.05	< 1.06	< 0.05	< 0.41	11	PPM	LBS/DAY	--	--	--
f. Flow	VALUE 3.5		VALUE 2.53		VALUE 0.98		70	MGD	--	VALUE --		-- --
g. Temperature (winter)	VALUE 5.9		VALUE --		VALUE --		1	°C		VALUE --		-- --
h. Temperature (summer)	VALUE 29.2		VALUE --		VALUE --		1	°C		VALUE --		-- --
i. pH	7.4	8.83	--	--			70	STANDARD UNITS				

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

1. Pollutant and CAS NO. (If available)	2. MARK 'X' b. Believed Present	c. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if availale) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	UNITS (specify if blank) a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)	x		2.1	61.64928	--	--	--	--	1	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual	x		< 0.1	< 2.93568	< 0.1	< 2.11002	< 0.1	< 0.81732	1	PPM	LBS/DAY	--	--	--
c. Color	x		15	--	--	--	--	--	1	PCU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
e. Fluoride (16984-48-8)	x		0.142	4.1686656	--	--	--	--	1	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite (as N)	x		0.01	0.293568	--	--	1.00	8.1732	12	PPM	LBS/DAY	--	--	--

ITEM V-B CONTINUED

OUTFALL NO. 005

1. Pollutant and CAS NO. (If available)	2. MARK 'X'		3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATIO	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)	x		0.56	16.44	0.56	11.82	0.27	2.21	11	PPM	LBS/DAY	--	--	--
h. Oil & Grease	x		< 5	< 146.78	< 5	< 105.50	< 5	< 40.87	70	PPM	LBS/DAY	--	--	--
i. Phosphorus (as P), Total (7723-14-0)	x		< 0.05	< 1.47	< 0.05	1.06	< 0.05	< 0.41	11	PPM	LBS/DAY	--	--	--
j. Radioactivity														
(1) Alpha		x	< 5	--	--	--	--	--	1	pCi/L	--	--	--	--
(2) Beta		x	< 1.88	--	--	--	--	--	1	pCi/L	--	--	--	--
(3) Radium, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
(4) Radium 226, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
k. Sulfate (as SO_4) (14808-79-8)	x		40.69	1194.53	--	--	--	--	1	PPM	LBS/DAY	--	--	--
l. Sulfide (as S)	x		< 0.05	< 1.47	--	--	--	--	1	PPM	LBS/DAY	--	--	--
m. Sulfite (as SO_3) (14265-45-3)		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
n. Surfactants	x		< 0.01	< 0.29	--	--	--	--	1	PPM	LBS/DAY	--	--	--
o. Aluminum, Total (7429-90-5)	x		< 0.09	< 2.64	--	--	--	--	1	PPM	LBS/DAY	--	--	--
p. Barium Total (7440-39-3)	x		0.208	6.11	--	--	--	--	1	PPM	LBS/DAY	--	--	--
q. Boron, Total (7440-42-8)	x		0.06	1.76	--	--	--	--	1	PPM	LBS/DAY	--	--	--
r. Cobalt, Total (7440-48-4)	x		< 0.0006	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
s. Iron, Total (7439-89-6)	x		0.26	7.63	--	--	--	--	1	PPM	LBS/DAY	--	--	--
t. Magnesium, Total (7439-95-4)	x		15.1	443.29	--	--	--	--	1	PPM	LBS/DAY	--	--	--
u. Molybdenum, Total (7439-98-7)	x		0.006	0.18	--	--	--	--	1	PPM	LBS/DAY	--	--	--
v. Manganese, Total (7439-96-5)	x		0.08	2.35	--	--	--	--	1	PPM	LBS/DAY	--	--	--
w. Tin, Total (7440-31-5)	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
x. Titanium, Total (7440-32-6)	x		< 0.002	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--

EPA I.D. NUMBER (copy from Item 1 of Form 1)	110000340774	OUTFALL NO. 005

CONTINUED FROM PAGE V-2

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

Part C.

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	x	x		0.001	0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2M. Arsenic, Total (7440-38-2	x	x		0.011	0.32	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3M. Beryllium, Total (7440-41-7)	x	x		< 0.0002	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4M. Cadmium, Total (7440-43-9)	x	x		< 0.0003	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5M. Chromium, Total (7440-47-3)	x	x		< 0.02	< 0.59	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6M. Copper, Total (7440-50-8)	x	x		0.001	0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7M. Lead, Total (7439-92-1)	x	x		< 0.001	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8M. Mercury, Total (7439-97-6)	x	x		< 0.0002	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9M. Nickel, Total (7440-02-0)	x	x		0.013	0.38	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10M. Selenium, Total (7782-49-2)	x	x		< 0.003	< 0.09	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11M. Silver, Total (7440-22-4	x	x		< 0.0001	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12M. Thallium, Total (7440-28-0)	x	x		0.0005	0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13M. Zinc, Total (7440-66-6)	x	x		0.01	0.29	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14M. Cyanide, Total (57-12-5)	x	x		< 0.01	< 0.29	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15M. Phenols, Total	x	x		0.03	0.88	--	--	--	--	1	PPM	LBS/DAY	--	--	--
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESULTS		No Sample									

CONTINUED FROM PAGE V-3

OUTFALL NO. 005

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Accrolein (107-02-8)	x	x		< 0.01	< 0.29	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2V. Acrylonitrile (107-13-1)	x	x		< 0.0015	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3V. Benzene (71-43-2)	x	x		< 0.0044	< 0.13	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)	x	x		< 0.0047	< 0.14	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6V. Carbon Tetrachloride (56-23-5)	x	x		< 0.0028	< 0.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7V. Chlorobenzene (108-90-7)	x	x		< 0.006	< 0.18	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8V. Chlorodibromomethane (124-48-1)	x	x		< 0.0031	< 0.09	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9V. Chloroethane (75-00-3)	x	x		< 0.0011	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10V. 2-Chloroethylvinyl Ether (110-75-8)	x	x		< 0.0012	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11V. Chloroform (67-66-3)	x	x		< 0.016	< 0.47	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12V. Dichlorobromomethane (75-27-4)	x	x		< 0.0022	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)	x	x		< 0.0047	< 0.14	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15V. 1,2-Dichloroethane (107-06-2)	x	x		< 0.0028	< 0.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16V. 1,1-Dichloroethylene (75-35-4)	x	x		< 0.0028	< 0.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17V. 1,2-Dichloropropane (78-87-5)	x	x		< 0.006	< 0.18	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18V. 1,3-Dichloropropylene (542-75-6)	x	x		< 0.0059	< 0.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19V. Ethylbenzene (100-41-4)	x	x		< 0.0072	< 0.21	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20V. Methyl Bromide (74-83-9)	x	x		< 0.0014	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21V. Methyl Chloride (74-87-3)	x	x		< 0.0011	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8989

CONTINUED FROM PAGE V-4

OUTFALL NO. 005

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)	x	x		< 0.0028	< 0.08	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	x	x		< 0.0069	< 0.20	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24V. Tetrachloroethylene (127-18-4)	x	x		< 0.0041	< 0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25V. Toluene (108-88-3)	x	x		< 0.006	< 0.18	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26V. 1,2-Trans-Dichloroethylene (156-60-5)	x	x		< 0.0016	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27V. 1,1,1-Trichloroethane (71-55-6)	x	x		< 0.0038	< 0.11	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28V. 1,1,2-Trichloroethane (79-00-5)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29V Trichloroethylene (79-01-6)	x	x		< 0.0019	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30V. Trichlorofluoromethane (75-69-4)	x	x		< 0.0023	< 0.07	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31V. Vinyl Chloride (75-01-4)	x	x		< 0.0018	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2A. 2,4-Dichlorophenol (120-83-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3A. 2,4-Dimethylphenol (105-67-9)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4A. 4,6-Dinitro-OCresol (534-52-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5A. 2,4-Dinitrophenol (51-28-5)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6A. 2-Nitrophenol (88-75-5)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7A. 4-Nitrophenol (100-02-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8A. P-Chloro-MCresol (59-50-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9A. Pentachlorophenol [illegible]7-86-5	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
[illegible]A. Phenol [illegible]08-95-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11A. 2,4,6-Trichlorophenol (88-05-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--

CONTINUED FROM PAGE V-5

OUTFALL NO. 005

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2B. Acenaphtylene (208-96-8)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3B. Anthracene (120-12-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4B. Benzidine (92-87-5)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5B. Benzo (a) Anthracene (56-55-3)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6B. Benzo (a) Pyrene (50-32-8)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7B. 3,4-Benzofluoranthene (205-99-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8B. Benzo (ghi) Perylene (191-24-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9B. Benzo (k) Fluoranthene (207-08-9)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11B. Bis (2-Chloroethyl) Ether (111-44-4)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14B. 4-BromophenylPhenyl Ether (101-55-3)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15B. Butyl Benzyl Phthalate (85-68-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16B. 2-Chloronaphthalene (91-58-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18B. Chrysene (218-01-9)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19B. Dibenzo (a,h) Anthracene (53-70-3)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20B. 1,2-Dichlorobenzene (95-50-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21B. 1,3-Di-chlorobenzene (541-73-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8691

CONTINUED FROM PAGE V-6

OUTFALL NO. 005

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23B. 3,3-Dichlorobenzidine (91-94-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24B. Diethyl Phthalate (84-66-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25B. Dimethyl Phthalate (131-11-3)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26B. Di-N-Butyl Phthalate (84-74-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27B. 2,4-Dinitrotoluene (121-14-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28B. 2,6-Dinitrotoluene (606-20-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29B. Di-N-Octyl Phthalate (117-84-0)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31B. Fluoranthene (206-44-0)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
32B. Fluorene (86-73-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
33B. Hexachlorobenzene (118-74-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
34B. Hexachlorobutadiene (87-68-3)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
35B. Hexachlorocyclopentadiene (77-47-4)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
36B Hexachloroethane (67-72-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
38B. Isophorone (78-59-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
39B. Naphthalene (91-20-3)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
40B. Nitrobenzene (98-95-3)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
41B. N-Nitrosodimethylamine (62-75-9)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
42B. N-Nitrosodi- N-Propylamine (621-64-7)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8692

CONTINUED FROM PAGE V-7

OUTFALL NO. 005

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
44B. Phenanthrene (85-01-8)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
45B. Pyrene (129-00-0	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
46B. 1,2,4-Trichlorobenzene (120-82-1)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GS/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	x	x		< 0.00005	< 0.0015	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2P. α-BHC (319-84-6)	x	x		< 0.00005	< 0.0015	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3P. β-BHC (319-85-7)	x	x		< 0.00005	< 0.0015	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4P. γ-BHC (58-89-9)	x	x		< 0.00005	< 0.0015	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5P. δ-BHC (319-86-8)	x	x		< 0.00005	< 0.0015	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6P. Chlordane (57-74-9)	x	x		< 0.0002	< 0.0059	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7P. 4,4'-DDT (50-29-3)	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8P. 4,4'-DDE (72-55-9)	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9P. 4,4'-DDD (72-54-8)	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10P. Dieldrin (60-57-1)	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11P. α-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12P. β-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13P. Endosulfan Sulfate (1031-07-8)	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14P. Endrin (72-20-8	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Aldehyde (7421-93-4)	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16P. Heptachlor (76-44-8)	x	x		< 0.00005	< 0.0015	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8693

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774	OUTFALL NO. 005

CONTINUED FROM PAGE V-8

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - PESTICIDES (*continued*)															
17P. Heptachlor Epoxide (1024-57-3)	x	x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18P. PCB-1242 (53469-21-9)	x	x		< 0.001	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19P. PCB-1254 (11097-69-1)	x	x		< 0.001	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20P. PCB-1221 (11104-28-2)	x	x		< 0.001	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21P. PCB-1232 (11131-16-5)	x	x		< 0.001	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
22P. PCB-1248 (12672-29-6)	x	x		< 0.001	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23P. PCB-1260 (11096-82-5)	x	x		< 0.001	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24P. PCB-1016 (12674-11-2)	x	x		< 0.001	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25P. Toxaphene (8001-35-2)	x	x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8694

Additional Testing Results on 9/14/2011 sample

OUTFALL NO. 005

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
Uranium		x		0.00051	0.0150	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2,4-D		x		< 0.01	< 0.2936	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Tl (dissolved)		x		0.0004	0.0117	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ti (dissolved)		x		< 0.002	< 0.0587	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sn (dissolved)		x		< 0.005	< 0.1468	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Se (dissolved)		x		< 0.003	< 0.0881	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sb (dissolved)		x		0.001	0.0294	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Pb (dissolved)		x		< 0.001	< 0.0294	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ni (dissolved)		x		0.01	0.2936	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mo (dissolved)		x		0.006	0.1761	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hg (dissolved)		x		< 0.0002	< 0.0059	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cu (dissolved)		x		< 0.001	< 0.0294	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cr (dissolved)		x		< 0.001	< 0.0294	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Co (dissolved)		x		< 0.0006	< 0.0176	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cd (dissolved)		x		< 0.0003	< 0.0088	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Be (dissolved)		x		< 0.0002	< 0.0059	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ba (dissolved)		x		0.19	5.58	--	--	--	--	1	PPM	LBS/DAY	--	--	--
As (dissolved)		x		0.01	0.29	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ag (dissolved)		x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Zn (dissolved)		x		< 0.01	< 0.29	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mn (dissolved)		x		0.06	1.76	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mg (dissolved)		x		15.38	451.51	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Fe (dissolved)		x		0.06	1.76	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Al (dissolved)		x		< 0.09	< 2.64	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Dissolved Solids		x		452	13269.27	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Hardness as CaCO3		x		129.96	3815.21	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorides as Cl		x		153.19	4497.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hydrogen Sulfide		x		< 0.05	< 1.47	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chromium +6 as Cr6		x		< 0.005	< 0.15	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Kepone		x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Methoxychlor		x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mirex		x		< 0.0001	< 0.0029	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorpyrifos		x		< 0.0002	< 0.0059	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Demeton		x		< 0.001	< 0.0294	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Diazinon		x		< 0.001	< 0.0294	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Guthion		x		< 0.001	< 0.0294	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Malathion		x		< 0.001	< 0.0294	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Parathion		x		< 0.001	< 0.0294	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Silvex		x		< 0.002	< 0.0587	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8695

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 007

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

1. Pollutant	2. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	3. UNITS (specify if blank) a. CONCENTRATION	b. MASS	4. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Biological Oxygen Demand *(BOD)*	< 3.0	< 25.60	--	--	--	--	1	PPM	LBS/DAY	--	--	--
b. Chemical Oxygen Demand *(COD)*	9.71	82.84	--	--	--	--	1	PPM	LBS/DAY	--	--	--
c. Total Organic Carbon *(TOC)*	7.00	59.72	--	--	--	--	1	PPM	LBS/DAY	--	--	--
d. Total Suspended Solids *(TSS)*	19.4	165.52	--	--	--	--	1	PPM	LBS/DAY	--	--	--
e. Ammonia *(as N)*	0.06	0.51	--	--	--	--	1	PPM	LBS/DAY	--	--	--
f. Flow	VALUE 1.0		VALUE 1.023		VALUE 0.37		15	MGD	--	VALUE --		-- --
g. Temperature *(winter)*	VALUE 3.4		VALUE --		VALUE --		1	°C		VALUE --		-- --
h. Temperature *(summer)*	VALUE 29.5		VALUE --		VALUE --		1	°C		VALUE --		-- --
i. pH	7.92	7.92	--	--			1	STANDARD UNITS				

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

1. Pollutant and CAS NO. *(If available)*	2. MARK 'X' b. Believed Present	c. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	UNITS (specify if blank) a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)	x		3.7	31.567734	--	--	--	--	1	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual	x		< 0.1	< 0.853182	--	--	--	--	1	PPM	LBS/DAY	--	--	--
c. Color	x		31	--	--	--	--	--	1	PCU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
e. Fluoride (16984-48-8)	x		0.103	0.87877746	--	--	--	--	1	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite *(as N)*	x		0.84	7.1667288	--	--	1.00	3.0858	12	PPM	LBS/DAY	--	--	--

ITEM V-B CONTINUED

OUTFALL NO. 007

1. Pollutant and CAS NO. (If available)	2. MARK 'X'		3. EFFLUENT							UNITS (specify if blank)		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATIO	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)	x		< 0.3	< 2.56	--	--	--	--	1	PPM	LBS/DAY	--	--	--
h. Oil & Grease	x		< 5	< 42.66	--	--	--	--	1	PPM	LBS/DAY	--	--	--
i. Phosphorus (as P), Total (7723-14-0)	x		< 0.1	< 0.85	--	--	--	--	1	PPM	LBS/DAY	--	--	--
j. Radioactivity														
(1) Alpha		x	< 1.94	--	--	--	--	--	1	pCi/L	--	--	--	--
(2) Beta		x	< 2.17	--	--	--	--	--	1	pCi/L	--	--	--	--
(3) Radium, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
(4) Radium 226, Total		x	--	--	--	--	--	--	1	pCi/L	--	--	--	--
k. Sulfate (as SO_4) (14808-79-8)	x		20.29	173.11	--	--	--	--	1	PPM	LBS/DAY	--	--	--
l. Sulfide (as S)	x		< 0.05	< 0.43	--	--	--	--	1	PPM	LBS/DAY	--	--	--
m. Sulfite (as SO_3) (14265-45-3)		x	No Sample	--	--	--	--	--	--	--	--	--	--	--
n. Surfactants	x		< 0.01	< 0.09	--	--	--	--	1	PPM	LBS/DAY	--	--	--
o. Aluminum, Total (7429-90-5)	x		0.46	3.92	--	--	--	--	1	PPM	LBS/DAY	--	--	--
p. Barium Total (7440-39-3)	x		0.066	0.56	--	--	--	--	1	PPM	LBS/DAY	--	--	--
q. Boron, Total (7440-42-8)	x		< 0.02	< 0.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
r. Cobalt, Total (7440-48-4)	x		< 0.0006	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
s. Iron, Total (7439-89-6)	x		1.08	9.21	--	--	--	--	1	PPM	LBS/DAY	--	--	--
t. Magnesium, Total (7439-95-4)	x		5.28	45.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
u. Molybdenum, Total (7439-98-7)	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
v. Manganese, Total (7439-96-5)	x		0.09	0.77	--	--	--	--	1	PPM	LBS/DAY	--	--	--
w. Tin, Total (7440-[illegible]-5)	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
x. Titanium, Total (7440-32-6)	x		< 0.002	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--

EPA I.D. NUMBER (copy from Item 1 of Form 1)	110000340774	OUTFALL NO. 007

CONTINUED FROM PAGE V-2

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

Part C.

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	x	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2M. Arsenic, Total (7440-38-2	x	x		< 0.003	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3M. Beryllium, Total (7440-41-7)	x	x		< 0.0002	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4M. Cadmium, Total (7440-43-9)	x	x		< 0.0003	< 0.00	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5M. Chromium, Total (7440-47-3)	x	x		< 0.02	< 0.17	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6M. Copper, Total (7440-50-8)	x	x		0.003	0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7M. Lead, Total (7439-92-1)	x	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8M. Mercury, Total (7439-97-6)	x	x		< 0.0002	< 0.0017	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9M. Nickel, Total (7440-02-0)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10M. Selenium, Total (7782-49-2)	x	x		< 0.003	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11M. Silver, Total (7440-22-4	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12M. Thallium, Total (7440-28-0)	x	x		0.0002	0.0017	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13M. Zinc, Total (7440-66-6)	x	x		0.014	0.12	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14M. Cyanide, Total (57-12-5)	x	x		< 0.01	< 0.09	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15M. Phenols, Total	x	x		< 0.01	< 0.09	--	--	--	--	1	PPM	LBS/DAY	--	--	--
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESULTS No Sample											

CONTINUED FROM PAGE V-3

OUTFALL NO. 007

1. Pollutant and CAS NO. (If available)	2. MARK 'X' a. Testing Required	b. Believed Present	c. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	4. UNITS (specify if blank) a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Accrolein (107-02-8)	x	x		< 0.01	< 0.09	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2V. Acrylonitrile (107-13-1)	x	x		< 0.0015	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3V. Benzene (71-43-2)	x	x		< 0.0044	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)	x	x		< 0.0047	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6V. Carbon Tetrachloride (56-23-5)	x	x		< 0.0028	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7V. Chlorobenzene (108-90-7)	x	x		< 0.006	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8V. Chlorodibromomethane (124-48-1)	x	x		< 0.0031	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9V. Chloroethane (75-00-3)	x	x		< 0.0011	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10V. 2-Chloroethylvinyl Ether (110-75-8)	x	x		< 0.0012	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11V. Chloroform (67-66-3)	x	x		< 0.016	< 0.14	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12V. Dichlorobromomethane (75-27-4)	x	x		< 0.0022	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)	x	x		< 0.0047	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15V. 1,2-Dichloroethane (107-06-2)	x	x		< 0.0028	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16V. 1,1-Dichloroethylene (75-35-4)	x	x		< 0.0028	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17V. 1,2-Dichloropropane (78-87-5)	x	x		< 0.006	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18V. 1,3-Dichloropropylene (542-75-6)	x	x		< 0.0059	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19V. Ethylbenzene (100-41-4)	x	x		< 0.0072	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20V. Methyl Bromide (74-83-9)	x	x		< 0.0014	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21V. Methyl Chloride (74-87-3)	x	x		< 0.0011	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--

CONTINUED FROM PAGE V-4

OUTFALL NO. 007

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)	x	x		< 0.0028	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	x	x		< 0.0069	< 0.06	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24V. Tetrachloroethylene (127-18-4)	x	x		< 0.0041	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25V. Toluene (108-88-3)	x	x		< 0.006	< 0.05	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26V. 1,2-Trans-Dichloroethylene (156-60-5)	x	x		< 0.0016	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27V. 1,1,1-Trichloroethane (71-55-6)	x	x		< 0.0038	< 0.03	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28V. 1,1,2-Trichloroethane (79-00-5)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29V Trichloroethylene (79-01-6)	x	x		< 0.0019	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30V. Trichlorofluoromethane (75-69-4)	x	x		< 0.0023	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31V. Vinyl Chloride (75-01-4)	x	x		< 0.0018	< 0.02	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2A. 2,4-Dichlorophenol (120-83-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3A. 2,4-Dimethylphenol (105-67-9)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4A. 4,6-Dinitro-OCresol (534-52-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5A. 2,4-Dinitrophenol (51-28-5)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6A. 2-Nitrophenol (88-75-5)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7A. 4-Nitrophenol (100-02-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8A. P-Chloro-MCresol (59-50-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9A. Pentachlorophenol (87-86-5	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10A. Phenol (108-95-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11A. 2,4,6-Trichlorophenol (88-05-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8700

CONTINUED FROM PAGE V-5

OUTFALL NO. 007

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2B. Acenaphtylene (208-96-8)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3B. Anthracene (120-12-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4B. Benzidine (92-87-5)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5B. Benzo (a) Anthracene (56-55-3)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6B. Benzo (a) Pyrene (50-32-8)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7B. 3,4-Benzofluoranthene (205-99-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8B. Benzo (ghi) Perylene (191-24-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9B. Benzo (k) Fluoranthene (207-08-9)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11B. Bis (2-Chloroethyl) Ether (111-44-4)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14B. 4-BromophenylPhenyl Ether (101-55-3)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
15B. Butyl Benzyl Phthalate (85-68-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16B. 2-Chloronaphthalene (91-58-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18B. Chrysene (218-01-9)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19B. Dibenzo (a,h) Anthracene (53-70-3)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20B. 1,2-Dichlorobenzene (95-50-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21B. 1,3-Di-chlorobenzene (541-73-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8701

CONTINUED FROM PAGE V-6

OUTFALL NO. 007

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23B. 3,3-Dichlorobenzidine (91-94-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24B. Diethyl Phthalate (84-66-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25B. Dimethyl Phthalate (131-11-3)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
26B. Di-N-Butyl Phthalate (84-74-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
27B. 2,4-Dinitrotoluene (121-14-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
28B. 2,6-Dinitrotoluene (606-20-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
29B. Di-N-Octyl Phthalate (117-84-0)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
31B. Fluoranthene (206-44-0)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
32B. Fluorene (86-73-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
33B. Hexachlorobenzene (118-74-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
34B. Hexachlorobutadiene (87-68-3)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
35B. Hexachlorocyclopentadiene (77-47-4)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
36B Hexachloroethane (67-72-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
38B. Isophorone (78-59-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
39B. Naphthalene (91-20-3)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
40B. Nitrobenzene (98-95-3)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
41B. N-Nitrosodimethylamine (62-75-9)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
42B. N-Nitrosodi- N-Propylamine (621-64-7)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8702

CONTINUED FROM PAGE V-7

OUTFALL NO. 007

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
44B. Phenanthrene (85-01-8)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
45B. Pyrene (129-00-0	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
46B. 1,2,4-Trichlorobenzene (120-82-1)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--
GS/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	x	x		< 0.00005	< 0.0004	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2P. α-BHC (319-84-6)	x	x		< 0.00005	< 0.0004	--	--	--	--	1	PPM	LBS/DAY	--	--	--
3P. β-BHC (319-85-7)	x	x		< 0.00005	< 0.0004	--	--	--	--	1	PPM	LBS/DAY	--	--	--
4P. γ-BHC (58-89-9)	x	x		< 0.00005	< 0.0004	--	--	--	--	1	PPM	LBS/DAY	--	--	--
5P. δ-BHC (319-86-8)	x	x		< 0.00005	< 0.0004	--	--	--	--	1	PPM	LBS/DAY	--	--	--
6P. Chlordane (57-74-9)	x	x		< 0.0002	< 0.0017	--	--	--	--	1	PPM	LBS/DAY	--	--	--
7P. 4,4'-DDT (50-29-3)	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
8P. 4,4'-DDE (72-55-9)	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
9P. 4,4'-DDD (72-54-8)	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
10P. Dieldrin (60-57-1)	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
11P. α-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
12P. β-Endosulfan (115-29-7)	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
13P. Endosulfan Sulfate (1031-07-8)	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
14P. Endrin (72-20-8	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Aldehyde (7421-93-4)	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
16P. Heptachlor (76-44-8)	x	x		< 0.00005	< 0.0004	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8703

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 007

CONTINUED FROM PAGE V-8

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)	x	x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
18P. PCB-1242 (53469-21-9)	x	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
19P. PCB-1254 (11097-69-1)	x	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
20P. PCB-1221 (11104-28-2)	x	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
21P. PCB-1232 (11131-16-5)	x	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
22P. PCB-1248 (12672-29-6)	x	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
23P. PCB-1260 (11096-82-5)	x	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
24P. PCB-1016 (12674-11-2)	x	x		< 0.001	< 0.01	--	--	--	--	1	PPM	LBS/DAY	--	--	--
25P. Toxaphene (8001-35-2)	x	x		< 0.005	< 0.04	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8704

Additional Testing Results on 9/14/2011 sample

OUTFALL NO. 007

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
Uranium		x		< 0.21	< 1.7917	--	--	--	--	1	PPM	LBS/DAY	--	--	--
2,4-D		x		< 0.01	< 0.0853	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Tl (dissolved)		x		< 0.0002	0.0017	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ti (dissolved)		x		< 0.002	< 0.0171	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sn (dissolved)		x		< 0.005	< 0.0427	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Se (dissolved)		x		< 0.003	< 0.0256	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Sb (dissolved)		x		< 0.001	0.0085	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Pb (dissolved)		x		< 0.001	< 0.0085	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ni (dissolved)		x		< 0.005	0.0427	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mo (dissolved)		x		< 0.001	0.0085	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hg (dissolved)		x		< 0.0002	< 0.0017	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cu (dissolved)		x		0.003	< 0.0256	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cr (dissolved)		x		< 0.001	< 0.0085	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Co (dissolved)		x		< 0.0006	< 0.0051	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Cd (dissolved)		x		< 0.0003	< 0.0026	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Be (dissolved)		x		< 0.0002	< 0.0017	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ba (dissolved)		x		0.04	0.3413	--	--	--	--	1	PPM	LBS/DAY	--	--	--
As (dissolved)		x		< 0.003	< 0.0256	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Ag (dissolved)		x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Zn (dissolved)		x		< 0.01	< 0.0853	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mn (dissolved)		x		< 0.02	< 0.1706	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mg (dissolved)		x		5.13	43.77	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Fe (dissolved)		x		0.1	0.85	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Al (dissolved)		x		< 0.09	< 0.77	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Dissolved Solids		x		164	1399.22	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Total Hardness as CaCO3		x		88.92	758.65	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorides as Cl		x		17.58	149.99	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Hydrogen Sulfide		x		< 0.05	< 0.43	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chromium +6 as Cr6		x		< 0.005	< 0.0427	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Kepone		x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Methoxychlor		x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Mirex		x		< 0.0001	< 0.0009	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Chlorpyrifos		x		< 0.0002	< 0.0017	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Demeton		x		< 0.001	< 0.0085	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Diazinon		x		< 0.001	< 0.0085	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Guthion		x		< 0.001	< 0.0085	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Malathion		x		< 0.001	< 0.0085	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Parathion		x		< 0.001	< 0.0085	--	--	--	--	1	PPM	LBS/DAY	--	--	--
Silvex		x		< 0.002	< 0.0171	--	--	--	--	1	PPM	LBS/DAY	--	--	--

8705

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 201

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

1. Pollutant	2. EFFLUENT								3. UNITS (*specify if blank*)		4. INTAKE (*optional*)		
	a. MAXIMUM DAY VALUE			b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biological Oxygen Demand (*BOD*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chemical Oxygen Demand (*COD*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Total Organic Carbon (*TOC*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
d. Total Suspended Solids (*TSS*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
e. Ammonia (*as N*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Flow		VALUE 5.8		VALUE 4.9		VALUE 1.48		32	MGD	--	VALUE --		-- --
g. Temperature (*winter*)		VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
h. Temperature (*summer*)		VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
i. pH		7.46	8.75	--	--			32	STANDARD UNITS				

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

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'		3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (if availale)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Color		x	No Sample	--	--	--	--	--	0	NTU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	0	COL/100ml	--	--	--	--
e. Fluoride (16984-48-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite (*as N*)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8706

ITEM V-B CONTINUED

OUTFALL NO. 201

1. Pollutant and CAS NO. (if available)	2. MARK 'X' a. Believed Present	2. MARK 'X' b. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	a. MAXIMUM DAY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVG. VALUE (2) MASS	d. No. OF ANALYSES	4. UNITS (specify if blank) a. CONCENTRATION	4. UNITS b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	5. INTAKE a. LONG TERM AVG. VALUE (2) MASS	5. INTAKE b. NO. OF ANALYSES
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
h. Oil & Grease		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
i. Phosphorus (as P), Total (7723-14-0)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
j. Radioactivity														
(1) Alpha		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(2) Beta		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(3) Radium, Total		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(4) Radium 226, Total		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
k. Sulfate (as SO_4) (14808-79-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
l. Sulfide (as S)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
m. Sulfite (as SO_3) (14265-45-3)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
n. Surfacants		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
o. Aluminum, Total (7429-90-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
p. Barium Total (7440-39-3)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
q. Boron, Total (7440-42-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
r. Cobalt, Total (7440-48-4)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
s. Iron, Total (7439-89-6)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
t. Magnesium, Total (7439-95-4)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
u. Molybdenum, Total (7439-98-7)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
v. Manganese, Total (7439-96-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
w. Tin, Total (7440-31-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
x. Titanium, Total (7440-32-6)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8707

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774	OUTFALL NO. 201

CONTINUED FROM PAGE V-2

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

Part C.

1. Pollutant and CAS NO. *(If available)*	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVG. VALUE *(if available)*		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2M. Arsenic, Total (7440-38-2			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3M. Beryllium, Total (7440-41-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4M. Cadmium, Total (7440-43-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5M. Chromium, Total (7440-47-3)	x	x		0.009	0.44	0.009	0.37	0.00078	0.01	32	PPM	LBS/DAY	--	--	--
6M. Copper, Total (7440-50-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7M. Lead, Total (7439-92-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8M. Mercury, Total (7439-97-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9M. Nickel, Total (7440-02-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10M. Selenium, Total (7782-49-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11M. Silver, Total (7440-22-4			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12M. Thallium, Total (7440-28-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13M. Zinc, Total (7440-66-6)	x	x		0.144	6.97	0.144	5.88	0.0119	0.15	32	PPM	LBS/DAY	--	--	--
14M. Cyanide, Total (57-12-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15M. Phenols, Total			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESULTS No Sample											

8708

CONTINUED FROM PAGE V-3

OUTFALL NO. 201

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Accrolein (107-02-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2V. Acrylonitrile (107-13-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3V. Benzene (71-43-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6V. Carbon Tetrachloride (56-23-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7V. Chlorobenzene (108-90-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8V. Chlorodibromomethane (124-48-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9V. Chloroethane (75-00-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10V. 2-Chloroethylvinyl Ether (110-75-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11V. Chloroform (67-66-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12V. Dichlorobromomethane (75-27-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15V. 1,2-Dichloroethane (107-06-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16V. 1,1-Dichloroethylene (75-35-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
17V. 1,2-Dichloropropane (78-87-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18V. 1,3-Dichloropropylene (542-75-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19V. Ethylbenzene (100-41-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20V. Methyl Bromide (74-83-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21V. Methyl Chloride (74-87-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8709

CONTINUED FROM PAGE V-4

OUTFALL NO. 201

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24V. Tetrachloroethylene (127-18-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25V. Toluene (108-88-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
26V. 1,2-Trans-Dichloroethylene (156-60-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
27V. 1,1,1-Trichloroethane (71-55-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
28V. 1,1,2-Trichloroethane (79-00-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
29V Trichloroethylene (79-01-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
30V. Trichlorofluoromethane (75-69-4)				Not Required		Not Required		Not Required							
31V. Vinyl Chloride (75-01-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2A. 2,4-Dichlorophenol (120-83-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3A. 2,4-Dimethylphenol (105-67-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4A. 4,6-Dinitro-OCresol (534-52-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5A. 2,4-Dinitrophenol (51-28-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6A. 2-Nitrophenol (88-75-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7A. 4-Nitrophenol (100-02-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8A. P-Chloro-MCresol (59-50-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9A. Pentachlorophenol (87-86-5			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10A. Phenol (108-95-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11A. 2,4,6-Trichlorophenol (88-05-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8710

CONTINUED FROM PAGE V-5

OUTFALL NO. 201

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2B. Acenaphtylen (208-96-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3B. Anthracene (120-12-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4B. Benzidine (92-87-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5B. Benzo (a) Anthracene (56-55-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6B. Benzo (a) Pyrene (50-32-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7B. 3,4-Benzofluoranthene (205-99-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8B. Benzo (ghi) Perylene (191-24-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9B. Benzo (k) Fluoranthene (207-08-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11B. Bis (2-Chloroethyl) Ether (111-44-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14B. 4-BromophenylPhenyl Ether (101-55-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15B. Butyl Benzyl Phthalate (85-68-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16B. 2-Chloronaphthalene (91-58-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18B. Chrysene (218-01-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19B. Dibenzo (a,h) Anthracene (53-70-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20B. 1,2-Dichlorobenzene (95-50-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21B. 1,3-Di-chlorobenzene (541-73-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8711

CONTINUED FROM PAGE V-6

OUTFALL NO. 201

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23B. 3,3-Dichlorobenzidine (91-94-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24B. Diethyl Phthalate (84-66-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25B. Dimethyl Phthalate (131-11-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
26B. Di-N-Butyl Phthalate (84-74-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
27B. 2,4-Dinitrotoluene (121-14-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
28B. 2,6-Dinitrotoluene (606-20-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
29B. Di-N-Octyl Phthalate (117-84-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
31B. Fluoranthene (206-44-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
32B. Fluorene (86-73-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
33B. Hexachlorobenzene (118-74-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
34B. Hexachlorobutadiene (87-68-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
35B. Hexachlorocyclopentadiene (77-47-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
36B Hexachloroethane (67-72-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
38B. Isophorone (78-59-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
39B. Naphthalene (91-20-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
40B. Nitrobenzene (98-95-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
41B. N-Nitrosodimethylamine (62-75-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
42B. N-Nitrosodi- N-Propylamine (621-64-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

CONTINUED FROM PAGE V-7

OUTFALL NO. 201

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
44B. Phenanthrene (85-01-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
45B. Pyrene (129-00-0			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
46B. 1,2,4-Trichlorobenzene (120-82-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
GS/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2P. α-BHC (319-84-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3P. β-BHC (319-85-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4P. γ-BHC (58-89-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5P. δ-BHC (319-86-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6P. Chlordane (57-74-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7P. 4,4'-DDT (50-29-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8P. 4,4'-DDE (72-55-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9P. 4,4'-DDD (72-54-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10P. Dieldrin (60-57-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11P. α-Enosulfan (115-29-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12P. β-Endosulfan (115-29-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13P. Endosulfan Sulfate (1031-07-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14P. Endrin (72-20-8			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
Aldehyde (7421-93-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16P. Heptachlor (76-44-8			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8713

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 201

CONTINUED FROM PAGE V-8

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18P. PCB-1242 (53469-21-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19P. PCB-1254 (11097-69-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20P. PCB-1221 (11104-28-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21P. PCB-1232 (11131-16-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
22P. PCB-1248 (12672-29-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23P. PCB-1260 (11096-82-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24P. PCB-1016 (12674-11-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25P. Toxaphene (8001-35-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8714

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 202

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

1. Pollutant	2. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	3. UNITS (specify if blank) a. CONCENTRATION	b. MASS	4. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Biological Oxygen Demand (BOD)	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chemical Oxygen Demand (COD)	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Total Organic Carbon (TOC)	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
d. Total Suspended Solids (TSS)	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
e. Ammonia (as N)	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Flow	VALUE 1.8		VALUE 1.8		VALUE 0.91		35	MGD	--	VALUE --		-- --
g. Temperature (winter)	VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
h. Temperature (summer)	VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
i. pH	6.08	8.32	--	--			35	STANDARD UNITS				

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

1. Pollutant and CAS NO. (If available)	2. MARK 'X' b. Believed Present	c. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. No. OF ANALYSES	4. UNITS (specify if blank) a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Color		x	No Sample	--	--	--	--	--	0	NTU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	0	COL/100ml	--	--	--	--
e. Fluoride (16984-48-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite (as N)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8715

ITEM V-B CONTINUED

OUTFALL NO. 202

1. Pollutant and CAS NO. (If available)	2. MARK 'X'		3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
h. Oil & Grease		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
i. Phosphorus (as P), Total (7723-14-0)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
j. Radioactivity														
(1) Alpha		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(2) Beta		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(3) Radium, Total		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(4) Radium 226, Total		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
k. Sulfate (as SO_4) (14808-79-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
l. Sulfide (as S)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
m. Sulfite (as SO_3) (14265-45-3)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
n. Surfacants		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
o. Aluminum, Total (7429-90-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
p. Barium Total (7440-39-3)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
q. Boron, Total (7440-42-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
r. Cobalt, Total (7440-48-4)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
s. Iron, Total (7439-89-6)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
t. Magnesium, Total (7439-95-4)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
u. Molybdenum, Total (7439-98-7)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
v. Manganese, Total (7439-96-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
w. Tin, Total (7440-31-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
x. Titanium, Total (7440-32-6)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8716

EPA I.D. NUMBER (copy from Item 1 of Form 1)	110000340774	OUTFALL NO. 202

CONTINUED FROM PAGE V-2

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

Part C.

1. Pollutant and CAS NO. *(If available)*	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVG. VALUE *(if available)*		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2M. Arsenic, Total (7440-38-2			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3M. Beryllium, Total (7440-41-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4M. Cadmium, Total (7440-43-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5M. Chromium, Total (7440-47-3)	x	x		0.006	0.09	0.006	0.09	0.0006	0.0046	32	PPM	LBS/DAY	--	--	--
6M. Copper, Total (7440-50-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7M. Lead, Total (7439-92-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8M. Mercury, Total (7439-97-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9M. Nickel, Total (7440-02-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10M. Selenium, Total (7782-49-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11M. Silver, Total (7440-22-4			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12M. Thallium, Total (7440-28-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13M. Zinc, Total (7440-66-6)	x	x		0.05	0.75	0.05	0.75	0.0014	0.01	32	PPM	LBS/DAY	--	--	--
14M. Cyanide, Total (57-12-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15M. Phenols, Total			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESULTS No Sample											

8777

CONTINUED FROM PAGE V-3

OUTFALL NO. 202

1. Pollutant and CAS NO. (*if available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2V. Acrylonitrile (107-13-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3V. Benzene (71-43-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6V. Carbon Tetrachloride (56-23-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7V. Chlorobenzene (108-90-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8V. Chlorodibromomethane (124-48-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9V. Chloroethane (75-00-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10V. 2-Chloroethylvinyl Ether (110-75-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11V. Chloroform (67-66-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12V. Dichlorobromomethane (75-27-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15V. 1,2-Dichloroethane (107-06-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16V. 1,1-Dichloroethylene (75-35-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
17V. 1,2-Dichloropropane (78-87-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18V. 1,3-Dichloropropylene (542-75-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19V. Ethylbenzene (100-41-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20V. Methyl Bromide (74-83-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21V. Methyl Chloride (74-87-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8718

CONTINUED FROM PAGE V-4

OUTFALL NO. 202

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24V. Tetrachloroethylene (127-18-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25V. Toluene (108-88-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
26V. 1,2-Trans-Dichloroethylene (156-60-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
27V. 1,1,1-Trichloroethane (71-55-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
28V. 1,1,2-Trichloroethane (79-00-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
29V Trichloroethylene (79-01-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
30V. Trichlorofluoromethane (75-69-4)				Not Required		Not Required		Not Required							
31V. Vinyl Chloride (75-01-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2A. 2,4-Dichlorophenol (120-83-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3A. 2,4-Dimethylphenol (105-67-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4A. 4,6-Dinitro-OCresol (534-52-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5A. 2,4-Dinitrophenol (51-28-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6A. 2-Nitrophenol (88-75-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7A. 4-Nitrophenol (100-02-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8A. P-Chloro-MCresol (59-50-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9A. Pentachlorophenol (87-86-5			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10A. Phenol (108-95-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11A. 2,4,6-Trichlorophenol (88-05-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8719

CONTINUED FROM PAGE V-5

OUTFALL NO. 202

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2B. Acenaphtylen (208-96-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3B. Anthracene (120-12-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4B. Benzidine (92-87-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5B. Benzo (a) Anthracene (56-55-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6B. Benzo (a) Pyrene (50-32-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7B. 3,4-Benzofluoranthene (205-99-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8B. Benzo (ghi) Perylene (191-24-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9B. Benzo (k) Fluoranthene (207-08-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11B. Bis (2-Chloroethyl) Ether (111-44-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14B. 4-BromophenylPhenyl Ether (101-55-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15B. Butyl Benzyl Phthalate (85-68-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16B. 2-Chloronaphthalene (91-58-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18B. Chrysene (218-01-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19B. Dibenzo (a,h) Anthracene (53-70-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20B. 1,2-Dichlorobenzene (95-50-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21B. 1,3-Di-chlorobenzene (541-73-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8720

CONTINUED FROM PAGE V-6

OUTFALL NO 202

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23B. 3,3-Dichlorobenzidine (91-94-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24B. Diethyl Phthalate (84-66-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25B. Dimethyl Phthalate (131-11-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
26B. Di-N-Butyl Phthalate (84-74-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
27B. 2,4-Dinitrotoluene (121-14-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
28B. 2,6-Dinitrotoluene (606-20-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
29B. Di-N-Octyl Phthalate (117-84-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
31B. Fluoranthene (206-44-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
32B. Fluorene (86-73-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
33B. Hexachlorobenzene (118-74-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
34B. Hexachlorobutadiene (87-68-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
35B. Hexachlorocyclopentadiene (77-47-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
36B Hexachloroethane (67-72-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
38B. Isophorone (78-59-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
39B. Naphthalene (91-20-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
40B. Nitrobenzene (98-95-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
41B. N-Nitrosodimethylamine (62-75-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
42B. N-Nitrosodi- N-Propylamine (621-64-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8721

CONTINUED FROM PAGE V-7

OUTFALL NO. 202

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
44B. Phenanthrene (85-01-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
45B. Pyrene (129-00-0			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
46B. 1,2,4-Trichlorobenzene (120-82-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
GS/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2P. α-BHC (319-84-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3P. β-BHC (319-85-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4P. γ-BHC (58-89-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5P. δ-BHC (319-86-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6P. Chlordane (57-74-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7P. 4,4'-DDT (50-29-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8P. 4,4'-DDE (72-55-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9P. 4,4'-DDD (72-54-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10P. Dieldrin (60-57-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11P. α-Enosulfan (115-29-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12P. β-Endosulfan (115-29-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13P. Endosulfan Sulfate (1031-07-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14P. Endrin (72-20-8			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
Aldehyde (7421-93-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16P. Heptachlor (76-44-8			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8722

CONTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 202

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18P. PCB-1242 (53469-21-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19P. PCB-1254 (11097-69-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20P. PCB-1221 (11104-28-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21P. PCB-1232 (11131-16-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
22P. PCB-1248 (12672-29-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23P. PCB-1260 (11096-82-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24P. PCB-1016 (12674-11-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25P. Toxaphene (8001-35-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8723

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 501

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

1. Pollutant	2. EFFLUENT								3. UNITS (*specify if blank*)		4. INTAKE (*optional*)		
	a. MAXIMUM DAY VALUE			b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if availale*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biological Oxygen Demand (*BOD*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chemical Oxygen Demand (*COD*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Total Organic Carbon (*TOC*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
d. Total Suspended Solids (*TSS*)		6.8	67.49	6.8	67.49	2.25	19.46	4	PPM	LBS/DAY	--	--	--
e. Ammonia (*as N*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Flow		VALUE 1.19		VALUE 1.19		VALUE 1.037		4	MGD	--	VALUE --		-- --
g. Temperature (*winter*)		VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
h. Temperature (*summer*)		VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
i. pH		No Sample	No Sample	--	--			0	STANDARD UNITS				

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

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'		3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if availale*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Color		x	No Sample	--	--	--	--	--	0	NTU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	0	COL/100ml	--	--	--	--
e. Fluoride (16984-48-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite (*as N*)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8724

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 501

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

1. Pollutant	2. EFFLUENT								3. UNITS (*specify if blank*)		4. INTAKE (*optional*)		
	a. MAXIMUM DAY VALUE			b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if availale*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biological Oxygen Demand (*BOD*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chemical Oxygen Demand (*COD*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Total Organic Carbon (*TOC*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
d. Total Suspended Solids (*TSS*)		6.8	67.49	6.8	67.49	2.25	19.46	4	PPM	LBS/DAY	--	--	--
e. Ammonia (*as N*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Flow		VALUE 1.19		VALUE 1.19		VALUE 1.037		4	MGD	--	VALUE --		-- --
g. Temperature (*winter*)		VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
h. Temperature (*summer*)		VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
i. pH		No Sample	No Sample	--	--			0	STANDARD UNITS				

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

1. Pollutant and CAS NO. (*If available*)	2.MARK 'X'		3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (if availale)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Color		x	No Sample	--	--	--	--	--	0	NTU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	0	COL/100ml	--	--	--	--
e. Fluoride (16984-48-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite (*as N*)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8725

ITEM V-B CONTINUED

OUTFALL NO. 501

1. Pollutant and CAS NO. (If available)	2. MARK 'X' a. Believed Present	2. MARK 'X' b. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	3. EFFLUENT a. MAXIMUM DAY VALUE (2) MASS	3. EFFLUENT b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	3. EFFLUENT b. MAXIMUM 30 DAY VALUE (if available) (2) MASS	3. EFFLUENT c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	3. EFFLUENT c. LONG TERM AVG. VALUE (if available) (2) MASS	3. EFFLUENT d. No. OF ANALYSES	4. UNITS (specify if blank) a. CONCENTRATION	4. UNITS b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	5. INTAKE (optional) a. LONG TERM AVG. VALUE (2) MASS	5. INTAKE (optional) b. NO. OF ANALYSES
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
h. Oil & Grease	x		< 5.00	< 49.62	< 5.00	< 49.62	< 5.00	< 43.24	4	PPM	LBS/DAY	--	--	--
i. Phosphorus (as P), Total (7723-14-0)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
j. Radioactivity														
(1) Alpha		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(2) Beta		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(3) Radium, Total		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(4) Radium 226, Total		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
k. Sulfate (as SO_4) (14808-79-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
l. Sulfide (as S)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
m. Sulfite (as SO_3) (14265-45-3)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
n. Surfacants		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
o. Aluminum, Total (7429-90-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
p. Barium Total (7440-39-3)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
q. Boron, Total (7440-42-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
r. Cobalt, Total (7440-48-4)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
s. Iron, Total (7439-89-6)	x		< 0.25	< 2.48	< 0.25	< 2.48	< 0.25	< 2.16	4	PPM	LBS/DAY	--	--	--
t. Magnesium, Total (7439-95-4)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
u. Molybdenum, Total (7439-98-7)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
v. Manganese, Total (7439-96-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
w. Tin, Total (7440-31-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
x. Titanium, Total (7440-32-6)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8729

EPA I.D. NUMBER (copy from Item 1 of Form 1)	110000340774	OUTFALL NO. 501

CONTINUED FROM PAGE V-2

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

Part C.

1. Pollutant and CAS NO. *(If available)*	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVG. VALUE *(if available)*		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2M. Arsenic, Total (7440-38-2			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3M. Beryllium, Total (7440-41-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4M. Cadmium, Total (7440-43-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5M. Chromium, Total (7440-47-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6M. Copper, Total (7440-50-8)	x	x		< 0.10	< 0.99	< 0.10	< 0.99	< 0.10	< 0.8649	4	PPM	LBS/DAY	--	--	--
7M. Lead, Total (7439-92-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8M. Mercury, Total (7439-97-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9M. Nickel, Total (7440-02-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10M. Selenium, Total (7782-49-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11M. Silver, Total (7440-22-4			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12M. Thallium, Total (7440-28-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13M. Zinc, Total (7440-66-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14M. Cyanide, Total (57-12-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15M. Phenols, Total			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
DIOXIN															
1.3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESULTS No Sample											

8727

CONTINUED FROM PAGE V-3

OUTFALL NO. 501

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Accrolein (107-02-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2V. Acrylonitrile (107-13-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3V. Benzene (71-43-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6V. Carbon Tetrachloride (56-23-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7V. Chlorobenzene (108-90-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8V. Chlorodibromomethane (124-48-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9V. Chloroethane (75-00-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10V. 2-Chloroethylvinyl Ether (110-75-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11V. Chloroform (67-66-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12V. Dichlorobromomethane (75-27-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15V. 1,2-Dichloroethane (107-06-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16V. 1,1-Dichloroethylene (75-35-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
17V. 1,2-Dichloropropane (78-87-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18V. 1,3-Dichloropropylene (542-75-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19V. Ethylbenzene (100-41-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20V. Methyl Bromide (74-83-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21V. Methyl Chloride (74-87-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8/28

CONTINUED FROM PAGE V-4

OUTFALL NO. 501

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24V. Tetrachloroethylene (127-18-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25V. Toluene (108-88-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
26V. 1,2-Trans-Dichloroethylene (156-60-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
27V. 1,1,1-Trichloroethane (71-55-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
28V. 1,1,2-Trichloroethane (79-00-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
29V Trichloroethylene (79-01-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
30V. Trichlorofluoromethane (75-69-4)				Not Required		Not Required		Not Required							
31V. Vinyl Chloride (75-01-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2A. 2,4-Dichlorophenol (120-83-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3A. 2,4-Dimethylphenol (105-67-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4A. 4,6-Dinitro-OCresol (534-52-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5A. 2,4-Dinitrophenol (51-28-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6A. 2-Nitrophenol (88-75-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7A. 4-Nitrophenol (100-02-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8A. P-Chloro-MCresol (59-50-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9A. Pentachlorophenol (87-86-5			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10A. Phenol (108-95-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11A. 2,4,6-Trichlorophenol (88-05-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8729

CONTINUED FROM PAGE V-5

OUTFALL NO. 501

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2B. Acenaphtylen (208-96-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3B. Anthracene (120-12-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4B. Benzidine (92-87-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5B. Benzo (a) Anthracene (56-55-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6B. Benzo (a) Pyrene (50-32-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7B. 3,4-Benzofluoranthene (205-99-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8B. Benzo (ghi) Perylene (191-24-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9B. Benzo (k) Fluoranthene (207-08-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11B. Bis (2-Chloroethyl) Ether (111-44-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14B. 4-BromophenylPhenyl Ether (101-55-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15B. Butyl Benzyl Phthalate (85-68-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16B. 2-Chloronaphthalene (91-58-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18B. Chrysene (218-01-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19B. Dibenzo (a,h) Anthracene (53-70-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20B. 1,2-Dichlorobenzene (95-50-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21B. 1,3-Di-chlorobenzene (541-73-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8730

CONTINUED FROM PAGE V-6

OUTFALL NO. 501

1. Pollutant and CAS NO. (*if available*)	2. MARK 'X'			3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if available*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23B. 3,3-Dichlorobenzidine (91-94-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24B. Diethyl Phthalate (84-66-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25B. Dimethyl Phthalate (131-11-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
26B. Di-N-Butyl Phthalate (84-74-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
27B. 2,4-Dinitrotoluene (121-14-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
28B. 2,6-Dinitrotoluene (606-20-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
29B. Di-N-Octyl Phthalate (117-84-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
31B. Fluoranthene (206-44-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
32B. Fluorene (86-73-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
33B. Hexachlorobenzene (118-74-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
34B. Hexachlorobutadiene (87-68-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
35B. Hexachlorocyclopentadiene (77-47-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
36B Hexachloroethane (67-72-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
38B. Isophorone (78-59-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
39B. Naphthalene (91-20-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
40B. Nitrobenzene (98-95-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
41B. N-Nitrosodimethylamine (62-75-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
42B. N-Nitrosodi- N-Propylamine (621-64-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8731

CONTINUED FROM PAGE V-7

OUTFALL NO. 501

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
44B. Phenanthrene (85-01-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
45B. Pyrene (129-00-0			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
46B. 1,2,4-Trichlorobenzene (120-82-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
GS/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2P. α-BHC (319-84-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3P. β-BHC (319-85-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4P. γ-BHC (58-89-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5P δ-BHC (319-86-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6P. Chlordane (57-74-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7P. 4,4'-DDT (50-29-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8P. 4,4'-DDE (72-55-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9P. 4,4'-DDD (72-54-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10P. Dieldrin (60-57-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11P. α-Enosulfan (115-29-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12P. β-Endosulfan (115-29-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13P. Endosulfan Sulfate (1031-07-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14P. Endrin (72-20-8			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
Aldehyde (7421-93-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16P. Heptachlor (76-44-8			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8732

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 501

CONTINUED FROM PAGE V-8

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18P. PCB-1242 (53469-21-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19P. PCB-1254 (11097-69-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20P. PCB-1221 (11104-28-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21P. PCB-1232 (11131-16-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
22P. PCB-1248 (12672-29-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23P. PCB-1260 (11096-82-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24P. PCB-1016 (12674-11-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25P. Toxaphene (8001-35-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8733

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
110000340774

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

OUTFALL NO. 502

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

1. Pollutant	2. EFFLUENT								3. UNITS (*specify if blank*)		4. INTAKE (*optional*)		
	a. MAXIMUM DAY VALUE			b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (*if availale*)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biological Oxygen Demand (*BOD*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chemical Oxygen Demand (*COD*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Total Organic Carbon (*TOC*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
d. Total Suspended Solids (*TSS*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
e. Ammonia (*as N*)		No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Flow		VALUE 0.567		VALUE 0.567		VALUE 0.567		35	MGD	--	VALUE --		-- --
g. Temperature (*winter*)		VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
h. Temperature (*summer*)		VALUE No Sample		VALUE --		VALUE --		0	°C		VALUE --		-- --
i. pH		No Sample	No Sample	--	--			0	STANDARD UNITS				

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

1. Pollutant and CAS NO. (*If available*)	2. MARK 'X'		3. EFFLUENT							4. UNITS (*specify if blank*)		5. INTAKE (*optional*)		
	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVG. VALUE (if availale)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
b. Chlorine, Total Residual		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
c. Color		x	No Sample	--	--	--	--	--	0	NTU	--	--	--	--
d. Fecal Coliform		x	No Sample	--	--	--	--	--	0	COL/100ml	--	--	--	--
e. Fluoride (16984-48-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
f. Nitrate - Nitrite (*as N*)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8734

ITEM V-B CONTINUED

OUTFALL NO. 502

1. Pollutant and CAS NO. (If available)	2. MARK 'X' a. Believed Present	2. MARK 'X' b. Believed Absent	3. EFFLUENT a. MAXIMUM DAY VALUE (1) CONCENTRATION	a. MAXIMUM DAY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (2) MASS	c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVG. VALUE (2) MASS	d. No. OF ANALYSES	4. UNITS (specify if blank) a. CONCENTRATION	4. UNITS b. MASS	5. INTAKE (optional) a. LONG TERM AVG. VALUE (1) CONCENTRATION	5. INTAKE a. LONG TERM AVG. VALUE (2) MASS	5. INTAKE b. NO. OF ANALYSES
GC/MS FRACTION														
g. Nitrogen, Total Organic (as N)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
h. Oil & Grease		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
i. Phosphorus (as P), Total (7723-14-0)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
j. Radioactivity														
(1) Alpha		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(2) Beta		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(3) Radium, Total		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
(4) Radium 226, Total		x	No Sample	--	--	--	--	--	0	pCi/L	--	--	--	--
k. Sulfate (as SO_4) (14808-79-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
l. Sulfide (as S)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
m. Sulfite (as SO_3) (14265-45-3)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
n. Surfacants		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
o. Aluminum, Total (7429-90-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
p. Barium Total (7440-39-3)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
q. Boron, Total (7440-42-8)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
r. Cobalt, Total (7440-48-4)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
s. Iron, Total (7439-89-6)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
t. Magnesium, Total (7439-95-4)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
u. Molybdenum, Total (7439-98-7)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
v. Manganese, Total (7439-96-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
w. Tin, Total (7440-31-5)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
x. Titanium, Total (7440-32-6)		x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8735

EPA I.D. NUMBER (copy from Item 1 of Form 1)	110000340774	OUTFALL NO. 502

CONTINUED FROM PAGE V-2

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

Part C.

1. Pollutant and CAS NO. *(if available)*	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE *(optional)*		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVG. VALUE *(if available)*		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2M. Arsenic, Total (7440-38-2			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3M. Beryllium, Total (7440-41-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4M. Cadmium, Total (7440-43-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5M. Chromium, Total (7440-47-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6M. Copper, Total (7440-50-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7M. Lead, Total (7439-92-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8M. Mercury, Total (7439-97-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9M. Nickel, Total (7440-02-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10M. Selenium, Total (7782-49-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11M. Silver, Total (7440-22-4			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12M. Thallium, Total (7440-28-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13M. Zinc, Total (7440-66-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14M. Cyanide, Total (57-12-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15M. Phenols, Total			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			x	DESCRIBE RESULTS No Sample											

8/96

CONTINUED FROM PAGE V-3

OUTFALL NO. 502

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Accrolein (107-02-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2V. Acrylonitrile (107-13-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3V. Benzene (71-43-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4V. Bis (Chloromethyl) Ether (542-88-1)				Not Required		Not Required		Not Required							
5V. Bromoform (75-25-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6V. Carbon Tetrachloride (56-23-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7V. Chlorobenzene (108-90-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8V. Chlorodibromomethane (124-48-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9V. Chloroethane (75-00-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10V. 2-Chloroethylvinyl Ether (110-75-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11V. Chloroform (67-66-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12V. Dichlorobromomethane (75-27-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13V. Dichlorodifluoromethane (75-71-8)				Not Required		Not Required		Not Required							
14V. 1,1-Dichloroethane (75-34-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15V. 1,2-Dichloroethane (107-06-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16V. 1,1-Dichloroethylene (75-35-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
17V. 1,2-Dichloropropane (78-87-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18V. 1,3-Dichloropropylene (542-75-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19V. Ethylbenzene (100-41-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20V. Methyl Bromide (74-83-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21V. Methyl Chloride (74-87-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8737

CONTINUED FROM PAGE V-4

OUTFALL NO. 502

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24V. Tetrachloroethylene (127-18-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25V. Toluene (108-88-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
26V. 1,2-Trans-Dichloroethylene (156-60-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
27V. 1,1,1-Trichloroethane (71-55-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
28V. 1,1,2-Trichloroethane (79-00-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
29V Trichloroethylene (79-01-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
30V. Trichlorofluoromethane (75-69-4)				Not Required		Not Required		Not Required							
31V. Vinyl Chloride (75-01-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2A. 2,4-Dichlorophenol (120-83-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3A. 2,4-Dimethylphenol (105-67-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4A. 4,6-Dinitro-OCresol (534-52-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5A. 2,4-Dinitrophenol (51-28-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6A. 2-Nitrophenol (88-75-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7A. 4-Nitrophenol (100-02-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8A. P-Chloro-MCresol (59-50-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9A. Pentachlorophenol (87-86-5			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10A. Phenol (108-95-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11A. 2,4,6-Trichlorophenol (88-05-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8738

CONTINUED FROM PAGE V-5

OUTFALL NO. 502

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2B. Acenaphtylen (208-96-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3B. Anthracene (120-12-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4B. Benzidine (92-87-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5B. Benzo (a) Anthracene (56-55-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6B. Benzo (a) Pyrene (50-32-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7B. 3,4-Benzofluoranthene (205-99-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8B. Benzo (ghi) Perylene (191-24-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9B. Benzo (k) Fluoranthene (207-08-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11B. Bis (2-Chloroethyl) Ether (111-44-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14B. 4-BromophenylPhenyl Ether (101-55-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
15B. Butyl Benzyl Phthalate (85-68-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16B. 2-Chloronaphthalene (91-58-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18B. Chrysene (218-01-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19B. Dibenzo (a,h) Anthracene (53-70-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20B. 1,2-Dichlorobenzene (95-50-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21B. 1,3-Di-chlorobenzene (541-73-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8739

CONTINUED FROM PAGE V-6

OUTFALL NO. 502

1. Pollutant and CAS NO. (If available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23B. 3,3-Dichlorobenzidine (91-94-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24B. Diethyl Phthalate (84-66-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25B. Dimethyl Phthalate (131-11-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
26B. Di-N-Butyl Phthalate (84-74-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
27B. 2,4-Dinitrotoluene (121-14-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
28B. 2,6-Dinitrotoluene (606-20-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
29B. Di-N-Octyl Phthalate (117-84-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
30B. 1,2-Diphenylhydrazine (as *Azobenzene*) (122-66-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
31B. Fluoranthene (206-44-0)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
32B. Fluorene (86-73-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
33B. Hexachlorobenzene (118-74-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
34B. Hexachlorobutadiene (87-68-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
35B. Hexachlorocyclopentadiene (77-47-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
36B. Hexachloroethane (67-72-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
37B. Indeno (*1,2,3-cd*) Pyrene (193-39-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
38B. Isophorone (78-59-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
39B. Naphthalene (91-20-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
40B. Nitrobenzene (98-95-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
41B. N-Nitrosodimethylamine (62-75-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
42B. N-Nitrosodi- N-Propylamine (621-64-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8740

CONTINUED FROM PAGE V-7

OUTFALL NO. 502

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
44B. Phenanthrene (85-01-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
45B. Pyrene (129-00-0			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
46B. 1,2,4-Trichlorobenzene (120-82-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
GS/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
2P. α-BHC (319-84-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
3P. β-BHC (319-85-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
4P. γ-BHC (58-89-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
5P. δ-BHC (319-86-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
6P. Chlordane (57-74-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
7P. 4,4'-DDT (50-29-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
8P. 4,4'-DDE (72-55-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
9P. 4,4'-DDD (72-54-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
10P. Dieldrin (60-57-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
11P. α-Enosulfan (115-29-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
12P. β-Endosulfan (115-29-7)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
13P. Endosulfan Sulfate (1031-07-8)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
14P. Endrin (72-20-8			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
Aldehyde (7421-93-4)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
16P. Heptachlor (76-44-8			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8741

CONTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1) 110000340774

OUTFALL NO. 502

1. Pollutant and CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. MAXIMUM DAY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. No. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVG. VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GS/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
18P. PCB-1242 (53469-21-9)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
19P. PCB-1254 (11097-69-1)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
20P. PCB-1221 (11104-28-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
21P. PCB-1232 (11141-16-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
22P. PCB-1248 (12672-29-6)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
23P. PCB-1260 (11096-82-5)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
24P. PCB-1016 (12674-11-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--
25P. Toxaphene (8001-35-2)			x	No Sample	--	--	--	--	--	0	PPM	LBS/DAY	--	--	--

8742

Form 2F

Application for Permit to Discharge Storm Water Associated with Industrial activities

Please print or type in the unshaded areas	EPA ID Number *(copy from item I of Form 1)* 110000340774	Form Approved. OMB No. 2040-0086

Form 2F NPDES

United States Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number *(list)*	B. Latitude			C. Longitude			D. Receiving Water *(name)*
S5	38	32	03	77	16	53	Quantico Creek
S61	38	32	13	77	17	00	Quantico Creek
S42	38	32	14	77	16	42	Potomac River
S31	38	32	03	77	16	51	Potomac River
S36	38	32	10	77	17	45	Potomac River
S37	38	32	09	77	16	46	Potomac River
S49	38	32	20	77	16	38	Potomac River
S77	38	32	25	77	17	18	Potomac River
S78	38	32	30	77	16	20	Potomac River
S79	38	32	33	77	16	20	Potomac River
S80	38	32	37	77	17	20	Potomac River
S86	38	32	26	77	16	28	Quantico Creek
S94	38	32	39	77	16	20	Potomac River
S95	38	32	44	77	17	18	Potomac River
S107	38	32	48	77	16	47	Quantico Creek

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
Not Applicable					

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

 Continued on Page 2

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
S5 **S61** **S42**	**0.021 acres (50%)** **0.872 acres (60%)** **1.860 acres (20%)** **See attached Storm Water Pollution Prevention Plan (Section 3) for information on the remaining stormwater outfalls.**	**3.9 acres** **2.8 acres** **6.6 acres**			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

No significant materials are currently treated, stored, or disposed at this Station in a manner to allow exposure to storm water.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge. **See Addendum the Form 2F**

Outfall Number	Treatment	List Codes from Table 2F-1
S5 **S61** **S42**	**Control measures used to reduce pollutants in runoff from Station storm water outfalls include: Settling Ponds, Ash Ponds, Oily Waste Treatment Basin, Drainage Ditches, Diversion Valves, Spill Containment and Overflow Protection, Paved and Gravel Areas, Good Housekeeping, Preventative Maintenance, Spill Prevention and Response Procedures, Inspections, Employee Training, Sediment and Erosion Control, and Management of Runoff.**	**1-O, 4-A**

V. Non Stormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name of Official Title *(type or print)*	Signature	Date Signed
C.D. Holley **VP Fossil and Hydro System Operations**	CD Holley	04/05/2012

B. provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Dry Weather Evaluations were conducted with the Annual Evaluation on the following date 9/14/2011.See Appendix H of the attached SWPPP.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

- **11/10/2009--Detergent/water discharged to Outfall S36 (estimated 50-100 gallons).; the portable wash station & and Port-a-John were re-located**
- **07/26/2010 --Process water overflow from Unit 6 Neutralization Pit to Outfall S42 (estimated several hundred gallons); the equipment was subsequently repaired.**

 Continued on Page 3

Continued from Page 2

EPA ID Number *(copy from Item I of Form I)*
110000340774

VII. Discharge Information

A,B,C, & D: See instruction before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables Vii-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E. Potential discharges not covered by analysis - is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes *(list all such pollutants below)* ☒ No *(go to Section IX)*

To the best of our knowledge, none of the pollutants listed in Tables 2F-2, 2F-3, or 2F-4 that are used or expect to be used over the next five years at this Station are discharged directly to state waters without first passing through a treatment system. Therefore, these pollutants are not listed.

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ Yes *(list all such pollutants below)* ☐ No *(go to Section IX)*

Biological toxicity tests required by Section D of our existing VPDES permit have been performed, and the results have been submitted to the Department of Environmental Quality, Northern Virginia Regional Office. These biological toxicity tests were performed on process water outfalls covered under our VPDES permit. No biological toxicity tests have been performed on discharges from storm water designated outfalls.

IX. Contact analysis Information

Were any of the analysis reported in item VII performed by a contact laboratory or consulting firm?

☒ Yes *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* ☐ No *(go to Section X)*

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Primary Laboratories, Inc.	**7423 Lee Davis Road Mechanicsville, VA 23111**	**(804) 559-9004**	**BOD, pesticides, herbicides, nitrate, color, bromide, sulfide, surfactants, Cyanide**

X. Certification

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.

A. Name & Official Title *(type or print)*	B. Area Code and Phone No.
C.D. Holley **VP Fossil and Hydro System Operations**	**(804) 273-3592**
C. Signature CD Holley	D. Date Signed 04/05/2012

8746

Outfall S5

EPA ID Number *(copy from Item I of Form 1)*
110000340774

Form Approved. OMB No. 2040-0086

VII. Discharge Information *(Continued from page 3 of Form 2F)*

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details. **Outfall S5**

Pollutant And CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil & Grease	**<5.00 ppm**	**N/A**	**<5.00 ppm**	**N/A**	**1**	**General Site Runoff**
Biological Oxygen Demand (BOD5)	**<3.00 ppm**	**N/A**	**<3.00 ppm**	**N/A**	**1**	**General Site Runoff**
Chemical Oxygen Demand (COD)	**20.42 ppm**	**N/A**	**20.42 ppm**	**N/A**	**1**	**General Site Runoff**
Total Suspended Solids (TSS)	**64.2 ppm**	**N/A**	**64.2 ppm**	**N/A**	**1**	**General Site Runoff**
Total Organic Nitrogen	**0.43 ppm**	**N/A**	**0.43 ppm**	**N/A**	**1**	**General Site Runoff**
Total Phosphorus	**0.19 ppm**	**N/A**	**0.19 ppm**	**N/A**	**1**	**General Site Runoff**
pH	**7.5 Minimum**	**7.5 Maximum**	**7.5 Minimum**	**7.5 Maximum**	**1**	**General Site Runoff**

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant And CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
pH	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	--
Phosphorous Total	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Ammonia	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Nitrogen Total	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Nitrate-Nitrite N Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Copper Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Copper dissolved	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Chromium Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Zinc Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Iron Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
TPH	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**N/A**
Total Suspended Solids	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Oil & Grease	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
126 Priority Pollutants in cooling tower additives.	**None of the 126 priority pollutants are present in cooling tower additives**		**N/A**	**N/A**	**N/A**	**N/A**

Outfall S5

Part C - List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant And CAS Number (if available)	Maximum Values (mg/L unless otherwise noted)		Average Values (mg/L unless otherwise noted)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Ammonia, Total	0.03	N/A	N/A	N/A	1	General Site Runoff
Bromide, Total	0.27	N/A	N/A	N/A	1	General Site Runoff
Chlorine, Total Residual	Believed Absent					
Color	34	N/A	N/A	N/A	1	General Site Runoff
Fecal Coliform	Believed Absent					
Fluoride	0.075	N/A	N/A	N/A		General Site Runoff
Nitrate + Nitrite	0.55	N/A	N/A	N/A	1	General Site Runoff
Nitrogen, Total Org. As N	0.43	N/A	N/A	N/A	1	General Site Runoff
Phosphorus (As P), Total	0.19	N/A	N/A	N/A	1	General Site Runoff
Alpha, Total pCi/l	Believed Absent					
Beta, Total pCi/l	Believed Absent					
Radium, Total	Believed Absent					
Radium 226 , Total	Believed Absent					
Sulfate (As SO4)	33.55	N/A	N/A	N/A	1	General Site Runoff
Sulfide (As S)	0.08	N/A	N/A	N/A	1	General Site Runoff
Sulfite (As SO3)	Believed Absent					
Surfactants	0.107	N/A	N/A	N/A	1	General Site Runoff
Aluminum, Total	2.16	N/A	N/A	N/A	1	General Site Runoff
Barium, Total	0.048	N/A	N/A	N/A	1	General Site Runoff
Boron, Total	<0.02	N/A	N/A	N/A	1	N/A
Cobalt, Total	0.0015	N/A	N/A	N/A	1	General Site Runoff
Iron, Total	3.51	N/A	N/A	N/A	1	General Site Runoff
Magnesium, Total	7.14	N/A	N/A	N/A	1	General Site Runoff
Molybdenum, Total	<0.001	N/A	N/A	N/A	1	N/A
Manganese, Total	0.1	N/A	N/A	N/A	1	General Site Runoff
Tin, Total	<0.005	N/A	N/A	N/A	1	N/A
Titanium, Total	0.087	N/A	N/A	N/A	1	General Site Runoff
Antimony, Total	<0.001	N/A	N/A	N/A	1	N/A
Arsenic, Total	0.004	N/A	N/A	N/A	1	General Site Runoff
Beryllium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Cadmium, Total	<0.0003	N/A	N/A	N/A	1	N/A
Chromium, Total	0.003	N/A	N/A	N/A	1	General Site Runoff
Copper, Total	0.076	N/A	N/A	N/A	1	General Site Runoff
Lead, Total	0.008	N/A	N/A	N/A	1	General Site Runoff
Mercury, Total	<0.0002	N/A	N/A	N/A	1	N/A
Nickel, Total	<0.005	N/A	N/A	N/A	1	N/A
Selenium, Total	<0.003	N/A	N/A	N/A	1	N/A
Silver, Total	<0.0001	N/A	N/A	N/A	1	N/A
Thallium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Zinc, Total	0.046	N/A	N/A	N/A	1	General Site Runoff
Cyanide, Total	<0.005	N/A	N/A	N/A	1	N/A
Phenol	<0.01	N/A	N/A	N/A	1	General Site Runoff
Dioxin Screen	Believed Absent					
Acrolein	<0.01	N/A	N/A	N/A	1	N/A
Acrylonitrile	<0.0015	N/A	N/A	N/A	1	N/A
Benzene	<0.0044	N/A	N/A	N/A	1	N/A
Bromoform	<0.0047	N/A	N/A	N/A	1	N/A
Carbon Tetrachloride	<0.0028	N/A	N/A	N/A	1	N/A
Chlorobenzene	<0.006	N/A	N/A	N/A	1	N/A
Chlorodibromomethane	<0.0031	N/A	N/A	N/A	1	N/A
Chloroethane	<0.0011	N/A	N/A	N/A	1	N/A
2-Chloroethylvinyl Ether	<0.0012	N/A	N/A	N/A	1	N/A
Chloroform	<0.0016	N/A	N/A	N/A	1	N/A
Dichlorobromomethane	<0.0022	N/A	N/A	N/A	1	N/A
1,1-Dichloroethane	<0.0047	N/A	N/A	N/A	1	N/A
1,2-Dichloroethane	<0.0028	N/A	N/A	N/A	1	N/A
1,1-Dichloroethylene	<0.0028	N/A	N/A	N/A	1	N/A
1,2-Dichloropropane	<0.006	N/A	N/A	N/A	1	N/A
1,3-Dichloropropylene	<0.005	N/A	N/A	N/A	1	N/A
Ethyl Benzene	<0.0072	N/A	N/A	N/A	1	N/A
Methyl Bromide	<0.0014	N/A	N/A	N/A	1	N/A
Methyl Chloride	<0.0011	N/A	N/A	N/A	1	N/A
Methylene Chloride	<0.0028	N/A	N/A	N/A	1	N/A

Outfall S5

1,1,2,2-Tetrachloroethane	<0.0069	N/A	N/A	N/A	1	N/A
Tetrachloroethylene	<0.0041	N/A	N/A	N/A	1	N/A
Toluene	<0.006	N/A	N/A	N/A	1	N/A
1,2-Trans-Dichloroethylene	<0.0016	N/A	N/A	N/A	1	N/A
1,1,1-Trichloroethane	<0.0038	N/A	N/A	N/A	1	N/A
1,1,2-Trichloroethane	<0.005	N/A	N/A	N/A	1	N/A
Trichloroethylene	<0.0019	N/A	N/A	N/A	1	N/A
Vinyl Chloride	<0.0018	N/A	N/A	N/A	1	N/A
2-Chlorophenol	<0.0033	N/A	N/A	N/A	1	N/A
2,4-Dichlorophenol	<0.0056	N/A	N/A	N/A	1	N/A
2,4-Dimethylphenol	<0.0052	N/A	N/A	N/A	1	N/A
4,6-Dinitro-O-Cresol	<0.024	N/A	N/A	N/A	1	N/A
2,4-Dinitrophenol	<0.042	N/A	N/A	N/A	1	N/A
2-Nitrophenol	<0.0036	N/A	N/A	N/A	1	N/A
4-Nitrophenol	<0.0024	N/A	N/A	N/A	1	N/A
P-Chloro-M-Cresol	<0.0075	N/A	N/A	N/A	1	N/A
Pentachlorophenol	<0.0036	N/A	N/A	N/A	1	N/A
Phenol	<0.0027	N/A	N/A	N/A	1	N/A
2,4,6-Trichlorophenol	<0.0027	N/A	N/A	N/A	1	N/A
Acenaphthene	<0.003	N/A	N/A	N/A	1	N/A
Acenaphthylene	<0.0035	N/A	N/A	N/A	1	N/A
Anthracene	<0.0019	N/A	N/A	N/A	1	N/A
Benzidine	<0.063	N/A	N/A	N/A	1	N/A
Benzo (A) Anthracene	<0.0078	N/A	N/A	N/A	1	N/A
Benzo (A) Pyrene	<0.0025	N/A	N/A	N/A	1	N/A
3,4-Benzofluoranthene	<0.0048	N/A	N/A	N/A	1	N/A
Benzo (G H I) Perylene	<0.0041	N/A	N/A	N/A	1	N/A
Benzo (K) Fluoranthene	<0.0025	N/A	N/A	N/A	1	N/A
Bis(2-Chloroethoxy) Methane	<0.0053	N/A	N/A	N/A	1	N/A
Bis(-2-Chloroethyl) Ether	<0.0057	N/A	N/A	N/A	1	N/A
Bis(2-Chloroisopropyl) Ether	<0.0057	N/A	N/A	N/A	1	N/A
Bis(2-Ethylhexyl) Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
4-Bromophenyl-Phenyl Ether	<0.003	N/A	N/A	N/A	1	N/A
Butyl Benzyl Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
2-Chloronaphthalene	<0.0046	N/A	N/A	N/A	1	N/A
4-Chlorophenyl-Phenyl Ether	<0.0042	N/A	N/A	N/A	1	N/A
Chrysene	<0.0025	N/A	N/A	N/A	1	N/A
Dibenzo (A H) Anthracene	<0.0025	N/A	N/A	N/A	1	N/A
1,2-Dichlorobenzene	<0.004	N/A	N/A	N/A	1	N/A
1,3-Dichlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
1,4-Dichlorobenzene	<0.0044	N/A	N/A	N/A	1	N/A
3,3"-Dichlorobenzidine	<0.0165	N/A	N/A	N/A	1	N/A
Diethyl Phthalate	<0.0074	N/A	N/A	N/A	1	N/A
Dimethyl Phthalate	<0.0075	N/A	N/A	N/A	1	N/A
Di-N-Butyl Phthalate	<0.0064	N/A	N/A	N/A	1	N/A
2,4-Dinitrotoluene	<0.0057	N/A	N/A	N/A	1	N/A
2,6-Dinitrotoluene	<0.0034	N/A	N/A	N/A	1	N/A
Di-N-Octyl Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
1,2-Diphenylhydrazine	<0.0088	N/A	N/A	N/A	1	N/A
Fluoranthene	<0.0022	N/A	N/A	N/A	1	N/A
Fluorene	<0.0022	N/A	N/A	N/A	1	N/A
Hexachlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
Hexachlorobutadiene	<0.0018	N/A	N/A	N/A	1	N/A
Hexachlorocyclopentadiene	<0.01	N/A	N/A	N/A	1	N/A
Hexachloroethane	<0.0024	N/A	N/A	N/A	1	N/A
Indeno (1,2,3-Cd) Pyrene	<0.0037	N/A	N/A	N/A	1	N/A
Isophorone	<0.0051	N/A	N/A	N/A	1	N/A
Naphthalene	<0.0038	N/A	N/A	N/A	1	N/A
Nitrobenzene	<0.0042	N/A	N/A	N/A	1	N/A
N-Nitrosodimethylamine	<0.0062	N/A	N/A	N/A	1	N/A
N-Nitroso-Di-N-Propylamine	<0.0036	N/A	N/A	N/A	1	N/A
N-Nitrosodiphenylamine	<0.0027	N/A	N/A	N/A	1	N/A
Phenanthrene	<0.0054	N/A	N/A	N/A	1	N/A

Outfall S5

Pyrene	<0.0038	N/A	N/A	N/A	1	N/A
1,2,4-Trichlorobenzene	<0.0079	N/A	N/A	N/A	1	N/A
Aldrin	<0.00005	N/A	N/A	N/A	1	N/A
Alpha BHC	<0.00005	N/A	N/A	N/A	1	N/A
Beta BHC	<0.00005	N/A	N/A	N/A	1	N/A
Gamma BHC	<0.00005	N/A	N/A	N/A	1	N/A
Delta BHC	<0.00005	N/A	N/A	N/A	1	N/A
Chlordane	<0.0002	N/A	N/A	N/A	1	N/A
4,4pr DDT	<0.0001	N/A	N/A	N/A	1	N/A
4,4pr DDE	<0.0001	N/A	N/A	N/A	1	N/A
4,4pr DDD	<0.0001	N/A	N/A	N/A	1	N/A
Dieldrin	<0.0001	N/A	N/A	N/A	1	N/A
Alpha-Endosulfan	<0.0001	N/A	N/A	N/A	1	N/A
Beta-Endosulfan	<0.0001	N/A	N/A	N/A	1	N/A
Endosulfan Sulfate	<0.0001	N/A	N/A	N/A	1	N/A
Endrin	<0.0001	N/A	N/A	N/A	1	N/A
Endrin Aldehyde	<0.0001	N/A	N/A	N/A	1	N/A
Heptachlor	<0.00005	N/A	N/A	N/A	1	N/A
Heptachlor-Epoxide	<0.0001	N/A	N/A	N/A	1	N/A
PCB 1242	<0.001	N/A	N/A	N/A	1	N/A
PCB 1254	<0.001	N/A	N/A	N/A	1	N/A
PCB 1221	<0.001	N/A	N/A	N/A	1	N/A
PCB 1232	<0.001	N/A	N/A	N/A	1	N/A
PCB 1248	<0.001	N/A	N/A	N/A	1	N/A
PCB 1260	<0.001	N/A	N/A	N/A	1	N/A
PCB 1016	<0.001	N/A	N/A	N/A	1	N/A
Toxaphene	<0.005	N/A	N/A	N/A	1	N/A
Kepone	<0.0001	N/A	N/A	N/A	1	N/A
Methoxychlor	<0.0001	N/A	N/A	N/A	1	N/A
Mirex	<0.0001	N/A	N/A	N/A	1	N/A
Tributyltin	<0.00003	N/A	N/A	N/A	1	N/A
Demeton	<0.001	N/A	N/A	N/A	1	N/A
Malathion	<0.001	N/A	N/A	N/A	1	N/A
Parathion	<0.001	N/A	N/A	N/A	1	N/A
Clorpyrifos	<0.0002	N/A	N/A	N/A	1	N/A
Guthion	<0.001	N/A	N/A	N/A	1	N/A
Silvex	<0.0001	N/A	N/A	N/A	1	N/A
2,4-D	<0.0001	N/A	N/A	N/A	1	N/A
Hardness as CaCO3, Total	99.18	N/A	N/A	N/A	1	N/A
Vanadium, Total	0.004	N/A	N/A	N/A	1	General Site Runoff
Vanadium (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
TPH-DRO	<0.5	N/A	N/A	N/A	1	N/A
TPH-GRO	<0.5	N/A	N/A	N/A	1	N/A
Tl (dissolved)	<0.0002	N/A	N/A	N/A	1	N/A
Ti (dissolved)	<0.002	N/A	N/A	N/A	1	N/A
Sn (dissolved)	<0.005	N/A	N/A	N/A	1	N/A
Se (dissolved)	<0.003	N/A	N/A	N/A	1	N/A
Sb (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Pb (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Ni (dissolved)	<0.005	N/A	N/A	N/A	1	N/A
Mo (dissolved)	0.001	N/A	N/A	N/A	1	General Site Runoff
Hg (dissolved)	<0.0002	N/A	N/A	N/A	1	N/A
Cu (dissolved)	0.037	N/A	N/A	N/A	1	General Site Runoff
Cr (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Co (dissolved)	<0.0006	N/A	N/A	N/A	1	N/A
Cd (dissolved)	<0.0003	N/A	N/A	N/A	1	N/A
Be (dissolved)	<0.0002	N/A	N/A	N/A	1	N/A
Ba (dissolved)	0.033	N/A	N/A	N/A	1	General Site Runoff
As (dissolved)	<0.003	N/A	N/A	N/A	1	N/A
Ag (dissolved)	<0.0001	N/A	N/A	N/A	1	N/A
Zn (dissolved)	<0.01	N/A	N/A	N/A	1	N/A
Mn (dissolved)	<0.02	N/A	N/A	N/A	1	N/A
Mg (dissolved)	5.98	N/A	N/A	N/A	1	General Site Runoff
Fe (dissolved)	<0.05	N/A	N/A	N/A	1	N/A
Al (dissolved)	<0.09	N/A	N/A	N/A	1	N/A

Outfall S61

EPA ID Number *(copy from Item I of Form 1)*
110000340774

Form Approved. OMB No. 2040-0086

VII. Discharge Information *(Continued from page 3 of Form 2F)*

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details. **Outfall S61**

Pollutant And CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil & Grease	**<5.00 ppm**	**N/A**	**<5.00 ppm**	**N/A**	1	**General Site Runoff**
Biological Oxygen Demand (BOD5)	**<3.00 ppm**	**N/A**	**<3.00 ppm**	**N/A**	1	**General Site Runoff**
Chemical Oxygen Demand (COD)	**<5.00 ppm**	**N/A**	**<5.00 ppm**	**N/A**	1	**General Site Runoff**
Total Suspended Solids (TSS)	**5.0 ppm**	**N/A**	**5.0 ppm**	**N/A**	1	**General Site Runoff**
Total Organic Nitrogen	**<0.30 ppm**	**N/A**	**<0.30 ppm**	**N/A**	1	**General Site Runoff**
Total Phosphorus	**<0.05 ppm**	**N/A**	**<0.05 ppm**	**N/A**	1	**General Site Runoff**
pH	**8.2 Minimum**	**8.2 Maximum**	**8.2 Minimum**	**8.2 Maximum**	1	**General Site Runoff**

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant And CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
pH	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	--
Phosphorous Total	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Ammonia	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Nitrogen Total	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Nitrate-Nitrite N Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Copper Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Copper dissolved	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Chromium Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Zinc Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Iron Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
TPH	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**N/A**
Total Suspended Solids	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Oil & Grease	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
126 Priority Pollutants in cooling tower additives.	**None of the 126 priority pollutants are present in cooling tower additives**		**N/A**	**N/A**	**N/A**	**N/A**

Outfall S61

Part C - List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant And CAS Number *(if available)*	Maximum Values *(mg/L unless otherwise noted)*		Average Values *(mg/L unless otherwise noted)*		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Ammonia, Total	0.02	N/A	N/A	N/A	1	General Site Runoff
Bromide, Total	0.17	N/A	N/A	N/A	1	General Site Runoff
Chlorine, Total Residual	Believed Absent					
Color	20	N/A	N/A	N/A	1	General Site Runoff
Fecal Coliform	Believed Absent					
Fluoride	0.055	N/A	N/A	N/A		General Site Runoff
Nitrate + Nitrite	0.73	N/A	N/A	N/A	1	General Site Runoff
Nitrogen, Total Org. As N	<0.30	N/A	N/A	N/A	1	
Phosphorus (As P), Total	<0.05	N/A	N/A	N/A	1	
Alpha, Total pCi/l	Believed Absent					
Beta, Total pCi/l	Believed Absent					
Radium, Total	Believed Absent					
Radium 226 , Total	Believed Absent					
Sulfate (As SO4)	40.94	N/A	N/A	N/A	1	General Site Runoff
Sulfide (As S)	0.12	N/A	N/A	N/A	1	General Site Runoff
Sulfite (As SO3)	Believed Absent					
Surfactants	0.118	N/A	N/A	N/A	1	General Site Runoff
Aluminum, Total	0.67	N/A	N/A	N/A	1	General Site Runoff
Barium, Total	0.045	N/A	N/A	N/A	1	General Site Runoff
Boron, Total	0.02	N/A	N/A	N/A	1	General Site Runoff
Cobalt, Total	<0.0006	N/A	N/A	N/A	1	N/A
Iron, Total	1.06	N/A	N/A	N/A	1	General Site Runoff
Magnesium, Total	8.48	N/A	N/A	N/A	1	General Site Runoff
Molybdenum, Total	<0.001	N/A	N/A	N/A	1	N/A
Manganese, Total	0.02	N/A	N/A	N/A	1	General Site Runoff
Tin, Total	<0.005	N/A	N/A	N/A	1	N/A
Titanium, Total	<0.002	N/A	N/A	N/A	1	N/A
Antimony, Total	<0.001	N/A	N/A	N/A	1	N/A
Arsenic, Total	<0.003	N/A	N/A	N/A	1	General Site Runoff
Beryllium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Cadmium, Total	<0.0003	N/A	N/A	N/A	1	N/A
Chromium, Total	<0.001	N/A	N/A	N/A	1	N/A
Copper, Total	0.002	N/A	N/A	N/A	1	General Site Runoff
Lead, Total	0.010	N/A	N/A	N/A	1	General Site Runoff
Mercury, Total	<0.0002	N/A	N/A	N/A	1	N/A
Nickel, Total	<0.005	N/A	N/A	N/A	1	N/A
Selenium, Total	<0.003	N/A	N/A	N/A	1	N/A
Silver, Total	<0.0001	N/A	N/A	N/A	1	N/A
Thallium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Zinc, Total	0.020	N/A	N/A	N/A	1	General Site Runoff
Cyanide, Total	<0.005	N/A	N/A	N/A	1	N/A
Phenol	<0.01	N/A	N/A	N/A	1	General Site Runoff
Dioxin Screen	Believed Absent					
Acrolein	<0.01	N/A	N/A	N/A	1	N/A
Acrylonitrile	<0.0015	N/A	N/A	N/A	1	N/A
Benzene	<0.0044	N/A	N/A	N/A	1	N/A
Bromoform	<0.0047	N/A	N/A	N/A	1	N/A
Carbon Tetrachloride	<0.0028	N/A	N/A	N/A	1	N/A
Chlorobenzene	<0.006	N/A	N/A	N/A	1	N/A
Chlorodibromomethane	<0.0031	N/A	N/A	N/A	1	N/A
Chloroethane	<0.0011	N/A	N/A	N/A	1	N/A
2-Chloroethylvinyl Ether	<0.0012	N/A	N/A	N/A	1	N/A
Chloroform	<0.0016	N/A	N/A	N/A	1	N/A
Dichlorobromomethane	<0.0022	N/A	N/A	N/A	1	N/A
1,1-Dichloroethane	<0.0047	N/A	N/A	N/A	1	N/A
1,2-Dichloroethane	<0.0028	N/A	N/A	N/A	1	N/A
1,1-Dichloroethylene	<0.0028	N/A	N/A	N/A	1	N/A
1,2-Dichloropropane	<0.006	N/A	N/A	N/A	1	N/A
1,3-Dichloropropylene	<0.005	N/A	N/A	N/A	1	N/A
Ethyl Benzene	<0.0072	N/A	N/A	N/A	1	N/A
Methyl Bromide	<0.0014	N/A	N/A	N/A	1	N/A
Methyl Chloride	<0.0011	N/A	N/A	N/A	1	N/A
Methylene Chloride	<0.0028	N/A	N/A	N/A	1	N/A

Outfall S61

1,1,2,2-Tetrachloroethane	<0.0069	N/A	N/A	N/A	1	N/A
Tetrachloroethylene	<0.0041	N/A	N/A	N/A	1	N/A
Toluene	<0.006	N/A	N/A	N/A	1	N/A
1,2-Trans-Dichloroethylene	<0.0016	N/A	N/A	N/A	1	N/A
1,1,1-Trichloroethane	<0.0038	N/A	N/A	N/A	1	N/A
1,1,2-Trichloroethane	<0.005	N/A	N/A	N/A	1	N/A
Trichloroethylene	<0.0019	N/A	N/A	N/A	1	N/A
Vinyl Chloride	<0.0018	N/A	N/A	N/A	1	N/A
2-Chlorophenol	<0.0033	N/A	N/A	N/A	1	N/A
2,4-Dichlorophenol	<0.0056	N/A	N/A	N/A	1	N/A
2,4-Dimethylphenol	<0.0052	N/A	N/A	N/A	1	N/A
4,6-Dinitro-O-Cresol	<0.024	N/A	N/A	N/A	1	N/A
2,4-Dinitrophenol	<0.042	N/A	N/A	N/A	1	N/A
2-Nitrophenol	<0.0036	N/A	N/A	N/A	1	N/A
4-Nitrophenol	<0.0024	N/A	N/A	N/A	1	N/A
P-Chloro-M-Cresol	<0.0075	N/A	N/A	N/A	1	N/A
Pentachlorophenol	<0.0036	N/A	N/A	N/A	1	N/A
Phenol	<0.0027	N/A	N/A	N/A	1	N/A
2,4,6-Trichlorophenol	<0.0027	N/A	N/A	N/A	1	N/A
Acenaphthene	<0.003	N/A	N/A	N/A	1	N/A
Acenaphthylene	<0.0035	N/A	N/A	N/A	1	N/A
Anthracene	<0.0019	N/A	N/A	N/A	1	N/A
Benzidine	<0.063	N/A	N/A	N/A	1	N/A
Benzo (A) Anthracene	<0.0078	N/A	N/A	N/A	1	N/A
Benzo (A) Pyrene	<0.0025	N/A	N/A	N/A	1	N/A
3,4-Benzofluoranthene	<0.0048	N/A	N/A	N/A	1	N/A
Benzo (G H I) Perylene	<0.0041	N/A	N/A	N/A	1	N/A
Benzo (K) Fluoranthene	<0.0025	N/A	N/A	N/A	1	N/A
Bis(2-Chloroethoxy) Methane	<0.0053	N/A	N/A	N/A	1	N/A
Bis(-2-Chloroethyl) Ether	<0.0057	N/A	N/A	N/A	1	N/A
Bis(2-Chloroisopropyl) Ether	<0.0057	N/A	N/A	N/A	1	N/A
Bis(2-Ethylhexyl) Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
4-Bromophenyl-Phenyl Ether	<0.003	N/A	N/A	N/A	1	N/A
Butyl Benzyl Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
2-Chloronaphthalene	<0.0046	N/A	N/A	N/A	1	N/A
4-Chlorophenyl-Phenyl Ether	<0.0042	N/A	N/A	N/A	1	N/A
Chrysene	<0.0025	N/A	N/A	N/A	1	N/A
Dibenzo (A H) Anthracene	<0.0025	N/A	N/A	N/A	1	N/A
1,2-Dichlorobenzene	<0.004	N/A	N/A	N/A	1	N/A
1,3-Dichlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
1,4-Dichlorobenzene	<0.0044	N/A	N/A	N/A	1	N/A
3,3"-Dichlorobenzidine	<0.0165	N/A	N/A	N/A	1	N/A
Diethyl Phthalate	<0.0074	N/A	N/A	N/A	1	N/A
Dimethyl Phthalate	<0.0075	N/A	N/A	N/A	1	N/A
Di-N-Butyl Phthalate	<0.0064	N/A	N/A	N/A	1	N/A
2,4-Dinitrotoluene	<0.0057	N/A	N/A	N/A	1	N/A
2,6-Dinitrotoluene	<0.0034	N/A	N/A	N/A	1	N/A
Di-N-Octyl Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
1,2-Diphenylhydrazine	<0.0088	N/A	N/A	N/A	1	N/A
Fluoranthene	<0.0022	N/A	N/A	N/A	1	N/A
Fluorene	<0.0022	N/A	N/A	N/A	1	N/A
Hexachlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
Hexachlorobutadiene	<0.0018	N/A	N/A	N/A	1	N/A
Hexachlorocyclopentadiene	<0.01	N/A	N/A	N/A	1	N/A
Hexachloroethane	<0.0024	N/A	N/A	N/A	1	N/A
Indeno (1,2,3-Cd) Pyrene	<0.0037	N/A	N/A	N/A	1	N/A
Isophorone	<0.0051	N/A	N/A	N/A	1	N/A
Naphthalene	<0.0038	N/A	N/A	N/A	1	N/A
Nitrobenzene	<0.0042	N/A	N/A	N/A	1	N/A
N-Nitrosodimethylamine	<0.0062	N/A	N/A	N/A	1	N/A
N-Nitroso-Di-N-Propylamine	<0.0036	N/A	N/A	N/A	1	N/A
N-Nitrosodiphenylamine	<0.0027	N/A	N/A	N/A	1	N/A
Phenanthrene	<0.0054	N/A	N/A	N/A	1	N/A

Outfall S61

Pyrene	<0.0038	N/A	N/A	N/A	1	N/A
1,2,4-Trichlorobenzene	<0.0079	N/A	N/A	N/A	1	N/A
Aldrin	<0.00005	N/A	N/A	N/A	1	N/A
Alpha BHC	<0.00005	N/A	N/A	N/A	1	N/A
Beta BHC	<0.00005	N/A	N/A	N/A	1	N/A
Gamma BHC	<0.00005	N/A	N/A	N/A	1	N/A
Delta BHC	<0.00005	N/A	N/A	N/A	1	N/A
Chlordane	<0.0002	N/A	N/A	N/A	1	N/A
4,4pr DDT	<0.0001	N/A	N/A	N/A	1	N/A
4,4pr DDE	<0.0001	N/A	N/A	N/A	1	N/A
4,4pr DDD	<0.0001	N/A	N/A	N/A	1	N/A
Dieldrin	<0.0001	N/A	N/A	N/A	1	N/A
Alpha-Endosulfan	<0.0001	N/A	N/A	N/A	1	N/A
Beta-Endosulfan	<0.0001	N/A	N/A	N/A	1	N/A
Endosulfan Sulfate	<0.0001	N/A	N/A	N/A	1	N/A
Endrin	<0.0001	N/A	N/A	N/A	1	N/A
Endrin Aldehyde	<0.0001	N/A	N/A	N/A	1	N/A
Heptachlor	<0.00005	N/A	N/A	N/A	1	N/A
Heptachlor-Epoxide	<0.0001	N/A	N/A	N/A	1	N/A
PCB 1242	<0.001	N/A	N/A	N/A	1	N/A
PCB 1254	<0.001	N/A	N/A	N/A	1	N/A
PCB 1221	<0.001	N/A	N/A	N/A	1	N/A
PCB 1232	<0.001	N/A	N/A	N/A	1	N/A
PCB 1248	<0.001	N/A	N/A	N/A	1	N/A
PCB 1260	<0.001	N/A	N/A	N/A	1	N/A
PCB 1016	<0.001	N/A	N/A	N/A	1	N/A
Toxaphene	<0.005	N/A	N/A	N/A	1	N/A
Kepone	<0.0001	N/A	N/A	N/A	1	N/A
Methoxychlor	<0.0001	N/A	N/A	N/A	1	N/A
Mirex	<0.0001	N/A	N/A	N/A	1	N/A
Tributyltin	<0.00003	N/A	N/A	N/A	1	N/A
Demeton	<0.001	N/A	N/A	N/A	1	N/A
Malathion	<0.001	N/A	N/A	N/A	1	N/A
Parathion	<0.001	N/A	N/A	N/A	1	N/A
Clorpyrifos	<0.0002	N/A	N/A	N/A	1	N/A
Guthion	<0.001	N/A	N/A	N/A	1	N/A
Silvex	<0.0001	N/A	N/A	N/A	1	N/A
2,4-D	<0.0001	N/A	N/A	N/A	1	N/A
Hardness as CaCO3, Total	92.34	N/A	N/A	N/A	1	N/A
Vanadiun, Total	0.005	N/A	N/A	N/A	1	General Site Runoff
Vanadium (dissolved)	0.003	N/A	N/A	N/A	1	General Site Runoff
TPH-DRO	<0.5	N/A	N/A	N/A	1	N/A
TPH-GRO	<0.5	N/A	N/A	N/A	1	N/A
Tl (dissolved)	<0.0002	N/A	N/A	N/A	1	N/A
Ti (dissolved)	<0.002	N/A	N/A	N/A	1	N/A
Sn (dissolved)	<0.005	N/A	N/A	N/A	1	N/A
Se (dissolved)	<0.003	N/A	N/A	N/A	1	N/A
Sb (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Pb (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Ni (dissolved)	<0.005	N/A	N/A	N/A	1	N/A
Mo (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Hg (dissolved)	<0.0002	N/A	N/A	N/A	1	N/A
Cu (dissolved)	0.001	N/A	N/A	N/A	1	General Site Runoff
Cr (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Co (dissolved)	<0.0006	N/A	N/A	N/A	1	N/A
Cd (dissolved)	<0.0003	N/A	N/A	N/A	1	N/A
Be (dissolved)	<0.0002	N/A	N/A	N/A	1	N/A
Ba (dissolved)	0.048	N/A	N/A	N/A	1	General Site Runoff
As (dissolved)	<0.003	N/A	N/A	N/A	1	N/A
Ag (dissolved)	<0.0001	N/A	N/A	N/A	1	N/A
Zn (dissolved)	<0.01	N/A	N/A	N/A	1	N/A
Mn (dissolved)	<0.02	N/A	N/A	N/A	1	N/A
Mg (dissolved)	8.26	N/A	N/A	N/A	1	General Site Runoff
Fe (dissolved)	<0.05	N/A	N/A	N/A	1	N/A
Al (dissolved)	<0.09	N/A	N/A	N/A	1	N/A

Outfall S42

EPA ID Number *(copy from Item 1 of Form 1)*
110000340774

Form Approved. OMB No. 2040-0086

VII. Discharge Information *(Continued from page 3 of Form 2F)*

Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details. **Outfall 42**

Pollutant And CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil & Grease	<5.00 ppm	N/A	<5.00 ppm	N/A	1	**General Site Runoff**
Biological Oxygen Demand (BOD5)	<3.00 ppm	N/A	<3.00 ppm	N/A	1	**General Site Runoff**
Chemical Oxygen Demand (COD)	16.69 ppm	N/A	16.69 ppm	N/A	1	**General Site Runoff**
Total Suspended Solids (TSS)	92.1 ppm	N/A	92.1 ppm	N/A	1	**General Site Runoff**
Total Organic Nitrogen	<0.30 ppm	N/A	<0.30 ppm	N/A	1	**General Site Runoff**
Total Phosphorus	0.27 ppm	N/A	0.27 ppm	N/A	1	**General Site Runoff**
pH	6.5 Minimum	6. 5 Maximum	6.5 Minimum	6. 5 Maximum	1	**General Site Runoff**

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant And CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
pH	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	--
Phosphorous Total	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Ammonia	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Nitrogen Total	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Nitrate-Nitrite N Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Copper Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Copper dissolved	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Chromium Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Zinc Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Iron Total	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
TPH	**See Part C**	**N/A**	**N/A**	**N/A**	**1**	**N/A**
Total Suspended Solids	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
Oil & Grease	**See Part A**	**N/A**	**N/A**	**N/A**	**1**	**General Site Runoff**
126 Priority Pollutants in cooling tower additives.	**None of the 126 priority pollutants are present in cooling tower additives**		**N/A**	**N/A**	**N/A**	**N/A**

Outfall S42

Part C - List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant And CAS Number (if available)	Maximum Values (mg/L unless otherwise noted)		Average Values (mg/L unless otherwise noted)		Number Of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Ammonia, Total	0.08	N/A	N/A	N/A	1	General Site Runoff
Bromide, Total	0.21	N/A	N/A	N/A	1	General Site Runoff
Chlorine, Total Residual	Believed Absent					
Color	48	N/A	N/A	N/A	1	General Site Runoff
Fecal Coliform	Believed Absent					
Fluoride	0.080	N/A	N/A	N/A		General Site Runoff
Nitrate + Nitrite	0.79	N/A	N/A	N/A	1	General Site Runoff
Nitrogen, Total Org. As N	<0.30	N/A	N/A	N/A	1	
Phosphorus (As P), Total	0.27	N/A	N/A	N/A	1	General Site Runoff
Alpha, Total pCi/l	Believed Absent					
Beta, Total pCi/l	Believed Absent					
Radium, Total	Believed Absent					
Radium 226 , Total	Believed Absent					
Sulfate (As SO4)	24.80	N/A	N/A	N/A	1	General Site Runoff
Sulfide (As S)	0.08	N/A	N/A	N/A	1	General Site Runoff
Sulfite (As SO3)	Believed Absent					
Surfactants	<0.100	N/A	N/A	N/A	1	
Aluminum, Total	3.04	N/A	N/A	N/A	1	General Site Runoff
Barium, Total	0.048	N/A	N/A	N/A	1	General Site Runoff
Boron, Total	0.03	N/A	N/A	N/A	1	General Site Runoff
Cobalt, Total	0.0027	N/A	N/A	N/A	1	General Site Runoff
Iron, Total	5.26	N/A	N/A	N/A	1	General Site Runoff
Magnesium, Total	5.65	N/A	N/A	N/A	1	General Site Runoff
Molybdenum, Total	<0.001	N/A	N/A	N/A	1	N/A
Manganese, Total	0.13	N/A	N/A	N/A	1	General Site Runoff
Tin, Total	<0.005	N/A	N/A	N/A	1	N/A
Titanium, Total	0.011	N/A	N/A	N/A	1	General Site Runoff
Antimony, Total	<0.001	N/A	N/A	N/A	1	N/A
Arsenic, Total	<0.003	N/A	N/A	N/A	1	General Site Runoff
Beryllium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Cadmium, Total	0.0003	N/A	N/A	N/A	1	General Site Runoff
Chromium, Total	0.003	N/A	N/A	N/A	1	General Site Runoff
Copper, Total	0.034	N/A	N/A	N/A	1	General Site Runoff
Lead, Total	0.013	N/A	N/A	N/A	1	General Site Runoff
Mercury, Total	<0.0002	N/A	N/A	N/A	1	N/A
Nickel, Total	0.024	N/A	N/A	N/A	1	General Site Runoff
Selenium, Total	<0.003	N/A	N/A	N/A	1	N/A
Silver, Total	<0.0001	N/A	N/A	N/A	1	N/A
Thallium, Total	<0.0002	N/A	N/A	N/A	1	N/A
Zinc, Total	0.246	N/A	N/A	N/A	1	General Site Runoff
Cyanide, Total	<0.005	N/A	N/A	N/A	1	N/A
Phenol	0.10	N/A	N/A	N/A	1	General Site Runoff
Dioxin Screen	Believed Absent					
Acrolein	<0.01	N/A	N/A	N/A	1	N/A
Acrylonitrile	<0.0015	N/A	N/A	N/A	1	N/A
Benzene	<0.0044	N/A	N/A	N/A	1	N/A
Bromoform	<0.0047	N/A	N/A	N/A	1	N/A
Carbon Tetrachloride	<0.0028	N/A	N/A	N/A	1	N/A
Chlorobenzene	<0.006	N/A	N/A	N/A	1	N/A
Chlorodibromomethane	<0.0031	N/A	N/A	N/A	1	N/A
Chloroethane	<0.0011	N/A	N/A	N/A	1	N/A
2-Chloroethylvinyl Ether	<0.0012	N/A	N/A	N/A	1	N/A
Chloroform	<0.0016	N/A	N/A	N/A	1	N/A
Dichlorobromomethane	<0.0022	N/A	N/A	N/A	1	N/A
1,1-Dichloroethane	<0.0047	N/A	N/A	N/A	1	N/A
1,2-Dichloroethane	<0.0028	N/A	N/A	N/A	1	N/A
1,1-Dichloroethylene	<0.0028	N/A	N/A	N/A	1	N/A
1,2-Dichloropropane	<0.006	N/A	N/A	N/A	1	N/A
1,3-Dichloropropylene	<0.005	N/A	N/A	N/A	1	N/A
Ethyl Benzene	<0.0072	N/A	N/A	N/A	1	N/A
Methyl Bromide	<0.0014	N/A	N/A	N/A	1	N/A
Methyl Chloride	<0.0011	N/A	N/A	N/A	1	N/A
Methylene Chloride	<0.0028	N/A	N/A	N/A	1	N/A

Outfall S42

1,1,2,2-Tetrachloroethane	<0.0069	N/A	N/A	N/A	1	N/A
Tetrachloroethylene	<0.0041	N/A	N/A	N/A	1	N/A
Toluene	<0.006	N/A	N/A	N/A	1	N/A
1,2-Trans-Dichloroethylene	<0.0016	N/A	N/A	N/A	1	N/A
1,1,1-Trichloroethane	<0.0038	N/A	N/A	N/A	1	N/A
1,1,2-Trichloroethane	<0.005	N/A	N/A	N/A	1	N/A
Trichloroethylene	<0.0019	N/A	N/A	N/A	1	N/A
Vinyl Chloride	<0.0018	N/A	N/A	N/A	1	N/A
2-Chlorophenol	<0.0033	N/A	N/A	N/A	1	N/A
2,4-Dichlorophenol	<0.0056	N/A	N/A	N/A	1	N/A
2,4-Dimethylphenol	<0.0052	N/A	N/A	N/A	1	N/A
4,6-Dinitro-O-Cresol	<0.024	N/A	N/A	N/A	1	N/A
2,4-Dinitrophenol	<0.042	N/A	N/A	N/A	1	N/A
2-Nitrophenol	<0.0036	N/A	N/A	N/A	1	N/A
4-Nitrophenol	<0.0024	N/A	N/A	N/A	1	N/A
P-Chloro-M-Cresol	<0.0075	N/A	N/A	N/A	1	N/A
Pentachlorophenol	<0.0036	N/A	N/A	N/A	1	N/A
Phenol	<0.0027	N/A	N/A	N/A	1	N/A
2,4,6-Trichlorophenol	<0.0027	N/A	N/A	N/A	1	N/A
Acenaphthene	<0.003	N/A	N/A	N/A	1	N/A
Acenaphthylene	<0.0035	N/A	N/A	N/A	1	N/A
Anthracene	<0.0019	N/A	N/A	N/A	1	N/A
Benzidine	<0.063	N/A	N/A	N/A	1	N/A
Benzo (A) Anthracene	<0.0078	N/A	N/A	N/A	1	N/A
Benzo (A) Pyrene	<0.0025	N/A	N/A	N/A	1	N/A
3,4-Benzofluoranthene	<0.0048	N/A	N/A	N/A	1	N/A
Benzo (G H I) Perylene	<0.0041	N/A	N/A	N/A	1	N/A
Benzo (K) Fluoranthene	<0.0025	N/A	N/A	N/A	1	N/A
Bis(2-Chloroethoxy) Methane	<0.0053	N/A	N/A	N/A	1	N/A
Bis(-2-Chloroethyl) Ether	<0.0057	N/A	N/A	N/A	1	N/A
Bis(2-Chloroisopropyl) Ether	<0.0057	N/A	N/A	N/A	1	N/A
Bis(2-Ethylhexyl) Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
4-Bromophenyl-Phenyl Ether	<0.003	N/A	N/A	N/A	1	N/A
Butyl Benzyl Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
2-Chloronaphthalene	<0.0046	N/A	N/A	N/A	1	N/A
4-Chlorophenyl-Phenyl Ether	<0.0042	N/A	N/A	N/A	1	N/A
Chrysene	<0.0025	N/A	N/A	N/A	1	N/A
Dibenzo (A H) Anthracene	<0.0025	N/A	N/A	N/A	1	N/A
1,2-Dichlorobenzene	<0.004	N/A	N/A	N/A	1	N/A
1,3-Dichlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
1,4-Dichlorobenzene	<0.0044	N/A	N/A	N/A	1	N/A
3,3''-Dichlorobenzidine	<0.0165	N/A	N/A	N/A	1	N/A
Diethyl Phthalate	<0.0074	N/A	N/A	N/A	1	N/A
Dimethyl Phthalate	<0.0075	N/A	N/A	N/A	1	N/A
Di-N-Butyl Phthalate	<0.0064	N/A	N/A	N/A	1	N/A
2,4-Dinitrotoluene	<0.0057	N/A	N/A	N/A	1	N/A
2,6-Dinitrotoluene	<0.0034	N/A	N/A	N/A	1	N/A
Di-N-Octyl Phthalate	<0.0025	N/A	N/A	N/A	1	N/A
1,2-Diphenylhydrazine	<0.0088	N/A	N/A	N/A	1	N/A
Fluoranthene	<0.0022	N/A	N/A	N/A	1	N/A
Fluorene	<0.0022	N/A	N/A	N/A	1	N/A
Hexachlorobenzene	<0.0031	N/A	N/A	N/A	1	N/A
Hexachlorobutadiene	<0.0018	N/A	N/A	N/A	1	N/A
Hexachlorocyclopentadiene	<0.01	N/A	N/A	N/A	1	N/A
Hexachloroethane	<0.0024	N/A	N/A	N/A	1	N/A
Indeno (1,2,3-Cd) Pyrene	<0.0037	N/A	N/A	N/A	1	N/A
Isophorone	<0.0051	N/A	N/A	N/A	1	N/A
Naphthalene	<0.0038	N/A	N/A	N/A	1	N/A
Nitrobenzene	<0.0042	N/A	N/A	N/A	1	N/A
N-Nitrosodimethylamine	<0.0062	N/A	N/A	N/A	1	N/A
N-Nitroso-Di-N-Propylamine	<0.0036	N/A	N/A	N/A	1	N/A
N-Nitrosodiphenylamine	<0.0027	N/A	N/A	N/A	1	N/A
Phenanthrene	<0.0054	N/A	N/A	N/A	1	N/A

Outfall S42

Pyrene	<0.0038	N/A	N/A	N/A	1	N/A
1,2,4-Trichlorobenzene	<0.0079	N/A	N/A	N/A	1	N/A
Aldrin	<0.00005	N/A	N/A	N/A	1	N/A
Alpha BHC	<0.00005	N/A	N/A	N/A	1	N/A
Beta BHC	<0.00005	N/A	N/A	N/A	1	N/A
Gamma BHC	<0.00005	N/A	N/A	N/A	1	N/A
Delta BHC	<0.00005	N/A	N/A	N/A	1	N/A
Chlordane	<0.0002	N/A	N/A	N/A	1	N/A
4,4pr DDT	<0.0001	N/A	N/A	N/A	1	N/A
4,4pr DDE	<0.0001	N/A	N/A	N/A	1	N/A
4,4pr DDD	<0.0001	N/A	N/A	N/A	1	N/A
Dieldrin	<0.0001	N/A	N/A	N/A	1	N/A
Alpha-Endosulfan	<0.0001	N/A	N/A	N/A	1	N/A
Beta-Endosulfan	<0.0001	N/A	N/A	N/A	1	N/A
Endosulfan Sulfate	<0.0001	N/A	N/A	N/A	1	N/A
Endrin	<0.0001	N/A	N/A	N/A	1	N/A
Endrin Aldehyde	<0.0001	N/A	N/A	N/A	1	N/A
Heptachlor	<0.00005	N/A	N/A	N/A	1	N/A
Heptachlor-Epoxide	<0.0001	N/A	N/A	N/A	1	N/A
PCB 1242	<0.001	N/A	N/A	N/A	1	N/A
PCB 1254	<0.001	N/A	N/A	N/A	1	N/A
PCB 1221	<0.001	N/A	N/A	N/A	1	N/A
PCB 1232	<0.001	N/A	N/A	N/A	1	N/A
PCB 1248	<0.001	N/A	N/A	N/A	1	N/A
PCB 1260	<0.001	N/A	N/A	N/A	1	N/A
PCB 1016	<0.001	N/A	N/A	N/A	1	N/A
Toxaphene	<0.005	N/A	N/A	N/A	1	N/A
Kepone	<0.0001	N/A	N/A	N/A	1	N/A
Methoxychlor	<0.0001	N/A	N/A	N/A	1	N/A
Mirex	<0.0001	N/A	N/A	N/A	1	N/A
Tributyltin	<0.00003	N/A	N/A	N/A	1	N/A
Demeton	<0.001	N/A	N/A	N/A	1	N/A
Malathion	<0.001	N/A	N/A	N/A	1	N/A
Parathion	<0.001	N/A	N/A	N/A	1	N/A
Clorpyrifos	<0.0002	N/A	N/A	N/A	1	N/A
Guthion	<0.001	N/A	N/A	N/A	1	N/A
Silvex	<0.0001	N/A	N/A	N/A	1	N/A
2,4-D	<0.0001	N/A	N/A	N/A	1	N/A
Hardness as CaCO3, Total	83.79	N/A	N/A	N/A	1	N/A
Vanadiun, Total	0.070	N/A	N/A	N/A	1	General Site Runoff
Vanadium (dissolved)	0.010	N/A	N/A	N/A	1	General Site Runoff
TPH-DRO	<0.5	N/A	N/A	N/A	1	N/A
TPH-GRO	<0.5	N/A	N/A	N/A	1	N/A
Tl (dissolved)	<0.0002	N/A	N/A	N/A	1	N/A
Ti (dissolved)	<0.002	N/A	N/A	N/A	1	N/A
Sn (dissolved)	<0.005	N/A	N/A	N/A	1	N/A
Se (dissolved)	<0.003	N/A	N/A	N/A	1	N/A
Sb (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Pb (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Ni (dissolved)	<0.005	N/A	N/A	N/A	1	N/A
Mo (dissolved)	0.001	N/A	N/A	N/A	1	General Site Runoff
Hg (dissolved)	<0.0002	N/A	N/A	N/A	1	N/A
Cu (dissolved)	0.004	N/A	N/A	N/A	1	General Site Runoff
Cr (dissolved)	<0.001	N/A	N/A	N/A	1	N/A
Co (dissolved)	<0.0006	N/A	N/A	N/A	1	N/A
Cd (dissolved)	<0.0003	N/A	N/A	N/A	1	N/A
Be (dissolved)	<0.0002	N/A	N/A	N/A	1	N/A
Ba (dissolved)	0.020	N/A	N/A	N/A	1	General Site Runoff
As (dissolved)	<0.003	N/A	N/A	N/A	1	N/A
Ag (dissolved)	<0.0001	N/A	N/A	N/A	1	N/A
Zn (dissolved)	0.051	N/A	N/A	N/A	1	General Site Runoff
Mn (dissolved)	<0.02	N/A	N/A	N/A	1	N/A
Mg (dissolved)	3.45	N/A	N/A	N/A	1	General Site Runoff
Fe (dissolved)	<0.05	N/A	N/A	N/A	1	N/A
Al (dissolved)	0.10	N/A	N/A	N/A	1	General Site Runoff

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.						
OUTFALL	1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during event (gallons/minute)	6. Total flow from rain event (gallons)
N/A						

Dominion requested and was granted a waiver from the requirement to collect flow-weighted composite samples. Grab samples were taken from the three representative storm water outfalls [Outfall S5, Outfall S61, and Outfall S42] on 1/27/2012 and analyzed for applicable Part A, B, and C parameters in accordance with the sampling plan approved by DEQ.

7. Provide a description of the method of flow measurement or estimate

N/A

Storm Water Pollution Prevention Plan

STORM WATER POLLUTION PREVENTION PLAN

FOR

POSSUM POINT POWER STATION

19000 Possum Point Road
Dumfries, VA 22026

Prepared by:
Dominion Generation
Electric Environmental Services & Projects

August 2011

Table of Contents

VIRGINIA NPDES PERMIT CROSS REFERENCE iii
PLAN RVIEW AND CERTIFICATION xi
GOALS AND OBJECTIVES, AND ACTION ITEMS 18
RECORD OF REVIEWS 18

1.0 FACILITY INFORMATION 1
1.1 Facility Description - General 1
1.2 Facility Owner and Operator 1
2.0 CONTACTS & TEAM MEMBERS 1
2.1 Pollution Prevention Team 1
2.2 Spill Prevention & Response 2
2.3 POTW City Notification Requirement 2
3.0 SAMPLING/MONITORING & INSPECTION REQUIREMENTS 3
3.1 Summary of Outfalls 3
3.2 Non-Storm water Discharges 4
3.3 Monitoring Requirements 6
3.4 SWPPP Inspection Requirements 6
3.5 Comprehensive Site Compliance Evaluation 6
4.0 POTENTIAL POLLUTANT SOURCES 7
4.1 Summary of Potential Pollutant Sources 7
4.2 Site Bulk Chemicals 8
4.3 Site Bulk Oil 11
4.4 Sediment & Erosion 11
5.0 STORM WATER CONTROLS 12
5.1 Structrual BMPs 12
5.2 Non-Structial BMPs 12
5.3 BMP Maintenance 13
5.4 BMPs Planned for Consideration 14
6.0 GOOD HOUSEKEEPING MEASURES 15
6.1 Fugitive Dust Emissions 15
6.2 Delivery Vehicles 15
6.3 Fuel Oil Unloading Areas 15
6.4 Chemical Loading/Unloading Areas 15
6.5 Miscellaneous Loading/Unloading Areas 15
6.6 Small Liquid Storage Tanks 15
6.7 Large Bulk Fuel Storage Tanks 15
6.8 Spill Reduction Measures 15
6.9 Oil Bearing Equipment in Switchyards 15
6.10 Residue Hauling Vehicles 16
6.11 Ash Loading Areas 16
6.12 Areas Adjacent to Disposal Ponds or Landfills 16
6.13 Landfills, Scrap Yards, Surface Impoundments, Open Dumps, General Refuse Sites 16
6.14 Maintenance Activities 16
6.15 Material Storage Areas 16

8762

7.0 DOCUMENTATION **17**

7.1 Spills and Leaks 17
7.2 Storm Water Monitoring Requirements 17
7.3 Site Inspections 17
7.4 Annual Evaluation 17
7.5 Goals & Objectives 18
7.6 Record of Review 18

Appendices

Appendix A Topographic Site Map
Appendix B Site Plan
Appendix C Storm Water Drainage Areas
Appendix D Annual Compliance Evaluation Summary Report
Appendix E SWPPP Inspection Report Forms
Appendix F Cooling Tower Mist Study
Appendix G Construction Sediment and Erosion Control (Reserved)
Appendix H Storm Water Discharge Certification
Appendix I Spill History
Appendix J POTW Email

Permit Cross Reference

SWPPP Permit Reference	VPDES Permit VA0002071 Storm Water Pollution Prevention Plan (SWPPP) Elements	SWPPP Text Reference
(1)	**VA0002071 Part I.G.1.b. Signature and Plan Review.** *Signature/Location.* The plan shall be signed in accordance with Part II, K., and be retained onsite at the facility that generates the storm water discharge in accordance with Part II, B.2. For inactive facilities, the plan may be kept at the nearest office of the permittee.	**Page x.**
(2)	**VA0002071 Part I.G.1.d.(1)** ***Pollution Prevention Team.*** The plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.	**Section 1.2**
(3)	**VA0002071 Part I.G.1.d.(2)** ***Description of Potential Pollutant Sources.*** The plan shall provide a description of potential sources that may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. The plan shall identify all activities and significant materials that may potentially be significant pollutant sources. The plan shall include, at a minimum:	**Section 4.0**
(4)	**VA0002071 Part I.G.1.d.(2)(a)** ***Drainage.*** A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part I.G.1.d.2.c) have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes and waste waters, locations used for the treatment, filtration, or storage of water supplies, liquid storage tanks, processing areas, and storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls; and for each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants that are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified;	**Section 3.1 and Appendices A, B, & C**
(5)	**VA0002071 Part I.G.1.d.(2)(b)** ***Inventory of Exposed Materials.*** An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3-years prior to the date of submission of an application to be covered under this permit and the present; method	**Section 4.0 4.3 & Appendix B&C**

	and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3-years prior to the date of the submission of an application to be covered under this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives;	
(6)	**VA0002071 Part I.G.1.d.(2)(c)** ***Spills and Leaks.*** A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility within the 3-year period immediately prior to the date of submission of an application to be covered under this permit. Such list shall be updated as appropriate during the term of the permit;	**Section 7.1**
(7)	**VA0002071 Part I.G.1.d.(2)(d)** ***Sampling Data.*** A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit; and	**Section 7.2**
(8)	**VA0002071 Part I.G.1.d.(2)(e)** ***Risk Identification and Summary of Potential Pollutant Sources.*** A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices, and wastewater treatment activities to include sludge drying, storage, application or disposal activities. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, total suspended solids, etc.) of concern shall be identified.	**Section 4.1**
(9)	**VA0002071 Part I.G.1.d.(3)** ***Measures and Controls.*** The facility covered by this permit shall develop a description of storm water management controls appropriate for the facility and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls. *a) Good Housekeeping.* Good housekeeping requires the clean and orderly maintenance of areas that may contribute pollutants to storm water discharges. The plan shall describe procedures performed to minimize contact of materials with storm water runoff. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, material handling areas, and loading/unloading areas. (1) *Fugitive Dust Emissions.* The plan must describe measures that prevent or minimize fugitive dust emissions from coal handling areas. The permittee shall consider establishing procedures to minimize offsite tracking of coal dust. To prevent offsite tracking the facility may consider specially designed tires, or washing vehicles in a designated area before they leave the site, and controlling the wash water. (2) *Delivery Vehicles.* The plan must describe measures that prevent or minimize contamination of storm water runoff from delivery vehicles arriving on the plant site. At a minimum the permittee should consider the following: i. Develop procedures for the inspection of delivery vehicles arriving on the plant site, and ensure overall integrity of the body or container; and ii. Develop procedures to deal with leakage or spillage from vehicles or	**Section 5.0** **Section 6.0**

8765

containers, and ensure that proper protective measures are available for personnel and environment.

(3) *Fuel Oil Unloading Areas.* The plan must describe measures that prevent or minimize contamination of storm water runoff from fuel oil unloading areas. At a minimum the permittee must consider using the following measures, or an equivalent:

i. Use containment curbs in unloading areas;
ii. During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up; and
iii. Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath fuel oil connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors).

(4) *Chemical Loading/Unloading Areas.* The plan must describe measures that prevent or minimize the contamination of storm water runoff from chemical loading/unloading areas. Where practicable, chemical loading/unloading areas should be covered, and chemicals should be stored indoors. At a minimum the permittee must consider using the following measures or an equivalent:

i. Use containment curbs at chemical loading/unloading areas to contain spills; and
ii. During deliveries station personnel familiar with spill prevention and response procedures must be present to ensure that any leaks or spills are immediately contained and cleaned up.

(5) *Miscellaneous Loading/Unloading Areas.* The plan must describe measures that prevent or minimizes the contamination of storm water runoff from loading and unloading areas. The plan may consider covering the loading area, minimizing storm water runon to the loading area by grading, berming, or curbing the area around the loading area to direct storm water away from the area, or locate the loading/unloading equipment and vehicles so that leaks can be contained in existing containment and flow diversion systems.

(6) *Liquid Storage Tanks.* The plan must describe measures that prevent or minimize contamination of storm water runoff from above ground liquid storage tanks. At a minimum the permittee must consider employing the following measures or an equivalent:

i. Use protective guards around tanks;
ii. Use containment curbs;
iii. Use spill and overflow protection (drip pans, drip diapers, and/or other containment devices shall be placed beneath chemical connectors to contain any spillage that may occur during deliveries or due to leaks at such connectors); and
iv. Use dry cleanup methods.

(7) *Large Bulk Fuel Storage Tanks.* The plan must describe measures that prevent or minimize contamination of storm water runoff from liquid storage tanks. At a minimum the permittee must consider employing the following measures, or an equivalent:

i. Comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC); and

ii. Containment berms.

(8) The plan must describe measures to reduce the potential for an oil spill, or a chemical spill, or reference the appropriate section of their SPCC plan. At a minimum the structural integrity of all above ground tanks, pipelines, pumps and other related equipment shall be visually inspected on a weekly basis. All repairs deemed necessary based on the findings of the inspections shall be completed immediately to reduce the incidence of spills and leaks occurring from such faulty equipment.

(9) *Oil Bearing Equipment in Switchyards.* The plan must describe measures to reduce the potential for storm water contamination from oil bearing equipment in switchyard areas. The permittee may consider level grades and gravel surfaces to retard flows and limit the spread of spills; collection of storm water runoff in perimeter ditches.

(10) *Residue Hauling Vehicles.* All residue hauling vehicles shall be inspected for proper covering over the load, adequate gate sealing and overall integrity of the body or container. Vehicles without load coverings or adequate gate sealing, or with leaking containers or beds must be repaired as soon as practicable.

(11) *Ash Loading Areas.* Plant procedures shall be established to reduce and/or control the tracking of ash or residue from ash loading areas for example, where practicable, requirements to clear the ash building floor and immediately adjacent roadways of spillage, debris and excess water.

(12) *Areas Adjacent to Disposal Ponds or Landfills.* The plan must describe measures that prevent or minimize contamination of storm water runoff from areas adjacent to disposal ponds or landfills. The permittee must develop procedures to:

i. Reduce ash residue which may be tracked on to access roads traveled by residue trucks or residue handling vehicles; and
ii. Reduce ash residue on exit roads leading into and out of residue handling areas.

(13) *Landfills, Scrapyards, Surface Impoundments, Open Dumps, and General Refuse Sites.* The plan must address landfills, scrapyards, surface impoundments, open dumps and general refuse sites.

(14) *Maintenance Activities.* For vehicle maintenance activities performed on the plant site, the plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment maintenance. The permittee shall consider performing all maintenance activities indoors, using drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting wet clean up practices where the practices would result in the discharge of pollutants to storm water drainage systems, using dry cleanup methods, collecting the storm water runoff from the maintenance area and providing treatment or recycling, minimizing runon/runoff of storm water areas or other equivalent measures.

(15) *Material Storage Areas.* The plan must describe measures that prevent or

	minimize contamination of storm water from material storage areas (including areas used for temporary storage of miscellaneous products, and construction materials stored in lay down areas). The permittee may consider flat yard grades, runoff collection in graded swales or ditches, erosion protection measures at steep outfall sites (e.g., concrete chutes, riprap, stilling basins), covering lay down areas, storing the materials indoors, covering the material with a temporary covering made of polyethylene, polyurethane, polypropylene, or hypalon. Storm water runon may be minimized by constructing an enclosure or building a berm around the area.	
(10)	**VA0002071 Part I.G.1.d.(3)(b)** ***Preventive Maintenance.*** A preventive maintenance program shall involve: timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins); inspection and testing of facility equipment and systems to uncover conditions that could cause breakdowns or failures which could result in discharges of pollutants to surface waters; and appropriate maintenance of such equipment and systems.	**Section 5.3**
(11)	**VA0002071 Part I.G.1.d.(3)(c)** ***Spill Prevention and Response Procedures.*** Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.	**Section 2.2**
(12)	**VA0002071 Part I.G.1.d.(3)(d)** ***Inspections.*** Facility personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall be identified to inspect designated equipment and areas of the facility. The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.	**Section 3.4, 5.2.3, & 7.3**
(13)	**VA0002071 Part I.G.1.d.(3)(e)** ***Employee Training.*** Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training.	**Section 5.2.1**
(14)	**VA0002071 Part I.G.1.d.(3)(f)** ***Recordkeeping and Internal Reporting Procedures.*** A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.	**Section 7.0**
(15)	**VA0002071 Part I.G.1.d.(3)(g)** ***Sediment and Erosion Control.*** The plan shall identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.	**Section 4.5**
(16)	**VA0002071 Part I.G.1.d.(3)(h)** ***Management of Runoff.*** The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water	**Section 5.0**

	discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices; reuse of collected storm water (such as for a process or as an irrigation source); inlet controls (such as oil/water separators); snow management activities; infiltration devices and wet detention/retention devices; or other equivalent measures.	
(17)	**VA0002071 Part I.G.1.d.(4)***Comprehensive Site Compliance Evaluation.* Personnel who are familiar with the industrial activity, the BMPs and the storm water pollution prevention plan shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall include the following: a) Areas contributing to a storm water discharge associated with industrial activity such as material storage, handling, and disposal activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made; b) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with Part I.G.1.d.(2) and pollution prevention measures and controls identified in the plan in accordance with Part I.G.1.d.(3) shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation; c) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with Part I.G.1.d.4(b) shall be made and retained as part of the storm water pollution prevention plan for at least 3-years from the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with Part II.K.; and d) Where compliance evaluation schedules overlap with inspections required under Part I.G.1.d.3(d), the compliance evaluation may be conducted in place of one such inspection.	**Section 3.5, Section 7.4, & Appendix E**
(18)	**VA0002071 Part I.G.2. <u>General Storm Water Conditions</u>** a. **Quarterly Visual Examination of Storm Water Quality.** Unless another more frequent schedule is established elsewhere within this permit, the permittee shall	**Section 3.3, Section 7.2,**

	perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. b. Examination shall be made of samples 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. The examination shall document observations of color, odor, clarity, floating solids, settle solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term. c. Visual examination reports must be maintained onsite with the pollution prevention plan. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snowmelt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settle solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution) and probable sources of any observed storm water contamination. d. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40-65 percent), or high (above 65 percent) shall be provided in the plan. e. When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).	**& Appendix F**
(19)	**VA0002071 Part I.G.2.b. Prohibition of Non-storm Water Discharges.**	**Section 3.2.1**

	Except as provided in this paragraph or elsewhere in this permit, all storm water discharges covered by this permit shall be composed entirely of storm water. The following non-storm water discharges are authorized by this permit provided the non-storm water component of the discharge is in compliance with this permit: discharges from fire fighting activities; fire hydrant flushings; potable water sources including waterline flushings; uncontaminated compressor condensate; irrigation drainage; lawn watering; routine external building wash down that does not use detergents or other compounds; pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents All other non-storm water discharges must be addressed within and in compliance with this VPDES permit.	**& Appendix H**

PLAN REVIEW AND CERTIFICATION

VA0002071 Part I.G.1.b. Signature and Plan Review (SWPPP Cross Reference #1)

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 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	11-15-11
Printed Name:	Jeffrey O. Heffelman		
Title:	Director – F&H Station		

1.0 FACILITY INFORMATION

1.1 Facility Description - General

Possum Point Power Station is a gas and oil fired steam electric generating station. The principle wastewater discharges enter Quantico Creek. An oil dock and two cooling water intake structures originate from the Virginia shoreline of the Potomac River and extend into the Maryland waters of the Potomac River. The station is approximately thirty-five miles south of Washington D.C. and twenty-two miles from Fredericksburg, Virginia. The facility's latitude is 38° 32' 12.2" and longitude is 77° 16' 37.8". A Topographic Map of the Facility is included in Appendix A.

Driving Direction: To reach Possum Point Power Station from Interstate 95, take the Dumfries – Manassas exit at Route 234 south. Take a right at the first traffic light on Route 1 south. Turn left off Route 1 (0.5 miles) onto Possum Point Road. The Power Station is located 4 miles off Route 1 at the end of Possum Point Road.

1.2 Facility Owner and Operator

Facility Operator:	Dominion Generation	Owner Name:	Virginia Electric and Power Co.
Address:	19000 Possum Point Road, Dumfries, VA 22026	Address:	5000 Dominion Blvd. Glen Allen, VA 23060
Telephone:	(703) 441-3813	Telephone:	804-273-3800

2.0 Contacts & Team Members

2.1 Pollution Prevention Team

VA0002071 Part I.G.1.d.(1) *Pollution Prevention Team* (SWPPP Cross Reference #2)

Name	Title	Contact Number
Jeffrey C. Heffelman	Director – F&H Station (1)	(703) 441-3880
Jeffrey R. Marcell	Environmental Supervisor (2)	(703) 441-3813
Keith Homza	Station Chemist III (3)	(703) 441-3814
(24 Hour Coverage)	Shift Supervisor (5)	(703) 441-3832
Rick Woolard	Environmental Specialist III (4)	(804) 273-2991

(1) RESPONSIBLE PERSON FOR OVERALL COORDINATION AND DEVELOPMENT.
(2) RESPONSIBLE PERSON FOR IMPLEMENTATION, TRAINING, AND REVISIONS TO PLAN.
(3) RESPONSIBLE PERSON FOR INSPECTION AND PLAN DEVELOPMENT .
(4) RESPOSIBLE PERSON FOR PERMIT INTERPRETATION FOR COORDINATION OF CORPORATE ENVIRONMENTAL AND STATION REQUIREMENTS.
(5) DAILY PLANT OPERATIONS.

2.2 SPILL PREVENTION AND RESPONSE

VA0002071 Part I.G.1.d.(3)(c) ***Spill Prevention and Response Procedures*** (SWPPP Cross Reference # 11)

The Station's Director, O&M Manager(s), and Environmental Supervisor are on call 24hrs a day 7days a week. The Station's Operator(s) are to contact any of the above individuals in the event of a spill and/or leak.

Spill response procedures for petroleum products are referenced in the SPCC/ODCP/FRP plans. For all other spills Possum Point's Emergency & Evacuation Procedures are located in the Safety Coordinator's Office and available electronically in the Operation's Folder. Spill history is provide in Section 7.1 of this plan.

2.3 POTW City Notification Requirement

N/A

Possum Point Power Station discharges their sanitary waste to Prince William County Service Authority, specifically H.L. Mooney Waste Water Treatment Plant. (Note back ground history email in Appendix J).

3.0 SAMPLING / MONITORING AND INSPECTION REQUIREMENTS

3.1 Summary of Outfalls

VA0002071 Part I.G.1.d.(2)(a) *Drainage.* (SWPPP Cross Reference # 4)

Discharge Point S5 : Discharges to Potomac River. Receives runoff from approximately 3.9 acres between Unit #5's Cooling Towers. The area is approximately 50% impervious buildings and 50% pervious grass with packed gravel. Outfall discharges to the mouth of Quantico Creek near the southeast corner of Unit #5 Cooling Tower A.

Discharge Point S61: Discharges to Quantico Creek. Receives runoff from approximately 2.8 acres from the main entrance way to the plant, the gravel area west of the "Old" Combustion Turbine buildings, a portion of the roadway leading from the "Old" Combustion Turbines to the northwest end of the 115 kV Switchyard, grassy area and railway located west of the 115 kV Switchyard, and the west end of the maintenance shop including the west ½ of the Maintenance Shop roof. The area is estimated to be 60% impervious (buildings, roads), and 40% pervious (gravel, grass, woods, riparian buffer) areas.

Discharge Point S42 : Discharges to Potomac River. Receives runoff from approximately 6.6 acres, which collects storm water through multiple drop inlets located around the perimeter of Unit #5 boiler and dust collector. The area is estimated to be 20% impervious (buildings, road) and 80% pervious (gravel, grass). One of the drop inlets receives drainage conveyed via ditch from the "Old" Combustion Turbines' oily-water separator, used as tertiary containment.

Discharge Point S31: Discharges to Potomac River. Cooling Tower Mist (Allowable Non-Storm Water) Area north end of Unit #5 Cooling Tower B, includes 2 drop inlets that drain the 0.15 acres. Area consist of 10% Pervious (gravel & grass) and 90% impervious (road).

Discharge Point S36: Area is located that around Units 1&2 stacks and the road under Units 3&4 Precipitators. This drainage area includes two drop inlet, one located under the Units 3&4 Precipitator and the other on the roof of Units 3&4 Screen Wells. The area consist of approximately 0.11 acres that are 30% pervious (gravel) and 70% impervious (road, roof).

Discharge Point S37: Receives runoff from the area around Administration Building which is mainly vehicle parking, roof drainage from the Admin. Bldg and eastern ½ of the Maintenance Shop. The area consist of approximate 2.0 acres that are 40% pervious (grass and gravel) and 60% impervious (parking lot, roads, and roof tops).

Discharge Point S49: Discharges to Potomac River and collects drainage from area east Unit #5 Boiler and north of Oil Dock Foam House. This area includes one drop inlet and consist of approximately 0.15 acres that are 50% pervious (gravel) and 50% impervious (roof).

Discharge Point S77: Discharges to Potomac River and collects drainage conveyed through a concrete pipe from the area surrounding the eastern edge of the No. 6 fuel oil pipe bench leading north to the Unit #5 Transfer Pump House. This area is approximately 0.14 acres that are 90% pervious (river bank, gravel) and 10% impervious.

Discharge Point S78, S79, S80, & S94 (MD): Discharges to Potomac River. All four outfalls are concrete flumes that drain the exterior berm of the Heavy Oil Tanks' containment. These areas' acreage are (0.61, 0.56, 0.36, and 0.23) respectively. The areas are 100% pervious (vegetative slope) with no industrial activity.

Discharge Point S86: Discharges to Quantico Creek. Area collects drainage in ditches on both sides of the Rail Road, the ditches along Rail Road industrial storm water the from west of the 230 kV Switchyard, all of the M&R Station, west of the light oil containment tanks, the parking lot "Old" Combustion Turbines, and the Main Entrance. This area is approximately 34.6 acres and estimated 95% pervious (gravel, grass, vegetated slopes) and 5 % impervious (road, parking lot).

Discharge Point S95: Discharges to Potomac River. Area consist of multiple ditches and graded surfaces that channel to a concrete plume that discharges to the Potomac River. This area is approximately 2.6 acres which is estimated 90% pervious (gravel, grass, vegetated slopes) and 10% impervious (road, parking lot).

Discharge Point S107: Discharges to Quantico Creek. Collects storm water from the berm of Delta Pond via two drop inlets. This outfall is designed to collect groundwater infiltration from the Delta Pond's berm for stabilization. This outfall was sampled to characterize the groundwater discharge. The area is approximately 14.4 acres and estimated to be 100% pervious (grass, vegetative slopes).

3.2 Non-Storm Water Discharges

3.2.1 Certification of Non-Storm Water Discharges

VA0002071 Part I.G.2.b Prohidition of Non-storm Water Discharges (SWPPP Cross Reference #19)

The non-storm water discharge certification is included in the Appendix H.

3.2.2 Allowable Non-Storm Water Discharges

VA0002071 Part I.G.2.b Prohidition of Non-storm Water Discharges (SWPPP Cross Reference #19)

This facility is permitted by the above referenced permit in Part I.G.2.b., page 28 of 29, for the following "Allowable Nonstorm Water Discharges". Please refer to Appendix C for the allowable sources drainage locations and Section 5.0 of this plan for various storm water controls.

- Discharge from fire fighting activities;
- Fire Hydrant Flushing;
- Potable Water Sources including waterline flushings;
- Uncontaminated compressor condensate;
- Irrigation drainage;
- Lawn Watering;
- Routine external building wash down which does not use detergents or other compounds;
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used;
- Air conditioning condensate;
- Uncontaminated springs;
- Uncontaminated groundwater;
- Foundation or footing where flows are not contaminated with process materials such as solvents;
- Incidental windblown mist from cooling towers, and
- Demineralized water from storage tanks *"and trucks"*.

The various storm water controls (structural and non-structural) for this facility are discussed in Section 5.0 of this plan.

Possum Point Power Station's discharges are permitted by VA DEQ as Individual Industrial Major VPDES permit. The VPDES permit No. VA0002071 combines both industrial wastewater and storm water discharges. The following are the VPDES permitted wastewater outfalls:

Discharge Point 001 & 002: Combined outfalls that discharge to Quantico Creek. The discharges are Condenser Cooling Water & Cooling Tower Blowdown and receive flow from internal Discharge Outfalls 201 & 202:
Discharge Point 201: Cooling Tower Blowdown for Unit 5.
Discharge Point 202: Cooling Tower Blowdown for Unit 6.

Discharge Point 003: Condenser Cooling Water for Unit 4 that discharges to Quantico Creek.

Discharge Point 004: Low Volume Waste Settling Pond that discharges to the mouth of Quantico Creek.

Discharge Point 005: Ash Pond E to Quantico Creek. Receives flows from internal Outfalls 501 & 502:
Discharge Point 501: Oil Waste Treatment Basin.
Discharge Point 502: Metals Cleaning Waste Treatment Facility.

Discharge Point 007: Units 1-4 Intake Screen Backwash to Potomac River.

Discharge Point 008: Intake Screenwell Freeze Protection to Potomac River.

3.3 Monitoring Requirements

VA0002071 Part I.G.2.(a) Quarterly Visual Examination of Storm Water Quality (SWPPP Cross Reference #18)

The Quarterly Visual Monitoring is required to be conducted periods of (January – March) (April - June) (July – September) (October – December). See the above permit condition for the details on qualifying rain events and adverse weather conditions. An example of Visual Inspection forms are provided in Appendix E.

QUARTERLY VISUAL MONITORING PARAMETERS OF NPDES PERMIT

Discharge Characteristics	Monitoring Frequency	NDPES Permit # Monitoring Location
Color	Quarterly	Outfalls S5, S61, S42
Odor	Quarterly	Outfalls S5, S61, S42
Clarity	Quarterly	Outfalls S5, S61, S42
Floating Solids	Quarterly	Outfalls S5, S61, S42
Settle Solids	Quarterly	Outfalls S5, S61, S42
Suspended	Quarterly	Outfalls S5, S61, S42
Foam	Quarterly	Outfalls S5, S61, S42
Oil Sheen	Quarterly	Outfalls S5, S61, S42
Other Obvious Indicators	Quarterly	Outfalls S5, S61, S42

3.4 SWPPP Inspection Requirements

VA0002071 Part I.G.1.d.(3)(d) ***Inspections*** (SWPPP Cross Reference #12)

The above referenced permit condition requires the identified storm water exposed items identified in this plan to be inspected at least quarterly. The suggested schedule; **(January – March)**, **(April – June)**, **(July – September)**, and **(October – December)**. The facility petroleum items will be inspected in accordance with the SPCC requirements, please refer to the SPCC plan. (Please see section 7.3 of this plan for Storm Water inspection documentation and Appendix E of this plan for blank Storm Water inspection forms.)

3.5 Comprehensive Site Compliance Evaluation

VA0002071 Part I.G.1.d.(4) ***Comprehensive Site Compliance Evaluation*** (SWPPP Cross Reference #17)

The Storm Water Pollution Prevention Plan shall be reviewed and updated on an **Annual** basis and can coincide with one of the quarterly inspections. For records of annual reviews, see section 7.4 and/or Appendix D.

Note: The permit requires the SWPPP to be amended within 14 days of the Annual evaluation and 12 weeks to implement the Action Items unless DEQ approves a written time extension request.

4.0 POTENTIAL POLLUTANT SOURCES

VA0002071 Part I.G.1.d.(2) ***Description of Potential Pollutant Sources.*** (SWPPP Cross Reference #3)

A SWPPP evaluation and associated SPCC Plan identify the following equipment and areas that could potentially impact storm water as a result of spills during oil or chemical transfer operations. The likelihood is low and is primarily associated with storm drain vicinity to the equipment/operation. Please refer to Appendix B & C maps for locations and drainage patterns.

4.1 SUMMARY OF POTENTIAL POLLUTANT SOURCES

Facility Area	Activity	Pollutant(s) or Pollutant Parameter(s)
Barge Unloading Area	Barge Off Loading	POLLUTANT: Petroleum DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
Laydown Area	Bulk Equipment Unloading and Storage (Temporary / Outages)	POLLUTANT: Metals DIRECT EXPOSURE: Yes POTENTIAL TO DISCHARGE: Yes
Metal Dumpster	Storage	POLLUTANT: Metal DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
Sand and Gravel Stock Pile	Unloading and Storage	POLLUTANT: Sand and Gravel DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
General Refuse Areas (3 Locations)	Storage	POLLUTANT: General Refuse DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
Oil Dock Fire Foam House	Unloading and Storage	POLLUTANT: Fire Foam DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
Possum Point C.T. False Start Drain Tank (Old C.T.s)	Storage and Unloading	POLLUTANT: Petroleum DIRECT EXPOSURE: No POTENTIAL TO DISCHARGE: Yes
		POLLUTANT: DIRECT EXPOSURE: POTENTIAL TO DISCHARGE:

4.2 Site Bulk Chemicals/ Materials

VA0002071 Part I.G.1.d.(2)(b) ***Inventory of Exposed Materials*** (SWPPP Cross Reference #5)

Chemical / Material Storage		
Material Exposure (Map Key ID "S#")	**Storage Capacity (Gallons)**	**BMPs**
General Refuse Dumpster Map Key (S1, S2 & S3)	NA	Equipped with lids and/or tarps, Drains to Outfall S42, Outfall S95, and S85.
Laydown Area Map Key (S4)	NA	Graded with rock - Drains to Outfall S86.
Metal Dumpster Map Key (S5)	NA	Equipped with lids and or tarps - Drains to Outfall S95.
Sand and Gravel Stock Pile Map Key (S6)	Varies	Equipped with concrete pad and covered with tarps – Drains to Outfall S5.
Possum Point C.T. False Start Drain Tank (Old C.T.s) Map Key (S7)	500	Double walled tank, slope concrete pad curbed on three sides. Drain is protected with Active-X membrane. Drains to Outfall S42.

Chemical Containing Equipment		
Equipment / Material (Map Key ID "S#")	**Storage Capacity (Gallons)**	**BMPs**
Unit 5A Cooling Towers Map Key (S8)	Flow Through 330,000 gpm	- Drains to Outfalls S5. Concrete Basin.
Unit 5B Cooling Towers Map Key (S9)	Flow Through 330,000 gpm	- Drains to Outfalls S5 and Outfall S31. Concrete Basin.

Chemical & Material Unloading & Transfer Facilities		
Material Exposure (Map Key ID "S#")	**Spill Potential**	**BMPs**
Fire Fighting Foam Map Key (S10)	Product Transfer from tote/drum	Stored inside of building - Drains to Outfall S46.
Oil Water Separator Sump Clean-out Map Key (S11)	Max Truck Capacity (3,000 gallons)	Catch Pans and pads under the connection. The tanker utilizes vacuum pressure. – Outfall S86
No. 2 Dock Oil Water Sump Clean-out Map Key (S12)	Max Truck Capacity (3,000 gallons)	Catch Pans and pads under the connection. The tanker utilizes vacuum pressure. – A release would be to the dock area over the Potomac River, which is protected by shoreline boom.
Possum Point C.T. False Start Drain Tank (Old C.T.s) Map Key (S13)	Max Truck Capacity (3,000 gallons)	Catch Pans and pads under the connection. The tanker utilizes vacuum pressure. – A release would be to the dock area over the Potomac River. Drain is equipped with Active-X membrane material. Outfall S42.
C.T. Portable Restroom Map Key (S14)	1000 gallon Sewage 400 Water	The Portable Restrooms are strategically placed in areas away for storm drain inlets and ditches. The station has developed a written procedure for managing Portable Restrooms.

4.3 Site Bulk Oil

The oil related tables, please refer to the SPCC/ODCP/FRP Plans.

4.4 Sediment & Erosion

VA0002071 Part I.G.1.d.(3)(h) *Sediment and Erosion Control* (SWPPP Cross Reference # 15)

4.4.1 Sediment and Erosion Control

The Station utilizes curbs, concrete ditches, rocks and grates/inlets to control storm water runoff. Some of the grates/inlets are surrounded with hay bales and silt fences. Approximately 22% of the property is impervious surfaces such as roof tops and paved parking lots and roads. The other 78% are previous with ponds, graveled and some grassy areas. No evidence of serve erosion is currently present.

4.5.2 Construction Erosion & Sediment Control

Appendix G is reserved for Erosion Control and Sediment Plan insertion in the event of construction activity at the station. Such plans are required for Construction Storm Water Permits and developed with a specific focus on site topography, drainage patterns, soils, ground cover, and adjacent runoff areas.

5.0 STORM WATER CONTROLS

VA0002071 Part I.G.1.d.(3)(h) ***Management of Runoff*** (SWPPP Cross Reference #16)

Storm water management controls appropriate for the Station can be summarized as follows:

UNIT OR AREA NAME	APPROPRIATE STORM WATER MANAGEMENT CONTROLS
Runoff Control	Drop in-let, silt-traps, rocks, gravel, and curbing.
Material Transfer Areas	Secondary containment as applicable, drainage system, written procedures, personnel attendance during transfers, spill kits, and inspections.
Storage Tanks	Secondary containment, drainage system, shutoff valves, loading/unloading procedures, inspection, and spill kits.
Oil-Filled Mechanical/Electrical Equipment	Secondary containment, written procedures, drainage system, spill kits, inspections, and deployment of oil boom.

5.1 Structural BMPs

Refer to Section 4.3, 4.4 and 4.5 for structural BMPs in place at this Station.

5.2 Non-Structural BMPs

The Station has Operating Procedures (OP) that are related to storm water contact management. They reduce the potential for storm water contact due to equipment failure or operational losses. The associated OPs are listed in section 5.2.1:

5.2.1 Employee Training

VA0002071 Part I.G.1.d.(3)(e) ***Employee Training*** (SWPPP Cross Reference #13)

The positions noted (2) in the Pollution Prevention Team in Section 2.1 of this plan are responsible for providing the storm water training. The Station has the following training that encompasses storm water management:

- New Employee Orientation
- Safety Inspections
- Hazard Communication Program
- Annual Storm Water Pollution Prevention

The Station has developed Operational Procedures (OP) associated with storm water and used as training. Copies of the OPs are maintained in the Station's internal computer network under the Operation's Folder for product deliveries and available upon request.

Material Safety Data Sheets (MSDS) are also utilized as part of training to ensure that employees understand the nature of materials that could cause equipment leaks. Refer to Station's files for copies of the MSDS.

5.2.2 Good Housekeeping

VA0002071 Part I.G.1.d.(3)(a) Good Housekeeping (SWPPP Cross Reference #)

Section 6.0 of this plan includes the details for each Good Housekeeping requirement.

5.2.3 Routine Facility Inspections

VA0002071 Part I.G.1.d.(3)(d) ***Inspections*** (SWPPP Cross Reference #12)

Routine facility inspections are comprehensive in scope, refer to Appendix E of this plan for the Storm Water Inspection and SPCC/ODCP/FRP plan for the Oil Inspection forms. The inspections include:

- Storm Water: Monthly Inspection and Annual Evaluation
- SPCC Plan form "Daily, Weekly, and Monthly Oil Inspection."

5.2.4 Spill Prevention and Response Procedures

VA0002071 Part I.G.1.d.(3)(c) ***Spill Prevention and Response Procedures*** (SWPPP Cross Reference # 11)

Please refer to Section 2.2 of this and plan and the SPCC/OCDP/FRP plans for general spill response procedures.

5.3 BMP Maintenance

VA0002071 Part I.G.1.d.(3)(b) Preventive Maintenance (SWPPP Cross Reference #10)

Based upon facility evaluation, Section 4.0 (Potential Pollutant Sources) identified those types and locations of equipment that can potential impact storm water as a result of operational or equipment failure or human error. The continuing structural or non-structural Best Management Practices (BMPs) that are currently utilized, and will continue to be utilized, until planned BMP feasibility studies are completed for possible future construction and/or implementation. Refer also to Section 5.5.

5.4 BMPs Planned for Consideration

BMPs planned for consideration at this facility are limited to those identified during periodic evaluations. Storm water detention or retention is included as one type of structural BMP under consideration and will be continually reviewed for both contained and uncontained equipment. Refer to Appendix E, Annual Compliance Evaluation for the most recent BMP recommendations.

New BMP Candidates Since the Last Site Evaluation:	**Responsible Person**	**Status**

6.0 GOOD HOUSEKEEPING MEASURES

VA0002071 Part I.G.1.d. (3)(a) *Good Housekeeping* (SWPPP Cross Reference #9)

6.1 Fugitive Dust Emissions

Wet suppression is implemented on as needed basis.

6.2 Delivery Vehicles

Bulk chemicals come in closed container trucks. Facility has safe fill and shutdown procedures that are to be used in transfer process and posted at each unloading area. Delivery of petroleum products is handled in accordance with the SPCC Plan.

6.3 Fuel Oil Unloading Areas

Measures to prevent or minimize contamination of storm water runoff from fuel oil unloading areas are described in the SPCC Plan.

6.4 Chemical Loading/Unloading Areas

Operations is notified upon arrival of bulk shipment. Station personnel trained in spill prevention response are available during unloading. Most of the chemicals used at the Station are stored indoors. Chemical unloading areas are equipped with containment and drains to handle any spill. Safe fill and shutdown procedures are used during unloading events.

6.5 Miscellaneous Loading/Unloading Areas

Various structural Best Management practices such as berming, curbing, containment, and written procedures are utilized for both chemical and petroleum unloading areas.

6.6 Small Liquid Storage Tanks

Bulk chemical spills from storage tanks are contained, cleaned up, and/or routed to the Station's Low Volume Settling Ponds or Oil Retention Pond. Transfer facilities are equipped with spill and overflow protection. (e.g. containment curbing, drip pans, drip diapers, and/or other containment devices). Trained personnel handle small clean-ups and contractors are hired to handle large clean-ups.

6.7 Large Bulk Fuel Storage Tanks

Refer to Section 4.4 and the facility's SPCC plan maintained under separate cover.

6.8 Spill Reduction Measures

Refer to Section 5.0 and the facility's SPCC plan maintained under separate cover.

6.9 Oil Bearing Equipment in Switchyards

Refer to Section 4.4 and the facility's SPCC plan maintained under separate cover.

6.10 Residue Hauling Vehicles

The Station does not routinely haul coal or coal by-product. The Station ensures all residue hauling vehicles will be inspected for proper covering over the load, adequate gate sealing and overall integrity of the body or container. Vehicles without load coverings or adequate gate sealing, or with leaking containers or beds will be repaired as soon as practicable.

6.11 Ash Loading Areas

No longer applicable to Possum Point Power Station, this facility no longer burns coal. The Oil Ash from Unit 5 is vacuumed into a sealed container and transported to an industrial landfill.

6.12 Areas Adjacent to Disposal Ponds or Landfills

When this facility operated via coal, the ash was sluiced to a settling pond, therefore ash hauling/tracking is not an issue for this facility. The integrity of Ash Pond's berms and banks are periodically inspected for erosion issues. For vehicle tracking management, please refer to section 6.10 above.

6.13 Landfills, Scrapyards, Surface Impoundments, Open Dumps, General Refuse Sites

The General Refuse dumpsters are equipped with lids to prevent rainwater. Scrap metal is placed in dedicated metal debris dumpster for disposal. During construction activities, large pieces of equipment are stored in a Laydown area. Oily rags and absorbents are placed in the dedicated Oily Debris dumpster equipped with lids.

6.14 Maintenance Activities

Vehicle and Equipment Storage Areas:
Vehicles awaiting maintenance are stored in Coal Yard Service Building.

Fueling Areas:
Measures to prevent or minimize contamination of storm water runoff from fueling areas are described in the SPCC Plan.

Vehicle and Equipment Cleaning Areas:
Vehicle washing is limited to drains that connect to Wastewater Outfall 004. (No Detergents are used)

Vehicle and Equipment Maintenance Areas:
On-road vehicle and heavy equipment maintenance is performed in the Coal Yard Service building or under cover on the East side of the Unit 5 Sandfilter Building.

6.15 Material Storage Areas

Materials are placed in covered storage areas or, if stored outdoors, in closed containers or under cover. Storage units for all materials are maintained in good condition.

7.0 DOCUMENTATION

VA0002071 Part I.G.1.d.(3)(f) ***Recordkeeping and Internal Reporting Procedures*** (SWPPP Cross Reference #14)

The following subsections represent the various methods of documentation.

7.1 Spills and Leaks

VA0002071 Part I.G.1.d.(2)(c) ***Spills and Leaks.*** (SWPPP Cross Reference #6)

The reportable spills list is provided in Appendix I of this plan and locations are referenced on the Appendix C drawing.

7.2 Storm Water Monitoring Requirements

VA0002071 Part I.G.1.d.(2)(d) ***Sampling Data*** (SWPPP Cross Reference #7)

Monitoring records are maintained in Station's files and available upon request, an example of monitoring forms is Appendix E. A summary of the monitoring data is conducted during the Annual Evaluation and is provided in Appendix D.

7.3 Site Inspections

VA0002071 Part I.G.1.d.(3)(d) ***Inspections*** (SWPPP Cross Reference #12)

Inspection forms are in Appendix E and records are maintained in Station's files and available upon request.

7.4 Annual Evaluation

VA0002071 Part I.G.1.d.(4) ***Comprehensive Site Compliance Evaluation*** (SWPPP Cross Reference #17)

Refer to Appendix D for evaluation summary forms and reports.

ANNUAL COMPLIANCE EVALUATION CERTIFICATION

Date of Site Visit	Purpose
July 16 &17, 2008	Annual Evaluation
August 11 & 12, 2009	Annual Evaluation
August 17 & 18, 2010	Annual Evaluation
August 3, 2011	Annual Evaluation

7.5 Goals & Objectives

The storm water pollution prevention plan (SWPPP) has been developed as required by the Station's storm water discharge permit and to incorporate good engineering practices. This SWPPP describes this Station, its operations, identifies potential sources of storm water pollution at the facility, recommends appropriate best management practices (BMPs) or pollution control measures to reduce the discharge of pollutants in storm water runoff, and provides for periodic review of this SWPPP. It is the objective of this program to improve the quality of surface waters by reducing the amount of pollutants potentially contained in the storm water runoff being discharged.

7.6 Record of Review

Record of Reviews
(SWPPP Permit Reference #13)

Date of Inspection [1]	Date Minor SWPPP Revisions Completed [2]	Date of Substantial BMP Modification [3,4]	Date of Comprehensive Site Evaluation Summary Report [5]	Reason for Amendment
July 16 & 17, 2008			July 17, 2008	Annual Evaluation
August 11 & 12, 2009			August 12, 2009	Annual Evaluation
August 17 & 18, 2010			August 18, 2010	Annual Evaluation
August 3, 2011			November 14, 2011	Annual Evaluation

[1] A Station inspection must be completed by qualified personnel familiar with Station operations in accordance with State and Federal SWPPP regulations.

[2] The SWPPP shall be modified as necessary to include minor changes in SWPPP text, Station controls or BMPs. Revision to the SWPPP must be completed within two weeks following the inspection, unless permission for a later date is granted in writing by the State NPDES authority.

[3] If substantial SWPPP change is necessary including significant modification of existing BMPs or if the addition of new BMPs is necessary, implementation must be completed before the next anticipated storm event, if practicable, but not more than 12 weeks after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the State NPDES authority. Refer to the Action Item Schedule on the next page.

[4] The permittee shall amend the SWPPP whenever: (1) there is a change in design, construction, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of

pollutants from the facility; (2) during inspections, monitoring, or investigations by facility personnel or by local, state, or federal officials, it is determined that the SWPPP is ineffective in eliminating or significantly minimizing pollutants from sources identified.

[5] A report summarizing the scope of the inspection name(s) of personnel making the inspection, date(s) of the inspection, and major observations relating to the implementation of the SWPPP, and actions taken in accordance with the NPDES permit shall be made and retained as part of the SWPPP for at least five years from the date of the inspections.

Appendix A

Topographic Site Map and Site Vicinity Map
(SWPPP Permit Reference #4)

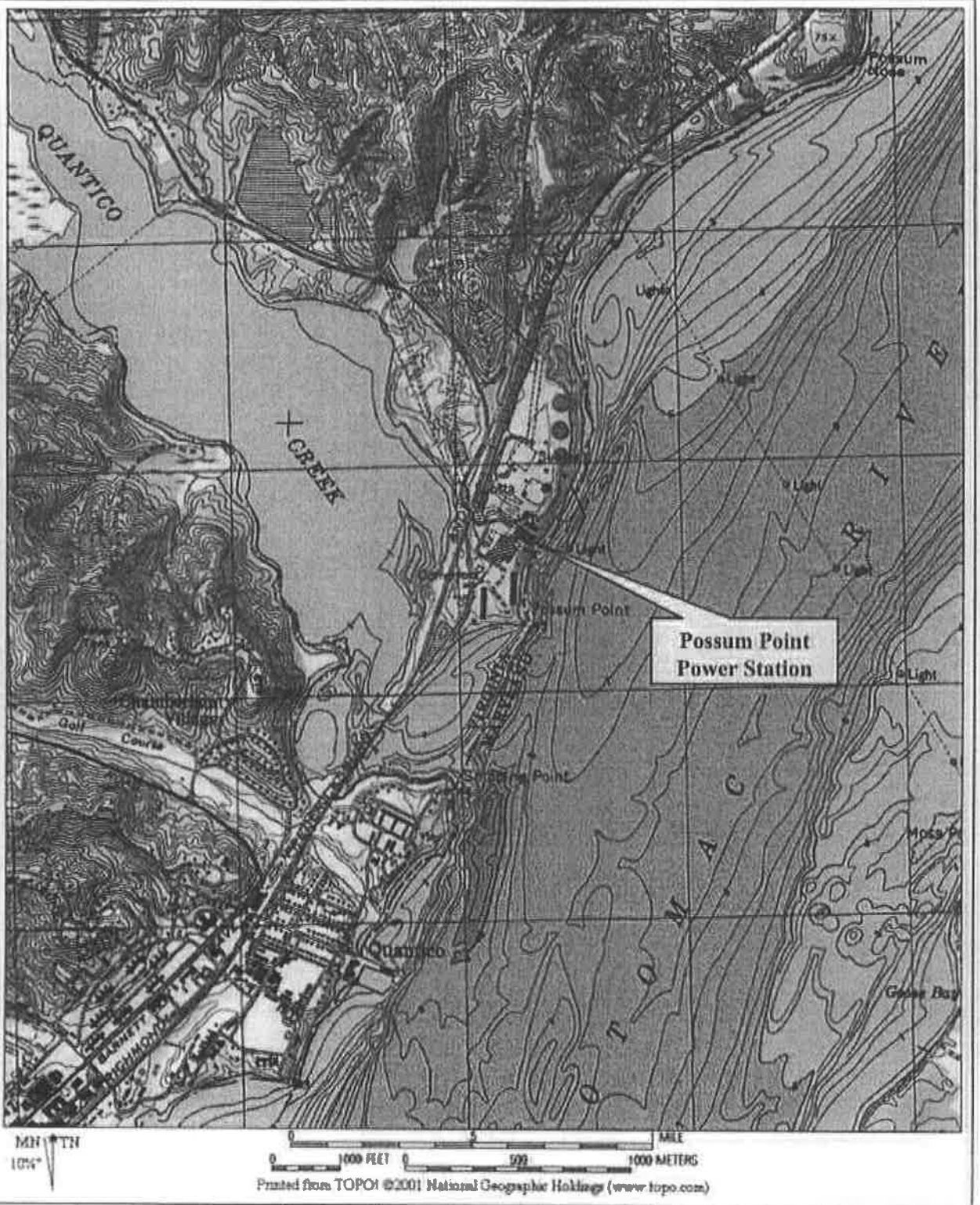


Figure 1
Site Location Map

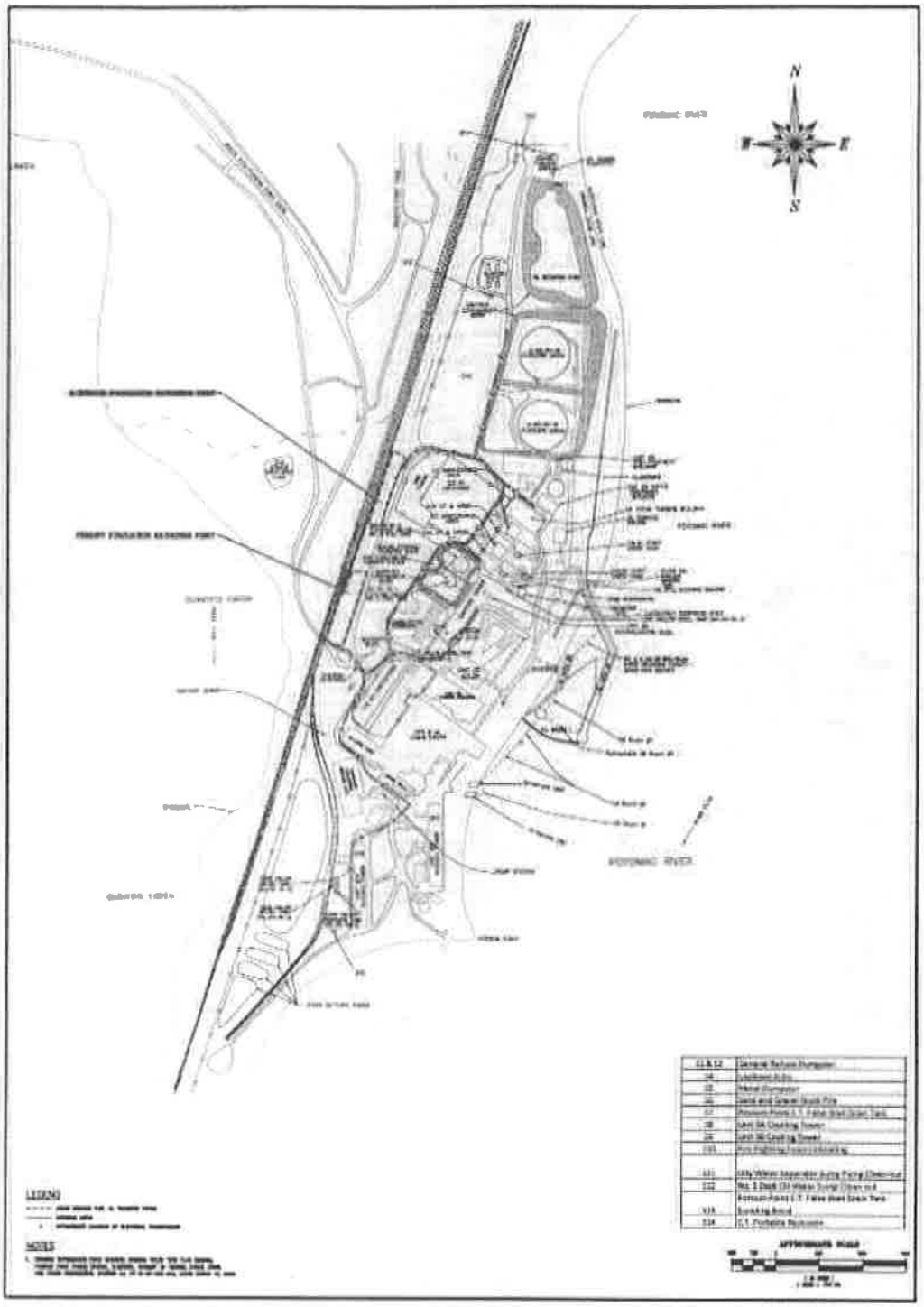
Dominion Generation
Possum Point Power Station
Dumfries, Virginia

Appendix B

Site Plan
(SWPPP Permit Reference #4 & 5)

Appendix C

Storm Water Drainage Areas
(SWPPP Permit Reference # 4 & 5)

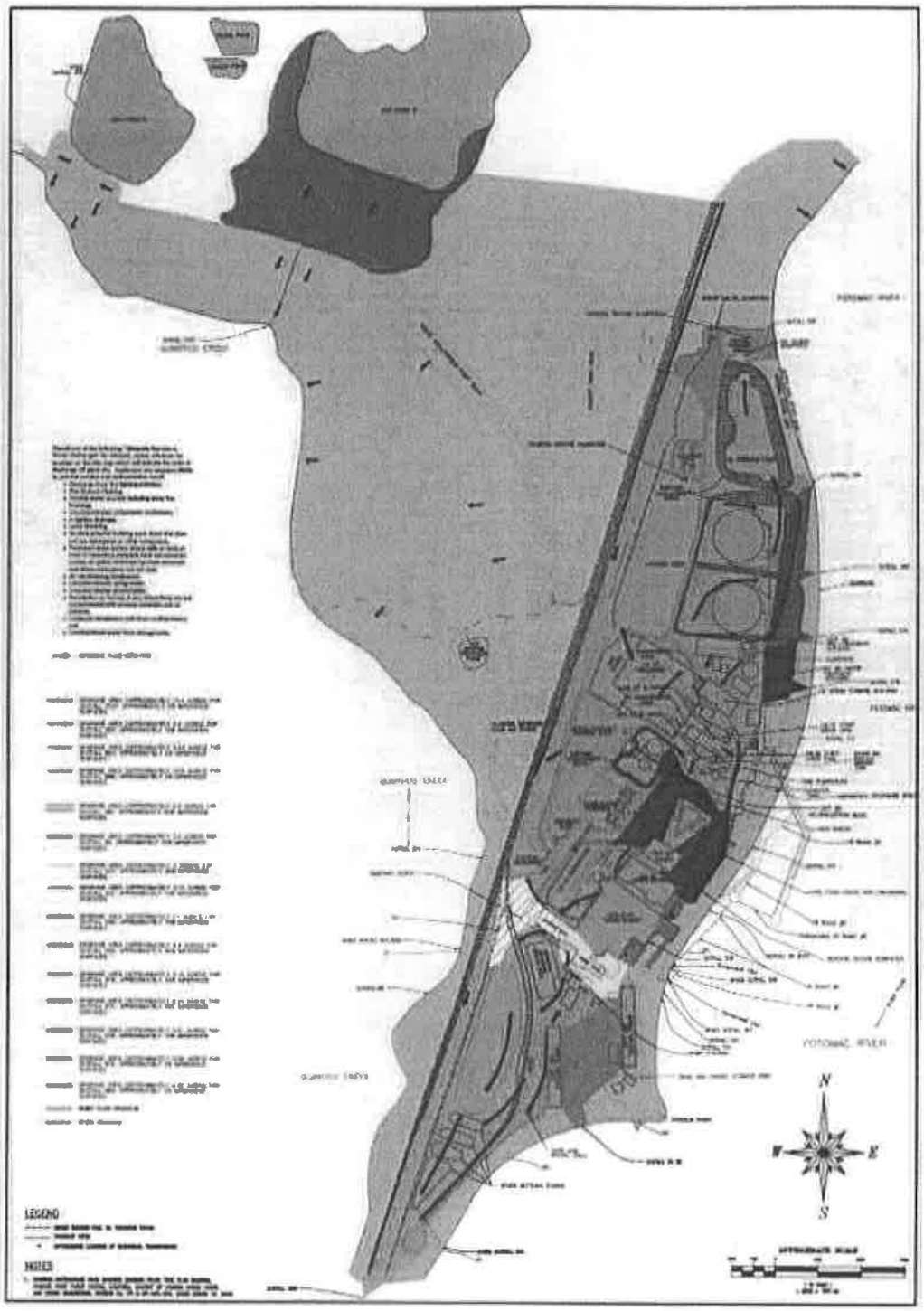


DOMINION ENERGY

SITE PLAN
OIL TANK AND UNLOADING AREA
POSSUM POINT POWER STATION

PP-0-SP-STA-621 | 0

8796



DOMINION ENERGY

SITE PLAN
DRAINAGE AREA
POSSUM POINT POWER STATION

PP-0-SP-STA-622 0

Appendix D

Annual Compliance Evaluation Summary Report (SWPPP Permit Reference #17)

STORM WATER POLLUTION PREVENTION PLAN ANNUAL SITE COMPLIANCE EVALUATION

LOCATION: Possum Point Power Station

DATE OF ANNUAL EVALUATION:
EVALUATION METHOD: Comprehensive SWPPP Checklist
EVALUATION TEAM:

SCOPE OF SITE COMPLIANCE EVALUATION:

SUMMARY OF EVALUTION	YES or NO
Answer the following questions with YES or NO	
Inspection Made of Each Material Exposed to Storm Water?	
Inspection Made of Each Activity / Unloading Area Exposed to Storm Water?	
Inspection Made for Contaminants on the Ground?	
Inspection Made for Leaks from Equipment or Containers?	
Inspection Made for Vehicle Tracking Impacts?	
Inspection Made for Materials Blowing from Areas?	
Inspection Made of Pollutants in Drainage Ways?	
Inspection Made of Monitoring and Inspection Records?	
BMPs Identified in the SWPPP Were Checked to See if Used?	
Were the Locations of Outfalls Inspected?	
Site Map(s) Reviewed?	

COMPLIANCE EVALUATION SUMMARY REPORT:

EVALUATION OF OUTFALLS:	TOTALS
Storm Water Outfalls:	
Process/Allowable Non-Storm Water Outfalls:	
Compliance Action Item Summary:	YES or NO
Any evidence of Leaks or Spills that may have reached offsite Surface Water?	
Any evidence of exposure sources contacting Storm Water?	
Is Written SWPPP Binder Updates Needed?	
Does the Site Map(s) require revisions?	
Are Additional BMPs needed or requiring maintenance?	
Incidents of Non-Compliance of Permit Discharge Limits?	
Were any issues of Non-compliance found?	
Was any incidents noted that require Notification?	

SWPPP TEXT OBSERVATIONS – Possum Point Power Station SWPPP

Corresponding SWPPP Section	REQUIRED SWPPP CONTENTS:	Revision Required (Yes or No)
Page xi	Management Approval Certification	
Section 1.0	Description of Station & its activities	
Section 2.1	Pollution Prevention Team	
Section 2.2	Spill Response Procedures	
Sections 3.1 & 3.2	Outfall Descriptions	
Section 3.2	Non-Storm Water Evaluation Certification	
Section 3.2	Allowable Discharge Descriptions	
Sections 3.3, 3.4 & 3.5	Monitoring and/or Inspections descriptions	
Sections 4.0	List of Exposed Materials and/or Activities	
Sections 4.2 & 5.0	List of Structural BMPs	
Section 4.4	Construction, Sediment, or Erosion Control discussion	
Section 5.2.1	Storm Water Training and Schedules	
Section 6.0	**Non-Structural BMPs - Good Housekeeping:**	
Section 6.1	Dust Control Equipment Areas	
Section 6.2	Delivery Vehicle	
Section 6.3	Fuel Oil Unloading Areas	
Section 6.4	Chemical Unloading Areas	
Section 6.5	Miscellaneous Loading / Unloading	
Sections 6.6 & 6.7	Small and Large Storage Tank Areas	
Section 6.8	Spill Reduction Measures	
Section 6.9	Oil Filled Electrical Equipment Areas, e.g., Transformers	
Section 6.10	Residue Hauling Vehicles	
Section 6.11	Ash Handling Areas & Hauling Vehicles	
Section 6.12	Areas Adjacent to Ponds/Basins/Impoundments	
Section 6.13	Landfills, Scrap Yards, Surface Impoundments, Open Dumps, General Refuse	
Section 6.14	Maintenance Activities	
Section 6.15	Material Storage Areas	
Section 7.0	**SWPPP Documentation:**	
Section 7.1	Reportable Spills	
Section 7.2 & 7.3	Inspections and Monitoring Documentation Locations	
Section 7.4	Annual Evaluation Documentation	
	SWPPP Map Elements – Summary:	
	Updated Outfall Locations & Numbers	
Appendices A, B & C	Topographical Location & Surface Water Body Names	
Appendices A, B & C	Drainage Direction by Site Area	
Appendices A, B & C	Activity Locations Exposed to Storm Water	
Appendices A, B & C	Equipment Locations Exposed to Storm Water	
Appendices A, B & C	Materials Potentially Exposed to Storm Water	
Appendices A, B & C	Spill or Leak Areas - Past or Potential	

SITE OBSERVATIONS – Possum Point Power Station Site Visit
(Records, Site Conditions, Structural / Non-Structural BMPs)

NOTE: List any test methods used in evaluating Nonstorm Water Discharges and the results.

SUMMARY DISCHARGE MONITORING DATA:

Visually Monitoring Reports:

Inspections Records:

Other Observations:

SWPPP ACTION ITEMS – Possum Point Power Station

ACTION ITEM IMPLEMENTATION SCHEDULE			
Action Item	**Responsible Person**	**Completion Deadline**	**Actual Date Completed**
1.			
2.			
3.			
4.			
5.			
6.			
7.			

CERTIFICATION OF ANNUAL SWPPP EVALUATION

☐ Is this facility is in compliance with the SWPPP and the VPDES permit VA0002071.

Plan Certification Requirement: I have reviewed and approve the revisions that resulted from this annual Comprehensive Site Compliance Evaluation.

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 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.

Authorized Signatory

Signature:		Date:
Printed Name:		
Title:		

STORM WATER POLLUTION PREVENTION PLAN ANNUAL SITE COMPLIANCE EVALUATION

LOCATION: Possum Point Power Station

DATE OF ANNUAL EVALUATION: August 3, 2011 & September 14, 2011
EVALUATION METHOD: Comprehensive SWPPP Checklist
EVALUATION TEAM: Jeffrey Marcell & Rick Woolard

SCOPE OF SITE COMPLIANCE EVALUATION:

SUMMARY OF EVALUTION	YES or NO
Answer the following questions with YES or NO	
Inspection Made of Each Material Exposed to Storm Water?	Yes
Inspection Made of Each Activity / Unloading Area Exposed to Storm Water?	Yes
Inspection Made for Contaminants on the Ground?	Yes
Inspection Made for Leaks from Equipment or Containers?	Yes
Inspection Made for Vehicle Tracking Impacts?	Yes
Inspection Made for Materials Blowing from Areas?	Yes
Inspection Made of Pollutants in Drainage Ways?	Yes
Inspection Made of Monitoring and Inspection Records?	Yes
BMPs Identified in the SWPPP Were Checked to See if Used?	Yes
Were the Locations of Outfalls Inspected?	Yes
Site Map(s) Reviewed?	Yes

COMPLIANCE EVALUATION SUMMARY REPORT:

EVALUATION OF OUTFALLS:	TOTALS
Storm Water Outfalls:	15
Process/Allowable Non-Storm Water Outfalls:	6
Compliance Action Item Summary:	YES or NO
Any evidence of Leaks or Spills that may have reached offsite Surface Water?	No
Any evidence of exposure sources contacting Storm Water?	No
Is Written SWPPP Binder Updates Needed?	Yes
Does the Site Map(s) require revisions?	Yes
Are Additional BMPs needed or requiring maintenance?	Yes
Incidents of Non-Compliance of Permit Discharge Limits?	No
Were any issues of Non-compliance found?	No
Was any incidents noted that require Notification?	No

SWPPP TEXT OBSERVATIONS – Possum Point Power Station SWPPP

Corresponding SWPPP Section	REQUIRED SWPPP CONTENTS:	Revision Required (Yes or No)
Page xi	Management Approval Certification	Yes
Section 1.0	Description of Station & its activities	No
Section 2.1	Pollution Prevention Team	Yes
Section 2.2	Spill Response Procedures	Yes
Sections 3.1 & 3.2	Outfall Descriptions	No
Section 3.2	Non-Storm Water Evaluation Certification	No
Section 3.2	Allowable Discharge Descriptions	Yes
Sections 3.3, 3.4 & 3.5	Monitoring and/or Inspections descriptions	No
Sections 4.0	List of Exposed Materials and/or Activities	Yes
Sections 4.2 & 5.0	List of Structural BMPs	Yes
Section 4.4	Construction, Sediment, or Erosion Control discussion	No
Section 5.2.1	Storm Water Training and Schedules	No
Section 6.0	**Non-Structural BMPs - Good Housekeeping:**	
Section 6.1	Dust Control Equipment Areas	No
Section 6.2	Delivery Vehicle	No
Section 6.3	Fuel Oil Unloading Areas	No
Section 6.4	Chemical Unloading Areas	No
Section 6.5	Miscellaneous Loading / Unloading	No
Sections 6.6 & 6.7	Small and Large Storage Tank Areas	No
Section 6.8	Spill Reduction Measures	No
Section 6.9	Oil Filled Electrical Equipment Areas, e.g., Transformers	No
Section 6.10	Residue Hauling Vehicles	No
Section 6.11	Ash Handling Areas & Hauling Vehicles	No
Section 6.12	Areas Adjacent to Ponds/Basins/Impoundments	No
Section 6.13	Landfills, Scrap Yards, Surface Impoundments, Open Dumps, General Refuse	No
Section 6.14	Maintenance Activities	No
Section 6.15	Material Storage Areas	No
Section 7.0	**SWPPP Documentation:**	
Section 7.1	Reportable Spills	Yes
Section 7.2 & 7.3	Inspections and Monitoring Documentation Locations	Yes
Section 7.4	Annual Evaluation Documentation	Yes
	SWPPP Map Elements – Summary:	
	Updated Outfall Locations & Numbers	
Appendices A, B & C	Topographical Location & Surface Water Body Names	No
Appendices A, B & C	Drainage Direction by Site Area	No
Appendices A, B & C	Activity Locations Exposed to Storm Water	Yes
Appendices A, B & C	Equipment Locations Exposed to Storm Water	No
Appendices A, B & C	Materials Potentially Exposed to Storm Water	Yes
Appendices A, B & C	Spill or Leak Areas - Past or Potential	No

SITE OBSERVATIONS – Possum Point Power Station Site Visit
(Records, Site Conditions, Structural / Non-Structural BMPs)

NOTE: List any test methods used in evaluating Nonstorm Water Discharges and the results.
Dry weather evaluation was unable to be preformed on August 3, 2011 due to recent precipitation.

On September 14, 2011 a dry weather evaluation was preformed and a copy of the report is provided in Appendix H of the SWPPP.

SUMMARY DISCHARGE MONITORING DATA:

Visually Monitoring Reports: The past twelve month's of visual monitoring reports were made available. The following summarizes the results:
Outfall S61 – No consistent issues to note.
Outfall S5 – The color of the water is consistently reported as various shades of tan.
Outfall S42 – Solids are consistently observed. Drainage area was evaluated during the site evaluations, no specific contributors were identified, however it should be noted that most of the drainage area is impervious.

Note, the visual monitoring forms should be signed by only VPDES authorized individuals who have been identified in writing to DEQ.

Inspections Records: Past twelve month's inspection records were made available, no consistent issues to note.

Other Observations:
NA

SWPPP ACTION ITEMS – Possum Point Power Station

ACTION ITEM IMPLEMENTATION SCHEDULE			
Action Item	**Responsible Person**	**Completion Deadline**	**Actual Date Completed**
1. Revise the Appendix B & C drawings.	Rick Woolard	Within 14 days of the Signature below	
2. The SWPPP text revisions were completed during the annual comprehensive SWPPP evaluation. The signature statement below requires the SWPPP revisions to be reviewed prior to signing the below certification statement	Jeff Marcell	Before Signing below signature	
3.			
4.			
5.			
6.			
7.			

CERTIFICATION OF ANNUAL SWPPP EVALUATION

Yes Is this facility is in compliance with the SWPPP and the VPDES permit VA0002071.

Plan Certification Requirement: I have reviewed and approve the revisions that resulted from this annual Comprehensive Site Compliance Evaluation.

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 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.

Authorized Signatory

Signature:	Jeffrey R Marcell	Date: 11/14/11
Printed Name:	JEFFREY R MARCELL	
Title:	ENVIRONMENTAL SUPERVISOR	

Appendix E

SWPPP Inspection Report Forms
(SWPPP Permit Reference #12)

SPCC Monthly Oil Inspection Form (Page 1 of 7)

	Check each item for each tank or area if acceptable; if unacceptable mark space with * and explain in comments section at bottom of form. Date and sign form.	5-HO-TK 1A (South) 21 million gal.	5-HO-TK 1B (North)	00-FO-TK-1 (#2 Oil South) 1,015,000 gal.	00-FO-TK-2 (#2 Oil North) 2 million gal.	CT Backup Gen Diesel Tank 110 gal.
1	**Tank Shell & Roof-** Check for:					
a	Drip marks					
b	Discoloration of tanks or flaking					
c	Localized corrosion					
d	Puddles containing oil					
e	Corrosion					
f	Structural Damage					
g	Hairline Cracks					
h	Localized Dead Vegetation					
i	Vegetation obstructing inspection					
j	Oil at Release Prevention Barrier (RPB) or in leak detection system					N/A
2	**Foundation/Supports**-Check for:					
a	Cracking or deterioration of support / ringwall					N/A
b	Discoloration or corrosion					
c	Puddles containing oil					
d	Settlement					
e	Gaps between tank and foundation / support					
f	Damage caused by vegetation roots					
g	Vegetation obstructing inspection					
3	**Piping**					
a	Droplets of oil					
b	Discoloration					
c	Corrosion					
d	Pipes bowing between supports					
e	Evidence of seepage from valve stems, flanges, seals					
f	Localized dead vegetation near piping					
4	**Secondary Containment - Dike or Berm**					
a	Standing water (does area need to be drained to maintain capacity?)					N/A
	If yes, indicate the date the valve is opened and the date the valve is closed:	Opened / Closed	Opened / Closed	Opened / Closed	Opened / Closed	Opened / Closed: N/A / N/A
b	Status of dike drain valve and valve lock (where appropriate)					N/A
c	Permeability of dike wall & floor (cracks or holes, from rodents, trees, piping, etc.)					
d	Debris outside containment area					
e	Erosion of dike					N/A
f	Status of pipes, inlets, drainage beneath tanks, etc.					
g	Vegetation obstructing inspection					
5	**Secondary Containment-Other**					
a	Cracks					
b	Discoloration					
c	Standing water or oil					
d	Corrosion					
e	Valve conditions					

Comments:

SPCC Monthly Oil Inspection Form (Page 2 of 7)

	Check each item for each tank or area if acceptable; if unacceptable mark space with * and explain in comments section at bottom of form. Date and sign form.	Unit 5 Lube Oil Room		Unit 4 Lube Oil Room		Unit 1 Lube Oil Room		Unit 6 Drum Oil First Floor Steam Turbine Building		Coal Yard Lube Oil Room	
1	**Tank Shell & Roof**- Check for:										
a	Drip marks										
b	Discoloration of tanks or flaking										
c	Localized corrosion										
d	Puddles containing oil										
e	Corrosion										
f	Structural Damage										
g	Hairline Cracks										
h	Localized Dead Vegetation	N/A		N/A		N/A		N/A		N/A	
I	Vegetation obstructing inspection	N/A		N/A		N/A		N/A		N/A	
j	Oil at Release Prevention Barrier (RPB) or in leak detection system	N/A		N/A		N/A		N/A		N/A	
2	**Foundation/Supports**-Check for:										
a	Cracking or deterioration of support / ringwall										
b	Discoloration or corrosion										
c	Puddles containing oil										
d	Settlement										
e	Gaps between tank and foundation / support										
f	Damage caused by vegetation roots	N/A		N/A		N/A		N/A		N/A	
g	Vegetation obstructing inspection	N/A		N/A		N/A		N/A		N/A	
3	**Piping**										
a	Droplets of oil										
b	Discoloration										
c	Corrosion										
d	Pipes bowing between supports										
e	Evidence of seepage from valve stems, flanges, seals										
f	Localized dead vegetation near piping	N/A		N/A		N/A		N/A		N/A	
4	**Secondary Containment - Dike or Berm**										
a	Standing water (does area need to be drained to maintain capacity?)	N/A		N/A		N/A		N/A		N/A	
	If yes, indicate the date the valve is opened and the date the valve is closed:	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b	Status of dike drain valve and valve lock (where appropriate)										
c	Permeability of dike wall & floor (cracks or holes, from rodents, trees, piping, etc.)										
d	Debris outside containment area										
e	Erosion of dike	N/A		N/A		N/A		N/A		N/A	
f	Status of pipes, inlets, drainage beneath tanks, etc.										
g	Vegetation obstructing inspection	N/A		N/A		N/A		N/A		N/A	
5	**Secondary Containment-Other**										
a	Cracks										
b	Discoloration										
c	Standing water or oil										
d	Corrosion										
e	Valve conditions										

Comments:

SPCC Monthly Oil Inspection Form (Page 3 of 7)

	Check each item for each tank or area if acceptable; if unacceptable mark space with * and explain in comments section at bottom of form. Date and sign form.	Unit 3 Turbine Lube Oil Res. 3150 gal.		Unit 4 Turbine Lube Oil Res. 4750 gal.		Unit 5 Turbine Lube Oil Res. 10,000 gal.		Unit 6 Steam Turbine Lube Oil Res. 4000 gal.		U3 ID Fans A&B Oil. Res. 2 @ 80 gal.	
1	**Tank Shell & Roof-** Check for:										
a	Drip marks										
b	Discoloration of tanks or flaking										
c	Localized corrosion										
d	Puddles containing oil										
e	Corrosion										
f	Structural Damage										
g	Hairline Cracks										
h	Localized Dead Vegetation	N/A		N/A		N/A		N/A			
i	Vegetation obstructing inspection	N/A		N/A		N/A		N/A			
j	Oil at Release Prevention Barrier (RPB) or in leak detection system	N/A		N/A		N/A		N/A			
2	**Foundation/Supports-**Check for:										
a	Cracking or deterioration of support / dingwall										
b	Discoloration or corrosion										
c	Puddles containing oil										
d	Settlement										
e	Gaps between tank and foundation / support										
f	Damage caused by vegetation roots	N/A		N/A		N/A		N/A			
g	Vegetation obstructing inspection	N/A		N/A		N/A		N/A			
3	**Piping**										
a	Droplets of oil										
b	Discoloration										
c	Corrosion										
d	Pipes bowing between supports										
e	Evidence of seepage from valve stems, flanges, seals										
f	Localized dead vegetation near piping	N/A		N/A		N/A		N/A			
4	**Secondary Containment - Dike or Berm**										
a	Standing water (does area need to be drained to maintain capacity?)	N/A		N/A		N/A		N/A		N/A	
	If yes, indicate the date the valve is opened and the date the valve is closed:	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b	Status of dike drain valve and valve lock (where appropriate)										
c	Permeability of dike wall & floor (cracks or holes, from rodents, trees, piping, etc.)										
d	Debris outside containment area										
e	Erosion of dike	N/A		N/A		N/A		N/A		N/A	
f	Status of pipes, inlets, drainage beneath tanks, etc.										
g	Vegetation obstructing inspection	N/A		N/A		N/A		N/A			
5	**Secondary Containment-Other**										
a	Cracks										
b	Discoloration										
c	Standing water or oil										
d	Corrosion										
e	Valve conditions										

Comments:

SPCC Monthly Oil Inspection Form (Page 4 of 7)

	Check each item for each tank or area if acceptable; if unacceptable mark space with * and explain in comments section at bottom of form. Date and sign form.	U4 ID Fans A&B Oil. Res. 2 @ 65 gal.		U5 ID Fans A,B,C&D 4@87 gal.		00-FO-TK-3 Diesel Fire Pump 1000 gal.		00-FO-TK-4 Gasoline (3000 gal.) / Diesel (5000 gal.)		00-FO-TK-5 Kerosene 2000 gal.	
1	**Tank Shell & Roof-** Check for:										
a	Drip marks										
b	Discoloration of tanks or flaking										
c	Localized corrosion										
d	Puddles containing oil										
e	Corrosion										
f	Structural Damage										
g	Hairline Cracks										
h	Localized Dead Vegetation										
I	Vegetation obstructing inspection										
j	Oil at Release Prevention Barrier (RPB) or in leak detection system					N/A		N/A		N/A	
2	**Foundation/Supports**-Check for:										
a	Cracking or deterioration of support / ringwall					N/A					
b	Discoloration or corrosion										
c	Puddles containing oil										
d	Settlement										
e	Gaps between tank and foundation / support										
f	Damage caused by vegetation roots							N/A		N/A	
g	Vegetation obstructing inspection										
3	**Piping**										
a	Droplets of oil										
b	Discoloration										
c	Corrosion										
d	Pipes bowing between supports										
e	Evidence of seepage from valve stems, flanges, seals										
f	Localized dead vegetation near piping							N/A		N/A	
4	**Secondary Containment - Dike or Berm**										
a	Standing water (does area need to be drained to maintain capacity?)	N/A		N/A		N/A		N/A		N/A	
	If yes, indicate the date the valve is opened and the date the valve is closed:	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b	Status of dike drain valve and valve lock (where appropriate)					N/A		N/A		N/A	
c	Permeability of dike wall & floor (cracks or holes, from rodents, trees, piping, etc.)										
d	Debris outside containment area										
e	Erosion of dike	N/A		N/A		N/A					
f	Status of pipes, inlets, drainage beneath tanks, etc.										
g	Vegetation obstructing inspection										
5	**Secondary Containment-Other**										
a	Cracks										
b	Discoloration										
c	Standing water or oil										
d	Corrosion										
e	Valve conditions										

Comments:

SPCC Monthly Oil Inspection Form (Page 5 of 7)

Oil Retention Pond Inspection

Check each item for each tank or area if acceptable; if unacceptable mark space with * and explain in comments section at bottom of form. Date and sign form.		Oil Retention Pond									
	Retention and Drainage Ponds										
a	Erosion										
b	Available capacity										
c	Presence of oil										
d	Debris										
e	Stressed vegetation										

Leak Detection

Leak Detection	Sat	Unsat	Comments
False start drain tank Unit 6 A			
False start drain tank Unit 6 B			
Oily Water Separator			

SPCC Montly Oil Inspection (Page 6 of 7)
Misc. Areas

Area	Status (OK: Y/N)	Comments
5-HO-TK-1A Piping		
5-HO-TK-1B Piping		
00-FO-TK-1 Piping		
00-FO-TK-2 Piping		
00-FO-TK-3 Piping		
Dike Penetrations: 1@HO Tanks 3@FO Tanks		
Oil Docks / Piping		
Trash Dumpsters & Metals Dumpster		
Sand & Gravel Stock Piles		
U5 A&B Cooling Towers		
Warehouse Oil Storage Area		
Unit 1 Used Oil Area		
Unit 5 Used Oil Area		
115Kv Yard		

SPCC Montly Oil Inspection (Page 7 of 7)
Misc. Areas Cont'd

Area	Status (OK: Y/N)	Comments
Unit 3 Basement (Misc. Equipment)		
Unit 4 Basement (Misc. Equipment)		
Unit 5 Basement (Misc. Equipment)		
Unit 6 HRSG Boiler Feed Pumps		
Unit 6 Steam Turbine Hydraulic Oil Reservoir		
Unit 6 A/B Lube Oil Accesory Modules		
Mobil Oil Carts (5 Total) Includes U6 Portable Trailer		
U5 Transfer Pump House		
Coal Conveyor Areas (2)		
Oil Retention Pond		

Date: _____ **Signature:**_____

General Comments:

Possum Point Power Station
Storm Water Quarterly Visual Examination Report
Monitoring Year_____ Outfall # S5 (VA)

Visual Examinations must be made of samples collected within the first 30 minutes of rain event commencement or discharge. All samples are to be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous 0.1 inch event unless the previous event did not cause a discharge. Personnel conducting the examinations should attempt to relate any contamination that is observed in the samples to the sources of pollutants on site. If contamination is observed, the personnel should evaluate whether or not additional BMPs should be implemented in the pollution prevention plan to address the observed contaminant, and if BMPs have already been implemented, evaluating whether or not these are working correctly or need maintenance.

	January – March Monitoring Period	**April – June** Monitoring Period	**July – September** Monitoring Period	**October – December** Monitoring Period
Date/Time				
Rainfall in Inches				
Number of hours or days from previous 0.1" event which caused a discharge.				
Examiner(s)				
Nature of Discharge				
Visual Quality of Discharge				
Color				
Odor				
Clarity				
Floating Solids				
Settled Solids				
Suspended Solids				
Foam				
Oil Sheen				
Any other obvious indicators of contamination				
Probable source(s) of any observed storm water contamination				
Certification Signature Read Statement Below				

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.

Comments: _____

8815

Possum Point Power Station
Storm Water Quarterly Visual Examination Report
Monitoring Year_____ Outfall # S42 (MD)

Visual Examinations must be made of samples collected within the first 30 minutes of rain event commencement or discharge. All samples are to be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous 0.1 inch event unless the previous event did not cause a discharge. Personnel conducting the examinations should attempt to relate any contamination that is observed in the samples to the sources of pollutants on site. If contamination is observed, the personnel should evaluate whether or not additional BMPs should be implemented in the pollution prevention plan to address the observed contaminant, and if BMPs have already been implemented, evaluating whether or not these are working correctly or need maintenance.

	January – March Monitoring Period	**April – June** Monitoring Period	**July – September** Monitoring Period	**October – December** Monitoring Period
Date/Time				
Rainfall in Inches				
Number of hours or days from previous 0.1" event which caused a discharge.				
Examiner(s)				
Nature of Discharge				
Visual Quality of Discharge				
Color				
Odor				
Clarity				
Floating Solids				
Settled Solids				
Suspended Solids				
Foam				
Oil Sheen				
Any other obvious indicators of contamination				
Probable source(s) of any observed storm water contamination				
Certification Signature Read Statement Below				

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.

Comments: _____

8816

Possum Point Power Station
Storm Water Quarterly Visual Examination Report
Monitoring Year_____ Outfall # S61 (VA)

Visual Examinations must be made of samples collected within the first 30 minutes of rain event commencement or discharge. All samples are to be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous 0.1 inch event unless the previous event did not cause a discharge. Personnel conducting the examinations should attempt to relate any contamination that is observed in the samples to the sources of pollutants on site. If contamination is observed, the personnel should evaluate whether or not additional BMPs should be implemented in the pollution prevention plan to address the observed contaminant, and if BMPs have already been implemented, evaluating whether or not these are working correctly or need maintenance.

	January – March Monitoring Period	**April – June** Monitoring Period	**July – September** Monitoring Period	**October – December** Monitoring Period
Date/Time				
Rainfall in Inches				
Number of hours or days from previous 0.1" event which caused a discharge.				
Examiner(s)				
Nature of Discharge				
Visual Quality of Discharge				
Color				
Odor				
Clarity				
Floating Solids				
Settled Solids				
Suspended Solids				
Foam				
Oil Sheen				
Any other obvious indicators of contamination				
Probable source(s) of any observed storm water contamination				
Certification Signature Read Statement Below				

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.

Comments: _____

8817

Appendix F

Cooling Tower Mist Study

Manufacturer	The Marley Company
Type/Model	Cross Flow/6616-4-11 Class 600
Number Cooling Towersq.	2
Number Cells Per Tower	11
Tag	M-529 A&B

I. Performance Data

*Circ. Water Flow, GPM	330,000
Inlet Water Temp., Deg. F	113
Outlet Water Temp., Deg. F	89
Ambient W.B. Temp., Deg. F	78
Approach, Deg. F	11
Ambient D.B. Temp., Deg. F	
Power Input to Fan Motors, HP Total 22 Motors -	4592
Tower Pumping Head, Ft (Exclusive of Riser Friction Losses), Ft.	41.02
* Drift Loss, %	.005
Max. Sound Loss, DBA	90
Atmos. Press., HG A	29.92
Wind Velocity, MPH	0 to 10
Total Dissolved Solids, PPM	10,000
Air Flow, LB/HR (LB. Dry Air Per HR. per Fan)	95,683
Exhaust Wet Bulb Temp., Deg. F	101.4
Exhaust Dry Bulb Temp., Deg. F	101.4
Evaporation Loss, %	2.150
Total Losses (Drift & Evap), %	2.155
Heat Removed, BTU/HR.	3960 X 10^6
Water to Air Ratio	1,3057
Fill Height, Ft.	36
Total Wetted Surf, 22 Cells, $Ft.^2$	3,293,400
Number of Fill Layers	108

DRIFT = (.00005) x (330,000) = *'16.5 gpm

*' = WHEN THE UNIT IS RUNNING AND THE COOLING TOWER IS IN SERVICE

10/16/06 - JRM

COOLING TOWER SPECIFICATIONS AND EQUIPMENT DATA SHEET

IF ANY DIFFICULTIES OR PROBLEMS OCCUR, CALL:
PSYCHROMETRIC SYSTEMS, INC.
1-303-215-1100

Possum Point U6 Cooling Tower

TOWER MODEL NUMBER	CFF-484838-10B-33
CUSTOMER NAME	GE INTERNATIONAL
CONTRACT NUMBER	70100818
PSYCHROMETRIC SYSTEMS JOB NUMBER	01-116
LOCATION	POSSUM POINT, VA
COMPLETION DATE	3/11/01

PERFORMANCE DATA

* WATER CIRCULATION, US GPM	189463
INLET WATER CIRCULATION TEMPERATURE (°F)	103.56
OUTLET WATER TEMPERATURE (°F)	88.98
DESIGN WET BULB TEMPERATURE (°F)	75.96
ELEVATION (FT)	67 FT

TOWER DESIGN DATA

TYPE	BACK TO BACK COUNTERFLOW
NUMBER OF CELLS	10
CELL SIZE (FT x FT)	48 X 48
OVERALL LENGTH/WIDTH (FT x FT)	240 X 96
BASIN CURB TO DISTRIBUTION CENTER LINE (FT)	26'-11"
DISTRIBUTION TYPE	LOW PRESSURE DOWN SPRAY
* DRIFT LOSS (% CIRCULATION)	0.005%
DRIFT ELIMINATOR TYPE	BRENTWOOD CDX-150
FILL TYPE	BRENTWOOD VF19/ BRENTWOOD 1900BR
ACCESS TO TOP OF TOWER	1 FRP STAIR & 1 FRP LADDER
FAN DECK LIVE LOAD (PSF)	60
SNOW LOAD (PSF)	30
DESIGN WIND VELOCITY (MPH)	80

MATERIALS

STRUCTURE	FIBERGLASS
BOLTING HARDWARE	316 LSS
NAILING HARDWARE	316 LSS
BASE ANCHORS	316 SS
JOINT CONNECTORS	316 SS
GEAR SUPPORT MEMBERS	HDG

DRIFT = (0.00005) x (189463) = *' 9.47 gpm

*': WHEN THE COOLING TOWER IS IN SERVICE AND THE UNIT IS OPERATING

10/17/06 - JRM

ACCU-PAC
SURFACE MEDIA

DRIFT ELIMINATOR PRODUCT SUMMARY

Possum Point U6 Cooling Tower

Product	Type	Standard Gauges Corr/Wave	Price Factor[1]	Span[2]	Pressure Drop @ .075 lb/ft³			Drift Rate[3]
					400 fpm	500 fpm	600 fpm	
		(Nom. mils)		(ft)	(in. wg.)			(% w.f.)
CDX-080	Cellular	10/15	1.22	4	0.024	0.037	0.049	0.001
		15/15	1.36	4	"	"	"	"
		10/25	1.47	6	"	"	"	"
		10/35	2.56	8	"	"	"	"
* CDX-150	Cellular	15/15	1.00	4	0.021	0.032	0.044	0.002 *
		15/25	1.19	6	"	"	"	"
		15/35	1.81	8	"	"	"	"
DE-080	Blade	25	1.00	6	0.015	0.021	0.028	0.002
DE-097	Blade	25	1.14	6	0.035	0.052	0.071	0.004
DE-120	Blade	25	0.71	6	0.017	0.024	0.033	0.005

[1]Based on 5/1/95 price list with CDX-150 15/15 price factor of 1.00

[2]Max. span for a two point, simply supported arrangement at a maximum air temperature of 115°F

[3]Based on the CTI-HBIK test method. **These limits are guidelines only.** Please contact Brentwood for project specific values.

10/19/06 - JRM

desum.spn

BRENTWOOD INDUSTRIES, INC.

P.O. Box 605, Reading, PA 19603 610/374-5109
Telefax 610/376-6022

Appendix G

Construction Sediment and Erosion Control

Appendix H

Storm Water Discharge Certification

Possum Point Power Station Non-Storm Water Discharge Evaluation

Outfall ID	Method	Observation
Outfall S107	Dry Weather Evaluation	Wet and flowing - Historical investigation deemed to be groundwater.
Outfall S95	Dry Weather Evaluation	Wet but no flow.
Outfall S94	Dry Weather Evaluation	Dry and no flow
Outfall S86	Dry Weather Evaluation	Dry and no flow
Outfall S5	Dry Weather Evaluation	Dry and no flow
Outfall S37	Dry Weather Evaluation	Dry and no flow
Outfall S31	Dry Weather Evaluation	Dry and no flow
Outfall S36	Dry Weather Evaluation	Wet bu no flow
Outfall S42	Dry Weather Evaluation	Wet and flowing - Historical investigation deemed to be groundwater.
Outfall S49	Dry Weather Evaluation	Dry and no flow
Outfall S77	Dry Weather Evaluation	Dry and no flow
Outfall S78	Dry Weather Evaluation	Dry and no flow
Outfall S79	Dry Weather Evaluation	Dry and no flow
Outfall S80	Dry Weather Evaluation	Dry and no flow

Inspectors: Jeff Marcell & Rick Woolard

Date: September 14, 2011

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.

Authorized Signatory

11/14/11
Date

8824

Appendix I

Spill History

Possum Point Reportable Spill History

Map Key	Date	Description and Corrective Action
#1	01/31/2003	Unit 5A Gas Recirc Fan 30 gallons of lube oil to ground, contained and cleaned.
#2	07/17/2003	Old discharge pipe for Outfall 004 ruptured, simultaneous discharge of pond from old and existing locations, plugged next day.
#3	09/24/2003	Old #4 sump discharge pipe, previously plugged, broke because of Hurricane Isabel, release of #4 sump, plugged same day.
#4	10/29/2004	Lost control of Front-end loader at Boat Ramp, submerged engine in Potomac River, release sheen, contained and cleaned.
#5	03/02/2005	Unit 6 Neutralization Pit overflow to storm drain leading to Potomac River.
#6	07/05/2005	Old Combustion Turbine fuel oil supply line rupture on #1 and #2 units; release of 200 gallons between ground and Pond "E" and cleaned, cleaned ground area surrounding each CT.
#7	09/26/2005	Unit 6 Cooling Tower pH excursion for Outfall 202 which discharges into Outfall 001/002.
#8	04/13/2006	Unit 6 Service Water chlorine overfeed, discharge of chlorine above permit limit for Outfall 004.
#9	07/03/2007	Unit 6B Inlet Guide Vane to Combustion Turbine pressurized oil leak to ground, release of 600 gallons to ground, contained and cleaned.
#10	11/12/2008	#6 Oil leak from Units 1&2 return line on Pipe Bench. Line repaired and vacuumed; ~200 gallons to ground.
#11	06/25/2008	#5 Oil Water discharge to weir, Outfalls 001 & 004; Flood Admin area; Line was repaired.
#12	11/10/2009	Detergent/water discharged to Outfall S36; Portable wash station & Port-a-John were re-located.
#13	07/26/2010	Process water overflow form Unit 6 Neutralization Pit to Outfall S42; equipment repaired.

Note: The locations of the spills are posted on the Appendix C "SWPPP Drawing" with the Red #s that correspond with the #s posted in the above Map Key column.

Appendix J

POTW Authorization Email

H.L. Mooney Wastewater Treatment Plant. Our primary discharge is sanitary wastewater with incidental laboratory discharge. We have approximately 100 employees, not all 100 are on site at one time. Our industrial discharge is covered by a Virginia Department of Environmental Quality Individual Discharge Permit. The laboratory discharge is infrequent and is the result of chemical analyses for boiler/steam quality and water permit compliance.

As discussed the two qualifications which require a specific permit from PWCSA are as follows:

1) Discharge of sanitary wastewater equal to or greater than 25,000 gallons per day

and/or

2) Discharge of industrial/chemical waste in quantities that will impact the H.L. Mooney treatment system.

It is our understanding that Possum Point does not qualify in either of the two conditions, therefore no permit is required.

Please respond back to close the loop in our documentation.

Thanks for you time.

Jeff Marcell
Sr. Environmental Compliance Coordinator
Dominion-Possum Point Power Station
703-441-3813 (phone)
8-795-3813 (tie)
703-441-3897 (fax)

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Laboratory Data Sheets For Intake Water Samples

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 11/01/2011

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803
Description :INTAKE

Sample Date: 09/14/2011
Unit: 0

Note: < value = N.D. at value (MDL)

Submitter Comments:

Parameter		Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed
Ammonia as N, PPM		0.05	SM18TH 4500NH3F	NH3	DAWNE01	10/06/2011	1805
Boron as B, PPM		0.02	SM18TH 4500-B B	B	DONNA13	09/27/2011	1330
COD, PPM		8.68	HACH 8000	COD	DONNA13	09/19/2011	1205
Fluoride as F, PPM		0.104	EPA 300	FIC	DAWNE01	10/06/2011	2137
NO3+NO2, PPM		0.74	EPA 353.2	NO3NO2	DONNA13	09/22/2011	1028
Oil and Grease, PPM	<	5.00	EPA 1664A	O&G	TANYA19	09/27/2011	930
Phenol, PPM		0.01	EPA 420.1	PHENOL	TANYA19	09/23/2011	1253
Sulfate as SO4, PPM		20.78	EPA 300	SO4IC	DAWNE01	10/06/2011	2137
TK Nitrogen as N,PPM	<	0.30	EPA 351.2	TKN	DONNA13	09/27/2011	1040
TOC, PPM		6.9	SM18TH 5310B	TOC	DONNA13	09/19/2011	1057
TSS, PPM		23.0	SM18TH 2540D	TSS	TANYA19	09/20/2011	1430
Total Phos. as P,PPM		0.09	SM18TH 4500-P	TP	TANYA19	09/27/2011	1330
Aluminum as Al, PPM		0.61	SM18TH 3111D	AL	DAWNE01	10/28/2011	1402
Antimony as Sb, ppb	<	1.	SM18TH 3113B	SBPPB	STEVE72	10/10/2011	1048
Arsenic as As, ppb	<	3.	SM18TH 3113B	ASPPB	STEVE72	09/21/2011	1738
Barium as Ba, ppb		36.	SM18TH 3113B	BAPPB	STEVE72	10/11/2011	833
Beryllium as Be, ppb	<	0.2	SM18TH 3113B	BEPPB	STEVE72	10/10/2011	2152
Cadmium as Cd, ppb	<	0.3	SM18TH 3113B	CDPPB	STEVE72	10/10/2011	1601
Chromium as Cr, ppb	<	1.	SM18TH 3113B	CRPPB	STEVE72	10/11/2011	1334
Cobalt as Co, ppb	<	0.6	SM18TH 3113B	COPPB	STEVE72	10/10/2011	1855
Copper as Cu, ppb		3.	SM18TH 3113B	CUPPB	STEVE72	10/10/2011	1829
Iron as Fe, PPM		1.37	SM18TH 3111B	FE	DAWNE01	10/27/2011	1344
Lead as Pb, ppb	<	1.	SM18TH 3113B	PBPPB	STEVE72	10/10/2011	1431
Magnesium as Mg, PPM		5.72	SM18TH 3111B	MG	DAWNE01	10/28/2011	1238
Manganese as Mn, PPM		0.63	SM18TH 3111B	MN	DAWNE01	10/27/2011	1616
Mercury as Hg, ppb	<	0.2	SM18TH 3112B	HGPPB	STEVE72	09/21/2011	848
Molybdenum as Mo,ppb	<	1.	SM18TH 3113B	MOPPB	STEVE72	10/06/2011	1222
Nickel as Ni, ppb	<	5.	SM18TH 3113B	NIPPB	STEVE72	10/10/2011	1951
Selenium as Se, ppb	<	3.	SM18TH 3113B	SEPPB	STEVE72	09/21/2011	1413
Silver as Ag, ppb	<	0.1	SM18TH 3113B	AGPPB	STEVE72	09/22/2011	841
Thallium as Tl, ppb		0.4	EPA 279.2	TLPPB	STEVE72	10/10/2011	1546
Tin as Sn, ppb	<	5.	SM18TH 3113B	SNPPB	STEVE72	10/06/2011	1002
Titanium as Ti, ppb	<	2.	EPA 283.2	TIPPB	STEVE72	10/11/2011	833
Zinc as Zn, PPM		0.023	SM18TH 3111B	ZN	DAWNE01	10/27/2011	1440
Methyl Chloride, ppb	<	1.10	EPA 624	VOA624	CHAR130	09/20/2011	1236
Methyl Bromide, ppb	<	1.40	EPA 624	VOA624	CHAR130	09/20/2011	1236
Vinyl Chloride, ppb	<	1.80	EPA 624	VOA624	CHAR130	09/20/2011	1236

8831

DOMINION LABORATORY SERVICES
==========
REPORT PRODUCED ON 11/01/2011

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803
Description :INTAKE

Sample Date: 09/14/2011
Unit: 0

Note: < value = N.D. at value (MDL)

Submitter Comments:

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed
Chloroethane, ppb	< 1.10	EPA 624	VOA624	CHAR130	09/20/2011	1236
Methylene Chloride, ppb	< 2.80	EPA 624	VOA624	CHAR130	09/20/2011	1236
Acrolein, ppb	< 10.00	EPA 624	VOA624	CHAR130	09/20/2011	1236
Acrylonitrile, ppb	< 1.50	EPA 624	VOA624	CHAR130	09/20/2011	1236
Trichlorofluoromethane, ppb	< 2.30	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,1-Dichloroethylene, ppb	< 2.80	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,1-Dichloroethane, ppb	< 4.70	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,2-Trans-Dichloroethylene, ppb	< 1.60	EPA 624	VOA624	CHAR130	09/20/2011	1236
Chloroform, ppb	< 1.60	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,2-Dichloroethane, ppb	< 2.80	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,1,1-Trichloroethane, ppb	< 3.80	EPA 624	VOA624	CHAR130	09/20/2011	1236
Carbon Tetrachloride, ppb	< 2.80	EPA 624	VOA624	CHAR130	09/20/2011	1236
Dichlorobromomethane, ppb	< 2.20	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,2-Dichloropropane, ppb	< 6.00	EPA 624	VOA624	CHAR130	09/20/2011	1236
Cis-1 3-Dichloropropylene, ppb	< 5.00	EPA 624	VOA624	CHAR130	09/20/2011	1236
Trans-1 3-Dichloropropylene, ppb	< 0.90	EPA 624	VOA624	CHAR130	09/20/2011	1236
Trichloroethylene, ppb	< 1.90	EPA 624	VOA624	CHAR130	09/20/2011	1236
Chlorodibromomethane, ppb	< 3.10	EPA 624	VOA624	CHAR130	09/20/2011	1236
Benzene, ppb	< 4.40	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,1,2-Trichloroethane, ppb	< 5.00	EPA 624	VOA624	CHAR130	09/20/2011	1236
2-Chloroethylvinyl Ether, ppb	< 1.20	EPA 624	VOA624	CHAR130	09/20/2011	1236
Bromoform, ppb	< 4.70	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,1,2,2-Tetrachloroethane, ppb	< 6.90	EPA 624	VOA624	CHAR130	09/20/2011	1236
Tetrachloroethylene, ppb	< 4.10	EPA 624	VOA624	CHAR130	09/20/2011	1236
Toluene, ppb	< 6.00	EPA 624	VOA624	CHAR130	09/20/2011	1236
Chlorobenzene, ppb	< 6.00	EPA 624	VOA624	CHAR130	09/20/2011	1236
Ethylbenzene, ppb	< 7.20	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,3 Dichlorobenzene, ppb	< 5.00	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,4 Dichlorobenzene, ppb	< 5.00	EPA 624	VOA624	CHAR130	09/20/2011	1236
1,2 Dichlorobenzene, ppb	< 5.00	EPA 624	VOA624	CHAR130	09/20/2011	1236
Dis. Tl, ppb	0.2	EPA 279.2	TLDISPPB	STEVE72	10/10/2011	1546
Dis. Ti, ppb	< 2.	EPA 283.2	TIDISPPB	STEVE72	10/11/2011	833
Dis. Sn, ppb	< 5.	SM18TH 3113B	SNDISPPB	STEVE72	10/06/2011	1002
Dis. Se, ppb	< 3.	SM18TH 3113B	SEDISPPB	STEVE72	09/21/2011	1413
Dis. Sb, ppb	< 1.	SM18TH 3113B	SBDISPPB	STEVE72	10/10/2011	1048
Dis. Pb, ppb	< 1.	SM18TH 3113B	PBDISPPB	STEVE72	10/10/2011	1431
Dis. Ni, ppb	< 5.	SM18TH 3113B	NIDISPPB	STEVE72	10/10/2011	1951

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 11/01/2011.

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803
Description :INTAKE

Sample Date: 09/14/2011
Unit: 0

Note: < value = N.D. at value (MDL)

Submitter Comments:

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed
Dis. Mo, ppb	< 1.	SM18TH 3113B	MODISPPB	STEVE72	10/06/2011	1222
Dis. Hg, ppb	< 0.2	SM18TH 3112B	HGDISPPB	STEVE72	09/21/2011	848
Dis. Cu, ppb	2.	SM18TH 3113B	CUDISPPB	STEVE72	10/10/2011	1829
Dis. Cr, ppb	< 1.	SM18TH 3113B	CRDISPPB	STEVE72	10/11/2011	1334
Dis. Co, ppb	< 0.6	SM18TH 3113B	CODISPPB	STEVE72	10/10/2011	1855
Dis. Cd, ppb	< 0.3	SM18TH 3113B	CDDISPPB	STEVE72	10/10/2011	1601
Dis. Be, ppb	< 0.2	SM18TH 3113B	BEDISPPB	STEVE72	10/10/2011	2152
Dis. Ba, ppb	36.	SM18TH 3113B	BADISPPB	STEVE72	10/11/2011	833
Dis. As, ppb	< 3.	SM18TH 3113B	ASDISPPB	STEVE72	09/21/2011	1738
Dis. Ag, ppb	< 0.1	SM18TH 3113B	AGDISPPB	STEVE72	09/22/2011	841
Dis. Zn, PPM	< 0.010	SM18TH 3111B	ZNDIS	DAWNE01	10/27/2011	1440
Dis. Mn, PPM	0.04	SM18TH 3111B	MNDIS	DAWNE01	10/27/2011	1616
Dis. Mg, PPM	5.27	SM18TH 3111B	MGDIS	DAWNE01	10/28/2011	1238
Dis. Fe, PPM	1.37	SM18TH 3111B	FEDIS	DAWNE01	10/27/2011	1344
Dis. Al, PPM	< 0.09	SM18TH 3111D	ALDIS	DAWNE01	10/28/2011	1402
T-Hard. as CaCO3,PPM	75.24	SM18TH 2340C	HARD	TANYA19	09/30/2011	1030
Chloride as Cl, PPM	20.54	EPA 300	CLIC	DAWNE01	10/06/2011	2137
Nitrate as N, PPM	0.81	EPA 353.2	NO3	DONNA13	09/15/2011	1343
T-Dis. Solids, PPM	173.0	SM18TH 2540C	TDS	TANYA19	09/20/2011	1430
Cyanide as CN, PPM	< 0.010	SM 4500CN E	CN	HERBE31	09/16/2011	
Hydrogen Sulfide, PPM	< 0.05	EPA 376.1	HYDSULF	HERBE31	10/05/2011	
1,2 Diphenylhydrazine, ppb	< 0.1	EPA 625	625DPH	HERBE31	10/10/2011	
BOD, PPM	< 3.00	SM 5210 B	BOD	HERBE31	09/16/2011	1300
Chrom. +6 as Cr6,PPM	< 0.005	SM 3500-CR D	CR6	HERBE31	09/15/2011	930
Bromide as Br, PPM	5.90	EPA 320.1	BR	HERBE31	09/28/2011	
Color, PCU	35.0	SM18TH 2120B	CLR	HERBE31	09/15/2011	1600
MBAS as LAS, PPM	< 0.010	SM 5540C	SURF	HERBE31	09/16/2011	
Chromium as Cr, PPM	< 0.02	SM18TH 3120B	CR-ICP	HERBE31	09/26/2011	
Aldrin, ppb	< 0.050	EPA 608	608GC	HERBE31	10/05/2011	
Chlordane, ppb	< 0.200	EPA 608	608GC	HERBE31	10/05/2011	
Dieldrin, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
4,4-DDT, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
4,4-DDE, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
4,4-DDD, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
Endosulfan Sulfate, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
Endosulfan I, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
Endosulfan II, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	

8833

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 11/01/2011

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803
Description :INTAKE

Sample Date: 09/14/2011
Unit: 0

Note: < value = N.D. at value (MDL)

Submitter Comments:

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed
Endrin, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
Alpha-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/05/2011	
Beta-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/05/2011	
Delta-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/05/2011	
Gamma-BHC (Lindane), ppb	< 0.050	EPA 608	608GC	HERBE31	10/05/2011	
Heptachlor, ppb	< 0.050	EPA 608	608GC	HERBE31	10/05/2011	
Kepone, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
Methoxychlor, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
Mirex, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
Endrin Aldehyde, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
Heptachlor Epoxide, ppb	< 0.100	EPA 608	608GC	HERBE31	10/05/2011	
Toxaphene, ppb	< 5.000	EPA 608	608GC	HERBE31	10/05/2011	
Arochlor 1016, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1221, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1232, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1242, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1248, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1254, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
Arochlor 1260, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/05/2011	
2,4-D, ppb	< 10.00	EPA 615	8151GC	HERBE31	10/10/2011	
Silvex, ppb	< 2.00	EPA 615	8151GC	HERBE31	10/10/2011	
Chlorpyrifos, ppb	< 0.2000	EPA 622	ORGPHOS	HERBE31	09/23/2011	
Demeton, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	09/23/2011	
Diazinon, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	09/23/2011	
Guthion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	09/23/2011	
Malathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	09/23/2011	
Parathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	09/23/2011	
Phenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
2-Chlorophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
2-Nitrophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
2,4-Dimethylphenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
2,4-Dichlorophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
4-Chloro-3-Methylphenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
2,4,6-Trichlorophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
2,4-Dinitrophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
4-Nitrophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
2-Methyl-4,6-Dinitrophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	

DOMINION LABORATORY SERVICES
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REPORT PRODUCED ON 11/01/2011

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803
Description :INTAKE

Sample Date: 09/14/2011
Unit: 0

Note: < value = N.D. at value (MDL)

Submitter Comments:

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed
Pentachlorophenol, ppb	< 5.00	EPA 625	ACID625	HERBE31	10/10/2011	
N-Nitrosodimethylamine, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Bis(-2-Chloroethyl) ether, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Bis(2-Chloroisopropyl) ether, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
N-nitroso-Di-n-propylamine, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Hexachloroethane, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Nitrobenzene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Isophorone, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Bis(-2-Chloroethoxy) Methane, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
1,2,4-Trichlorobenzene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Naphthalene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Hexachlorobutadiene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Hexachlorocyclopentadiene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
2-Chloronaphthalene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Dimethyl Phthalate, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Acenaphthylene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
2,6-Dinitrotoluene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Acenaphthene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
2,4-Dinitrotoluene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Diethylphthalate, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Fluorene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
4-Chlorophenyl-phenylether, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
N-nitrosodiphenylamine, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
1,2-Diphenylhydrazine, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
4-Bromophenyl-phenylether, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Hexachlorobenzene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Phenanthrene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Anthracene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Di-n-Butylphthalate, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Fluoranthene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Benzidine, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Pyrene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Butylbenzylphthalate, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Chrysene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
3,3'-Dichlorobenzidine, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Benzo (a) Anthracene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Bis(2-ethylhexyl) Phthalate, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	

8835

DOMINION LABORATORY SERVICES
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REPORT PRODUCED ON 11/01/2011

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: POSSUM POINT

Submitter: GLENN BISHOP

System Laboratory Number: 392803
Description :INTAKE

Sample Date: 09/14/2011
Unit: 0

Note: < value = N.D. at value (MDL)

Submitter Comments:

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed
Di-n-octyl Phthalate, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Benzo (b) fluoranthene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Benzo (k) fluoranthene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Benzo (a) pyrene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Indeno (1 2 3-cd) pyrene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Dibenzo (a h) anthracene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Benzo (g h i) perylene, ppb	< 5.00	EPA 625	BN625	HERBE31	10/10/2011	
Gross Alpha, pCi/L	< 0.749	EPA 900.0	RADIO	HERBE31	09/23/2011	1659
Gross Beta, pCi/L	1.480	EPA 900.0	RADIO	HERBE31	09/23/2011	1659
Uranium as U, ppb	< 0.21	D5174-97	UPPB	HERBE31	09/29/2011	1304

418864

Samples rec'd on ice
0.9°C

Location:	Possum Point	Requested by:	WWB	Priority:	
Required Date:	60 days 11/14/11	Phone:		Date Analysis Complete:	10/28/11
Comment:		Sampled by:	WGB	Date Approved Released:	11/1/11

Bottle Types: O/G=Oil and Grease, PT=Phenols Total, V=Volatiles, M=Metals, A=[Ammonia,TKN,TP,COD,NO_3/NO_2], BOD=Biological Oxygen Demand
TOC=Total Organic Carbon, TSS=[Total Suspended Solids,B,F,NO_3/NO_2,SO_4,~~TDS,Chloride~~]
ABN=Acid Base Neutrals, PP=Pesticide/PCBs

Preservatives: HCl=Hydrochloric acid, CS=Cu Sulfate, S=Sulfuric acid, N=Nitric acid, ZA=Zinc acetate, SH=Sodium Hydroxide

Tests Required 1= O/G, Phenol total, Volatiles, [Ammonia, TKN, TP, COD, NO_3/NO_2], TOC
2= [TSS, TDS, B, F, NO_3/NO_2, Nitrate N, Chlorides, SO_4]

NOTE:

4= TR and Diss Metals Al,Ba,Co,Fe,Mg,Mo,Mn,Sn,Ti,Sb,As,Be,Cd,Cr,Cu,Pb,Hg,Ni,Se,Ag,Tl,Zn + Hardness

Consider:
Temp (W+S) — 27.5
pH — 6.8
TRC — <dL

X - PLACE AN "X" IN THE BOX FOR SAMPLES TO BE SUBMITTED
Preservative

System Lab Number	x	Sample ID	Sample Date	Sample Time	Comp	Grab	Cl_2 Screen [ABN,Vol]	Dechlor confirmed?			HCl O/G	CS,S PT	HCl V	N M	S A	BOD				HCl TOC	TSS	ABN	P/P		Test Required	Notes
9.15.11 dm 392203 ~~392063~~		Outfall Intake	9/14/11	1350		x	Pos / Neg	~~Yes/No~~			1	1	5	3	1					1	1				1,2,3,4	CONS 1

Relinquished by: (Signature) WWB	Date 9/15/11	Time ~~0900~~ 0930	Received by: (Signature) [signature]	Date 9.15.11	Time 0930	Dominion Resources Laboratory Services 11202 Old Stage Road Chester, VA 23836
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	

coc CPM Possum Intake.xlsx

8837

Primary Laboratories, Inc.

7423 Lee Davis Road • Mechanicsville, VA 23111 • Telephone (804) 559-9004 • Fax (804) 559-9306

ANALYTICAL LABORATORY REPORT

12-Oct-11

Dominion Virginia Power
Attn: Glenn Bishop
4111 Castlewood Road
Richmond, Va. 23234

Date Received: 15-Sep-11
Date Sampled: 14-Sep-11
Work Order No: 1109136-01
Client ID: **Outfall Possum Intake** 39LP3

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Cyanide	<0.01	0.01	mg/L	4500CN E	16-Sep-11	HV
Hydrogen Sulfide	<0.050	0.050	mg/L	376.1	5-Oct-11	HV
1,2 Diphenylhydrazine	<0.1	0.1	ug/L	526	10-Oct-11	HV
BOD	<3.0	3.0	mg/L	5210 B	16-Sep-11 at 13:00	PB
Hexavalent Chromium	<0.005	0.005	mg/L	3500	15-Sep-11 at 9:30	NA
Bromide	5.9	0.1	mg/L	Titrimetric	28-Sep-11	PB
Color	35.0	5.0	PCU	2120 B	15-Sep-11 at 16:00	NA
MBAS	<0.01	0.01	mg/L	5540C	16-Sep-11	HV
Metals						
Chromium III	<0.02	0.02	mg/L	3120 B	26-Sep-11	HV

Primary Laboratories, Inc.
Results

12-Oct-11

Date Sampled: 14-Sep-11
Work Order No: 1109136-01
Client ID: **Outfall Possum Intake**

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Pesticides						
Aldrin	<0.05	0.05	ug/L	608	5-Oct-11	HV
Chlordane	<0.20	0.20	ug/L	608	5-Oct-11	HV
Dieldrin	<0.10	0.10	ug/L	608	5-Oct-11	HV
4,4-DDT	<0.10	0.10	ug/L	608	5-Oct-11	HV
4,4-DDE	<0.10	0.10	ug/L	608	5-Oct-11	HV
4,4-DDD	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endosulfan sulfate	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endosulfan I	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endosulfan II	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endrin	<0.10	0.10	ug/L	608	5-Oct-11	HV
Alpha-BHC	<0.05	0.05	ug/L	608	5-Oct-11	HV
Beta-BHC	<0.05	0.05	ug/L	608	5-Oct-11	HV
Delta-BHC	<0.05	0.05	ug/L	608	5-Oct-11	HV
Gamma-BHC (Lindane)	<0.05	0.05	ug/L	608	5-Oct-11	HV
Heptachlor	<0.05	0.05	ug/L	608	5-Oct-11	HV
Kepone	<0.10	0.10	ug/L	608	5-Oct-11	HV
Methoxychlor	<0.10	0.10	ug/L	608	5-Oct-11	HV
Mirex	<0.10	0.10	ug/L	608	5-Oct-11	HV
Endrin Aldehyde	<0.10	0.10	ug/L	608	5-Oct-11	HV
Heptachlor Epoxide	<0.10	0.10	ug/L	608	5-Oct-11	HV
PCB-1221	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1232	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1242	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1016	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1248	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1254	<1.0	1.0	ug/L	608	5-Oct-11	HV
PCB-1260	<1.0	1.0	ug/L	608	5-Oct-11	HV
Toxaphene	<5.0	5.0	ug/L	608	5-Oct-11	HV

Date Sampled: 14-Sep-11
Work Order No: 1109136-01
Client ID: **Outfall Possum Intake**

Test Description	Final Result	Reporting Limit	Units of Measure	Standard Methods (18)	Date Analyzed	Tech. Initials
Herbicides						
2,4-D	<0.010	0.010	mg/L	615	10-Oct-11	HV
2,4,5-TP (Silvex)	<0.002	0.002	mg/L	615	10-Oct-11	HV

Primary Laboratories, Inc.
Results

12-Oct-11

Date Sampled: 14-Sep-11
Work Order No: 1109136-01
Client ID: **Outfall Possum Intake**

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Organophosphorus Pesticides						
Diazinon	<1	1	ug/L	622	23-Sep-11	SC**
Demeton	<1	1	ug/L	622	23-Sep-11	SC**
Malathion	<1	1	ug/L	622	23-Sep-11	SC**
Chlorpyrifos	<0.2	0.2	ug/L	622	23-Sep-11	SC**
Parathion	<1	1	ug/L	622	23-Sep-11	SC**
Guthion	<1	1	ug/L	622	23-Sep-11	SC**

** Analysis sub-contracted.

Method Numbers*: EPA 625
Date Analyzed: 10-Oct-11
Technician: HV
Units of Measure: ug/L
Date Sampled: 14-Sep-11
Work Order No: 1109136-01
Client ID: **Outfall Possum Intake**

Test Description	Final Result	Detection Limit
Acenaphthene	<5.0	5.0
Acenaphthylene	<5.0	5.0
Anthracene	<5.0	5.0
Benzidine	<5.0	5.0
Benzo(a) anthracene	<5.0	5.0
Benzo(b) fluoranthene	<5.0	5.0
Benzo(k) fluoranthene	<5.0	5.0
Benzo(g,h,i) perylene	<5.0	5.0
Benzo(a)pyrene	<5.0	5.0
bis-(2-Chloroethoxy)methane	<5.0	5.0
bis-(2-Chloroethyl)ether	<5.0	5.0
bis-(2-Chloroisopropyl)ether	<5.0	5.0
bis-(2-Ethylhexyl)phthalate	<5.0	5.0
4-Bromophenyl phenyl ether	<5.0	5.0
Butyl benzyl phthalate	<5.0	5.0
2-Chloronaphthalene	<5.0	5.0
4-Chloro-3-methylphenol	<5.0	5.0
2-Chlorophenol	<5.0	5.0
4-Chlorophenyl phenyl ether	<5.0	5.0

Primary Laboratories, Inc.
Results

12-Oct-11

Method Numbers*: EPA 625 (con't)
Date Analyzed: 10-Oct-11
Technician: HV
Units of Measure: ug/L
Date Sampled: 14-Sep-11
Work Order No: 1109136-01
Client ID: **Outfall Possum Intake**

Test Description	Final Result	Detection Limit
Chrysene	<5.0	5.0
Dibenzo(a,h)anthracene	<5.0	5.0
Di-n-butyl phthalate	<5.0	5.0
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
3,3-Dichlorobenzidine	<5.0	5.0
2,4-Dichlorophenol	<5.0	5.0
Diethyl phthalate	<5.0	5.0
2,4-Dimethylphenol	<5.0	5.0
Dimethyl phthalate	<5.0	5.0
4,6-Dinitro-2-methylphenol	<5.0	5.0
2,4-Dinitrophenol	<5.0	5.0
2,4-Dinitrotoluene	<5.0	5.0
2,6-Dinitrotoluene	<5.0	5.0
Di-n-octylphthalate	<5.0	5.0
1,2-Diphenylhydrazine	<5.0	5.0
Fluoranthene	<5.0	5.0
Fluorene	<5.0	5.0
Hexachlorobenzene	<5.0	5.0
Hexachlorobutadiene	<5.0	5.0
Hexachlorocyclopentadiene	<5.0	5.0
Hexachloroethane	<5.0	5.0
Indeno(1,2,3-cd) pyrene	<5.0	5.0
Isophorone	<5.0	5.0
Naphthalene	<5.0	5.0
Nitrobenzene	<5.0	5.0
2-Nitrophenol	<5.0	5.0
4-Nitrophenol	<5.0	5.0
N-Nitrosodimethylamine	<5.0	5.0
N-Nitrosodiphenylamine	<5.0	5.0
N-Nitrosodi-n-propylamine	<5.0	5.0
Pentachlorophenol	<5.0	5.0

Primary Laboratories, Inc.
Results

12-Oct-11

Method Numbers*:	EPA 625 (con't)
Date Analyzed:	10-Oct-11
Technician:	HV
Units of Measure:	ug/L
Date Sampled:	14-Sep-11
Work Order No:	1109136-01
Client ID:	**Outfall Possum Intake**

Test Description	Final Result	Detection Limit
Phenanthrene	<5.0	5.0
Phenol	<5.0	5.0
Pyrene	<5.0	5.0
1,2,4-Trichlorobenzene	<5.0	5.0
2,4,6-Trichlorophenol	<5.0	5.0

* All methods are Standard Methods 18th Edition unless otherwise noted.

Signature: _____ Date: 10/12/11

Parry L. Bragg
Laboratory Manager

These analytical results are based upon materials provided by the client and are intended for the exclusive use of the client. These analytical results represent the best judgement of Primary Laboratories, Inc. Primary Laboratories, Inc. assumes no responsibility, express or implied, as to the interpretation of the analytical results contained in this report. This report is not to be reproduced except with the written approval of Primary Laboratories, Inc.

1109 13~~8~~6-1

9-29

Location: Possum Point	Requested by:	Priority:
Required Date: 30 days 10/14/11	Phone:	Date Analysis Complete:
Comment:	Sampled by:	Date Approved Released:

Bottle Types: Cs=Cyanide, FC=Fecals, EC = E coli, H_2S = Hydrogen sulfide, Asb = Asbestos, BOD=Biological Oxygen Demand
P/P=Pesticide / PCBs, TBT = Tributyltin, R = Radioactivity, Br = Bromide, Color, Sul = sulfide, Sur = Surfactants, DS = Dioxin screen

Preservatives: HCl=Hydrochloric acid, CS=Cu Sulfate, S=Sulfuric acid, N=Nitric acid, ZA=Zinc acetate, SH=Sodium Hydroxide

Tests Required 1= Cn, H_2S, BOD, Pest / PCBs, ABN, *Nonylphenol*, (1,2,Diphenylhydrazine)
2 = Cr3, Cr6
3= (Br, Color), Sulfide, Surfactants

1.9°C

X - PLACE AN "X" IN THE BOX FOR SAMPLES TO BE SUBMITTED
Preservative

System Lab Number	x	Sample ID	Sample Date	Sample Time	Comp	Grab	Cl_2 Screen [Cn]	Dechlor cool immed?	Sulfide Screen [Cn]	Cn (SH)	FC	EC	H_2S (ZA,SH)	Asb	BOD	P/P	ABN	Nonylphenol	1,2,Diphenylhydrazine	Cr3, Cr6	Br, Color	Sul (ZA,SH)	Sur	DS	Test Required	Notes
		Outall Possum Intake	9/14/11	1350		x	Pos / ~~Neg~~	~~Yes/No~~	Pos / ~~Neg~~	1			2		1	2	1	1	1	2	1	1	1		1,2,3	Do Pest / PCBs per attached list For 1,2 Diphenylhydrazine, use Method 526 at QL = 0.1 ppb

Relinquished by: (Signature) Wmg	Date 9/15/11	Time 0850	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature) R. Burruss	Date 9-15-11	Time 8:15

Primary Laboratories
7423 Lee Davis Road
Mechanicsville, VA 23111
804-559-9004

8843

coc CPM Possum Intake.xlsx

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-3600

October 06, 2011

Mr. Glenn Bishop
Dominion Environmental Biology
4111 Castlewood Road
Richmond, VA 23234

RE: Project: Possum Intake
Pace Project No.: 3053968 392803

Dear Mr. Bishop:
Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures

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(724)850-5600

CERTIFICATIONS

Project: Possum Intake
Pace Project No.: 3053968

Pennsylvania Certification IDs
1638 Roseytown Road Suites 2,3&4, Greensburg, PA 15601
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/NELAC Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/NELAC Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/NELAC Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/NELAC Certification #: LA080002
Louisiana/NELAC Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/NELAC Certification #: 2976
New Jersey/NELAC Certification #: PA 051
New Mexico Certification
New York/NELAC Certification #: 10888
North Carolina Certification #: 42706
Oregon/NELAC Certification #: PA200002
Pennsylvania/NELAC Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/NELAC Certification #: T104704188-09 TX
Utah/NELAC Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Washington Certification #: C1941
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

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SAMPLE SUMMARY

Project: Possum Intake
Pace Project No.: 3053968

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3053968001	Possum Intake	Water	09/14/11 13:50	09/16/11 10:00

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SAMPLE ANALYTE COUNT

Project: Possum Intake
Pace Project No.: 3053968

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3053968001	Possum Intake	EPA 900.0m	JAL	2
		ASTM D5174-97	RMK	1

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PROJECT NARRATIVE

Project: Possum Intake
Pace Project No.: 3053968

Method: EPA 900.0m
Description: 900.0 Gross Alpha/Beta
Client: Dominion Environmental Biology
Date: October 06, 2011

General Information:
1 sample was analyzed for EPA 900.0m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Possum Intake
Pace Project No.: 3053968

Method: ASTM D5174.97
Description: D517497 Total Uranium KPA
Client: Dominion Environmental Biology
Date: October 06, 2011

General Information:
1 sample was analyzed for ASTM D5174.97. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below..

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Possum Intake
Pace Project No.: 3053968

Sample: Possum Intake | **Lab ID: 3053968001** | Collected: 09/14/11 13:50 | Received: 09/16/11 10:00 | Matrix: Water
PWS: | Site ID: | Sample Type:

Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Gross Alpha	EPA 900.0m	**0.0176 ± 0.419 (0.749)**	pCi/L	09/23/11 16:59	12587-46-1	
Gross Beta	EPA 900.0m	**1.48 ± 0.541 (0.724)**	pCi/L	09/23/11 16:59	12587-47-2	
Total Uranium	ASTM D5174.97	**0.183 ± 0.004 (0.210)**	ug/L	09/29/11 13:04	7440-61-1	

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QUALITY CONTROL DATA

Project: Possum Intake
Pace Project No.: 3053968

QC Batch: RADC/9568
QC Batch Method: ASTM D5174.97
Analysis Method: ASTM D5174.97
Analysis Description: D5174.97 Total Uranium KPA
Associated Lab Samples: 3053968001

METHOD BLANK: 345460
Matrix: Water
Associated Lab Samples: 3053968001

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Total Uranium	0.067 ±0.003 (0.210)	ug/L	09/26/11 16:47	

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QUALITY CONTROL DATA

Project: Possum Intake
Pace Project No.: 3053968

QC Batch: RADC/9572 | Analysis Method: EPA 900.0m
QC Batch Method: EPA 900.0m | Analysis Description: 900.0 Gross Alpha/Beta
Associated Lab Samples: 3053968001

METHOD BLANK: 345464 | Matrix: Water
Associated Lab Samples: 3053968001

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Gross Alpha	-0.001 ± 0.676 (1.85)	pCi/L	09/23/11 15:25	
Gross Beta	0.458 ± 0.812 (1.84)	pCi/L	09/23/11 15:25	

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QUALIFIERS

Project: Possum Intake
Pace Project No.: 3053968

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:

Company:	Dominion Environmental Biology
Address:	4111 Castlewood Road
	Richmond, VA 23234
Email To:	glenn.bishop@dom.com
Phone: 804-350-6918	Fax: 888-342-0629
Requested Due Date/TAT:	Normal

Section B Required Project Information:

Report To:	Glenn Bishop
Copy To:	
Purchase Order No.:	Mastercard
Project Name:	
Project Number:	

Section C Invoice Information:

Attention:	Glenn Bishop
Company Name:	Dominion
Address:	4111 Castlewood Road 23234
Pace Quote Reference:	46012743
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: VA

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	Gross Alpha	Gross Beta	Uranium	Pace Project No./ Lab I.D.
				4/15/11																		3053968
1	Possum Intake		G	9/14/11	1350				1	X								X	X	X		Note: If Gross Alpha exceeds
2				9/14/11																		5 picocuries / liter, then analyze
3																						for Radium 226 and Radium 228
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	9/15/11	1500	[signature] / Pace	9/16/11	1000	NA	N	N	Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: Glenn Bishop					
SIGNATURE of SAMPLER: [signature]	DATE Signed (MM/DD/YY): 9/15/11				

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.06, 2-Feb-2007

8854

Sample Condition Upon Receipt

Pace Analytical

Client Name: DOM Env Biology Project # 3053968

Courier: ☐ Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 1Z102V975019 3213553

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other _____

Thermometer Used 3 5 Type of Ice: Wet Blue (None) ☐ Samples on ice, cooling process has begun

Cooler Temperature NA Biological Tissue Is Frozen: Yes No

Date and Initials of person examining contents: RES 9/16/11

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☒No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT	☒Yes ☐No ☐N/A	12.
All containers needing preservation have been checked.	☒Yes ☐No ☐N/A	13. Preserved to pH<2 9/16/11 @1305
All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☒No ☐Yes ☒No	Initial when completed RES Lot # of added preservative RF11-013603
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☐No ☒N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] Date: 9/18/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALLC003-4 23Feb2010

VPDES Permit Application Addendum

Authorization for Public Notice Billing

Permit Fee Billing Information

VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued:** Virginia Electric & Power Company
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** No

3. **What is the tax map parcel number for the land where this facility is located?** 8288-96-2368

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** <1 acre.

5. ALL FACILITIES: **What is the design average flow of this facility?** 234.4 MGD
Industrial facilities: What is the max. 30-day avg. production level (include units)? 547,463.5 MWh

   In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? No

   If □Yes□, please specify the other flow tiers (in MGD) or production levels: n/a
Please consider: Is your facility's design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

6. **Nature of operations generating wastewater:** Steam Electric Generation

   <0% of flow from domestic connections/sources
   Number of private residences to be served by the wastewater treatment facilities: X 0 __ 1-49 __ 50 or more

   >100% of flow from non-domestic connections/sources

7. **Mode of discharge:** X Continuous __Intermittent __Seasonal
Describe frequency and duration of intermittent or seasonal discharges: N/A

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**
X Permanent stream, never dry
__ Intermittent stream, usually flowing, sometimes dry
__ Ephemeral stream, wet-weather flow, often dry
__ Effluent-dependent stream, usually or always dry
__ Lake or pond at or below the discharge point
__ Other:_____

9. **Approval Date(s):**
O & M Manual 5/9/2008.
Sludge/Solids Management Plan N/A
Have there been any changes in your operations or procedures since the above approval dates? An updated O&M manual was submitted for review in March 2012

AUTHORIZATION FOR PUBLIC NOTICE BILLING

TO

VPDES PERMIT APPLICANT

RECEIVED
APR 10 2012
DEQ-NRO

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in the ***News & Messenger.***

Authorizing Agent: Cathy C Taylor
Signature

Applicant's Address: Cathy C. Taylor
Dominion
5000 Dominion Blvd.
Glen Allen, VA 23060

Telephone Number: 804/273-2929

Permit No. VA0002071
Attn: Susan Mackert

Sampling Plans

&

Sampling Plan Approvals

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

July 27, 2011

Ms. Cathy C. Taylor
Director, Electric Environmental Services
Dominion Virginia Power
5000 Dominion Boulevard
Glen Allen, VA 23060

Re: Dominion – Possum Point Power Station, VPDES Permit No. VA0002071

Dear Ms. Taylor:

Thank you for your correspondence dated June 13, 2011, regarding sampling and testing waivers associated with the referenced VPDES permit reissuance application. Staff has reviewed Dominion's sampling and testing waiver request and has the following comments.

Waiver Request – Outfall 001/002
Dominion requests that the requirement for 24-hour composite sampling be waived for Outfalls 001 and 002.

Staff Response
Staff has no objection to the use of grab sampling in lieu of 24-hour composite sampling for Outfalls 001 and 002. As such, the 24-hour composite sampling requirement is waived for Outfalls 001 and 002.

Waiver Request – Outfall 001/002
Dominion requests that fecal coliform sampling be waived for Outfalls 001 and 002.

Staff Response
The discharges from Outfall 001 and Outfall 002 are considered industrial in nature. Fecal coliform is not considered a parameter of concern with these industrial discharges. As such, the monitoring for fecal coliform is waived at Outfall 001 and Outfall 002.

Waiver Request – Outfall 003
Dominion requests that the requirement for 24-hour composite sampling be waived for Outfall 003.

Staff Response
Staff has no objection to the use of grab sampling in lieu of 24-hour composite sampling for Outfall 003. As such, the 24-hour composite sampling requirement is waived for Outfall 003.

Waiver Request – Outfall 003
Dominion requests that fecal coliform sampling be waived for Outfall 003.

Staff Response
The discharge from Outfall 003 is considered industrial in nature. Fecal coliform is not considered a parameter of concern with this industrial discharge. As such, the monitoring for fecal coliform is waived at Outfall 003.

Waiver Request – Outfall 004
Dominion requests that fecal coliform sampling be waived for Outfall 004.

Staff Response
The discharge from Outfall 004 is considered industrial in nature. Fecal coliform is not considered a parameter of concern with this industrial discharge. As such, the monitoring for fecal coliform is waived at Outfall 004.

Waiver Request – Outfall 005
Dominion requests that fecal coliform sampling be waived for Outfall 005.

Staff Response
The discharge from Outfall 005 is considered industrial in nature. Fecal coliform is not considered a parameter of concern with this industrial discharge. As such, the monitoring for fecal coliform is waived at Outfall 005.

Sampling Request – Outfall 201
Dominion proposes to submit existing Discharge Monitoring Report (DMR) data for Form 2C parameters and that no additional testing will be performed as this is an internal outfall.

Staff Response
Staff has no objection to limiting the parameters monitored for internal Outfall 201 to those parameters monitored in the effective VPDES permit. As such, all monitoring requirements except for those parameters monitored in the effective VPDES permit are waived.

Sampling Request – Outfall 202
Dominion proposes to submit existing Discharge Monitoring Report (DMR) data for Form 2C parameters and that no additional testing will be performed as this is an internal outfall.

Staff Response
Staff has no objection to limiting the parameters monitored for internal Outfall 202 to those parameters monitored in the effective VPDES permit. As such, all monitoring requirements except for those parameters monitored in the effective VPDES permit are waived.

Sampling Request – Outfall 501
Dominion proposes to submit existing Discharge Monitoring Report (DMR) data for Form 2C parameters and that no additional testing will be performed as this is an internal outfall.

Staff Response
Staff has no objection to limiting the parameters monitored for internal Outfall 501 to those parameters monitored in the effective VPDES permit. The discharge from internal Outfall 501 is addressed under Federal Effluent Guidelines established in 40 CFR Part 423 – Steam Electric Power Generating Point Source Category. Monitoring requirements established under this Federal Effluent Guideline are currently reflected in the effective VPDES permit for this internal outfall. As such, all monitoring requirements except for those parameters monitored in the effective VPDES permit are waived.

Sampling Request – Outfall 502
Dominion proposes to submit existing Discharge Monitoring Report (DMR) data for Form 2C parameters and that no additional testing will be performed as this is an internal outfall.

Staff Response
Staff has no objection to limiting the parameters monitored for internal Outfall 502 to those parameters monitored in the effective VPDES permit. As such, all monitoring requirements except for those parameters monitored in the effective VPDES permit are waived.

Waiver Request – Outfall 007/008
Dominion requests that the requirement for 24-hour composite sampling be waived for Outfalls 007 and 008.

Staff Response
Staff has no objection to the use of grab sampling in lieu of 24-hour composite sampling for Outfalls 007 and 008. As such, the 24-hour composite sampling requirement is waived for Outfalls 007 and 008.

Waiver Request – Outfall 007/008
Dominion requests that fecal coliform sampling be waived for Outfalls 007 and 008.

Staff Response
The discharges from Outfall 007 and Outfall 008 are considered industrial in nature. Fecal coliform is not considered a parameter of concern with these industrial discharges. As such, the monitoring for fecal coliform is waived at Outfall 007 and Outfall 008.

If you have any questions, please contact Susan Mackert at (703) 583-3853 or by email at susan.mackert@deq.virginia.gov.

Respectfully,

Bryant Thomas
Water Permits Manager

cc: VA0002071 – Reissuance File

Dominion Resources Services, Inc.
5000 Dominion Boulevard, Glen Allen, VA 23060
Web Address: www.dom.com

Dominion®

Certified Mail
Return Receipt Requested

June 13, 2011

Ms. Susan Mackert
DEQ-Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

RE: Dominion Possum Point Power Station
VPDES Permit No. VA0002071
Permit Reissuance Application Sampling Plan and Waivers Request

Dear Ms. Mackert:

Dominion is preparing an application to renew the Possum Point Power Station's VPDES permit (VA0002071). This current permit expires on October 23, 2012. In accordance with the requirements as we understand them, we have developed the attached sampling plan to include the upcoming work planned for this facility and the waivers requested. We plan to report analytical data from three years of discharge monitoring reports (2009-2011) for the parameters currently limited in the VPDES permit for each outfall. We plan to conduct the majority of our permit application sampling and analyses in the July-August, 2011 timeframe.

Dominion appreciates this opportunity to review these requirements and coordinate our sampling plan with your agency. If you have any questions, please contact Oula Shehab-Dandan at (804) 273-2697.

Sincerely,

Cathy C. Taylor
Director, Electric Environmental Services

Attachment

Possum Point Power Station PermitVA0002071
Sampling Plan and Requested Waivers

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
001/002 – Seal Pit and Unit 3 Non Contact Cooling Water	2C – Part A	Flow, pH, Temperature	DMRs	NA
		Remaining Part A Parameters	Field sampling - Grab	Grab to replace 24hc
	2C – Part B	TRC	DMRs	NA
		Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
		Sulfite	Believed absent	NA
		Remaining Part B Parameters	Field sampling - Grab	Grab to replace 24hc
	2C – Part C	Dioxin	Believed absent	NA
		Remaining Part C Parameters	Field sampling - Grab	Grab to replace 24hc
	VA – WQS	Uranium, H_2S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	Grab to replace 24hc
		TBT	Believed absent	NA

Possum Point Power Station PermitVA0002071
Sampling Plan and Requested Waivers

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
003 – Unit 4 Non Contact Cooling Water	2C – Part A	Flow, pH, Temperature	DMRs	NA
		Remaining Part A Parameters	Field sampling - Grab	Grab to replace 24hc
	2C – Part B	TRC, Dissolved Cu	DMRs	NA
		Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
		Sulfite	Believed absent	NA
		Remaining Part B Parameters	Field sampling - Grab	Grab to replace 24hc
	2C – Part C	Dioxin	Believed absent	NA
		Remaining Part C Parameters	Field sampling - Grab	Grab to replace 24hc
	VA – WQS	Uranium, H_2S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	Grab to replace 24hc
		TBT	Believed absent	NA

Possum Point Power Station PermitVA0002071
Sampling Plan and Requested Waivers

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
004 – Low Volume Waste Settling Basin	2C – Part A	Flow, pH, TSS, Ammonia, Temperature	DMRs	NA
		Remaining Part A Parameters	Field sampling - Grab	NA- retention > 24 hrs
	2C – Part B	TRC, Total P, O&G, TKN, NO_3/NO_2	DMRs	NA
		Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
		Sulfite	Believed absent	NA
		Remaining Part B Parameters	Field sampling - Grab	NA- retention > 24 hrs
	2C – Part C	Dioxin	Believed absent	NA
		Remaining Part C Parameters	Field sampling - Grab	NA- retention > 24 hrs
	VA – WQS	Uranium, H_2S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	NA- retention > 24 hrs
		TBT	Believed absent	NA
	Other	Total N	DMRs	NA

Possum Point Power Station PermitVA0002071
Sampling Plan and Requested Waivers

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
005 - Ash Pond E	2C – Part A	Flow, pH, Ammonia, TSS	DMRs	NA
		Remaining Part A Parameters	Field sampling - Grab	NA- retention > 24 hrs
	2C – Part B	Oil and Grease, TRC, TKN, NO_3/NO_2, Total phosphorus	DMRs	NA
		Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
		Sulfite	Believed absent	NA
		Remaining Part B Parameters	Field sampling - Grab	NA- retention > 24 hrs
	2C – Part C	Dioxin	Believed absent	NA
		Remaining Part C Parameters	Field sampling - Grab	NA- retention > 24 hrs
	VA – WQS	Uranium, H_2S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	NA- retention > 24 hrs.
		TBT	Believed absent	NA
	Other	Total Nitrogen	DMRs	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
201 – Unit 5 Cooling Tower Blowdown *Existing DMR data will be submitted for Form 2C parameters. No additional testing will be performed as this is an internal outfall.*	2C – Part A	Flow, pH	DMRs	NA
	2C – Part B	FAC, Cr, Zn	DMRs	NA
	2C – Part C	NA	NA	NA
	VA – WQS	NA	NA	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
202 – Unit 6 Cooling Tower Blowdown *Existing DMR data will be submitted for Form 2C parameters. No additional testing will be performed as this is an internal outfall.*	2C – Part A	Flow, pH	DMRs	NA
	2C – Part B	FAC, Cr, Zn	DMRs	NA
	2C – Part C	NA	NA	NA
	VA – WQS	NA	NA	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
501 – Metals Cleaning Waste Basin *Existing DMR data will be submitted for Form 2C parameters. No additional testing will be performed as this is an internal outfall.*	2C – Part A	Flow, TSS	DMRs	NA
	2C – Part B	Oil and Grease, Fe, Cu	DMRs	NA
	2C – Part C	NA	NA	NA
	VA – WQS	NA	NA	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
502 – Oily Waste Pond *Existing DMR data will be submitted for Form 2C parameters. No additional testing will be performed as this is an internal outfall.*	2C – Part A	Flow	DMRs	NA
	2C – Part B	NA	NA	NA
	2C – Part C	NA	NA	NA
	VA – WQS	NA	NA	NA
	Other	TPH	DMRs	NA

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
007 & 008 – Intake Screen Backwash Water	2C – Part A	Flow	DMRs	NA
		Remaining Part A Parameters	Field sampling - Grab	Grab to replace 24hc
	2C – Part B	Fecals	No testing	Waiver from testing as no station activities contribute to or adversely affect concentrations of this parameter
		Sulfite	Believed absent	NA
		Remaining Part B Parameters	Field sampling - Grab	Grab to replace 24hc
	2C – Part C	Dioxin	Believed absent	NA
		Remaining Part C Parameters	Field sampling - Grab	Grab to replace 24hc
	VA – WQS	Uranium, H_2S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	Grab to replace 24hc
		TBT	Believed absent	NA

Possum Point Power Station PermitVA0002071
Sampling Plan and Requested Waivers

Outfall	EPA Form	Parameters	Data Source To Be Used	Waiver Requested
Intake	2C – Part A	Flow	No data	NA
		Remaining Part A Parameters	Field sampling - Grab	NA
	2C – Part B	Fecals, Sulfite	No testing	NA
		Remaining Part B Parameters	Field sampling - Grab	NA
	2C – Part C	Dioxin	Believed absent	NA
		Remaining Part C Parameters	Field sampling - Grab	NA
	VA – WQS	Uranium, H_2S, Nitrate N, Chlorides, TDS, Pesticides / PCBs	Field sampling – Grab	NA
		TBT	Believed absent	NA

From: Mackert, Susan (DEQ)
To: Oula K Shehab-Dandan (Services - 6)
Cc: Jeffrey R Marcell (Generation - 3); Glenn Bishop (Services - 6); Kenneth Roller (Services - 6)
Subject: RE: Possum Point Power Station VA0002071
Date: Monday, January 09, 2012 10:44:38 AM
Attachments: image001.png

Hi Oula,

We have no objection to the sampling plan that Dominion has proposed for the three representative storm water outfalls for Possum Point.

Please don't hesitate to contact me should you have any further questions or concerns.
Susan

Susan Mackert
Water Permit Writer, Senior II
Regional Industrial Storm Water Coordinator
Certified Erosion and Sediment Control Inspector #2804
Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193
Phone: (703) 583-3853
Fax: (703) 583-3821
susan.mackert@deq.virginia.gov

From: Oula K Shehab-Dandan [mailto:oula.k.shehab-dandan@dom.com]
Sent: Monday, January 09, 2012 9:01 AM
To: Mackert, Susan (DEQ)
Cc: Jeffrey R Marcell; Glenn Bishop; Kenneth Roller
Subject: Possum Point Power Station VA0002071

Hi Susan,
I am currently working on the Possum Point Permit VPDES application and realized that the sampling plan and waiver request that we submitted did not include storm water outfalls sampling.

We are proposing to follow the same sampling plan that was approved by VDEQ in the previous permit application (2005). We are proposing to collect grab samples at 3 representative storm water discharges (**S4** located between Unit 5 CTs, **S61** located near 001/002, **S42** located between Units 4 & 5). We would like to sample the outfalls as soon as possible. Please review the attached sampling plan and let me know if you have any comments. You quick review and approval will be greatly appreciated.

Oula Shehab-Dandan
Environmental Consultant
Electric Environmental Services

Dominion Resources Inc.

5000 Dominion Boulevard
Glen Allen VA 23060
Phone: 804-273-2697
Tie line 8-730-2697
oula.k.shehab-dandan@dom.com

CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and/or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

Possum Point Power Station VA0004090
Proposed Form 2F Sampling Plan and Requested Waivers

Outfall	EPA Form	Parameters	Data Source	Waiver Requested
S4 – Stormwater from Industrial Activities	2F – Part VII A	All Part A Parameters	Grab sampling	
	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	
S42 – Stormwater from Industrial Activities	2F – Part VII A	All Part A Parameters	Grab sampling	
	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	
S61 – Stormwater from Industrial Activities	2F – Part VII A	All Part A Parameters	Grab sampling	
	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	

Oula K Shehab-Dandan (Services - 6)

From: Mackert, Susan (DEQ) [Susan.Mackert@deq.virginia.gov]
Sent: Thursday, March 29, 2012 6:58 AM
To: Oula K Shehab-Dandan (Services - 6)
Subject: RE: Possum Point Power Station VA0002071-- Storm Water

Hi Oula,

DEQ has no objection to the corrections for the storm water sampling plan.

Thanks,
Susan

Susan Mackert
Water Permit Writer, Senior II
Regional Industrial Storm Water Coordinator
Certified Erosion and Sediment Control Inspector #2804
Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193
Phone: (703) 583-3853
Fax: (703) 583-3821
susan.mackert@deq.virginia.gov

From: Oula K Shehab-Dandan [mailto:oula.k.shehab-dandan@dom.com]
Sent: Wednesday, March 28, 2012 3:10 PM
To: Mackert, Susan (DEQ)
Subject: RE: Possum Point Power Station VA0002071-- Storm Water

Hi Susan, is the change ok with you?
Oula

From: Oula K Shehab-Dandan (Services - 6)
Sent: Friday, March 23, 2012 9:47 AM
To: 'Mackert, Susan (DEQ)'
Cc: Kenneth Roller (Services - 6); Jeffrey R Marcell (Generation - 3)
Subject: RE: Possum Point Power Station VA0002071-- Storm Water

Susan,
Per our conversation this morning, this is to correct a typographical error.
The representative storm water outfalls are **S5, S61 and S42**. I attached the corrected sampling plan.

Thanks
Oula

From: Mackert, Susan (DEQ) [mailto:Susan.Mackert@deq.virginia.gov]
Sent: Monday, January 09, 2012 10:43 AM
To: Oula K Shehab-Dandan (Services - 6)
Cc: Jeffrey R Marcell (Generation - 3); Glenn Bishop (Services - 6); Kenneth Roller (Services - 6)
Subject: RE: Possum Point Power Station VA0002071

Hi Oula,

We have no objection to the sampling plan that Dominion has proposed for the three representative storm water outfalls for Possum Point.

Please don't hesitate to contact me should you have any further questions or concerns.
Susan

Susan Mackert
Water Permit Writer, Senior II
Regional Industrial Storm Water Coordinator
Certified Erosion and Sediment Control Inspector #2804
Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193
Phone: (703) 583-3853
Fax: (703) 583-3821
susan.mackert@deq.virginia.gov

From: Oula K Shehab-Dandan [mailto:oula.k.shehab-dandan@dom.com]
Sent: Monday, January 09, 2012 9:01 AM
To: Mackert, Susan (DEQ)
Cc: Jeffrey R Marcell; Glenn Bishop; Kenneth Roller
Subject: Possum Point Power Station VA0002071

Hi Susan,
I am currently working on the Possum Point Permit VPDES application and realized that the sampling plan and waiver request that we submitted did not include storm water outfalls sampling.

We are proposing to follow the same sampling plan that was approved by VDEQ in the previous permit application (2005). We are proposing to collect grab samples at 3 representative storm water discharges (**S4** located between Unit 5 CTs, **S61** located near 001/002, **S42** located between Units 4 & 5). We would like to sample the outfalls as soon as possible. Please review the attached sampling plan and let me know if you have any comments. You quick review and approval will be greatly appreciated.

Oula Shehab-Dandan
Environmental Consultant
Electric Environmental Services

Dominion Resources Inc.
5000 Dominion Boulevard
Glen Allen VA 23060
Phone: 804-273-2697
Tie line 8-730-2697
oula.k.shehab-dandan@dom.com

Possum Point Power Station VA0004090
Proposed Form 2F Sampling Plan and Requested Waivers

Outfall	EPA Form	Parameters	Data Source	Waiver Requested
S5 – Stormwater from Industrial Activities	2F – Part VII A	All Part A Parameters	Grab sampling	
	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	
S42 – Stormwater from Industrial Activities	2F – Part VII A	All Part A Parameters	Grab sampling	
	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	
S61 – Stormwater from Industrial Activities	2F – Part VII A	All Part A Parameters	Grab sampling	
	2F – Part VII B	All remaining Part B parameters [as limited by an applicable effluent guideline or listed in NPDES permit for process wastewater]	Grab sampling	No testing of fecal coliform
	2F – Part VII C	All remaining Tables 2F-2, 2F-3 and 2F-4 parameters if believed present	Grab sampling	Waiver from qualifying storm event triggers
		Asbestos, TBT, dioxin, sulfite, TRC, FAC, Radioactivity	Believed absent	

8876

Dominion Generation
19000 Possum Point Road, Dumfries, VA 22026

BY ELECTRONIC MAIL

March 24, 2016

Ms. Susan Mackert
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

RE: Dominion Possum Point Power Station VA0002071
No Discharge from Outfall 503

Ms. Mackert:

Dominion is submitting this letter in accordance with Part I.A.4.(5) of the subject permit to report that there was no discharge from Outfall 503 from March 13-19, 2016. In addition, a progress report summarizing the status of activities to the CCR Surface Impoundment Closure Project is attached with this report.

If you have any questions or need additional information, please contact Jeff Marcell at (703)-441-3813.

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,

Jeffrey C. Heffelman
Station Director

Dominion – Possum Point Power Station

CCR Impoundment Closure Project

Weekly Status Report

Activities for the Week Ending: 3/19/16
• Initiated installation of office trailers on compacted rock pad at Pond D.

Ongoing Activities
• Mobilization of equipment associated with the wastewater treatment system. • Stock piling of dry ash from Pond E within the pond footprint to facilitate future loading operations. • Installation of electrical system associated with Pond D office trailers. • Demolition and repair of rail track to facilitate future offsite transport of ash. • Sealing of toe drain at Outfall S107 • Pumping of filtered water from Ponds A, B, C and E to Pond D • Preparation of revisions to Wastewater Treatment System Concept Engineering Report (CER) to address DEQ comments. • Preparation of CER Addendum to address effluent storage following treatment for submittal to DEQ.

Look Ahead
• Complete S107 Toe drain sealing.