

*KINGSTOWNE SECTION 47
FAIRFAX COUNTY, VIRGINIA*

STORM WATER POLLUTION PREVENTION PLAN

In Compliance With:

STORM WATER CONSTRUCTION GENERAL PERMIT NO. VAR430968

Prepared By:

*THE RYLAND GROUP, INC.
11216 Waples Mill Road, Suite 100
Fairfax, Virginia 22030*

July 12, 2001

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1.0 INTRODUCTION

1.1 PLAN PURPOSE

This Storm Water Pollution Prevention Plan (SWPPP) has been developed as a requirement of the Virginia Pollution Discharge Elimination System (VPDES) General Permit for Discharges of Storm Water from Construction Activities (Permit), as defined in 9 VAC 25-180-10 et seq. The purpose of this SWPPP is to:

- Identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the construction site, and,*
- To describe and ensure the implementation of practices that will be used to reduce pollutants in storm water discharges from the construction site and to assure compliance with the conditions of the Permit.*

Implementation of the components of this SWPPP is required as a condition of the Permit, a copy of which is included in Appendix A. The Department of Environmental Quality (VDEQ) has been granted authority to administer the VPDES program and is therefore the regulatory authority overseeing the implementation of this SWPPP.

1.2 BACKGROUND

The Permit, VDEQ Storm Water General Permit No. VAR430968, has a fixed term of 5 years from the effective date of June 30, 1999 and is required for all projects that will disturb more than 5 acres of total land area. A Registration Statement, a copy of which is included in Appendix B, was submitted to the VDEQ Northern Virginia Regional Office on April 5, 2001, and the Kingstowne Section 47 residential development was determined to be eligible for coverage under the Permit on April 30, 2001.

The Permit authorizes the discharge of storm water from construction activities until the Permit's expiration date. The Permit also authorizes the discharge of storm water from offsite support activities, provided that certain conditions are met as outlined in the Permit (Part I A. 2.). Certain non-storm water discharges are also authorized by the Permit, provided the conditions contained in the Permit (Part I D. 2.) are met.

Upon final stabilization of the site, a Notice of Termination will be submitted to the VDEQ. Coverage under the Permit will be deemed terminated 2 days after submittal of the Notice of Termination, a copy of which is included in Appendix B.

2.0 PLAN REQUIREMENTS

2.1 GENERAL REQUIREMENTS

Deadlines

The SWPPP provides for compliance with the terms and schedule of the Permit beginning with the initiation of construction activities.

Incorporation of Other Plans

The requirements of the Permit are satisfied by incorporating by reference other plans developed for this construction activity. The Construction Plans developed for this project (Project Construction Plans), were approved by the Fairfax County Department of Public Works and Environmental Services on September 26, 2000 under Plan Number 6105-SP-79. The Project Construction Plans meet current Fairfax County requirements regarding erosion and sediment control and storm water management, and also comply with State regulatory requirements as presented in the Virginia Erosion and Sediment Control Handbook, Third Edition. All plans incorporated by reference into the SWPPP are enforceable under the Permit.

Plan Administration

The SWPPP has been certified in accordance with the Permit, and a copy of the Certification is included in Appendix C. Copies of the SWPPP will be kept on-site and be made available to the VDEQ, or other regulatory agencies having authority, upon request. The SWPPP will also be available to all operators identified as having responsibilities to carry out provisions contained in the SWPPP.

SWPPP Updates

The SWPPP will be amended whenever there is a change in design, construction, operation, or maintenance of the construction site that has a significant effect on the potential for the discharge of pollutants to surface waters and that has not been addressed in the normal implementation of the SWPPP. The SWPPP will also be updated whenever it is found to be ineffective in meeting the requirements of the Permit. In the event the VDEQ notifies the Permittee that the SWPPP does not meet one or more of the provisions of the Permit, within a period of seven days the Permittee will make the required changes to the SWPPP and will submit a certification to the VDEQ stating that the required changes have been made.

2.2 SPECIFIC REQUIREMENTS

Site Description

The items required by the Permit regarding the site description (Part II D.1., Appendix A) can be found in the Project Construction Plans, which are incorporated by reference into this SWPPP. A summary of the required elements is provided in Table 1, along with a reference to the appropriate sheet in the Project Construction Plans where the required element can be located. Copies of the referenced sheets are included in Appendix F.

Table 1. Site Description Elements – Included in Fairfax County Plan No. 6105-SP-79

Permit Part II D. 1....	Required Element	Construction Plan Sheet No.
a.	Description of construction activity	1 & 9 of 34
b.	Description of construction sequence of soil disturbing activities	9 of 34
c.	Site area estimates, including limits of soil disturbance	1 & 9 of 34
d.	Pre and post-construction runoff coefficients	1 of 34
e.	Existing vegetation at the site	9 of 34
f.	Description of other potential pollution sources, including vehicle fueling, chemical storage areas, sanitary waste facilities, construction debris, litter, etc.	Refer to Narrative
g.	Receiving water names, including the ultimate receiving water, and the aerial extent of wetlands	1 of 34
h.	Site map, to include locations of the following:	
h.(1)	- Drainage patterns, pre and post-construction	9 & 10 of 34
h.(2)	- Limits of clearing	9 & 10 of 34
h.(3)	- Major structural and non-structural controls	9 & 10 of 34
h.(4)	- Stabilization areas, including types of vegetative cover	9 & 10 of 34
h.(5)	- Surface waters	19 of 34
h.(6)	- Storm water discharge points, with an outline of the associated drainage areas	10 of 34
h.(7)	- Existing and planned buildings and paved areas	5 & 6 of 34
h.(8)	- Permanent storm water management facilities	19 of 34
h.(9)	- Offsite material, waste, borrow, or equipment areas covered by the Plan	N/A
h.(10)	- Other potential pollution sources (as described in f. above)	Refer to Narrative
i.	Description of support activities covered by the Permit, including any dedicated concrete and asphalt plants	N/A

Controls and Measures

The Permit requires the implementation of various types of controls and measures that are implemented to control pollutants in storm water discharges from the project site. The Permit specifically requires the implementation of erosion and sediment control practices (both structural and non-structural), storm water management practices, and specific other controls to reduce pollutants. All controls employed in this project were selected to meet and/or exceed State and local requirements and are detailed in the referenced Construction Plans.

The Project Construction Plans contain detailed information regarding the various types of controls used in this project. Table 2 summarizes where the detailed information can be found in the Construction Plans:

Table 2. Control Measures Included in Fairfax County Plan No. 6105-SP-79

<i>Type of Control Measure</i>	<i>Construction Plan Sheet No.</i>
<i>Erosion and Sediment Control Measures</i>	<i>2, 9 & 10 of 34</i>
<i>Storm Water Management Control Measures</i>	<i>19 of 34</i>

Several requirements of the Permit relating to controls (Part II 2., Appendix A) are not included in the referenced Construction Plans. A description of these required items is presented below, along with how they are addressed in this SWPPP:

No solid materials will be discharged to surface water. Solid materials, including building materials, garbage, and debris will be cleaned up daily and will be properly disposed of at a permitted facility.

A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated will be maintained at the Project Site. A copy of the "Record of Land Disturbance" form is included in Appendix D.

Certain materials are stored and/or used onsite that must be controlled to prevent discharge to surface waters. A list of these items along with the control practice employed to control discharges is presented below:

Fuels and Oils

On-site vehicle refueling is conducted in a location away from access to surface waters. Any on-site storage tanks will have a means of secondary containment. In the event of a spill, it will be cleaned up immediately and the material, including any contaminated soil, will be disposed of according to all Federal, State, and Local regulations.

Oil spills in excess of reportable quantities, in accordance with Part I E. of the Permit (Appendix A), are to be reported to the VDEQ in accordance with Part III G. of the Permit as soon as the discharge is discovered, but no later than 24 hours. A reportable quantity is defined as a discharge to a surface water that causes a sheen, discoloration, and/or an emulsion. Reports can be made to the VDEQ's Northern Virginia Regional Office by telephone at 703.583.3870 or by facsimile at 703.583.3821. For reports outside normal working hours, leave a message.

Chemical Storage Areas

Chemicals used on-site, such as adhesives, paints and lubricants, are kept in small quantities and stored in closed containers undercover and kept out of direct contact with storm water. As with fuels and oils, any inadvertent spills will be cleaned up immediately and disposed of according to Federal, State, and Local regulations.

Sanitary Waste Facilities

Portable lavatories are located on-site and are serviced on a weekly basis by a Portable Toilet and Septic Tank Service that is licensed and inspected by the Fairfax County Health Department. The lavatories are located in upland areas away from direct contact with surface waters. Any spills occurring during servicing will be cleaned up immediately, including any contaminated soils, and disposed of according to all Federal, State, and Local regulations.

Maintenance

Maintenance of the erosion and sediment controls incorporated into this project must be maintained on a regular basis to assure their continued effectiveness. This includes repairs to all erosion and sediment controls, including cleanout of all sediment traps at the required intervals. Those controls found to be ineffective during routine inspections will be repaired before the next anticipated storm event or as soon as practicable. A more detailed description of the maintenance procedures is contained in the Project Construction Plans, and is incorporated in this SWPPP by reference.

Inspections

Regular inspections of the construction site will be performed by personnel familiar with all aspects of the SWPPP and the implemented control practices. Inspections will include the review of all disturbed areas, structural and non-structural control measures, material storage areas, and vehicular access points. Inspections will be performed at least once every 14 calendar days and within 48 hours after a storm event totaling 0.5 inches or more. Areas that already have been stabilized or where runoff is unlikely due to frozen or snow covered ground will be inspected at least on a monthly basis.

Inspections are intended to identify areas where the pollutant control measures at the site are ineffective and are allowing pollutants to enter surface waters. Receiving waters will be inspected to ascertain whether control measures are effective in preventing significant impacts. Locations where vehicles enter or exit the site will be inspected for evidence of offsite sediment tracking.

If as a result of the inspection, the site conditions and/or control measures are found to have changed, the SWPPP will be updated within a period of 7 calendar days. If control measures need to be modified to assure effectiveness or if additional measures are determined to be necessary, implementation will be completed prior to the next anticipated storm event or as soon as practicable.

A report summarizing the inspections and the subsequent maintenance activities will be completed and maintained as part of the SWPPP at the Project Site. Required elements include major observations (including information on control measure performance and incidents of non-compliance), and information on the inspecting personnel. If an inspection does not identify any incidents of non-compliance, then the certification statement contained in the inspection form will apply. A copy of the "Record of Site Inspection" form is included in Appendix E.

Non-Storm Water Discharges

Allowable non-storm water discharges associated with this project, which are directed to sediment traps or to areas with other soil erosion control measures, include waters used to wash vehicles where detergents are not used; waters used to control dust; potable water sources including waterline flushings; water used for hydrostatic testing of new pipeline construction; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred; and water from foundation or footing drains where flows are not contaminated with process materials such as solvents.

2.3 CONTRACTOR CERTIFICATION

A signed copy of the Contractor Certification regarding responsibility for implementing and maintaining the controls identified in this SWPPP is included in Appendix C.

3.0 REFERENCES

1998 Public Facilities Manual of the County of Fairfax, Virginia, Fairfax County Department of Public Works & Environmental Services, Office of Site Development Services, Code Analysis Division.

1992 Virginia Erosion and Sediment Control Handbook, Third Edition, Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation.

APPENDIX A

STORM WATER CONSTRUCTION GENERAL PERMIT



3 2001

COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

Northern Virginia Regional Office
13901 Crown Court
Woodbridge, VA 22193-1453
(703) 583-3800 fax (703) 583-3801
<http://www.deq.state.va.us>

Dennis H. Treacy
Director

Gregory L. Clayton
Regional Director

April 30, 2001

Mr. Scott A. Gullivan
Vice President
The Ryland Group, Inc.
11216 Waples Mill Road, Suite 100
Fairfax, VA 22030

Re: Construction Storm Water General Permit No. VAR430968
Kingstowne Section 47 - Fairfax County

Dear Mr. Gullivan:

The staff has reviewed your complete registration statement for coverage and determined this facility is eligible for coverage under the VPDES General Permit for Storm Water Discharges from Construction Sites. A copy of this Permit is enclosed. The effective date is June 30, 1999, and the expiration date is June 30, 2004. This facility's date of coverage is April 30, 2001. Please read the Permit carefully as you are responsible for meeting all Permit conditions.

Also, a General Permit Notice of Termination is enclosed. If at any time you no longer require coverage under the VPDES General Permit for Storm Water you may submit the Termination form to this office for processing.

If you have any questions, please do not hesitate to contact Sue Heddings at (703) 583-3847.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joan C. Crowther".

Joan C. Crowther
Water Resource Development Supervisor

cc: Applicable County

Enclosure: Stormwater Permit
Termination Form

Appendix C
Certifications

OWNER 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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Firm: *The Ryland Group, Inc.*
Address: *11216 Waples Mill Road, Suite 100*
Fairfax, Virginia 22030
Telephone: *703.352.8050*

Signature:



John F. Dec, Assistant Vice President

Date:

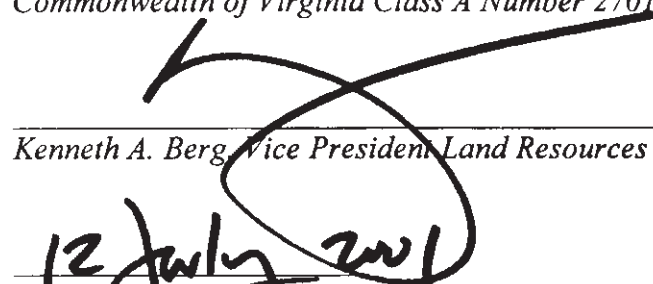
07/12/01

CONTRACTOR CERTIFICATION

"I certify under penalty of law that I understand the terms and conditions of this Virginia Pollutant Discharge Elimination System (VPDES) general permit that authorizes the storm water discharges from the construction activity identified as part of this certification."

Firm: The Ryland Group, Inc.
Address: 11216 Waples Mill Road, Suite 100
Fairfax, Virginia 22030
Telephone: 703.352.8050
Contractors License: Commonwealth of Virginia Class A Number 2701 009945A

Signature:


Kenneth A. Berg, Vice President Land Resources

Date:


12 July 2001

Appendix D
Record of Land Disturbance

Appendix E
Record of Site Inspection

EROSION & SEDIMENT CONTROLS CHECKLIST

Date: _____

Project: _____

Checklist Items:

- 1 Perimeter of work area secured with silt fence, super silt fence, or diversion dike?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	N/A

 Remarks: _____

- 2 Check dams installed and functional?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	N/A

 Remarks: _____

- 3 Temporary sediment traps and basins installed and functional?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	N/A

 Remarks: _____

- 4 Construction entrances installed and functional? No excessive dirt or mud on streets?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	N/A

 Remarks: _____

- 5 Denuded areas stabilized with temporary seeding and/or mulching?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	N/A

 Remarks: _____

- 6 All inlets protected with silt fence or inlet protections and functional?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	N/A

 Remarks: _____

- 7 Storm outfalls clean, no silt discharge apparent?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	N/A

 Remarks: _____

Corrective Items:

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____

Copy To: _____

Signed: _____

Appendix F
Project Construction Plans