

Part 3 of 4

**CASE NO. 12-1146-GA-BLN  
LETTER OF NOTIFICATION  
PIR-609 HIGH PRESSURE  
DISTRIBUTION PIPELINE**

**ATTACHMENT G  
ENVIRONMENTAL REPORTS AND PERMITS  
(Continued)**



April 2, 2012

**BY FEDEX**

Julie Berbari  
Stark County Soil and Water Conservation District  
2650 Richville Dr. S.E., Suite 103  
Massillon, Ohio 44646

**RE: East Ohio Gas Company, Pipeline Infrastructure Replacement Program**  
**Stark County Storm Water Management Application**  
**PIR 609 – L#2472 Pipeline Replacement Project**

Dear Ms. Berbari:

The East Ohio Gas Company (EOG) is proposing to replace approximately 7,298 feet of natural gas pipeline (twelve-inch diameter) under the EOG Pipeline Replacement Program. The purpose of the program is to replace existing bare steel pipe with coated steel or PVC pipe to ensure the safety and reliability of pipeline operations. The project area of PIR 609 is located within a 60-foot easement bounded on the north by SR 30 and extending south of Faircrest Street, as indicated on the location map in Appendix A-1 of the Storm Water Pollution Prevention Plan (SWPPP) (Attachment 4). The project area is limited to the existing 60-foot easement within a mix of residential, agricultural, and recreational areas. The area of disturbance that will result from the implementation of this project is 3.4 acres.

One wetland and two streams occur within the project area of PIR 609. To install the pipeline for this project, it is necessary to temporarily impact these water resources. Following excavation, the original contours of the water resources will be restored and the substrate of the streams will be replaced. Because of these temporary impacts, authorization from the U.S. Army Corps of Engineers was necessary.

The following documents are included for your review:

- Attachment 1: Stark County SWPPP Checklist;
- Attachment 2: Stark County Earth Disturbance Permit;
- Attachment 3: OEPA NOI Application;
- Attachment 4: PIR 609 SWPPP;
- Attachment 5: Authorization from U.S. Army Corps of Engineers

Also included in this submittal is a check for \$350.00 made payable to Stark Soil and Water Conservation District. This includes the \$100.00 charge for review of the SWPPP and the \$250.00 charge for site inspections of sites between 1-4.9 acres. Two (2) copies of the SWPPP will be included in this submittal.

As required, EOG will hold a pre-construction meeting with the Stark Soil and Water Conservation District (SWCD) inspector prior to earthwork activities. This meeting will be scheduled by EOG with Stark SWCD office personnel. EOG, the contractor, and the EOG environmental inspector will be in attendance.

Your timely review and approval of this Storm Water Pollution Prevention Plan is appreciated. Please direct your response to:

Greg Eastridge, Environmental Specialist  
Dominion East Ohio Gas  
320 Springside Drive, Suite 320  
Akron, OH 44333

If you have any questions please contact Greg Eastridge at (330) 664-2576 or by email at [Gregory.K.Eastridge@dom.com](mailto:Gregory.K.Eastridge@dom.com)

Sincerely,

A handwritten signature in blue ink that reads "Sam Mathew". The signature is written in a cursive style with a horizontal line underneath the name.

Sam Mathew, P.E.  
Manager, Gas Environmental Services

Enclosures

cc: Greg Eastridge, East Ohio Gas

Bcc: Nancy Kovack, EOG

**Attachment 1**

**Stark County SWPPP Checklist**

This checklist is effective as of June 1, 2010

**STARK SOIL & WATER CONSERVATION DISTRICT**  
**2650 Richville Drive SE, Suite 103**  
**Massillon, Ohio 44646**  
**330-830-7700**  
**EROSION/SEDIMENT CONTROL PLAN (ESC) CHECKLIST**

NPDES PERMIT# \_\_\_\_\_

PROJECT PIR 609, L#2472

DEVELOPER East Ohio Gas

LOCATION Perry

CONTRACTOR To be determined

NOTE: There is a minimum review charge of \$100.00 for sites 1-5 acres.

Plan Review	Review Fee
Preliminary Plan *	\$15.00 / acre Minimum charge - \$75.00
Storm Water Pollution Prevention (SWP3) Plan	\$20.00 / acre Minimum charge - \$100.00
Site Inspections	Inspection Fee
Sites 1 – 4.9 acres	\$250.00
Sites 5 –9.9 acres	\$800.00
Sites 10 – 19.9 acres	\$1300.00
Sites 20 – 49.9 acres	\$1700.00
Sites larger than 50 acres	\$2000.00

**GENERAL REQUIREMENTS:** 2 sets of the Erosion/Sediment Control Plan (ESC/SWPPP) must be submitted before any earthmoving begins. The plan will be reviewed and approved or returned for revisions within 30 working days after submittal. The ESC Plan will be valid for 2 years. The developer must apply for a Notice of Intent (NOI) from Ohio EPA if applicable and a copy sent to this office. An approved plan & pre-construction meeting are required before any earthmoving is started. Please call 330-830-7700, ext. 127 with any questions.

**MINIMUM STANDARDS** - This plan must address all minimum components of the NPDES Phase 2 Permit and conform to the specifications of the Stark County Water Quality Regulations. An Erosion/Sediment Control Plan (ESC) and Stormwater Pollution Prevention Plan (SWPPP) are interchangeable for the purposes of these components.

**Submitted Plans must include:**

- **Contact Person-** Contact information for the owner or developer of the land.
- **Coopermitee information-** Contact information of the contractor who will be responsible for implementing (*installing & removing practices*) the SWPPP Plan and write the inspection reports. NOTE: If the contractor is unknown at the time of plan review the information will be required before a pre-construction meeting is scheduled.
- **Vicinity Map** – Location map showing site in relation to surrounding area. Include Location of receiving streams/surface waters
- **Limits of Clearing and Grading Plan** – Clearly indicate limits and show acreage of earth disturbing activity. Show borrow, spoil and topsoil stockpile areas. Include before and after contours with appropriate contour intervals. Delineate drainage watersheds, indicating acreage of each area.
- **Project Description** – Briefly describe the nature, purpose and scope of the land disturbing activity. This may be self evident from the plan. Include total area of site and acreage's of individual phases if applicable. Include a narrative describing the overall erosion and sediment control scheme for this site.
- **Soils Information** – Show unstable or highly erodible soils as determined by the Stark County Soil Survey and/or soil tests. Show location of any soil test borings on plan. Other soils information such as permeability, perched water table, etc. may be mentioned.
- **Surface Water Locations** – Show locations of all lakes, ponds, surface drainage Patterns, wetlands, spring, etc. on or within 1000 feet of the site. If storm water will be discharging into a municipal separate storm sewer system or into a storm water management structure such as a retention basin that is off the site, clearly indicate this on the plans.
- **Site Development** – Show locations of all existing and proposed buildings, roads, Utilities, parking facilities, etc.
- **Schedule of Construction Activity** – Included in this should be a schedule for implementing temporary and permanent erosion and sediment control practices and storm water management facilities. The NPDES permit requires that all sediment ponds and perimeter barriers be constructed within 7 days of first grubbing. All sediment control structures must remain functional until upland areas are stabilized.
- **Location of Practices** – Show locations of all structural erosion and sediment control,



storm water management, and water quality practices, including post-construction best management practices. Water ponding facilities should be drawn to scale, with the area of the contributing watershed given.


- **Detail Drawings** – All structural practices should be explained with the detail drawings of specifications. Installation specifications may also be necessary to aid contractor. Included should be outlet structures for retention, detention facilities and any special modifications to these structures to aid in improved sediment trapping capability.
- **Land Stabilization Measures** – Provide specifications for temporary and permanent seeding, mulching, blanketing, etc. and also installation schedule for each practice. Temporarily stabilize disturbed areas that will remain idle for 21 days or longer within 7 days of last disturbance or within 2 days for areas within 50' of a stream. Permanently stabilize disturbed areas within 7 days of reaching final grade. Erosion control blankets and matting should be used to stabilize channels where the flow velocity is greater than 3.5 ft/sec., steep slopes, on highly erosive soils and on areas slow to establish a vegetative cover.
- **Special Notes for Critical Areas** – Include pertinent information regarding stream bank stabilization, riparian corridors, buffer areas, stream restoration plans, and wetland areas.
- **Existing Natural Areas** – Show existing or unusual vegetation, wetlands, springs, rock outcroppings, etc. Include vegetation to remain (trees, buffer areas, etc.)
- **Maintenance and Inspections** – Provide notes and information regarding maintenance of each practice to assure continued performance. Erosion and sediment control must be inspected once every 7 days and with 24 hours of 0.5" or greater rainfall. A written log of these inspections must become part of the ESC Plan. This log should indicate the dates of inspection, inspector weather conditions, observations, actions taken to correct problems, and the date action was taken.
- **Storm Water Runoff Considerations and Post-Construction BMPs** – Show the pre and post-construction runoff coefficients including information such as the method used to calculate runoff. Include a narrative describing post construction storm water quality BMP's such as detention basins; grass filter strips or wetlands in a separate long term maintenance plan. Indicate in this report who will be the responsible person and/or association for long-term maintenance and how it will be maintained throughout its life. Show locations of all storm water management facilities. Include vegetation to remain (trees, buffer areas, etc.).
- **Trap Efficiency, Location, and Volume of Sediment Ponds** – These calculations must be shown for all temporary or permanent sediment traps/ponds and any retention/detention facilities to be used for this purpose. All ponds used for the purpose of trapping sediment must have a volume of 67 cubic yards per acre of total drainage area to the pond (not disturbed area). Trapping efficiency of these structures must be at least 75%

- **Disposal of Solid, Sanitary and Toxic Waste** – Solid, sanitary and toxic waste must be disposed of in a proper manner in accordance with local, state, and federal regulations. It is prohibited to burn, bury or pour out onto the ground or into the storm sewers any solvents, paints, stains, gasoline, diesel fuel, used motor oil, hydraulic fluid, and antifreeze, cement curing compounds and other such toxic or hazardous wastes. Wash out of cement trucks should occur in a diked, designated area where the washings can collect and be disposed of properly when they harden. Storage tanks should be located in diked areas away from any drainage channels. The diked area should hold a volume 110% of the largest tank
- **Off-Site Sediment Tracking** – Minimize such tracking of sediments by vehicles by Making sure the use of gravel construction entrances and regularly scheduled sweeping/good housekeeping.
- **Plan Certification** – The plan must include the following verbiage “ *I, the undersigned, certify that I understand and will adhere to the requirements, terms, and conditions of the Storm Water Pollution Prevention Plan reviewed and approved by the Stark Soil and Water Conservation District for compliance with the Stark County Water Quality Regulations for the above referenced project.*” This statement must be dated and signed by all applicable parties with indication of what activity they are responsible for.
- **Long Term Maintenance Plan** – Detail drawings and maintenance plans shall be provided to Stark SWCD and/or the local MS4 for all Post-Construction Best Management Practices (BMPs) prior to plan approval and shall include the following information:
  - Cover sheet listing MS4 Operator, site name and date.
  - Name and number of the party or association responsible for post construction long term maintenance.
  - List of all post-construction BMP's, structural and non-structural with all supporting design data.
  - Instructions on how and when the practices are to be maintained along with an inspection schedule.
  - A detail drawing of the BMP's listed.
  - A copy of any required easements.

Maintenance plans must ensure that pollutants collect within structural Post-Construction BMP practices be disposed of in accordance with local, state and federal guidelines.

**Attachment 2**

**Stark County Earth Disturbance Permit Application**

	<b>Office Use Only</b>
	<b>Date SWPPP Submittal Received:</b> _____
	<b>Fee:</b> _____ <b>Invoice Billing Number:</b> _____
	<b>Earth Disturbance Permit #</b> _____

**Applicant Name:** East Ohio Gas Gas, contact Greg Eastridge

**Phone:** (330) 644-2576

**MS4 Operator:** Perry



### **Site Information**

**Site Name:** PIR 556 - L#2472

**Acres:** 3.4 **Phase:** NA **Watershed:** Tuscarawas River

**Site Location:** Located within a 60-foot easement bounded on the north by SR 30 and extending south of Faircrest Street.

### **Description of activity:** *(check appropriate activity)*

**subdivision/development** \_\_\_\_\_ **homesite** \_\_\_\_\_ **commercial** \_\_\_\_\_  
**industrial** \_\_\_\_\_ **grading** \_\_\_\_\_ **filling** \_\_\_\_\_ **timbering** \_\_\_\_\_  
**redevelopment** \_\_\_\_\_ **clearing** \_\_\_\_\_ **other (include description)** X

Natural gas pipeline replacement project

### **Storm Water Pollution Prevention Plan (SWPPP)**

***If the site will disturb 1 acre of land as defined by clearing, grading, grubbing, excavation, demolition, timbering, filling and off-site borrow areas, or is part of a larger common plan of development or sale an SWPPP must be submitted to this office for review and approval prior to disturbance. Failure to do so will result in an immediate "stop work order".***

**Attachment 3**  
**OEPA NOI Application**

Dominion Resources Services, Inc.  
320 Springside Dr., Ste. 320, Akron, OH 44333  
Web Address: www.dom.com



April 2, 2012

**BY U.S. MAIL, RETURN RECEIPT REQUESTED**

7011 0470 0000 9724 6169

Ohio Environmental Protection Agency  
Office of Fiscal Administration  
P. O. Box 1049  
Columbus, OH 43216

**RE: The East Ohio Gas Company, Pipeline Infrastructure Replacement Program**  
**Notice of Intent, OEPA General Permit OHC000003 – Construction Storm Water**  
**PIR 609 - L#2472 Pipeline Replacement Project**

Dear Sir or Madam:

Please find attached a Notice of Intent for Coverage under the Ohio Environmental Protection Agency General Permit OHC000003 – Construction Storm Water for East Ohio Gas Company's (EOG) PIR 609 – L#2472 project located in Perry Township, Stark County, Ohio.

If you have any questions or need additional information please contact Greg Eastridge at (330) 664-2576.

Sincerely,

A handwritten signature in blue ink that reads "Sam Mathew".

Sam Mathew, P.E.  
Manager, Environmental

**Enclosures:**

NOI Form  
USGS Topographic Quadrangle  
\$200.00 Check made payable to Treasurer, State of Ohio

Cc: Greg Eastridge, Dominion



Environmental  
Protection Agency

## Notice of Intent (NOI) For Coverage Under Ohio Environmental Protection Agency General Permit

(Read accompanying instructions carefully before completing this form)

Submission of this NOI constitutes notice that the party identified in Section I of this form intends to be authorized to discharge into state surface waters under Ohio EPA's NPDES general permit program. Becoming a permittee obligates a discharger to comply with the terms and conditions of the permit. Complete all required information as indicated by the instructions. Forms transmitted by fax will not be accepted. A check for the proper amount must accompany this form and be made payable to "Treasurer, State of Ohio." (See the fee table in Attachment C of the NOI instructions for the appropriate processing fee)

### I. Applicant Information/Mailing Address

Company (Applicant) Name: East Ohio Gas Company

Mailing (Applicant) Address: 320 Springside Drive, Suite 320

City: Akron

State: Ohio

Zip Code: 44333

Contact Person: Greg Eastridge

Phone: (330) 664-2576

Fax: (330) 664-2669

Contact E-Mail Address: Gregory.K.Eastridge@dom.com

### II. Facility/Site Location Information

Facility Name: PIR 609, L#2472 Pipeline RPL

Facility Address/Location: Extends from Route 62 on the north to south of Faircrest Street SW

City: Perry

State: Ohio

Zip Code: 44706, 44662

County(ies): Stark

Township(s): Perry

Facility Contact Person: Nancy Kovack

Phone: (330) 664-2515

Fax: (877) 201-8687

Facility Contact E-Mail Address: nancy.a.kovack@dom.com

Latitude: 41.76157 Longitude: -81.45757 (For Construction & Coal, must complete lat/long & attach map)

Receiving Stream or MS4: Perry

### III. General Permit Information

General Permit Number: OHC000003 Construction Storm Water

Initial Coverage: ☒ Renewal Coverage: ☐

Type of Activity: All Construction Storm Water - 1 to 5.99 acres disturbed Fee = \$200

SIC Code(s): - - - - -

Existing NPDES Permit Number:

ODNR Coal Mining Application Number:

Outfall: Design Flow (MGD)

Associated Permit Effluent Table

Latitude

Longitude

Are These Permits Required? PTI No

401 Water Quality Certification No

Isolated Wetland No

US Army Corps of Engineers Yes - approved

Individual NPDES No

Proposed Project Start Date (MO DY YR): 6 1 12

Estimated Completion Date (MO DY YR):     

Total Land Disturbance (Acres): 3.4 acres

MS4 Drainage Area (Square Miles):     

### IV. Payment Information

Check #: 0191

Check Amount: \$200.00

Date of Check (MO DY YR): 11 2 12

#### For Ohio EPA Use Only

Check ID (OFA):     

ORG #:     

Rev ID:     

DOC #:     

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.

Applicant Name: Michael C Reed

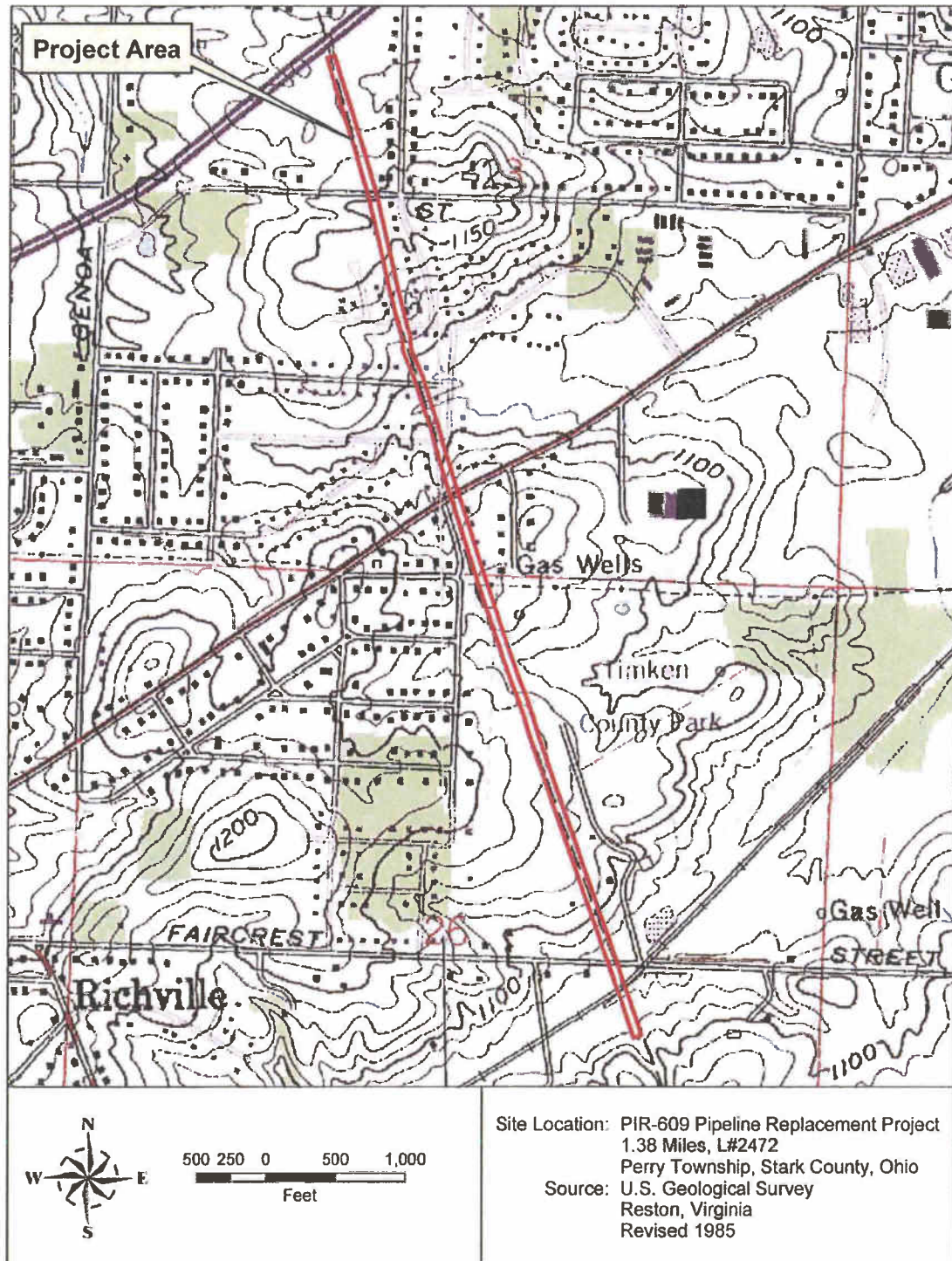
Title: Director, Gas Operations

Applicant Signature: Michael C Reed

Date: 3-30-12



**Location of Project Area on  
USGS 7.5-Minute Topographic Map  
(Canton West Quadrangle)**





SAM MATHEW  
1001 DOMINION CHECK CARD  
SUITE 320  
320 SPRINGSIDE DRIVE  
AKRON, OH 44333-4542

5015418038061

0491  
2-1710

April 2, 2012

PAY TO THE ORDER OF

Treasurer, State of Ohio

\$ 200.00

Two Hundred + <sup>00</sup>/<sub>100</sub>

DOLLARS

JPMorganChase  
CHICAGO, ILLINOIS 60670

NOT VALID FOR OVER \$5,000.00

MEMO

3C07345429

PIR 609 Nol Fee

Sam Mathew

⑆071000013⑆

9026851⑈

0491

**Attachment 4**

**Storm Water Pollution Prevention Plan**



**Dominion**<sup>SM</sup>

**OHIO  
STORM WATER POLLUTION  
PREVENTION PLAN (SWPPP)**

**Bare Steel Pipeline Replacement Project  
PIR 609, L#2472  
Perry Township, Stark County, OH**

**Name of Project/Replacement Segment: PIR 609**

**Planned Construction Start Date:** \_\_\_\_\_

**Planned Construction Completion Date:** \_\_\_\_\_

**Construction Supervisor:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**Project Manager (signature):** Nancy Karam 330-604-2515

**Construction Contractor (signature):** \_\_\_\_\_

**Environmental Inspector (signature):** \_\_\_\_\_

**NOTE:**

**THIS PLAN MUST BE KEPT  
AT THE CONSTRUCTION SITE  
DURING WORKING HOURS**

**SWPPP Prepared: March 29, 2011**

**Prepared by: East Ohio Gas Co. and Davey Resource Group**

**SIGNATORY REQUIREMENTS**  
**STORM WATER POLLUTION PREVENTION PLAN**

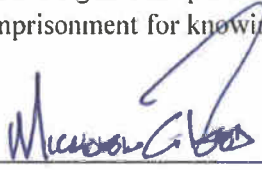
**COMPANY:** The East Ohio Gas Company

**LOCATION:** 320 Springside Drive, Suite 320  
Akron, Ohio 44333

**CORPORATE APPROVAL**

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 managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE: \_\_\_\_\_



NAME: \_\_\_\_\_

Michael C. Reed

TITLE: \_\_\_\_\_

Director Design and Construction

# STORM WATER POLLUTION PREVENTION PLAN

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### **APPENDIX**

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#### **APPENDIX D.....SITE DRAWING CHECKLIST**

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# STORM WATER POLLUTION PREVENTION PLAN

## 1.0 PROJECT OVERVIEW

### 1.1 Introduction

The contents of this document and the accompanying attachments comprise the Storm Water Pollution Prevention Plan (SWPPP) for a natural gas pipeline replacement project performed under East Ohio Gas Company's (EOG) Pipeline Infrastructure Replacement (PIR) Program. This Program's effort consists of replacing approximately 4,000 miles of discontinuous sections of steel pipeline with new pipeline and may continue for 20 years or more. This is a proactive, multi-year program for repairing and maintaining EOG-owned transmission, distribution, and storage pipelines throughout Ohio. The work to be conducted will focus on specific individual pipeline segments, selected for replacement during any given year based on several factors, including pipe viability, location, and potential impacts to protected natural resources.

The purpose of this SWPPP is to present procedures that will be followed during installation of this pipeline to minimize adverse environmental impacts from stormwater runoff and sediment pollution. This document was prepared in accordance with the requirements of the Ohio Environmental Protection Agency NPDES General Permit No. OHC000003 (published requirements effective April 2008 through April 20, 2013).

### 1.2 Project Description

The following segments are proposed for construction/replacement:

**PIR 609** – This project involves the installation of approximately 7,298 feet of natural gas pipeline (up to 12 inches in diameter) to replace existing bare steel pipe with coated steel or PVC pipe to ensure the safety and reliability of pipeline operations. The PIR 609 pipeline is located within a 60-foot-wide easement within Perry, Stark County, Ohio. Two streams and one wetland will be crossed during the pipeline replacement activities. A total of approximately 3.4 acres of ground disturbance is anticipated. These pipeline segments are shown on a United States Geological Survey (USGS) 7½-Minute Series Topographic Map, Canton West quadrangle, excerpts included in **Appendix A-1**.

### 1.3 Description of Construction Activities and Areas Disturbed

Some pipeline replacement will involve "lift-and-lay" construction (replacement in place) while some projects require offsetting the new pipeline within the 60-foot-wide easement. Site location maps showing the pipeline segment(s) to be replaced are provided in **Appendix A-1**.

All pipeline replacements and construction activities will occur within the 60-foot-wide easement, with the exception of some additional temporary workspace located adjacent to the 60-foot-wide easement. The construction activities will require soil disturbance within the construction corridor to accommodate areas for the trench excavation, side-cast spoil, temporary storage of the new and removed pipe, and equipment/vehicular traffic. In addition, extra workspaces may be required outside but adjacent to this construction corridor in certain areas, to accommodate additional workspace needs associated with crossing features such as waterbodies, roads, and railroads. Similarly, extra workspaces may also be required for crossing certain features including agricultural areas (to allow space for topsoil segregation) and side slope areas (to allow grading for safety). Off-site areas have been designated for pipe, equipment, and materials storage. All work shall be performed within these authorized limits of disturbance.



Typically, the trench will be excavated to facilitate removal of the old pipeline and to allow 3 to 5 feet of cover over the new pipeline after installation and backfilling. The backfill material that will be returned to the trench will consist of the same material removed from the trench, to the extent practicable. Excess soil will be spread onsite but outside of and away from agricultural areas, wetlands, floodplains, streams, drainage ways, or other environmentally sensitive areas. Following pipeline installation, all disturbed areas will be returned to their original slope and contour, stabilized, and seeded.

All vegetated areas that undergo project-related soil disturbance will be seeded and re-vegetated to provide a permanent herbaceous cover to stabilize the soils, and temporary erosion and sediment controls will be maintained until disturbed areas are stabilized.

#### **1.4 New Impervious Areas and Runoff Coefficients**

New impervious surfaces will not be created. The majority of areas that will be affected consist of existing, vegetated pipeline ROW. All areas disturbed by the project will be restored to their preconstruction material, condition, and contours.

Accordingly, post-construction runoff will remain essentially the same as pre-construction runoff. Therefore, the calculation of runoff coefficients for pre-construction vs. post-construction conditions is not warranted or applicable to this linear project.

#### **1.5 Delineation of Drainage Watersheds**

Delineation of drainage watersheds traversed is not warranted or applicable for this project because the temporary stormwater control measures that will be used during construction are adaptable to any size watershed based on field conditions and professional judgment. No permanent stormwater management systems will be developed in conjunction with this project. No permanent filling or relocation of wetlands or waterbodies is planned, and no permanent bridges or culverts are planned. Furthermore, there will be no permanent changes in grade, ground surface material, or waterway drainage or wetland contours, as all areas disturbed by the project will be restored to their preconstruction condition.

#### **1.6 Site Conditions**

##### 1.6.1 Soils

The soils in the project area are depicted and described by name on maps in **Appendix A-2**.

Soils disturbed during trench excavation for the installation of the pipeline will be replaced within the trench once work activities are complete. Any excess spoil will be redistributed within the project area. All disturbed areas will then be re-vegetated and stabilized.

##### 1.6.2 Prior Land Uses

The existing land use in the project area consists of residential, recreational, agricultural, and pavement in the existing, pipeline ROW where vegetation is maintained in an herbaceous condition. These existing ROW areas are controlled by EOG via legal easements. Extra workspace areas are situated adjacent to the ROW and may consist of open, agricultural, forested, residential, or commercial/industrial areas. EOG negotiates with the landowners and compensates them as appropriate to gain permission to use these areas.

#### 1.6.3 Surface Waters and Wetlands in Project Area

A waterbody crossing table listing surface waters that will be traversed by the project is provided in **Appendix A-3**. Maps showing the locations of these surface waters are provided in **Appendix A-5**. Construction methods for crossing waterbodies are described in Section 2.2.1 of this plan. Typical drawings depicting the crossing methods are provided in **Appendix B**.

A wetland crossing table listing wetlands that will be traversed by the project (including distance and acreage affected) is provided in **Appendix A-4**. Maps showing the locations of and aerial extent of these wetlands are provided in **Appendix A-5**. Construction methods for crossing wetlands are described in Section 2.2.2 of this plan. Typical drawings depicting the crossing methods are provided in **Appendix B**.

As a contingency for waterbody and wetland crossings that are bored, an HDD Frac-Out Contingency Plan is provided in **Appendix A-6**.

#### 1.6.4 Discharges to Municipal Separate Storm Sewer Systems

During the course of this pipeline replacement program involving the replacement of approximately 4,000 miles of pipeline over the course of 20 to 25 years, it is possible that some segments of the project will be located within communities that have regulated municipal separate storm sewer systems (MS4s). However, no permanent storm water management systems will be developed as part of this pipeline replacement project; all areas will be re-vegetated and restored to their preconstruction grade. In addition, diligent and proper implementation of this SWPPP should result in the control and retention of construction-related soils and sediments onsite, without the need to use established municipal storm water systems. Therefore, no discharges to MS4 systems are planned or anticipated.

#### 1.6.5 Notes Addressing Site Mapping Requirements

The maps in Appendix A (including A-1, A-2, and A-5) and the narrative of this SWPPP include the required points of information as listed in Part III.G.1.n of the Ohio EPA General permit for Storm Water Discharges from Construction Activities. Specifically, the following information can be found in the following locations:

- i. Location/limits of earth disturbing activity – **Appendix A-1** and narrative in SWPPP **Section 1.3**.
- ii. Soil types – **Appendix A-2**.
- iii. Existing and proposed contours – **Appendix A-1** (planned contours are same as existing). Delineation of drainage watersheds – Not applicable, as explained in **Section 1.5**.
- iv. Surface water locations including springs, wetlands, streams, lakes, water wells on or within 200 feet of site, including boundary locations of wetlands and streams – **Appendix A-5**.
- v. Existing and planned locations of buildings, roads, parking facilities, utilities – **Appendix A-1 and Appendix A-5**.
- vi. Locations of erosion and sedimentation control practices, including the areas likely to require temporary stabilization during the course of site development – Text descriptions in **Section 3.0** and typical figures in **Appendices B and C**.

- vii. Sediment and stormwater management basins – Not applicable to project.
- viii. Permanent stormwater management practices – Not applicable, all disturbed soils will be restored to preconstruction contours and permanently stabilized with vegetation.
- ix. Areas for storage of waste / dumpsters – Not applicable to project. Waste generated during construction will be removed from construction site.
- x. Locations of construction entrances for access – Construction access will be from locations where the pipeline ROW crosses public roads and via approved existing private access roads. These are shown on the site location maps in **Appendix A-1**.
- xi. Locations of in-stream activities/stream crossings – Maps in **Appendix A-1** and **Appendix A-5**.

## 2.0 CONSTRUCTION ACTIVITIES

This section describes the environmental construction techniques that EOG and its contractors will use to perform the proposed pipeline replacement activities. Best Management Practices (BMPs) will be implemented throughout construction to minimize soil erosion and the transport of sediments from the construction area, and to protect surface waters and wetlands located in and adjacent to the project areas. Detail drawings of specific BMPs are included in Appendices B and C.

### 2.1 Sequence of Construction Activities

The following general construction sequence provides an overview of the construction process. Wherever practical, construction activities will occur simultaneously and some steps may not occur in the exact order in which they are listed below.

- 1) Survey and stake existing / proposed pipeline and limits of construction workspaces, as necessary.
- 2) Install entrance pads at all access points from paved roads, if necessary (see **Detail No. C-8**);
- 3) Flag/field mark wetland areas, as necessary;
- 4) Begin clearing and brushing of the ROW;
- 5) Install filter fence (**Detail No. C-1**), filter socks (**Detail No. C-2**), rock check dams (**Detail No. C-10**) and storm drain inlet protection (**Detail No. C-9**) in areas that are not anticipated to be disturbed by subsequent grading and installation of temporary equipment crossings;
- 6) Grade the workspace if necessary;
- 7) Install timber mats for access roads/equipment crossings at stream crossings (**Detail No. B-6 and B-7**);
- 8) Install timber mats for access roads/equipment stabilization at wetland crossings (**Detail No. B-8**);
- 9) Install all required filter fence (**Detail No. C-1**), filter socks (**Detail No. C-2**), rock check dams (**Detail No. C-10**) and storm drain inlet protection (**Detail No. C-9**);
- 10) Install temporary water bars/slope breakers (**Detail No. C-4**);
- 11) Excavate pipeline trench in upland areas;
- 12) Remove existing pipeline to be abandoned;

- 13) String new pipe along ROW;
- 14) Weld new pipe sections together;
- 15) Implement BMPs for trench dewatering (if required) (**Detail No. C-3**);
- 16) Lower pipeline into trench;
- 17) Install trench plugs (**Detail No. C-5**);
- 18) Backfill trench;
- 19) Restore grade to preconstruction contours and install permanent slope breakers where warranted (**Detail No. C-4**);
- 20) Install stream crossings (install sedimentation controls as necessary for retaining temporary spoil piles) and restore/stabilize stream banks (**Detail No. B-2, B-3, B-4, B-5 and C-6**);
- 21) Install wetland crossings (**Detail No. B-8 and B-9**);
- 22) Apply lime and fertilizer as needed. Seed and mulch to all disturbed upland areas, and only the specified wetland seed mix, if required, in wetlands;
- 23) Install erosion control blankets on steep slopes (**Detail No. C-7**);
- 24) Monitor adequacy of erosion control practices; and,
- 25) After permanent stabilization is achieved, remove temporary erosion and sediment controls.

Note: Steps 20 and 21 should be installed in the order that best suits site and scheduling conditions.

## **2.2 Timing of Certain Construction Activities**

The special timing considerations that apply to construction activities and implementation of BMPs are described below.

### **2.2.1 Temporary Stabilization/Sediment Control**

Sediment controls such as filter fabric fence (see **Detail No. C-1**) and filter socks (see **Detail No. C-2**) will be installed before initial ground disturbance, or immediately following ground disturbance if the nature of the disturbance (e.g., grading) would affect the stability of pre-installed sediment controls.

Disturbed areas must be stabilized (i.e., using vegetative or structural soil cover to control erosion, such as temporary or permanent seed & mulch) during construction as specified in Table 1.

**Table 1. Temporary Stabilization Timeframes**

<b>Area Requiring Temporary Stabilization</b>	<b>Timeframe to Apply Erosion Controls</b>
Disturbed areas within 50 ft of a Surface Water of the State and before final grade	Within 2 days of the most recent disturbance if the area will remain idle for > 21 days
For all construction areas, disturbed areas that will be idle for > 21 days but < 1 year, and not within 50 ft of a Surface Water of the State	Within 7 days of the most recent disturbance in the area
Disturbed areas that will be idle over the winter	Prior to onset of winter weather

### 2.2.2 Permanent Stabilization

Following completion of construction activities, disturbed areas must be permanently stabilized (i.e., seeded, mulched, and fertilized) as specified in Table 2.

**Table 2. Permanent Stabilization Timeframes**

Area Requiring Permanent Stabilization	Timeframe to Apply Erosion Controls
Any areas that will lie dormant for one year or more	Within seven days of the most recent disturbance
Any areas within 50 feet from a surface water of the State and at final grade	Within two days of reaching final grade
Any other areas at final grade	Within seven days of reaching final grade within that area

### 2.2.3 Timing of Waterbody Crossings

In-stream work will be scheduled to avoid high stream flow conditions, such as immediately following heavy periods of rain, to achieve a dry or low flow condition. The total length of excavated trench open at the stream crossing at any one time will not be greater than the total length of pipeline that can be placed in the trench and backfilled in one working day. Equipment associated with isolation crossing methods (i.e., sand bag dams, flume pipe, pumps, etc) should not be left in the stream overnight. Every effort will be made to cross streams 10 feet in (bottom) width or less, including the trench backfilling, in one working day. Stream banks and the areas 50 feet from the top of each stream bank will be stabilized within 72 hours from the beginning of the stream crossing.

## 3.0 EROSION AND SEDIMENTATION CONTROL

Project construction activities (e.g., mowing/clearing, grading, trench excavation, spoil storage, backfilling, and restoration) will expose bare soils and increase the potential for erosion and sedimentation. Through adherence to this SWPPP, EOG's objective is to minimize the potential for soil erosion and sedimentation during construction, and to effectively restore and stabilize the ROW and other disturbed areas when construction is completed.

In general, the measures in this plan are designed to minimize erosion and sedimentation by:

- limiting construction work to only the approved areas;
- minimizing the quantity and duration of soil exposure;
- protecting critical areas during construction by reducing the velocity of and redirecting runoff;
- installing and maintaining erosion and sediment control measures in appropriate locations;
- conducting in-stream activities during low-flow periods to the extent practicable;
- limiting the duration of in-stream activities;
- using specialized construction and restoration techniques for wetland and waterbody crossings;
- implementing spill prevention and control measures;
- establishing vegetation as soon as possible following final grading; and,
- inspecting the ROW and other disturbed areas and maintaining erosion and sediment controls as necessary until final stabilization is achieved.



### **3.1 Inspection and Maintenance**

A qualified environmental inspector will inspect all BMPs at least once every 7 days, *and* within 24 hours of a 0.5-inch or greater rainfall within a 24-hour period. The inspector will evaluate whether measures to prevent erosion are adequate and properly implemented or whether additional control measures are required. The inspector will identify and document specific areas that may be contributing to storm water discharges associated with construction activities; and recommend maintenance, supplementation, or replacement of BMPs. All temporary and permanent control practices will be maintained and repaired as needed. A sample inspection report form is shown in **Detail C-11**.

Specifically, disturbed areas and areas used for storage of materials that are exposed to precipitation will be inspected for evidence of, or the potential for, pollutants to enter a surface waterbody, wetland, or existing drainage system. Erosion and sediment control measures will be inspected to determine their effectiveness in retaining soils and sediments. Locations where vehicles enter or exit the site will be inspected to ensure soils are not tracked off-site onto public roadways. Problematic erosion areas will be corrected by EOG in a timely manner, or within 3 days in accordance with the NPDES General Permit.

The erosion and sediment control measures will continue to be monitored and maintained until all disturbed areas are stabilized.

The site log book and inspection report forms shall be maintained at the construction site during active construction and be made available to permitting authorities upon request. Prior to filing of the Notice of Termination or the end of permit term (such as during the first growing season following project completion), a project environmental inspector or other qualified professional will perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed.

### **3.2 Temporary Sediment Barriers**

Temporary sediment barriers, such as filter fabric fences, filter socks, and waterbars, shall be placed to intercept runoff from the construction site to prevent silt from entering watercourses, municipal storm sewers, road surfaces, off-ROW areas, and other sensitive areas. This section addresses temporary sediment barriers for general ROW areas. The use of sediment barriers at waterbody and wetland crossings is addressed in **Sections 3.3 and 3.4**.

General notes on installation and maintenance of temporary sediment barriers in specific areas are provided in the following subsections, based on the features/areas involved. These areas include: general ROW areas, hillsides, soil stockpile areas, road crossings, and trench dewatering areas. Detail drawings are provided in **Appendices B and C**.

### 3.2.1 General Right-of-Way Areas

A perimeter sediment control device (i.e. filter fabric fence or filter sock) will be placed downgradient of pipeline construction activities and staging areas, where effective and required to protect adjacent undisturbed wetlands and other water resources, road surfaces, and residential properties from sediment transported by sheet flow runoff. Installation will be in accordance with the details depicted in **Detail C-1** “Filter Fabric Fence Detail” and **Detail C-2** “Filter Sock Detail”. Sediment will be removed when accumulations reach 1/2 the above ground height of the fence. Perimeter sediment control devices that have been undermined or topped should be immediately repaired.

### 3.2.2 Hillside Pipeline Construction

For pipeline construction parallel to the gradient of a hill (uphill/downhill) areas, where the slope is greater than 1%, EOG will consider installing water bars or other suitable sediment barrier across the ROW if runoff has the potential to adversely affect a waterbody or adjacent property (see **Detail C-4**). Recommended spacing for water bars is listed in **Table 3**. They should be installed to effectively divert downhill runoff to well vegetated areas adjacent to the ROW, thereby preventing the occurrence of concentrated and erosive flows directly down the disturbed hillside area.

**Table 3. Recommended Spacing for Sediment Barriers/Water Bars On Hills**

Percent Slope	Spacing (Feet)
1	400
2	250
5	135
10	80
15	60
20	45

For pipeline construction perpendicular to the gradient of a hill (sidehill areas), where the slope is greater than 1%, a perimeter sediment control device shall be installed to protect adjacent water resources, road surfaces, and residential properties from sediment transported by sheet flow runoff. Both ends of the barrier will be extended at least 8 feet up slope at 45 degrees to the main barrier alignment.

### 3.2.3 Soil Stockpiles

A perimeter sediment control device will be installed adjacent to spoil stockpiles to prevent sedimentation into streams and other surface waters. Refer to **Details C-1** and **C-2** for installation details.

Stockpiles will be placed at existing level grade with both ends of the barrier extending at least 8 feet up slope at 45 degrees to the main barrier alignment. Sediment will be removed when accumulations reach 1/3 the aboveground height of the barrier.

#### 3.2.4 Road Crossings

The types and locations of control measures needed at roadway crossings will depend upon the slope of the land and the type of roadway drainage systems present at that location. Upslope runoff will be diverted around the work area by use of diversion channel or waterbars. For this project, it is not anticipated upslope diversion will be necessary since the terrain at the road crossings is flat.

Sediment barriers will be located down slope of trench or boring pit storage piles. Such storage piles will not be located in any roadway swale or ditch. Runoff from existing roadway culverts, storm sewers, swales, and ditches will be safely conveyed over any open trench. When entering any construction area from paved roads, all sediment tracked onto the road will be cleaned as soon as practical. If excessive tracking occurs or equipment will access an area for extended periods (i.e. pipeyards or staging areas), a stabilized construction entrance constructed of rock, timber mats, or other suitable material will be installed. Refer to **Detail C-8** for an example of a rock construction entrance.

#### 3.2.5 Trench Dewatering

Excessive water that accumulates in the trench will be pumped from the trench and filtered prior to discharging onto the ground along the ROW. Filter bags, designed to trap particles larger than 150 microns, will be used to remove sediment from the water. The filter bags will be located on a relatively flat (< 5% slope), well-vegetated area. If the dewatering location is within 50 feet of a stream or wetland, a barrier made of straw bales and geotextile, filter socks, or silt fence should be considered to pool the water and allow sediment to settle. The pump discharge hose will be inserted into the bags in the manner specified by the manufacturer and securely clamped. When the bag is filled to  $\frac{1}{2}$  its total capacity, it should be replaced with a new bag and properly disposed. If a well-vegetated area is not available, a geotextile underlayment will be placed under the area discharge area. Refer to **Detail C-3** for filter bag placement and use.

#### 3.2.6 Storm Drain Inlet Protection

Storm drain inlet protection devices will be installed to remove sediment from storm water before it enters storm sewers or downstream areas. Inlet protection devices are sediment barriers that may be constructed of geotextile fabrics and other materials that are supported around or across the storm drain inlets. All storm drain inlet protection requires frequent maintenance and cleaning to maintain sufficient flow rates and prevent clogging. Geotextile inlet protection devices are commonly used for storm drain inlet protection and the installation details are shown in **Detail C-9**. Sediment should be removed from the Geotextile inlet protection when accumulations reach  $\frac{1}{2}$  the height of the trap. Sediment will be removed and placed in a location where it is stable and not subject to erosion and should never be washed into an inlet. Filter socks are also acceptable sediment trapping devices. Sediment should be removed from the filter socks when accumulations reach  $\frac{1}{3}$  the height of the trap. Filter socks will be installed per manufacturer's recommendations.

#### 3.2.7 Rock Check Dam

This practice is limited to use in small open channels where it is necessary to slow the velocity of flow in order to prevent erosion and allow for sedimentation. While this practice often traps some sediment, its trapping efficiency is extremely poor, thus, it should not be used as a primary sediment trapping device. Applications include temporary swales, which because of their short length of service, are not practical to receive a non-erosive lining or swales which need protection during the establishment of grass linings.



Check dams can be small rock dams constructed in ditches, swales, grassed waterways or diversions. Installation details are shown in **Detail C-10**. Filter socks may be used as check dams by staking the socks perpendicular to the flow of the channel. Refer to **Detail C-2** for installation. If a channel is expected to have high flow, filter fabric may be placed in front of the check dam. Sediment shall be removed from behind the check dam once it accumulates to one-half the original height of the check dam. Removal of the check dam can be performed by hand or mechanical means. Stone and sediment should be removed and the area graded and seeded.

### 3.2.8 Filter Socks

Filter socks may be used as perimeter sediment control devices and function by capturing sediment by ponding and filtering water through the device during rain events. Installation details are shown in **Detail C-2**. They may be a preferred alternative where equipment may drive near or over sediment barriers, as they are not as prone to complete failure as silt fence. Driving over filter socks is not recommended; however, if this occurs, the filter sock should be immediately inspected for damage. If needed, the sock should be repaired or replaced. The use of filter socks is applicable to slopes up to 2:1 (H:V), around inlets, and in other disturbed areas of construction sites requiring sediment control. Typically, filter socks can handle the same water flow or slightly more than silt fence. For most applications, standard silt fence is replaced with 12" diameter filter socks. When construction is completed on site, the filter socks may be cut open and the compost dispersed across upland ROW. The mesh netting material will be disposed of in a normal trash container or removed by the contractor.

## 3.3 **Permanent Sediment Barriers**

### 3.3.1 Water Bars

The installation of permanent sediment barriers, such as waterbars, will be considered at each slope greater than 1% grade, if in the judgment of EOG, potential runoff as the result of ROW clearing will adversely affect a water-body or adjacent property. Details and spacing requirements for waterbar installation are shown in **Detail C-4**.

### 3.3.2 Trench Plugs

Trench Plugs are required at each side of streams and wetlands crossings completed by trenching, regardless of trench slope. These requirements supplement EOG's general construction practice for the placement of plugs in trenches on steep slopes. Trench plugs will also be installed if it is determined that flooding at the low point elevation of a pipeline will adversely affect the adjacent property. Installation will be in accordance with the details depicted in **Detail C-5** and **Table 4** below.

**Table 4. Required Spacing and Materials for Trench Plugs**

<b>Trench Slope (%)</b>	<b>Spacing (FT)</b>	<b>Plug Material</b>
< 5	*	*
5 – 15	500	Sand or Earth** Filled Sacks
15 – 25	300	Sand or Earth** Filled Sacks
25 – 35	200	Sand or Earth** Filled Sacks
35 – 100	100	Sand or Earth** Filled Sacks
> 100	50	Cement Filled Bags (Wetted) or Mortared Stone

- \* Trench Plugs are required at each side of all stream, river or water-body crossings completed by trenching, regardless of trench slope. Otherwise not required.
- \*\* Topsoil may not be used to fill sacks.

### 3.4 Waterbody Crossings

Proposed stream-crossing techniques have been selected based on permitting, the technical feasibility of the method at each site, the sensitivity of the fisheries resource, and the ability of the technique to minimize the impact on local fish habitat and the potential for sediment release to downstream habitats. Contingency methods will be used if the preferred technique is assessed to be not practical or too high a risk at the time of construction as determined by stream flows and other on-site conditions.

Typically, minor streams,  $\leq 10$ -feet wide at normal flow depth, will be crossed using “open cut” method. However, crossings of minor streams that are designated high quality fisheries or exceptional value streams shall use “isolation” methods that include using the flume pipe, the dam and pump, or the in-stream diversion method. Intermediate streams,  $> 10$ -feet and  $\leq 100$ -feet wide, and major streams,  $> 100$ -feet in width, will be crossed using the wet trench method or by horizontal directional drilling.

Hazardous materials, chemicals, fuels, and lubricating oils will not be stored, and concrete coating activities will not be conducted, within 100 feet of any waterbody, wetland, or within any designated municipal watershed area (except at industrial locations designated for these purposes by an appropriate governmental authority). Refueling of construction equipment will be conducted at least 100 feet away from waterbodies and wetlands.

Refer to the appropriate sections below for a description of the crossing methods, and to **Details B-2, B-3, B-4 and B-5** for depictions of the waterbody crossing methods.

#### 3.4.1 Use of Sediment Barriers for Waterbody Crossings

Prior to any construction activities within the stream channel, perimeter sediment control devices (i.e. filter fabric fence or filter socks) will be installed on both sides of the stream banks (see **Details C-1 and C-2**). The general locations where sediment barriers will be installed at waterbody crossings are shown on **Details B-2, B-3, and B-4** (for each applicable waterbody crossing technique).

Spoil piles from the tie-in and trench excavations will be placed behind the barriers to protect the stream from sediment buildup. Assembly areas, temporary equipment and non-hazardous material storage areas will be located a minimum of 50 feet back from the top of the stream bank.

Perimeter sediment control devices shall be installed parallel to the stream bank with both ends extending at least 8 feet upslope at 45 degrees to the main barrier alignment. Sediment shall be removed when accumulations reach  $\frac{1}{2}$  the above ground height of the device. Any section of the sediment barrier that has been undermined, topped or damaged will be immediately repaired. The barriers shall remain in place until final stabilization of the area.

#### 3.4.2 Open Cut Method

Open cutting is the standard method for pipe installation in dry watercourses well removed from fish bearing reaches. The pipeline trench is excavated in the bed and banks of the flowing or dry watercourse channel and is backfilled after the pipe is lowered in. The bed and banks of the channel are re-contoured to their original condition and stabilized with seed and mulch. Erosion control matting and/or rip-rap may also be used to further stabilize the watercourse.

After installation of the perimeter sediment control device, excavation activities may commence. The trench will be excavated to the minimum width necessary to accommodate installation of the pipe. The trench will be monitored to ensure proper depth and width. In most instances, streambed substrate should be separated from the subsoil and backfilled last to minimize impact. Excavated material that will subsequently be used as backfill shall be immediately removed from the stream crossing and placed behind the sediment barriers on the stream bank. The pipeline will then be lowered into the trench and backfilled. Trench plugs will be installed at the top of the stream bank as shown in Detail C-5. The stream bank will then be stabilized with seed and mulch. Erosion control matting and/or rip-rap may also be applied to further stabilize the stream banks.

#### 3.4.3 Isolation Method

The isolation method is one in which a trench is excavated in the bed and banks of a water body while the surface water in the water body flows uninterrupted and isolated from the excavation area. Isolation techniques include, but are not limited to, fluming, pumped by-pass, and in-channel diversion.

After placement of the perimeter sediment control device, installation of the dam and/or flume will commence. Refer to **Detail B-2** for pumped by-pass installation, **Detail B-3** for flume installation, and **Detail B-4** for in-stream channel diversion.

The structures for stream isolation methods will be installed and functioning prior to any trench excavation within the stream channel. The sand-filled bags will be stacked at least 12 inches above the level of the stream. The trench will be excavated to the minimum width necessary width to accommodate installation of the pipe. The trench will be monitored to ensure proper depth and width. Excavated material that will subsequently be used as backfill will be immediately removed from the stream crossing and placed behind the sediment barriers on the stream bank. The pipeline will then be lowered into the ditch and backfilled. (Pipe will be welded and bent prior to placement in the trench.) Trench plugs will be installed at the top of the streambank as shown in **Detail C-5**. The streambanks will be restored to original contour and stabilized with either riprap or erosion control matting (see **Detail C-6**). The sand bag dams will be removed following complete restoration of the stream channel and banks.

#### 3.4.4 Horizontal Directional Drill Method

Horizontal directional drilling is the preferred crossing method for large river systems with significant fisheries values. However, the geometry and geology of the terrain needs to be appropriate to have a reasonable assurance of success. Due to the topography (steep slopes) and constraints to allow boring equipment to be situated in the ROW, this method may not be practical for all stream crossings.

After placement of filter fabric fence, the launching and receiving holes on both sides of the stream will be excavated. These excavations will be at least 10 feet or more from the stream bank (see Detail B-5). As a contingency for waterbody and wetland crossings, an HDD Frac-Out Contingency Plan is provided in Appendix A-6.

### **3.5 Wetland Crossings**

Prior to construction, wetland areas will be identified and flagged within the ROW. Extra work and staging areas will be located at least 50 feet from the edge of the wetland, where possible. The width of the disturbance will be limited to the minimum necessary for the actual crossing. Movement of vehicles and equipment across the wetland will be minimized. Where equipment and vehicles must traverse saturated wetlands, the use of pads, mats, or other suitable methods will be used to minimize disturbance.

During trench excavation, the top 6 to 12 inches of topsoil (with the vegetative root mass) will be carefully removed from over the trenchline and stockpiled separately from the trench subsoil (unless standing water or saturated soils make this impracticable to effectively segregate). Topsoil piles should be differentiated from subsoil piles with flagging, ribbons or other effective devices. The pipeline will be installed and trench plugs will be placed as identified in this plan, to prevent the trench from draining the wetland or changing its hydrology. The trench will be backfilled with subsoil first and topsoil on top, and the preconstruction contours will be restored. Excess material, if any, will be removed from the wetland upon completion. Unless required by local agencies, seeding, mulching, and fertilization will not be done in wetlands. Restoration of the previously salvaged topsoil will allow the wetland vegetation indigenous to the wetland to revegetate naturally. Disturbed slopes adjacent to the wetland will be stabilized immediately upon pipeline installation.

Refer to the appropriate sections below for a description of the crossing methods and to **Details B-8 and B-9** for depictions of the wetland crossing methods.

### **3.6 Post Construction Erosion Control Practices**

Permanent or temporary soil stabilization shall be applied to disturbed areas within seven (7) days after final grade is reached on any portion of the pipeline. When seasonal conditions prohibit the application of temporary or permanent seeding, dormant seeding (applying seed at 1.5 times permanent seeding rate) or non-vegetative soil stabilization practices such as mulching and matting shall be used.

#### **3.6.1 Seeding**

Once backfilling operations are completed, the tie-in excavations will be returned to their original slope and contour. Wetlands will not be seeded, but will be allowed to revegetate naturally from the seed stock and roots retained in the salvaged topsoil. All disturbed areas will be seeded with plant species that have a high germination capacity. Seeding will be performed with broadcast seeding equipment followed by a mulch covering. The following application rates will be used:

### Temporary Seeding

Seed	2 pounds per 1,000 square feet (85 pounds per acre) with a winter (annual) rye or wheat dominant mix
Mulch	2-3 bales per 1,000 square feet minimum

### Permanent Seeding

Seed	3-5 pounds per 1,000 square feet (130 – 215 pounds per acre) with a Kentucky blue grass and fescue mixture incorporating a perennial rye or similar mix.
Mulch	2-3 bales per 1,000 square feet minimum

In critical areas (e.g. adjacent to or within 50 feet of streams, ponds, or wetlands) consideration will be given to providing a protective blanket for seeded areas. Mulch with netting or protective blankets will be considered for seeded areas on slopes steeper than 3:1. Refer to **Detail C-7** for proper installation of erosion control matting.

#### 3.6.2 Fertilizing

Lime and fertilizer will be applied at recommended amounts, according to the following rates:

Lime	100 pounds per 1000 square feet (2 tons per acre) Agricultural Grade Limestone
Fertilizer	25 pounds per 1000 square feet (1000 pounds per acre) of a 10-10-10 mixture

#### 3.6.3 Post-Construction Monitoring

At the end of construction/restoration activities, a project environmental inspector or other qualified professional will perform a final site erosion control inspection to identify any remaining punch-list items to be completed to ensure long-term soil stability. The project area will be monitored on a regular basis and any needed repairs made during the post-construction period. Temporary erosion and sediment control measures will not be removed until the disturbed area is stabilized. Remedial soil conditioning, fertilization, reseeding and mulching will be performed as needed.

Prior to filing of the Notice of Termination (within 45 days of confirming that final stabilization has been achieved), the qualified professional shall certify that the site has undergone final stabilization using either vegetative or structural stabilization methods and that all temporary sediment and erosion controls (such as silt fence) not needed for long-term erosion control have been removed.

### 3.7 **Hydrostatic Discharge**

After installation, some pipelines require testing using hydrostatic pressure to ensure integrity of the welds and seams. The subsequent test water is typically discharged on-site or into a sanitary sewer. If discharge into surface waters of the state is expected, EOG will submit a Notice of Intent (NOI) to obtain coverage under General Permit Number OHH000001 from the Ohio EPA. State-designated exceptional value waters, waterbodies which provide habitat for threatened or endangered species, or waterbodies designated as public water supplies will not be used as receiving waters unless



appropriate Federal, state and/or local permitting agencies have granted written permission. Discharges into sanitary sewers require approval from the applicable sewer district. Environmental personnel must be notified prior to the hydrostatic discharge release. Sampling required by the OEPA permit or sewer district will be performed by qualified personnel, typically the on-site environmental inspector.

BMPs outlined in the EOG Standard Erosion and Sediment Control Plan and OEPA permit must be used during the hydrostatic discharge. Examples of accepted BMPs include filter bags, filter socks, and dewatering pits made from straw bales lined with geotextile. Every effort will be made to discharge onto a large, well vegetated, non-sloping, upland area. The water will be regulated at the discharge point to prevent excessive flow and scouring. Initially, the release rate is not to exceed 350 gallons per minute; if the EI or other qualified environmental personnel deem that BMPs are functioning well enough to increase the velocity, flow can be raised to a maximum of 500 gallons per minute. Test water is typically obtained from a municipal water source and no chemicals or additives are to be used in the test water. If the discharge conditions require releasing water near a surface water of the state or if high levels of iron or total suspended solids are anticipated, BMPs such as slowing the velocity of the release and/or using treated filter socks to remove suspended solids and metals may be considered to stay in compliance with the NOI.

#### **4.0 ADDITIONAL CONSTRUCTION SITE POLLUTION CONTROL**

Sediment is the primary pollutant of concern resulting from construction activities. However, other potential sources of pollution are also present during construction, such as petrochemicals, construction materials and wastes, and leftover hazardous and toxic substances. These materials require proper management and handling. Keeping these substances from polluting runoff can be accomplished to a large extent through good housekeeping and following the manufacturer's recommendations for their use and disposal. The following guidance will help to prevent additional construction site pollutants from leaving the site.

##### **4.1 Waste Disposal Containers**

Waste disposal containers shall be provided for the proper collection of all waste materials including construction debris, sanitary garbage, petroleum products, and any hazardous materials to be used on-site. Containers shall be covered and not leaking. All waste material shall be disposed of at facilities approved for that material.

##### **4.2 Construction Related Waste Materials Disposal**

No construction related waste materials are to be buried onsite. By exception, clean fill (bricks, hardened concrete, soil) may be utilized in a way that does not encroach upon natural wetlands, streams, or their floodplains. Filling of stream side areas is "fill" and will not be done so no contamination of waters of the state will occur.

##### **4.3 Handling Construction Chemicals**

Mixing, pumping, transferring, or other handling of construction chemicals such as fertilizer, lime, asphalt, concrete drying compounds, and all other potentially hazardous materials shall be performed in an area away from any water source, ditch, or storm drain.

#### **4.4 Construction and Demolition Debris (CD&D) Disposal**

CD&D waste must be disposed of in accordance with ORC 3714 at an approved Ohio EPA CD&D Landfill. CD&D waste is defined as all materials attached to a structure which is being demolished.

#### **4.5 Equipment Fueling and Maintenance**

Equipment fueling and maintenance shall be performed away from watercourses, ditches, or storm drain inlets, in an area designated for that purpose. The designated area shall be equipped for recycling oil and catching spills.

#### **4.6 Concrete Wash Water / Wash Outs**

Concrete wash water shall not be allowed to flow to streams, ditches, storm drain inlets, or any other water conveyance. A sump or pit with no potential for discharge shall be constructed if needed to contain concrete wash water. Field tile or other subsurface drainage structure within 10 ft. of the sump shall be cut and plugged.

#### **4.7 Contaminated Soils**

If substances such as oil, diesel fuel, hydraulic fluid, antifreeze, etc., are spilled, leaked, or released onto the soil, the soil should be dug up and disposed of at a licensed sanitary landfill, or other approved petroleum contaminated soil remediation facility (not a construction /demolition debris landfill). Storm water runoff associated with contaminated soils is not authorized under the Ohio EPA General Storm Water Permit associated with Construction Activities.

In the event that there are areas of contaminated soils encountered during construction, additional measures above and beyond the conditions of the Ohio EPA's General Storm Water Permit will be required. The soils shall be dug up and disposed of at a licensed facility (not a construction/demolition debris landfill). Depending on the extent of contamination, additional treatment and/or collection and disposal may be required. All storm water discharged associated with the contaminated soils must be authorized under an alternate NPDES permit.

#### **4.8 Spill Reporting Requirements**

Spills on pavement shall be absorbed with sawdust, kitty litter, or other absorbent materials and disposed of with the trash at a licensed sanitary landfill and disposed of with the trash at a licensed sanitary landfill. Hazardous or industrial wastes such as most solvents, gasoline, oil-based paints, and cement curing compounds require special handling. Spills shall be reported to Ohio EPA (1-800-282-9378). Spills of 25 gallons or more of petroleum products shall be reported to Ohio EPA (1-800-282-9378), the local fire department, and the Local Emergency Planning Committee within 30 min. of discovery of the release. All spills which result in contact with waters of the state must be reported to Ohio EPA's Hotline.

#### **4.9 Open Burning**

Open burning is not allowed within restricted areas such as within municipal corporation limits. No materials containing rubber, grease, asphalt, or petroleum products (such as tires, autoparts, plastic, or plastic coated wire) may be burned (see OAC 3745-19) at any location.

#### **4.10 Dust Control**

Dust control is required to prevent nuisance conditions. Dust controls must be used in accordance with the manufacturer's specifications and not be applied in a manner, which would result in a discharge to waters of the state. Isolation distances from bridges, catch basins, and other drainageways must be observed. Application (excluding water) may not occur when precipitation is imminent as noted in the short term forecast. Used oil may not be used as dust control.

#### **4.11 Other Air Permitting Requirements**

All contractors and subcontractors must be made aware that certain activities associated with construction will require air permits. Activities including but not limited to mobile concrete batch plants, mobile asphalt plants, concrete crushers, large generators, etc., will require Ohio EPA Air Permits for installation and operation.

#### **4.12 Process Waste Water / Leachate Management**

Ohio EPA Construction General Permit only allows discharge of storm water and does not include other waste streams/discharges such as vehicle and or equipment washing, on-site leachate concrete washouts, which are all considered process wastewaters. All process wastewaters must be collected and properly disposed at an approved disposal facility. In the event leachate or septage is discharged, it must be isolated for collection and proper disposal and corrective actions taken to eliminate the source of waste water. Sanitary waste collection facilities such as Port-a-Jons will be provided along the project route.



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Summary: Letter of Notification for Dominion East Ohio's Plr-609 (L#2472) Part 3  
electronically filed by Teresa Orahod on behalf of Dominion East Ohio Gas