Pipeline 101
Permitting and Permit Review
Section 401 CWA
Natural Gas Pipelines

Association of State Wetland Managers

7 November 2018
Natural Gas Production August 2018
70.53 Bcf/d

- Appalachia: 28.87 Bcf/d
- Permian: 10.89 Bcf/d
- Anadarko: 7.12 Bcf/d
- Niobrara: 5.15 Bcf/d
- Haynesville: 9.14 Bcf/d
- Eagle Ford: 6.93 Bcf/d
- Bakken: 2.43 Bcf/d

Source: Energy Information Administration
Pipelines

Gathering
Transmission
Distribution
Upstream
Midstream
Downstream
Transmission
Distribution
What is a Regulated Pipeline?
USACE
NWP 12 Utility Line Activities
Corps NWP 12 Specific Regional Conditions:

d. Anti-seep collars or clay plugs must be utilized for trenching activities conducted in a perennial or intermittent stream or a wetland.
NWP 12 West Virginia 401 Water Quality Certification Special
Conditions:

A. Individual State Water Quality Certification is required for:
i. Pipelines equal to or greater than 36 inches in diameter;
ii. Pipelines crossing a Section 10 river (unless the bore is greater than 100 feet below the stream bed on the Ohio River mainstem, or greater than 50 feet below the stream bed on all other Section 10 waters);
36 inch Diameter
Section 10 Streams in West Virginia

1. Ohio River............Total Length in State
2. Kanawha River...........Total Length
3. New River............Total Length in State
4. Big Sandy River..........Total Length
5. Tug Fork......................58 Miles
6. Elk River....................139 Miles
7. Gauley River...............75 Miles
8. Guyandotte River.........122 Miles
9. Little Kanawha River.....130.75 Miles
10. Greenbrier River.......150.50 Miles
11. Coal River...............57.90 Miles
12. Monongahela River......Total Length in State
13. Tygart River...............7 Miles
14. West Fork...................74 Miles
15. Shenandoah River........Total Length in State
16. Potomac River..........Total Length in State
West Virginia 401 Special Conditions:

J. Prior written notification to West Virginia Department of Environmental Protection, Division of Water and Waste Management (WV DEP DWWM) is required when this permit is being used for vented low water crossings.

L. No structure authorized by this permit shall impede or prevent fish movement upstream or downstream.
H. Horizontal directional drilling for underwater crossings requires an Inadvertent Return Contingency Plan certified by a West Virginia Professional Engineer to be kept on site and made available upon request.
HDD Contingency

Failed bore

Inadvertent return(s)
Corps NWP 12 Specific Regional Conditions:

b. For all horizontal directional drilling activities requiring authorization from the Corps pursuant to section 10 of the Rivers and Harbors Act of 1899, the PCN must include a drilling mud clean-up plan as a contingency for an inadvertent return of drilling mud to the surface.

e. Should an inadvertent return of drilling mud occur during a directional drilling activity, and the clean-up of drilling muds necessitates the use of NWP 12 the permittee must report to the Corps the location and circumstances of the clean-up after the work has been conducted unless a PCN is otherwise required.
Inadvertent Return
West Virginia 401 Special Conditions:

C. Individual stream crossings must be completed in a continuous, progressive manner and within 72 hours during seasonal normal or below normal stream flow conditions. Crossings on the Ohio River, Kanawha River, New River, Monongahela River and Little Kanawha River, below the confluence with Hughes River, are exempt from the 72 hour requirements. All stream activities shall be completed as rapidly as possible.
Wet Trench
Cofferdam

Photo: Detroit tarp.com
TITLE 47
LEGISLATIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER RESOURCES
SERIES 5A
RULES FOR INDIVIDUAL STATE CERTIFICATION OF ACTIVITIES REQUIRING A FEDERAL PERMIT

4.1. Information contained within environmental processes and reviews such as environmental assessments, environmental impact statements and mining and reclamation plans, may be used to meet part or all of the requirements of this Rule.

4.1. b. The Secretary shall, within one year after an application is deemed complete, issue, waive or deny the request for a water quality certification.
Why?

Certify

Waive

Deny
Permitting

USACE
WVDEP
USFWS
WVDNR
FERC
Water Withdrawal
Jurisdiction

All Waters of the US are Waters of the State not all Waters of the State are Waters of the US
USFWS
Endangered Species
WVDNR

401 Review
ROE Stream Crossing
Wildlife Management Areas
Mussel Surveys
Cooperating Agency
State Wildlife Action Plan

Species of Greatest Conservation Need
Training
Experience
Volume
West Virginia 2015-2018

- Brooke County Access
- Eastern Panhandle Expansion
- Mountain Valley Pipeline
- Equitrans Expansion
- WB Xpress
- Mountaineer Xpress
- Ohio Valley Connector
- Utica Access
- Rover
- WB2VA Integrity
- Leach Xpress
- Atlantic Coast Pipeline
- Supply Header Project
TERMINOLOGY

**DRIP**: A vessel attached beneath a gas pipeline in which water and liquids accumulate due to gravity.

**LOOPING**: Two or more pipelines running parallel to each other to increase capacity.

**MUD**: Drilling fluid circulated through the drill pipe and back to the surface during rotary drilling.

**PIG**: A scraping instrument for cleaning a pipeline.

**SMART PIG**: Inspection devices that record information about the internal conditions of a pipeline.
Acronyms and Abbreviations

ATWS additional temporary workspace

AMM Avoidance and Minimization Measures

LOD Limit of Disturbance

MLV mainline valve

TOYR time of year restriction

TWS temporary workspace
USACE

Single and complete project
Permanent Impact
Temporary Impact
Informal Consultation
Formal Consultation
Jeopardy
Formal Conference
BA biological assessment
BO Biological Opinion
LAA likely to be adversely affected
FERC

Ex-parte
Cooperating agency
Intervenor
Open House
Participating agency
Resource Reports
Scoping meetings
EO 13807

“...Federal environmental review and permitting...coordinated, predictable and transparent”
Not “One” Recipe
Use Special Conditions
(ingredients)
401 Desk top review
Recognize Responsibilities
Utilize Available Information
Train Administration
Understand the Impact
Avoid the Failure of Process
Failed Process

ACP - USFWS

MVP - USACE

MVP – BLM/USFS
Protect the Resource