



Bureau of Waterways Engineering and Wetlands

# Guidance for Developing a Chapter 105 Alternatives Analysis



**Water Resources Advisory Committee**

**July 20, 2023**

Josh Shapiro, Governor

Richard Negrin, Secretary

# Background

- The **alternatives analysis** is a key part of many Chapter 105 permit reviews.
- Detailed guidance has not previously been developed until now (good for permit reviewers and permittees).
- Analysis must evaluate alternatives to avoid and minimize impacts.
- Alternatives analyses requirements are found throughout the Chapter 105 regulations.
- DEP believes the final guidance will be a significant step forward in providing clear guidance to applicants.



# Background

- Stakeholder workgroup (January – July 2019) furthered earlier efforts to develop this guidance
- After DEP review and edits, published draft guidance September 4, 2021
- 30-day comment period
- 93 comments from 6 public commentators received

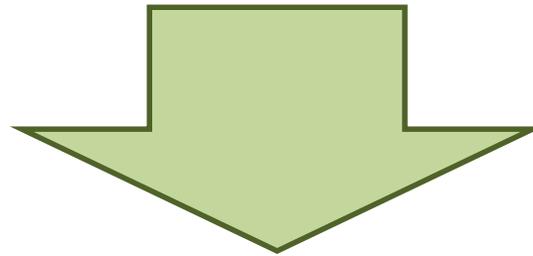
# Changes from Draft to Final

- DEP has reviewed and considered all public comments
- Evaluated sections and performed some reorganizing to enhance readability
- Provided both industry-specific and general guidance

# Title Change

*Title published as draft*

## **Chapter 105 Alternatives Analysis Technical Guidance Document**



*Title of the final guidance*

## **Guidance for Developing a Chapter 105 Alternatives Analysis**

## Change Highlight – Is an AA required for all permits?

- Multiple comments received on implication that General Permits require alternatives analysis
- Revised multiple sections to clarify and correct language
- Not required for standalone General Permit registrations\*
- Not Required for Waivers that don't require EA approval\*

\*unless part of a larger project requiring alternatives analysis

## Change Highlight – More specific detail

- Multiple comments received requesting more specific details on what to include in an analysis
- Many wanted guidance for very specific scenarios
- Many comments addressed to provide more detail and clearer expectations
- High variability in environmental and project factors restricts level of detail guidance can provide

## Change Highlight – Cost in alternatives analyses

- Multiple comments received on using cost figures
- Cost discussions consolidated to a new section
- Clarified cost is not a common element of all alternatives analyses
- Often, cost is not needed to document no practicable alternative
- Clearer guidance on what is expected when it is included in analysis

## Change Highlight – Use of eminent domain clarified

- Exercise of Eminent Domain clarified
- DEP does not review or evaluate appropriateness to exercise the right of Eminent Domain
- Permits do not give property rights

## Change Highlight – Pollution abatement and restoration

- Broke into two sections
- Added additional detail on what is expected and should be provided
- Pollution abatement may have impacts, should be minimized with practicable alternatives
- Restoration and Enhancement seek to improve resources; therefore, an alternatives analysis for these types of projects should summarize the Environmental Assessment

## Change Highlight – Practicable alternative

- Multiple comments received definition and use of this term
- Definition removed from TGD
- Revised to clarify why the concept of practicable alternatives is applicable to all alternatives analyses

## Change Highlight – FERC and 401

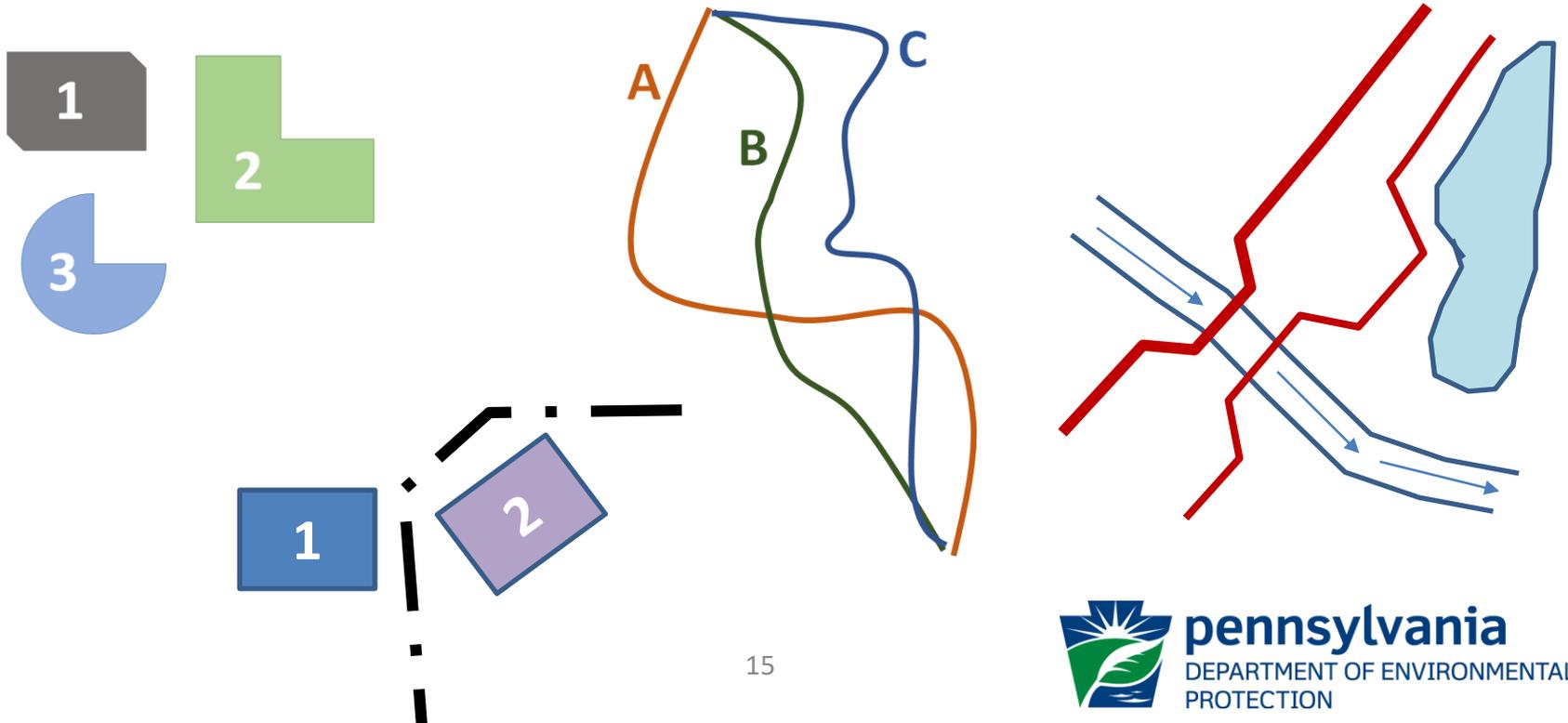
- Multiple comments received on FERC and Water Quality Certifications under Section 401 of the federal Clean Water Act
- Consolidated to new 401 Water Quality Certification section
- Added clarification on 401 Certifications and Chapter 105 alternatives analysis interactions

## Change Highlight – Trenchless technology

- Removed specific reference to the draft trenchless technology TGD
- Added clarification to the consideration of trenchless technology use
- Added clarification that there can be risks with trenchless technologies and that those risks should also be evaluated as part of the alternatives analysis

# Questions or comments?

## Guidance for Developing a Chapter 105 Alternatives Analysis





**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Waterways Engineering and Wetlands

**Andy Klinger**

Director

Bureau of Waterways Engineering and Wetlands

[anklinger@pa.gov](mailto:anklinger@pa.gov)

717.772.5975