


# Chapter 105 Alternatives Analysis Technical Guidance Document

Presentation
to the
Water Resources Advisory Committee

March 2020

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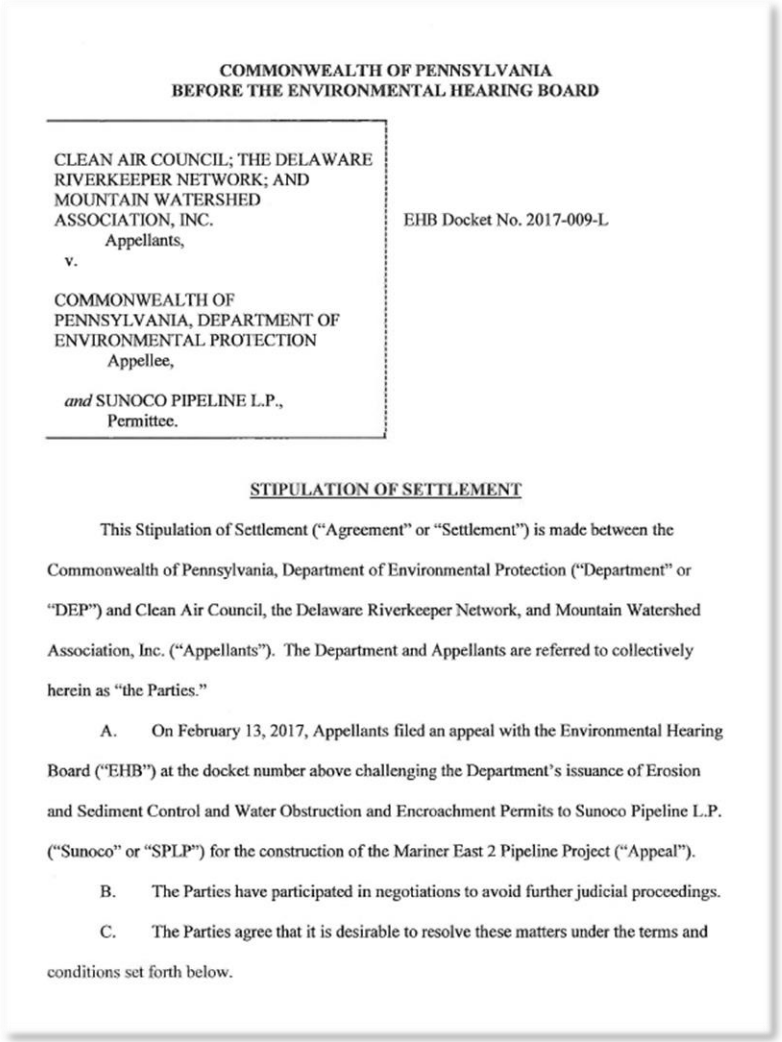
# Alternatives Analysis Technical Guidance Document – Development Process

- **Stipulated Settlement –** *2018*
  - *Clean Air Council*
  - *Delaware Riverkeeper Network*
  - *Mountain Watershed Association*

- **Workgroup Meetings -** *2019*
  - Preliminary Draft (200 Comments)
  - Stakeholder Draft (364 Comments)



COMMONWEALTH OF PENNSYLVANIA
BEFORE THE ENVIRONMENTAL HEARING BOARD

CLEAN AIR COUNCIL; THE DELAWARE RIVERKEEPER NETWORK; AND MOUNTAIN WATERSHED ASSOCIATION, INC.
Appellants,
v.
COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
Appellee,
*and* SUNOCO PIPELINE L.P.,
Permittee.

EHB Docket No. 2017-009-L

STIPULATION OF SETTLEMENT

This Stipulation of Settlement ("Agreement" or "Settlement") is made between the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department" or "DEP") and Clean Air Council, the Delaware Riverkeeper Network, and Mountain Watershed Association, Inc. ("Appellants"). The Department and Appellants are referred to collectively herein as "the Parties."

A. On February 13, 2017, Appellants filed an appeal with the Environmental Hearing Board ("EHB") at the docket number above challenging the Department's issuance of Erosion and Sediment Control and Water Obstruction and Encroachment Permits to Sunoco Pipeline L.P. ("Sunoco" or "SPLP") for the construction of the Mariner East 2 Pipeline Project ("Appeal").

B. The Parties have participated in negotiations to avoid further judicial proceedings.

C. The Parties agree that it is desirable to resolve these matters under the terms and conditions set forth below.

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- **State Agency Representatives**
  - DEP's Regional Permit Coordination Office
  - DEP's Bureau of Oil and Gas
  - DEP's Southeast Regional Office
  - DEP's Bureau of Clean Water
  - DEP's Bureau of Waterways Engineering and Wetlands
  - PA Department of Conservation and Natural Resources
  - PA Department of Transportation (PennDOT)
  - PA Fish & Boat Commission
- **Appellant Representatives**
  - Clean Air Council
  - Mountain Watershed Association
  - Delaware Riverkeeper Network
- **Federal Agency Representatives**
  - U.S. Army Corps of Engineers
- **Industry Representatives**
  - Oil and Gas Experts
  - Transportation Experts
  - Pa Homebuilders
  - Consultant, Ch. 105 Expert

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- **Presentation of Stakeholder Draft documents to advisory committees and boards -** *2019 /2020*

  - Water Resources Advisory Committee (WRAC) – *October 2019*
  - Agricultural Advisory Board (AAB) – *November 2019*
  - Citizens Advisory Council (CAC) – *March 2020*
  - Environmental Justice Advisory Board (EJAB) - *February 2020*
  - Oil and Gas Technical Advisory Board – *January 2020*
  - Water Resources Advisory Committee (WRAC) – *May 2020*
  - Agricultural Advisory Board (AAB) – *May 2020*

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- **Public comment period -** *Fall / Winter 2020?*
- **Final publication -** Coordinating release with the Chapter 105 Regulation Annex
- **Tutorial video  -** Department's Clean Water Academy?
- **Additional Coordination** - Merge with other guidance documents to develop a larger manual?

# Alternatives Analysis Technical Guidance Document

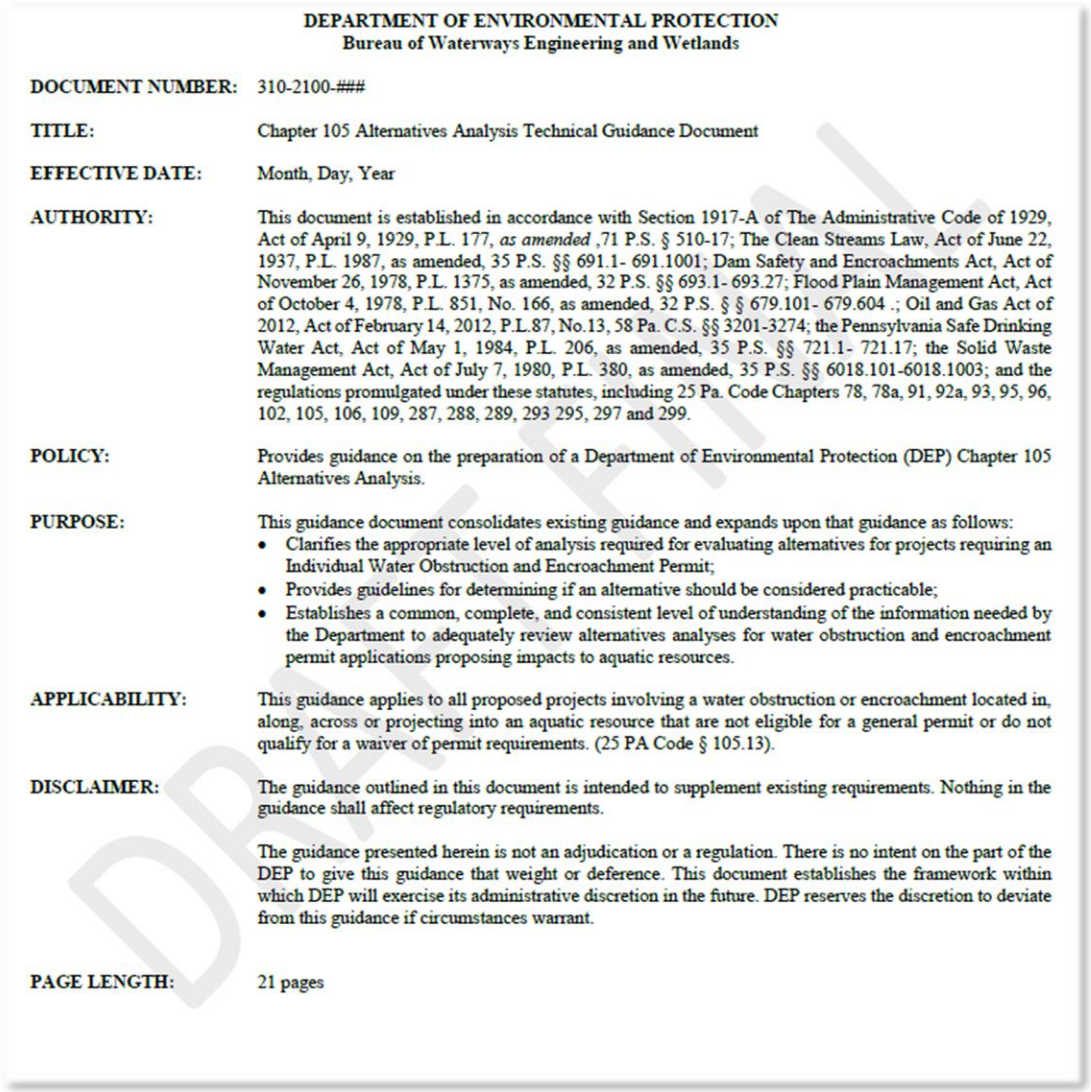
## Alternatives Analysis Regulatory Background

- Existing regulation
  - *§105.13(e)(viii) Alternative Analysis* - A detailed analysis of alternatives to the proposed action, including alternative locations, routings or designs to avoid or minimize adverse environmental impacts.

- Component of Chapter 105-permit Joint Permit Application
  - Trenchless Technology is an example of an alternative

- Alternatives Analysis Technical Guidance Document enhance existing guidance in the Environmental Assessment form

# Alternatives Analysis Technical Guidance Document



**DEPARTMENT OF ENVIRONMENTAL PROTECTION**
**Bureau of Waterways Engineering and Wetlands**

**DOCUMENT NUMBER:** 310-2100-###

**TITLE:** Chapter 105 Alternatives Analysis Technical Guidance Document

**EFFECTIVE DATE:** Month, Day, Year

**AUTHORITY:** This document is established in accordance with Section 1917-A of The Administrative Code of 1929, Act of April 9, 1929, P.L. 177, *as amended* ,71 P.S. § 510-17; The Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. §§ 691.1- 691.1001; Dam Safety and Encroachments Act, Act of November 26, 1978, P.L. 1375, as amended, 32 P.S. §§ 693.1- 693.27; Flood Plain Management Act, Act of October 4, 1978, P.L. 851, No. 166, as amended, 32 P.S. § § 679.101- 679.604 .; Oil and Gas Act of 2012, Act of February 14, 2012, P.L.87, No.13, 58 Pa. C.S. §§ 3201-3274; the Pennsylvania Safe Drinking Water Act, Act of May 1, 1984, P.L. 206, as amended, 35 P.S. §§ 721.1- 721.17; the Solid Waste Management Act, Act of July 7, 1980, P.L. 380, as amended, 35 P.S. §§ 6018.101-6018.1003; and the regulations promulgated under these statutes, including 25 Pa. Code Chapters 78, 78a, 91, 92a, 93, 95, 96, 102, 105, 106, 109, 287, 288, 289, 293 295, 297 and 299.

**POLICY:** Provides guidance on the preparation of a Department of Environmental Protection (DEP) Chapter 105 Alternatives Analysis.

**PURPOSE:** This guidance document consolidates existing guidance and expands upon that guidance as follows:
- Clarifies the appropriate level of analysis required for evaluating alternatives for projects requiring an Individual Water Obstruction and Encroachment Permit;
- Provides guidelines for determining if an alternative should be considered practicable;
- Establishes a common, complete, and consistent level of understanding of the information needed by the Department to adequately review alternatives analyses for water obstruction and encroachment permit applications proposing impacts to aquatic resources.

**APPLICABILITY:** This guidance applies to all proposed projects involving a water obstruction or encroachment located in, along, across or projecting into an aquatic resource that are not eligible for a general permit or do not qualify for a waiver of permit requirements. (25 PA Code § 105.13).

**DISCLAIMER:** The guidance outlined in this document is intended to supplement existing requirements. Nothing in the guidance shall affect regulatory requirements.

The guidance presented herein is not an adjudication or a regulation. There is no intent on the part of the DEP to give this guidance that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this guidance if circumstances warrant.

**PAGE LENGTH:** 21 pages

DRAFT FINAL

- **Draft Final**
- **21 pages**
- **Disclaimer**

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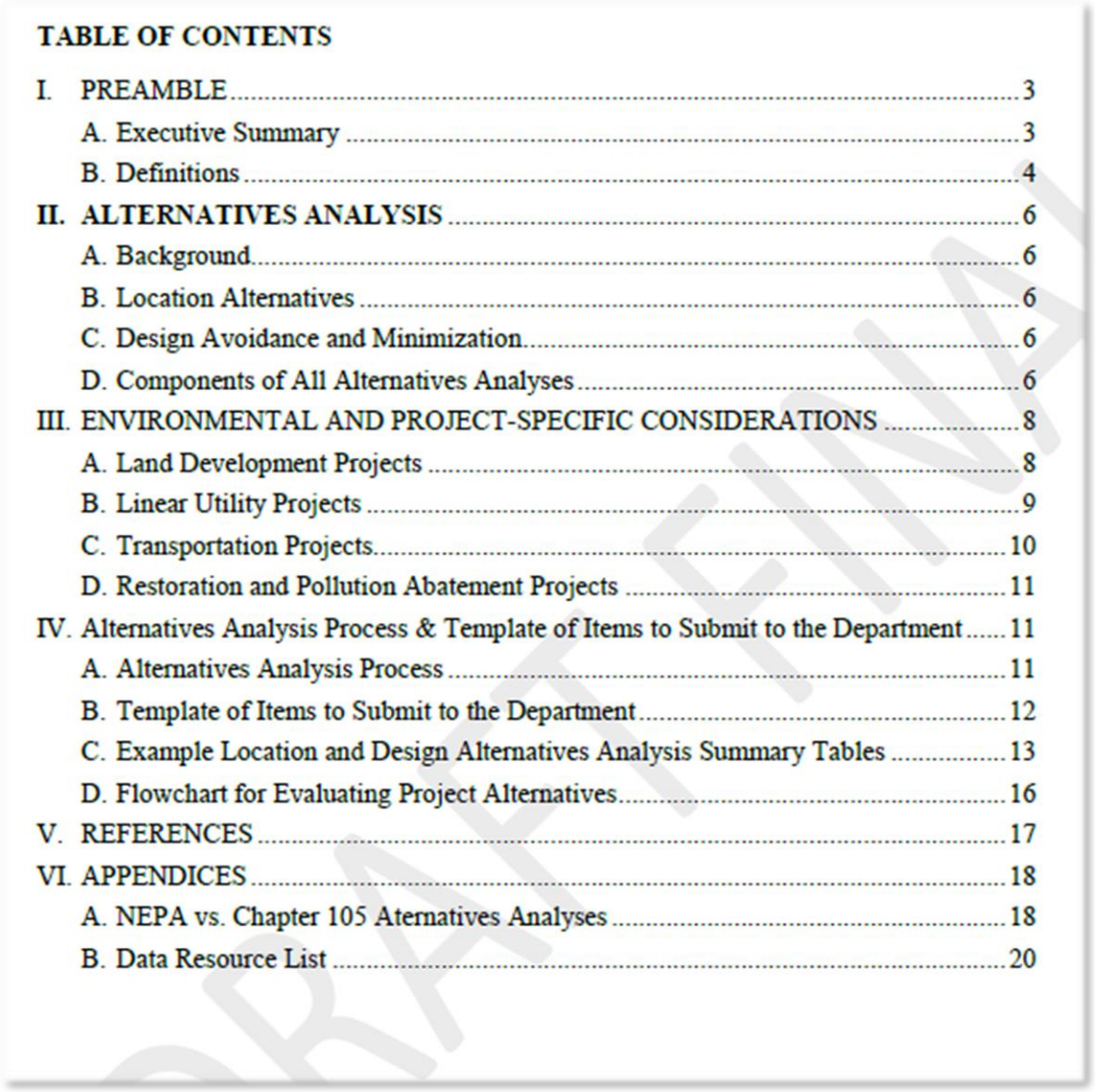

TABLE OF CONTENTS



- **Section II**
  - Context of what an alternatives analysis is and when it must be completed
  - Difference between alternatives analysis for the Department vs. NEPA
  - Components of an alternatives analysis

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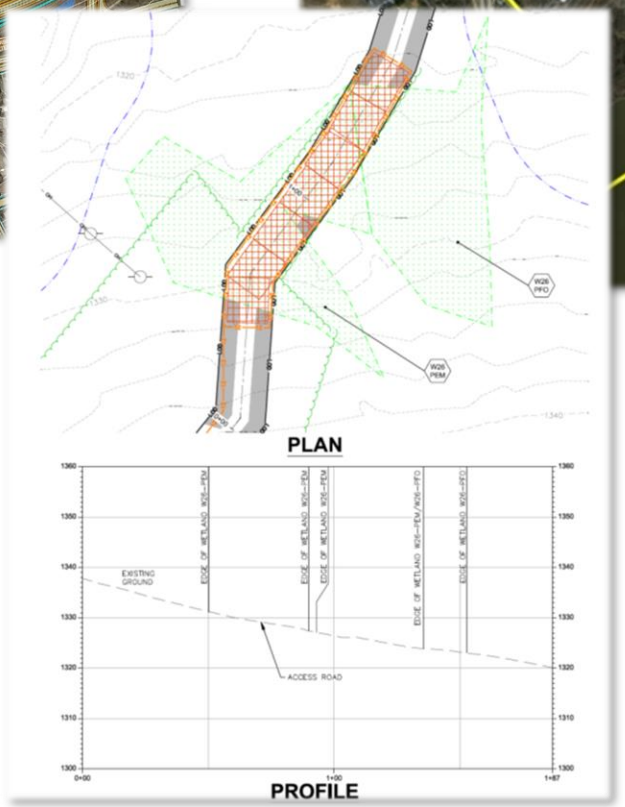
# Alternatives Analysis Technical Guidance Document


Source: 422 Westshore Bypass

Source: www.businesswire.com




Source: Columbia 134 Replacement

- **Section III**
  - Land Development Project
  - Linear Utility Projects
  - Transportation Projects
  - Restoration and Pollution Abatement Projects

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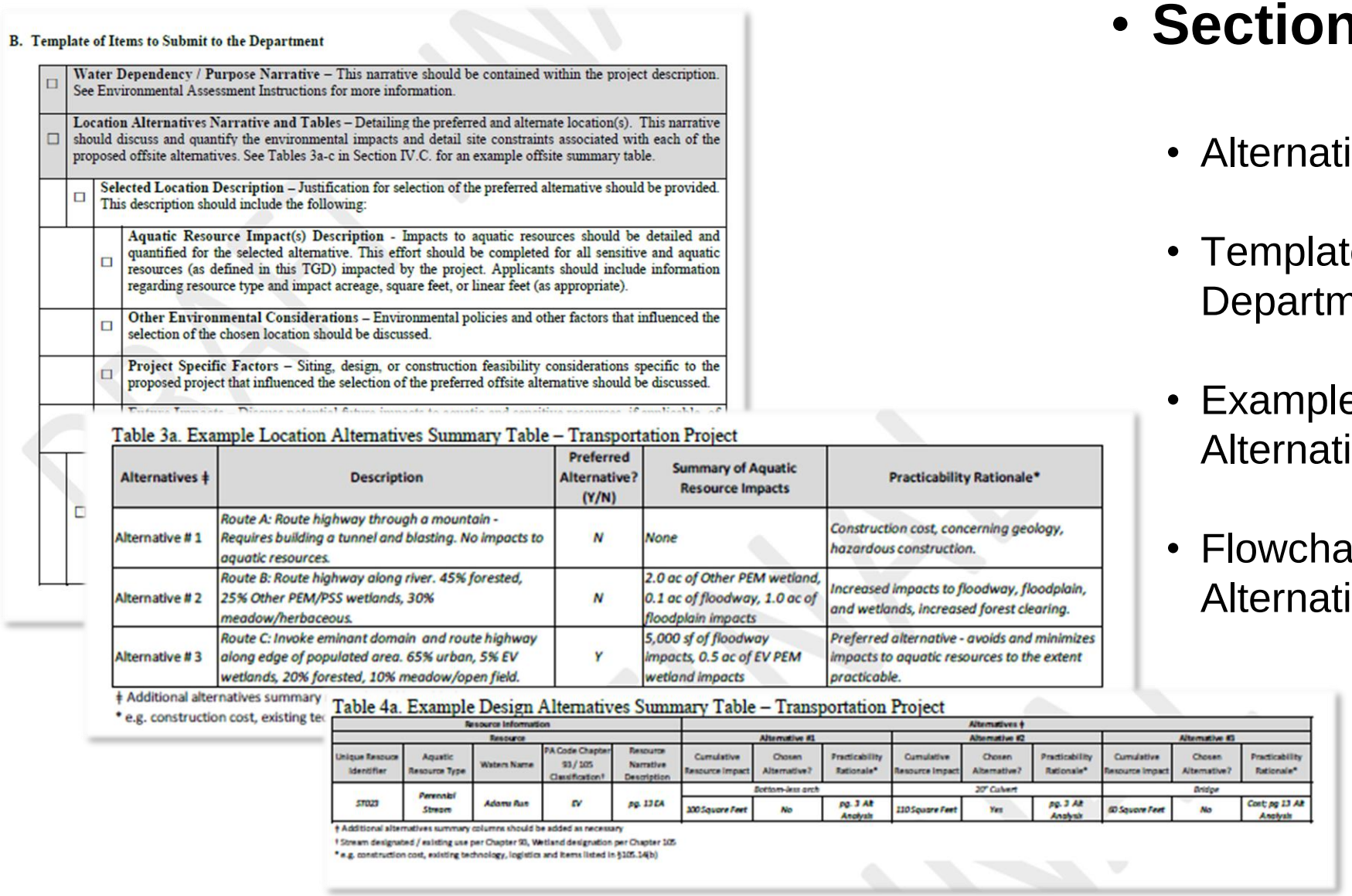

B. Template of Items to Submit to the Department

| | |
|---|---|
| ☐ | **Water Dependency / Purpose Narrative** – This narrative should be contained within the project description. See Environmental Assessment Instructions for more information. |
| ☐ | **Location Alternatives Narrative and Tables** – Detailing the preferred and alternate location(s). This narrative should discuss and quantify the environmental impacts and detail site constraints associated with each of the proposed offsite alternatives. See Tables 3a-c in Section IV.C. for an example offsite summary table. |
| ☐ | **Selected Location Description** – Justification for selection of the preferred alternative should be provided. This description should include the following: |
| ☐ | **Aquatic Resource Impact(s) Description** - Impacts to aquatic resources should be detailed and quantified for the selected alternative. This effort should be completed for all sensitive and aquatic resources (as defined in this TGD) impacted by the project. Applicants should include information regarding resource type and impact acreage, square feet, or linear feet (as appropriate). |
| ☐ | **Other Environmental Considerations** – Environmental policies and other factors that influenced the selection of the chosen location should be discussed. |
| ☐ | **Project Specific Factors** – Siting, design, or construction feasibility considerations specific to the proposed project that influenced the selection of the preferred offsite alternative should be discussed. |

Table 3a. Example Location Alternatives Summary Table – Transportation Project

| Alternatives ǂ | Description | Preferred Alternative? (Y/N) | Summary of Aquatic Resource Impacts | Practicability Rationale* |
|---|---|---|---|---|
| Alternative # 1 | *Route A: Route highway through a mountain - Requires building a tunnel and blasting. No impacts to aquatic resources.* | *N* | *None* | *Construction cost, concerning geology, hazardous construction.* |
| Alternative # 2 | *Route B: Route highway along river. 45% forested, 25% Other PEM/PSS wetlands, 30% meadow/herbaceous.* | *N* | *2.0 ac of Other PEM wetland, 0.1 ac of floodway, 1.0 ac of floodplain impacts* | *Increased impacts to floodway, floodplain, and wetlands, increased forest clearing.* |
| Alternative # 3 | *Route C: Invoke eminant domain and route highway along edge of populated area. 65% urban, 5% EV wetlands, 20% forested, 10% meadow/open field.* | *Y* | *5,000 sf of floodway impacts, 0.5 ac of EV PEM wetland impacts* | *Preferred alternative - avoids and minimizes impacts to aquatic resources to the extent practicable.* |

ǂ Additional alternatives summary

* e.g. construction cost, existing te

Table 4a. Example Design Alternatives Summary Table – Transportation Project

| Resource Information | | | | | Alternatives ǂ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resource | | | | | Alternative #1 | | | Alternative #2 | | | Alternative #3 | | |
| Unique Resource Identifier | Aquatic Resource Type | Waters Name | PA Code Chapter 93 / 105 Classification† | Resource Narrative Description | Cumulative Resource Impact | Chosen Alternative? | Practicability Rationale* | Cumulative Resource Impact | Chosen Alternative? | Practicability Rationale* | Cumulative Resource Impact | Chosen Alternative? | Practicability Rationale* |
| *ST023* | *Perennial Stream* | *Adams Run* | *EV* | *pg. 13 EA* | *Bottom-less arch* | | | *20' Culvert* | | | *Bridge* | | |
| | | | | | *300 Square Feet* | *No* | *pg. 3 Alt Analysis* | *110 Square Feet* | *Yes* | *pg. 3 Alt Analysis* | *60 Square Feet* | *No* | *Cont; pg 13 Alt Analysis* |

ǂ Additional alternatives summary columns should be added as necessary

† Stream designated / existing use per Chapter 93, Wetland designation per Chapter 105

* e.g. construction cost, existing technology, logistics and items listed in §105.14(b)

- **Section IV**
  - Alternatives Analysis Process
  - Template of Items to Submit to the Department
  - Example Location and Design Alternatives Analysis Tables
  - Flowchart for Evaluating Project Alternatives

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# Questions