

PART 3

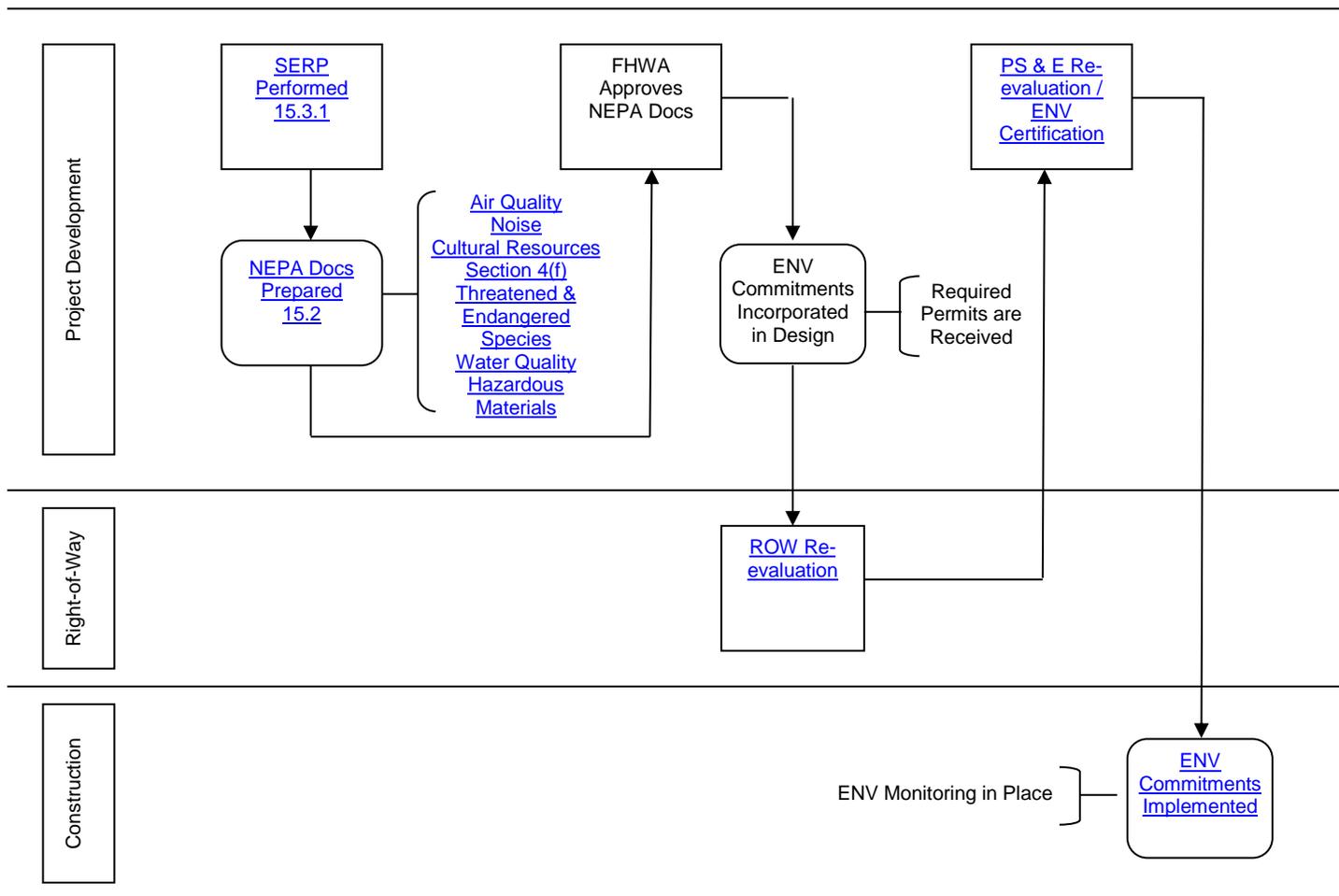
Standards and
practices for LAP

Chapter 15

Environmental
Requirements

Locally Administered
Projects (LAP) Manual

CHAPTER 15 ENVIRONMENTAL FLOW CHART



CHAPTER 15 ENVIRONMENTAL PROCEDURES

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15.1 GENERAL ENVIRONMENTAL PROCEDURES

15.1.1 Introduction

Transportation projects require compliance with a wide variety of state and federal environmental laws, regulations, and executive orders. The project scope and associated environmental impacts will determine the specific laws, regulations and executive orders that must be addressed in detail during design and construction. For federal-aid LPA administered projects, FHWA has set minimum oversight expectations which can be found in [VDOT's plan for the oversight of environmental elements of locally administered projects](#). The environmental requirements in the following chapters reflect these expectations. Except as otherwise noted, non federal-aid projects generally will require a certification of compliance as noted in Chapter 5, instead of meeting the federal-aid requirements emphasized in this manual.

The most common environmental requirements for transportation projects are explained in greater detail in the sections that follow. However, LPA's may encounter additional environmental requirements from time to time on individual projects. [VDOT District Environmental Managers](#) and their technical staff are available to support and assist the LPA's.

In order to ensure that VDOT and the LPA are clear regarding environmental expectations, VDOT recommends that an environmental kick-off meeting be held. This may be as simple as a telephone conversation with the VDOT project coordinator and Environmental staff or it may occur within a formal scoping meeting.

At the kick-off meeting, the VDOT District Environmental Manager (or designee) will provide the LPA with a completed copy of the [Environmental Scoping Recommendations form](#), as well as other documentation applicable to the project. The information on this form will assist the LPA in determining what the environmental requirements are and assist in determining their needs for consultant assistance, if required.

For LPA's unfamiliar with many of the technical aspects of environmental analyses, VDOT can provide assistance reviewing scopes of services or determining appropriateness of consultants' proposals for environmental work, in accordance with [Chapter 11](#), Consultant Services, of this manual.

15.1.2 Summary of Requirements/Submittals Table

[Appendix A](#) provides a list of the required submittals that must be completed to adequately address the range of environmental issues associated with a typical federal-aid project.

The table also includes timing for those submittals, general VDOT review times, and LPA/VDOT responsibilities associated with those tasks and submittals. [Appendix 15.1-A](#) is intended to provide a list of all required LPA submittals and primary LPA/VDOT tasks. It is **not** intended to provide details of all activities that must take place prior to or after each submittal or task identified in the table.

APPENDIX 15.1 – A
Summary Table of Primary Tasks/Responsibilities

| Task/Submittal/ File Documentation | LPA Responsibility | VDOT Responsibility | Submittal Timing/Recordkeeping Requirement/Review Timeframe |
|---|---|--|--|
| EQ-429 – Project Definition form | Submit a completed EQ-429 with project location map | Enter into CEDAR | EQ-429 submitted by LPA to VDOT prior to project scoping or at Scoping Meeting |
| State Environmental Review Process/PEI Exemption / / Preliminary Environmental Inventory (PEI) project value >\$500,000 | N/A | PEI exemption notification to LPA; or complete State Agency Coordination; provide PEI to LPA | VDOT PEI to LPA within 30 – 90 days |
| NEPA Concurrence Form | Submit completed form to VDOT (<u>not</u> required for BCE/ PCE) | Coordinate with FHWA; convey level of NEPA document to LPA; enter into CEDAR | LPA submits to VDOT prior to beginning NEPA document; response from FHWA in 5 days |
| NEPA – BCE/PCE/CE | Complete prior to Public Hearing and any R/W acquisition | Review/coordinate with FHWA; provide approved document back to LPA; enter into CEDAR (The decision to use a BCE category must be approved by VDOT) | LPA will submit draft PCE/CE 60 days prior to Public Hearing; VDOT will review and notify the LPA within: PCE - 5 days CE - 10 days BCE – 1 day |

| Task/Submittal/ File Documentation | LPA Responsibility | VDOT Responsibility | Submittal Timing/Recordkeeping Requirement/Review Timeframe |
|---|---|--|--|
| NEPA – EA | Complete prior to Public Hearing and any R/W acquisition | Review/coordinate with FHWA for approval of draft EA; FHWA issues FONSI; enter into CEDAR | Draft EA must be submitted by LPA to VDOT 60 days prior to public release and available 30 days prior to Public Hearing. VDOT review - 15 days for each individual section (this does not include FHWA review time) |
| Section 106 Process (Cultural Resources) | Coordinate with VDHR, submit technical reports, and obtain effect determination letter or MOA if required; submit documentation to VDOT | Enter into CEDAR | Effect determination concurrence (or MOA) submitted by LPA to VDOT prior to/or concurrent with submittal of NEPA documentation. |
| Noise analysis | Submit draft and final reports to VDOT | Determine if Type I; review/comment on Report; plan for State Noise Abatement Committee meeting, as applicable; enter into CEDAR | LPA submits to VDOT prior to completing NEPA documentation |
| Air Quality Studies | Submit draft and final reports to VDOT | Review /comment on Report; enter into CEDAR | LPA submits to VDOT prior to completing NEPA documentation |
| EQ-121 (Hazardous Materials Due Diligence form) | Complete necessary studies and submit completed/signed forms to VDOT. | Provide EQ-121 at kick off/scoping meeting. Enter EQ-121 into CEDAR | LPA submits completed form prior to requesting R/W authorization. |
| Natural Resources (EQ-555 Water Quality permits and Natural Resource Due Diligence certification/checklist for locally administered projects) | Coordinate with VDOT and regulatory agencies to determine if permits /clearances are necessary | Provide EQ-555 with required regulatory agency correspondence and copies of any permits/clearances | Locality submits to VDOT EQ-555/correspondence/permits prior to VDOT's completion of Environmental Certification/PS&E Re-evaluations |

| Task/Submittal/ File Documentation | LPA Responsibility | VDOT Responsibility | Submittal Timing/Recordkeeping Requirement/Review Timeframe |
|---|---|--|---|
| Environmental Certification and Reevaluation @ R/W authorization and Construction Advertisement | Notify VDOT PC ready for authorization at R/W and/or construction advertisement | R/W reevaluation form/PS&E reevaluation form/Environmental Certification form completed by VDOT; provided to LPA; enter into CEDAR | VDOT completes Re-evaluations and Certification within 15 business days |

APPENDIX 15.1 -B

ENVIRONMENTAL LEGISLATIVE, REGULATORY, AND EXECUTIVE ORDERS REFERENCES

National Environmental Policy Act (NEPA)

- National Environmental Policy Act, 42 U.S.C. 4332(2)(C) PL 91-910
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A legacy for Users (SAFETEA-LU) PL 109-59
- Moving Ahead for Progress in the 21st Century (**MAP-21**) - Transforming the Way We Build, Maintain, and Manage Our Nation's Highways P.L. 112-141
- Clean Air Act, as amended, 42 U.S.C. 1857 PL 95-95
- Federal Aid Highway Act of 1970 23 U.S.C. 109 (h)(i)(j)
- Federal Highway Administration's Noise Regulations, 23 CFR Part 772
- Transportation Conformity Regulations, 40 CFR Parts 51 and 93
- National Historic Preservation Act (16 U.S.C. 470f)
- Section 4(f) 23 CFR 774
- Endangered Species Act, 1973, as amended, 16 U.S.C. 1531-15443
- Farmland Protection Policy Act, 1981, 7 C.F.R. 658
- Section 6(f) of the Land and Water Conservation Fund Act (Section 6(f)) 16 U.S.C. 4601-8(f)
- Transportation Alternatives Activities, 23 U.S.C. 101(a)(35); 23 U.S.C. 133(b)
- Federal Highway Administration Regulations Governing the Preparation of Environmental Documents, 23 C.F.R. 771
- Regulations for Implementing the Procedural Provision of the National Environmental Policy Act, 1978, 40 C.F.R. 1500-1508
- National Recreational Trails Program, 23 U.S.C. 206
- National Scenic Byways Program, 23 U.S.C. 162
- Procedures for Abatement of Highway Traffic Noise, Federal Aid Program Guide, 23 C.F.R. 772
- Section 106 of the National Historic Preservation Act, 16 U.S.C. 470f; 36 C.F.R. Part 800; 36 C.F.R. Part 60; 36 C.F.R. Part 63
- Section 110 of the National Historic Preservation Act, 16 U.S.C. 470h-2; 36 C.F.R. 78
- Archaeological Resources Protection Act, 16 U.S.C. 470 aa-mm; 32 C.F.R. 229; 36 C.F.R. 79; 36 C.F.R. 296; 43 C.F.R. 7
- Wilderness Act, 36 C.F.R. 293; 43 C.F.R., 8560; 50 C.F.R. 35
- Wild and Scenic Rivers Act, 36 C.F.R. 297
- Uniform Relocation Assistance and Real Property Acquisition Act of 1970, 49 C.F.R. 24
- Title VI of the Civil Rights Act of 1964, 49 C.F.R. 21; 23 C.F.R. 200

- Resource Conservation and Recovery Act of 1976 (RCRA), 40 CFR §260 et seq.
- Hazardous and Solid Waste Amendments (HSWA) of 1984
- Emergency Planning and Community Right to Know Act (EPCRA) 40 CFR Part 355
- Comprehensive Environmental Response Compensation and Liability Act, 40 CFR §300 et seq. and 29 CFR §1910
- Superfund Amendments and Reauthorization Act (SARA), 40 CFR §300 et seq.
- Hazardous Materials Transportation Act (HMTA), 49 CFR 171-180
- Occupational Safety and Health Act of 1970, 29 U.S.C §651-678
- Federal Water Pollution Control Act, Public Law 101-508 §1388 et seq
- Safe Drinking Water Act of 1974, 40 CFR §104 et seq.
- Clean Air Act, 40 CFR §§60 and 763 et seq.
- Toxic Substances Control Act (TSCA) 40 CFR §761
- Federal Insecticide, Fungicide, Rodenticide Act (FIFRA), 86 Sta. §973 et seq.
- Fish and Wildlife Coordination Act ,16 U.S.C 661-666 PL 93-205
- Clean Water Act, 33 U.S.C 1251-1376
- Rivers and Harbors Act of 1899, 33 U.S.C 401 et. seq
- Coastal Zone Management Act (1972), 16 U.S.C
- Tennessee Valley Act of 1933
- Endangered Species Act, 1973, as amended, 16 U.S.C. 1531-15443
- Executive Order 13112: Invasive Species
- Executive Order 11988: Floodplain Management, as amended by Executive Order 12148
- Executive Order 12898: Federal Actions to Address Environmental Justice in Low Income Populations and Minority Populations, as amended by Executive Order 12948
- Executive Order 11990: Protection of Wetlands
- Executive Order 11514: Protection and Transportation Alternatives of Environmental Quality
- Executive Order 12630: Governmental Actions and Interference with Constitutionally Protected Property Rights
- Executive Order 13166: Improving Access to Services for Persons with Limited English Proficiency
- Executive Order 13186: Responsibilities of Federal Agencies to Protect Migratory Birds
- Executive Order 13195: Trails for America in the 21st Century
- Executive Order 13352: Facilitation of Cooperative Conservation
- Executive Order 13392: Improving Agency Disclosure of Information
- Executive Order 13406: Protection the Property Rights of the American People

State Environmental Review Process

- Code of Virginia Section 10.1-1188 (B)

Cultural Resources

- Section 106 of the National Historic Preservation Act, 16 U.S.C 470f
- Protection of Historic Properties, 36 CFR Part 800
- National Environmental Policy Act, 42 U.S.C 4321-4347
- Environmental Impact Reports of State Agencies, Code of Virginia 10.1-1188-1192

Section 4(f)

- 23 CFR 774
- Title 49 U.S.C. Section 303
- Title 23 U.S.C. Section 138

Noise Studies and Abatement

- National Environmental Policy Act, 42 U.S.C 4332(2)(C) PL 91-910
- Noise Control Act of 1972, 42 U.S.C Chapter 65 Section 4901 et seq.
- Federal Aid Highway Act of 1970, 23 U.S.C 109(h)(i)(j)
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)
- Federal Highway Administration's Noise Regulations, 23 CFR 772
- Section 33.1-12 of the Code of Virginia.
- State Noise Abatement Policy

Air Quality

- National Environmental Policy Act, 42 U.S.C 4332(2)(C) PL 91-910
- Clean Air Act, as amended, 42 U.S.C 1857 PL 95
- Federal Aid Highway Act of 1970, 23 U.S.C 109(h)(i)(j)
- Energy Policy Act, 42 U.S.C 15801
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)
- Transportation Conformity Regulations, 40 CFR Parts 51 (Implementation), 81 (Designations), and 93 (Transportation Conformity)
- Statewide Transportation Planning Regulations, 23 CFR Part 450
- Interim Guidance on Air Toxic Analysis in NEPA Documents – FHWA Guidance Memorandum – February 3, 2006
- Memorandum of Agreement with FWHA Regarding Streamlining Project Level Carbon Monoxide Air Quality Studies, 2009
- Virginia Air Pollution Control Law
- State Regulation for Transportation Conformity, 9 VAC 5 Chapter 151

Water Quality Permits

- National Environmental Policy Act, 42 U.S.C 4321-4347
- Fish and Wildlife Coordination Act ,16 U.S.C 661-666 PL 93-205
- Clean Water Act, 33 U.S.C 1251-1376
- Rivers and Harbors Act of 1899, 33 U.S.C. 403
- Section 106 of the National Historic Preservation Act, 16 U.S.C. 470f
- Executive Order 11988, Floodplain Management
- Executive Order 11990, Protection of Wetlands
- Virginia General Permit, Code of Virginia, 28.2-103 and 28.2-1203
- Coastal Zone Management Act, 16 U.S.C 1451-1465
- Endangered Species Act, 16 U.S.C 1531-1544
- Tennessee Valley Act of 1933, 16 U.S.C. 831
- Virginia Stormwater Management Program 2005
- Virginia Water Protection Permit Regulations, Title 62.1-44.15.5
- Wild and Scenic Rivers Act, 16 U.S.C. 1278
- Virginia Scenic Rivers Act, Code of Virginia, 10.1-400 to 418
- Virginia Endangered Plant and Insect Species Act, Code of Virginia, 3.1-1020 to 1030
- Virginia Department of Game and Inland Fisheries manages endangered and threatened fish and wildlife (except insects) in Virginia, Code of Virginia, 29.1-564
- Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (1995)
- Virginia Erosion and Sediment Control Law and Regulations, Code of Virginia 10.1-561 et seq.
- Chesapeake Bay Preservation Act, Code of Virginia, 10.1-2100 to 2116
- Virginia Cave Protection Act, July 1979, as amended, July 1984, Code of Virginia 10.1-1000 to 1008
- Natural Area Preserves Act, Code of Virginia, 10.1-208 to 217

Threatened and Endangered Species

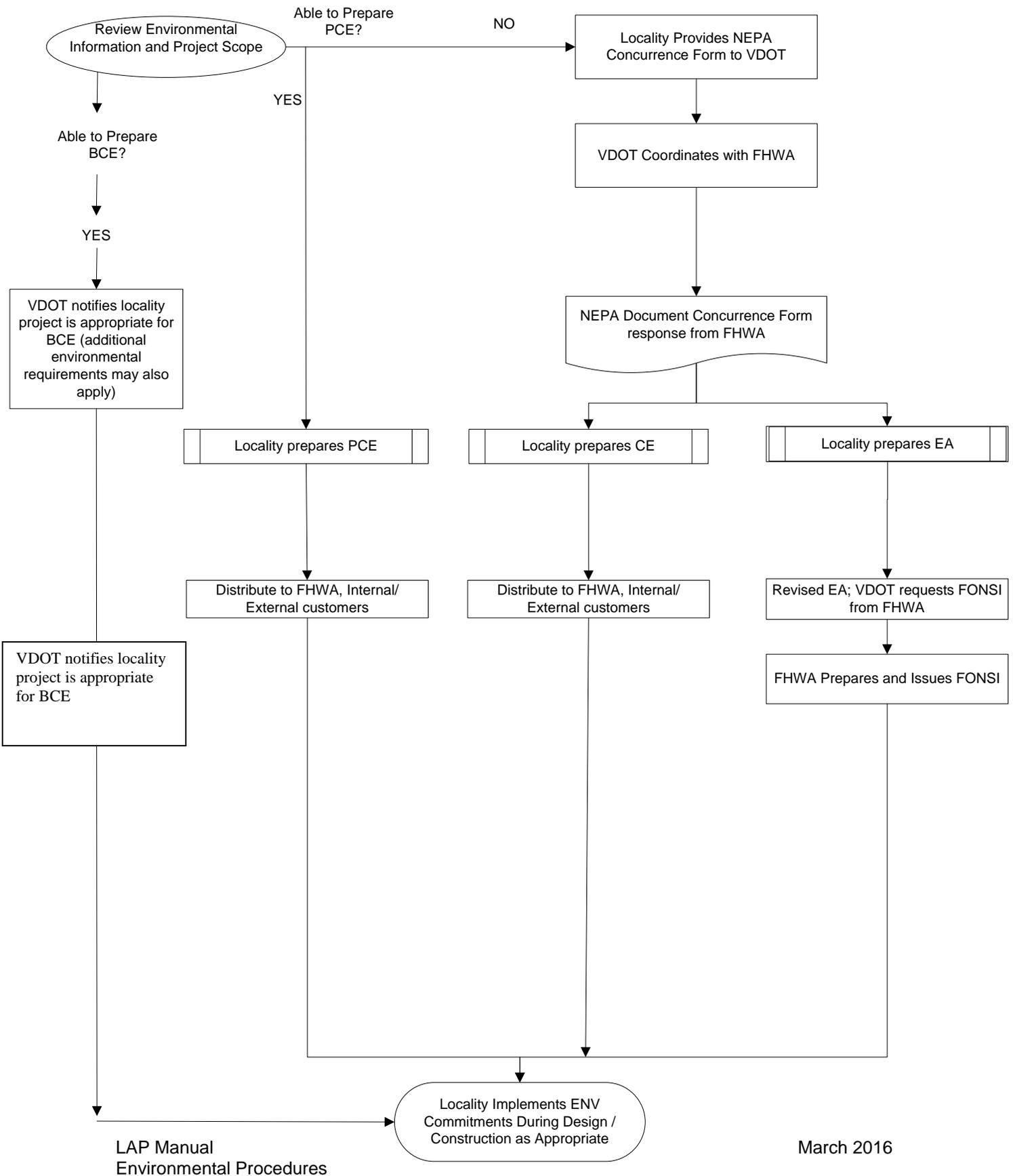
- Endangered Species Act, 16 U.S.C 1531-1544
- National Environmental Policy Act, 42 U.S.C 4321-4347
- Fish and Wildlife Coordination Act ,16 U.S.C 661-666 PL 93-205
- Clean Water Act, 33 U.S.C 1251-1376
- Rivers and Harbors Act of 1899, 33 U.S.C. 403
- Executive Order 11988, Floodplain Management
- Executive Order 11990, Protection of Wetlands
- Coastal Zone Management Act, 16 U.S.C 1451-1465
- Tennessee Valley Act of 1933, 16 U.S.C. 831
- Wild and Scenic Rivers Act, 16 U.S.C. 1278
- Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (1995)

- Migratory Bird Treaty Act 16 U.S.C Sections 703-712
- Bald and Golden Eagle Protection Act RIN 1018-AV11
- Virginia Stormwater Management Program 2005
- Virginia Water Protection Permit Regulations, Title 62.1-44.15.5
- Virginia Scenic Rivers Act, Code of Virginia, 10.1-400 to 418
- Virginia Endangered Plant and Insect Species Act, Code of Virginia, 3.1-1020 to 1030
- Virginia Department of Game and Inland Fisheries manages endangered and threatened fish and wildlife (except insects) in Virginia, Code of Virginia, 29.1-564
- Virginia Erosion and Sediment Control Law and Regulations, Code of Virginia 10.1-561 et seq.
- Virginia General Permit, Code of Virginia, 28.2-103 and 28.2-1203
- Chesapeake Bay Preservation Act, Code of Virginia, 10.1-2100 to 2116
- Virginia Cave Protection Act, July 1979, as amended, July 1984, Code of Virginia 10.1-1000 to 1008
- Natural Area Preserves Act, Code of Virginia, 10.1-208 to 217

Hazardous Materials

- Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C 6901-6991k
- Hazardous and Solid Waste Amendments (HSWA) of 1984
- Emergency Planning and Community Right to Know Act (EPCRA), 40 CFR 355
- Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 300 et seq. and 29 CFR 1910
- Superfund Amendments and Reauthorization Act (SARA), 40 CFR 171-180
- Hazardous Materials Transportation Act (HMTA), 49 CFR 171-180
- Occupational Safety and Health Act of 1970, 29 U.S.C 651-678
- Federal Water Pollution Control Act, PL 101-508, 1388 et seq.
- Clean Water Act of 1977 and Safe Drinking Water Act of 1974, 40 CFR 104 et seq.
- Clean Air Act, 42 U.S.C 7401-7671q
- Toxic Substances Control Act (TSCA), 40 CFR 761
- Virginia Hazardous Waste Management Regulation, 9 VAC 25-31-10 et seq. and 9 VAC 25-260 et seq.
- Virginia Solid Waste Management Regulations, 9 VAC 20-80 et seq.
- Virginia Water Control Board Regulations, 9 VAC 25-91-10 et seq. and 25-280-10 et seq.
- National Environmental Policy Act of 1969, 42 U.S.C 4321-4347
- Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), 7 U.S.C 136 et seq.

15.2 NATIONAL ENVIRONMENTAL POLICY ACT



15.2.1 Introduction

This section provides a general overview of the National Environmental Policy Act ([NEPA](#)) and the process a LPA must follow to ensure successful completion of the NEPA process. By regulation, FHWA retains NEPA approval authority and requires VDOT oversee compliance with NEPA on its behalf, even if a project is administered by a local government. While a LPA is required to perform all necessary environmental investigations and prepare all necessary documentation demonstrating compliance with NEPA, the FHWA must provide all approvals for NEPA actions. Accordingly, close coordination between the LPA, their consultant, and VDOT is extremely important during the NEPA process to ensure that project delays are avoided.

Transportation projects differ in type, size, complexity, and potential to impact the environment. Transportation project impacts on the natural and human environment can vary from very minor to significant. To account for the variability of project impact, three basic "classes of action" are allowed and determine how compliance with NEPA is carried out and documented:

- [Categorical Exclusions \(CE's\)](#) are issued for actions that do not individually or cumulatively have a significant effect on the environment. CE's can be concluded typically within six to nine months' time. There are also project categories that may be addressed as Programmatic Categorical Exclusions (PCE's) or Blanket Categorical Exclusions (BCE's). PCE's may typically be concluded in several weeks' time and BCE's may be concluded in less time. Most LPA administered projects will fall into this level of NEPA action.
- An [Environmental Assessment \(EA\)](#) is prepared for actions in which the significance of the environmental impact is not clearly established. Should environmental analysis and interagency review during the EA process find a project to have no significant impact on the quality of the environment, a [Finding of No Significant Impact \(FONSI\)](#) is issued. EA/FONSI's can be concluded typically within 16 months.

- An [Environmental Impact Statement \(EIS\)](#) is prepared for projects where it is known that the action will have a significant effect on the environment. EIS documents routinely take several years to complete.

This chapter will focus on the requirements for BCE's, PCEs, CEs, and EAs. When it is determined an EIS will be required for a LPA project, a separate memorandum of agreement, outlining specific actions and requirements of VDOT and the LPA will be developed.

15.2.2 Applicability

- All federal-aid projects and projects developed to qualify for federal-aid.
- Projects which are not federal-aid or developed to qualify for federal-aid but involve another federal action (such as a federal permit or use of federal property) require compliance with NEPA; however, VDOT does not provide oversight or have approval authority for actions required by agencies other than FHWA.

15.2.3 NEPA Concurrence



Prior to the initiation of environmental studies, the LPA must submit a NEPA Concurrence form to the VDOT project coordinator. It is recommended that the LPA discuss the NEPA class of action with the VDOT District Environmental Coordinator when completing this form.



It is important to remember that only CE's, EA's, and EIS's require preparation of a NEPA Concurrence form; BCE's and PCE's do not.

VDOT requires the use of a standardized [NEPA Concurrence form](#).

VDOT has developed guidance on the use of the NEPA Concurrence form which is available [here](#) or through the District Environmental Section.

VDOT Responsibilities:

- *After receiving the NEPA Concurrence Form, the project coordinator will forward the form to the District Environmental Manager for review and concurrence.*
- *The VDOT District Environmental Manager will request FHWA concurrence or request additional information from the LPA within 5 business days. The VDOT project coordinator will forward the information request or concurrence to the LPA and facilitate further consultations, if necessary.*
- *The approved NEPA Concurrence form will be uploaded into CEDAR.*

15.2.4 Categorical Exclusions

15.2.4.1 Blanket Categorical Exclusions (BCE's)

VDOT and FHWA signed a revised [Programmatic Categorical Exclusion Agreement](#) on May 1, 2013 which offers further NEPA documentation efficiencies for certain categories of transportation projects. The Agreement creates Blanket Categorical Exclusions (BCE's) which are actions that require no further NEPA approval or documentation for the action. VDOT will notify the LPA if their project qualifies as a BCE. No further NEPA documentation is needed by the LPA. The use of a BCE means that the proposed project will not have any other state/federal environmental laws or regulations requirements. If additional state or federal environmental actions are applicable to the project (e.g. water quality permit acquisition), the use of a BCE is not appropriate.

15.2.4.2 Programmatic Categorical Exclusions (PCE's)

There are a variety of project types which may qualify for preparation of a Programmatic Categorical Exclusion. The VDOT-FHWA [Programmatic](#)

[Categorical Exclusion Agreement](#) list identifies these types of projects and provides the requirements for and restrictions on the use of these PCEs.

To complete a PCE, the LPA must determine through coordination with various regulatory agencies that the project does not require an individual permit from the Coast Guard or Army Corps of Engineers, does not have relocations or substantial R/W impacts, does not use land from a Section 4(f) resource (including de minimis findings), and does not have an Adverse Effect on Historic Properties (see section 15.4.8). The sources of these determinations are based on [16 criteria outlined](#) and documented on the standardized [PCE](#) Form, with the LPA's submittal of additional supporting documentation to VDOT.

VDOT requires the use of a standardized [PCE](#) form.

VDOT has developed guidance on the completion of the PCE form which is available [here](#) or through the District Environmental Section.

15.2.4.3 Categorical Exclusions (CE's)

Other actions which are not identified in the Programmatic Categorical Exclusion Agreement, but based on experience do not involve significant environmental impacts require preparation of a Categorical Exclusion, with the submittal of additional documentation. A list of these actions is contained in [23 CFR 771.117\(d\)](#) .

VDOT requires the use of a standardized [CE](#) form.

VDOT has developed guidance on the completion of the CE form which is available [here](#) or through the District Environmental Section.

15.2.4.4 Submitting the PCE/CE



The LPA must submit a draft PCE or CE, along with the supporting documentation, to the VDOT project coordinator.



VDOT concurrence with the completed PCE or CE, and supporting documentation, must be received prior to announcement of a public hearing or posting of willingness and prior to Right of Way Authorization.

PCE's will require a minimum of 5 business days for a quality assurance review. Complex and more detailed CE's may require additional review time. The LPA may want to schedule additional time for a consultation meeting with the District Environmental Section.

The LPA will address comments provided, if necessary, and will submit a final PCE or CE, including an electronic copy, to the project coordinator.

VDOT Responsibilities:

- *During PCE/CE development, the project coordinator and the District Environmental Section may provide support to the LPA as requested, to ensure a quality PCE/CE will be submitted. The project coordinator will forward the completed PCE/CE to the District Environmental Manager for a quality assurance review.*
- *For most PCE/CE's, the VDOT Environmental staff will provide a concurrence or make a request for additional information within 5 business days for a PCE and 10 business days for a CE. When additional review time or consultation with the LPA is necessary, the Environmental Section will promptly notify the project coordinator and the LPA.*
- *The District Environmental Office will upload documentation into CEDAR.*

15.2.5 Environmental Assessments

Because of the complexity involved with the preparation of an EA, close coordination with the VDOT Environmental Coordinator throughout the development of the EA is essential.



To ensure concurrence with the [Purpose & Need](#) (P/N) and the [Alternatives Analysis](#) sections of the documents, FHWA requires those portions of the EA be submitted for review, as they are completed. This early review by VDOT and FHWA will expedite the overall approval process for the EA. A link to an example of a P/N chapter is found [here](#). An example of an Alternatives Analysis chapter can be found [here](#).

For additional guidance on the development of an EA, click [here](#).

VDOT does not require the use of a standardized form for EA's; however, the VDOT Environmental Coordinator can provide examples of Environmental Assessments for assistance with formatting. The LPA should note that FHWA allows no consultant logos in NEPA documentation.



The LPA must submit the EA which has addressed any comments on the P/N and Alternative Analysis sections, along with supporting documentation, to the VDOT project coordinator. Supporting documentation for the EA may include technical reports for air quality, noise analysis, cultural resources, natural resources technical reports, hazardous materials investigations and agency coordination letters.



FHWA's written approval of the EA for public availability must be received prior to announcement of a public hearing or posting of willingness.

EA's will require a minimum of 10 business days for a quality assurance review. Complex and more detailed EA's may require additional review time. The LPA may want to schedule additional time for a consultation meeting with the District Environmental Section.

The LPA will address comments provided, if necessary, and will submit the revised EA, including an electronic copy, to the project coordinator.

After the public hearing, the LPA will have to revise the EA based on public comments and make the written request for a Finding of No Significant Impact (FONSI). The LPA's draft request should be provided to the VDOT project coordinator for the final written request to FHWA. Once FHWA's FONSI has been received, the LPA will be provided with an electronic copy.

VDOT Responsibilities:

- *During EA development, the project coordinator and the District Environmental Section may provide support to the LPA as requested, to ensure a quality EA will be submitted. The project coordinator will forward the completed draft P/N section, Alternatives Analysis section, and EA to the District Environmental Manager for a quality assurance review.*
- *For most reviews, the Environmental Section will generally provide a concurrence or comments/request for additional information within 10 business days. When additional review time or consultation with the LPA is necessary, the Environmental Section will promptly notify the project coordinator and LPA.*
- *The District Environmental Office will upload all required documentation into CEDAR.*

15.2.6 Documentation

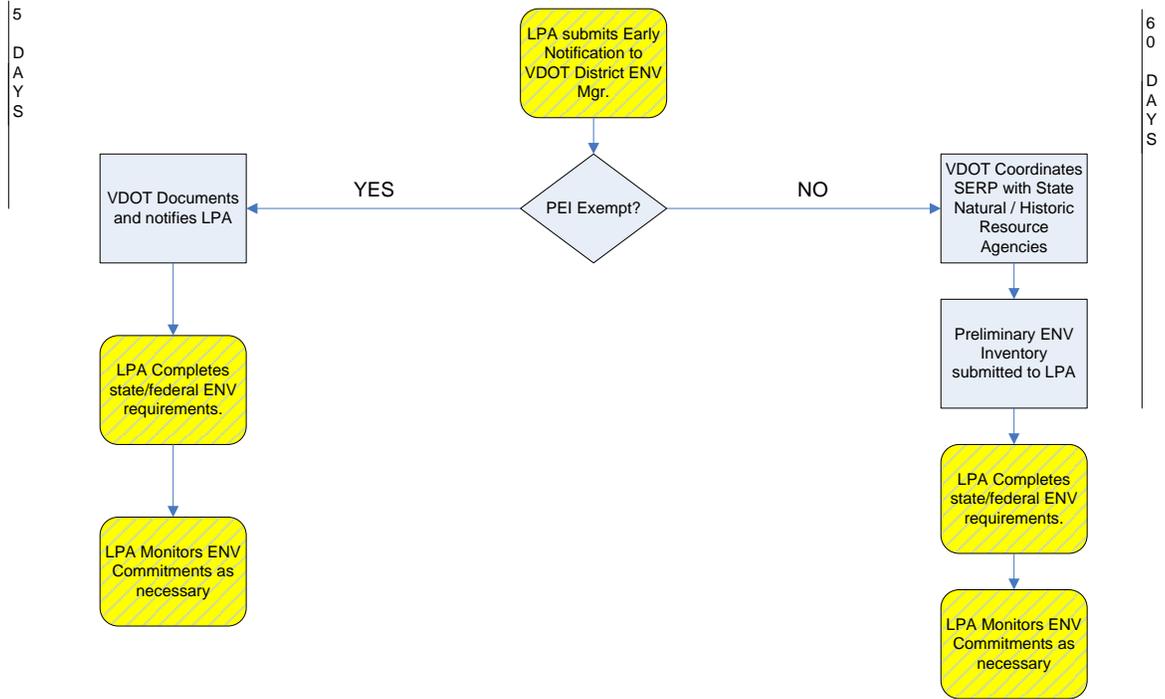
Another equally important aspect of compliance with state and federal laws, regulations and Executive Orders is written documentation. LPA will provide VDOT with copies of all documentation evidencing compliance with applicable laws, regulations and executive orders. This will allow any project specific audits or investigations of environmental compliance to be efficiently and successfully addressed. The American Association of State Highway and Transportation Officials (AASHTO) provide an excellent discussion on maintaining and preparing an administrative record for environmental compliance ([AASHTO Center for Environmental Excellence](#)).

15.2.7 References

- [NEPA Concurrence form](#) and [Guidance](#)
- [PCE form](#) and [Guidance](#)
- [CE form](#) and [Guidance](#)
- [Purpose & Need](#)
- [Alternatives Analysis](#)

15.3 STATE ENVIRONMENTAL REVIEW PROCESS (SERP)

State Environmental Review Process SERP



15.3.1 Introduction

The Code of Virginia directed the Secretaries of Natural Resource and Transportation to establish procedures for review and comment on highway construction projects. The [Memorandum of Agreement](#) (MOA) between those Secretariats implemented a streamlined process for accomplishing this, known as the State Environmental Review Process (SERP).

The SERP provides Virginia state natural and historic resource agencies the opportunity to provide environmental resource information and comment on transportation construction projects at the earliest possible stage of development.

The resource information provided in the Preliminary Environmental Inventory (PEI) assists the LPA, VDOT, and the state resource agencies in identifying any known environmental issues early in project development.

15.3.2 Applicability

- Only applicable to state funded projects estimated to cost more than \$500,000.

15.3.3 SERP Coordination Process



For projects meeting the above criteria, the LPA will submit to the VDOT PC, a [Project Definition form \(EQ-429\)](#) and a topographic map depicting the project limits after the Project Administration Agreement is completed and once the preliminary project scope is determined.



The LPA should be sure to be as inclusive as possible when providing project information. It is best to include any project features that may be included in the project, even if a final determination of those project features has not been made.

The VDOT PC will coordinate with the District Environmental staff to determine whether or not a PEI is required for the project. The LPA will be notified of the VDOT Environmental staff's decision in writing by the VDOT PC. The VDOT PC will copy VDOT Environmental staff on this communication with the LPA. If the project is exempt from the preparation of a PEI, there will be no further communication from the VDOT PC or VDOT Environmental Staff regarding SERP. The VDOT PC shall upload all PEI documentation into iPM, and VDOT Environmental staff will ensure that it is documented in CEDAR.



Even if a project is determined to be PEI-exempt, the LPA is still required to obtain any environmental clearances necessary to satisfy state/federal regulatory requirements.

If a project is determined to require preparation of a PEI, VDOT Environmental staff will contact state resource agencies with the information and project description provided by the LPA. State resource agencies will generally provide comments within 45 days.

VDOT Environmental staff will consolidate agency comments and prepare a "Preliminary Environmental Inventory" for the LPA's use. An example of a completed PEI is found [here](#).



The PEI will not include comments from federal resource agencies (such as US Fish and Wildlife) nor will it provide information on specific water quality permitting requirements. The PEI is solely intended as a preliminary environmental inventory from state resource agency databases. The PEI does not take the place of direct coordination with regulatory agencies to resolve project impacts.

VDOT Responsibilities:

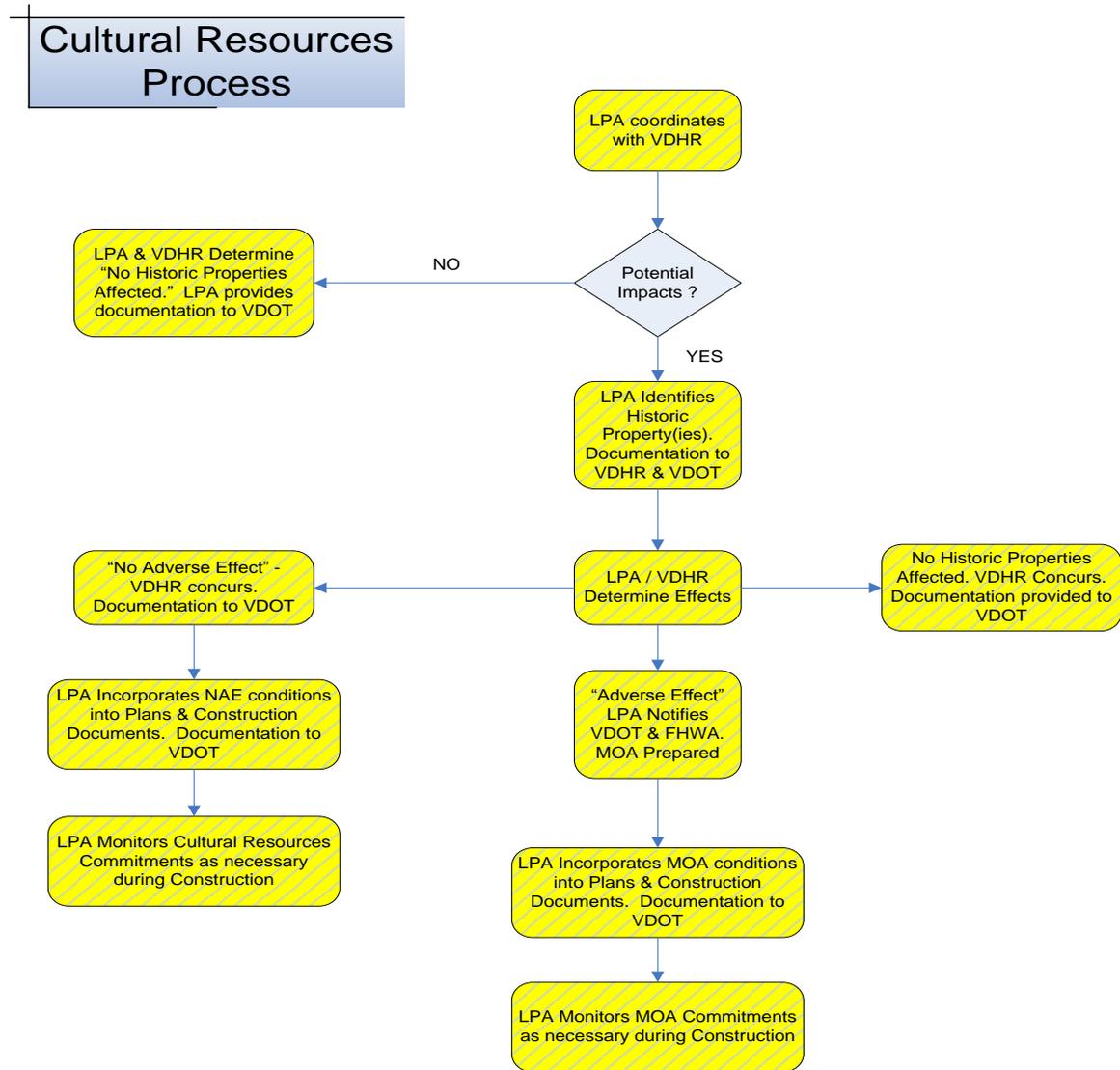
- *The VDOT project coordinator will input the information from the Project Definition form (EQ-429) into CEDAR.*

- *The VDOT Project Coordinator will coordinate with the VDOT Environmental staff to determine whether or not the project requires a PEI to be prepared.*
- *The VDOT Environmental staff will provide a determination, including PEI exemption, to the VDOT PC within 5 business days after the Project Definition form (EQ-429) has been entered into CEDAR. The VDOT project coordinator will then notify the LPA of this determination in writing, copying the VDOT Environmental staff.*
- *If a PEI is required, the VDOT Environmental staff will coordinate with regulatory agencies and prepare a PEI and a memorandum outlining any required environmental commitments, generally between 30 and 90 days after submittal of the Project Definition form (EQ-429).*
- *The VDOT PC and VDOT Environmental staff will ensure that all relevant documentation is uploaded into the VDOT iPM and CEDAR systems accordingly.*

15.3.4 References

- [SERP Memorandum of Agreement](#)
- [Project Early Notification form \(EQ-429\)](#)
- [Preliminary Environmental Inventory \(example\)](#)

15.4 CULTURAL RESOURCES



15.4.1 Introduction

A cultural resource review, performed in accordance with Section 106 of the National Historic Preservation Act, is required for any federal undertaking to include projects receiving federal-aid or projects requiring a federal permit (such as a water quality permit from the US Army Corps of Engineers or the Tennessee Valley Authority). The regulations that implement Section 106 (36 CFR Part 800) provide the process steps for considering the effects of an undertaking on historic properties. This process must be conducted in consultation with the State Historic Preservation Office (SHPO; in Virginia, the Virginia Department of Historic Resources), federally recognized Indian tribes, representatives of local government, other interested parties, the general public, and in some cases, the Advisory Council on Historic Preservation (ACHP) (the federal entity that oversees implementation of Section 106).

The major steps in the Section 106 process are:

- (1) Identification of consulting/interested parties;
- (2) Definition of the geographic area within which a project may directly or indirectly cause changes in the character or use of historic properties;
- (3) Identification of historic properties within the Area of Potential Effects (APE);
- (4) Assessment of project effects on historic properties;
- (5) Consideration of alternatives or modifications to project design that would avoid or minimize adverse effects; and
- (6) Resolution of any remaining adverse effects through the federal agency's execution of a Memorandum of Agreement with the SHPO and other parties.

For federal-aid transportation projects in Virginia, the Section 106 process is used to meet the requirements of the National Environmental Policy Act (NEPA) for ensuring that historic preservation is given appropriate consideration in project planning and development.

Cultural resource review of state-funded transportation projects (that do not require a federal permit) is conducted pursuant to §10.1-1188-1192, Code of Virginia and the SERP MOA. If cultural resource issues on transportation projects without federal involvement (funding or permit) cannot be resolved during the SERP, they are investigated and coordinated further with the VDHR in a manner consistent with 36 CFR Part 800 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. The process followed to ensure project effects on historic properties are considered on state-funded projects is consistent with the federal Section 106 process, but does not involve the ACHP or a federal sponsor.

The Virginia Department of Historic Resources maintains a [Web site](#) that contains valuable information regarding cultural resource coordination requirements.

15.4.2 Applicability

- The requirements of this chapter are applicable to federal-aid projects and projects developed as federally eligible.
- State funded projects requiring a federal water quality permit.

15.4.3 Section 106 Coordination Process

After completion of SERP, the VDOT District Environmental Manager will provide the LPA information on known historic resources within the vicinity of the project obtained from the VDHR's Data Sharing System. After receiving information on known historic resources, the LPA is responsible for identifying consulting parties, defining the APE, conducting technical studies needed to identify historic properties within the APE, assessing the project's effects on historic properties, and coordinating these findings with VDHR and other consulting parties. The LPA can begin coordination with VDHR as soon as a project scope is ready.

15.4.4 Effect Determinations



The LPA is required to provide VDOT with copies of the technical reports (two hard copies and an electronic copy in PDF format) and written correspondence from VDHR, providing VDHR's concurrence with the LPA's findings and effect determinations.

The outcome of coordination with VDHR will be one of several effect determinations: No Historic Properties Present or Affected; No Adverse Effect on Historic Properties (with or without conditions); or Adverse Effect on Historic Properties. When the effect is adverse, a Memorandum of Agreement to resolve adverse effects must be executed.

The LPA should be mindful that receiving an Adverse Effect will require preparation of a CE (instead of a PCE) to comply with NEPA.

Additionally, the LPA should consider whether a historic property may also require preparation of a Section 4(f) evaluation (see 15.5).

15.4.5 Memorandum of Agreement

When an LPA reaches an Adverse Effect determination with VDHR, the VDOT project coordinator must be notified. VDOT and FHWA will participate in the development and execution of the Memoranda of Agreement (MOA). The US Army Corps of Engineers or Tennessee Valley Authority may also be consulting parties for projects with federal permits.

15.4.6 Post Consultation/Construction

The LPA is required to implement commitments required by VDHR during design and/or construction to avoid, minimize, or mitigate effects on historic properties. The LPA must provide VDOT documentation evidencing commitments have been implemented.

If any design changes occur, which affect the project scope reviewed by VDHR, the LPA must coordinate again with VDHR to address any change in effects to historic properties. The LPA must provide VDOT documentation demonstrating VDHR's continued concurrence with the LPA's findings and determination.

If previously unidentified archaeological sites are encountered during project construction, the LPA must address these in accordance with Section 107.14(d) of the VDOT's *Road and Bridge Specifications* and 36 CFR 800.13.

15.4.7 VDHR Permits



Regardless of funding source, when the LPA must conduct archaeological testing or excavations within state-owned right of way, it must first secure a permit from VDHR pursuant to [§10.1-2302](#) of the Code of Virginia. Permits are issued through the VDHR's Division of Resource Services and Review.

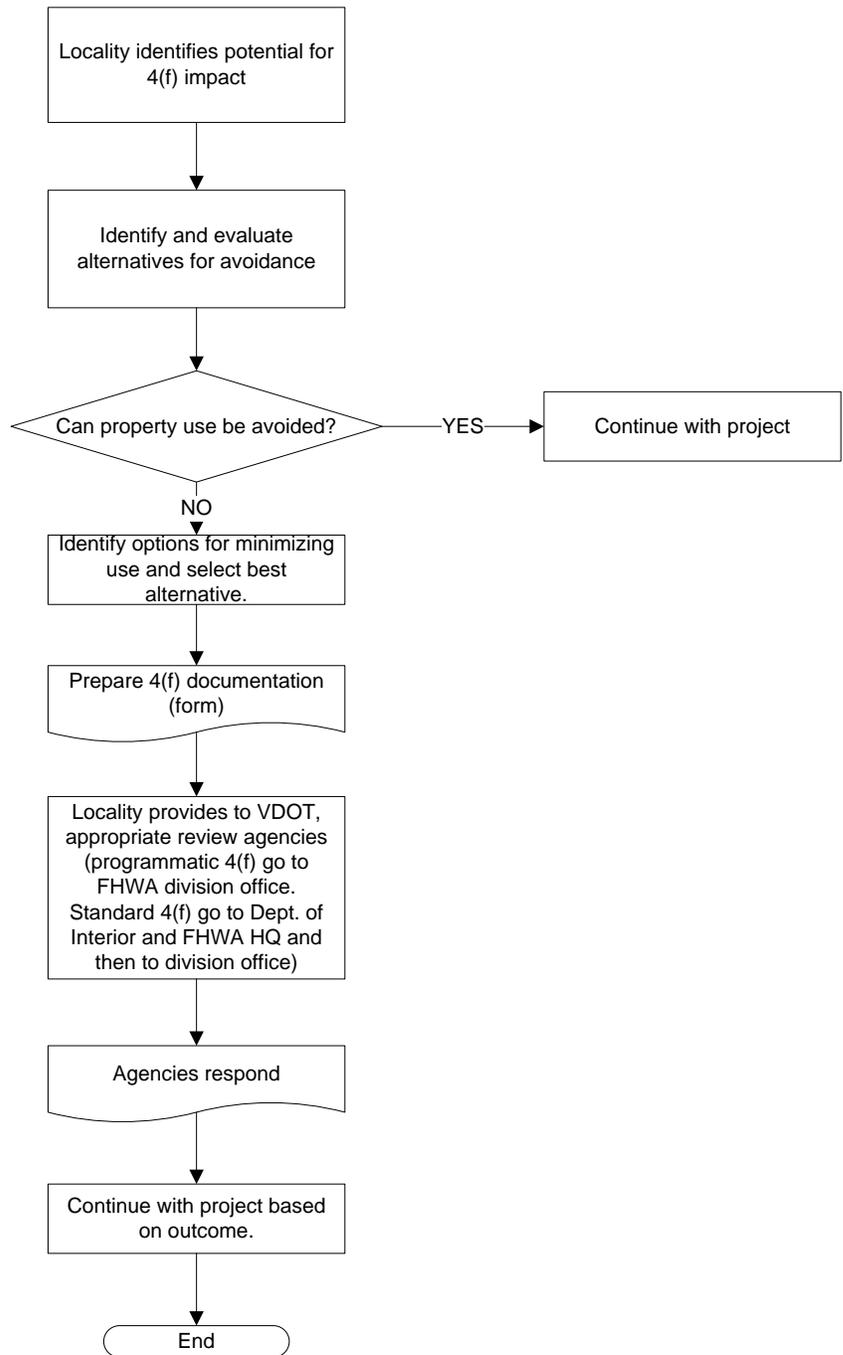
VDOT Responsibilities:

The VDOT Environmental Manager will provide the LPA information on known historic resources within the vicinity of the project as obtained from the VDHR's Data Sharing System.

- *Participate, as a consulting party, during the development of any MOA between the LPA and VDHR, for federal-aid projects..*
- *Prior to completion of NEPA documentation, ensure a copy of the effect determination letter from VDHR or MOA is received and entered into CEDAR.*
- *Oversee all commitments made for a federal-aid project to obtain a cultural resource effect determination are implemented by the LPA during the appropriate phase of project development or during construction.*

15.4.8 References

- Advisory Council on Historic Preservation [Section 106 Regulations User's Guide](#)
- Virginia Department of Historic Resources' [Environmental Review](#)
- VDHR's [Guidelines for Conducting Cultural Resource's Survey in Virginia](#)
- VDHR's [Guidelines for Archaeological Investigations in Virginia](#)



15.5.1 Introduction

The Department of Transportation Act (DOT Act) of 1966 included a special provision - Section 4(f) - which stipulated that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land, and
- The action includes all possible planning to minimize harm to the property resulting from use.

In August 2005, [Section 6009\(a\) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users \(SAFETEA-LU\)](#), made the first substantive revision to Section 4(f) since the 1966 US Department of Transportation Act. Section 6009, which amended existing Section 4(f) legislation at both Title 49 U.S.C Section 303 and Title 23 U.S.C. Section 138, simplified the process and approval of projects that have only *de minimis* (minor) impacts on lands impacted by Section 4(f). Under the new provisions, once FHWA determines that a transportation use of Section 4(f) property results in a *de minimis* impact, analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. Section 6009 also required the US DOT to issue regulations that clarify the factors to be considered and the standards to be applied when determining if an alternative for avoiding the use of a section 4(f) property is feasible and prudent. On March 12, 2008 FHWA issued a [Final Rule](#) on Section 4(f), which clarifies the 4(f) approval process and simplifies its regulatory requirements. In addition, the Final Rule moves the Section 4(f) regulation to [23 CFR 774](#).

15.5.2 Applicability

- The requirements of this chapter are applicable to all federal-aid projects and projects developed to qualify for federal aid.

15.5.3 Section 4(f) Coordination Process

Potential 4(f) properties should be identified during pre-scoping, scoping, or during the preliminary environmental review of the project if at all possible. When VDOT Environmental staff believes that 4(f) properties may be impacted, the LPA will be notified.



The LPA must consider 4(f) property impacts and coordinate with VDOT Environmental staff for additional review. The VDOT Environmental Coordinator will consult with FHWA for a formal determination of 4(f) applicability.

After a determination that 4(f) is applicable, the LPA will complete the necessary evaluation, coordination, and documentation.



VDOT requires the use of a standardized form for [Section 4\(f\) Evaluation](#).

Guidance for completing the Section 4(f) evaluation can be found [here](#).

The draft 4(f) Evaluation will be submitted to VDOT for review. Comments will generally be provided within 15 business days. After addressing the VDOT comments, the LPA will submit a final draft 4(f) Evaluation and VDOT will submit to FHWA for final approval.

VDOT Responsibilities:

- *VDOT Environmental staff will consult with FHWA regarding Section 4(f) applicability and notify the project coordinator and LPA of the determination.*
- *After receiving the draft 4(f) Evaluation, the Environmental Coordinator will provide comments to the VDOT project coordinator and LPA within 15 business days.*

- *After receiving the final 4(f) Evaluation, the VDOT Environmental Coordinator will submit it to FHWA.*
- *Information uploaded into CEDAR.*

15.5.4 References

- [FHWA Section 4\(f\) Policy Paper](#)
- [Guidance for Determining De Minimis Impacts to Section 4\(f\) Resources - FHWA](#)
- [Section 4\(f\) - Independent Bikeway or Walkway Construction Projects](#)
- [Section 4\(f\) - Use of Historic Bridges](#)
- [Section 4\(f\) - Involvements with Historic Sites](#)
- [Section 4\(f\) - Involvements with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges](#)
- [Section 4\(f\) Evaluation and Approval for Transportation Projects That Have a Net Benefit to a Section 4\(f\) Property](#)
- [Section 4\(f\) Evaluation form](#) and [Guidance](#)

15.6 NOISE STUDIES AND ABATEMENT

15.6.1 Introduction

Federal regulations ([23 CFR Part 772](#)) require that each State Transportation Agency determine and analyze anticipated noise impacts and alternative noise abatement measures for those impacts for specific type of highway construction projects.

In response to new technology and the industry practices, FHWA proposed changes to federal noise abatement policy and regulation. The final rule was published on July 13, 2010 with an effective date of July 13, 2011. It required each State DOT to revise its noise policy to be in accordance with this final rule. [FHWA approved the Virginia Department of Transportation Highway Traffic Noise Impact Analysis Guidance Manual on March 15, 2011. The CTB approved the Manual on June 15, 2011.](#)

Effective Date: July 13, 2011

Updated: July 14, 2014

The new policy sets out statements on general applicability (FHWA resources, General Assembly mandate, and administration of the policy) as well as creates a companion document to cover details in a comprehensive manner. The companion document is titled “Highway Traffic Noise Impact Analysis Guidance Manual”. The VDOT noise policy and guidance manual can be located at: <http://www.virginiadot.org/projects/pr-noise-walls-about.asp>.

A noise wall is a specially designed structure built to reduce noise levels created by nearby highway traffic. It is built only after noise impact studies are conducted and certain conditions are met. VDOT conducts studies and looks into options for reducing noise levels along proposed federally funded highway improvement projects. Projects must meet one of the following conditions to be considered for noise abatement:

- (1) The construction of a highway on new location; or,
- (2) The physical alteration of an existing highway where there is either:

- (i) Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
 - (ii) Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,
- (3) The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,
- (4) The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or,
- (5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
- (6) Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or,
- (7) The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

15.6.2 Applicability

- Requirements of this chapter apply to all federal-aid projects and projects developed to qualify for federal-aid.

15.6.3 Noise Abatement Coordination Process

15.6.3.1 Project Type Determination

Only those projects determined to be Type I federal-aid projects will require noise analysis. Type I projects involve the construction of a highway on new location or the physical alteration of an existing highway which significantly changes the horizontal or vertical alignment or increases the number of through traffic lanes and are further defined in section 15.6.1 (1) through (7).

VDOT Responsibilities:

- *VDOT Environmental coordinates with VDOT Noise Abatement Engineer to obtain determination whether project is Type I and will require a Noise analysis.*
- *VDOT Environmental provides project coordinator and LPA determination within 7 business days.*

15.6.3.2 Noise Analysis



During the noise analysis, the LPA is encouraged to consult with VDOT Noise Abatement Engineer to ensure that the approach and methodologies being used meet the requirements of FHWA. The LPA may request a coordination meeting with VDOT Noise staff to discuss analysis planning.



The LPA will provide the draft and final Preliminary Design and Final Design Noise Analysis Technical Report to the VDOT project coordinator who will transmit the reports to the VDOT Noise Abatement Engineer for review. The noise analysis must document the existing, no-build (where applicable), and the design year noise environment and the results of the noise analysis must be included in the NEPA documentation. This information should also be used to ensure appropriate Right of Way and design considerations take place.

VDOT Noise Abatement Engineer reviews and comments on draft Noise Technical Reports within 30 days of receipt from LPA/consultant.

15.6.4 Citizen Coordination

After the approval of the Final Design Noise Analysis and Chief Engineer approval, the LPA will send out certified survey letters to affected property owners. Results are presented to VDOT Noise Abatement Engineer. An

example of a [cover letter](#) and [survey](#) for citizens is attached. A graphic is also usually inserted with letters.

The impacted citizens have the final say in the construction of barriers. If a tie vote occurs the barrier is typically constructed. However, if more than half of the citizens do not want the barrier a graphical analysis of the votes is recommended. For example, if 10 citizens in the front row vote yes and 12 citizens in the 2nd row vote no, then the barrier would be constructed because the front row of homes are anticipated to have a greater noise impact.

The LPA provides results of the citizen survey to the VDOT Noise Abatement Engineer.

15.6.5 Noise Abatement Design

The LPA will ensure design and construction of noise abatement (barriers, berms, etc.) as per the approved Final Design Noise Analysis. The LPA provides the VDOT Noise Abatement Engineer with any changes to design plans that take place after the approval of the Final Design Noise Analysis.

Noise Abatement Specialists use computer models to analyze and predict noise levels based on the loudest hour of the day for future conditions. Along with the road's design, they must consider the area's topography, the distance between the road and nearby properties, traffic speeds and the sounds created by different types of vehicles. The computer model uses that data to predict the future noise level, which is compared with Federal Highway Administration (FHWA) and VDOT noise abatement criteria. If this comparison identifies an impact, VDOT noise abatement specialists must evaluate noise reduction options.

Several options including noise barriers are available and they are presented in the Highway Traffic Noise Impact Analysis Guidance Manual.

The noise barriers can reduce traffic noise significantly and improve quality of life for people living behind them. However, noise barriers must meet the following conditions to be feasible and/or reasonable:

To be feasible a noise barrier:

- (1) must reduce noise levels by at least a 5 decibels 50 percent or more of the impacted receptors experience 5 dB(A) or more of insertion loss to be feasible; and;
- (2) it must be possible to design and construct the noise abatement measure in the proposed location. The factors related to the design and construction include: safety, barrier height, topography, drainage, utilities, and maintenance of the abatement measure, maintenance access to adjacent properties, and general access to adjacent properties (i.e. arterial widening projects)

All of the reasonableness factors listed below must collectively be achieved in order for a noise abatement measure to be deemed reasonable:

- (1) the viewpoints of the affected citizens shall be obtained through surveys. 50 percent or more of the respondents shall be required to favor the noise abatement measure in determining reasonableness, and
- (2) the noise barrier must be 1,600 square feet or less per benefited receptor to be considered cost-effective, and
- (3) the noise barrier shall reduce noise levels by 7 decibels for at least one (1) noise impacted property.

VDOT Responsibilities:

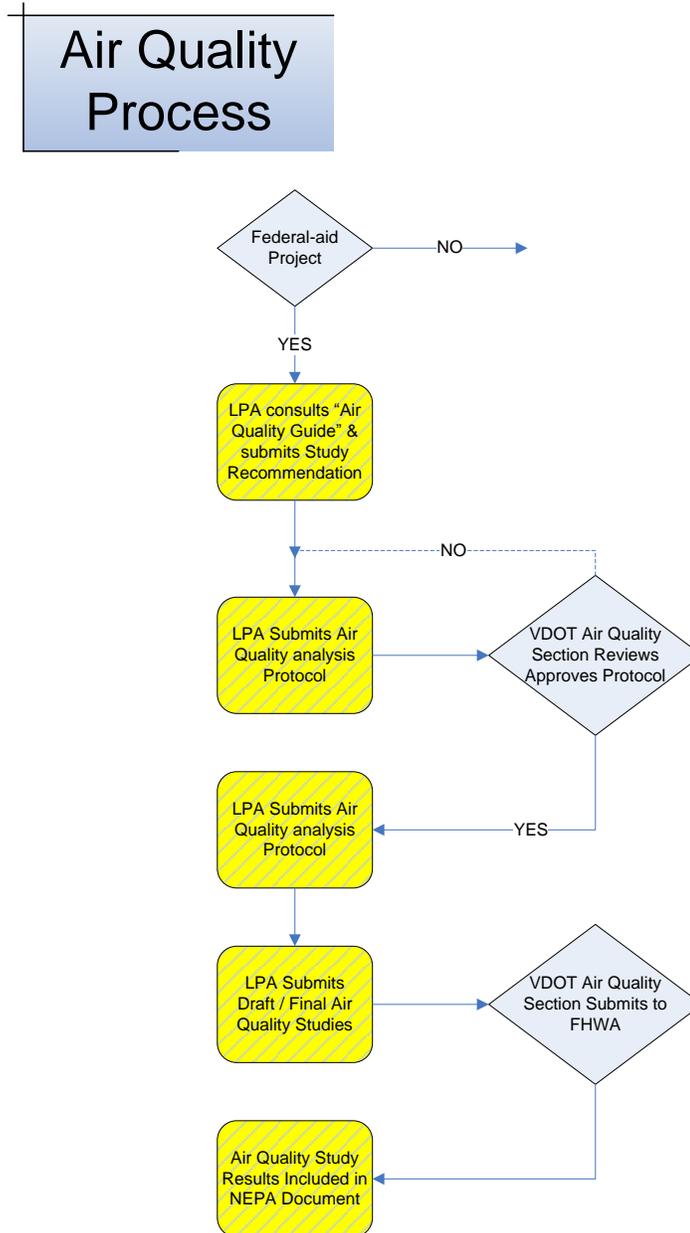
- *Oversee LPA implementation of any required noise abatement during design and construction.*
- *Ensure LPA coordinates with VDOT Noise Abatement Engineer changes to design plans made after NAC decision.*

- *Obtain Chief Engineer/FHWA concurrence memorandum and provide to LPA.*

15.6.7 References/Links

- [VDOT "About Noise Walls"](#)
- [FHWA Guidebook References on Noise](#)
- [State Noise Abatement Policy](#)
- [FHWA's Highway Traffic Noise Analysis and Abatement Policy and Guidance](#)
- [Bridge Manuals Soundwall; Volume V-Part 12](#)

15.7 AIR QUALITY



15.7.1 Introduction

The Clean Air Act requires that transportation projects not result in or contribute to a violation of the National Ambient Air Quality Standards (NAAQS), or delay timely attainment of them. As such, all federally funded transportation plans, improvement programs, and projects must be shown to conform to the purpose of the Air Quality Plan in all non-attainment and maintenance areas throughout Virginia. This process is called Transportation Conformity and applies to regional long-range transportation plans (LRTP) and transportation improvement programs (TIP), as well as individual transportation projects.

Every regionally significant transportation project must be included in a conforming LRTP and/or TIP. Regional transportation conformity requirements are generally met by performing a regional emissions analysis for various analysis years throughout the timeframe of the LRTP, and the total projected air pollutant emissions must be demonstrated to fall below the motor vehicle emissions budgets included in the applicable Air Quality Plan. This function is typically performed by VDOT, or in the case of Northern Virginia, by the Metropolitan Washington Council of Governments.

In addition, NEPA requires each federally funded transportation project be evaluated for its potential impact on air quality in the immediate vicinity of the project, and this evaluation is called a “hot-spot” analysis. Each applicable project must demonstrate that sensitive populations will not be exposed to pollutant concentrations above an applicable air quality standard. Depending upon its location, each project may need to be evaluated for its impact on carbon monoxide, fine particulate matter, and mobile source air toxics concentrations. VDOT’s [Air Quality Consultant's Guide](#) sets standards for air quality assessment work and must be consulted to avoid approval delays.

15.7.2 Applicability

- All federal-aid projects and projects developed to qualify for federal-aid.

- Regionally significant non federal-aid projects, as identified in VDOT's SYIP.
- Transportation conformity requirements apply only to transportation projects located in Virginia's air quality nonattainment and maintenance areas. Currently, this includes the Richmond/Tri-Cities, Hampton Roads, Fredericksburg, and Northern Virginia regions.

15.7.3 Air Quality Coordination Process

The LPA will review the requirements outlined in VDOT's Air Quality Consultant's Guide and in consultation with VDOT Environmental determine which, if any, project-level air studies (i.e. PM2.5 Hot Spot Analysis, Carbon Monoxide Analysis, and/or Mobile Source Air Toxics Analysis) are required, as well as appropriate level of analysis (i.e. qualitative or quantitative).



The LPA will prepare an air quality analysis protocol in accordance with [VDOT's Air Quality Consultant's Guide](#) and submit to the VDOT project coordinator (who will coordinate with the VDOT Air Section) for review/comment. The VDOT Air Section will provide comments and recommendations within five business days.

The LPA will perform the required project-level air quality analyses and submit an electronic draft to the project coordinator. VDOT Air Section will provide comments within 10 business days. After consideration of VDOT's comments, the LPA will submit an electronic copy of the final analyses. When appropriate, VDOT will submit the final analysis to FHWA for review and approval.

VDOT Responsibilities:

- *The VDOT project coordinator and the District Environmental staff will work with VDOT Air Section to provide technical advice to the LPA, as requested during development of the Air Quality analyses.*

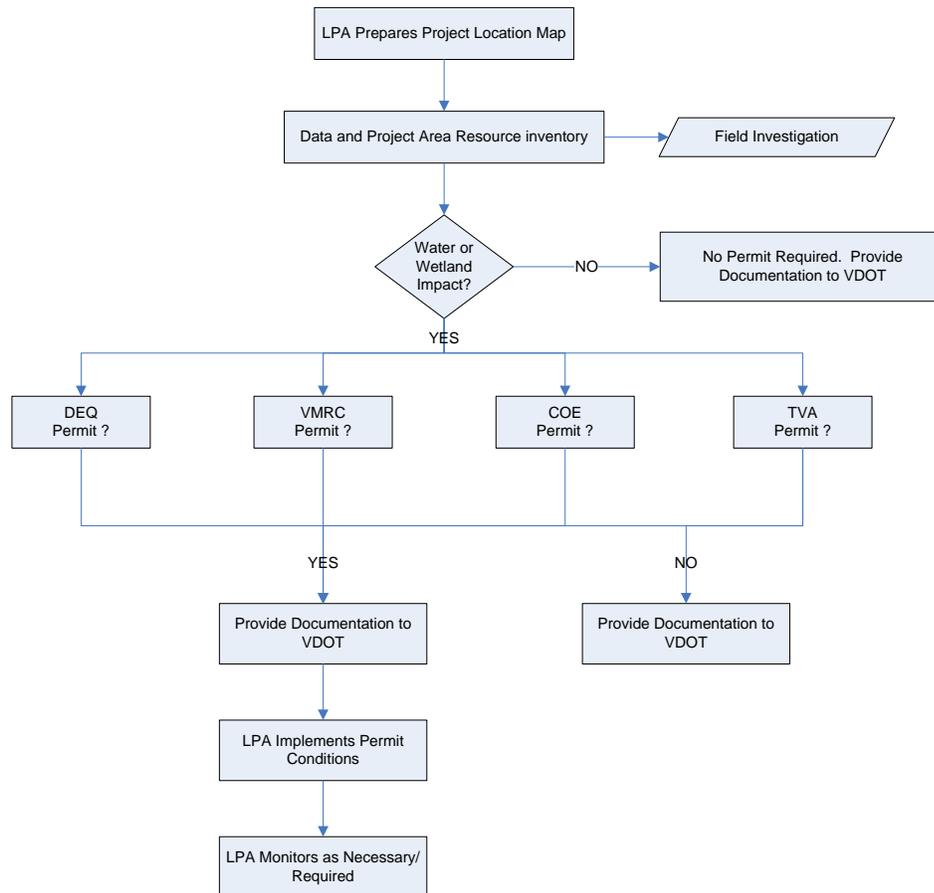
- *VDOT Air Section will review and provide comments for protocols within 5 business days of receipt. Comments for draft analyses will generally be provided within 10 business days.*
- *VDOT Air Section submits draft/final project level air studies to FHWA as appropriate.*

15.7.4 References/Links

- [Interim Guidance on Mobile Air Toxic Analysis in NEPA documents - FHWA Guidance Memorandum September 30, 2009](#)
- [FHWA Agreement on Streamlining Project Level Air Studies 2009](#)
- [VA Department of Environmental Quality - Air regulation](#)
- [VDOT's Air Quality Consultant's Guide](#)
- [FHWA Air Quality](#)
- [FHWA Air Toxics](#)

15.8 WATER QUALITY PERMITTING

Water Quality Permits



15.8.1 Introduction

There are a variety of different state and federal regulations that are applicable when a transportation project impacts streams and/or wetlands. LPA's should expect to consult with the US Army Corps of Engineers (COE) for permits for fill and/or excavation to waters of the United States, including wetlands. LPA's bordering the Tennessee River or any of its tributaries may be required to obtain permits through the Tennessee Valley Authority (TVA). Additionally, Localities may be required to consult with the Virginia Department of Environmental Quality (VDEQ) and/or the Virginia Marine Resources Commission (VMRC) for permits.

15.8.2 Applicability

- The requirements of this chapter are applicable to federal-aid projects and projects developed to qualify for federal-aid.

15.8.3 Water Quality Permitting Coordination Process

The LPA is responsible for obtaining all necessary regulatory approvals, permits, and licenses for each project, which may include United States Coast Guard permits over navigable waterways and COE permits for impacts to waters of the United States (streams and wetlands) and any other permits issued by state agencies. The locality must design its projects in accordance with the laws and regulations referenced below. Unless otherwise agreed to, VDOT will not be involved in the LPA's efforts to obtain the regulatory approvals, permits, or licenses.



Prior to federal authorization for construction advertisement, the LPA must submit documentation in conjunction with a completed and signed [Natural Resources Due Diligence Certification Checklist](#) (EQ-555). This documentation must be submitted as part of the PS&E Submittal Package (see [chapter 12.6](#)). VDOT cannot complete the Environmental Certification (EQ-103) without this information.



Oftentimes there are conditions associated with the issuance of water quality permits. Compliance with those permit conditions are the sole responsibility of the LPA and regulatory agencies will enforce those conditions.

VDOT Responsibilities:

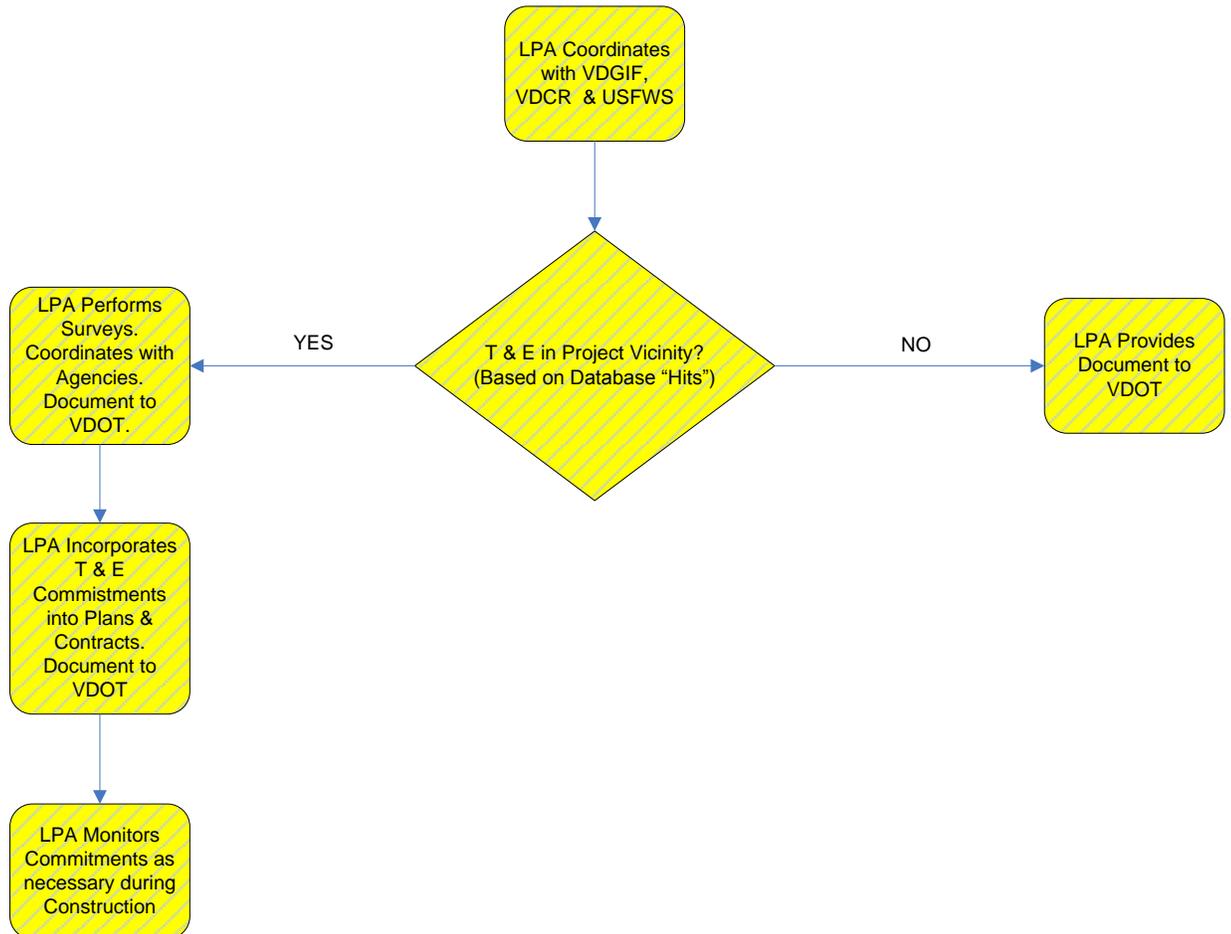
- *VDOT Environmental Staff provides the Natural Resources Due Diligence Checklist to the LPA.*
- *VDOT receives copies of LPA's documentation based on the Natural Resources Due Diligence Checklist from regulatory agencies (e.g. clearance correspondence or permits obtained).*

15.8.4 References

- [Virginia Department of Environmental Quality - Water Division](#)
- [US Army Corps of Engineers - Norfolk District](#)
- [Virginia Marine Resource Commission](#)
- [Natural Resources Due Diligence Certification Checklist \(EQ-555\)](#)

15.9 THREATENED AND ENDANGERED SPECIES

Threatened & Endangered Species



15.9.1 Introduction

Threatened and Endangered (T&E) species clearances are required to ensure the LPA is meeting its state and federal requirements to address potential effects and impacts on state and federal species in accordance with legal and regulatory requirements.

In Virginia, LPA's should consult with VDOT's Environmental Section and may expect to coordinate with the US Fish and Wildlife Service (FWS), the Virginia Department of Game and Inland Fisheries (DGIF), and the Division of Natural Heritage (DNH) within the Virginia Department of Conservation and Recreation (DCR).

15.9.2 Applicability

The requirements of this chapter are applicable to federal-aid projects and projects developed as federally eligible and projects requiring federal permits.

15.9.3 T&E Coordination

After consulting with VDOT's Environmental Section the LPA will coordinate with appropriate regulatory agencies to determine if listed state/federal T&E species exist within the project area. Based on this initial coordination with the regulatory agencies, LPA's would then conduct any technical studies (i.e. habitat assessment, species surveys, Biological Evaluations or Biological Assessments) as required.



The results of this coordination and any studies are then provided to VDOT in conjunction with a completed and signed [Natural Resources Due Diligence Checklist](#) (EQ-555). Information related to the potential presence of federally listed T&E species is necessary for completion of the NEPA document. Complete T&E documentation is required for VDOT to complete the

PS&E re-evaluation and Environmental Certification prior to authorization to advertise.



The LPA must incorporate any environmental commitments made to regulatory agencies during the T&E coordination process into project plans or construction documents (e.g. avoidance of specified area, relocation of species prior to ground disturbance, Time of Year Restrictions, etc.).

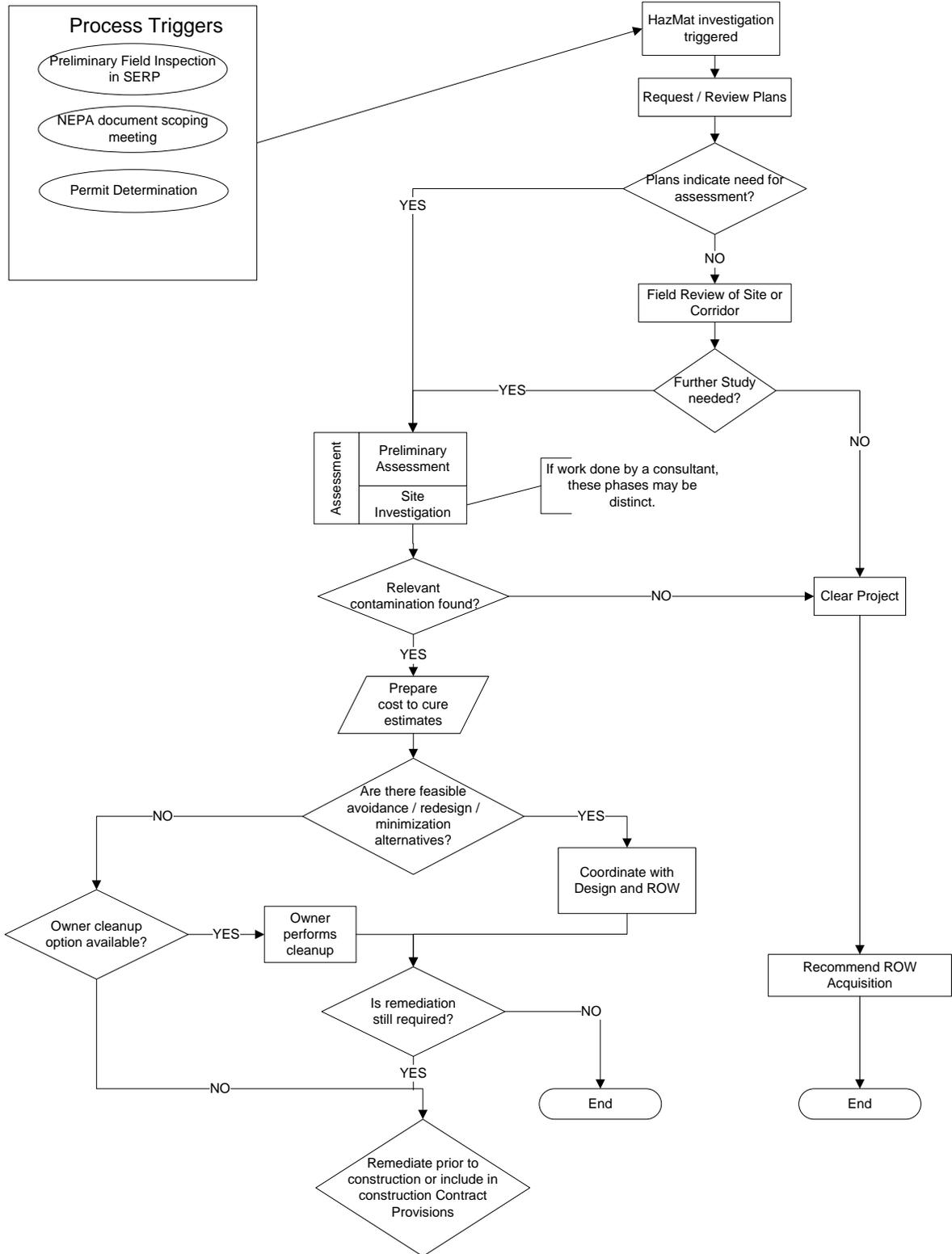
VDOT Responsibilities:

- *Provide copy of Natural Resources Due Diligence Checklist to LPA.*
- *Receive copies of LPA's agency correspondence based on Natural Resources Due Diligence Checklist.*
- *Oversee that any environmental commitments are incorporated into locality's design or construction.*

15.9.4 References/Links

- [US Fish & Wildlife Service Endangered Species Act](#)
- [Virginia Department of Conservation & Recreation's Division of Natural Heritage](#)
- [Virginia Department of Game & Inland Fisheries](#)
- [Natural Resources Due Diligence Certification Checklist](#)

15.10 HAZARDOUS MATERIALS



15.10.1 Introduction

LPA's are responsible for performing an appropriate level of environmental "due diligence" to determine any "recognized environmental conditions" (REC's) on properties that will be acquired for the project. Additionally, LPA's will need to determine any such conditions on existing right-of-way that might impact construction activities. Such REC's can indicate a continuing release, past release, or a material threat of a release of hazardous substances or petroleum into the soil, groundwater or surface water of the property or adjacent properties, or the presence of such impairments associated with buildings or structures.

VDOT recommends that all due diligence investigations satisfy the practices that constitute all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary practice as defined in 42 U.S.C. 9601(35)(B). Accepted industry environmental due diligence procedures is available through [ASTM-International](#). When REC's are determined to be present, the LPA is responsible for coordinating with appropriate environmental agencies to determine what, if any, regulatory requirements must be met prior to, during, and/or following construction.



The LPA should take prudent steps to avoid, minimize, contain or otherwise manage potential impacts from contamination or potential sources of contamination through alignment shifts or design changes. Where such impacts cannot feasibly be avoided, the LPA is responsible for developing cost estimates for site closure/remediation/mitigation and addressing the impacts either prior to project construction (e.g. underground storage tank closure) or during the construction phase through the use of specific contract provisions.

The responsible entity must also ensure that appropriate inspections are made for asbestos containing materials and that provisions are made to remove/abate or otherwise mitigate such hazards. VDOT can provide copies of established

procedures for asbestos inspection, asbestos abatement, and asbestos project monitoring that the LPA can follow.

15.10.2 Applicability

- Federal-aid projects and projects developed to qualify for federal aid.
- All projects where VDOT will maintain the project after construction.

15.10.3 Hazardous Materials Coordination Process

After completion of the SERP, the LPA will receive a PEI that contains an inventory of known REC's within the project corridor. The LPA should use this information in addition to any prudent further due diligence activities they deem appropriate.



After completion of the due diligence activities and before federal Right of Way Authorization can be provided, the LPA must submit a completed and signed [Hazardous Materials Due Diligence form \(EQ-121\)](#) to the VDOT project coordinator (to be used by the VDOT District Right-of-Way Manager and District Environmental Manager).

At times, hazardous materials mitigation must be performed during construction. On these occasions, the LPA will need to prepare special contract provisions and/or special provision copied notes to address hazardous materials issues on a project (e.g. petroleum contamination, lead paint, asbestos inspections, abatement, and monitoring). VDOT has a number of special provisions and the LPA is encouraged to coordinate with VDOT Environmental staff to obtain those provisions.

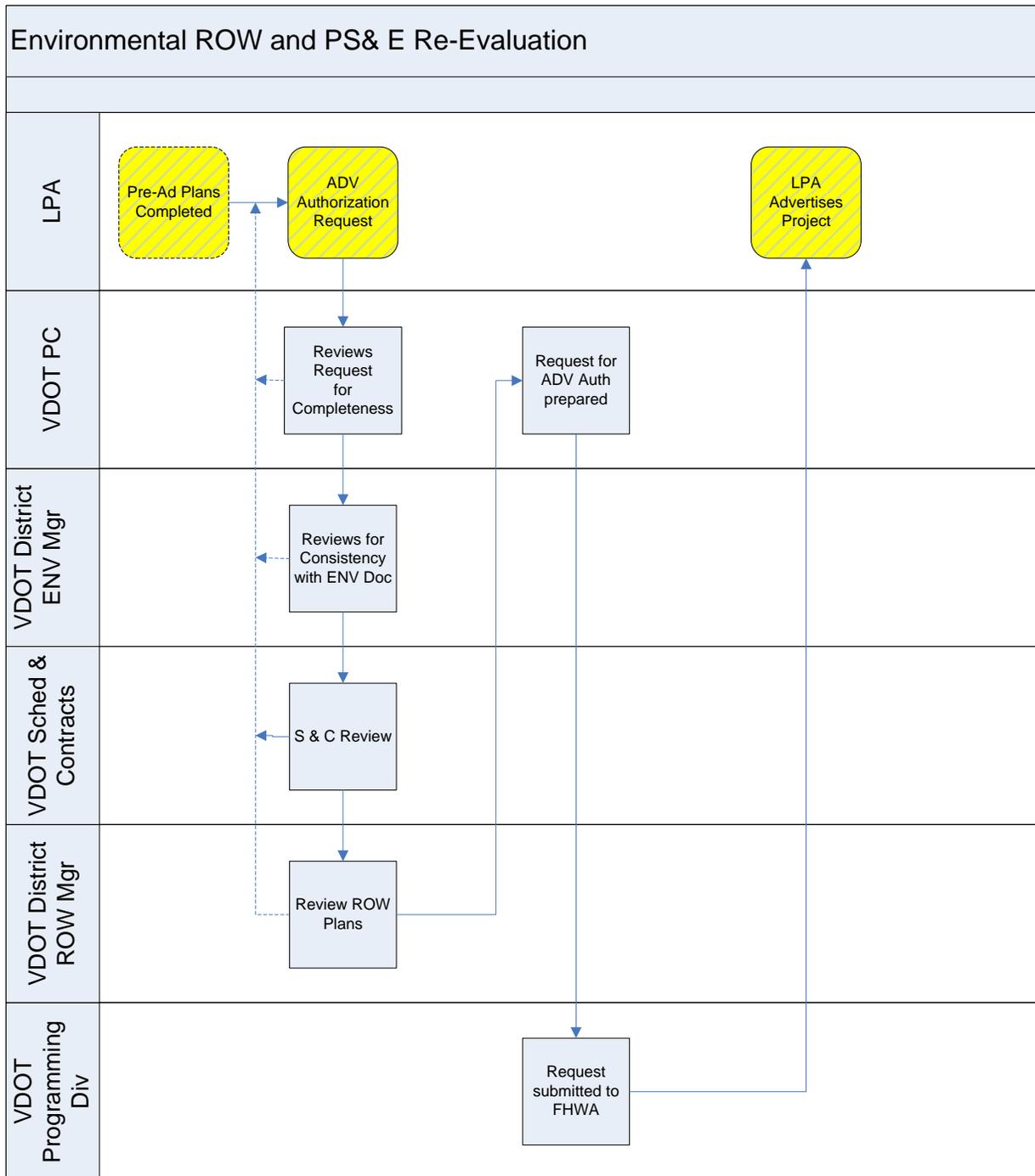
VDOT Responsibilities:

- *VDOT Environmental provides the EQ-121 to the LPA at kick off or scoping meeting.*
- *VDOT Right-of-Way Manager receives the completed and signed EQ-121 form from LPA. VDOT Right-of-Way then can proceed with the Right-of-Way certification process.*
- *VDOT District Environmental Manager receives the completed and signed EQ-121 form from LPA. Environmental Manager then can proceed with PS&E re-evaluation / Environmental Certification process.*

15.10.4 References

- [ASTM-International](#)
- [FHWA Guidance on Hazmat](#)
- [Virginia Department of Environmental Quality - Waste](#)
- [Environmental Protection Agency - Due Diligence/Due Care](#)
- [Hazardous Materials Due Diligence form \(EQ-121\)](#)

15.11 RE-EVALUATIONS AND CERTIFICATION



15.11.1 Introduction

The VDOT District Environmental Manager must certify that the environmental documentation is complete and valid prior to federal right of way and construction authorizations.

15.11.2 Applicability

- All federal-aid projects and projects developed to qualify for federal-aid.

15.11.3 Right of Way Re-evaluation



Prior to Right-of-Way authorization (when the acquisition involves federal right of way funds), VDOT must confirm that the Right-of-Way proposed for purchase conforms to the footprint studied in the NEPA document. This is documented by VDOT in the [Right-of-Way Re-evaluation form](#) and provided to FHWA.

Projects which have received a Programmatic Categorical Exclusion (PCE) are not required to receive a PM-130 form or right-of-way re-evaluation form at the right-of-way authorization stage.

VDOT Responsibilities:

- *VDOT project coordinator provides [PM-130 form](#) to VDOT Environmental Manager for right-of-way authorization. Environmental Manager reviews plans and environmental documentation; completes right-of-way reevaluation form within 15 business days. Copy provided to LPA.*

15.11.4 PS&E Re-evaluation & Environmental Certification



Prior to Construction authorization by FHWA, VDOT District Environmental Manager must confirm that the plans proposed for construction match the footprint originally studied in the NEPA document (PS&E Re-evaluation), that all required environmental permits,

environmental commitments and conditions have been fulfilled, or plans are in place to fulfill them (Environmental Certification).

The environmental documentation and project plans provided by the LPA to the VDOT project coordinator (which will be forwarded to the VDOT District Environmental Manager), allow this confirmation to take place. The [Plans, Specifications, and Estimates \(PS&E\) Re-evaluation form](#) and the [Environmental Certification Checklist](#) taken together, reaffirm to VDOT and FHWA that the environmental documentation originally prepared by the LPA is sufficient to advance to construction.

The LPA project manager should review the requirements identified in these forms and ensure that all necessary documentation has been submitted prior to requesting authorization to advertise. Missing documentation will delay VDOT's ability to complete the processes necessary to request FHWA authorization for advertisement.

VDOT Responsibilities:

- *VDOT project coordinator provides [PM-130 form](#) to VDOT Environmental Manager for PS&E authorization. Environmental Manager reviews environmental documentation and completes PS&E reevaluation and Environmental Certification form within 15 business days. Copy provided to LPA.*

15.12 Environmental Monitoring

15.12.1 Introduction

Coordination with state and federal regulatory agencies and completion of NEPA documents may result in environmental commitments that must be implemented during design, construction, or post-construction. It is the responsibility of the LPA to ensure environmental process steps or environmental commitments made to regulatory agencies are implemented. VDOT's oversight responsibility is limited to those items identified in this manual and items identified in VDOT's plan for the oversight of environmental elements of locally administered projects.

The VDOT Area Construction Engineer will conduct periodic monitoring of environmental commitments identified in the NEPA process. Failure to implement environmental commitments can result in the LPA's loss of federal aid or the possibility of fines and criminal convictions.

LPA's are solely responsible for the compliance with all environmental laws and regulations applicable to their projects.

Chapter 15 – Environmental – Checklist

These checklists can be found in their entirety in the [VDOT on line forms library](#)

CH 15 - Environmental

Localities and VDOT are responsible for ensuring that the environment is protected from potential adverse impacts due to transportation projects. As defined, the environment includes both natural and cultural resources. LPA's must comply with NEPA when using federal funds or when the project is federal eligible. LPA's must comply with SERP when using state funds (\$500,000 or more). This checklist outlines the elements and processes that must be addressed to ensure compliance on a broader scale with NEPA for federally funded projects and on a narrower scale with SERP for State funded projects.

| SUBMIT | COMPL | F | S-V | S-L | TA | UCI | Requirement | Reference | |
|---|--------------------------|------|------|------|----|-----|--|-----------|-----------------------------|
| | | | | | | | | LAP | Other** |
|  | <input type="checkbox"/> | X | X | X | | | Submit EQ-429 Project Definition Form & project location map | 15.1A | |
| | <input type="checkbox"/> | X*** | X*** | X*** | | | Hold Scoping/kickoff meeting or discussion | 15.1.1 | |
| | <input type="checkbox"/> | X | X | X | | | Obtain Environmental Scoping Recommendations from VDOT | 15.1.1 | |
| | <input type="checkbox"/> | | X | X | | | Perform SERP for State funded projects having a value greater than \$500,000. | 15.3 | |
|  | <input type="checkbox"/> | X | -- | -- | | | Prepare and submit NEPA Concurrence form - Not Applicable to BCE's & PCE's | 15.2 | 42USC4332 40CFR1500-1508 |
|  | <input type="checkbox"/> | X | -- | -- | | | Prepare and submit NEPA BCE/PCE/CE - Supporting documentation for PCE/CE | 15.2 | 42USC4332 40CFR1500-1508 |
|  | <input type="checkbox"/> | X | -- | -- | | | Complete NEPA EA (if required) prior to Public Hearing and any R/W acquisition | 15.2 | 42USC4332 40CFR1500-1508 |
|  | <input type="checkbox"/> | X | -- | -- | | | Coordinate with VDHR for Cultural Resources Analysis (Sec 106); submit technical reports to VDOT, and obtain effect determination letter or MOA if required from VDHR. | 15.4 | 16USC470f |

| | | | | | | | | | |
|---|--------------------------|---|----|----|--|--|---|-------|----------------------------------|
|  | <input type="checkbox"/> | X | -- | -- | | | Submit Section 4f Evaluation when applicable | 15.5 | 23CFR774 49USC303 23USC138 |
|  | <input type="checkbox"/> | X | -- | -- | | | Submit draft and final Noise Impact Assessment reports to VDOT when applicable | 15.6 | 42USC4332(2) |
|  | <input type="checkbox"/> | X | -- | -- | | | Submit draft and final Air Quality Analysis reports to VDOT when applicable | 15.7 | 42USC1857 |
|  | <input type="checkbox"/> | X | -- | -- | | | Coordinate with resource agencies, submit EQ-555 form, water quality certifications and supporting documentation to VDOT | 15.8 | 42USC4321-4347 |
|  | <input type="checkbox"/> | X | X | -- | | | Complete and submit Hazardous Materials Reviews (EQ-121 form) and supporting documentation to VDOT | 15.10 | 42USC6901-6991k |
|  | <input type="checkbox"/> | X | -- | -- | | | Submit Environmental Re-evaluation at PS&E (EQ-200); Environmental Certification (EQ-103) - Notify VDOT PC when ready for authorization at R/W and/or construction advertisement. LPA submits supporting documentation. | 15.11 | |

** For additional USC and CFR references see Appendix 15.1 - B

*** While not required, this is strongly recommended for all projects