

# Environmental Regulatory Competitiveness Benchmarking for North Carolina

North Carolina Chamber Foundation

May 2017





## Quality information

### **Prepared by**

Kerri Hartung and others  
as described in Appendix A

### **Checked by**

Steven Moore, Lead Verifier

### **Approved by**

Scott Hartung, Vice President,  
Mid-Southeast Business Unit  
Leader – Environment

## Revision History

<b>Revision</b>	<b>Revision Date</b>	<b>Details</b>	<b>Issuer Name</b>	<b>Position</b>
0	April 2017	Initial Version	Kerri Hartung	PM
1	May 2017	Revised Version	Kerri Hartung	PM

## Distribution List

<b>No. Hard Copies</b>	<b>PDF</b>	<b>Association / Company Name</b>
0	1	NC Chamber Foundation – Cassi Zumbiel, Jason Soper, Jake Cashion
0	1	NC Chamber Foundation – Cassi Zumbiel, Jason Soper, Jake Cashion

## Prepared for:

North Carolina Chamber Foundation  
701 Corporate Center Drive, Suite 400  
Raleigh, NC 27607

## Prepared by:

AECOM Technical Services of North Carolina, Inc.  
1600 Perimeter Park, Suite 400  
Morrisville, NC, 27560  
aecom.com

Copyright © 2017 by AECOM

All rights reserved. No part of this copyrighted work may be reproduced, distributed, or transmitted in any form or by any means without the prior written permission of AECOM.

*This page intentionally left blank*

## Table of Contents

<b>Executive Summary .....</b>	<b>ES-i</b>
<b>1.0 Benchmarking Purpose, Approach and Organization .....</b>	<b>1-1</b>
1.1 Purpose .....	1-1
1.2 Approach .....	1-1
1.3 Organization .....	1-2
<b>2.0 Regulatory Primer by Media .....</b>	<b>2-1</b>
2.1 Air .....	2-1
2.2 Water .....	2-2
2.3 Waste.....	2-4
2.4 Environmental Policy Act Review .....	2-4
2.5 Obtaining Permits .....	2-5
2.6 Voluntary Non-Compliance Disclosure (Audit Privilege) .....	2-5
<b>3.0 Benchmarking Findings and Recommendations .....</b>	<b>3-1</b>
<b>Appendix A Qualifications and Staffing</b>	
<b>Appendix B Detailed Benchmarking by Media and State</b>	
<b>Appendix C Acronyms</b>	
<b>Appendix D End Notes</b>	

### Figures

Figure 1 Five Beneficial Administrative Practices

### Tables

Table 1 Comparison of Air Program Elements

Table 2 Summary of Benchmarking Findings

Table 3 Summary of Recommendations for North Carolina – General Administrative Improvements

Table 4 Summary of Recommendations for North Carolina – Media-Specific Administrative Improvements

Table 5 Summary of Recommendations for North Carolina – Regulatory Improvements

*This page intentionally left blank*

## Executive Summary

The Southeast as a region has long been attractive for industrial growth and continued expansion when compared to other regions of the country due to its combination of tax policies, low cost of living, and access to infrastructure, workforce talent, and natural resources. Ease of obtaining required environmental permits and complying with environmental regulations therefore can be a differentiating factor when industry is deciding whether to operate or expand in a particular location within the region. The North Carolina Chamber Foundation (NC Chamber Foundation) selected AECOM Technical Services of North Carolina, Inc. (AECOM) to prepare a benchmarking assessment of environmental regulatory and permitting requirements for North Carolina and competing Southern states, with the desire to increase awareness of both challenges and good practices, and to identify where reforms may be merited.

Per NC Chamber Foundation request, this benchmarking assessment compared environmental permitting requirements for North Carolina to that of Alabama, Florida, Georgia, South Carolina, Tennessee and Virginia for the following business scenarios and media:

1. Business scenarios: transportation networks; manufacturing; commercial development; and expansion vs new construction where there are material differences from an environmental media perspective
2. Environmental media: air, solid and hazardous waste, water and wastewater, and state environmental policy act compliance (transportation networks)



In order to complete the benchmarking in each state and to develop recommendations for North Carolina, AECOM assembled a team of subject matter experts each with over 15 years of experience in their respective fields (refer to Appendix A for additional details). Benchmarking drew from team member experience and reviews of policy, procedure, regulatory language and/or agency guidance.

The benchmarking analysis focused on identifying areas where a given state has implemented environmental permitting and/or regulatory requirements beyond those mandated by federal regulation for the media and business scenarios evaluated. The benchmarking focused on evaluating state requirements rather than federal requirements as federal requirements serve as minimum standards that would be in place for any state. Areas where state requirements have been streamlined were recognized as well. Results and recommendations are a “snapshot in time,” reflecting regulations and policies in place at the time of the analysis (i.e., January through March 2017).

The benchmarking showed that the states evaluated were aligned in many respects. While the benchmarking highlighted specific opportunities for regulatory improvements in North Carolina, it also illustrated that a similar number of recommended improvements are administrative in nature.

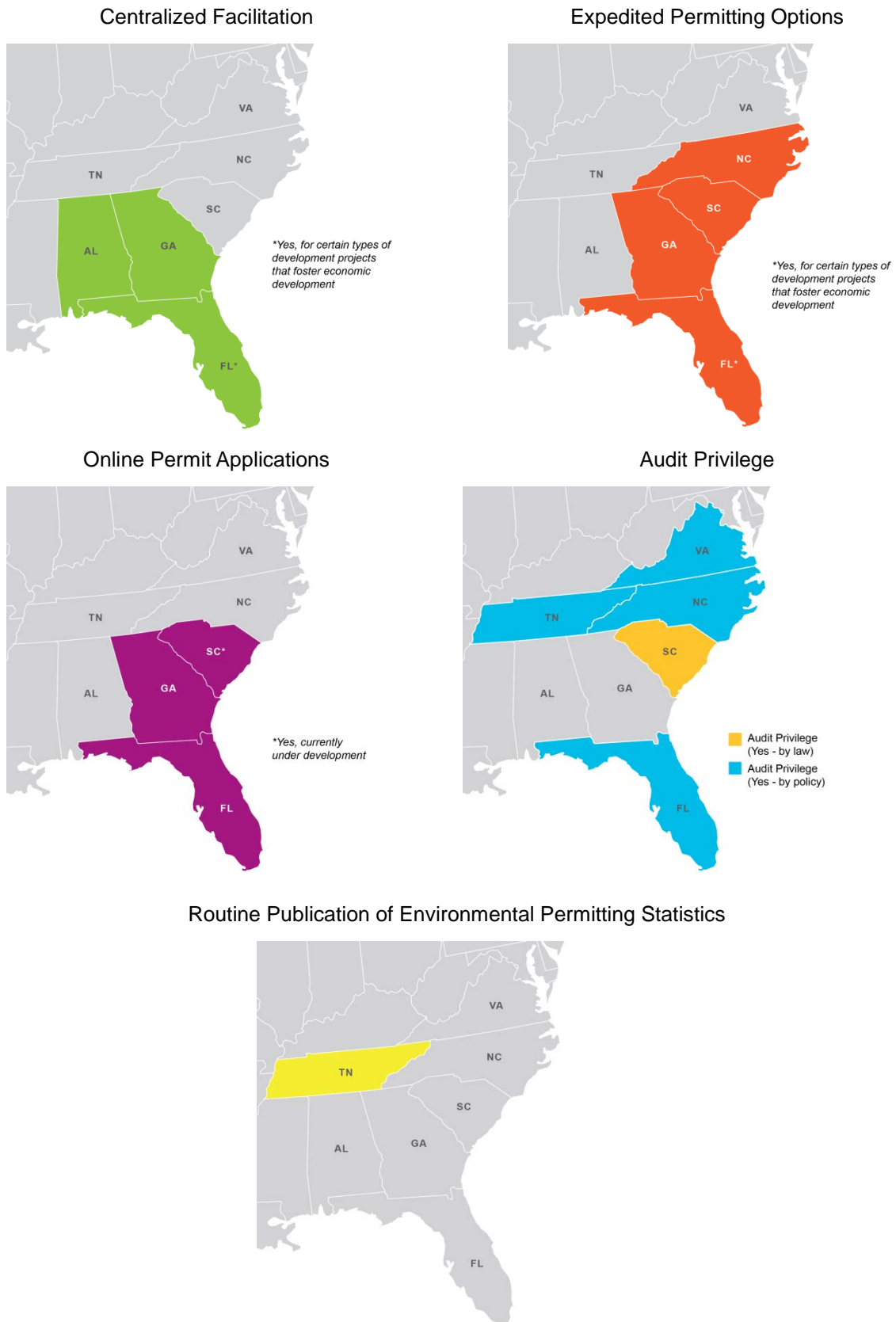
Recommendations presented in Tables ES-1 through ES-3 were drawn from good regulatory and administrative practices observed in benchmarked states, as well as from AECOM's experience with assisting clients to obtain environmental permits and comply with environmental regulations in the Southeast. Figure ES-1 illustrates which states have adopted the five following beneficial administrative practices: centralized facilitation, expedited permitting options, online submittal of permitting applications, audit privilege, and routine publication of permitting statistics.

**Table ES-1. Summary of Recommendations for North Carolina – Regulatory Improvements**

Media	Recommendations
<b>Air</b>	<p><b>Refine the NC Air Toxics Program.</b> Recent refinements to the North Carolina Air Toxics Rule did not result in the anticipated streamlining of the rule. Further refinement is merited to maintain protective standards without disproportionately burdening industry. Good practice states: AL, FL, TN, VA.</p> <p><b>Offer Permit-by-Rule (i.e., General Permits) for appropriate source types.</b> Permit-by-Rule provides a streamlined permitting process, as general permits have already undergone any needed public notice processes and routine technical reviews. Permittees can expect predictable, streamlined permitting processes with lower administrative burdens, and DAQ can expedite their review and approval. Good practice states: TN and VA.</p>
<b>Water</b>	<p><b>Allow monitoring exemptions under Stormwater General Permits.</b> Allow facilities to self-exempt (using adequate documentation) from stormwater monitoring for parameters otherwise required under the Industrial General Permit but which are not present at the site due to current or previous industrial activities. Good practice states: GA.</p>
<b>NEPA/ SEPA</b>	<p><b>Assess the Case for Pursuing Full NEPA Assignment.</b> Currently, NC has NEPA Assignment for Categorical Exclusions only. For routine projects, such as highway or safety improvements, and restoration, rehabilitation, reconstruction or replacement of bridges and pavement, delegation of all federal environmental compliance functions to NC DOT may be an effective way to speed up project processing while preserving environmental quality. Good practice state: FL.</p>



**Figure ES-1. Five Beneficial Administrative Practices by State**



## Table ES-2. Summary of Recommendations for North Carolina – General Administrative Improvements

---

**Provide centralized permitting services.** Establish a centralized permitting division/department to implement, coordinate, and oversee the environmental permitting process for all media. Good practice state: AL.

**Offer online permitting/submittal systems.** Offer an ePermitting service where applications and other related materials can be developed and submitted online to expedite permit review and issuance. Good practice states: FL, GA, SC.

**Offer expedited permitting for all environmental permits.** Offer an expedited permitting program across all media which allows applicants to pay additional fees for more rapid evaluations. Good practice states: FL, GA, SC.

**Allow applicant funded short-term staff augmentation.** For large scale programs/projects whose permit review could be impacted by staffing shortfalls at DEQ, allow applicants to fund a short-term position. Good practice state: NC DOT.

**Improve general web resources, guidance and tools.** Adopt improved business-friendly websites, electronic permitting selection tools, and clarifying FAQs, or guidance documents on all regulations. Provide consolidated guidance on typical permitting timelines to give industry a holistic idea of what to expect. Good practice state: SC water, FL air, FL NEPA/SEPA, VA NEPA/SEPA.

**Routinely publish transparent permitting statistics.** Increase transparency on permit application review and decision statistics on an annual basis. Good practice state: TN.

---

## Table ES-3. Summary of Recommendations for North Carolina – Media-Specific Administrative Improvements

---

**Streamline application materials.** Return to the previous practice of allowing applicants to reference the appendices of an air permit application or emissions data they already have on file rather than complete application forms with duplicate information. Prior good practice state: NC.

**Engage in additional drought planning.** Allow various local and regional water supply planning organizations to develop Water Supply Plans in case of drought (VA) or have a Technical Advisory Committee for water planning in case of drought (TN).

**Offer clarified and enriched web resources for stormwater information and permitting**

Streamline and clarify web resources. Stormwater is managed by several different divisions within DEQ as well as delegated entities in other municipalities, and the rules have not been clearly consolidated into one location or cohesively presented on NC DEQ's website. Offer an enhanced Water Quality Tool to allow applicants/permittees to query watershed data for more details on the receiving streams nearby, including specifics on TMDLs, and analytical data from nearby water quality monitoring sites. Publish clarifying FAQs and guidance documents. Good practice state: SC.

**Provide more detailed SEPA guidance.** Develop a SEPA guide with flow mapping (decision trees, milestones, checklists, etc.) for affected projects. Good practice states: VA, FL.

**Increase outreach and communication from State Historic Preservation Office (SHPO).** Increase outreach and communication from SHPO on procedures, typical timelines and process to extend typical timelines. For expected reoccurring impacts, encourage establishment of a programmatic agreement between the agency and the applicant and educate applicants on this approach. Good practice state: FL.

---

## 1.0 Benchmarking Purpose, Approach and Organization

### 1.1 Purpose

The Southeast as a region has long been attractive for industrial growth and continued expansion when compared to other regions of the country due to its combination of tax policies, low cost of living, and access to infrastructure, workforce talent, and natural resources. Ease of obtaining required environmental permits and complying with environmental regulations can therefore be a differentiating factor when industry is deciding whether to operate or expand in a particular location within the region. The North Carolina Chamber Foundation (NC Chamber Foundation) selected AECOM Technical Services of North Carolina, Inc. (AECOM) to prepare a benchmarking assessment of environmental regulatory and permitting requirements for North Carolina and competing Southern states, with the desire to increase awareness of both challenges and good practices, and to identify where reforms may be merited.

### 1.2 Approach

Per NC Chamber Foundation request, this benchmarking assessment compared environmental permitting requirements for North Carolina to that of Alabama, Florida, Georgia, South Carolina, Tennessee and Virginia for the following business scenarios and media:

3. Business scenarios: transportation networks; manufacturing; commercial development; and expansion vs new construction where there are material differences from an environmental media perspective
4. Environmental media: air, solid and hazardous waste, water and wastewater, and state environmental policy act compliance (transportation networks)



The benchmarking analysis focused on identifying areas where a given state has implemented environmental permitting and/or regulatory requirements beyond those mandated by federal regulation for the media and business scenarios evaluated. The benchmarking focused on evaluating state requirements rather than federal requirements as federal requirements serve as minimum standards that would be in place for any state.

Cases where a given state is affected by federally determined conditions, such as air quality attainment status, however, were identified in the benchmarking to support state implementation differences. Areas where state requirements have been streamlined were recognized as well. Results and recommendations are a “snapshot in time,”

reflecting regulations and policies in place at the time of the analysis (i.e., January through March 2017).

In order to complete the benchmarking in each state and to develop recommendations for North Carolina, AECOM assembled a team of subject matter experts each with over 15 years of experience in their respective fields (refer to Appendix A for additional details). Benchmarking drew from team member experience and reviews of policy, procedure, regulatory language and/or agency guidance.

AECOM researched agency structure, staffing, and funding as part of benchmarking preparations. Direct comparisons were not possible, however, as agency structures vary across states. For example, while North Carolina's Department of Environmental Quality focuses on environment only, South Carolina's Department of Health and Environmental Control addresses health, environment, and food safety initiatives under the same department.

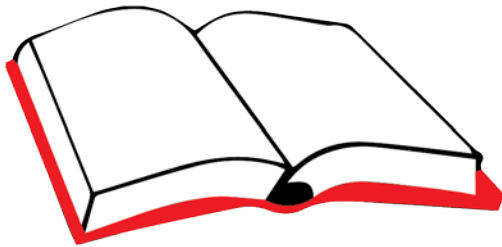
### **1.3 Organization**

The benchmarking has been organized as follows, to allow readers with varying backgrounds and interests to focus on the level(s) of detail best suits their needs:

- Executive Summary: provides an overview of the benchmarking as a whole, including high level findings and recommendations
- Section 2 Regulatory Primer by Media – provides a primer on the key regulatory elements
- Section 3 Findings and Recommendations – provides a summary of key findings and recommendations, both regulatory and administrative
- Appendix A – AECOM Team Member Biographies
- Appendix B – Detailed Benchmarking by Media
- Appendix C – Acronyms
- Appendix D – End Notes

## 2.0 Regulatory Primer by Media

The application of environmental regulations can be a complex task whether at the federal or the state level. AECOM has therefore prepared this primer on the key regulatory elements for each media type. While not exhaustive, the primer is intended to provide context for the benchmarking findings presented in Section 3. Additional regulatory background can be found at [www.epa.gov](http://www.epa.gov).

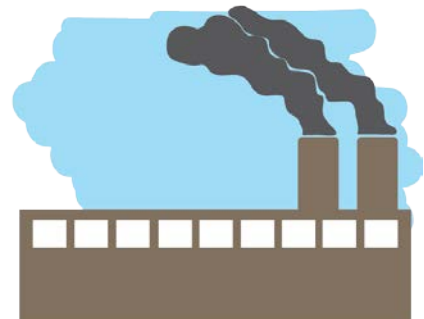


All the states included in the benchmarking have been delegated authority by USEPA, with some exceptions for water permits. Delegation affords states the ability to implement EPA regulatory programs subject to USEPA oversight and enforcement along with any of their own more stringent requirements. Some regulatory program elements are jointly addressed with other agencies, such as the US Army Corps of Engineers, in conjunction with state and federal environmental protection agencies. Environmental Protection Act reviews often hinge on input and oversight from multiple agencies including the Federal Highway Administration (FHWA), State Departments of Transportation (DOT) and the State Historic Preservation Office (SHPO).

### 2.1 Air

Air emissions come from both mobile sources (e.g., automobiles, trains, airplanes) as well as stationary sources (e.g., manufacturing plants, chemical plants, power plants, etc.). As authorized under the Clean Air Act (CAA) and its 1977 and 1990 amendments, the US Environmental Protection Agency (USEPA) sets limits on certain air pollutants from both mobile and stationary sources, and requires stationary source operating permits which are administered at the state level for all states included in the benchmarking. Individual states and localities may have stricter air pollution laws, but they may not have weaker pollution limits than those set by the USEPA. The air component of the benchmarking focused on stationary sources of emissions because mobile sources are mainly regulated at the federal level and are therefore not an area for state level differentiation.

The CAA requires the USEPA to set National Ambient Air Quality Standards (NAAQS) for six common air pollutants. The USEPA must designate areas as meeting (attainment) or not meeting (nonattainment) the standard. States are required to develop a general plan to attain and maintain the NAAQS in all areas of the country, and a specific plan to attain the standards for each area



designated nonattainment for a NAAQS. The CAA also requires the USEPA to regulate emissions of toxic air pollutants from a published list of industrial sources referred to as "source categories." As with the NAAQS, states are able to apply more stringent air toxics regulations. Greenhouse gases regulations and permit conditions were not included in the air benchmarking as reporting and permitting applicability were federally directed initiatives, and there were no caps or trading programs in place in the states evaluated, at the time of the analysis.

Regulations are typically applied and enforced via the issuance of pre-construction permits and post-construction operating permits which vary depending on the type of operation, and the type and amount of pollutants involved. Table 1 presents a comparison of key air regulatory program elements that were addressed in the benchmarking analysis; how a given state treats a particular element can be an indication of the complexity of the air regulations in that state.

**Table 1. Comparison of Common Air Program Elements**

State	Designated Nonattainment Areas?	Local Permit Programs That Go Beyond State Requirements?	State-Specific Air Toxics Program?	Additional Air Modeling Requirements (Excluding Air Toxics)?*	Other State Rules or Policies of Significance (Excluding Air Toxics)?
Alabama	Yes	Yes	No	No	Yes – PM and SO <sub>2</sub> limits in former nonattainment areas
Florida	Yes	Yes	No	No	No
Georgia	Yes	Yes	Yes	No	No
North Carolina	No	Yes	Yes	No	No
South Carolina	No	No	Yes	Yes	Yes – state level NO <sub>x</sub> control regulations
Tennessee	Yes	Yes	No	Yes	Yes
Virginia	Yes	No	No	Yes	Yes – state level BACT

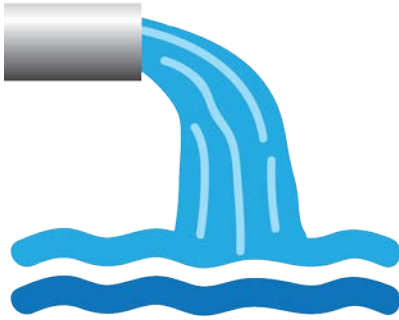
\*Beyond that required for pre-construction air quality permits

## 2.2 Water

The Clean Water Act (CWA) serves as the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Key regulatory and permitting programs authorized under the CWA include the National Pollutant Discharge Elimination System (NPDES), which regulates pollutant discharge to surface waters from industrial processes including issuing permits. Certain instances of stormwater runoff from industrial and construction activity

are regulated via NPDES permits as well; and Best Management Practices to control toxic pollutants from ancillary industrial and construction runoff may also apply. Compliance monitoring under the NPDES Program takes place largely at the state level.

The CWA also addresses impaired or threatened waters, and requires the establishment of pollutant reduction levels necessary to meet approved water quality



standards. States in turn determine which water bodies are impaired or threatened, and calculate Total Maximum Daily Loads (TMDLs), or pollutant loading capacities, for these waters.

A TMDL represents the maximum amount of a pollutant allowed in a waterbody and serves as the starting point or planning tool for restoring water quality. Within the TMDL, states allocate these loading capacities among the various contributing point sources and non-point sources.

NPDES permits address point sources of pollution, which are discrete sources of discharge. Non-point sources of pollution, which include urban development, agriculture and forestry, are addressed via a variety of other programs including grants, partnerships, and voluntary initiatives. States are required to update and resubmit their impaired waters list every two years.

The US Army Corps of Engineers and the USEPA jointly implement permit programs to protect wetlands and other water bodies under the CWA affected by the placement of dredged or fill materials. States issue certifications that triggering actions, such as dredging or filling wetlands or streams, will not adversely affect the water quality of the state.

The Safe Drinking Water Act (SDWA) was established to protect the quality of drinking water in the U.S, known as source water. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources, and charters the USEPA to establish health protective drinking water treatment standards. Individual states implement the USEPA's minimum standards for protection of groundwater via a system of underground injection control regulations and permits.

Source water and surface water protection initiatives and regulations can be highly localized and vary between states and between areas within a given state. Stormwater regulations in particular can be governed differently across watersheds, states and municipalities.

Benchmarking analyses were broken down into water sourcing, wastewater discharge, groundwater and





stormwater environmental permitting and regulatory requirements.

## 2.3 Waste

Construction and industrial activity can create both hazardous and non-hazardous waste. Some wastes may be reused or recycled, whereas others at present require disposal. Both waste types are regulated via the Resource Conservation and Recovery Act (RCRA). RCRA's goals are protection of the environment from the hazards of waste disposal; conservation of energy and natural resources by recycling and recovery; reduction or elimination of waste; and cleanup of waste that may have spilled, leaked or been improperly disposed.



The Hazardous Waste Program, under RCRA Subtitle C, establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal. Transportation of hazardous waste is regulated at the federal level and was not addressed in the benchmarking as it is not an area for state-level differentiation.

The Solid Waste Program, under RCRA Subtitle D, encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste.

Benchmarking generally emphasized solid and hazardous waste requirements from the generator perspective as generator status had greater applicability to the business scenarios evaluated. As such, generators of hazardous waste typically do not obtain permits as the burdens associated with such permits typically outweigh the benefits; and there are no permits associated with solid waste generation. Instead, generators of both solid and hazardous waste generally operate under regulatory requirements directing how waste is managed and disposed.

## 2.4 Environmental Policy Act Review

Development of transportation projects is a complex process requiring compliance with state and federal laws, regulations, and Executive Orders. Holistic assessments of the potential impacts drive the process rather than the permits and operating regulations that have been presented here for other media.

The process can be broken down into three phases:

- Planning (concept development, environmental evaluation [National Environmental Policy Act (NEPA) and State Environmental Policy Act (SEPA) compliance])
- Design (engineering, permitting)
- Implementation (construction, operation)



As a matter of complexity and duration, the planning phase is the most challenging. All projects that use federal funding must comply with NEPA, which requires federal agencies to assess the environmental impacts of their proposed actions prior to making decisions. The range of actions covered by NEPA is broad and includes:



- Making decisions on permit applications
- Adopting federal land management actions
- Constructing highways and other publicly-owned facilities

Using the NEPA process, agencies evaluate the environmental and related social and economic effects of their proposed actions. Agencies also provide opportunities for public review and comment on those evaluations. Each federal agency is responsible for NEPA compliance, and each agency has a process for achieving compliance. Of all the modes of transportation, highway/roadway projects are the most numerous and they are overseen by the Federal Highway Administration (FHWA) and State Departments of Transportation (DOT).

While NEPA is a federal program, the compliance process varies from state to state. In addition, some states have their own state-specific SEPA programs.

## **2.5 Obtaining Permits**

Permits must be obtained specific to each media (e.g., air, water), and a state may require more than one permit for a given media type. Environmental permits are issued by each benchmarked state, with the exception of cross-jurisdictional water programs or local air programs as summarized above. Timelines for permit issuance vary by state and media and depend on the complexity of the affected activity, applicable regulatory requirements, and application forms and documentation. Permitting new or modified sites will typically be more time intensive than renewals of permits for sites with unchanged operations or applicable requirements.

## **2.6 Voluntary Non-Compliance Disclosure (Audit Privilege)**

Voluntary disclosure programs are addressed at the state level and provide regulated facilities with immunity against administrative or civil penalties for voluntarily disclosing environmental regulatory violations, consistent with federal requirements. Not all states offer such programs, and the details of their application can vary from state to state, including whether such programs are codified by law or are recommended policy.

*This page intentionally left blank*

### **3.0 Benchmarking Findings and Recommendations**

Benchmarking addressed administrative elements such as permit application, review and issuance process, as well as regulatory elements such as applicability, requirements, guidance resources, clarity and consistency.

The benchmarking showed that the states evaluated were aligned in many respects. While the benchmarking highlighted specific opportunities for regulatory improvements in North Carolina, it also illustrated that a similar number of recommended improvements are administrative in nature. For example, certain states offer services to streamline and expedite the permitting process; and one state routinely issues transparent statistics on permitting efficiency.<sup>i</sup>

Table 2 summarizes findings across the business scenarios and environmental media that AECOM evaluated. Detailed benchmarking by media and by state is provided in Appendix B.

Recommendations presented in Tables 3 through 5 were drawn from good regulatory and administrative practices observed in benchmarked states, as well as from AECOM's experience with assisting clients to obtain environmental permits and comply with environmental regulations in the Southeast. Figure 1 illustrates which states have adopted the five following beneficial administrative practices: centralized facilitation, expedited permitting options, online submittal of permitting applications, audit privilege, and routine publication of permitting statistics.

**Table 2. Summary of Benchmarking Findings by State**

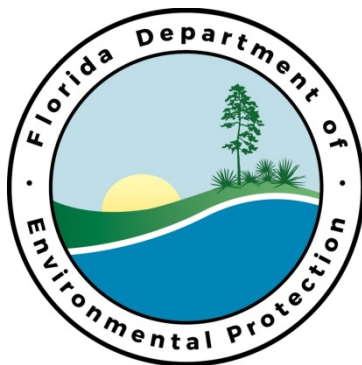
State	General	Key Media-Specific Findings
<b>NC</b>	<p data-bbox="260 313 674 370"><b>North Carolina Department of Environmental Quality (NC DEQ)</b></p> <p data-bbox="260 407 604 431"><b>Centralized Facilitation:</b> No</p> <p data-bbox="260 472 709 529"><b>Expedited Permitting Options:</b> Yes - select water permits only<sup>ii</sup></p> <p data-bbox="260 570 632 594"><b>Online permit application:</b> No</p> <p data-bbox="260 634 604 659"><b>Audit Privilege:</b> Yes - Policy</p> <p data-bbox="260 699 737 751"><b>Routine Publication of Environmental Permitting Statistics:</b> No</p>	<p data-bbox="749 313 791 337"><b>Air</b></p> <ol data-bbox="804 345 1892 646" style="list-style-type: none"> <li>1. NC DAQ does not require permittees to follow certain guidance memoranda that would force a more conservative permitting approach, and they have at times refused to implement certain USEPA guidance that they feel is contradictory to regulatory language.</li> <li>2. General permits and tiered enforcement (deviations versus violations) are now allowed by NC DAQ.</li> <li>3. Although the state air toxics rules exempt emission sources that are subject to national standards, NC DAQ still has the authority to require modeling of all sources at a facility to determine if any modification would result in an unacceptable risk to human health. For smaller facilities with few emission sources and low emission rates, there is a possibility of screening out of the program, but this pathway is not available to large, complex facilities.</li> </ol> <p data-bbox="749 662 827 686"><b>Water</b></p> <ol data-bbox="804 695 1913 963" style="list-style-type: none"> <li>1. NC adopts federal regulations with minor additions and revisions, monitors water resources across the state.</li> <li>2. Rules, other requirements and guidance documents are spread throughout general statutes, promulgated rules, legislative session law, and various repositories. Facilities which span multiple jurisdictions can be subject to a complex mixture of the requirements.</li> <li>3. The BMP prioritization/selection protocol is tedious and time consuming.</li> <li>4. The Section 401 certification requires additional steps and also varies depending on the regulated authority at the facility location.</li> <li>5. Some NC DEQ websites present outdated information not marked as historical documents.</li> </ol> <p data-bbox="749 987 1892 1076"><b>Waste.</b> NC follows federal guidelines. Hazardous waste generator facilities can generally operate without a permit unless they wish to dispose of, treat or store hazardous waste longer than 90 days.</p> <p data-bbox="749 1092 905 1117"><b>NEPA/SEPA</b></p> <ol data-bbox="804 1125 1913 1307" style="list-style-type: none"> <li>1. NC does have environmental guidance and procedures, but they are not well organized or regularly updated.</li> <li>2. NC was granted NEPA Assignment FHWA, but only for Categorical Exclusions.</li> <li>3. Agencies ask for more information than what is required. Philosophical differences between federal, state, and local governments; reviews and agreement to revisions; project controversy; and threat of litigation can impede subject projects.</li> </ol>



State	General	Key Media-Specific Findings
<b>AL</b>	<p data-bbox="285 240 779 302"><b>Alabama Department of Environmental Management (ADEM)</b></p> <p data-bbox="285 337 636 362"><b>Centralized Facilitation:</b> Yes</p> <p data-bbox="285 397 709 422"><b>Expedited Permitting Options:</b> No</p> <p data-bbox="285 457 655 482"><b>Online permit application:</b> No</p> <p data-bbox="285 518 522 542"><b>Audit Privilege:</b> No</p> <p data-bbox="285 578 760 639"><b>Routine Publication of Environmental Permitting Statistics:</b> No</p>	<p data-bbox="835 240 871 264"><b>Air</b></p> <ol data-bbox="884 272 1913 553" style="list-style-type: none"> <li>1. AL’s air pollution control regulations generally follow the federal requirements, with some minor exceptions. AL has additional requirements beyond the Federal regulations applicable to specific source categories dependent on location with the state.</li> <li>2. AL has local permitting programs in Jefferson County (Birmingham) and the City of Huntsville. AL uses one common set of application forms for all types of air permits.</li> <li>3. Construction permits do not authorize new sources to begin operation. AL issues Temporary Authorization to Operate (TAO), followed by Authorization to Operate permits.</li> </ol> <p data-bbox="835 578 909 602"><b>Water</b></p> <ol data-bbox="884 610 1913 919" style="list-style-type: none"> <li>1. AL includes groundwater in the definition of “water.” AL’s UIC program closely follows the federal regulations.</li> <li>2. The state has adopted the federal NPDES with minor additions. ADEM is responsible for the regulation of point source discharges and discharges to POTWs.</li> <li>3. ADEM maintains 16 general permits for stormwater discharges associated with industrial activities, instead of implementing the MSGP. Some of these permits include authorization for both stormwater and process wastewater discharges.</li> <li>4. Although there are no current promulgated regulations for drought planning, AL participates in several interstate associations to monitor and regulate water consumption on selected interstate river systems during drought conditions.</li> </ol> <p data-bbox="835 943 915 967"><b>Waste</b></p> <ol data-bbox="884 976 1913 1252" style="list-style-type: none"> <li>1. AL has a USEPA-approved program for solid waste management, including detailed permitting requirements. Any public or private entity involved in solid waste management in AL must undertake measures to support the attainment of statewide solid waste reduction goals.</li> <li>2. The USEPA has authorized AL to administer its own hazardous waste program. The state generally follows the federal hazardous waste regulations, and hazardous waste generator facilities can generally operate without a permit unless they wish to dispose of, treat or store hazardous waste longer than 90 days.</li> <li>3. AL has additional requirements for management of special wastes and scrap tires.</li> </ol> <p data-bbox="835 1276 984 1300"><b>NEPA/SEPA</b></p> <ol data-bbox="884 1308 1913 1494" style="list-style-type: none"> <li>1. AL offers an EA checklist similar to that for CEs, but does not have comprehensive environmental guidance.</li> <li>2. AL does not have a SEPA.</li> <li>3. Agencies ask for more information than what is required. Philosophical differences between federal, state, and local governments; reviews and agreement to revisions; project controversy; and threat of litigation can impede subject projects.</li> </ol>



State	General	Key Media-Specific Findings
FL	<p><b>Florida Department of Environmental Protection (FDEP)</b></p> <p><b>Annual Publication of Environmental Permitting Statistics:</b> No</p> <p><b>Centralized Facilitation and Expedited Permitting:</b> Yes, for certain types of development projects that foster economic development<sup>iii</sup></p> <p><b>Online permit application:</b> Yes</p> <p><b>Audit Privilege:</b> Yes - policy</p> <p><b>Routine Publication of Environmental Permitting Statistics:</b> No</p>	<p><b>Air</b></p> <ol style="list-style-type: none"> <li>1. FL's air pollution control regulations generally follow the federal requirements, with a few relatively minor exceptions.</li> <li>2. Eight FL counties have approved air programs—Broward, Dade, Duval, Hillsborough, Orange, Palm Beach, Pinellas, and Sarasota.</li> <li>3. FL does not have a state-specific air toxics program.</li> <li>4. FL has attempted to streamline the permitting process by allowing online application submittals, posting permitting status and information on its website, and permit writer's tools and a "permitting action tree" are also available on the website.<sup>iv</sup></li> </ol> <p><b>Water</b></p> <ol style="list-style-type: none"> <li>1. FL offers an ePermitting service for certain types of water permits and determinations.</li> <li>2. Different geographical regions have different regulations for water use, discharge, and stormwater. Therefore, opening more than one location requires familiarity with multiple different regulatory agencies.</li> <li>3. Consumptive use includes groundwater, surface water, and reclaimed water sources. State mandated minimum flow requirements may restrict water usage from selected surface waters.</li> <li>4. FDEP is responsible for the regulation of point source discharges. Additionally, some counties may also impose wastewater requirements which are included in a facility's NPDES permit. Issuance of NPDES permits for facilities around Miami was not delegated to FDEP; these permits are issued by the USEPA.</li> </ol> <p><b>Waste</b></p> <ol style="list-style-type: none"> <li>1. FL follows the federal regulations with respect to solid waste management, with a few additional requirements.</li> <li>2. FL has been delegated authority by the USEPA to enforce the federal hazardous waste regulations. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining generator status under state and federal regulations.</li> </ol> <p><b>NEPA/SEPA</b></p> <ol style="list-style-type: none"> <li>1. FL recently full NEPA Assignment and NEPA guidance documents are thorough and regularly updated.</li> <li>2. FL does not have a SEPA; SEIR is conducted for state/locally funded roadway projects.</li> <li>3. Philosophical differences between federal, state, and local governments; reviews and agreement to revisions; project controversy; and threat of litigation can impede subject projects.</li> </ol>



State	General	Key Media-Specific Findings
<b>GA</b>	<p data-bbox="270 250 705 315"><b>Georgia Environmental Protection Division (GEPD)</b></p> <p data-bbox="270 347 621 375"><b>Centralized Facilitation:</b> Yes</p> <p data-bbox="270 407 705 435"><b>Expedited Permitting Options:</b> Yes</p> <p data-bbox="270 467 653 495"><b>Online permit application:</b> Yes</p> <p data-bbox="270 527 510 555"><b>Audit Privilege:</b> No</p> <p data-bbox="270 587 747 652"><b>Routine Publication of Environmental Permitting Statistics:</b> No</p>	<p data-bbox="758 250 800 277"><b>Air</b></p> <ol data-bbox="810 277 1940 456" style="list-style-type: none"> <li>GA has adopted Federal permitting requirements, with multiple procedural options for major sources that can decrease approval time for projects that do not involve significant modifications. Small sources may be able to qualify for certain permit exemptions, a general air permit, or permit-by-rule.</li> <li>GA has an air toxics permitting program, but it is not as comprehensive or stringent as NC's.</li> <li>GA requires Title V permit application forms to be submitted and certified online</li> </ol> <p data-bbox="758 472 835 500"><b>Water</b></p> <ol data-bbox="810 508 1940 792" style="list-style-type: none"> <li>Water use and conservation is regulated by the GDEP in conjunction with GA's 11 Water Planning Regions.</li> <li>GA includes groundwater in the definition of "waters of the state." UIC permit holders must develop a Water Conservation Plan which includes a drought contingency plan, and implement water conservation measures.</li> <li>The state has adopted the federal NPDES with minor additions and revisions.</li> <li>GA allows facilities to self-exempt (using adequate documentation) from stormwater monitoring for parameters otherwise required under the IGP but which are not present at the site due to current or previous industrial activities.</li> </ol> <p data-bbox="758 808 842 836"><b>Waste</b></p> <ol data-bbox="810 836 1940 992" style="list-style-type: none"> <li>In general, unless operating a facility to treat and dispose of solid wastes, generators are required to properly characterize waste and ensure disposal in a properly permitted facility.</li> <li>GA's rules incorporate by reference the federal hazardous waste regulations. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations.</li> </ol> <p data-bbox="758 1008 915 1036"><b>NEPA/SEPA</b></p> <ol data-bbox="810 1036 1940 1284" style="list-style-type: none"> <li>A changing regulatory landscape, logical termini<sup>v</sup> concerns, protected species issues, funding/project prioritization, generally larger more complex projects with multiple resources and issues needing avoidance and minimization, expiration of studies and need to re-procure and update environmental evaluations have impeded subject projects.</li> <li>GA has implemented several streamlining measures including joint coordination procedures between agencies and programmatic CE for specific project. GA was granted NEPA Assignment from FHWA for Categorical Exclusions only.</li> <li>There is no SEPA in GA.</li> </ol>



State	General	Key Media-Specific Findings
<b>SC</b>	<p><b>South Carolina Department of Health and Environmental Control (SC DHEC)</b></p> <p><b>Centralized Facilitation:</b> No</p> <p><b>Expedited Permitting Options:</b> Yes – air and stormwater</p> <p><b>Online permit application:</b> Yes – currently under development</p> <p><b>Audit Privilege:</b> Yes - law</p> <p><b>Routine Publication of Environmental Permitting Statistics:</b> No</p>	<p><b>Air</b></p> <ol style="list-style-type: none"> <li>1. SC’s air pollution control regulations generally follow the federal requirements, with some minor exceptions including certain types of NOx control, state air toxics program, and demonstration requirements for attaining ambient air quality standards and air quality increments via modeling.</li> <li>2. SC maintains separate construction air permit and Title V operating permit applications. Sources request an operating permit after beginning operation and continue to operate under the construction permit until the operating permit is issued.</li> </ol> <p><b>Water</b></p> <ol style="list-style-type: none"> <li>1. SC includes groundwater in the definition of “waters of the state.”</li> <li>2. SC has adopted the federal National Pollutant Discharge Elimination System (NPDES) with minor additions and revisions for both stormwater and wastewater.</li> <li>3. SC’s general permit for industrial stormwater activities, reissued in September 2016, is similar to the USEPA’s Multisector General Permit. SC is responsible for the regulation of point source discharges and discharges to POTWs and maintains 6 general permits for process wastewater discharges associated with industrial activities, not including remediation and pesticides application. Several of these permits are currently expired by SCDHEC is currently updating them.</li> </ol> <p><b>Waste</b></p> <ol style="list-style-type: none"> <li>1. The state has adopted the federal hazardous waste regulations with minor additions and revisions. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations.</li> <li>2. The USEPA has approved SC’s solid waste management program. Unless operating a facility to treat and dispose of solid wastes, generators are required to properly characterize waste and ensure disposal in a properly permitted facility.</li> </ol> <p><b>NEPA/SEPA</b></p> <ol style="list-style-type: none"> <li>1. State funded positions in USACE have sped reviews and helped to keep permits moving forward. SC does not have comprehensive environmental guidance but does have some specific on-line guidance documents. SC does not have a SEPA.</li> <li>2. SC was granted NEPA Assignment from FHWA for Categorical Exclusions only.</li> <li>3. Threat of litigation (growing in SC compared to years past), and extensive changes to satisfy agency comments, can impede subject projects. Philosophical differences between federal, state, and local governments; reviews and agreement to revisions; project controversy; and threat of litigation can impede subject projects.</li> </ol>





State	General	Key Media-Specific Findings
<b>TN</b>	<p data-bbox="254 253 653 345"><b>Tennessee Department of Environment and Conservation (TDEC)</b></p> <p data-bbox="254 383 596 407"><b>Centralized Facilitation:</b> No</p> <p data-bbox="254 444 680 469"><b>Expedited Permitting Options:</b> No</p> <p data-bbox="254 506 625 531"><b>Online permit application:</b> No</p> <p data-bbox="254 568 592 592"><b>Audit Privilege:</b> Yes - policy</p> <p data-bbox="254 630 730 695"><b>Routine Publication of Environmental Permitting Statistics:</b> Yes</p>	<p data-bbox="751 253 800 277"><b>Air</b></p> <ol data-bbox="800 285 1936 440" style="list-style-type: none"> <li>1. TN has adopted the Federal regulations with minor differences. Additional requirements beyond the Federal regulations apply to legacy nonattainment areas now in maintenance status.</li> <li>2. TN will be offering permit-by-rule starting in 2017 for minor sources in specific air categories; permit-by-Rule is typically a faster and less expensive method of permitting.<sup>vi</sup></li> </ol> <p data-bbox="751 456 831 480"><b>Water</b></p> <ol data-bbox="800 488 1936 740" style="list-style-type: none"> <li>1. Water use and conservation is monitored by TDEC, but a permit is not required. After a significant drought in 2007, TN organized the TN Water Resources Technical Advisory Committee to make recommendations for water planning.</li> <li>2. The TMSPP for stormwater discharges from industrial activities generally mirrors the USEPA's Multisector General Permit.</li> <li>3. TN includes groundwater in the definition of 'waters of the state'.</li> <li>4. TDEC is responsible for the regulation of point source discharges and discharges to POTWs, and has adopted the federal NPDES with minor additions and revisions.</li> </ol> <p data-bbox="751 756 835 781"><b>Waste</b></p> <ol data-bbox="800 789 1936 1008" style="list-style-type: none"> <li>1. TN's general requirements on solid waste management primarily apply to solid waste storage, transfer, processing, and disposal facilities. Unless operating a facility to treat and dispose of solid wastes, generators are required to properly characterize waste and ensure disposal in a properly permitted facility</li> <li>2. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations.</li> </ol> <p data-bbox="751 1024 905 1049"><b>NEPA/SEPA</b></p> <ol data-bbox="800 1057 1936 1312" style="list-style-type: none"> <li>1. TN does not have a SEPA but does have TEER which serves as a review process for smaller projects.</li> <li>2. TN does not have major comprehensive documented policies/procedures, nor does it have NEPA Assignment from FHWA.</li> <li>3. TESA is a streamlining measures but infrequency of TESA meetings (every 2-3 months) can be an impediment. Philosophical differences between federal, state, and local governments; reviews and agreement to revisions; project controversy; and threat of litigation can also impede subject projects.</li> </ol>



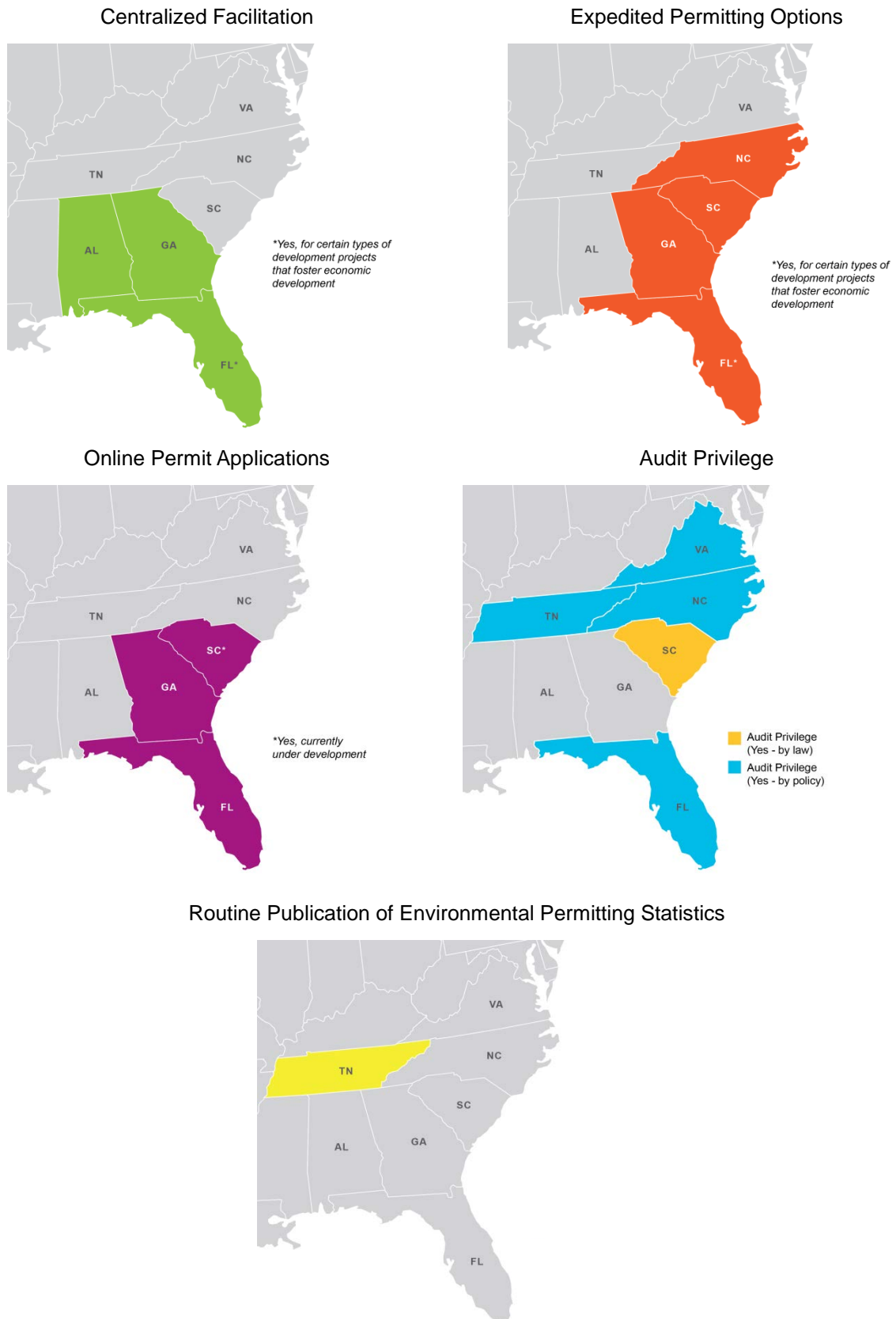
State	General	Key Media-Specific Findings
<b>VA</b>	<p data-bbox="247 253 667 315"><b>VA Department of Environmental Quality (VA DEQ)</b></p> <p data-bbox="247 350 594 375"><b>Centralized Facilitation:</b> No</p> <p data-bbox="247 410 678 440"><b>Expedited Permitting Options:</b> No</p> <p data-bbox="247 508 621 537"><b>Online permit application:</b> No</p> <p data-bbox="247 573 590 602"><b>Audit Privilege:</b> Yes - policy</p> <p data-bbox="247 638 709 727"><b>Routine Annual Publication of Environmental Permitting Statistics:</b> No</p>	<p data-bbox="747 253 789 277"><b>Air</b></p> <ol data-bbox="793 285 1923 570" style="list-style-type: none"> <li>1. Permitting is handled by regional offices, and there is sometimes inconsistency in how stringently regulations are applied across the regions</li> <li>2. VA offers Permit-by-Rule (i.e., General Permits) for certain source types.</li> <li>3. State requirements that go beyond federal requirements include air dispersion modeling for both criteria and toxic air pollutants, with criteria pollutant results having a notable likelihood of requiring additional cost and schedule impacts to projects; emission sources typically require a “state-level” best available control technology (BACT) evaluation for emission sources being added or expanded; and subjecting minor source applications to public notice if federally enforceable conditions to avoid major source status are involved.</li> </ol> <p data-bbox="747 586 825 610"><b>Water</b></p> <ol data-bbox="793 618 1892 886" style="list-style-type: none"> <li>1. Water use and conservation is regulated by VDEQ’s Office of Water Supply. Various local and regional water supply planning organizations may develop Water Supply Plans.</li> <li>2. VA includes groundwater in the definition of “waters of the state.”</li> <li>3. The state has adopted the federal National Pollutant Discharge Elimination System (NPDES) with minor additions and revisions. The stormwater General Industrial Permit mirrors the USEPA’s Multisector General Permit, with additional mandates inside the Chesapeake Bay Watershed. VDEQ maintains 8 general permits for process wastewater discharges associated with industrial activities, also with additional mandates inside the Chesapeake Bay Watershed.</li> </ol> <p data-bbox="747 902 825 927"><b>Waste</b></p> <ol data-bbox="793 935 1881 1114" style="list-style-type: none"> <li>1. Permitting requirements apply to solid waste management units. VA generally adopts the federal requirements with some revisions.</li> <li>2. VA has been authorized by the USEPA to implement its own state hazardous waste program. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations.</li> </ol> <p data-bbox="747 1130 898 1154"><b>NEPA/SEPA</b></p> <ol data-bbox="793 1162 1850 1317" style="list-style-type: none"> <li>1. A robust Locally Administered Projects program, complemented by thorough guidance documents, partners localities with VDOT to take on administration duties.</li> <li>2. VA has a SEPA process that only applies to State actions and projects.</li> <li>3. Philosophical differences between federal, state, and local governments; reviews and agreement to revisions; and project controversy can impede subject projects.</li> </ol>



**Table 3. Summary of Recommendations for North Carolina – Regulatory Improvements**

<b>Media</b>	<b>Recommendations</b>
<b>Air</b>	<p><b>Refine the NC Air Toxics Program.</b> Though significant effort has been made to refine the NC Air Toxics Rule in recent years, the impacts of the eventual changes did not result in the anticipated streamlining of the rule to mitigate the current burden it places on facilities. In spite of the USEPA having performed risk assessments for air toxics emissions from several sectors (e.g., pulp and paper, phosphate, etc.) that have resulted in a determination of acceptable risk with an ample margin of safety, DAQ continues to make those facilities demonstrate compliance with the state air toxics rule, even for sources that qualify for exemptions. Further refinement is merited to maintain protective standards without disproportionately burdening industry. Good practice states: AL, FL, TN, VA.</p> <p><b>Offer Permit-by-Rule (i.e., General Permits) for appropriate source types.</b> Permit-by-Rule provides a streamlined permitting process, as general permits have already undergone any needed public notice processes and routine technical reviews. Permittees can expect predictable, streamlined permitting processes with lower administrative burdens, and DAQ can expedite their review and approval. Good practice states: TN and VA.</p>
<b>Water</b>	<p><b>Allow monitoring exemptions under Stormwater General Permits.</b> Allow facilities to self-exempt (using adequate documentation) from stormwater monitoring for parameters otherwise required under the Industrial General Permit but which are not present at the site due to current or previous industrial activities. Good practice states: GA.</p>
<b>NEPA/ SEPA</b>	<p><b>Assess the Case for Pursuing Full NEPA Assignment.</b> Currently, NC has NEPA Assignment for Categorical Exclusions only. NEPA Assignment refers to a state DOT that has assumed Federal Highway Administration’s (FHWSA) responsibility for compliance with NEPA and other federal environmental laws addressed in the environmental review process under the “NEPA umbrella,” such as the Endangered Species Act, National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, Clean Water Act, etc. Under NEPA Assignment, FHWA no longer has a project-level environmental decision-making role in the administration of the state DOT environmental program, but instead transitions to a program oversight role in ensuring federal requirements and commitments made by the state in the Memorandum of Understanding are met through audits and/or monitoring. For routine projects, such as highway or safety improvements, and restoration, rehabilitation, reconstruction or replacement of bridges and pavement, delegation of federal environmental compliance functions to NC DOT may be an effective way to speed up project processing while preserving environmental quality. Good practice state: FL.</p>

**Figure 1. Five Beneficial Administrative Practices by State**



**Table 4. Summary of Recommendations for North Carolina – General Administrative Improvements**

---

**Recommendation**

---

**Provide centralized permitting services.** Establish a centralized permitting division/department to implement, coordinate, and oversee the environmental permitting process for all media. Staff who focus on particular industries/markets would be an asset, as well as assigning a single point of contact within the agency to help advocate for a particular facility/project. As an example, ADEM offers a Permit Coordination and Development Center (PCDC). The PCDC serves as a focal point for permit applications by coordinating communications and administrative functions such as collection of fees and public notices. They also arrange conferences with the applicant and other public agencies as needed to expedite the permit decision process.<sup>vii</sup> Good practice state: AL.

**Offer online permitting/submittal systems.** Offer an ePermitting service where applications and other related materials can be developed and submitted online to expedite permit review and issuance. Continue to allow hardcopy submittals for particularly complex applications. For NEPA/SEPA, offer an online system for document submittal and review, as is the case in GA, which employs a MS SharePoint system. Good practice states: FL, GA, SC<sup>viii</sup>.

**Offer expedited permitting for all environmental permits.** Offer an expedited permitting program across all media which allows applicants to pay additional fees for more rapid evaluations. Good practice states: FL, GA, SC.

**Allow applicant funded short-term staff augmentation.** For large scale programs/projects whose permit review could be impacted by staffing shortfalls at DEQ, allow applicants to fund a short-term position. Good practice basis: NC DOT.

**Improve general internet resources, guidance and tools.** Adopt improved business-friendly websites, electronic permitting selection tools, and clarifying FAQs, or guidance documents on all regulations. Provide consolidated guidance on typical permitting timelines to give industry a holistic idea of what to expect.<sup>ix</sup> SC water, FL air, FL NEPA/SEPA, VA NEPA/SEPA.

**Routinely publish transparent permitting statistics.** Increase transparency on permit application review and decision statistics on an annual basis. Good practice state: TN.

---

**Table 5. Summary of Recommendations for North Carolina – Media-Specific Administrative Improvements**

Media	Recommendation
<b>Air</b>	<b>Streamline application materials.</b> Allow applicants to reference the appendices of an air permit application or emissions data they already have on file rather than complete application forms with duplicate information. Good practice state: NC <sup>x</sup> .
<b>Water</b>	<b>Engage in additional drought planning.</b> Allow various local and regional water supply planning organizations to develop Water Supply Plans in case of drought (VA) or have a Technical Advisory Committee for water planning in case of drought (TN).
	<p><b>Offer clarified and enriched web resources for stormwater information and permitting</b></p> <ol style="list-style-type: none"> <li>1. Streamline and clarify web resources. Stormwater is managed by several different divisions within DEQ as well as delegated entities in other municipalities, and the rules have not been clearly consolidated into one location or cohesively presented on NC DEQ's website. It appears NC DEQ's website has several similarly-named links but they do not all go to the same location. Therefore, it can be difficult to find information related to certain topics. Additionally, new regulations that became effective in January 2017 require a complex review of and calculation to prioritize the "best" BMP for various situations. SC DHEC's website is laid out so that information is easily accessible from different entry points and could serve as a potential model for improvements.</li> <li>2. Offer an enhanced Water Quality Tool to allow applicants/permittees to query watershed data for more details on the receiving streams nearby, including specifics on TMDLs, and analytical data from nearby water quality monitoring sites. This type of information can be valuable when locating a facility that may discharge high concentrations of pollutants of concern, or when preparing Stormwater Pollution Prevention Plans and Spill Control and Countermeasures Plans. SC DEHC has a thorough system that could serve as a guide.<sup>xi</sup></li> <li>3. Publish clarifying FAQs and guidance documents.</li> </ol>
<b>NEPA/SEPA</b>	<b>Provide more detailed SEPA guidance.</b> Develop a SEPA guide with flow mapping (decision trees, milestones, checklists, etc.) for affected projects. Good practice states: VA, FL.
<b>NEPA/SEPA</b>	<b>Increase outreach and communication from State Historic Preservation Office (SHPO).</b> Increase outreach and communication from SHPO on procedures, typical timelines and process to extend typical timelines. For expected reoccurring impacts, encourage establishment of a programmatic agreement between the agency and the applicant and educate applicants on this approach. Good practice states: VA, FL.

## **Appendix A Qualifications and Staffing**

*This page intentionally left blank*



AECOM is a global leader in providing fully integrated technical and management support services for a broad range of clients. We are able to access the talents of over 100,000 employees in a multitude of disciplines in more than 150 countries around the globe. At the time of the project's commencement, there were over 300 AECOM personnel in the Raleigh area, and over 600 environmental regulatory professionals in the southeast. In addition to our extensive staff qualifications, AECOM is a member of the National Association of Environmental Managers, and the Regional Transportation Alliance, and local staff members routinely attend meetings of the North Carolina Manufacturer's Association and the Carolinas Air Pollution Control Association.

The project was undertaken by staff with considerable experience in environmental permitting and regulatory assessments. Ms. Kerri Hartung served as Project Manager and will implement AECOM corporate procedures and techniques that adhere to AECOM Quality and Project Management System requirements. She is located at AECOM's Morrisville, NC, office, and is an AECOM certified project manager with over 20 years of experience in multi-media environmental regulatory compliance analyses, permitting and auditing for public and private sector clients, including experience in North Carolina, South Carolina, Virginia and Tennessee. Mr. Steven Moore served as Lead Verifier, reviewing the report for scope adherence, technical accuracy, and tone and style consistency. He is located in the Greenville, SC, office and is a Senior Project Manager with over 25 years of experience in the environmental compliance field, responsible for assisting industrial clients with air quality requirements and environmental reporting obligations.

Ms. Hartung oversaw a team of subject matter experts located in the Southeast. The following key staff members contributed to this project.

- Ann Leininger – Ms. Leininger is a project manager in the environmental compliance group with 26 years of experience. Her areas of expertise include hazardous waste management and compliance, wastewater compliance, facility audits and stormwater permitting. For the past 10 years, she has served as a Project Manager for RCRA support services for an aircraft engine manufacturing and power systems company with facilities in 10 different states including North Carolina, Florida and Georgia. Services include site inspections, systems evaluations, process mapping, waste characterization, waste analyses plans, sampling, data evaluation, process optimization for waste minimization, follow-up to third party audit findings, resolution of agency inspection findings, state and federal regulatory interpretation, development of policy guidelines and development of a "RCRA Waste Management Work Plan" to be used at all facilities for compliance enhancement. In addition to her experience in North Carolina, Florida and Georgia, Ms. Leininger has addressed environmental regulatory requirements in South Carolina, Tennessee, Virginia, and Georgia, as well as other states outside the region.
- Amy Marshall - Ms. Marshall is a registered professional engineer in North Carolina, South Carolina and Florida with over 20 years of technical experience. Her focus is providing strategic air quality regulatory support to industrial clients. She also works

with various trade associations and individual companies to evaluate impacts and provide technical comments to the USEPA on air rules that impact both combustion and industrial process emissions sources. In addition to managing strategic air quality-related projects, Ms. Marshall leads the AECOM Americas air quality practice, which is comprised of over 350 staff across North and South America. Ms. Marshall has addressed environmental regulatory requirements in her area of expertise in North Carolina, South Carolina, Florida, Virginia and Georgia, as well as other states outside the region.

- Michelle Mayfield – Ms. Mayfield is the North Carolina Compliance Department Manager with over 17 years of experience. Her primary area of expertise is federal and state wastewater and stormwater compliance for numerous municipal and industrial entities. This work includes compliance assurance programs, auditing, permit applications, permitting strategy developments and regulatory agency negotiations, and greenfield development. Ms. Mayfield participated in stakeholder listening sessions during North Carolina's Environmental Management Commission's (EMC's) Rules Review process in the spring of 2016. During the meetings, Ms. Mayfield collaborated with clients to develop and submit comments to improve the clarity, context and effectiveness of the Water Quality Regulations on behalf of several clients. The Rules Review process is intended to provide NCDEQ with preliminary comments on rules prior to public meetings. In addition to her work in North Carolina, she has addressed environmental regulatory requirements in her areas of expertise in South Carolina, Florida, and Virginia, as well as other states outside the region.
- Jeff Weisner – Mr. Weisner has over 22 years of experience as a Transportation and Environmental Planner on a wide variety of highway, transit, rail, airport, seaport, and other infrastructure planning projects across the Southeast. As a NEPA specialist, Mr. Weisner is knowledgeable of federal and state policies regarding environmental resources and specializes in National Environmental Policy Act (NEPA)/State Environmental Policy Act (SEPA) documentation to fulfill federal, state, and local agency requirements. His responsibilities include management of multidisciplinary teams for transportation planning and environmental studies ranging from initial planning and feasibility studies, to alternative analysis, to NEPA/SEPA documentation. He also contributed to the North Carolina Maritime Strategy developed for NC DOT, which served as an open evaluation of North Carolina's position, opportunities and challenges in global maritime commerce. In addition to his work in North Carolina, Mr. Weisner has addressed transportation development and environmental considerations in Florida, Tennessee, and Georgia, as well as other states outside the region.

## **Appendix B Detailed Benchmarking by Media and State**

*This page intentionally left blank*

State Media/Activity

Environmental Permitting/Regulatory Benchmarking

NC Air

Requirements for obtaining air permits from the NC Division of Air Quality (DAQ) are adopted from Federal Procedures and incorporated into the State Implementation Plan. Procedures are codified in 15 A Section 2Q of the NC Administrative Code. Small sources deal directly with a regional office, instead of the central DAQ office, and may be able to qualify for certain permit exemptions or a general air permit. NC DAQ has multiple air permitting procedural options for major sources that can decrease approval time for projects that do not involve significant modifications. For projects that are not significant modifications, a two-step process is allowed, by which a facility can obtain a permit to construct and operate without a public notice process and then submit a Title V operating permit application within 12 months of completing the project. In recent years, the NC Division of Air Quality has developed procedures for approving certain types of activities or changes without the need to submit a formal air permit application and wait for a revision to the permit. As a result of Senate Bill 945 and G.S. 143-215.108A, a facility can also use the Notice of Intent to Construct process to perform construction activities on certain types of projects prior to receipt of a revised operating permit. Unlike other neighboring states, there is no formal expedited permitting program for applications requiring minor or major new source review. A fee is required for air permit applications and the amount of the fee depends on the complexity of the application.

NC has the following timelines for action on permit applications:

- Applications for permit renewal must be submitted at least 90 days prior to permit expiration for non-Title V sources and at least 9 months prior to permit expiration for Title V sources. Permit renewals typically take several months to be issued, although DAQ rules state that a draft Title V permit must be noticed within 270 days of receiving a complete application.
- For permit modifications, minor new source review (NSR) air permit applications must be submitted at least 90 days prior to beginning construction and PSD/nonattainment NSR applications must be submitted at least 180 days prior to beginning construction and a pre-application meeting is required.
- DAQ must acknowledge receipt of an application within 10 days and review the application for completeness within 45 days (60 days for Title V applications).
- DAQ will determine within 45 days of receipt of a complete application if any additional information is needed to complete the review.
- If the draft permit is not required to go to public notice or to public hearing, DAQ will issue or deny the permit within 90 days of receipt of a complete application or 10 days after receipt of requested additional information, whichever is later. (Note that sometimes processing time can be longer, especially if multiple requests for additional information are made.)
- For PSD/NSR projects that require a notice, permit issuance time can be up to 1 year for complex projects.
- If the "2-step" permitting process is used for modifications, a construction permit is issued for the modification and within 12 months of completing the modification, a Title V permit application is required to be submitted.
- Note also that in areas without zoning, before a facility submits a permit application for a new or expanded facility, a public notice must be published in the newspaper at least 2 weeks before submitting the permit application and a sign must be posted on the property where the new facility or expansion will be located at least 10 days prior to submitting the permit application and remain in place for at least 30 days after submittal of the application.

NC has a comprehensive air toxics permitting program. NC has established facility-wide toxic pollutant emission rates (TPERs) that set an emission rate threshold above which a facility is required to submit an air dispersion modeling analysis to demonstrate compliance with acceptable ambient levels (AALs) at and beyond the property line. The results of the modeling are used to set air toxics emission limits that are incorporated into the facility's permit as state-only conditions (not subject to Title V compliance certification). Although the air toxics rules exempt emission sources that are subject to national emission standards for hazardous air pollutants (NESHAP), the DAQ still has the authority to require modeling of all sources at a facility to determine if any modification to a facility would result in an unacceptable risk to human health, thereby decreasing the utility of this exemption. In the past, DAQ has issued a notice of noncompliance for a facility that submits a report where some emissions are over the air toxics limits in the permit, even if such report is followed up by a successful modeling demonstration at the higher emission rates. For smaller facilities with few emission sources and low emission rates, there is a possibility of screening out of the program, but this pathway is not available to large, complex facilities.

---

**NC Air**

In July 10, 1995, Lydia Wegman of the USEPA OAQPS published White Paper 1 which included a provision for cross referencing information provided in permit applications. Recent correspondence from DAQ has indicated that they are forgoing the guidance in the USEPA white paper and requiring application forms to be completely filled out in place of referencing the appendices of an application or emissions data they already have on file.

Although DAQ does implement several flexible policies and guidance memoranda related to air quality analyses and air permitting procedures, and they do not require permittees to follow certain guidance memoranda that would force a more conservative permitting approach, they have at times refused to implement certain USEPA guidance that they feel is contradictory to regulatory language (e.g., exclusion of emergency generators and other intermittent sources from 1-hour NO<sub>2</sub> NAAQS modeling).

General permits and tiered enforcement (deviations versus violations) are now allowed by NC DAQ.

---

**NC Water**

**Water Sources.** Water withdrawal authorizations, regulated by NCDEQ, are required in 15 counties of the Central Coastal Plain Capacity Use Area (CCPCUA). Annual registration is required for withdrawals between 10,000 gpd and 100,000 gpd. Withdrawals over 100,000 gpd require a Water Use Permit (15A NCAC 2E .0500). NCDEQ also monitors the quality of ground water and surface water resources and encourage conservation to meet the state-wide needs and forecasts.

**Groundwater.** NC includes groundwater in the definition of "water". Class I – IV wells are prohibited in NC (15A NCAC 02C.0209(a) – 02C.0209(d)). Class V wells are allowed.

**Stormwater.** Submittal for an erosion and sediment control (ESC) plan under the land management regulations fulfills the requirements of applying for a general permit for stormwater discharges associated with construction activities and a general NPDES permit for stormwater associated with construction activities is automatically issued. Under its NPDES program, NCDEQ maintains 20 general permits for stormwater discharges associated with industrial activities, instead of implementing the multi-sector general permit (MSGP). Although sampling and reporting requirements are similar to the MSGP, exceedances of limits or thresholds triggers a three-tiered compliance process which may require an individual permit after continued non-compliance.

Additional state-specific regulations mandate permits for post-construction stormwater discharges from any activity in the 20 coastal counties and selected other watersheds under State Stormwater Rules. These rules dictate some design requirements and discharge restrictions depending upon the density of built upon area and receiving stream classification. NC has established additional minimum design criteria and a stormwater BMP prioritization protocol. Geographies regulated by delegated programs (usually municipalities or military installations) may have more restrictive stormwater regulations. Additionally, recent legislation has prohibited delegated programs from implementing NCDEQ guidance, although they must implement promulgated rules. The NPDES and State Stormwater Rules, other requirements and guidance documents are spread throughout general statutes, promulgated rules, legislative session law, and various repositories creating a maze of requirements that are difficult to follow. Adding to the confusion, some NCDEQ websites with outdated information are still available, but are not marked as historical documents. The BMP prioritization/selection protocol is tedious and time consuming. The process for Section 401 certification for projects impacting wetlands or buffers requires additional steps and also varies depending on the regulated authority at the facility location. Facilities which span multiple jurisdictions can be subject to a complex mixture of the requirement.

**Wastewater Discharges.** Expansions, upgrades, or other modifications affecting the treatment capabilities of a domestic wastewater treatment facility require an Authorization to Construct (ATC) permit prior to implementation. Since 2011, ATCs are no longer required for manufacturing facilities and several other industrial sites. Discharge permits are not required for discharges to the land surface from flushing and hydrostatic testing water associated with utility distribution systems, new sewer extensions, or new reclaimed water distribution lines. NCDEQ maintains 4 general permits for process wastewater discharges associated with industrial activities, not including remediation and pesticide applications. The state has adopted the federal National Pollutant Discharge Elimination System (NPDES) with minor additions and revisions. NCDEQ is responsible for the regulation of point source discharges and discharges to POTWs. NCDEQ may approve local POTWS to be the permitting control authority.

**Note:** NC's expedited permitting options for water is limited to major Coastal Area Management Act permits, Coastal State Stormwater Permits, Erosion and Sediment control Plans, Wetland Certifications or Stream Determinations.

---

---

NC	Waste	<p><b>Solid Waste.</b> Solid waste management facilities include the following: composting facilities, demolition landfills, incinerators, land-clearing and inert-debris landfills (LCID landfills), municipal solid waste landfills, open dumps, recycling facilities, resource-recovery facilities, sanitary landfills, treatment and processing facilities, and transfer facilities. Generators of solid waste are not required to have permits but must ensure that their waste is properly characterized and disposed in a properly permitted unit. Municipal solid waste landfills (MSWLFs) must obtain a permit to construct and a permit to operate and have additional requirements associated with groundwater monitoring and corrective action, financial assurance and closure. NC has specific requirements for electronic waste that is based on shared responsibility among manufacturers, retailers, consumers and the state. Manufacturer must register in NC and pay an annual fee, develop and submit a recycling plan, make annual reports, conduct due diligence assessments of recyclers they may use.</p> <p><b>Hazardous Waste.</b> The state has adopted the federal hazardous waste regulations with minor additions and revisions. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations. A permit would be required if the facility wished to treat or dispose of hazardous waste onsite, or to store waste longer than 90 days. Requirements for generators of hazardous waste generally mirror federal regulations. Facilities can effectively manage their operations and generation of hazardous waste without a permit by maintaining large quantity or small quantity generator status under state and federal regulations. A permit would be required if the facility wished to treat or dispose of hazardous waste onsite, or to store waste longer than 90 days. Requirements for permitted facilities include some more stringent restrictions associated with closure requirements and location standards for the facility. They are also required to monitor groundwater.</p>
NC	NEPA/SEPA - Transportation	<p><b>NEPA.</b> The average duration of FHWA NEPA process for Environmental Impact Statement (EIS) projects to reach Record of Decision (ROD) is <b>10-12 years</b>, and the average duration of Environmental Assessment (EA) projects to obtain Finding of No Significant Impact (FONSI) – <b>3-5 years</b>. Primary impediments for reducing durations include philosophical differences between federal, state, and local governments; reviews and agreement to revisions; project controversy; and threat of litigation. Agencies often ask for more information than what is required. Successful streamlining measures implemented by the State include:</p> <ul style="list-style-type: none"><li>• State funded positions for regulatory agencies to focus on NCDOT projects, speed up reviews, and permitting</li><li>• NEPA/Section 404 process – Agreement between FHWA, United States Army Corps of Engineers (USACE), NCDOT, and NC Department of Environmental Quality to streamline the project development and permitting process. It allows agency representatives to work more efficiently by proving a common forum for agencies to discuss issues and find ways to comply with key elements of their agency's mission.</li></ul> <p><b>SEPA.</b> NC has a SEPA process for non-federal projects that applies only to state actions and projects. Primary impediments for reducing durations (regulations, bureaucracy, permitting, etc.) include philosophical differences between state and local governments and other stakeholders, reviews and agreement to revisions, controversy control, and threat of litigation. Successful streamlining measures implemented by the State include State projects are reviewed by state agencies through the state clearinghouse that has established review times of thirty days, with limited extension of review time upon request. NC has environmental guidance and procedures, but they are not well organized or regularly updated.</p> <p><b>Note:</b> NC was granted NEPA Assignment (delegation of approval authority) from FHWA, but only for Categorical Exclusions, as of the end of January 2017.</p>
AL	All	<p>ADEM established a Permit Coordination and Development Center (PCDC) to coordinate the permitting process by organizing communications between ADEM and a new permittee. ADEM's website states that new air and water permits are typically issued within 60 days of application, PSD permits are issued within 120 days, and that Construction permits are issued within 45-60 days of application. ADEM's website is available in Korean, Vietnamese, Spanish and English.</p>

---

---

**AL Air**

AL has adopted the Federal regulations with minor differences. AL has additional requirements beyond the Federal regulations applicable to specific source categories dependent on location with the state. AL currently has one nonattainment area for lead (Pb) in Troy (Pike County).

AL's air quality program is managed by the Air Division of the AL Department of Environmental Management (ADEM). AL also has local permitting programs in Jefferson County (Birmingham) and the City of Huntsville. AL uses one common set of application forms for all types of air permits.

AL has timelines for action on permit applications outlined below:

- Air permit applications must be submitted at least 10-days prior to starting construction.
- A permit must be issued prior to starting construction for projects at Greenfield sites and projects involving PSD/NSR permits. Construction may commence ten days after submittal of the permit application for other types of air permits.
- Minor source permits are issued 45 days after submittal of a complete application.
- Synthetic minor source permits are issued 75 days after submittal of a complete application.
- Major source permits (PSD/NSR) are issued 150 days after submittal of a complete application.
- Sources are encouraged to contact ADEM prior to submitting a permit application to discuss the proposed project and review the application requirements.

AL's air pollution control regulations generally follow the federal requirements, with some minor exceptions. AL's regulations also include several requirements unique to AL outlined below:

- Construction permits do not authorize new sources to begin operation. A separate notification of construction completion must be submitted. Following review, ADEM will issue a Temporary Authorization to Operate (TAO), allowing the source to begin operation, make adjustments to equipment, and perform any required emissions testing. Following issuance of the TAO, ADEM will inspect the constructed/modified sources, verify the accuracy of the application, and review any source testing results prior to determining if an Authorization to Operate will be granted.
- AL regulation 335-3-4 and 335-3-5 establish emission limits for particulate matter and sulfur compounds from several fuel-burning and process source categories based on the air quality classification of the county in which the source is located.
- AL regulation 335-3-8 establishes state-wide emission limits for nitrogen oxides from several categories of process and fuel burning sources as well as emission limits from specific existing sources in several counties.

---

**AL Water**

**Water Sources.** Certificates of Use (COUs) are issued by the AL Department of Economic and Community Affairs' (ADECA) Office of Water Resources (OWR) under Code of AL §§9-10B-19 to entities that withdraw 100,000 gallons per day (gpd) or more and all public water systems. Cumulative impacts to groundwater or surface water are not considered when issuing COUs, although there are permits required for wells in the coastal areas producing at rates of 50 gpm or greater to protect groundwater resources including avoiding saltwater intrusion. Although there are no current promulgated regulations for drought planning, AL participates in several interstate associations to monitor and regulate water consumption on selected interstate river systems during drought conditions.

**Groundwater.** AL includes groundwater in the definition of "water". AL's Underground Injection Control Program (UIC) program closely follows the federal regulations. Class I and IV wells are prohibited.

**Stormwater.** AL's Construction General Permit (CGP) for stormwater discharges requires a daily inspection by the owner (compared to NC's requirement for a weekly inspection) and a routine inspection by a certified Qualified Credentialed Inspection (CO). NC's CGP does not require this additional certified inspector. NPDES regulations and procedures have been adopted, in general. ADEM maintains 16 general permits for stormwater discharges associated with industrial activities, instead of implementing the multi-sector general permit (MSGP). \*\*Some of these permits include authorization for both stormwater and process wastewater discharges.

**Wastewater.** ADEM maintains 5 general permits for process wastewater discharges associated with industrial activities, not including pesticide application. The state has adopted the federal National Pollutant Discharge Elimination System (NPDES) with minor additions (AL Administrative Code 335-6 – 335-10). ADEM is responsible for the regulation of point source discharges and discharges to POTWs. Discharges greater than 1 million gallons per day to coastal waters must characterize sediments and benthic microinvertebrates prior to discharge for new facilities and upon renewal of their NPDES permit for existing facilities. Subsequent studies may be necessary if the facility fails toxicity testing (AAC 335-8-2-.12).

**Note:** ADEM does not have an expedited permitting program for water.

---



---

<b>AL</b> <b>Waste</b>	<p><b>Solid Waste.</b> AL has an USEPA-approved program for solid waste management, including detailed permitting requirements. With some exceptions, unless operating a facility to treat and dispose of solid wastes, generators are required to properly characterize waste and ensure disposal in a properly permitted facility. Solid waste disposal permits are required for operation of all landfills and are valid for no longer than five years. Any public or private entity involved in solid waste management in AL must undertake measures to support the attainment of the statewide solid waste reduction goal, including but not limited to implementing waste reduction and recycling programs through the approved local solid waste management plan and recording and reporting the amounts of recycled or beneficially reused materials. The AL Department of Public Health, which regulates the collection and transportation of solid wastes, has established specific requirements for processing facilities. ADEM has established design and operating standards for solid waste disposal facilities and must comply with siting, location and water quality standards and operational requirements. AL has additional requirements that pertain to the registration and permitting of scrap-tire facilities and has designated facilities as Class 1 and Class 2 receivers of scrap tires. There are also general requirements that apply to all scrap tire facilities. AL regulates special wastes which are those wastes that require specific processing, handling, or disposal techniques as determined by ADEM. Special wastes include, but are not limited to: mining wastes; fly ash; bottom ash; sludges; friable asbestos; industrial wastes; liquid wastes; medical wastes; foundry wastes; petroleum-contaminated wastes; municipal solid waste ash; contaminated soil and water from the cleanup of a spill; and wood ash waste.</p> <p><b>Hazardous Waste.</b> Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations. A permit would be required if the facility wished to treat or dispose of hazardous waste onsite, or to store waste longer than 90 days. AL has additional requirements for Small Quantity Generators (SQG) and Large Quantity Generators (LQG) that relate to waste management, inspection and reporting requirements. SQGs and LQGs must have written waste minimization plans. Facilities that are permitted to store, treat or dispose of waste must meet additional container storage requirements, secondary containment requirements and sample analysis. Used oil generators that generate an average of greater than 25 gallons of used oil per month in a calendar year must obtain an USEPA ID number and annually report their activities. Federal requirements do not require that a facility obtain an USEPA ID and make annually report if they only generate used oil and not hazardous waste.</p>
<b>AL</b> <b>NEPA/SEPA - Transportation</b>	<p><b>NEPA.</b> The average duration of FHWA NEPA process for Environmental Impact Statement (EIS) projects to reach Record of Decision (ROD) is <b>10-12 years but is increasing</b>, and the average duration of Environmental Assessment (EA) projects to obtain Finding of No Significant Impact (FONSI) – <b>2-5 years</b>. Primary impediments for reducing durations include philosophical differences between federal, state, and local governments; reviews and agreement to revisions; project controversy; and threat of litigation. Agencies often ask for more information than what is required, and AL lacks documented environmental procedures. Successful streamlining measures implemented by the State include an EA Checklist similar to that for Categorical Exclusions (CEs). AL does not have comprehensive environmental guidance but does have some guidance for EAs and CEs.</p> <p><b>SEPA.</b> AL does not have a SEPA. AL was granted NEPA Assignment (delegation of approval authority) from FHWA for Categorical Exclusions only.</p>
<b>FL</b> <b>Air</b>	<p>Florida's air quality programs are managed by the Florida Department of the Environment (FDEP), Division of Air Resources Management (DARM). In Florida, an air permit is required prior to constructing, operating or modifying a facility or unit that emits or is reasonably expected to emit any air pollutant unless specifically exempt from permitting.</p> <p>Although there are no written timelines for FDEP permit application review and approval, there are regulatory deadlines for submitting request for additional information (RAI) and follow-up by FDEP after receipt of a response (30 days for construction or minor air operation permit application, 60 days for a TV air operation permit application, and 60 days after receipt of the RAI for FDEP response, and 90 days for FDEP to take action after receiving the last items that makes the application complete). FDEP has attempted to streamline the permitting process by posting permitting status and information on the website. The website provides the permits under review statewide, the date the application was received, the permit application, and the draft and final permits. FDEP also encourages pre-application meetings for all Title V applications submitted. Permit writer's tools are posted on the website, including the "permitting action tree" (a non-policy, non-guidance, and non-binding tool which recommend what permitting action to take when a specific issue arises).</p> <p>There are six district offices and eight FDEP-approved county air quality programs. The eight Florida counties with approved programs—Broward, Dade, Duval, Hillsborough, Orange, Palm Beach, Pinellas, and Sarasota—have each passed their own air pollution control regulations that go beyond the state requirements. Florida's air pollution control regulations generally follow the federal requirements, with a few relatively minor exceptions. Key points are provided below:</p> <ul style="list-style-type: none"><li>• Florida has adopted federal Prevention of Significant Deterioration (PSD) regulations by reference, with specific PSD air monitoring requirements that exhibit minor differences from federal requirements. Florida has four PSD Class I areas: Bradwell Bay National Wilderness Area, Chassahowitzka National</li></ul>

---

---

<b>FL</b> <b>Air</b>	<p>Wilderness Area, Everglades National Park, and St. Marks National Wilderness Area.</p> <ul style="list-style-type: none"><li>• The state's Stationary Source Emission Standards regulations closely parallel the federal requirements.</li><li>• Most of the federal National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and Maximum Achievable Control Technology (MACT) Standard requirements are incorporated by reference. Florida does NOT have a state toxics program.</li><li>• The state's Risk Management Program (RMP) mirrors federal requirements, and the Florida Emergency Management Division is responsible for implementing this act. The state has obtained delegation for implementation from the USEPA, with the exception of propane. Sources with propane as the only covered chemical process are not covered under Florida ARP/RMP, but are still covered under the federal regulations in 40 CFR 68.</li></ul>
<b>FL</b> <b>Water</b>	<p>Florida offers an ePermitting service where applications and other submittals can be developed and submitted for expedited permitting for Environmental Resource Permits, water use, wetland determination and other permits. Different geographical regions have different regulations for water use, discharge, and stormwater. Therefore, opening more than one location requires familiarity with multiple different regulatory agencies.</p> <p><b>Water Sources.</b> Water Use Rights are regulated by the FDEP, the five FWMDs and other state and local agencies. The FWMDs control issuance of permits for wells, consumptive use permits, and storage of surface waters. Consumptive use includes groundwater, surface water, and reclaimed water sources. State mandated minimum flow requirements may restrict water usage from selected surface waters. Water Use Permits (WUPs, also known as Consumptive Use Permits or CUPs) are issued by the five Florida Water Management Districts (FWMDs) in accordance with region-specific regulations. WUPs are required for withdrawals of over 100,000 gpd, and may be required for withdrawals over 50,000 gpd in specific geographical areas.</p> <p><b>Groundwater.</b> Florida includes groundwater in the definition of "water". Therefore, discharges to groundwater are regulating to meet FDEP classification standards. Groundwater Standards are equivalent to drinking water standards. The Aquifer Protection Program at FAC Chapter 62-520 regulates Underground Injection Control Program (UIC) ; Regulation of Wells; Water Well Construction ; Source Water and Wellhead Protection Programs; and Ground Water Classes, Standards and Monitoring.</p> <p><b>Stormwater.</b> NPDES regulations and procedures have been adopted, in general. Florida only offers 4 general or generic permits for stormwater discharges associated with industrial facilities not involved in remediation or agriculture (car washes, mining, laundromats, and concrete batch plants). Florida-specific regulations for cleaning, grading, and construction (including dredging and filling) are incorporated into the Environmental Resource Permit (ERP). ERP permits are required for many types of work within those waters, such as dredging or filling, construction of dams, impoundments, docks or other structures, as well as the construction of stormwater management systems that discharge to those waters. Permits are primarily issued by one of the FWMDs or local delegated programs. There is also a generic (or general) permit for construction stormwater discharges. Specific types of facilities and those using selected green infrastructure stormwater management may be exempt from permitting.</p> <p><b>Wastewater.</b> The state has adopted the federal National Pollutant Discharge Elimination System (NPDES) with minor additions and revisions. FDEP is responsible for the regulation of point source discharges. A limited number of general permits for industrial wastewater discharges. Additionally, some counties may also impose wastewater requirements which are included in a facility's NPDES permit. Issuance of NPDES permits for facilities around Miami was not delegated to FDEP; these permits are issued by the USEPA. Third parties can seek Site-Specific Alternative Criteria (SSAC) water quality limits for Total Nitrogen, Total Phosphorous, chlorophyll a, and nitrate+nitrite to be more or less stringent than other state-wide limits. Current statewide nutrient limits vary by region and geophysical attributes of the receiving water. As an example, limits for Total Nitrogen range from 0.67 mg/L in the western panhandle to 1.54 mg/L in the Peninsula. Additionally, some industries may benefit from regulations such as the Electrical Power Plant Siting Regulations (Section 62-17, FAC) which facilitates industrial development and expedites decision making timeframes.</p>
<b>FL</b> <b>Waste</b>	<p><b>Solid Waste.</b> Florida follows the federal regulations with respect to solid waste management, with a few additional requirements. With some exceptions, unless operating a facility to treat and dispose of solid wastes, generators are required to properly characterize waste and ensure disposal in a properly permitted facility. Florida has established the following two classes of landfills: Class 1 and Class 2, depending on waste received. Solid waste landfills must hold construction and operation permits. Solid waste management facilities may not be constructed, operated, maintained, modified, or closed without a permit issued by FDEP. Solid waste management facilities must submit to the FDEP district office where the facility is located permit applications for the proposed construction, modification, operation, or closure of a facility.</p>

---

---

FL	Waste	<p><b>Hazardous Waste.</b> Florida has adopted the federal regulations with minor revisions. Some counties, such as Miami-Dade also impose more stringent regulations. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations. A permit would be required if the facility wished to treat or dispose of hazardous waste onsite, or to store waste longer than 90 days. Permitting requirements generally follow the federal regulations. Separate permits are required for construction, operation, and closure of a treatment, storage or disposal facility; the USEPA requires only an operating permit and a post closure permit. A construction permit is also required prior to starting a major modification. Permitted facilities must meet state financial assurance and closure requirements. Permit modification is more stringent in Florida than at the federal level.</p>
FL	NEPA/SEPA	<p><b>NEPA.</b> The average duration of FHWA NEPA process for Environmental Impact Statement (EIS) projects to reach Record of Decision (ROD) is <b>10-12 years but is increasing</b>, and the average duration of Environmental Assessment (EA) projects to obtain Finding of No Significant Impact (FONSI) – <b>3-5 years</b>. Primary impediments for reducing durations include philosophical differences between federal, state, and local governments; reviews and agreement to revisions; and project controversy. Florida was granted full NEPA Assignment (delegation of approval authority) from FHWA in January 2017. Florida NEPA guidance documents are thorough and regularly updated.</p> <p><b>SEPA.</b> Florida does not have a SEPA; however, a State Environmental Impact Report (SEIR) may be conducted for state or locally funded roadway projects. Depending on size of project the duration is typically 2-4 years; SEIRs are approved at the District level.</p> <p><b>Note:</b> Unique among the southern states, Florida recently obtained full NEPA Assignment from FHWA.</p>
GA	Air	<p>Requirements for obtaining air permits from the Georgia Environmental Protection Division (EPD) are adopted from Federal Procedures and incorporated into the State Implementation Plan. Georgia's Rules for Air Quality Control are codified in Chapter 391-3-1 of the state's regulations. Small sources may be able to qualify for certain permit exemptions, a general air permit, or permit-by-rule. Georgia EPD has multiple air permitting procedural options for major sources that can decrease approval time for projects that do not involve significant modifications (e.g., off-permit changes). There is no fee for air permit applications, but an expedited permit review process is available for a fee that depends on the complexity of the application.</p> <p>Georgia has an air toxics permitting program, but it is not as comprehensive or stringent as NC's.</p> <p>Georgia has separate permit application forms for construction permitting and Title V operating permit modifications. Georgia requires Title V permit application forms to be submitted and certified via an online database program called GEOS, so this is an additional system that must be utilized when submitting Title V permit applications. The permitting process for new sources is not appreciably different than for existing sources. Georgia has some ozone non-attainment areas, including a large one around Atlanta. Permitting of sources can be difficult or impossible in certain counties if VOC or NOx emissions are expected. The major source threshold is also lower in these areas, requiring smaller sources to be subject to Title V and major NSR programs.</p> <p>Georgia has some ozone non-attainment areas, including a large one around Atlanta. Expansion of existing sources can be difficult or impossible in certain counties if VOC or NOx emissions increases are expected.</p>
GA	Water	<p><b>Water Sources.</b> Water use and conservation is regulated by the GDEP in conjunction with Georgia's 11 Water Planning Regions. The regions monitor the quality of ground water and surface water resources and encourage conservation to meet the regional needs and forecasts. Concerns over saltwater intrusion, high water usage in northern Georgia, and other water-quality related drivers resulted in the development of river basin management plans and several regional Water Planning Districts. Conservation strategies are implemented during drought conditions or as needed. A Groundwater Use permit is required for withdrawals of greater than 100,000 gallons per day on a monthly average. Permit holders must develop a Water Conservation Plan which includes a drought contingency plan, and implement water conservation measures.</p> <p><b>Groundwater.</b> Georgia includes groundwater in the definition of 'waters of the state'. Therefore, discharges to groundwater are regulated to meet GDEP classification standards. Groundwater Standards are equivalent to drinking water standards. Georgia allows Class I – VI Underground Injection Control (UIC) wells except for specific disposal uses, such as hazardous or radioactive wastes and loop heat pump systems where water is returned to a well. Class V wells are also allowed.</p> <p><b>Stormwater.</b> Georgia's general permit for industrial activities (called the Industrial General Permit, or IGP) mirrors the USEPA's Multisector General Permit with the exception of not including mine dewatering discharges at crushed stone, construction sand and gravel or other sand mining facilities. Georgia may require the stormwater pollution prevention plans (SWPPPs) to be prepared, reviewed, and certified by a professional engineer or geologist (if for a mining activity) if the SWPPP</p>

---

**GA Water**

is not compliant with the permit. SWPPP inspections must be performed quarterly. Analytical monitoring under Georgia's IGP (which applies to multiple industries) is only required when specific activities are materials are on site, resulting in reduced requirements for analytical monitoring compared to NC's general permits. Georgia allows facilities to exempt themselves (using adequate documentation) from monitoring for parameters otherwise required under the IGP but which are not present at the site due to current or previous industrial activities.

**Wastewater.** The state has adopted the federal National Pollutant Discharge Elimination System (NPDES) with minor additions and revisions. GA EPD maintains 2 general permits for process wastewater discharges associated with industrial activities, not including remediation and pesticides application. No new point source discharges, or increases above permitted levels in discharges from existing point sources, are allowed to receiving waters classified as Outstanding National Resource Waters. Point source discharges from animal feeding operations (AFOs, or CAFOs) are prohibited (land application of wastewaters is allowed). New industries are encouraged to locate in communities with existing Publicly Owned Treatment Works which accept indirect dischargers. New or expanding discharges upstream of or directly to reservoirs, lakes and/or estuaries may receive additional numeric limits for Total Phosphorous if there is a potential to discharge phosphorous.

---

**GA Waste**

**Solid Waste.** Georgia's solid waste program is subdivided into the following three units: Municipal Solid Waste/Surface Mining; Commercial and Industrial Solid Waste; and Solid Waste Compliance. With some exceptions, unless operating a facility to treat and dispose of solid wastes, generators are required to properly characterize waste and ensure disposal in a properly permitted facility. Georgia overall follows the federal requirements for solid waste management. Certain types of waste management facilities may operate under permit-by-rule if certain conditions are met. Georgia has more stringent requirements for landfills addressing site location, design, operating criteria, closure and post-closure-care requirements, and financial assurance for solid waste landfills. Georgia Environmental Protection Division regulates scrap tires from their point of generation through disposal and has specific comprehensive requirements addressing storage, processing, sorting and disposing of tires.

**Hazardous Waste.** Georgia's rules incorporate by reference the federal hazardous waste regulations. There are no significant differences between state and federal regulations regarding management of hazardous waste. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations. A permit would be required if the facility wished to treat or dispose of hazardous waste onsite, or to store waste longer than 90 days.

---

**GA NEPA/SEPA**

**NEPA.** The average duration of FHWA NEPA process for Environmental Impact Statement (EIS) projects to reach Record of Decision (ROD) is **8-10 years**, and the average duration of Environmental Assessment (EA) projects to obtain Finding of No Significant Impact (FONSI) – **4-6 years**. Primary impediments for reducing durations include a changing regulatory landscape, logical termini, protected species issues, funding/project prioritization, generally larger more complex projects with multiple resources and issues needing avoidance and minimization, expiration of studies and need to re-procure and update environmental evaluations, and changing project scope once project initiated which may increase scale of project/level of effort, and threat of litigation. Successful streamlining measures implemented by the State include concurrent reviews among GDOT offices and within Office of Environmental Services as an option depending on where in the deliverable process the project is and is done upon request; joint coordination procedures between FHWA/USACE/GDOT regarding concurrent Section 404b1 permitting and NEPA processes; Programmatic CE for specific projects, early transmittals of deliverables to agencies to obtain concurrences as the project moves forward to mitigate risk to project schedule, e.g., there's an understanding during project development of where potential risks could be, as well as agency feedback; State funded projects which eliminate FHWA and result in one less agency review- however, this is under development and there are some challenges with agencies that haven't previously served in the lead agency role; Sharepoint options for electronic uploads of documents to GDOT and electronic review processes, which limits the production process and helps streamline overall, and implementation of a Quality Initiative made up of committees for ongoing improvement of processes between consultants and GDOT staff. Policies and procedures are documented via GDOT Environmental Procedures Manual online. It is project owner's responsibility to assist in regular updates to the P6 schedule as well as the deliverables tracking online database owned/operated by GDOT. GDOT provides a weekly send out of the status of projects based on these updates, which keeps focus on project schedules and delivery.

**SEPA.** Georgia does not have a SEPA; there was a GA Environmental Policy Act but effective July 1, 2016, this only applied for projects exceeding \$100M.

**Note:** Georgia was granted NEPA Assignment (delegation of approval authority) from FHWA for Categorical Exclusions only.

---

**SC Air**

South Carolina's air quality program is managed by the South Carolina Department of Health and Environmental Control (SCDHEC), Bureau of Air Quality (BAQ). South Carolina maintains separate construction air permit and Title V operating permit applications. Permits are issued by BAQ's central office and regional offices are generally only involved with inspection-related activities. South Carolina allows some construction activities prior to issuance of non-PSD construction permits. In South Carolina, sources request an operating permit after beginning operation and continue to operate under the construction permit until the operating permit is issued. South Carolina currently has no areas of the state classified as nonattainment for any air pollutant. South Carolina has specific timelines for action on construction permit applications outlined below:

- 90-days from submittal of a complete application for non-PSD permit applications
- 270-days from submittal of a complete application for PSD permit applications
- Expedited construction permits may be requested for an additional fee. Expedited permit review is not automatic and may be denied. Expedited permits range from 30-days for minor sources without public notice requirements up to 150 days for PSD permits impacting PSD Class I areas.
- The permit timelines may be suspended when additional requested information is not provided in a timely manner. A pre-application meeting is recommended for projects requesting expedited permitting and is required for PSD applications.

South Carolina's air pollution control regulations generally follow the federal requirements, with some minor exceptions. South Carolina's regulations also include several requirements unique to South Carolina outlined below:

- South Carolina NO<sub>x</sub> control regulation 61-62.5, Std. 5.2 reduces emissions of oxides of nitrogen (NO<sub>x</sub>) from modified fuel combustion sources that have not previously undergone an emission control technology review for NO<sub>x</sub>.
- South Carolina toxic air pollutant (SCTAP) regulation 61-62.5, Std. 8 limits airborne concentrations of 257 SCTAP's. Hazardous air pollutants (HAP's) being emitted from sources subject to a Federal standard under 40 CFR Part 63 are exempted. A compliance demonstration is required for applicable sources using air dispersion modeling or lookup tables. The SCTAP emission rates demonstrating compliance have historically been incorporated into permits as state-only requirements. A compliance evaluation is required following each facility modification which alters the atmospheric dispersion characteristics or increases the emission rate of any SCTAP from any source at the facility.
- South Carolina requires each permitted facility to demonstrate the emissions of each criteria air pollutant will not interfere with attaining the ambient air quality standards (SC Reg. 61-62.5, Std. 2) and air quality increments (SC Reg. 61-62.5 – Std. 7). The emission rates demonstrating compliance have historically been incorporated into permits as state-only requirements. A compliance evaluation is required following each facility modification which alters the atmospheric dispersion characteristics or increases the emission rate of any criteria pollutant from any source at the facility.

---

**SC Water**

**Water Sources.** Water use and conservation is regulated by SCDHEC. Responsibility to develop a Water Plan with the SC Department of Natural Resources. Surface water withdrawals of 3 million gallons a month or more require a Surface Water Withdrawal Permit. Use Withdrawal Permits for groundwater are only required in designated capacity use areas (currently about 15 counties) for withdrawals and use of 3 million gallons a month or more.

**Groundwater.** South Carolina includes groundwater in the definition of 'waters of the state'. Class I and IV Underground Injection Control (UIC) wells are prohibited in South Carolina. There are currently no Class II or III wells permitted in the state.

**Stormwater.** NPDES regulations and procedures have been adopted, in general. South Carolina's general permit for industrial activities, reissued in September 2016, is similar to the USEPA's Multisector General Permit, but does not include mining or extraction of coal, oil and gas, and minerals. South Carolina may require the stormwater pollution prevention plans (SWPPPs) to be prepared, reviewed, and certified by a professional engineer or geologist (if for a mining activity) if the SWPPP is not compliant with the permit. SCDHEC may delegate local entities to administer the stormwater program. The threshold for requiring coverage under the Construction General Permit (CGP) in selected coastal counties is reduce from 1 acre typically found in similar states to 0.5 acres. Issuance of a CGP is dependent on acquiring a Coastal Zone Consistency permit and, for permanent or temporary stormwater control structure, a Critical Area Permit. A pre-construction conference is required with all parties involved in any construction project which requires a permit. No new discharges are allowed under the Industrial Activities General Permit to receiving waters classified as Outstanding National Resource Waters. New facilities must apply for the Industrial General Permit for stormwater discharges at least 17 days prior to starting industrial activities.

**Wastewater.** The state has adopted the federal National Pollutant Discharge Elimination System (NPDES) with minor additions and revisions. SCDHEC maintains 6 general permits for process wastewater discharges associated with industrial activities, not including remediation and pesticides application. Several of these permits

---

SC	Water	are currently expired by SCDHEC is currently updating them. SCDHEC is responsible for the regulation of point source discharges and discharges to POTWs. SCDHEC may approve local POTWS to be the permitting control authority.
SC	Waste	<p><b>Solid Waste.</b> With some exceptions, unless operating a facility to treat and dispose of solid wastes, generators are required to properly characterize waste and ensure disposal in a properly permitted facility. Specific regulations have been established for solid waste processing facilities, solid waste incineration, yard trash, land clearing and composting, and land application of solid waste. Overall solid waste management requirements are consistent with federal requirements. SC has established requirements for Class 1, 2 and 3 landfills addressing types of waste disposed. Landfills have additional requirements relative to waste characterization, reporting of waste characterization and structural fill activities. There may also be requirements for financial assurance for closure and post-closure and corrective action. South Carolina has established specific requirements for waste tire haulers, collectors, processors, and disposers. South Carolina has established specific requirements for special wastes, batteries and white goods. Special wastes are non-residential and commercial solid wastes, other than regulated hazardous wastes, that are difficult or dangerous to handle and thus require unusual management. South Carolina's Manufacturer Responsibility and Consumer Convenience Information Technology Equipment Collection and Recovery Act bans the disposal of certain electronic wastes in landfills and establishes recovery obligations for computer monitor and television manufacturers.</p> <p><b>Hazardous Waste.</b> Requirements for generators of hazardous waste generally mirror federal regulations. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations. A permit would be required if the facility wished to treat or dispose of hazardous waste onsite, or to store waste longer than 90 days. Large quantity generators have additional reporting requirements beyond federal requirements: LOGs must submit quarterly reports on their hazardous waste management activities. LOGs must submit information annually on their hazardous waste minimization efforts. SC has additional requirements for permitted treatment, storage and disposal facilities that include location standards, reporting requirements, and surface impoundment and landfill disposal requirements.</p>
SC	NEPA/SEPA	<p><b>NEPA.</b> The average duration of FHWA NEPA process for Environmental Impact Statement (EIS) projects to reach Record of Decision (ROD) is <b>3-5 years but is increasing</b>, and the average duration of Environmental Assessment (EA) projects to obtain Finding of No Significant Impact (FONSI) is <b>16-18 months</b>. Primary impediments for reducing durations include philosophical differences between federal, state, and local governments; reviews and agreement to revisions; and project controversy. Agencies often ask for more information than what is required, and SCDOT and FHWA often relent and provide additional information at greater expense and time. Also, the threat of litigation from advocacy groups is growing in South Carolina (SC). This means longer documents and more legal reviews than in years past. USACE attorneys are also much more conservative now. Successful streamlining has resulted when dealing with state-funded positions in the USACE; they typically answer questions quickly, speed up reviews and help keep permits moving. South Carolina does not have comprehensive environmental guidance but does have some specific on-line guidance documents; their website has a comprehensive library that includes federal and state guidance documents.</p> <p><b>SEPA.</b> South Carolina does not have a SEPA. South Carolina was granted NEPA Assignment (delegation of approval authority) from FHWA for Categorical Exclusions only.</p>
TN	Air	<p>Tennessee's air quality program is managed by the Tennessee Department of Environment and Conservation (TDEC), Division of Air Pollution Control (APC). Tennessee also has local permitting programs in Davidson County (Nashville), Hamilton County (Chattanooga), Knox County (Knoxville) and Shelby County (Memphis). Tennessee maintains separate applications for state operating permits and Title V operating permits. Construction permit applications are processed using the appropriate operating permit application forms. Following completion of construction facilities have 30-days to request an operating permit.</p> <p>Tennessee currently has nonattainment areas for fine particulate matter (PM<sub>2.5</sub>) in the Greater Knoxville area (Anderson, Blount, Knox, Loudon and Roane counties) and for sulfur dioxide (SO<sub>2</sub>) in Sullivan County.</p> <p>Tennessee has specific timelines for action on construction permit applications outlined below:</p> <ul style="list-style-type: none"><li>• Construction permit applications must be submitted at least 90-days prior to construction for minor sources and 120-days prior for major sources (Title V sources).</li><li>• Minor source construction permits must be issued or denied within 115-days from submittal of a complete application.</li><li>• Major source construction permits must be issued 180 to 365 days from submittal of a complete application.</li><li>• A pre-application meeting is recommended for large projects.</li></ul>

---



**TN Air**

Tennessee's air pollution control regulations generally follow the federal requirements, with some minor exceptions. Tennessee's regulations also include several requirements unique to Tennessee outlined below:

- Tennessee regulation 1200-03-19 includes requirements applicable to existing PM and SO<sub>2</sub> sources located within or near the boundaries of former nonattainment areas across in the state.
- Tennessee regulation 1200-03-27 includes requirements for NO<sub>x</sub> sources located in the Greater Nashville area and certain NO<sub>x</sub> sources located elsewhere in Tennessee.
- Tennessee regulation 1200-03-09 requires new sources and modifications of existing sources to demonstrate through air dispersion modeling the proposed source will not cause or contribute to a violation of any ambient air quality standard or air quality increment.

Tennessee will be offering permit-by-rule starting in 2017 for minor sources in specific air categories; permit-by-Rule is typically a faster and less expensive method of permitting<sup>1</sup>

---

**TN Water**

**Water Sources.** Water use and conservation is monitored by TDEC, but a permit is not required. After a significant drought in 2007, Tennessee organized the Tennessee Water Resources Technical Advisory Committee to make recommendations for water planning. Two regional water resource studies have been performed. Reoccurring water withdrawals of 10,000 gallons a day or more are required to be registered with TDEC's Division of Water annually.

**Groundwater.** Tennessee includes groundwater in the definition of 'waters of the state'. Tennessee permits Class I and V Underground Injection Control (UIC) wells. Class II wells are permitted by the USEPA; There are no existing Class III wells in the state; Class IV wells are prohibited.

**Stormwater.** The Tennessee Multi-Sector General Permit (TMSP) for stormwater discharges from industrial activities mirrors the USEPA's Multisector General Permit with the exception of not including metal mining. The TMSP requires quarterly monitoring for facilities discharging pollutants of concern to streams impaired for that pollutant or discharging to Outstanding National Resource Waters or contributing to the degradation of exceptional Tennessee waters cannot be covered under the TMSP. Persons preparing an erosion and sediment control plan must have a working knowledge of erosion and sediment controls, such as a Certified Professional in Erosion and sediment Control (CPESC) or have completed a state-specific certification course. Persons performing site assessments also require certification. Routine inspections of construction sites must be performed twice a week.

**Wastewater.** TDEC is responsible for the regulation of point source discharges and discharges to Publicly Owned Treatment Works (POTWs). TDEC may approve local POTWS to be the permitting control authority. The state has adopted the federal National Pollutant Discharge Elimination System (NPDES) with minor additions and revisions. TDEC maintains 3 general permits for process wastewater discharges associated with industrial activities, not including remediation, agriculture, and pesticides application.

---

**TN Waste**

**Solid Waste.** With some exceptions, unless operating a facility to treat and dispose of solid wastes, generators are required to properly characterize waste and ensure disposal in a properly permitted facility. Owners and operators of solid waste storage, disposal, and/or processing facilities must obtain an operating permit although certain activities are deemed permit-by-rule. Facilities must have an approved closure/post-closure care plan and must file and maintain financial assurance with TDEC. TN has established specific requirements for four classes of disposal facilities according to the waste they receive. Tennessee has established more stringent location criteria for Class I, II, III, and IV disposal facilities. Tennessee has specific requirements that address management of waste tires, and Tennessee has specific requirements for "special wastes," defined as solid wastes that are either difficult or dangerous to manage. Special wastes may include sludges, bulky wastes, pesticide wastes, medical wastes, industrial wastes, hazardous wastes that are not subject to regulation under specific state hazardous waste rules, liquid wastes, friable asbestos wastes, and combustion wastes.

**Hazardous Waste.** Requirements for generators of hazardous waste generally mirror federal regulations with minor revisions. Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations. A permit would be required if the facility wished to treat or dispose of hazardous waste onsite, or to store waste longer than 90 days. Generators must develop and maintain hazardous waste reduction plans, and an annual report must be submitted. TN has established additional permitting and siting criteria applicable to commercial hazardous waste management facilities, and has special requirements for dry cleaning facilities.

---

<sup>1</sup> <http://www.tennessee.gov/environment/article/permit-air-permit-by-rule#sthash.MePkeqn5.dpuf>

---

TN	NEPA/SEPA	<p><b>NEPA.</b> The average duration of FHWA NEPA process for Environmental Impact Statement (EIS) projects to reach Record of Decision (ROD) is <b>12 years</b>, and the average duration of Environmental Assessment (EA) projects to obtain Finding of No Significant Impact (FONSI) – <b>3 years</b>. Primary impediments for reducing durations include philosophical differences between federal, state, and local governments; reviews and agreement to revisions; project controversy and threat of litigation. While the Tennessee Environmental Streamlining Agreement (TESA) is a successful streamlining measure, infrequent TESA meetings (every 2-3 months) can adversely impact project schedule.</p> <p><b>SEPA.</b> Tennessee does not have a SEPA but does have Tennessee Environmental Evaluation Report (TEER) which serves as the environmental review process for smaller projects. Major TEER is at the same level as a D-List Categorical Exclusion (CE) and Minor TEER is at the level of a programmatic CE (checkboxes).</p> <p><b>Note:</b> Tennessee does not have NEPA Assignment from FHWA.</p>
VA	Air	<p>Virginia's air quality permitting is managed by the Air Division of the Department of Environmental Quality (VADEQ). In general, permitting is handled by regional offices, so there is sometimes inconsistency in how stringently regulations are applied across the regions. Air dispersion modeling is reviewed by VADEQ's central office. Only minor construction activities such as land clearing and grading are allowed prior to receipt of a construction permit. Virginia has the following ozone nonattainment areas: Arlington County, Fairfax County, Loudoun County, Prince William County, City of Alexandria, City of Fairfax, City of Falls Church, City of Manassas, and City of Manassas Park.</p> <p>Virginia has the following guidelines on timelines for issuance of permits:</p> <ul style="list-style-type: none"><li>• Issued within 90 to 120 days for a minor new source review (NSR) permit</li><li>• Issued within 12 months for Prevention of Significant Deterioration (PSD) applications. The typical processing time for PSD applications typically does not exceed 9 to 10 months.</li></ul> <p>VADEQ's permitting requirements codified under 9 VAC Chapter 80 include several requirements that go well beyond federal requirements creating additional burden to prepare applications, including the following:</p> <ul style="list-style-type: none"><li>• Depending upon the magnitude of emissions, applicants can expect to conduct air dispersion modeling for both criteria and toxic air pollutants. Due to the stringency of the current national ambient air quality standards (NAAQS) and the conservatism of the USEPA's air dispersion modeling software, the "state-only" requirement for criteria pollutants has a notable likelihood of requiring additional cost and schedule impacts to projects.</li><li>• There is generally an expectation that emission sources require a "state-level" best available control technology (BACT) evaluation for emission sources being added or expanded.</li><li>• Depending upon the type of source being operated and the magnitude of emissions from the site, more stringent emissions standards generally apply in the significant number of ozone nonattainment areas identified above.</li><li>• VADEQ subjects draft minor NSR permit that establish federally enforceable emission limits to avoid major source permitting requirements to public notice requirements, unlike many states, potentially inviting requests for public meetings.</li></ul>
VA	Water	<p><b>Water Sources.</b> Water use and conservation is regulated by VDEQ's Office of Water Supply. Various local and regional water supply planning organizations may develop Water Supply Plans. Additional conservation strategies are implemented during drought conditions or as needed. A Groundwater Use permit is required for withdrawals of 300,000 gallons per month or more if located within two Groundwater Management Areas (25 VAC 62). Permit holders must develop a Water Conservation and Management Plan which includes a drought contingency plan, and implement water conservation measures. Surface water withdrawals are regulated under the Virginia Water Protection Permit Program for withdrawals greater than 10,000 gpd from non-tidal waters and 2 MGD from tidal waters. New or expanding surface water withdrawals exceeding 90 million gallons per month are required to hold a pre-application panel review and public notice.</p> <p><b>Groundwater.</b> Virginia includes groundwater in the definition of 'waters of the state'. The USEPA Region 3 issues Underground Injection Control (UIC) permits within Virginia. Disposal of pollutants in wells also requires a Virginia Pollution Act (VPA) permit issued by VDEQ.</p> <p><b>Stormwater.</b> The General Industrial Permit mirrors the USEPA's Multisector General Permit. Virginia's General Permit for Discharges of Storm Water Associated with Industrial Activities (known as the General Industrial Permit) includes requirements for the Chesapeake Bay Total Maximum Daily Load (TMDL). The TMDL prohibits any facilities commencing construction after June 30, 2014 from exceeding the nutrient and sediment loading discharged from the site prior to development. Additionally, the total phosphorus load cannot exceed design criteria specified in the permit. Nutrients and solids must be sampled by permit holders for two years. If</p>

---



**VA Water**

above specified thresholds, a Chesapeake Bay TMDL Action Plan must be developed and annual reports on their progress to implement the plan must be submitted to VDEQ. Permittees must also adopt any local municipal ordinances developed and implemented to meet the TMDL. After June 30, 2014, construction disturbing 2,500 square-feet but less than one acre within the Chesapeake Bay Preservation Area is not subject to the CGP but must acquire approval of a stormwater management plan under the Virginia Stormwater Management Plan regulations. Construction outside of the Chesapeake Bay Preservation Area disturbing more than one acre (or part of a larger plan) are subject to the Construction General Permit. Projects greater than 5 acres are subject to additional requirements. Inspections are required once every four business days. Changes to the DMV license requirements for a Demolisher/Rebuilder/Salvage Dealer/Salvage Pool/Vehicle Removal Operator license went into effect in October of 2009. A change in the law now requires license applicants to certify to the Commissioner that they either are permitted under a VPDES industrial stormwater permit, or that they are exempt from that permitting requirement.

**Wastewater.** The state has adopted the federal National Pollutant Discharge Elimination System (NPDES) with minor additions and revisions. VDEQ is responsible for the regulation of point source discharges and discharges to POTWs. VPDES permits are issued through VDEQ's regional offices. VDEQ maintains 8 general permits for process wastewater discharges associated with industrial activities, not including remediation and pesticides applications. The Nutrient Discharges and Nutrient Trading in the Chesapeake Bay Watershed general permit makes new VPDES permit holders discharging 1,000 gpd or more which discharge to the Chesapeake subject to annual effluent loading limits for nitrogen and phosphorus and allows trading of credits. Expansions to facilities which initiated discharges after January 1, 2011 are subject to the Nutrient Discharges and Nutrient Trading in the Chesapeake Bay Watershed general permit (described below) if discharging 40,000 gpd or more. Federal regulations include items that are not allowed to be kept confidential. However, Virginia specifies that "any secret formula, secret processes, or secret method other than effluent data" maybe kept confidential. Point source discharges from animal feeding operations (AFOs) are prohibited except in rain events greater than a 25 year, 24-hour storm (land application of wastewaters is allowed). However, confined animal feeding operations (CAFOs, generally larger feed lot operations) can be authorized under individual permits.

---

**VA Waste**

**Solid Waste.** VA generally adopts the federal requirements with some revisions. Unless operating a facility to treat and dispose of solid wastes, generators are required to properly characterize waste and ensure disposal in a properly permitted facility. Virginia regulates three types of landfills: sanitary landfills, industrial waste landfills, and construction/demolition/debris (CDD) landfills. All solid waste management facilities in the state must be permitted. Permits specify requirements for monitoring, reporting, recordkeeping, and inspections. Permit-by-rule is available for composting facilities, solid waste transfer stations, material recovery facilities, waste-to-energy facilities, thermal treatment or incineration facilities, waste piles, and centralized waste treatment facilities. Solid waste management facilities must comply with reporting and financial assurance requirements. Virginia's Computer Recovery and Recycling Act establishes requirements for the collection, recycling, and reuse of computer equipment. Manufacturers must adopt and implement a recovery plan and meet reporting requirements.

**Hazardous Waste.** Facilities are generally able to operate effectively without a hazardous waste permit by maintaining large quantity or small quantity generator status under state and federal regulations. A permit would be required if the facility wished to treat or dispose of hazardous waste onsite, or to store waste longer than 90 days.

---

**VA NEPA/SEPA**

**NEPA.** The average duration of FHWA NEPA process for Environmental Impact Statement (EIS) projects to reach Record of Decision (ROD) is **3-5 years**, and the average duration of Environmental Assessment (EA) projects to obtain Finding of No Significant Impact (FONSI) is **18 months**. Primary impediments for reducing durations include philosophical differences between federal, state, and local governments; reviews and agreement to revisions; and project controversy. Successful streamlining includes a robust Locally Administered Projects program where localities partner with Virginia DOT (VDOT) to take on the administration of projects. VDOT has procedure and guidance manuals such as the Locally Administered Projects Manual which provides guidance and instruction on project development and implementation for localities. Under this program projects are completed in 1 to 6 years depending on complexity. VA provides comprehensive environmental guidance for NEPA/SEPA analyses.

**SEPA.** Virginia has a SEPA process that only applies to State actions and projects. Average duration of the SEPA process, if applicable for EIS projects to reach ROD and EA projects to obtain FONSI, is 1-3 years or more depending on the complexity of the project. Virginia does not have NEPA Assignment from FHWA.

---

*This page intentionally left blank*

## **Appendix C Acronyms**

*This page intentionally left blank*

<b>Acronym</b>	<b>Definition</b>	<b>Applicable Media</b>
AAC	Alabama Administrative Code	Multiple
ADECA	Alabama Department of Economic and Community Affairs	Multiple
ADEM	Alabama Department of Environmental Management	Multiple
AECOM	AECOM Technical Services of North Carolina	NA
AFO	Animal Feeding Operations	Water
AL	Alabama	NA
APC	Air Pollution Control	Air
ARP/RMP	Accidental Release Prevention and Risk Management Planning	Air
ATC	Authorization to Construct	Air
BACT	Best Available Control Technology	Air
BAQ	Bureau of Air Quality	Air
BAR	Bureau of Air Regulation	Air
BMP	Best Management Practices	Water
CAA	Clean Air Act	Air
CCPCUA	Central Coastal Plain Capacity Use Are	Water
CDD	Construction Demolition Debris	Waste
CE	Categorical Exclusion	NEPA/SEPA
CFR	Code of Federal Regulations	Multiple
CGP	Construction General Permit	Water
COU	Certificates of Use	Water
CPESC	Certified Professional in Erosion and Sediment Control	CPESC
CUP	Consumptive Use Permit	Water
CWA	Clean Water Act	Water
DAQ	Division of Air Quality (NC)	Air
DARM	Division of Air Resources Management	Air
DMV	Department of Motor Vehicles	Water
DOT	State Departments of Transportation	NEPA/SEPA
EA	Environmental Assessment	NEPA/SEPA
EIS	Environmental Impact Statement	NEPA/SEPA
ERP	Environmental Resource Permit	Water
ESC	Erosion and Sediment Control	Water
FAC	Florida Administrative Code	Multiple
FAQ	Frequently Asked Questions	Multiple
FDEP	Florida Department of Environmental Protection	Multiple
FESOP	Federally Enforceable State Operation Permits	Air
FHWA	Federal Highway Administration	NEPA/SEPA
FL	Federal Level	Multiple
FONSI	Finding of No Significant Impact	NEPA/SEPA
FWMD	Florida Water Management District	FWMD
G.S.	General Statute	Multiple
GA	Georgia	NA
GDOT	Georgia DOT	NEPA/SEPA

<b>Acronym</b>	<b>Definition</b>	<b>Applicable Media</b>
GEOS	Georgia EPD Online System	Air
GEPD	Georgia Environmental Protection Division	Multiple
HAP	Hazardous Air Pollutant	Air
IGP	Industrial General Permit	Water
LCID	Land-Clearing and Inert-Debris	Water
LQG	Large Quantity Generators	Waste
MACT	Maximum Achievable Control Technology	Air
MGD	Million Gallon per Day	Water
MS	Mississippi	NA
MSGP	Multi-Sector General Permit	Water
MSWLF	Municipal Solid Waste Landfill	Waste
NAAQS	National Ambient Air Quality Standards	Air
NC	North Carolina	NA
NCAC	North Carolina Administrative Code	Multiple
NC Chamber Foundation	The North Carolina Chamber Foundation	NA
NCAC	North Carolina Administrative Code	Multiple
NC DAQ	North Carolina Department of Air Quality	
NC DEQ	North Carolina Department of Environmental Quality	Multiple
NC DOT	North Carolina Department of Transportation	NEPA/SEPA
NEPA	National Environmental Policy Act	NEPA/SEPA
NESHAP	National Emission Standards for Hazardous Air Pollutants	Air
NO <sub>2</sub>	Nitrogen Dioxide	Air
NO <sub>x</sub>	Nitrous Oxides	Air
NPDES	National Pollutant Discharge Elimination System	Air
NSR	New Source Review	Air
OAQPS	Office of Air Quality Planning and Standards	Air
OWR	Office of Water Resources	Water
Pb	Lead	Air
PCDC	Permit Coordination and Development Center	Multiple
PM	Particulate Matter	Air
PM2.5	Particulate Matter less than 2.5 microns in diameter	Air
POTW	Publically Owned Treatment Works	Water
PSD	Prevention of Significant Deterioration	Air
QCI	Qualified Credentialed Inspection	Water
RAI	Request for Additional Information	Air
RCRA	Resource Conservation and Recovery Act	Waste
RMP	Risk Management Program	Air
ROD	Record of Decision	NEPA/SEPA
SC	South Carolina	NA
SCDHEC	S.C. Department of Health & Environmental Control	Multiple
SC DOT	South Carolina Department of Transportation	NEPA/SEPA

<b>Acronym</b>	<b>Definition</b>	<b>Applicable Media</b>
SCTAP	South Carolina Toxic Air Pollutant	Air
SDWA	Safe Drinking Water Act	Water
SEIR	State Environmental Impact Report	NEPA/SEPA
SEPA	State Environmental Policy Act	NEPA/SEPA
SHPO	State Historic Preservation Office	NEPA/SEPA
SO <sub>2</sub>	Sulfur Dioxide	Air
SOx	Sulfur Oxides	Air
SQG	Small Quantity Generators	Air
SSAC	Site Specific Alternative Criteria	Water
SWPPP	Stormwater Pollution Prevention Plan	SWPPP
TAO	Temporary Authorization to Operate	Air
TDEC	Tennessee Department of Environment & Conservation	Multiple
TEER	Tennessee Environmental Evaluation Report	NEPA/SEPA
TESA	Tennessee Environmental Streamlining Agreement	NEPA/SEPA
TMDL	Total Maximum Daily Loads	Water
TMSP	Tennessee Multi-Sector General Permit	Water
TN	Tennessee	NA
TPERS	Toxic Pollutant Emission Rates	Air
UIC	Underground Injection Control Program	Water
USACE	U.S. Army Corps of Engineers	NEPA/SEPA
USEPA	United States Environmental Protection Agency	NA
VA	Virginia	NA
VAC	Virginia Administrative Code	VAC
VADEQ	Air Division - Virginia Department of Environmental Quality	Air
VDEQ	Virginia Department of Environmental Quality	Multiple
VDOT	Virginia Department of Transportation	NEPA/SEPA
VPA	Virginia Pollution Act	Water
VOC	Volatile Organic Compound	Air
WUP	Water Use Permits	Water

*This page intentionally left blank*



## Appendix D End Notes

<sup>i</sup> [https://www.tennessee.gov/assets/entities/environment/attachments/eper\\_aug2016.pdf](https://www.tennessee.gov/assets/entities/environment/attachments/eper_aug2016.pdf)

<sup>ii</sup> <http://deq.nc.gov/permits-regulations/express-permitting>

<sup>iii</sup> <http://law.justia.com/codes/florida/2016/title-xxix/chapter-403/part-ix/section-403.973/>

<sup>iv</sup> <http://www.dep.state.fl.us/air/emission/permitwriters.htm>

<sup>v</sup> Logical termini - a project must have logical beginning and ending points such that the project would have independent utility, meaning that it must not depend on another project in order for the project meet a defined purpose and need.

<sup>vi</sup> <http://www.tennessee.gov/environment/article/permit-air-permit-by-rule#sthash.MePkeqn5.dpuf>

<sup>vii</sup> <http://www.adem.state.al.us/MoreInfo/permittingInfo.cnt>, <http://www.edpa.org/alabama-advantages/environmental-permitting/>

<sup>viii</sup> South Carolina's system, SC HELPRS, is currently under development and expected to deploy in 2018. Georgia's system, GEOS (Georgia EPD Online System) is accessed at <http://epd.georgia.gov/geos/>. Florida's system for air permit applications, EPSAP, is accessed at <http://www.dep.state.fl.us/AIR/emission/epsap/default.htm/>, and water permit applications at <http://flwaterpermits.com/> and <http://www.nfwwater.com/permits>.

<sup>ix</sup> VADEQ (<http://www.deq.virginia.gov/Permits/PermitTimeFrames.aspx>)

<sup>x</sup> Prior good practice no longer allowed

<sup>xi</sup> <http://gisweb01.dhec.sc.gov/water/Stormwater.html?mode=1/>