

APPENDIX B2

RESPONSES TO STATE AGENCY COMMENTS



D.C. TO RICHMOND SOUTHEAST HIGH SPEED RAIL


Appendix B2

RESPONSES TO STATE AGENCY COMMENTS

This Appendix Section B2 provides detailed responses to State agency letters, presented in the below order:

- Virginia Department of Environmental Quality (DEQ) B-61
- Virginia Department of Historic Resources (DHR) B-216

VIRGINIA DEQ



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November 3, 2017

Emily Stock
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Virginia Department of Rail and Public Transportation
600 East Main Street, Suite 2102
Richmond, Virginia 23219

RE: Comments on the Tier II Draft Environmental Impact Statement for the Washington, D.C. to Richmond Southeast High Speed Rail Project, Federal Railway Administration and Virginia Department of Rail and Public Transportation

Dear Ms. Stock:

The Commonwealth of Virginia has completed its review of the above-referenced document. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal environmental documents submitted under the National Environmental Policy Act (NEPA) and responding to appropriate federal officials and project contacts on behalf of the Commonwealth. This is in response to the September 2017 Draft Environmental Impact Statement (DEIS) prepared by the U.S. Department of Transportation Federal Railroad Administration and the Virginia Department of Rail and Public Transportation for the above-referenced project. The following agencies, localities and planning district commissions (PDC) participated in the review of this proposal:

- Department of Environmental Quality (DEQ)
- Department of Conservation and Recreation (DCR)
- Department of Health (VDH)
- Department of Historic Resources (DHR)
- Richmond Regional PDC
- Crater PDC
- Virginia Outdoors Foundation
- Town of Ashland
- City of Fredericksburg
- Fairfax County

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In addition, the Department of Agriculture and Consumer Services, Department of Game and Inland Fisheries, Department of Forestry, Marine Resources Commission, Department of Transportation, the Northern Virginia Regional Commission, George Washington Regional Commission, the Cities of Richmond, Fairfax, and Alexandria, the Town of Quantico and Chesterfield, Henrico, Hanover, Caroline, Spotsylvania, Stafford, Prince William, and Arlington counties were invited to comment on the proposal.

PROJECT DESCRIPTION

The U.S. Department of Transportation Federal Rail Administration (FRA) and the Virginia Department of Rail and Public Transportation (DRPT) (project sponsors) have jointly released a DEIS for the proposed Washington, D.C. to Richmond Southeast High Speed Rail (DC2RVA) project to improve intercity rail service in the project corridor. The purpose of DC2RVA project is to provide a high speed passenger rail service with increased service frequencies, reliability, and travel time, including an expanded commuter rail service in the corridor and to accommodate the growth of freight rail in the region. The 123-mile project is primarily located along an existing rail corridor owned by CSX Transportation (CSXT, owner) from the Long Bridge at the Potomac River in Arlington to Centralia in Chesterfield County that generally parallels Interstate-95 (I-95). Proposed improvements include the construction of additional main line tracks and crossovers, the straightening of curves to allow for higher speeds, improvement of intercity passenger rail stations, improved sidings and signals, and roadway crossing safety improvements. In most areas the project proposes to add an additional main track either to the east or west of the existing tracks depending on the location. The proposed Build Alternatives include bypass options around downtown areas for the City of Fredericksburg and the Town of Ashland where alignments outside of existing right-of-way (ROW) were considered. The rail corridor is shared by passenger rail services (Amtrak and Virginia Railway Express) and freight services by CSXT.

DC2RVA is the northern portion of the larger Southeast High Speed Rail (SEHSR) corridor from Washington, D.C. to Charlotte, NC which was considered in a 2002 Tier I EIS which established the overall purpose and route for providing a competitive transportation alternative to highway or air travel for travelers within the region. The Tier II DEIS currently under consideration carries forward the purpose from the Tier I EIS within the Washington, D.C. to Richmond corridor and explores the infrastructure improvements that would be necessary to provide the desired improved level of rail service. The project is needed to increase rail capacity due to regional population growth, congestion in the I-95 corridor and in air travel congestion, the growth of freight traffic. Additionally the existing infrastructure is reaching its capacity and there is a need to provide reliable transportation options for passengers and goods. Nine daily roundtrip passenger trains would be added to the corridor by 2025 as a result of the project implementation.

DRPT and the FRA are adopting an incremental approach to the construction of infrastructure improvements and are working with CSXT to identify opportunities to implement the improved service as fast as possible. Complete build-out and full

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implementation is dependent on funding and permitting approvals but it is estimated that the new service could be in operation by 2025. Once the Tier II EIS process has been completed, the goal is to have completed the NEPA process, thereby making the project eligible for federal funding.

Build Alternatives were developed and screened to be carried forward for consideration in the DEIS with a focus on a proposed alignment's ability to reduce trip times and increase the reliability of operations, with the least potential to impact the environment, taking into account construction cost. Six "Alternative Areas" were identified with area-specific build alternatives developed for each area (23 total Build Alternatives considered for the corridor as a whole) along the 123-mile project route. DRPT has linked area-specific build alternatives to form a single DRPT Recommended Preferred Alternative for the corridor. Input received from the DEIS review process will be considered prior to the issuance of a Final EIS and FRA's selection of the Preferred Alternative. The Alternative Areas, Build Alternatives and DRPT recommended area-specific build alternative are summarized in Table 1 below. The DRPT recommended preferred alternative is outlined to provide the public with a clear understanding of the DRPT's conclusions at this stage of the project development. The recommendation is non-binding.

Table 1. DC2RVA Alternative Areas, Build Alternatives, and DRPT Recommended Preferred Alternative.

Alternative Area	Area- Specific Build Alternatives	DRPT Recommended Preferred Alternative
Area 1: Arlington (1-mile Long Bridge approach)	<ul style="list-style-type: none"> 1A- Add two tracks east of two existing tracks 1B- Add two tracks west of two existing tracks 1C- Add one track east and one track west of two existing tracks *Each alternative results in four total tracks, constructed within existing railroad ROW	Retain Alternatives 1A, 1B, and 1C to support a deferred selection after completion of the Long Bridge Study
Area 2: Northern Virginia (47-mile section)	<ul style="list-style-type: none"> 2A- Add one main track where possible to create fourth track from Crystal City to Alexandria and third track from Alexandria to Spotsylvania. Improvements generally within existing ROW. Realignment of some curves to improve speed. 	Alternative 2A

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Alternative Area	Area- Specific Build Alternatives	DRPT Recommended Preferred Alternative
Area 3: Fredericksburg (14-mile section)	<ul style="list-style-type: none"> 3A- No additional tracks, with minor track improvements to maintain two tracks through town 3B- Add one additional track along existing alignment and east of existing two tracks, including through town 3C- Two-track bypass around the east side of Fredericksburg. Maintain two-track corridor through the city. *Each alternative includes construction of a new Fredericksburg Station	Alternative 3B
Area 4: Central Virginia (29-mile section)	<ul style="list-style-type: none"> 4A- Add one new track for a total of three tracks with improvements to existing tracks 	Alternative 4A
Area 5: Ashland (10-mile section)	<ul style="list-style-type: none"> 5A- Maintain two tracks through town. Construct one additional track north and south of town. Downtown Ashland Station remains 5A-Ashcake- Maintain two tracks through town. Construct one additional track north and south of town. Relocate station to south of Ashcake Road (Ashcake) 5B- Add one additional track to the east of the existing alignment through town, requiring additional ROW. Downtown Ashland Station remains 5B-Ashcake- Add one additional track to the east of the existing alignment through town, requiring additional ROW. Relocate station to Ashcake. 	Additional study of rail capacity improvements. Defer selection of a Recommended Preferred Alternative until the Final EIS. The Town of Ashland/ Hanover County Community Advisory Committee (CAC) has been created to provide greater opportunity for community and stakeholder input.

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Alternative Area	Area- Specific Build Alternatives	DRPT Recommended Preferred Alternative
	<ul style="list-style-type: none"> 5C- Two-track western bypass. Requires new ROW. Existing two-track corridor remains through town. Downtown Ashland Station remains. 5C-Ashcake- Two-track western bypass. Requires new ROW. Existing two-track corridor remains through town. Relocate station to Ashcake. 5D-Ashcake- Add one additional track through town. Center all main line tracks along the existing alignment through town, requiring additional ROW. Relocate station to Ashcake. 	
Area 6: Richmond (23-mile section)	<ul style="list-style-type: none"> 6A-Staples Mill Road Station only. Improve Staples Mill Station to be the only station serving Richmond (close Main Street Station). Construct one main track along Richmond, Fredericksburg & Potomac Railroad Company (RF&P) and A-line through Richmond. Track shifts to improve speed. 6B- A-line Boulevard Station only. Construct Boulevard Station to be the only station serving Richmond (close Main Street and Staples Mill stations). Construct one main track along portions of RF&P and A-line through Richmond. Track shifts to improve speed. 6B- S-line Boulevard Station only. Construct Boulevard Station to be the only station serving Richmond (close Main Street and Staples Mill 	Alternative 6F

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Alternative Area	Area- Specific Build Alternatives	DRPT Recommended Preferred Alternative
	<ul style="list-style-type: none"> Construct one main track along portions of RF&P and S-line through Richmond. Track shifts to improve speed. 6C- Broad Street Station only. Construct Broad Street Station to be the only station serving Richmond (close Main Street and Staples Mill stations). Construct one main track along portions of RF&P and A-line through Richmond. Track shifts to improve speed. 6D- Main Street Station only. Improve Main Street Station to be the only station serving Richmond (close Staples Mill station). Construct one main track along portions of RF&P and S-line through Richmond. Track shifts to improve speed. 6E- Split Service Staples Mill/Main Street Stations. Construct one main track along portions of RF&P and A-line through Richmond. Track shifts to improve speed. Both existing stations remain operational. 6F- Full Service Staples Mill/Main Street Stations. Construct one main track along portions of RF&P and S-line through Richmond. Track shifts to improve speed. Both existing stations remain operational. 6G- Shared Service Staples Mill/Main Street Stations. Construct one main track along portions of RF&P and S-line through Richmond. Track shifts to improve speed. 	

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Alternative Area	Area- Specific Build Alternatives	DRPT Recommended Preferred Alternative
	Both existing stations remain operational.	

DEQ NEPA REVIEW

DEQ has provided recommendations for minimizing potential impacts from the proposed activity and for compliance with applicable legal requirements below. DEQ received extensive comments from some reviewing agencies and affected localities. A summary of the comments is provided below in the Environmental Impacts and Mitigation section. The summary is not meant to substitute for the totality of the comments received and DEQ recommends that the FRA consider every comment, correction, or recommendation detailed in the attached individual comments (see Attachment A: Complete Comments Submitted on DC2RVA DEIS).

ENVIRONMENTAL IMPACTS AND MITIGATION

1. Water Quality and Wetlands. According to the DEIS (page 3-4), streams, floodplains, and wetlands within a 500-foot wide study area centered on the DC2RVA corridor were identified via mapping, photographic, and database resources. Field surveys were conducted from September 2015 to September 2016 to verify the existence of potential ephemeral, intermittent, and perennial streams and wetlands within 100-feet of the existing track, along the side where construction is proposed. The study area includes over 350 rivers, streams, and surface waters and 490.2 total acres of wetlands.

Due to the linear nature and length of this project, each alternative would include unavoidable impacts on water resources (DEIS, page 4-3). Depending on the ultimate combination of build alternative chosen, between 151 and 191 streams would be permanently impacted with linear encroachments to these stream estimated to be between 26,377 and 35,422 linear feet. Permanent impacts to wetlands are estimated to be between 22.14 and 49.64-acres (DEIS, page 4-8).

1(a) Agency Jurisdiction. The State Water Control Board promulgates Virginia's water regulations covering a variety of permits to include the Virginia Pollutant Discharge Elimination System Permit (VPDES) regulating point source discharges to surface waters, Virginia Pollution Abatement Permit regulating sewage sludge, storage and land application of biosolids, industrial wastes (sludge and wastewater), municipal wastewater, and animal wastes, the Surface and Groundwater Withdrawal Permit, and the Virginia Water Protection (VWP) Permit regulating impacts to streams, wetlands, and other surface waters. The VWP permit is a state permit which governs wetlands, surface water, and surface water withdrawals and impoundments. It also serves as §401 certification of the federal Clean Water Act §404 permits for dredge and fill

VIRGINIA DEQ (continued)

- As Virginia Department of Environmental Quality (DEQ) serves as a clearinghouse for State agencies and locality comments, the FRA and DRPT have reviewed and responded to all the State agency and locality comments provided by DEQ in their Appendix A, as appropriate. In the main body of their comment letter DEQ summarized the substantive comments from the State agencies and localities. For some comments, DRPT responded to DEQ's summary of the comment. In other cases, to avoid repetition, DRPT responded to the more detailed comment and discussion contained in the agency letter attached to DEQ's comment. When practical, DRPT has responded to the comment only once and then referenced this response when the comment was repeated in the attachment to DEQ's comment.

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activities in waters of the U.S. The VWP Permit Program is under the Office of Wetlands and Stream Protection, within the DEQ Division of Water Permitting. In addition to central office staff that review and issue VWP permits for transportation and water withdrawal projects, the six DEQ regional offices perform permit application reviews and issue permits for the covered activities:

- Clean Water Act, §401;
- Section 404(b)(i) Guidelines Mitigation Memorandum of Agreement (2/90);
- State Water Control Law, Virginia Code section 62.1-44.15:20 *et seq.*; and
- State Water Control *Regulations*, 9 VAC 25-210-10.

1(b) Agency Findings. The disturbance of surface waters or wetlands may require permitting/approval by DEQ and/or the U.S. Army Corps of Engineers (Corps). A VWP permit may be required should impacts to surface waters be necessary. Upon receipt of a Joint Permit Application (JPA) for the proposed surface water impacts, DEQ VWP Permit staff will review the proposed project in accordance with the VWP permit program regulations and current VWP permit program guidance. Refer to section 2(a) below for information on the JPA submittal and review process.

1(c) Agency Recommendations.

- Avoid and minimize impacts to surface waters to the maximum extent practicable; and
- Coordinate with the U.S. Army Corp of Engineers on wetlands impacts.

To minimize unavoidable impacts to wetlands and waterways, DEQ recommends the following practices:

- Operate machinery and construction vehicles outside of stream-beds and wetlands; use synthetic mats when in-stream work is unavoidable.
- Preserve the top 12 inches of material removed from wetlands for use as wetland seed and root-stock in the excavated area.
- Design erosion and sedimentation controls in accordance with the most current edition of the *Virginia Erosion and Sediment Control Handbook*. These controls should be in place prior to clearing and grading, and maintained in good working order to minimize impacts to state waters. The controls should remain in place until the area is stabilized.
- Place heavy equipment, located in temporarily impacted wetland areas, on mats, geotextile fabric, or use other suitable measures to minimize soil disturbance, to the maximum extent practicable.
- Restore all temporarily disturbed wetland areas to pre-construction conditions and plant or seed with appropriate wetlands vegetation in accordance with the cover type (emergent, scrub-shrub, or forested). The applicant should take all appropriate measures to promote re-vegetation of these areas. Stabilization and

VIRGINIA DEQ (continued)

2. through 4. The Project will have unavoidable impacts to water resources, but FRA and DRPT have minimized or avoided impacts to the extent practicable. As noted in Final EIS Section 5.1.5, DRPT anticipates submitting a Joint Permit Application (JPA) for Project impacts to surface waters and wetlands, for review by the US Army Corps of Engineers (USACE), DEQ, Virginia Marine Resource Commission (VMRC), and the Local Wetlands Boards during final design, after funding becomes available and incremental improvements are scheduled. DRPT will incorporate the recommended minimization measures provided by Virginia DEQ in section “1(c) Agency Recommendations” of their letter into the JPA, where appropriate, and in coordination with the USACE and VMRC.

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- restoration efforts should occur immediately after the temporary disturbance of each wetland area instead of waiting until the entire project has been completed.
- Place all materials which are temporarily stockpiled in wetlands, designated for use for the immediate stabilization of wetlands, on mats, geotextile fabric in order to prevent entry in state waters. These materials should be managed in a manner that prevents leachates from entering state waters and must be entirely removed within thirty days following completion of that construction activity. The disturbed areas should be returned to their original contours, stabilized within thirty days following removal of the stockpile, and restored to the original vegetated state.
 - Flag or mark all non-impacted surface waters within the project or right-of-way limits that are within 50 feet of any clearing, grading, or filling activities for the life of the construction activity within that area. The applicant should notify all contractors that these marked areas are surface waters where no activities are to occur.
 - Employ measures to prevent spills of fuels or lubricants into state waters.

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1(d) Agency Requirement. Submit a JPA for the proposed impacts to wetlands and surface waters to obtain a VWP Permit as necessary.

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2. Subaqueous Lands and Tidal Wetlands. The DEIS (page 4-10) indicates that a small portion of the wetlands in the northern section of the project (along Build Alternatives 1 and 2A) are tidally influenced. Impacts are minimized by spanning waterways and placing as little infrastructure in the waters as possible. The DEIS indicates (pages 4-73) that expanded bridge crossings will require the use of submerged lands for piers or infrastructure. A JPA will be submitted for these impacts.

2(a) Agency Jurisdiction. The Virginia Marine Resources Commission (VMRC) regulates encroachments in, on or over state-owned subaqueous beds as well as tidal wetlands pursuant to Virginia Code § 28.2-1200 through 1400.

The VMRC serves as the clearinghouse for the JPA used by the:

- Corps for issuing permits pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act;
- DEQ for issuance of a VWP permit;
- VMRC for encroachments on or over state-owned subaqueous beds as well as tidal wetlands; and
- local wetlands board for impacts to wetlands.

The VMRC will distribute the completed JPA to the appropriate agencies. Each agency will conduct its review and respond.

2(b) Agency Findings. VMRC did not comment on the proposal.

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(Response to comment 4 on previous page)

5. Comment noted; DRPT did not receive comments directly from VRMC.

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2(c) Agency Requirements. Any activity associated with the proposed project which would result in an encroachment upon or disturbance to state-owned subaqueous beds as well as tidal wetlands below mean low water and/or ordinary high water would require the submittal of a completed JPA to VMRC.

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2(d) Agency Recommendation. Coordinate with VMRC regarding the submittal of a JPA for distribution and review by Federal, State, and local environmental agencies.

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3. Erosion and Sediment Control and Stormwater Management. The DEIS (page 4-3) states that temporary impacts from the project will occur to surface waters due to increased erosion from disturbed areas resulting in increased sedimentation and water turbidity. Long-term impacts may result from increased impervious surfaces. The recommended Preferred Alternative would be designed and constructed in accordance with Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act (DEIS, page 4-8).

3(a) Agency Jurisdiction. The DEQ Office of Stormwater Management administers the following laws and regulations governing construction activities:

- Virginia Erosion and Sediment Control (ECS) Law (§ 62.1-44.15:51 *et seq.*) and Regulations (9VAC25-840);
- Virginia Stormwater Management Act (§ 62.1-44.15:24 *et seq.*);
- Virginia Stormwater Management Program (VSMP) regulation (9VAC25-870); and
- 2014 General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities (9VAC25-880).

In addition, DEQ is responsible for the Virginia Stormwater Management Program (VSMP) General Permit for Stormwater Discharges from Construction Activities related to Municipal Separate Storm Sewer Systems (MS4s) and construction activities for the control of stormwater discharges from MS4s and land disturbing activities under the Virginia Stormwater Management Program (9VAC25-890-40).

3(b) Agency Requirements.

3(b)(i) Erosion and Sediment Control Annual Specifications and Stormwater Management. In accordance with §62.1-44.15 *et seq.*, electric, natural gas and telephone utility companies, interstate and intrastate natural gas pipeline companies, and railroad companies shall, and authorities created pursuant to § 15.2-5102 may, file general erosion and sediment control standards and specifications annually with DEQ for review and approval. Such standards and specifications shall be consistent with the requirements of this article and associated regulations and the Erosion and Sediment Control Law and Stormwater Management Act (§ 62.1-44.15:24 *et seq.*) and associated regulations where applicable. The specifications shall apply to:

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VIRGINIA DEQ (continued)

6. and 7. Refer to DRPT-numbered statements #2 through #4 for response. Additionally, Section 5.1.5 of the Final EIS identifies permit authority by VMRC for activities in, on, or over subaqueous lands in Virginia.
8. DRPT will file erosion and sediment control standards and specifications with DEQ for review and approval in accordance with the Virginia Erosion and Sediment Control (ESC) Law (§ 62.1-44.15:51 *et seq.*), the Virginia Stormwater Management Act (§ 62.1-44.15:24 *et seq.*) and associated regulations, where applicable and as required at the time of submittal, during final design after funding becomes available and incremental improvements are scheduled.

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- Construction, installation, or maintenance of electric transmission, natural gas, and telephone utility lines and pipelines, and water and sewer lines; and
- Construction of the tracks, rights-of-way, bridges, communication facilities, and other related structures and facilities of the railroad company.

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3(b)(ii) Erosion and Sediment Control Site-Specific Plans. The owner is responsible for the development, review, and approval of a site-specific erosion and sediment control (ESC) plan in accordance with the approved erosion and sediment control standards and specifications. All regulated land-disturbing activities associated with the project/site, including on and off site access roads, staging areas, borrow areas, stockpiles, and soil intentionally transported from the project, must be covered by the site-specific ESC plan.

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3(b)(iii) Stormwater Management Site-Specific Plans. The owner is responsible for the development, review, and approval of a site-specific stormwater management (SWM) plan in accordance with the approved standards and specifications.

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3(b)(iv) General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities (VAR10). The operator or owner of a construction activity involving land disturbance of equal to or greater than 1 acre is required to register for coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities and develop a project specific stormwater pollution prevention plan (SWPPP). The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the SWPPP must address water quality and quantity in accordance with the Virginia Stormwater Management Program (VSMP) Regulations. General information and registration forms for the General Permit are available at www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx.

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3(c) Agency Recommendations. Consider utilizing permeable paving for parking areas and walkways, where appropriate. Denuded areas should be promptly revegetated following construction.

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4. Air Pollution Control. The DEIS (page 4-34) states that implementation of the project will result in increased rail-related emissions due to an increase in train operations each day and a change in equipment. Changes to regional emissions may occur as a result of travelers shifting from one mode of transport to another. Short-term increases in fugitive dust and construction equipment-related emissions will occur as a result of demolition and construction. The DEIS concludes (page 4-39) that the project will not result in significant adverse effects to public health due to air emissions.

4(a) Agency Jurisdiction. The DEQ Air Division, on behalf of the State Air Pollution Control Board, is responsible for developing regulations that implement Virginia's Air Pollution Control Law ([Virginia Code §10.1-1300 et seq.](#)). DEQ is charged with carrying

VIRGINIA DEQ (continued)

(Response to comment 8 on previous page)

9. DRPT will develop and submit to DEQ a site-specific ESC plan in accordance with the approved erosion and sediment control standards and specifications, as required at the time of submittal, during final design after funding becomes available and incremental improvements are scheduled. All regulated land-disturbing activities associated with the Project will be covered by the site-specific ESC plan.
10. DRPT will develop and submit to DEQ a site-specific stormwater management (SWM) plan in accordance with the approved standards and specifications, as required at the time of submittal, during final design after funding becomes available and incremental improvements are scheduled.
11. DRPT will register for coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities and develop a Project-specific stormwater pollution prevention plan (SWPPP), as required at the time of submittal, during final design after funding becomes available and incremental improvements are scheduled.
12. DRPT will consider utilizing permeable paving for parking areas and walkways, where practicable, during final design, after funding becomes available and incremental improvements are scheduled. DRPT will revegetate denuded areas, after construction.

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out mandates of the state law and related regulations as well as Virginia's federal obligations under the Clean Air Act as amended in 1990. The objective is to protect and enhance public health and quality of life through control and mitigation of air pollution. The division ensures the safety and quality of air in Virginia by monitoring and analyzing air quality data, regulating sources of air pollution, and working with local, state and federal agencies to plan and implement strategies to protect Virginia's air quality. The appropriate DEQ regional office is directly responsible for the issuance of necessary permits to construct and operate all stationary sources in the region as well as monitoring emissions from these sources for compliance. In the case of certain projects, additional evaluation and demonstration must be made under the general conformity provisions of state and federal law.

The Air Division regulates emissions of air pollutants from industries and facilities and implements programs designed to ensure that Virginia meets national air quality standards. The most common regulations associated with major projects are:

- Open burning: 9 VAC 5-130 *et seq.*
- Fugitive dust control: 9 VAC 5-50-60 *et seq.*
- Permits for fuel-burning equipment: 9 VAC 5-80-1100 *et seq.*

4(b) Agency Findings. According to the DEQ Air Division, the project site is partly located in a designated ozone nonattainment area and an emission control area for oxides of nitrogen (NO_x) and volatile organic compounds (VOCs). Other portions of the project are located in ozone attainment and maintenance areas.

4(c) Recommendation. Precautions should be taken to restrict the emissions of VOCs and NO_x during construction, particularly in Arlington, Fairfax, Prince William, Spotsylvania, Stafford, Alexandria, Fredericksburg, Henrico, Hanover, and Richmond. Construction operations should operate in a manner consistent with air pollution control practices for minimizing emissions, especially during periods of high ozone.

4(d) Requirements.

4(d)(i) Fugitive Dust. During construction, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 *et seq.* of the *Regulations for the Control and Abatement of Air Pollution*. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

VIRGINIA DEQ (continued)

13. The Draft EIS identified the Washington, DC-MD-VA marginal ozone nonattainment area in Table 3.6-2 and in Figure 3.6-1, and it is reflected in the air quality analysis for the Preferred Alternative (refer to Section 5.6 of the Final EIS).

14. DRPT will take all reasonable precautions during Project construction to limit the emissions of VOC and NO_x. A statement to this effect has been added to Section 5.19 of the Final EIS.

15. Draft EIS Section 4.19.2.3 addresses measures to control fugitive dust during construction, including methods outlined in 9 VAC 5-50-60 *et seq.* of the *Regulations for the Control and Abatement of Air Pollution*. Reference to these regulations has been added to Section 5.19 of the Final EIS.

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4(d)(ii) Open Burning. If project activities include the open burning of construction material or the use of special incineration devices, this activity must meet the requirements under 9 VAC 5-130 *et seq.* of the *Regulations* for open burning, and may require a permit. The *Regulations* provide for, but do not require, the local adoption of a model ordinance concerning open burning. The applicant should contact locality officials to determine what local requirements, if any, exist.

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4(d)(iii) Asphalt Paving. A precaution, which typically applies to road construction and paving work (9 VAC 5-45-780 *et seq.*), places limitations on the use of “cut-back” (liquefied asphalt cement, blended with petroleum solvents), and may apply to the project. The asphalt must be “emulsified” (predominantly cement and water with a small amount of emulsifying agent) except when specified circumstances apply. Moreover, there are time-of-year restrictions on its use from April through October in VOC emission control areas.

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4(d)(iv) Fuel Burning Equipment. Should the proposed project require the installation of fuel-burning equipment (boilers, generators, etc.), or other air pollution emitting equipment, the project may be subject to 9 VAC 5-80, Article 6, Permits for New and Modified sources.

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5. Solid and Hazardous Wastes and Hazardous Materials. According to the DEIS (page 4-26), contaminated sites along the project corridor may affect the project. Areas of contaminated soils are likely to exist along the corridor associated with residual contamination from adjacent industrial uses. Thorough site investigations will be performed to identify contamination associated with the acquisition of ROW and construction. Solid and hazardous wastes will be handled in accordance with applicable federal, state, and local regulations (DEIS, page 4-33).

5(a) Agency Jurisdiction. On behalf of the Virginia Waste Management Board, the DEQ Division of Land Protection and Revitalization is responsible for carrying out the mandates of the Virginia Waste Management Act (Virginia Code §10.1-1400 *et seq.*), as well as meeting Virginia’s federal obligations under the Resource Conservation and Recovery Act and the Comprehensive Environmental Response Compensation Liability Act (CERCLA), commonly known as Superfund. The DEQ Division of Land Protection and Revitalization also administers those laws and regulations on behalf of the State Water Control Board governing Petroleum Storage Tanks (Virginia Code §62.1-44.34:8 *et seq.*), including Aboveground Storage Tanks (9VAC25-91 *et seq.*) and Underground Storage Tanks (9VAC25-580 *et seq.* and 9VAC25-580-370 *et seq.*), also known as ‘Virginia Tank Regulations’, and § 62.1-44.34:14 *et seq.* which covers oil spills.

Virginia:

- Virginia Waste Management Act, Virginia Code § 10.1-1400 *et seq.*
- Virginia Solid Waste Management Regulations, 9 VAC 20-81
 - (9 VAC 20-81-620 applies to asbestos-containing materials)

VIRGINIA DEQ (continued)

16. If open burning or use of incineration devices are to be used during construction, DRPT would comply with 9 VAC 5-130 *et seq.* of the *Regulations* for open burning and coordinate with DEQ and local officials to determine whether permits or other requirements are applicable. A statement to this effect has been added to Section 5.19 of the Final EIS.
17. DRPT will adhere to limitations on the use of “cut-back” during construction consistent with 9 VAC 5-45-780 *et seq.* A statement to this effect has been added to Section 5.19 of the Final EIS.
18. DRPT will adhere to requirements of 9 VAC 5-80, Article 6, Permits for New and Modified Sources, for the installation of fuel-burning equipment or other air pollution generating equipment during construction. A statement to this effect has been added to Section 5.19.2.3 of the Final EIS.

VIRGINIA DEQ (continued)

19. Comment noted. DRPT appreciates the list of hazardous materials sites provided by the DEQ Division of Land Protection and Revitalization (DLPR). As described in Draft EIS Section 3.5, a database search was conducted for hazardous materials sites within 500 feet of existing or proposed rail line. Draft EIS Table 3.5-1 lists the databases included in the search and Table 3.5-3 summarizes the sites by type within each of the six alternative areas. Maps in Draft EIS Appendix O show the locations of the sites and tables in Draft EIS Appendix O provide information on individual sites. As noted in Section 3.5.3 of the Draft EIS, the search revealed 1,034 mapped hazardous materials sites/facilities within the study area, most of which (702) are either Petroleum Registered Facilities or Petroleum Release Sites. Finally, further investigation of hazardous material sites/facilities that could potentially be affected by the Project will be completed in a Phase I Environmental Site Assessment (ESA) that will occur prior to any property acquisition.

Final EIS Section 5.5.1 describes potential hazardous materials sites impacts based on limits of disturbance for the Preferred Alternative, which have been updated since the Draft EIS. Appendix M of the Final EIS also provides updated mapping of the critical hazardous materials sites in relation to the Preferred Alternative limits of disturbance.

(Responses are continued on next page)

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- *Virginia Hazardous Waste Management Regulations*, 9 VAC 20-60
 - (9 VAC 20-60-261 applies to lead-based paints)
- *Virginia Regulations for the Transportation of Hazardous Materials*, 9 VAC 20-110.

Federal:

- Resource Conservation and Recovery Act (RCRA), 42 U.S. Code sections 6901 *et seq.*
- U.S. Department of Transportation *Rules for Transportation of Hazardous Materials*, 49 *Code of Federal Regulations*, Part 107
- Applicable rules contained in Title 40, *Code of Federal Regulations*.

5(b) Agency Findings. The DEQ Division of Land Protection and Revitalization (DLPR) conducted a review of solid and hazardous waste databases (Hazardous Waste, RCRA Corrective Action, Federal Facilities, Solid Waste, Virginia Remediation Program (VRP) and Petroleum Release databases) utilizing a 1,000-foot search radius for sites along the project corridor. Four hundred and one (401) sites within the search parameters that may impact the activity were identified. The sites identified include hazardous waste/RCRA facilities, CERCLA sites, solid waste sites, VRP sites, and petroleum release sites. The petroleum release sites were the most numerous with 340 found within the study area, often with multiple incidents recorded at the same address. Refer to the attached memorandum dated October 3, 2017 for a comprehensive list of the sites identified.

5(c) Requirements.

5(c)(i) Waste Management Requirement. Any soil that is suspected of contamination or wastes that are generated during construction must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations. All construction and demolition debris must be characterized in accordance with the *Virginia Hazardous Waste Management Regulations* prior to disposal at an appropriate facility. It is the generator's responsibility to determine if a solid waste meets the criteria of a hazardous waste and to manage the waste appropriately.

5(c)(ii) Asbestos-Containing Materials and Lead-Based Paint. All structures being demolished should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to federal waste-related regulations, state regulations 9 VAC 20-80-620 for ACM and 9 VAC 20-60-261 for LBP must be followed.

5(c)(iii) Fuel Storage Tanks. The removal, relocation or closure or installation/operation of any regulated petroleum storage tanks, aboveground storage tank (AST) or underground storage tank (UST), must be conducted in accordance with the requirements of the Virginia Tank Regulations 9VAC 25-91-10 *et seq.* (AST) and / or

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- *Virginia Hazardous Waste Management Regulations*, 9 VAC 20-60
 - (9 VAC 20-60-261 applies to lead-based paints)
- *Virginia Regulations for the Transportation of Hazardous Materials*, 9 VAC 20-110.

Federal:

- Resource Conservation and Recovery Act (RCRA), 42 U.S. Code sections 6901 *et seq.*
- U.S. Department of Transportation *Rules for Transportation of Hazardous Materials*, 49 *Code of Federal Regulations*, Part 107
- Applicable rules contained in Title 40, *Code of Federal Regulations*.

5(b) Agency Findings. The DEQ Division of Land Protection and Revitalization (DLPR) conducted a review of solid and hazardous waste databases (Hazardous Waste, RCRA Corrective Action, Federal Facilities, Solid Waste, Virginia Remediation Program (VRP) and Petroleum Release databases) utilizing a 1,000-foot search radius for sites along the project corridor. Four hundred and one (401) sites within the search parameters that may impact the activity were identified. The sites identified include hazardous waste/RCRA facilities, CERCLA sites, solid waste sites, VRP sites, and petroleum release sites. The petroleum release sites were the most numerous with 340 found within the study area, often with multiple incidents recorded at the same address. Refer to the attached memorandum dated October 3, 2017 for a comprehensive list of the sites identified.

5(c) Requirements.

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5(c)(ii) Asbestos-Containing Materials and Lead-Based Paint. All structures being demolished should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to federal waste-related regulations, state regulations 9 VAC 20-80-620 for ACM and 9 VAC 20-60-261 for LBP must be followed.

5(c)(iii) Fuel Storage Tanks. The removal, relocation or closure or installation/operation of any regulated petroleum storage tanks, aboveground storage tank (AST) or underground storage tank (UST), must be conducted in accordance with the requirements of the Virginia Tank Regulations 9VAC 25-91-10 *et seq.* (AST) and / or

VIRGINIA DEQ (continued)

20. to 23. DRPT will comply with the requirements for solid and hazardous wastes and hazardous materials specified by DEQ during construction. Section 5.5.2 of the Final EIS addresses the testing, removal and disposal of solid waste and hazardous waste during construction in accordance with the Virginia Solid Waste Management Regulations and Virginia Hazardous Waste Management Regulations. Prior to the acquisition of right-of-way and construction, thorough site investigations will be conducted, as required, to determine whether any of the sites are contaminated, and, if so, the nature and extent of that contamination. Any additional hazardous material sites discovered during construction will be removed and disposed of in compliance with all applicable federal, state, and local regulations. All structures being demolished, renovated, and/or removed will be inspected for asbestos containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to the federal waste-related regulations, state regulations for ACM and for LBP will be followed. All necessary remediation will be conducted in compliance with applicable federal, state, and local environmental laws and will be coordinated with the EPA, DEQ, and other federal or state or local agencies as necessary.

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VIRGINIA DEQ (continued)

(Response to comments 22 and 23 on previous page)

24. DRPT will reduce, reuse, and recycle solid waste generated by the Project to the extent practicable. See response to comment #19 regarding the database search for hazardous materials sites reported in the Draft EIS and the Phase I ESA investigation that will be conducted prior to any property acquisition.

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9VAC 25-580-10 *et seq.* (UST).

5(c)(iv) Petroleum Release Sites. If evidence of a petroleum release is discovered during implementation of this project, it must be reported to DEQ, as authorized by Virginia Code § 62.1-44.34.8 through 9 and 9 VAC 25-580-10 *et seq.*

5(d) Agency Recommendation. DEQ recommends that the applicant implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

Information related to hazardous waste and RCRA/CERCLA sites may be accessed from the following EPA websites:

- <https://www3.epa.gov/enviro/>
- <https://rcrainfopreprod.epa.gov/rcrainfoweb/action/main-menu/view>
- <https://www.epa.gov/superfund>

Information related to the identified petroleum release sites (pollution complaint- PC cases) should be further evaluated by the project engineer to determine the location, nature, and extent of the petroleum release and the potential for it to impact the project. Coordinate with the Tanks Program at the appropriate DEQ Regional Office for more information:

Northern Regional Office (NRO): (703) 583-3800
Piedmont Regional Office (PRO): (804) 527-5020

Due to the historical uses of the project corridor, all necessary precautions should be taken to avoid or minimize potential environmental/health risks. For any petroleum contaminated soil/groundwater that are encountered during the sub-surface phases of this project, contact the local Fire Marshall with any personal safety concerns.

6. Natural Heritage Resources. The DEIS (page 4-68) concludes that depending on the build alternatives chosen, between 31 and 264 acres of habitat are estimated to be permanently lost due to conversion of existing land into railroad structures and maintained ROW. Due to the length and linear nature of the project, impacts to habitat would be unavoidable although all practicable measures will be taken to avoid and minimize the impacts. Habitats that would be affected are those adjacent to the existing rail line and are already affected by railway activities, with the exception of the bypass routes. Station upgrades would occur in urban areas and are not expected to impact significant habitat.

The bypass routes would permanently convert greater areas of habitat and forested areas would be bisected (DEIS, pages 4-70- 4-71). The Fredericksburg Bypass (Build Alternative 3C) crosses an area of over 1,200 acres of continuous forest southwest of the Rappahannock River. The Ashland Bypass (Build Alternatives 5C and 5C-Ashcake)

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crosses several wildlife corridors associated with waterways and three tracts of forested habitats (approximately 140, 380, and 180 acres in size).

6(a) Agency Jurisdiction.

(i) The Virginia Department of Conservation and Recreation's (DCR) Division of Natural Heritage (DNH). DNH's mission is conserving Virginia's biodiversity through inventory, protection and stewardship. The Virginia Natural Area Preserves Act (Virginia Code §10.1-209 through 217), authorized DCR to maintain a statewide database for conservation planning and project review, protect land for the conservation of biodiversity, and the protect and ecologically manage the natural heritage resources of Virginia (the habitats of rare, threatened and endangered species, significant natural communities, geologic sites, and other natural features).

(ii) The Virginia Department of Agriculture and Consumer Services (VDACS): The Endangered Plant and Insect Species Act of 1979 (Virginia Code Chapter 39 §3.1-1020 through 1030) authorizes VDACS to conserve, protect and manage endangered and threatened species of plants and insects. Under a Memorandum of Agreement established between VDACS and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species.

6(b) Agency Findings. DCR DNH searched its Biotics Data System (Biotics) for occurrences of natural heritage resources in the vicinity of the project area. The site-specific results are summarized below. See the attached DCR memorandum dated October 11, 2017 for greater detail.

Alexandria Quad

Biotics historically documents the presence of natural heritage resources within two miles of the project area. However, due to the scope of the activity and the distance to the resources, DCR does not anticipate that this project will adversely impact these natural heritage resources.

Quantico, Guinea, Occoquan, Bowling Green, Ashland, Glen Allen, Ruther Glen, and Yellow Tavern Quads

Biotics documents the presence of natural heritage resources within two miles of the project area. However, due to the scope of the activity and the distance to the resources, DCR does not anticipate that this project will adversely impact these natural heritage resources.

Annandale Quad

According to information currently in Biotics, the Rusty patched bumble bee (*Bombus affinis*, G1/S1/LE/NL) has been historically documented within two miles of the project area. The Rusty patched bumble bee is listed as endangered under the Endangered

VIRGINIA DEQ (continued)

25. Refer to the referenced attached Virginia Department of Conservation and Recreation (DCR) memorandum (DRPT-numbered statements #103 through #126) for responses to detailed comments that are summarized here.

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VIRGINIA DEQ (continued)

(Response to comment 25 on previous page)

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Species Act by U.S. Fish and Wildlife Service (USFWS) effective March 21, 2017. Threats to the Rusty patched bumble bee include disease, pesticides, climate change, habitat loss and small population dynamics.

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Fort Belvoir Quad

According to the information currently in DCR DNH's files, the Marumsc Conservation Site is located downstream of the project site. Marumsc Conservation Site has been given a biodiversity significance ranking of B5, which represents a site of moderate significance. The natural heritage resource of concern at this site is the *Somatochlora filose* (Fine-lined emerald, G5/S2/NL/NL), a state-listed rare dragonfly species. Because of their aquatic lifestyle and limited mobility, the larvae are particularly vulnerable to shoreline disturbances that cause the loss of shoreline vegetation and siltation. They are also sensitive to alterations that result in poor water quality, aquatic substrate changes, and thermal fluctuations.

Stafford Quad

According to the information currently in Biotics, the Crow's Nest Conservation Site is located within two miles of the project site. Crow's Nest Conservation Site has been given a biodiversity significance ranking of B2, which represents a site of very high significance. The natural heritage resource of concern at this site is the Tidal Freshwater Marsh (Mixed High Marsh Type, G3/S4?/NL/NL).

The Crow's Nest Natural Area Preserve is located downstream from the project site.

Fredericksburg Quad

According to the information currently in Biotics, the South Fredericksburg Conservation Site is located within two miles of the project site. The South Fredericksburg Conservation Site has been given a biodiversity significance ranking of B2, which represents a site of very high significance. The natural heritage resource of concern at this site is the Non-Riverine Wet Hardwood Forest (Northern Coastal Plain type, G2?/S2?/NL/NL)

In addition, the Hazel Run Rt. 1 to Rt. 2 Stream Conservation Unit (SCU) is located downstream from the project site. The Hazel Run Rt. 1 to Rt. 2 SCU has been given a biodiversity ranking of B3, which represents a site of high significance. The natural heritage resources associated with this site are:

- Aquatic Natural Community (NP-Lower Rappahannock Second Order Stream)
G2?/S2?/NL/NL
- Aquatic Natural Community (NC-Lower Rappahannock Second Order Stream)
G2G3/S2S3/NL/NL

Threats to the significant Aquatic Natural Communities and the surrounding watershed include water quality degradation related to point and non-point pollution, water withdrawal and introduction of non-native species.

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In addition, Yellow lance (*Elliptio lanceolata*, G2G3/S2S3/SOC/NL) occurs in mid-sized rivers and second and third order streams. This species is currently classified as a species of concern by the USFWS however this designation has no official legal status.

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Ashland and Hanover Academy Quads

According to the information currently in Biotics, the South Anna River – Falling Creek Stream Conservation Unit (SCU) is located downstream from the project site. The South Anna River – Falling Creek SCU has been given a biodiversity ranking of B3, which represents a site of high significance. The natural heritage resources associated with this site are:

Elliptio lanceolate (Yellow lance), G2G3/S2S3/SOC/NL
Aquatic Natural Community (NP-Pamunkey Third Order Stream), G2/S2/NL/NL

Threats to the significant Aquatic Natural Community and the surrounding watershed include water quality degradation related to point and non-point pollution, water withdrawal and introduction of non-native species.

Additionally, Green floater (*Lasmigona subviridis*, G3/S2/NL/LT), a rare freshwater mussel, has been historically documented downstream of the project site in the South Anna River. This species has been listed as state threatened by the Department of Game and Inland Fisheries (DGIF).

Richmond and Drewry’s Bluff Quads

According to information currently in Biotics, there are records for Laura’s clubtail (*Stylurus laurae*, G4/S2/NL/NL), a state rare dragonfly, across the Piedmont and west to the Ridge and Valley region. Threats include activities that alter the water flow or substrate such as: impoundments, channelization, dredging, siltation, agricultural non-point pollution, and municipal and industrial pollution.

According to DCR’s species distribution model, potential may exist for the Dwarf wedgemussel (*Alasmidonta heterodon*, G1G2/S1/LE/LE) to be found within the project area or adjacent to the project area in the Fort Belvoir and Fredericksburg Quads.

State-listed Plant and Insect Species

The current activity will not affect any documented state-listed plants or insects.

6(c) Recommendations.

Annandale Quad

DCR recommends the implementation of the following USFWS voluntary measures for the conservation of the Rusty patched bumble bee: avoid pesticide use, avoid herbicide use, and plant native flowers that bloom throughout the spring and summer to support pollinator habitat.

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VIRGINIA DEQ (continued)

(For response to comment 25, refer to pages B-74)

26. DRPT does not anticipate use of pesticides or herbicides as part of Project construction or operating the proposed additional intercity passenger trains. As noted in Section 5.10.3.2 of the Final EIS, during construction, DRPT will reduce the likelihood of adverse effects to rare, threatened and endangered species, and other wildlife through reseeding of disturbed areas with native plants.

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Stafford Quad

DCR recommends coordination with Mike Lott, DCR - Division of Natural Heritage Northern Region Steward at (540) 658-8690 or Michael.lott@dcr.virginia.gov for additional information about the Crow's Nest Natural Area Preserve, located downstream from the project site, and associated natural heritage resources.

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Ashland and Hanover Academy Quads

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations, establishment/enhancement of riparian buffers with native plant species and maintaining natural stream flow.

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Richmond and Drewry's Bluff Quads

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations, establishment/enhancement of riparian buffers with native plant species and maintaining natural stream flow.

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General Recommendation

Contact DCR DNH to secure updated information on natural heritage resources if the scope of the project changes and/or six months has passed before it is utilized. New and updated information is continually added to the Biotics Data System.

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6(d) Additional Information. The Virginia Department of Game and Inland Fisheries (DGIF) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or by contacting Ernie Aschenbach at 804-367-2733 or via email at Ernie.Aschenbach@dgif.virginia.gov.

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7. Recreational Resources, Scenic Rivers and Byways. The Fredericksburg bypass option (Alternative 3C) would require a new bridge across the Rappahannock River. However, the bridge would not be located in an area where the river is designated as a State Scenic River. The State Scenic River designation ends north of the proposed bypass (DEIS, page 4-6). The DEIS does not indicate that Scenic Byways will be impacted. To minimize visual impacts, in general, new bridges and buildings will reflect the profiles of existing bridges and structures (DEIS, page 4-68).

7(a) Agency Jurisdiction. The DCR Division of Planning and Recreational Resources provides policy and direction to the public and private sectors to improve the management of recreational resources (in addition to outdoor and open spaces), and addresses issues related to scenic rivers, highways and byways.

VIRGINIA DEQ (continued)

- 27. DRPT does not anticipate the need for further coordination with DCR concerning the Crow's Nest Natural Area preserve; however, DRPT will coordinate as recommended, if required.
- 28. and 29. As noted in Section 5.1.6.3 of the Final EIS, DRPT will implement appropriate erosion and sediment control practices as required, in accordance with the Virginia Erosion and Sediment Control Regulations and the Virginia Stormwater Management Law and regulations.
- 30. DRPT will coordinate with resource agencies to obtain updated sensitive resources information in the event of significant changes in Project scope and during final design, after funding becomes available and incremental improvements are scheduled.
- 31. DRPT searched VDGIF's Virginia Fish and Wildlife Information Service (VaFWIS) as part of the Draft EIS inventory of wildlife resources (see Draft EIS Section 3.10.5).

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7(b) Agency Findings. The DCR Division of Planning and Recreational Resources identified a number of corrections or additions to be made in the document. In the Purpose and Need section (02-26), DCR states that although some impacts to parks and trails are recognized, the document fails to describe adequately mitigation opportunities, including a continuous, associated non-motorized trail network between, at minimum, Leesylvania State Park and Falmouth and the need for crossings that meet Americans with Disabilities Act (ADA) guidelines.

Section 4.15.2.2 discusses the effects on bicycle and pedestrian safety. DCR notes that there have been a number of bicyclist and pedestrian accidents and fatalities along the East Coast Greenway and recommend that the EIS consider how this project can help address bicyclist and pedestrian safety particularly in the Northern Virginia and George Washington regions.

In reference to Section 03-182 (Affected Environment), DCR notes that portions or perhaps all of Leesylvania State Park is protected in perpetuity by section 6(f) (3) of the Land and Water Conservation Fund Act. Section 6 (f) (3) of the Land & Water Conservation Fund Act (LWCF) states that: "No property acquired or developed with assistance under this section shall without approval of the Secretary [of the Interior] be converted to other than public outdoor recreation uses". The LWCF program realizes that in certain instances there is no alternative to converting a portion of a LWCF property.

Richmond Quad

This project is within a portion of the James River that has been designated as a scenic river.

7(c) Agency Recommendations. Incorporate into the EIS (Section 4.15.2.2) how this project can help address bicyclist and pedestrian safety particularly in the Northern Virginia and George Washington regions. At a minimum, DCR recommends that this project consider the health impact of not providing a safe corridor for bicyclists and pedestrians through this heavily congested, dangerous area by providing a shared-use path alongside the rail corridor.

In instances where there is no feasible alternative to converting a 6(f)(3) LWCF property, a conversion of use process must be initiated with DCR for approval from the National Park Service. The conversion of use process requires that a suitable piece of replacement property be found before a conversion occurs at a LWCF protected site (Leesylvania State Park). "Suitable" means equivalent in fair market value and can serve as a viable public outdoor recreation area without reliance upon adjoining or additional areas. Conversion of use processes must be initiated with DCR by the governmental body that owns the property. Coordinate with Synthia Waymack at synthia.waymack@dcr.virginia.gov to fully understand the requirements of conversion under this program.

VIRGINIA DEQ (continued)

32. As discussed throughout the Draft and Final EIS documentation, the addition of one track will primarily be within the existing CSXT right-of-way. DRPT will preserve the continuity of all trail crossings by extending the existing crossing over the new track (provided in-kind, to the current design specifications). Additional vehicle and pedestrian warning devices will be modified, as appropriate, for the new track and any change in authorized track speed. The details of these will be determined during final design after funding becomes available and incremental improvements are scheduled.

DRPT has not identified any impacts to the trail system which would require the addition of a greenway along the corridor from Leesylvania State Park to Falmouth as a mitigation measure.

33. Addressing bicyclist and pedestrian safety specifically on the East Coast Greenway is beyond the Purpose and Need of the DC2RVA Project, however, the DC2RVA Project will address and improve, as necessary, bike/pedestrian safety warning devices at all public crossings along the DC2RVA rail corridor, in keeping with the Project's Basis of Design and applicable FRA, Amtrak, CSXT, and VDOT safety standards.

34. No property will need to be acquired from Leesylvania State Park as part of the Preferred Alternative.

35. DRPT concurs; scenic rivers are presented in Section 3.1.3.2 of the Draft EIS. Potential effects on scenic rivers for the Preferred Alternative are presented in Section 5.1.1 of the Final EIS.

(Responses are continued on next page)

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7(b) Agency Findings. The DCR Division of Planning and Recreational Resources identified a number of corrections or additions to be made in the document. In the Purpose and Need section (02-26), DCR states that although some impacts to parks and trails are recognized, the document fails to describe adequately mitigation opportunities, including a continuous, associated non-motorized trail network between, at minimum, Leesylvania State Park and Falmouth and the need for crossings that meet Americans with Disabilities Act (ADA) guidelines.

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Section 4.15.2.2 discusses the effects on bicycle and pedestrian safety. DCR notes that there have been a number of bicyclist and pedestrian accidents and fatalities along the East Coast Greenway and recommend that the EIS consider how this project can help address bicyclist and pedestrian safety particularly in the Northern Virginia and George Washington regions.

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In reference to Section 03-182 (Affected Environment), DCR notes that portions or perhaps all of Leesylvania State Park is protected in perpetuity by section 6(f) (3) of the Land and Water Conservation Fund Act. Section 6 (f) (3) of the Land & Water Conservation Fund Act (LWCF) states that: "No property acquired or developed with assistance under this section shall without approval of the Secretary [of the Interior] be converted to other than public outdoor recreation uses". The LWCF program realizes that in certain instances there is no alternative to converting a portion of a LWCF property.

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Richmond Quad

This project is within a portion of the James River that has been designated as a scenic river.

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7(c) Agency Recommendations. Incorporate into the EIS (Section 4.15.2.2) how this project can help address bicyclist and pedestrian safety particularly in the Northern Virginia and George Washington regions. At a minimum, DCR recommends that this project consider the health impact of not providing a safe corridor for bicyclists and pedestrians through this heavily congested, dangerous area by providing a shared-use path alongside the rail corridor.

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In instances where there is no feasible alternative to converting a 6(f)(3) LWCF property, a conversion of use process must be initiated with DCR for approval from the National Park Service. The conversion of use process requires that a suitable piece of replacement property be found before a conversion occurs at a LWCF protected site (Leesylvania State Park). "Suitable" means equivalent in fair market value and can serve as a viable public outdoor recreation area without reliance upon adjoining or additional areas. Conversion of use processes must be initiated with DCR by the governmental body that owns the property. Coordinate with Synthia Waymack at synthia.waymack@dcr.virginia.gov to fully understand the requirements of conversion under this program.

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VIRGINIA DEQ (continued)

- 36. Provision of a new shared use path within the railroad right-of-way is beyond the Purpose and Need of the Project and CSXT policies currently do not allow recreational uses within their right-of-way. As indicated in Section 5.15.2.2 of the Final EIS, all existing bicycle and pedestrian facilities will be maintained (provided in-kind) as part of the Build Alternatives and will be designed to current safety standards. Opportunities for additional bicycle and pedestrian accessibility improvements, including updates to facilities to meet Americans with Disabilities Act of 1990 (ADA) requirements, could be incorporated during final design in coordination with FRA, after funding becomes available and incremental improvements are scheduled.
- 37. Replacement requirements for conversion of Section 6(f) lands as part of the Preferred Alternative are addressed in Section 5.14.1 of the Final EIS. As indicated in that section, DRPT does not anticipate permanent impacts to Section 6(f) lands for any Build Alternatives, including the Preferred Alternative as identified in the Final EIS. Temporary impacts during Project construction will not require replacement lands.

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Due the Richmond Quad being located within a portion of the James River that has been designated a scenic river, if there is any change to the existing tracks that cross the James, contact Lynn Crump of the DCR-Division of Planning and Recreation at 804-786-5054 or via email at Lynn.Crump@dcr.virginia.gov to coordinate further.

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8. State Parks. The DEIS (page 4-155) states that seventeen parkland and trail resources could be impacted by the implementation of this project. Permanent impacts would occur to six of the facilities. Permanent impacts are expected to the following resources (will vary depending on the build alternatives chosen): Long Bridge Park, Dog Run Park at Carlyle, Ashland Trolley Line, Carter Park, Gates Mill Park, Walker's Creek Retention Basin Park. Temporary impacts are expected to the following Section 6(f) resources: George Washington Memorial Parkway, Fredericksburg and Spotsylvania National Military Park, and Pierson/ Slaughter Pen Farm. Impacts to parklands were avoided and minimized to the maximum extent possible. The project sponsor will coordinate with park owners over impacts.

8(a) Agency Jurisdiction. DCR's Division of State Parks is responsible for acquiring, and managing, state parks. Park development and master planning are managed by the Division of Planning and Recreation Resources. Master plans are required prior to a parks opening and are updated every ten years (Virginia Code § 10.1-200 *et seq.*).

8(b) Agency Recommendation. Since this project has the potential to impact Leesylvania and Widewater State Parks, DCR recommends coordination with State Parks Division Director, Craig Seaver at Craig.Seaver@dcr.virginia.gov regarding these impacts.

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9. Historic Impacts. The DEIS (page 4-129) indicates that consultation between DHR and the project sponsor commenced in the fall of 2014 and is ongoing. DPRT defined an Area of Potential Effect (APE) and the State Historic Preservation Office (SHPO) concurred on the APE in 2015. One hundred and fifty-eight historic properties were identified within the APE along with two National Register of Historic Places (NRHP) and ten NRHP-eligible archaeological sites. Archaeological studies have been completed along all project alternatives except for the bypass options. The DEIS concludes (page 4-155) that 33 historic properties would be adversely affected by one or more of the project build alternatives. When an adverse effect has been identified, efforts will be undertaken to avoid, mitigate, or minimize the impacts. A Programmatic Agreement (PO) is under development with the SHPO to identify studies that will be necessary once the recommended Preferred Alternative has been selected and tasks that would be undertaken to mitigate adverse effects.

9(a) Agency Jurisdiction. The Department of Historic Resources (DHR) conducts reviews of projects to determine their effect on historic structures or cultural resources under its jurisdiction. DHR, as the designated State's Historic Preservation Office, ensures that federal actions comply with Section 106 of the National Historic Preservation Act of 1962 (NHPA), as amended, and its implementing regulation at 36

VIRGINIA DEQ (continued)

- 38. DRPT will coordinate with DCR regarding bridge design at scenic river crossings during final design, after funding becomes available and incremental improvements are scheduled. As discussed in Section 5.1.1.1 of the Final EIS, new bridges will generally reflect the horizontal and vertical profiles of existing structures and therefore DRPT anticipates that the landscape and viewsheds from scenic rivers will be similar in context to existing conditions.
- 39. Table 5.14-1 of the Final EIS identifies the permanent and temporary impacts of the Preferred Alternative to parkland resources. Leesylvania and Widewater State Parks are not among the parklands affected by the Preferred Alternative, either for temporary or permanent use.

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CFR Part 800. The NHPA requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places. Section 106 also applies if there are any federal involvements, such as licenses, permits, approvals or funding. DHR also provides comments to DEQ through the state environmental impact report review process.

9(b) Agency Finding. The Federal Railroad Authority and the Department of Rail and Public Transportation have both been working closely with DHR pursuant to Section 106 of the National Historic Preservation Act on this project. DHR anticipates that both agencies will continue to coordinate per Section 106.

9(c) Agency Requirement. DHR requests that the FRA continue to consult directly with DHR, as necessary, pursuant to Section 106 of the National Historic Preservation Act (as amended) and its implementing regulations codified at 36 CFR Part 800 which require Federal agencies to consider the effects of their undertakings on historic properties.

10. Public Water Supply. The DEIS (page 4-12) states that new permanent and temporary impacts within the wellhead protection zones for public and private wells would result from the DC2RVA project. Prior to construction commencing the sponsor will evaluate the potential for groundwater contamination to occur.

10(a) Agency Jurisdiction. The Virginia Department of Health (VDH), Office of Drinking Water (ODW) reviews projects for the potential to impact public drinking water sources (groundwater wells and surface water intakes). VDH administers both federal and state laws governing waterworks operation.

10(b) Agency Findings. VDH-ODW reviewed the project corridor for proximity to public drinking water sources including groundwater wells, springs and surface water intakes.

The following public groundwater wells are located within a 1-mile radius of the project site (wells within a 1,000-foot radius are formatted in **bold**):

PWS ID Number	City/County	System Name	Facility Name
6153765	PRINCE WILLIAM	TIM'S RIVERSHORE RESTAURANT	WELL #2 DRILLED 2011
6033362	CAROLINE	NPS - JACKSON SHRINE	DRILLED WELL
4087098	HENRICO	BUBBAS BAR AND GRILL	WELL NO. 2 (BORED)
4085129	HANOVER	CALVARY PENTECOSTAL CAMP	WELL #6
4085129	HANOVER	CALVARY PENTECOSTAL CAMP	WELL #5
4085920	HANOVER	RHAPSODY	DRILLED WELL

VIRGINIA DEQ (continued)

40. and 41. Close consultation with the Virginia Department of Historic Resources (DHR) commenced in November 2014. Pursuant to Section 106 of the National Historic Preservation Act (as amended), DRPT will continue to coordinate all cultural resource components with DHR during final design, after funding becomes available and incremental improvements are scheduled.

42. Refer to DRPT-numbered statements #129 through #131 for detailed lists provided by Virginia Department of Health (VDH), and DRPT's responses.

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6033495	CAROLINE	MICHAEL D. DENT INDUSTRIAL PARK	WELL 8B
6033490	CAROLINE	MATTAPONI SPRINGS GOLF COURSE	DRILLED WELL
6033500	CAROLINE	MILFORD SANITARY DISTRICT	WELL 2
6179630	STAFFORD	POTOMAC POINT WINERY	WELL 1
6059505	FAIRFAX COUNTY	FAIRFAX YACHT CLUB	FX YACHT CLUB DRILLED WELL

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The following surface water intakes are located within a 5-mile radius of the project site:

PWS ID Number	System Name	Facility Name
6059501	FAIRFAX COUNTY WATER AUTHORITY	OCCOQUAN RESERVIOR INTAKE
6179100	STAFFORD COUNTY UTILITIES	AQUIA CREEK
6153675	QUANTICO MARINE BASE-MAINSIDE	BRECKINRIDGE RE
6177300	SPOTSYLVANIA COUNTY UTILITIES	RAPPAHANNOCK RIVER INTAKE
6177300	SPOTSYLVANIA COUNTY UTILITIES	MOTTS RUN RESERVOIR - ALT INTAKE
6033425	LAKE CAROLINE	STEVENS MILL RN
4085398	HANOVER SUBURBAN WATER SYSTEM	NORTH ANNA RWI
4760100	RICHMOND, CITY OF	RAW WATER INTAKE

The project is within the watershed of the following public surface water sources (facilities where the project falls within 5 miles of the intake **and** is within the intake's watershed are formatted in **bold**):

PWS ID Number	System Name	Facility Name
4085398	HANOVER SUBURBAN WATER SYSTEM	NORTH ANNA RWI
3700500	NEWPORT NEWS, CITY OF	CHICKAHOMINY R
3670800	VIRGINIA-AMERICAN WATER CO	APPOMATTOX RIVER

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10(c) Agency Recommendation. Utilize Best Management Practices including Erosion and Sedimentation Controls and Spill Prevention Controls & Countermeasures on the project site. Field mark well(s) within a 1,000-foot radius from the project site to protect them from accidental damage during construction. Properly manage material on site and during transport to prevent impacts to nearby surface waters.

VIRGINIA DEQ (continued)

(Response to comment 42 on previous page)

43. As noted in Section 5.1.6.3 of the Final EIS, appropriate erosion and sediment control practices will be implemented during construction in accordance with the Virginia Erosion and Sediment Control Regulations and the Virginia Stormwater Management Law and regulations. During construction, wells within or adjacent to the Project Limits of Disturbance (LOD) will be field marked to protect them from accidental damage.

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10(d) Requirement. Potential impacts to public water distribution systems or sanitary sewage collection systems must be verified by the local utility.

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11. Septic Tanks and Drainfield Regulations. The DEIS does not indicate that private on-site sewage systems will be affected.

11(a) Agency Jurisdiction. The mission of the VDH Onsite Sewage and Water Services is to protect public health and ground water quality. This is best achieved by implementing an onsite wastewater program based on sound scientific, engineering, and public health principles.

11(b) Agency Findings. The VDH Office of Environmental Health Services (OEHS) Onsite Sewage and Water Services reviewed the proposal and states that local health districts can provide available electronic information regarding the location of private wells and sewage systems near the proposed project area. VDH does not have an accurate estimate of the number of private wells or septic systems in the project area.

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From the 250-acre Acca Yard in Henrico County (CSXT's major transfer point in Virginia) to Parham Road and points north, the project is mostly near areas served by public water and sewer; however, older wells or septic systems might still be in use or present (and not used). From Parham Road North to the Chickahominy River crossing into Hanover County, and parallel to Old Washington Highway, the project is near areas primarily served by private wells and septic systems (e.g., Classic Catering and Hunton Park). The projected rail line covers about 22 linear miles through Chesterfield County and the south side of the James River in the City of Richmond. For construction within the City of Richmond, staff notes there are several churches and schools within or near the project area. In the Hanover County project area, staff estimates that a few hundred wells and onsite sewage systems will be near the project area.

11(c) Agency Recommendation. OEHS recommends that the consultant contact each local health department in the project area, to the extent possible, to obtain appropriate records and ensure the project will not negatively impact private wells and onsite sewage systems.

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Staff recommends that information be shared with the local communities and that appropriate points of contact be made available. If water, sewer, electricity, or other utility service might be impacted, then the local community should be informed in advance with accommodations provided as necessary.

11(d) Agency Requirement. Property owners must submit an application to the local health department to relocate any onsite sewage system impacted by the construction.

47

12. Open Space. According to the DEIS (page 3-80), the Fredericksburg bypass route build alternative bisects two Virginia Outdoors Foundation (VOF) properties totaling

VIRGINIA DEQ (continued)

44. DRPT will coordinate with local utilities to identify potential impacts to public water distribution systems or sanitary sewage collection systems during final design, after funding becomes available and incremental improvements are scheduled.

45. DRPT will contact local health districts to identify locations of private wells and sewage systems within the Limits of Disturbance during final design, after funding becomes available and incremental improvements are scheduled. The number of churches and schools within 500 feet of the DC2RVA rail line are listed for each jurisdiction in Table 3.11-5 of the Draft EIS. Among the listed facilities are 13 religious facilities and 10 schools within the City of Richmond.

46. See response to DRPT-numbered statement #45. Prior to construction, DRPT will inform local communities regarding utility impacts and will develop appropriate measures to minimize or mitigate impacts to the community, in coordination with local health departments.

47. During final design, after funding becomes available and incremental improvements are scheduled, DRPT will submit an application to the local health department to relocate any onsite sewage system that will be impacted by construction.

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approximately 894-acres and comes within 1,000-feet of a third property. Permanent impacts to 1.22-acres of VOF Conservation Area CLN-VOF-3804 and 21.09-acres of VOF Conservation Area CLN-VOF-03850 are anticipated, along with temporary impacts to more acreage (DEIS, page 4-71). Coordination with VOF may be necessary.

12(a) Agency Jurisdiction. The Virginia Outdoors Foundation (VOF) was created by the General Assembly in 1966 and established in the Code of Virginia under § 10.1-1800, which states: " The Virginia Outdoors Foundation is established to promote the preservation of open-space lands and to encourage private gifts of money, securities, land or other property to preserve the natural, scenic, historic, scientific, open-space and recreational areas of the Commonwealth. The Virginia Outdoors Foundation is a body politic and shall be governed and administered by a board of trustees composed of seven trustees from the Commonwealth at large to be appointed by the Governor for four-year terms."

12(b) Agency Comments. The project is located in a region that does not contain a high concentration of open-space easements due to the urbanized nature of the existing rail corridor, U.S. Route 1, and I-95. Along the existing and preferred alignments for Area 3 (Fredericksburg), VOF does not hold any open-space easements within 1.5 miles of the corridor, nor is it working on any new open-space easement proposals within that 1.5 miles of the corridor.

However, Build Alternative 3C (two-track bypass east of Fredericksburg) would cross two open-space easements in Caroline County and come within 1.5-miles of two additional easements in Spotsylvania County. An open-space easement is a legal interest in real property that creates a relationship between the holders of the easement and the property owner. VOF has an interest in the conservation values of the property and a legal obligation to protect these values.

12(c) Agency Recommendation. The VOF is supportive of the DRPT Recommended Preferred Alternative 3B (add one track east of existing track) in Area 3 which would avoid impacts to existing open-space easements. Coordinate with VOF regarding the preservation of existing open-space easements if Build Alternative 3C is ultimately chosen for Area 3.

13. Chesapeake Bay Preservation Areas. The DEIS (page 4-6) notes that transportation projects, including rail lines, are conditionally exempt from the Chesapeake Bay Preservation Area Designation and Management Regulations. The project will be constructed in accordance with Virginia Erosion and Sediment Control Law, the Stormwater Management Act, and with any DEQ, Corps, and VRMC required permit. As such, the DC2RVA project will be in compliance with the Chesapeake Bay Preservation Act and implementing regulations.

13(a) Agency Jurisdiction. The DEQ Office of Local Government Programs administers the Chesapeake Bay Preservation Act (Virginia Code §62.1-44.15:67 *et*

VIRGINIA DEQ (continued)

48. and 49. Build Alternative 3C: Add Two-Track Bypass (East of Fredericksburg) was not selected as part of the Preferred Alternative (refer to Final EIS Section 4.3.3 for details). For Area 3, the Preferred Alternative is Alternative 3B: Add One Track East of Existing, which does not involve any Virginia Outdoors Foundation (VOF) easements, so DRPT does not anticipate any impacts to VOF easements.

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seq.) and Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 25-830-10 et seq.). Each Tidewater locality must adopt a program based on the Chesapeake Bay Preservation Act and the Chesapeake Bay Preservation Area Designation and Management Regulations. The Act and regulations recognize local government responsibility for land use decisions and are designed to establish a framework for compliance without dictating precisely what local programs must look like. Local governments have flexibility to develop water quality preservation programs that reflect unique local characteristics and embody other community goals. Such flexibility also facilitates innovative and creative approaches in achieving program objectives. The regulations address nonpoint source pollution by identifying and protecting certain lands called Chesapeake Bay Preservation Areas. The regulations use a resource-based approach that recognizes differences between various land forms and treats them differently.

13(b) Agency Findings. In the Cities of Richmond and Fredericksburg and the Counties of Chesterfield, Henrico, Hanover, Caroline, Spotsylvania, Stafford, Prince William, Fairfax and Arlington, the areas protected by the *Chesapeake Bay Preservation Act*, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by the local government. RPAs include tidal wetlands, certain non-tidal wetlands and tidal shores, and a minimum 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow. Areas within the RMA are subject to the general performance criteria as specified in 9VAC 25-830-130 of the Regulations and the local ordinance. Projects within the RMA must minimize land disturbance (including access and staging areas), retain existing vegetation and minimize impervious cover.

13(c) Agency Requirement. Construction, installation, and operation and maintenance of railroads and their appurtenant structures are conditionally exempt from the Regulations provided they are constructed in accordance with:

1. regulations promulgated pursuant to the *Erosion and Sediment Control Law*, § 10.1-603 et seq. of the Code of Virginia, and the *Stormwater Management Act*, § 10.1-603.1 et seq. of the Code of Virginia;
2. an erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation; or,
3. local water quality protection criteria at least as stringent as the above state requirements.

14. Local Participation. DEQ invited the affected localities and planning district commissions to participate in the Commonwealth's environmental review of this proposal.

14(a) Fairfax County. The Fairfax County Land Development Services (LDS), Department of Planning and Zoning (DPZ) and the Department of Public Works Urban

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VIRGINIA DEQ (continued)

50. During final design, after funding becomes available and incremental improvements are scheduled, DRPT will ensure Project conformance with applicable performance criteria for areas protected by the Chesapeake Bay Preservation Act as specified in 9VAC 25-830-130 of the Chesapeake Bay Preservation Area Designation and Management Regulations and local ordinances, including minimizing land disturbance and impervious cover.
51. As discussed in Section 5.1.1.1 of the Final EIS, the Project will be constructed in accordance with the Virginia Erosion and Sediment Control Law (§10.1-560 et seq. of the Code of Virginia) and the Stormwater Management Act (§10.1-603.1 et seq. of the Code of Virginia); the terms and conditions of water quality permits required by USACE, Virginia DEQ, and VMRC; and an erosion and sediment control plan and a SWM plan approved by Virginia DEQ.

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Forestry Management Division (UFMD) reviewed the proposal, with a focus on the 43-mile section that traverses the county.

14(a)(i) Fairfax County Comments. Fairfax County noted that the Build Alternative in the county involves the addition of a third track primarily within the existing ROW. No new station, bridge, bypass, or crossings are proposed in the county. The track addition and improvements will have impacts that require mitigation.

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LDS noted that the Pohick Seeps Conservation Area is a sensitive environment that could be impacted by one of the proposed track realignments. Multiple easements, including RPAs, are in place to protect this resource. Damage to the hydrology of the site could result in changes to the plant community structure which would be extremely difficult to mitigate since these communities take decades or centuries to develop.

More specific information is needed regarding the limits of disturbance (LOD) for the project and the design/placement of stormwater management facilities.

Refer to the attached letter from Fairfax County (dated October 20, 2017) for complete comments.

14(a)(ii) Fairfax County Park Authority Comments. The Fairfax County Park Authority submitted comments directly to the FRA under separate cover on January 9, 2017 and September 18, 2017. These letters were provided to DEQ on request and are attached. The comments are summarized below.

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- The rail corridor passes Old Colchester Park and Preserve with an approximately 85-foot ROW between the existing rail line and the park boundary. The ROW between Mason Neck West Park boundary and the existing rails is only 56-feet. The proposed rail line may cause significant impacts to both parks via loss of land, recreational facilities, vegetation, habitat, increased stormwater discharge, and invasive species.
- The potential impacted parcel of Old Colchester Park and Reserve is deed restricted as well as subject to Section 4(f) and 6(f) Land and Water Conservation Fund lands.
- There is a high potential for impacts to numerous Native American, historical, and environmental resources within Old Colchester Park

14(a)(iii) Fairfax County Recommendation. In addition to the mitigation and Best Management Practices (BPMs) identified in the DEIS, Fairfax County recommends:

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- Adequate tree protections including but not limited to tree protection fencing and signage, root pruning, and hand removal of trees (determined on a tree-by-tree basis) along the LOD;
- Invasive species management and replanting in environmentally sensitive areas such as RPAs may be necessary based on eventual location of the LOD.

VIRGINIA DEQ (continued)

52. Refer to the referenced attached Fairfax County letter (DRPT-numbered statements #136 to #138) for responses to the detailed comments that are summarized here.
53. Refer to the referenced attached Fairfax County Park Authority letter (DRPT-numbered statements #139 and #140) for responses to the detailed comments that are summarized here.
54. Refer to the referenced attached Fairfax County letter (DRPT-numbered statements #136 to #138) for responses to the detailed recommendations that are summarized here.

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The project sponsor should continue to coordinate with the Fairfax County Stormwater Planning Division as the primary county contact for resource condition and impact assessment. Coordinate with Fairfax County UFMD for review of canopy and forest stand valuation and regulatory enforcement in terms of local and state codes. Coordinate with the Fairfax County Facilities Management Division and the Fairfax County Land Acquisition Division related to the legal aspects of the easements and property rights of the Pohick Seeps.

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14(a)(iv) Fairfax County Park Authority Recommendation. Submit all future documents and plans at the earliest opportunity for review by the authority to ensure the project progresses with the least disturbance to parkland.

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14(a)(v) Fairfax County Park Authority Requirements.

- Obtain a Right of Entry License, Easement, and/or Construction Permit for any proposed surveying, test boring, wetland flagging, utility relocation, clearing, grading, or temporary/permanent construction on parkland, even within an existing easement. Conditions and/or fees may be required for a license/easement/permit.
- If a Section 6(f) resource is impacted, court action will be required and suitable land replacement will need to be identified, acquired, and conveyed in coordination with the park owner, DCR, and the Department of the Interior.
- A Phase I archaeological survey is required at Old Colchester Park, a known historic site. If significant sites are found, Phase II archaeological testing will be recommended to determine eligibility for inclusion on the NRHP. If sites are found eligible, avoidance or a Phase III archaeological data recovery will be recommended.

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14(b) City of Fredericksburg. The City of Fredericksburg indicated that the City Council was considering the proposal and that it anticipated having some mitigation recommendations. The City intends to submit its comments directly to FRA.

57

14(c) Town of Ashland. The Town of Ashland reviewed the proposal and submitted extensive comments under a letter dated October 18, 2017. The Town's primary comments and recommendations are summarized below. For complete comments and recommendations, refer to the attached letter.

14(c)(i) Town of Ashland Comments.

Chapter 2: Alternatives

- The Town of Ashland supports the reconsideration of the Deep Bore Tunnel option which was previously screened out of consideration. This option would avoid the impacts of the bypass alternatives and would garner community and local government support. The cost of the option should be weighed against the economic cost of the other build alternatives to the local community.
- Alternative 5C (add two-track western bypass with downtown Ashland station

VIRGINIA DEQ (continued)

(Response to comment 54 on previous page)

55. Refer to the referenced attached Fairfax County Park Authority letter (DRPT-numbered statements #139 and #140) for responses to the detailed recommendations that are summarized here.

56. DRPT received and has responded to comments from City of Fredericksburg under separate cover; the City's letter and DRPT's responses are included as part of the Final EIS.

57. and 58. Refer to the referenced attached Town of Ashland letter (DRPT-numbered statements #142 through #195) for responses to the detailed comments and recommendations that are summarized here.

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remaining) is the only option under current consideration that would not cause significant damage to the community.

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Chapter 3: Affected Environment

- Ashland opposes the construction of a third rail through the center of town. The additional vibration associated with a third track and additional trains would have a negative impact on historic buildings in the downtown commercial district.
- Ashland does not support any scenario which moves the Ashland Station from downtown.

Chapter 6: Public Involvement and Agency Coordination

- The Town of Ashland does not believe the recommendations of the Community Advisory Committee (CAC) can be fully incorporated into the Final EIS without considerable additional opportunities for public input, further engineering and analysis, and efforts to mitigate impacts of the proposals through the CAC process due to the committee being convened for the first time in May 2017, late into the EIS study process.

Chapter 7: DRPT Recommended Preferred Alternative

- The Town of Ashland disagrees with the statement that there is no local consensus or preference for a Build Alternative. According to Ashland, the Town and Hanover County would unanimously support a Deep Bore Tunnel.

14(c)(ii) Town of Ashland Recommendations.

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Chapter 1: Purpose and Need

- Analyze potential effects of technological changes (autonomous vehicles and intelligent transportation systems) that may occur between now and the 2025 estimated in-service date on the need for the project. Current information should be reconsidered every 2-3 years.
- The anticipated goal for improved travel time from the proposal has reduced to about five minutes from fifteen minutes. Further public outreach and education should be conducted to ensure those who previously commented on the Tier 1 EIS are aware of the change and reduction in benefit of the project.
- Conduct additional study to address improvements in technology and energy efficiency associated with electric train travel (versus conventional fossil-fueled equipment), as it relates to the project stated benefit of increased energy-efficiency.
- Consider the possibility that the proposed use of fossil-fuel burning equipment for the project rather than electric-powered equipment may be technologically obsolete by the time construction is completed.

Chapter 2: Alternatives

- The Town of Ashland advocates for additional consideration of the Deep Bore Tunnel option which was previously removed from consideration.

VIRGINIA DEQ (continued)

(Response to comments 57 and 58 on previous page)

VIRGINIA DEQ (continued)

(For response to comments 58, refer to pages B-87)

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- The Town of Ashland recommends removal of the Build Alternatives that involve relocation of the station to Ashcake (5A-Ashcake, 5B-Ashcake, 5C-Ashcake, 5D-Ashcake). The proposed Ashcake Road Station has limited connectivity to east-west primary roadways, possibly conflicts with local land use, and is removed from Ashland's central urban area.
- Further consideration of Build Alternative AEB1 (Ashland East Bypass) which was previously screened out of consideration is warranted. According to Ashland, Hanover County has stated that it is willing to consider relocating the park which led to the option being assessed as having impacts to parks and recreational areas which ultimately resulted in the dismissal of the alternative.
- Under all scenarios, a station must remain in downtown Ashland to maintain the character of the community.

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Chapter 3: Affected Environment

- The Ashland/Hanover Visitor Center located in the Ashland Depot Train Station should be considered a community facility for the purpose of Table 3.11-5 and all other sections of the DEIS (including Chapter 4).
- Consider and incorporate the attached Ashland Museum comments into Section 3.13.2.1- Buildings, Districts, Structures, and Objects.

Chapter 4: Environmental Consequences

- Alternatives 5B and 5D which involve a third rail through the center of town would have a high visual impact to the town. Section 4.9.1.5 should be updated to reflect this. Additionally, adding an additional set of tracks through town is not compatible with the town's comprehensive plan, existing land use, or future land use (Section 4.11.5.2). These options would also require the closure of the eastern section of Center Street/Railroad Ave creating a negative economic and traffic safety impact.
- Construction of Alternative 5B would result in a significant number of residential and commercial structures being destroyed. Update Section 4.11.1 to reflect this.
- The following Build Alternatives would result in significant business closures and economic loss: 5A, 5A-Ashcake, 5B, 5B-Ashcake, and 5D-Ashcake. Section 4.11.1 should be updated to reflect this and take into account the Economic Impact Analysis (see General Recommendations below)

Chapter 5: Section 4(f) Evaluation

- Additional consideration should be given to the contributing structures identified in the Ashland Museum and Town of Ashland Section 106 response. The Town concurs that Alternative 5C would best avoid impacts to historic resources.
- Further opportunities for public and stakeholder input are necessary once a preferred alternative for Area 5 is recommended.

Appendix Q: Community Impact Assessment Technical Report

- Commence a more accurate count of business/residential relocations, closures,

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and acquisitions that would occur in downtown Ashland with any option that brings additional rail capacity through downtown Ashland. Update Table 3-4 accordingly.

Appendix R: Cultural Resources Report

- Any and all cultural resources identified by the Ashland Museum should be addressed in the DEIS and Final EIS.

Overall Recommendations

- Consider the attached economic impact analysis titled *Estimated Impact of Proposed DC2RVA Rail Alternatives on the Town of Ashland*, commissioned by the Town to analyze impacts of the proposal on the economic vitality of the community.
- Discontinue any consideration of the three track trench option as it was created at the last CAC meeting (as of the writing of the October 18, 2017 Town of Ashland letter) and has not been evaluated sufficiently to warrant moving forward in the DEIS or Final EIS.

14(d) Richmond Regional Planning District Commission. The Richmond Regional PDC inquired with its member jurisdictions regarding this proposal. The PDC received no comments from locality staff and the PDC staff has no comments on the proposal.

14(e) Crater Planning District Commission. The Crater PDC had no comments on the proposal.

15. Pollution Prevention. DEQ advocates that principles of pollution prevention and sustainability be used in all construction projects as well as in facility operations. Effective siting, planning, and on-site BMPs will help to ensure that environmental impacts are minimized. However, pollution prevention and sustainability techniques also include decisions related to construction materials, design, and operational procedures that will facilitate the reduction of wastes at the source.

15(a) Recommendations. We have several pollution prevention recommendations that may be helpful in the construction of this project and in the operation of the facility:

- Consider development of an effective Environmental Management System (EMS). An effective EMS will ensure that the proposed facility is committed to complying with environmental regulations, reducing risk, minimizing environmental impacts, setting environmental goals, and achieving improvements in its environmental performance. DEQ offers EMS development assistance and recognizes facilities with effective Environmental Management Systems through its Virginia Environmental Excellence Program (VEEP). VEEP provides recognition, annual permit fee discounts, and the possibility for alternative compliance methods.

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VIRGINIA DEQ (continued)

(Response to comment 58 on page B-87)

59. Comment noted; DRPT did not receive comments directly from the Richmond Regional PDC.
60. Comment noted; DRPT did not receive comments directly from the Crater PDC.
61. Railroad operators maintain their own environmental management systems. For example, Amtrak’s *Environmental Management System Manual* (issued September 2001, revised March 2004) and CSX’s *Public Safety, Health & Environment Management System* (<https://www.csx.com/index.cfm/responsibility/environment-and-efficiency/environmental-management-system/>) have been designed to ensure compliance with environmental regulations and minimize environmental impacts. DRPT will consider sustainable materials and practices for construction and operation of the Project to the extent practicable.

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- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts.
- Consider energy efficiency when choosing materials and products, like insulation, fixtures, and HVAC systems.
- Consider contractors' commitment to the environment (such as an EMS) when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.
- Choose sustainable materials and practices for infrastructure construction and design. These could include asphalt and concrete containing recycled materials, and integrated pest management in landscaping, among other things.
- Integrate pollution prevention techniques into the facility maintenance and operation, to include inventory control for centralized storage of hazardous materials and source reduction (fixing leaks, energy efficient products). Maintenance facilities should have sufficient and suitable space to allow for effective inventory control and preventive maintenance.

DEQ's Office of Pollution Prevention provides information and technical assistance relating to pollution prevention techniques and EMS. For more information, contact DEQ's Office of Pollution Prevention, Meghann Quinn at (804) 698-4021.

16. Water Conservation. The following recommendations will result in reduced water use associated with the operation of the railroad and associated facilities (stations).

- Grounds should be landscaped with hardy native plant species to conserve water as well as minimize the need to use fertilizers and pesticides.
- Convert turf to low water-use landscaping such as drought resistant grass, plants, shrubs and trees.
- Consider installing low-flow restrictors/aerators to faucets.
- Improve irrigation practices by:
 - upgrading with a sprinkler clock; watering at night, if possible, to reduce evapotranspiration (lawns need only 1 inch of water per week and do not need to be watered daily; over watering causes 85 percent of turf problems);
 - installing a rain shutoff device; and
 - collecting rainwater with a rain bucket or cistern system with drip lines.
- Check for and repair leaks during routine maintenance activities.
- Consider replacement of old equipment with new high-efficiency machines to reduce water usage by 30-50 percent per use.

17. Energy Conservation. For any new facility construction such as new stations, the proposed facility should be planned and designed to comply with state and federal guidelines and industry standards for energy conservation and efficiency. The commonwealth encourages architectural and engineering designers to recognize and incorporate the energy, environmental, and sustainability concepts listed in the LEED

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VIRGINIA DEQ (continued)

(Response to comment 61 on previous page)

62. During final design, after funding becomes available and incremental improvements are scheduled, DRPT will consider incorporating water-reducing measures into facilities design, where practicable. Maintenance procedures will be determined by the facilities operator following construction.
63. Final design, after funding becomes available and incremental improvements are scheduled, will comply with state and federal guidelines and industry standards for energy conservation and efficiency. DRPT will consider energy, environmental, and sustainability concepts listed in the LEED Green Building Rating System for facilities during final design.

DC2RVA Southeast High Speed Rail DEIS
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Green Building Rating System into the development and procurement of their projects.

The energy efficiency of the facilities can be enhanced by maximizing the use of the following:

- thermally-efficient building shell components (roof, wall, floor, windows, and insulation);
- facility siting and orientation with consideration towards natural lighting and solar loads
- high efficiency heating, ventilation, air conditioning systems;
- high efficiency lighting systems and daylighting techniques; and
- energy-efficient appliances.

Contact the Department of Mines, Minerals and Energy, David Spears at (434) 951-6350, for assistance in meeting this challenge.

REGULATORY AND COORDINATION NEEDS

1. Surface Waters and Wetlands. The project must comply with the Virginia Water Protection Program (Virginia Code § 62.1-44.15 *et seq.*). DEQ regulates impacts to waters and wetlands pursuant to 9VAC25-210 *et seq.* If the proposed activities require impacts to wetlands or surface waters, coordinate with the appropriate DEQ Regional Office regarding potential permitting requirements (NRO 703-583-3800, PRO 804-527-5020).

2. Tidal Wetlands and Subaqueous Lands. Pursuant to section 28.2-1204 of the Code of Virginia, the VMRC has jurisdiction over tidal wetlands any encroachments in, on or over any state-owned rivers, streams or creeks in the Commonwealth. Contact VMRC (Tony Watkinson at 757-247-2250) regarding the submittal of a JPA for proposed impacts to tidal wetlands and submerged lands.

3. Erosion and Sediment Control and Stormwater Management.

3(a) Erosion and Sediment Control Annual Specifications. In accordance with §62.1-44.15 *et seq.*, electric, natural gas and telephone utility companies, interstate and intrastate natural gas pipeline companies, and railroad companies shall, and authorities created pursuant to § 15.2-5102 may, file general erosion and sediment control standards and specifications annually with DEQ for review and approval. Such standards and specifications shall be consistent with the requirements of this article and associated regulations and the Erosion and Sediment Control Law and Stormwater Management Act (§ 62.1-44.15:24 *et seq.*) and associated regulations where applicable.

3(b) Site-Specific Plans. Site-specific stormwater management and erosion and sediment control plans are required in accordance with the approved standards and

VIRGINIA DEQ (continued)

(Response to comment 63 on previous page)

64. and 65. Permit requirements and mitigations are discussed in Sections 5.1.5 and 5.1.6 of the Final EIS. DRPT will continue coordination with the federal and state regulatory agencies during the final design and construction phases of the Project, after funding becomes available and incremental improvements are scheduled. For proposed activities that impact wetlands and/or surface waters, DRPT will prepare a JPA to be submitted to the DEQ, VMRC, USACE and local wetland boards.

66. It is the responsibility of CSXT, as owner of the rail line and operator of freight service, to file general erosion and sediment control standards and specifications annually with DEQ for review and approval.

67. DRPT will develop site-specific SWM and erosion and sediment control plans as part of the Project’s final design phase, after funding becomes available and incremental improvements are scheduled. DRPT will continue coordination at that time with the DEQ and will develop plans in accordance with the approved standards and specifications.

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specifications are required.

Contact the DEQ Office of Stormwater Management (Hannah Zegler, 804-698-4206) for additional information.

3(c) Virginia Stormwater Management Program General Permit for Stormwater Discharges from Construction Activities (VAR10). For projects involving land-disturbing activities of equal to or greater than one acre the applicant is required to register for coverage under the Virginia Stormwater Management Program General Permit for Discharges of Stormwater from Construction Activities (9 VAC 25-870-1 *et seq.*). Specific questions regarding the Stormwater Management Program requirements should be directed to DEQ, Holly Sepety at (804) 698-4039.

4. Air Quality Regulations. This project is subject to air regulations administered by the Department of Environmental Quality. The following sections of the Code of Virginia and Virginia Administrative Code (VAC) are applicable:

- fugitive dust and emissions control (9 VAC 5-50-60 *et seq.*);
- permits for fuel-burning equipment (9VAC5-80-1100 *et seq.*);
- asphalt paving operations (9 VAC 5-45-760 *et seq.*); and
- open burning restrictions (9 VAC 5-130 *et seq.*).

Coordinate with the appropriate DEQ Regional Office with questions (NRO 703-583-3800, PRO 804-527-5020).

5. Solid and Hazardous Wastes. All solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations.

For additional information concerning location and availability of suitable waste management facilities in the project area or if free product, discolored soils, or other evidence of contaminated soils are encountered, coordinate with the appropriate DEQ Regional Office (NRO 703-583-3800, PRO 804-527-5020).

5(a) Asbestos-Containing Material. It is the responsibility of the owner or operator of a demolition activity to thoroughly inspect the affected part of the facility prior to demolition for the presence of asbestos, including Category I and Category II nonfriable asbestos-containing material. Upon classification as friable or non-friable, all asbestos-containing material shall be disposed of in accordance with the Virginia Solid Waste Management Regulations (9 VAC 20-80-640) and transported in accordance with the Virginia regulations governing Transportation of Hazardous Materials (9 VAC 20-110-10 *et seq.*). Contact the Department of Labor and Industry (804-371-2327) for additional information.

5(b) Lead-Based Paint. This project must comply with the U.S. Department of Labor,

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VIRGINIA DEQ (continued)

(Response to comment 67 on previous page)

68. Construction activities associated with several of the proposed improvement elements will disturb more than one acre of land. These improvements include straightening of curves, new mainline track and crossovers, station and station area improvements, new sidings and signals, and safety improvements at grade-crossings. DRPT will develop SWM plans for these improvements to be registered for coverage under the Virginia Stormwater Management Program General Permit for Discharges of Stormwater Activities, during the final design phase of the Project, after funding becomes available and incremental improvements are scheduled. See Sections 5.1.6 and 5.19.2 of the Final EIS.
69. Demolition and construction activities can result in short-term increases in air pollutants. DPRT will minimize potential negative effects during construction (through the contractor at that time) with the application of appropriate BMP's. See Sections 5.1.6 and 5.19.2 of the Final EIS.
70. All solid waste, hazardous waste, and hazardous materials generated by the Project will be handled and managed in accordance with federal, state and local regulations, including the Virginia Solid Waste Management Regulations (VSWMR). Impacts from the Preferred Alternative to known (or potential) hazardous material sites have been identified and discussed in Section 5.5 of the Final EIS.
71. Any asbestos, lead, or contaminated residues generated by construction of the Project will be handled in accordance with the VSWMR and transported in accordance with the Virginia regulations governing the Transportation of Hazardous Materials. DRPT will continue coordination with the DEQ and the Virginia Department of Labor and Industry during final design, after funding becomes available and incremental improvements are scheduled. See Sections 5.5 and 5.18 of the Final EIS.
72. Any use of lead-based paints during construction will be performed in accordance with Occupational Safety and Health Administration (OSHA) regulations and with the Virginia Lead-Based Paint Activities Rules and Regulations.

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Occupational Safety and Health Administration (OSHA) regulations and with the Virginia Lead-Based Paint Activities Rules and Regulations. For additional information regarding these requirements, contact the Department of Professional and Occupational Regulation at (804) 367-8500.

5(c) Petroleum Contamination. In accordance with Virginia Code §§ 62.1-44.34.8 through 9 and 9 VAC 25-580-10 *et seq.* contact the appropriate DEQ Regional Office (NRO 703-583-3800, PRO 804-527-5020) if evidence of a petroleum release is discovered during construction of this project.

5(d) Petroleum Storage Tanks Installation and operation or the relocation/removal of any regulated petroleum storage tank(s) either AST or UST must also be conducted in accordance with the Virginia Regulations 9 VAC 25-91-10 *et seq.* and / or 9 VAC 25-580-10 *et seq.* Tank registration may be accomplished by contacting the appropriate DEQ Regional Office (NRO 703-583-3800, PRO 804-527-5020) for additional details.

6. Natural Heritage and Recreational Resources. Contact DCR DNH (Robbie Rhur 804-371-2594) with questions regarding DCR's site-specific recommendations laid out in the Environmental Impacts and Mitigation Section 6(c) and 7(c). Coordinate with Synthia Waymack at synthia.wymack@dcr.virginia.gov to fully understand the requirements of conversion of LWCF properties.

Contact DCR DNH, Rene Hypes at (804) 371-2708, to secure updated information on natural heritage resources if the scope of the project changes and/or six months has passed before the project is implemented, since new and updated information is continually added to the Biotics Data System.

7. State Parks. Coordinate with the State Parks Division Director (Craig Seaver, Craig.Seaver@dcr.virginia.gov) regarding potential impacts to State Parks.

8. Historic and Archaeological Resources. The FRA should continue to coordinate the project with DHR, as necessary, to ensure compliance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR 800. Contact DHR (Roger Kirchen at 804-482-6091 or Roger.Kirchen@dhr.virginia.gov) regarding coordination.

9. Public Water Supply, Sanitary Sewer Distribution Systems and On-Site Sewage Systems. Potential impacts to public water distribution systems or sanitary sewage collection systems must be verified by the local utility. Contact VDH, Arlene Fields Warren with questions (804-864-7781).

Coordinate with the local health department to submit an application should relocation of any onsite sewage systems be necessary due to construction. Local health department contact information is available at the following webpage:
<http://www.vdh.virginia.gov/local-health-districts/>.

VIRGINIA DEQ (continued)

(Response to comment 72 on previous page)

- 73. Any environmental release (e.g., petroleum, hydraulic fluids, etc.) during construction will be immediately remediated on-site and the appropriate DEQ Regional Office will be contacted.
- 74. The installation and operation or the relocation/removal of any regulated petroleum storage tanks (above ground or underground) during construction will be conducted in accordance with Virginia Regulations 9 VAC 25-91-10 *et seq.* and/or 9 VAC 25-580-10 *et seq.*
- 75. See responses to DRPT-numbered statements #26, #36, #37 and #38.
- 76. DRPT will continue to coordinate with the Department of Conservation and Recreation – State Parks Division, through final design, after funding becomes available and incremental improvements are scheduled.
- 77. DRPT will continue to coordinate with DHR to ensure compliance with requirements of Section 106 of the National Historic Preservation Act. DRPT received notification from DHR under separate cover; refer to DHR's letter, which is included as part of the agency responses in the Final EIS.
- 78. Final confirmation of all public utilities will be performed during the final design phase of the Project, after funding becomes available and incremental improvements are scheduled.



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10. Open Space. Contact the VOF (Brian Fuller, 434-906-0879) for additional coordination regarding the preservation of existing open-space easements if Build Alternative 3C is ultimately chosen for Area 3.

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11. Chesapeake Bay Preservation Areas. The project must satisfy the applicable Chesapeake Bay Preservation Act (Virginia Code 62.1-44.15 *et seq.*) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830 *et seq.*) (Regulations). Section 9VAC25-830-150 of the Regulations exempt railroads and their appurtenant structures on the condition that the construction, installation, operation and maintenance of such railroads and structures are in accord with the following:

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1. Regulations promulgated pursuant to the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act;
2. An erosion and sediment control plan and a stormwater management approved by the Virginia Department of Environmental Quality and
3. Local water quality protection criteria at least as stringent as the above state requirements.

Contact the DEQ Office of Local Government Assistance Programs Daniel Moore (804-698-4520) with questions.

12. Fairfax County. Coordinate with the Fairfax County Department of Planning and Zoning (Erin Haley, 703-324-1380) regarding the comments and recommendations outlined in the Environmental Impacts and Mitigation Section 14(a)(i) and 14(a)(iii).

81

Coordinate with the Fairfax County Park Authority Easement Coordinator (703-324-8741) to obtain an application for a Right of Entry License, Easement, and/or Construction Permit, as necessary, for access to Park Authority owned property.

Contact Andy Galusha (Senior Landscape Architect, 703-324-8755) with questions regarding the Fairfax County Park Authority's comments, recommendations, and requirements found in the Environmental Impacts and Mitigation Sections 14(a)(ii), 14(a)(iv), and 14(a)(v).

13. Town of Ashland. Coordinate with the Town of Ashland Town Manager (Joshua Farrar, 804-798-9219) regarding the Town's extensive comments and recommendations related to the proposed Build Alternatives within Area 5 of the project corridor.

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14. Federal Consistency. The FRA must submit a Federal Consistency Determination pursuant to the Coastal Zone Management Act (CZMA) of 1972, as amended (16 USCA, CZMA § 307, § 1456(c)(3)(A)) and its implementing federal consistency regulations (15 CFR Part 930, subpart C). Coordinate directly with OEIR for the

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VIRGINIA DEQ (continued)

79. Build Alternative 3C - Add Two-Track Bypass (East of Fredericksburg) was not selected as part of the Preferred Alternative. (refer to Final EIS Section 4.3.3 for details). For Area 3, the Preferred Alternative is Alternative 3B: Add One Track East of Existing.

80. The DC2RVA Project is conditionally exempt from the Chesapeake Bay Preservation Act regulations. All construction will be in accordance with erosion and sediment control requirements and water quality protection criteria (see DRPT-numbered statements #66, #67 and #68 above).

81. See responses to DRPT-numbered statements #52 through #55.

82. DRPT coordinated with the Town of Ashland throughout selection of the Preferred Alternative of the Final EIS. Refer to DRPT-numbered statements #142 through #197 for responses to comments submitted by the Town.

83. As part of final design after funding becomes available and incremental improvements are scheduled, the sponsoring agency will submit a Federal Consistency Determination for the recommended Preferred Alternative that analyzes the coastal effects of the Project in light of the enforceable policies of the Virginia CZMA program and provides commitment to comply with those policies.

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submittal of FCDs. Information on document submission is available at <http://www.deq.virginia.gov/Programs/EnvironmentalImpactReview/DocumentSubmissions.aspx>. Information on FCDs is available at <http://www.deq.virginia.gov/Programs/EnvironmentalImpactReview/FederalConsistencyReviews.aspx>

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CONCLUSION

Thank you for the opportunity to review and respond to the Tier II Draft Environmental Impact Statement for the Washington, D.C. to Richmond Southeast High Speed Rail Project. Detailed comments of reviewing agencies are attached for your review. Please contact me at (804) 698-4204 or Janine Howard at (804) 698-4299 for clarification of these comments.

Sincerely,


Bettina Rayfield, Program Manager
Environmental Impact Review

Ec:

- Robbie Rhur, DCR
- Amy Ewing, DGIF
- Keith Tignor, VDACS
- Arlene Fields Warren, VDH
- Roger Kirchen, DHR
- Greg Evans, DOF
- Tony Watkinson, VMRC
- Elizabeth Jordan, VDOT
- Martha Little, Virginia Outdoors Foundation
- Denise James, Fairfax County
- Joseph Casey, Chesterfield County
- Charles Culley, Caroline County
- Mark Taylor, Spotsylvania County
- Thomas Foley, Stafford County
- Justin Patton, Prince William County
- Mark Olinger, City of Richmond
- Timothy Baroody, City of Fredericksburg
- Mark Schwartz, Arlington County
- John Vitoulkas, Henrico County
- Cecil R. Harris Jr., Hanover County
- Joshua, Farrar, Town of Ashland
- Bob Sisson, City of Fairfax

VIRGINIA DEQ (continued)

(Response to comment 83 on previous page)

VIRGINIA DEQ (continued)

(No comments on this page)

DC2RVA Southeast High Speed Rail DEIS
17-134F

Attachment A: Complete Comments Submitted on DC2RVA DEIS

Howard, Janine (DEQ)

From: Zegler, Hannah (DEQ)
Sent: Wednesday, October 25, 2017 11:17 AM
To: Howard, Janine (DEQ); Gavan, Larry (DEQ)
Subject: RE: NEW PROJECT FRA DC to Richmond Rail 17-134F

Yep!

84

From: Howard, Janine (DEQ)
Sent: Wednesday, October 25, 2017 11:16 AM
To: Zegler, Hannah (DEQ) <Hannah.Zegler@deq.virginia.gov>; Gavan, Larry (DEQ) <Larry.Gavan@deq.virginia.gov>
Subject: RE: NEW PROJECT FRA DC to Richmond Rail 17-134F

Thanks! Would the language for the VAR10 permit be appropriate to include as well?

3(b)(ii) General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities (VAR10). The operator or owner of a construction activity involving land disturbance of equal to or greater than 1 acre is required to register for coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities and develop a project specific stormwater pollution prevention plan (SWPPP). The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the SWPPP must address water quality and quantity in accordance with the Virginia Stormwater Management Program (VSMP) Regulations. General information and registration forms for the General Permit are available at www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx.

Janine Howard
Environmental Impact Review Coordinator

Office of Environmental Impact Review
Division of Environmental Enhancement
Virginia Department of Environmental Quality
629 E. Main Street
Richmond, VA 23219

t: (804) 698-4299
f: (804) 698-4032

For program updates and public notices please subscribe to the [OEIR News Feed](#)

From: Zegler, Hannah (DEQ)
Sent: Wednesday, October 25, 2017 11:06 AM
To: Howard, Janine (DEQ); Gavan, Larry (DEQ)
Subject: RE: NEW PROJECT FRA DC to Richmond Rail 17-134F

CSX still has AS&S.
Your statement looks good. I've highlighted one section to show that railroads can pretty much cover anything under their AS&S.

VIRGINIA DEQ (continued)

84. The content on this page is included in Section 3 (“Erosion and Sediment Control and Stormwater Management”) of DEQ’s main letter. Refer to DRPT-numbered statements #8 through #11.

VIRGINIA DEQ (continued)

(Response to comment 84 on previous page)

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From: Howard, Janine (DEQ)
Sent: Wednesday, October 25, 2017 11:02 AM
To: Gavan, Larry (DEQ) <Larry.Gavan@deq.virginia.gov>; Zegler, Hannah (DEQ) <Hannah.Zegler@deq.virginia.gov>
Subject: FW: NEW PROJECT FRA DC to Richmond Rail 17-134F

Hannah and Larry,

I'd like your input on this project. The proposal is for new rail lines on a 123-mile existing rail corridor that is owned by CSX Transportation, Inc. Bypass options around Ashland and Fredericksburg will require new ROW if chosen. The project is a joint state and federal venture undertaken by the Federal Rail Administration and the Virginia Department of Rail and Public Transportation. My understanding is that both federal and state funding will be utilized and the project will be implemented incrementally, with an in service date of 2025. The condensed executive summary for the project is available at the link below.

The latest spreadsheet that I have from Hannah shows that CSX has approved AS&S. However, since many years will pass before any construction happens I thought I'd use the below language. Let me know if this is correct/appropriate for this project.

(i) Erosion and Sediment Control Annual Specifications and Stormwater Management. In accordance with §62.1-44.15 *et seq.*, electric, natural gas and telephone utility companies, interstate and intrastate natural gas pipeline companies, and railroad companies shall, and authorities created pursuant to § 15.2-5102 may, file general erosion and sediment control standards and specifications annually with DEQ for review and approval. Such standards and specifications shall be consistent with the requirements of this article and associated regulations and the Erosion and Sediment Control Law and Stormwater Management Act (§ 62.1-44.15:24 *et seq.*) and associated regulations where applicable. The specifications shall apply to:

- Construction, installation, or maintenance of electric transmission, natural gas, and telephone utility lines and pipelines, and water and sewer lines; and
- Construction of the tracks, rights-of-way, bridges, communication facilities, and other related structures and facilities of the railroad company.

(ii) Erosion and Sediment Control Site-Specific Plans. The owner is responsible for the development, review, and approval of a site-specific erosion and sediment control (ESC) plan in accordance with the approved erosion and sediment control standards and specifications. All regulated land-disturbing activities associated with the project/site, including on and off site access roads, staging areas, borrow areas, stockpiles, and soil intentionally transported from the project, must be covered by the site-specific ESC plan.

(iii) Stormwater Management Site-Specific Plans. The owner is responsible for the development, review, and approval of a site-specific stormwater management (SWM) plan in accordance with the approved standards and specifications.

Also, some of the alternative include either renovation of existing train stations or construction of new stations. Would the AS&S cover land disturbance associated with station construction (i.e. do stations count as "other related structures and facilities of the railroad company"?)

Thanks,

Janine Howard
 Environmental Impact Review Coordinator

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR PROGRAM COORDINATION

ENVIRONMENTAL REVIEW COMMENTS APPLICABLE TO AIR QUALITY

TO: Janine L. Howard DEQ - OEIA PROJECT NUMBER: DEQ #17-134F

PROJECT TYPE: STATE EA / EIR FEDERAL EA / EIS SCC
 CONSISTENCY DETERMINATION

PROJECT TITLE: DC to Richmond Southeast High Speed Rail

PROJECT SPONSOR: Federal Railroad Administration

PROJECT LOCATION: OZONE ATTAINMENT, MAINTENANCE & NONATTAINMENT AND EMISSION CONTROL AREA FOR NOX & VOC

REGULATORY REQUIREMENTS MAY BE APPLICABLE TO: CONSTRUCTION
 OPERATION

STATE AIR POLLUTION CONTROL BOARD REGULATIONS THAT MAY APPLY:

1. 9 VAC 5-40-5200 C & 9 VAC 5-40-5220 E – STAGE I
2. 9 VAC 5-45-760 et seq. – Asphalt Paving operations
3. 9 VAC 5-130 et seq. – Open Burning
4. 9 VAC 5-50-60 et seq. Fugitive Dust Emissions
5. 9 VAC 5-50-130 et seq. - Odorous Emissions; Applicable to _____
6. 9 VAC 5-60-300 et seq. – Standards of Performance for Toxic Pollutants
7. 9 VAC 5-50-400 Subpart _____, Standards of Performance for New Stationary Sources, designates standards of performance for the _____
8. 9 VAC 5-80-1100 et seq. of the regulations – Permits for Stationary Sources
9. 9 VAC 5-80-1605 et seq. Of the regulations – Major or Modified Sources located in PSD areas. This rule may be applicable to the _____
10. 9 VAC 5-80-2000 et seq. of the regulations – New and modified sources located in non-attainment areas
11. 9 VAC 5-80-800 et seq. Of the regulations – State Operating Permits. This rule may be applicable to _____

COMMENTS SPECIFIC TO THE PROJECT:

All precautions are necessary to restrict the emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO_x) in some of the affected counties during construction. (Arlington, Fairfax, Prince William, Spotsylvania, Stafford, Alexandria, Fredericksburg, Henrico, & Hanover, Richmond)



(Kotur S. Narasimhan)
Office of Air Data Analysis

DATE: September 13, 2017

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VIRGINIA DEQ (continued)

85. The content on this page is included in Section 4 (“Air Pollution Control”) of DEQ’s main letter. Refer to DRPT-numbered statements #13 through #18.

VIRGINIA DEQ (continued)

86. The content on this page is included in the sections of DEQ's main letter. Refer to DRPT-numbered statements in the following sections: Section 5 (DRPT-numbered statements #19 through #24) for hazardous materials and waste; Section 4 (DRPT-numbered statements #14 through #18) for air pollution control; Section 1 for water quality and wetlands (DRPT-numbered statements #2 through #4); and Section 3 (DRPT-numbered statements #8 through #12) for Erosion and Sediment Control and Stormwater Management.

Howard, Janine (DEQ)

From: Burstein, Daniel (DEQ)
Sent: Friday, October 06, 2017 1:08 PM
To: Howard, Janine (DEQ)
Subject: Re: Federal Railroad Administration: DC to Richmond Southeast High Speed Rail Project, DEQ #17-134F - Review

NRO comments regarding the Draft EIS for the Federal Railroad Administration: DC to Richmond Southeast High Speed Rail Project, DEQ #17-134F, located in the City of Fredericksburg, and Caroline, Spotsylvania, Stafford, Prince William, Fairfax, and Arlington Counties, Virginia are as follows:

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Land Protection Division – The project manager is reminded that if any solid or hazardous waste is generated/encountered during construction, the project manager would follow applicable federal, state, and county regulations for their disposal.

Air Compliance/Permitting - The project manager is reminded that during the construction phases that occur with this project; the project is subject to the Fugitive Dust/Fugitive Emissions Rule 9 VAC 5-50-60 through 9 VAC 5-50-120. In addition, should any open burning or use of special incineration devices be employed in the disposal of land clearing debris during demolition and construction, the operation would be subject to the Open Burning Regulation 9 VAC 5-130-10 through 9 VAC 5-130-60 and 9 VAC 5-130-100.

Virginia Water Protection Permit (VWPP) Program – According to the submission, impacts to surface waters will be necessary. DEQ VWP staff recommends that the avoidance and minimization of surface water impacts to the maximum extent practicable as well as coordination with the US Army Corps of Engineers. Upon receipt of a Joint Permit Application for the proposed surface water impacts, DEQ VWP Permit staff will review the proposed project in accordance with the VWP permit program regulations and current VWP permit program guidance.

Erosion and Sediment Control and Storm Water Management: DEQ has regulatory authority for the Virginia Pollutant Discharge Elimination System (VPDES) programs related to municipal separate storm sewer systems (MS4s) and construction activities. Erosion and sediment control measures are addressed in local ordinances and State regulations. Additional information is available at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement.aspx>. Non-point source pollution resulting from this project should be minimized by using effective erosion and sediment control practices and structures. Consideration should also be given to using permeable paving for parking areas and walkways where appropriate, and denuded areas should be promptly revegetated following construction work. If the total land disturbance exceeds 10,000 square feet, an erosion and sediment control plan will be required. Some localities also require an E&S plan for disturbances less than 10,000 square feet. A stormwater management plan may also be required. For any land disturbing activities equal to one acre or more, you are required to apply for coverage under the VPDES General Permit for Discharges of Storm Water from Construction Activities. The Virginia Stormwater Management Permit Authority may be DEQ or the locality.

Daniel Burstein
 Regional Enforcement Specialist, Senior II
 Virginia Department of Environmental Quality
 Northern Virginia Regional Office
 13901 Crown Court
 Woodbridge, VA 22193



MEMORANDUM

TO: Janine Howard, DEQ/EIR Environmental Program Planner
FROM: Katy Dacey, Division of Land Protection & Revitalization Review Coordinator
DATE: October 3, 2017
COPIES: Sanjay Thirunagari, Division of Land Protection & Revitalization Review Manager; file
SUBJECT: Environmental Impact Review: EIR Project No 17-134F DC to Richmond Southeast High Speed Rail, Cities of Richmond and Fredericksburg, Chesterfield, Henrico, Hanover, Caroline, Spotsylvania, Stafford, Prince William, Fairfax and Arlington Counties, VA

The Division of Land Protection & Revitalization (DLPR) has completed its review of the September 2017 Draft EIR for the DC to Richmond Southeast High Speed Rail project located within the Cities of Richmond and Fredericksburg and the Counties of Chesterfield, Henrico, Hanover, Caroline, Spotsylvania, Stafford, Prince William, Fairfax and Arlington in Virginia

Project Scope: construction of a passenger rail service and infrastructure improvements to north-south travel corridor between Washington, DC and Richmond, VA

This submittal indicated that solid and hazardous waste issues were addressed and that a search of Federal and State environmental databases was conducted. DLPR staff with Geographical Information Systems conducted a 1000-foot radius search of Hazardous Waste, RCRA Corrective Action, Federal Facilities, Solid Waste, Virginia Remediation Program and Petroleum Release databases for sites along the entire project corridor in Virginia. DLPR staff identified four-hundred one sites within the search parameters which may impact the project activity. DLPR staff has reviewed the submittal and offers the following comments:

Hazardous Waste/RCRA Facilities – thirty-nine in close proximity to project corridor

EPA ID	RCRA/Hazardous Waste	Address	City	State	Zip Code	Status
VAD881039781	ALEXANDRIA MOTOR EQUIPMENT DIV	3650 WHEELER AVE	ALEXANDRIA	VA	22304	SOQ
VAD040567621	ALLEN DON SERVICE CENTER	5404 EISENHOWER AVE	ALEXANDRIA	VA	22304	SOQ
VAR000501866	ANC RENTAL CORP.	1200 N FAYETTE ST.	ALEXANDRIA	VA	22314	SOQ
VAD882670335	BEST AUTO BODY	5635 S VAN DORN ST	ALEXANDRIA	VA	22310	SOQ
VAD888222345	EAST COAST TRANSMISSION	5316 EISENHOWER AVE	ALEXANDRIA	VA	22304	SOQ

VIRGINIA DEQ (continued)

87. through 93. DRPT appreciates the list of hazardous materials sites provided by DLPR. The extent of DLPR’s list (401 sites) is comparable to the number of sites identified in Section 3.5.3 of the Draft EIS that have the potential to affect the Project, i.e. 484 sites, including CERCLA, potential or known hazardous material releases/contamination, and petroleum release sites. Section 5.5 of the Final EIS lists those sites which are within the permanent Limits of Disturbance (LOD) of the Preferred Alternative; updated mapping of critical hazardous materials sites in relation to that LOD are included in Appendix M.

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VIRGINIA DEQ (continued)

(For response to comments 87 through 93, refer to page B-102)

VAD04948835	DESIGN & PRODUCTION INC	5312 EISENHOWER AVE	ALEXANDRIA	VA	22304	SGQ
VAR000527937	ENTERPRISE HOLDINGS	4700 EISENHOWER AVENUE	ALEXANDRIA	VA	22304	SGQ
VAD086357258	EXHIBITS UNLIMITED INC	4306 WHEELER AVE	ALEXANDRIA	VA	22304	SGQ
VAD988171518	FEDERAL EXPRESS CORP	1200 N FAYETTE ST	ALEXANDRIA	VA	22314	SGQ
VAD892696676	GALLERY PRODUCTIONS INC	5180 EISENHOWER AVE	ALEXANDRIA	VA	22304	SGQ
VAR000525113	HANLIN AUTO T/A AUTO CRAFT BODY & PAINT COMPANY	6009 FARRINGTON AVENUE	ALEXANDRIA	VA	22304	SGQ
VAR000008805	OTIS ELEVATOR CO	2916 BUSINESS CTR DR	ALEXANDRIA	VA	22314	SGQ
VAD98111842	SYSTEMS MAINTENANCE BUILDING	195 TELEGRAPH RD	ALEXANDRIA	VA	22314	SGQ
VAD982570865	TRAFFIC CONTROL OPERATIONS	1505 POWHATAN ST	ALEXANDRIA	VA	22314	SGQ
VAD003126919	HERALD PROGRESS	112 THOMPSON ST	ASHLAND	VA	23005	SGQ
VAD980714703	NUSTAR TERMINALS OPERATIONS PARTNERSHIP L.P.	18000 COCKPIT POINT RD	CUMFRIES	VA	22026	SGQ
VAR000509067	AIRJET INC.	3000 MINE ROAD BLDG G	FREDERICKSBURG	VA	22408	SGQ
VAD982574667	ARTELEGO INC	109 DEACON RD	FREDERICKSBURG	VA	22405	SGQ
VAR000004200	CVS OF DC AND VA INC.	500 LANSDOWNE RD	FREDERICKSBURG	VA	22408	LQG
VAD988196747	OILFIELD PIPE AND SUPPLY INC.	10780 OLD WASHINGTON HWY	GLEN ALLEN	VA	23060	SGQ
VAD981045537	ALEXANDRIA METAL FINISHERS	9418 GUNSTON COVE RD	LORTON	VA	22079	LQG
VAD981113277	SWEDISH SERVICES INC	8249-C BACKLICK RD	LORTON	VA	22079	SGQ
VAD052358623	KJI, INC. (formerly Keller Ladders Inc.)	16174 INDUSTRIAL DR	MILFORD	VA	22514	Corrective Action
VAD982696551	CARTER PRINTING CO	2027 N HAMILTON ST	RICHMOND	VA	23230	SGQ
VAD003114337	CRENSHAW CORP	1700 COMMERCE DR	RICHMOND	VA	23224	SGQ
VAD000820654	CSX TRANSPORTATION INC.	1 CSX RCAD	RICHMOND	VA	23230	SGQ
VAR000508382	CSX TRANSPORTATION INC.	8300 SHELL RD	RICHMOND	VA	23231	SGQ
VAD09905137	DUPONT SPRUANCE PLANT	5431 JEFFERSON DAVIS HWY	RICHMOND	VA	23234	LQG
VAD981937386	DEPT OF GEN SVCS CITY OF RICHMOND	2901 N BOULEVARD	RICHMOND	VA	23230	SGQ
VAD04960811	GRAND EAGLE SERVICES	1001 EAST 4TH ST	RICHMOND	VA	23224	SGQ
VADC23916505	NASH W W & SONS INC	1430 BROOK RD	RICHMOND	VA	23220	SGQ
VAD058900336	RICHMOND TERMINAL	204 EAST FIRST ST	RICHMOND	VA	23224	SGQ
VAR000519678	PPD DEVELOPMENT LLC	2200 TOMLYNN ST	RICHMOND	VA	23230	LQG
VAD086293719	FEC BIOREMEDIATION FACILITY	200 MAURY STREET	RICHMOND	VA	23224	Corrective Action
VAR000508630	AUTOFLEET SERVICE & AUTO COSMETICS	15045 FARM CREEK DR	WOODBIDGE	VA	22191	SGQ
VAD988198271	AMOCO #60015-TANKS	13400 JEFFERSON DAVIS HWY	WOODBIDGE	VA	22191	SGQ
VAR000521831	CVS PHARMACY #1404	13500 JEFFERSON DAVIS HWY	WOODBIDGE	VA	22191	LQG
VAD982675415	DOMINIONX PAY INC	14847 PERSISTENCE D	WOODBIDGE	VA	22191	SGQ
VAD981939636	GOODYEAR AUTO SERVICE CENTER	13701 JEFFERSON DAVIS HWY	WOODBIDGE	VA	22191	SGQ

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CERCLA Sites – seven in the same zip codes of the project corridor

EPA ID	Site Name	Address	City	State	Zip Code	Status
VAD020312013	Richmond, Fredericksburg & Potomac Railroad	Jefferson Davis & Hume	Alexandria	VA	22301	Not on NPL
VAD988201976	Alexandria Town Gas & Oronoco Outfall	Oronoco Street	Alexandria	VA	22314	Not on NPL

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VIRGINIA DEQ (continued)

(For response to comments 87 through 93, refer to page B-102)

VAD980714877	FMC Corp Spotsylvania City Industrial Park	US Route 17	Spotsylvania	VA	22408	Not on NPL
VA0000100099	White Oak Landfill	VA Route 218	White Oak	VA	22401	Not on NPL
VAN000306717	Charles City Road Illegal Drum Dump	2401 Charles City Road	Henrico	VA	23231	Not on NPL
VAN000305915	Chesapeake Bio-Fuel Company	1638 E. Commerce Street	Richmond	VA	23224	Not on NPL
VA7210020981	USA Woodbridge Research Facility	Dawson Beach Road	Woodbridge	VA	22191	Not on NPL

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The above information related to hazardous wastes, RCRA/CERCLA sites can be accessed from EPA's websites at <https://www3.epa.gov/enviro/>, <https://rcrainfopreprod.epa.gov/rcrainfoweb/action/main-menu/view> and <https://www.epa.gov/superfund>

Formerly Used Defense Sites (FUDS) – none in close proximity to project corridor

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Solid Waste – five in close proximity to project corridor

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Permit Number	Facility Name	Address	City	State	Zip Code	Status
SWP592	Aqua Clean Environmental of Virginia	710 Hospital St	Richmond	VA	23219	Closed
SWP296	E I du Pont de Nemours & Company - Spruance Plant	5401 Jefferson Davis Hwy	Richmond	VA	23234	Closed CDD Landfill
SWP079	E I du Pont de Nemours & Company - Spruance Plant	5401 Jefferson Davis Hwy	Richmond	VA	23234	Closed Industrial Landfill
SWP121	E I du Pont de Nemours & Company - Spruance Plant	5401 Jefferson Davis Hwy	Richmond	VA	23234	Closed Industrial Landfill
SWP225	E I du Pont de Nemours & Company - Spruance Plant	5401 Jefferson Davis Hwy	Richmond	VA	23234	Closed Industrial Landfill

Virginia Remediation Program (VRP) – ten in close proximity to project corridor

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VRP ID	Site Name	Address	City	State	Zip Code	Type
VRP00241	Alexandria Town Gas	Oronoco Street	Alexandria	VA	22314	MGP
VRP00184	Carlyle-Block B (Formerly Block A, B, & C)	2099 Jamieson Avenue	Alexandria	VA	22314	Rail Yard
VRP00334	Arlington Industrial Property - North Tract	Old Jefferson Davis Highway	Arlington	VA	22202	Industry
VRP00560	Davis Industries Site (former)	311 Sixth Street South	Arlington	VA	22202	Industry
VRP00608	Long Bridge Park - Aquatics Center	475, 333, & 355 Long Bridge Drive	Arlington	VA	22202	Industry
VRP00257	General Products Company	3000 Mine Road	Fredericksburg	VA	22408	Industry
VRP00258	After Hours Formalwear, Inc.	3215 Williamsburg Road	Richmond	VA	23223	Dry Cleaner
VRP00395	VCU Social Services Parcel	1400 Oliver Hill Parkway	Richmond	VA	23219	Rail Yard
VRP00573	Richmond City Garage Complex	2905 North Boulevard	Richmond	VA	23230	Other
VRP00488	Station Plaza Shopping Center	13408-13450 Jefferson Davis Highway	Woodbridge	VA	22191	Dry Cleaner

Petroleum Releases – three hundred forty within the project corridor *Highlighted fields denote same address

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VIRGINIA DEQ (continued)

(For response to comments 87 through 93, refer to page B-102)

PC Number	Site Name	Address	City	State	Zip Code	Release Date	Status
19910720	C and P Telephone	115 S Floyd St	Alexandria	VA	22304	11/16/1990	Closed
20073074	Ingebretson Charles Property	120 E Walnut St	Alexandria	VA	22301	10/6/2006	Closed
19891602	Washington Cold Storage Associates	1200 First St	Alexandria	VA	22314	5/25/1989	Closed
20003320	Federal Express Facility	1200 N Fayette St	Alexandria	VA	22314	4/14/2000	Closed
19891447	Federal Express	1200 N Fayette St	Alexandria	VA	22314	5/5/1989	Closed
20163141	Q Market Center	1200 N Henry St Ste A	Alexandria	VA	22314	1/27/2016	Closed
19993295	Crowder Property	1219 First St	Alexandria	VA	22314	3/11/1999	Closed
20053162	Public Broadcasting Service	1320 Braddock Pl	Alexandria	VA	22314	12/22/2004	Closed
19954130	Alexandria City Motor Equipment Division	133 S Quaker Ln	Alexandria	VA	22314	12/1/1994	Closed
20093175	Future T and ES RCPA Maintenance Facility	133 S Quaker Ln	Alexandria	VA	22314	4/14/2009	Closed
19890896	Oliver Carr Company	1930 Diagonal Rd	Alexandria	VA	22314	2/7/1989	Closed
19930571	WMATA	195 Telegraph Rd	Alexandria	VA	22314	9/17/1992	Closed
19920309	US Post Office - Alexandria Vehicle Maintenance	2300 Duke St	Alexandria	VA	22314	8/1/1991	Closed
19900462	USPS - Alexandria Vehicle Maintenance	2300 Duke St	Alexandria	VA	22314	10/16/1989	Closed
20003367	USPS Alexandria Vehicle Maintenance Facility	2300 Duke St	Alexandria	VA	22314	5/31/2000	Closed
19973027	Central Properties	2350 Duke St	Alexandria	VA	22314	9/4/1996	Closed
19973183	Commonwealth Atlantic Properties	2400 Duke St	Alexandria	VA	22314	5/2/1997	Closed
19901730	Jensen Manufacturing	2644 Duke St	Alexandria	VA	22314	6/7/1990	Closed
19911942	RF and P Train Derailment - KOH	2801 Jefferson Davis Hwy	Alexandria	VA	22301	6/23/1991	Closed
19820331	RF&P Potomac Yard Train Wreck	2801 Jefferson Davis Hwy	Alexandria	VA	22301	11/2/1981	Closed
20133083	DASH Alexandria Transit Authority	3000 Business Center Dr	Alexandria	VA	22314	10/20/2012	Closed
20013039	Jones Roofing Company Incorporated	3124 Colvin St	Alexandria	VA	22314	8/18/2000	Closed
19901502	Alexandria City Public School Maintenance	3540 Wheeler Ave	Alexandria	VA	22304	5/2/1990	Closed
20013080	Alexandria City Motor Equipment Division	3550 Wheeler Ave	Alexandria	VA	22304	10/19/2000	Closed
19920113	Alexandria City	3550 Wheeler Ave	Alexandria	VA	22304	7/18/1991	Closed
20173027	EZ Storage Wheeler Land LLLP Property	3640-3642 Wheeler Ave	Alexandria	VA	22314	7/27/2016	Closed
19940121	Construction Service Association	3650 Wheeler Ave	Alexandria	VA	22304	7/22/1993	Closed
20033067	Braddock Road Service Center former	401 E Braddock Rd	Alexandria	VA	22313	10/1/2002	Closed
19922176	Duke Shirley	4116 Wheeler Ave	Alexandria	VA	22304	5/22/1992	Closed
20043038	Claremont Business Center	4536-4598 Eisenhower Ave	Alexandria	VA	22304	8/27/2003	Closed
19880941	Bekins Moving and Storage	4604 Eisenhower Ave	Alexandria	VA	22304	5/11/1988	Closed
19910160	Carey Winston Company	5150 Eisenhower Ave	Alexandria	VA	22304	8/1/1990	Closed
20063075	Fitzgerald and Hartselle LLC Property	5409A Vine St	Alexandria	VA	22310	9/30/2005	Closed
19900664	William B Hopke Company	5421 Vine St	Alexandria	VA	22310	11/30/1989	Closed
19911031	William B Hopke Company	5421 Vine St	Alexandria	VA	22310	1/16/1990	Closed
19963041	VDOT - Alexandria City	5500 Clermont Dr	Alexandria	VA	22304	9/18/1995	Closed

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VIRGINIA DEQ (continued)

(For response to comments 87 through 93, refer to page B-102)

19993283	Wayne Insulation	5509 Vine St	Alexandria	VA	22310	2/19/1999	Closed
19900689	Higham Company	5513 Vine St	Alexandria	VA	22310	12/4/1989	Closed
19940426	United Parcel Service	5601 Eisenhower Ave	Alexandria	VA	22304	9/10/1993	Closed
19942090	Boyd Property	5701 Vine St	Alexandria	VA	22310	2/14/1994	Closed
19943987	Boyd William E Property	5701 Vine St	Alexandria	VA	22310	5/18/1994	Closed
19920108	United Construction Services	5800 Farrington Ave	Alexandria	VA	22304	7/18/1991	Closed
19973152	Georgia Pacific Distribution Facility	5860 Farrington Ave	Alexandria	VA	22304	3/27/1997	Closed
19930798	VDOT - Van Dorn Area Headquarters	5910 McGuln Dr	Alexandria	VA	22310	10/16/1992	Closed
20063247	McClary Tile Incorporated	5918 Farrington Ave	Alexandria	VA	22304	5/18/2006	Closed
19891618	Ryder Truck Rental - Farrington Avenue	6100 Farrington Ave	Alexandria	VA	22304	5/26/1989	Closed
19922270	Premium Distributors	6600 Fleet Dr	Alexandria	VA	22310	6/12/1992	Closed
19911468	Premium Distributors	6600 Fleet Dr	Alexandria	VA	22310	4/8/1991	Closed
19932609	DMV	Powhatan St N Henry St and Slaters Ln	Alexandria	VA	22314	6/30/1993	Closed
20023191	Plantation Pipe Line - CSX Rail Line	S Duke St and Dove St	Alexandria	VA	22314	3/13/2002	Closed
20113249	Crystal Park Condominiums	1805 Crystal Dr	Arlington	VA	22202	6/22/2011	Closed
20013073	Hyatt Regency Crystal City	2799 Jefferson Davis Hwy	Arlington	VA	22202	10/9/2000	Closed
19943037	Ready Mix former	300 S 6th St	Arlington	VA	22202	3/27/1994	Closed
19870121	Davis Industries - RF&P	311 S 6th St	Arlington	VA	22202	8/8/1986	Closed
19901416	Davis Industries - RF and P	311 S 6th St	Arlington	VA	22202	4/20/1990	Closed
20083258	North Tract Lofts Property	305 S 10th St	Arlington	VA	22202	4/24/2008	Closed
19869985	Exxon 25644	355 Old Jefferson Davis Hwy	Arlington	VA	22202	1/10/1986	Closed
19910038	Exxon 25644	355 Old Jefferson Davis Hwy	Arlington	VA	22202	5/4/1990	Closed
19920213	Exxon 25644	355 Old Jefferson Davis Hwy	Arlington	VA	22202	7/30/1991	Closed
19910928	NPS - Maintenance Yard	2700 George Washington Memorial Pkwy	Arlington	VA	22201	12/28/1990	Closed
19890460	RFP Yard	400 Blk Old Jefferson Davis Hwy	Arlington	VA	22202	10/28/1988	Closed
19911566	RF and P Facility	400 Blk Old Jefferson Davis Hwy	Arlington	VA	22202	4/24/1991	Closed
19900555	RFP Yard	400 Blk Old Jefferson Davis Hwy	Arlington	VA	22202	1/30/1990	Closed
19933399	Cardinal Concrete	450 Old Jefferson Davis Hwy	Arlington	VA	22201	6/1/1999	Closed
19911565	RF and P Facility	700 Ball St	Arlington	VA	22202	4/24/1991	Closed
19880272	MWAA - Reagan Airport - National Car Rental	Airport Entrance Rd and Smith Blvd	Arlington	VA	22202	9/21/1987	Closed
19940187	MWAA - National Car Rental	Airport Entrance Rd and Smith Blvd	Arlington	VA	22202	7/30/1993	Closed
19940186	MWAA - Ogden Tank Farm	Engineering and Maintenance Division MA120	Arlington	VA	22202	7/30/1993	Closed
19940189	MWAA - Ogden Tank Farm Lines	Engineering and Maintenance Division MA120	Arlington	VA	22202	7/30/1993	Closed
19984369	Ashland Maintenance Shop	Vaughan Rd	Ashland	VA	23005	5/11/1998	Closed

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VIRGINIA DEQ (continued)

(For response to comments 87 through 93, refer to page B-102)

20004069	Iron Horse Restaurant	100 S Railroad Ave	Ashland	VA	23005	8/10/1999	Closed
20018179	Berry John Residence	1000 Center St	Ashland	VA	23005	5/29/2001	Closed
20044109	Hodges John Residence	106 Howard St	Ashland	VA	23005	8/20/2003	Closed
20164353	Ashland Manor Apartments	110 Cox Ln	Ashland	VA	23005	2/16/2016	Closed
20034102	Franck Charles Property	11465 Cedar L	Ashland	VA	23005	9/17/2002	Closed
20124650	Randolph Macon College	115 N Railroad Ave	Ashland	VA	23005	5/23/2012	Closed
20054049	Ashland Feed Store	120 Thompson St	Ashland	VA	23005	7/21/2004	Closed
20004679	Wehman Residence	321 Duncan St	Ashland	VA	23005	6/14/2000	Closed
20104011	Randolph Macon College	505 N Center St	Ashland	VA	23005	7/27/2009	Closed
20114436	Pecora Theresa Residence	805 S Center St	Ashland	VA	23005	4/29/2011	Closed
19942343	Morris Super Market	Route 1 and 636	Ashland	VA	23005	2/28/1994	Closed
19910732	Southern International	Route 657	Ashland	VA	23005	11/20/1990	Closed
19921860	7 Eleven 19929	10121 Chester Rd	Chester	VA	23831	4/6/1992	Closed
19994053	7 Eleven 19929	10121 Chester Rd	Chester	VA	23831	8/10/1998	Closed
19974154	Rental Property	5017 Douglas Ave	Chesterfield	VA	23234	1/8/1997	Closed
19941171	CSX Transportation	Off Route 668	Claiborne	VA	22408	1/7/1994	Closed
20154458	Bohannon Edwin Property	15384 Taylorsville Rd	Doswell	VA	23047	4/28/2015	Closed
20053063	Cockpit Point Property	1285 Cherry Hill Rd	Dumfries	VA	22026	5/5/2004	Closed
19921183	Sun Oil Facility	18000 Cockpit Point Rd	Dumfries	VA	22026	1/3/1992	Closed
20013228	Dominion Possum Point Power Station	19000 Possum Point Rd	Dumfries	VA	22026	4/6/2001	Closed
19921506	Virginia Power - Possum Point	19000 Possum Point Rd	Dumfries	VA	22026	8/18/1992	Closed
19983621	Virginia Power - Possum Point	19000 Possum Point Rd	Dumfries	VA	22026	12/9/1997	Closed
19910440	VDOT - 607 Deacon Rd	607 Deacon Rd	Falmouth	VA	22405	9/24/1990	Closed
19900316	VDOT - Fredericksburg District Shop	87 Deacon Rd	Falmouth	VA	22405	9/12/1989	Closed
19993223	VDOT - Fredericksburg District Shop	87 Deacon Rd	Falmouth	VA	22405	1/8/1999	Closed
19942721	Surgicenter	223 Willow St	Fredericksburg	VA	22405	6/15/1994	Closed
19963072	VDOT - Todd Gas	123 White Oak Rd	Fredericksburg	VA	22405	11/7/1995	Closed
19911131	Todd Gas Station	123 White Oak Rd	Fredericksburg	VA	22405	2/6/1991	Closed
20063064	Sorto Baires Amilcar Property	1320 Rail Road Ave	Fredericksburg	VA	22401	9/20/2005	Closed
19993332	General Products Company Incorporated	3000 Mine Rd	Fredericksburg	VA	22408	4/19/1999	Closed
19930301	General Products Company Incorporated	3000 Mine Rd	Fredericksburg	VA	22408	8/13/1992	Closed
20183039	Wilson Real Estate Property	301 Lafayette Blvd	Fredericksburg	VA	22401	8/16/2017	Closed
20013092	Sheridan Books Incorporated	3591 Lee Hill Dr	Fredericksburg	VA	22408	10/30/2000	Closed
19954267	General Products - Frackelton Cinder Block	400 Howison Rd	Fredericksburg	VA	22401	6/13/1995	Closed
19890710	Cooper Service Station	411 Lafayette Blvd	Fredericksburg	VA	22401	12/23/1988	Closed
19973136	Perma Treat Exterminating	507 Lafayette St	Fredericksburg	VA	22401	2/18/1997	Closed
19940032	A L Bennett Funeral Home	515 Princess Anne St	Fredericksburg	VA	22401	7/8/1993	Closed
19901398	Bobs Service Center	620 Lafayette Blvd	Fredericksburg	VA	22401	4/17/1990	Closed
20023044	Atlantic Oil former	Gunnery and Dunmore Rds	Fredericksburg	VA	22401	8/15/2001	Closed

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VIRGINIA DEQ (continued)

(For response to comments 87 through 93, refer to page B-102)

20173110	Plantation Pipeline Release at Lansdowne Rd	Lansdown Rd and CSX Right of Way	Fredericksburg	VA	22401	12/14/2016	Open
19860125	General Products Well	Rte 2 and Rte 17	Fredericksburg	VA	22408	8/9/1985	Closed
20064327	Snead Linda Residence	10598 Purcell Rd	Glen Allen	VA	23060	12/9/2005	Closed
20134028	Snead Linda Residence	10598 Purcell Rd	Glen Allen	VA	23060	7/19/2012	Closed
20124148	Wilson Vera Residence	11001 Old Washington Hwy	Glen Allen	VA	23060	9/21/2011	Closed
19911107	Chisholm Site	11491 Old Washington Hwy	Glen Allen	VA	23060	1/31/1991	Closed
19911794	Glen Allen Service Center Inc	3011 Mountain Rd	Glen Allen	VA	23060	12/31/1991	Closed
19994228	Primary Corp Bickerstaff	413 Bickerstaff Rd	Henrico	VA	23231	11/2/1998	Closed
19994178	Primary Corp Bickerstaff	413 Bickerstaff Rd	Henrico	VA	23231	11/30/1998	Closed
20123150	Brandywine Auto Parts	10212 Richmond Hwy	Lorton	VA	22199	1/20/2012	Closed
20053236	Cinderbed Road Property	7820 Cinderbed Rd	Lorton	VA	22079	3/31/2005	Closed
19910871	Worthington Industries	7820 Cinderbed Rd	Lorton	VA	22079	12/12/1990	Closed
19911550	Worthington Industries	7820 Cinderbed Rd	Lorton	VA	22079	4/23/1991	Closed
20003005	AMTRAK-Auto Train Complex	8006 Lorton Rd	Lorton	VA	22079	7/12/1999	Closed
19920862	GDC Trucking	8100 Mims St	Lorton	VA	22079	11/6/1991	Closed
19932452	GDC Trucking Incorporated	8100 Mims St	Lorton	VA	22079	6/6/1993	Closed
19943192	GDC Property - Former	8100 Mims St	Lorton	VA	22079	3/31/1994	Closed
19963159	Potomac Valley Brick	8306 Cinder Bed Rd	Lorton	VA	22079	4/16/1996	Closed
19942503	US Post Office - Milford	15429 Antioch Rd	Milford	VA	22427	6/13/1994	Closed
19870477	US Postal Service - Milford	15429 Antioch Rd	Milford	VA	22427	1/13/1987	Closed
19973202	VDOT - Routes 1 and I-95 N	Routes 1 and Interstate 95 N	Lorton	VA	22079	6/4/1997	Closed
19910284	Keller Industries	16174 Industrial Dr	Milford	VA	22514	8/23/1990	Closed
20013113	Keller Ladders Incorporated	16174 Industrial Dr	Milford	VA	22514	12/4/2000	Closed
20073169	Lorton Gas Station	9308 Gunston Cove Rd	Lorton	VA	22079	12/21/2006	Closed
20003384	American Stone Mix	16326 Industrial Dr	Milford	VA	22514	6/20/2000	Closed
20013030	American Stone Mix	16326 Industrial Dr	Milford	VA	22514	6/21/2000	Closed
19983660	7001 Newington Road	7001 Newington Rd	Newington	VA	22079	1/14/1998	Closed
20093055	American Stone Facility former	7901 Cinder Bed Rd	Lorton	VA	22079	9/25/2008	Closed
20163049	WMATA Bus Maintenance Facility	7901 Cinder Bed Rd	Lorton	VA	22079	9/9/2015	Closed
19983673	R E Lee Electric Company Incorporated	8207 Backlick Rd	Newington	VA	22122	2/18/1998	Closed
19954009	Newington Concrete	8413 Terminal Rd	Newington	VA	22122	7/13/1994	Closed
19993059	Research Development Property	8417A Terminal Rd	Newington	VA	22122	8/17/1998	Closed
19910997	Waste Management Company Facility	8421 Terminal Rd	Newington	VA	22122	1/11/1991	Closed
20093090	Quantico Boots	313 Potomac Ave	Quantico	VA	22134	11/24/2008	Closed
20173462	MCB Quantico Utility Trench	69 Bauer Rd	Quantico	VA	22134	6/26/2017	Open
19949302	Quantico MCB Building 2012 Central Heating Plant	MCB Quantico	Quantico	VA	22134	10/27/1993	Closed
19973055	Quantico MCB OCS Service Station	MCB Quantico	Quantico	VA	22134	9/27/1996	Closed

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VIRGINIA DEQ (continued)

(For response to comments 87 through 93, refer to page B-102)

19954234	Quantico MCB Motor Transport Site 3231	MCB Quantico	Quantico	VA	22134	4/3/1995	Closed
19983558	Quantico MCB Building 5121 OCS Sewage Pumping Sta	MCB Quantico	Quantico	VA	22134	6/20/1997	Closed
19983644	Quantico MCB Former Fire Trng Site 14	MCB Quantico	Quantico	VA	22134	1/15/1998	Closed
19983645	Quantico MCB Aero Club Site 18	MCB Quantico	Quantico	VA	22134	1/15/1998	Closed
19983739	Quantico MCB Little Hall Parking Lot	MCB Quantico	Quantico	VA	22134	4/22/1998	Closed
20023258	Quantico MCB - Building 3254 (Main Side)	MCB Quantico	Quantico	VA	22134	6/20/2002	Closed
19891436	Quantico MCB - Newlinn Hall	MCB Quantico	Quantico	VA	22134	5/4/1989	Closed
19930108	Quantico MCB Buildings 5106B and C Aero Club	MCB Quantico	Quantico	VA	22134	7/15/1992	Closed
19930378	Quantico MCB Building 3141	MCB Quantico	Quantico	VA	22134	8/21/1992	Closed
19931911	Quantico MCB - Building 3000	MCB Quantico	Quantico	VA	22134	4/2/1993	Closed
19931912	Quantico MCB - Building 2012 - Tanks 1728, 29, 30	MCB Quantico	Quantico	VA	22134	4/2/1993	Closed
19932350	Quantico Marine Corps Base - Building 2113	MCB Quantico	Quantico	VA	22134	5/25/1993	Closed
20153037	MCB Quantico Obstacle Course	MCB Quantico	Quantico	VA	22314	8/7/2014	Closed
19994208	Sams Phillips 66	100 E Belt Blvd	Richmond	VA	23224	12/14/1998	Closed
19931160	CSX Acca Yard	1 CSX Rd	Richmond	VA	23230	1/14/1994	Closed
19932493	CSX Acca Yard	1 CSX Rd	Richmond	VA	23230	1/14/1994	Closed
19922397	Locomotive Repair Shop	1 CSX Rd	Richmond	VA	23230	6/25/1992	Closed
19964149	Taylor Residence	1000 Arizona Dr	Richmond	VA	23224	3/7/1996	Closed
19901278	Richmond Plant	1000 E 4th St	Richmond	VA	23224	3/28/1990	Closed
20064332	VCU Steam Plant	1020 N Oliver Hill Way	Richmond	VA	23219	11/17/2005	Closed
20164328	Turlington E L Jr Residence	104 Portland Pl	Richmond	VA	23221	1/21/2016	Open
20154425	108 Nicholson Street	108 Nicholson St	Richmond	VA	23231	3/16/2015	Closed
19911401	Richmond Foundry Mfg Co	1100 Hermitage Rd	Richmond	VA	23220	3/28/1991	Closed
19911861	Venable Seed Company	1103 N 17th St	Richmond	VA	23219	6/10/1991	Closed
19940384	Lone Star Richmond Truck Shop	111 N Nicholson St	Richmond	VA	23223	9/2/1993	Closed
20124425	Wellford Randolph Property	1111 N Thompson St	Richmond	VA	23230	1/18/2012	Closed
20104625	McCauley Thelma Residence	1118 Floral Ave	Richmond	VA	23224	6/7/2010	Closed
20154041	1136 Hermitage Rd Property	1136 Hermitage Rd	Richmond	VA	23220	7/17/2014	Closed
20034387	Bishop Maxene Residence	120 Barteet Rd	Richmond	VA	23224	3/26/2003	Closed
20104661	Wilkes Patsy G Residence	1200 Floral Ave	Richmond	VA	23224	6/21/2010	Closed
20114013	Watson Audrey Residence	1207 Floral Ave	Richmond	VA	23224	7/13/2010	Closed
20184042	Hanson Pipe and Products Inc - School Street	1207 School St	Richmond	VA	23220	8/16/2017	Open
20104660	Ivey Joyce Residence	1212 Floral Ave	Richmond	VA	23224	6/18/2010	Closed
20114048	Neal Neva M Residence	1218 Floral Ave	Richmond	VA	23224	8/3/2010	Closed
20114074	Blake Bridget Residence	1219 Floral Ave	Richmond	VA	23224	8/16/2010	Closed
19984222	Jefferson National Bank	130 E Belt Blvd	Richmond	VA	23224	2/13/1998	Closed
20004272	Kelleher Cooling and Heating	1301 School St	Richmond	VA	23220	11/16/1999	Closed

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(For response to comments 87 through 93, refer to page B-102)

20024233	Kelleher Corp	1301 School St	Richmond	VA	23220	2/5/2002	Closed
20014890	Hughes Residence	1307 Boroughbridge Rd	Richmond	VA	23225	3/27/2001	Closed
20014724	Poe Residence	1315 Boroughbridge Rd	Richmond	VA	23225	3/14/2001	Closed
20004176	Anderson Property	1316 Evergreen Ave	Richmond	VA	23224	9/20/1999	Closed
20114365	Stephens Johnnie M Residence	1343 Evergreen Ave	Richmond	VA	23224	3/11/2011	Closed
20124367	Allen Joseph Residence	1350 Evergreen Ave	Richmond	VA	23224	11/30/2011	Closed
20024289	Purnell Robin Residence	1355 Evergreen Ave	Richmond	VA	23224	3/12/2002	Closed
19921452	Gas Lab Annex	14 N 15th St	Richmond	VA	23219	2/20/1992	Closed
20084125	Wilson Darryl G Residence	1400 Kingswood St	Richmond	VA	23224	8/27/2007	Closed
20084123	Gladden Sylvia S Residence	1401 Kingswood St	Richmond	VA	23224	8/27/2007	Closed
20044432	Rex Lumber Company Former	1405 Valley Rd	Richmond	VA	23222	2/11/2004	Closed
20084155	Wells Alice M Residence	1406 Kingswood St	Richmond	VA	23224	9/12/2007	Closed
20084200	Jones Andrea H Property	1413 Kingswood St	Richmond	VA	23224	10/5/2007	Closed
19880205	National Linen Service	1414 Chamberlayne Ave	Richmond	VA	23222	6/20/1990	Closed
20034297	Usry Properties Building	1415 Chamberlayne Ave	Richmond	VA	23222	12/31/2002	Closed
20104098	Usry Properties Building	1415 Chamberlayne Ave	Richmond	VA	23222	9/22/2009	Closed
20094475	Town and Country Mechanical	1416 Webster St	Richmond	VA	23220	5/8/2009	Closed
20084305	Thomas Johnnie L Residence	1419 Kingswood St	Richmond	VA	23224	11/15/2007	Closed
20014019	Jackson Residence	1424 Kingwood St	Richmond	VA	23224	7/11/2000	Closed
20134537	Ranson Barbara M Residence	1426 Sunbury Rd	Richmond	VA	23224	6/14/2013	Closed
20104619	Robinson Dorothy L Residence	1436 Greystone Ave	Richmond	VA	23224	5/24/2010	Closed
20114120	Eggleston Karen Residence	1437 Greystone Ave	Richmond	VA	23224	9/24/2010	Closed
20104129	David Annette Residence	1442 Greystone Ave	Richmond	VA	23224	9/22/2009	Closed
19910435	U S Army Corp	14th and Byrd St	Richmond	VA	23219	9/9/1990	Closed
19901403	Industrial Alloy Fabricators	1501 Valley Rd	Richmond	VA	23222	4/19/1990	Closed
19911227	Industrial Alloy Fabricators Inc	1501 Valley Rd	Richmond	VA	23222	2/25/1991	Closed
20124063	Provo Debra Property	1509 Catalina Dr	Richmond	VA	23224	8/8/2011	Closed
19890028	Garretts Auto Union 76 Station	1504 N Hamilton St	Richmond	VA	23230	7/8/1988	Closed
19890914	Union 76 Station	1504 N Hamilton St	Richmond	VA	23230	11/20/1990	Closed
20084434	Garretts Auto Union 76 Station	1504 N Hamilton St	Richmond	VA	23230	2/1/2008	Closed
20004247	Southern Warehouses Inc	1510 Webster St	Richmond	VA	23220	11/4/1999	Closed
20018186	Steele Richard Residence	1517 Sunset Ln	Richmond	VA	23221	6/5/2001	Closed
19880385	Reams Coal and Oil	1520 E Marshall St	Richmond	VA	23234	12/21/1990	Closed
19994300	Martin Brothers Roofing	1531 Saint James St	Richmond	VA	23222	2/5/1999	Closed
19901117	Lovings Produce Co	1601 E Grace St	Richmond	VA	23219	2/28/1990	Closed
20044675	1607 Sunbury Road	1607 Sunbury Rd	Richmond	VA	23224	6/4/2004	Closed
20084363	Owens Alice M Residence	1607 Sunbury Rd	Richmond	VA	23224	12/17/2007	Closed
20084388	Tuck Hazel B Residence	1610 Sunbury Rd	Richmond	VA	23224	12/27/2007	Closed
19940844	Spur Station Former	1615 E Broad St	Richmond	VA	23220	11/17/1993	Closed
20084278	Robinson Jr Thurman D Residence	1616 Sunbury Rd	Richmond	VA	23224	11/8/2007	Closed
20084389	Eubanks Wilford W Residence	1619 Sunbury Rd	Richmond	VA	23224	12/27/2007	Closed

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20124141	Woodfin Oil 926	1625 N Hamilton Ave	Richmond	VA	23230	9/9/2011	Closed
20084402	Greene Jr Danver Residence	1625 Sunbury Rd	Richmond	VA	23224	11/26/2007	Closed
19964126	Little Oil Company Terminal	1638 Commerce Rd	Richmond	VA	23224	2/7/1996	Closed
19953223	Little Oil Richmond Terminal	1638 Commerce Rd	Richmond	VA	23224	5/11/1995	Closed
19974164	Little Oil Company Terminal	1638 Commerce Rd	Richmond	VA	23224	1/21/1997	Closed
19901489	Southern Fuel Oils Inc	1640 Commerce Rd	Richmond	VA	23224	5/1/1990	Closed
19911519	Richmond Flood Wall	16th and Dock St	Richmond	VA	23224	4/17/1991	Closed
19931691	Richmond Flood Wall	16th and Dock St	Richmond	VA	23224	3/4/1993	Closed
19931135	Richmond Flood Wall	16th and Dock St	Richmond	VA	23224	12/16/1992	Closed
20094493	Richmond Cold Storage - E Marshall St	1700 E Marshall St Bldg 2	Richmond	VA	23223	5/22/2009	Closed
19920810	Exxon 20077 Shockhoe Bottom	1701 E Broad St	Richmond	VA	23223	6/30/1992	Closed
20114352	Uppys 23	1701 E Broad St	Richmond	VA	23223	3/10/2011	Closed
20064100	Raven Apartments Proposed	1710 E Broad St	Richmond	VA	23223	8/22/2005	Closed
19900512	W S Pinchbeck Inc	1701 Sunbury Rd	Richmond	VA	23224	10/25/1989	Closed
19900513	W S Pinchbeck Inc	1701 Sunbury Rd	Richmond	VA	23224	10/25/1989	Closed
19900514	W S Pinchbeck Inc	1701 Sunbury Rd	Richmond	VA	23224	10/25/1989	Closed
19921871	Lee Hy Paving Corp	1721 Darbytown Rd	Richmond	VA	23231	4/7/1992	Closed
19911657	McGuire Motors Inc	1740 E Belt Blvd	Richmond	VA	23224	5/13/1991	Closed
19901443	VDOT 17th and Dock St	17th and Dock St	Richmond	VA	23219	5/25/1990	Closed
19901615	VDOT 17th and Dock St	17th and Dock St	Richmond	VA	23219	5/17/1990	Closed
20054151	Shockoe Valley Fugitive Tanks - Gaston	17th St and 195	Richmond	VA	23219	9/3/2004	Closed
20004234	Tipton Enterprises	1800 Summit Ave	Richmond	VA	23230	10/27/1999	Closed
20164400	Symbol Mattress	1814 High Point Ave	Richmond	VA	23230	3/29/2016	Closed
20134289	BC Architects Engineers Property	1850 Commerce Rd	Richmond	VA	23224	1/14/2013	Closed
19953234	Southern Brick and Supply Co Inc	1900 Roseneath Rd	Richmond	VA	23230	6/2/1995	Closed
20114292	James River Petroleum - Lubricant Storage Facility	1901 Roseneath Rd	Richmond	VA	23230	2/4/2011	Closed
19901613	Industrial Supply Corporation	1905 Westwood Ave	Richmond	VA	23227	5/16/1990	Closed
19890022	Philip Morris	19th and Cary St	Richmond	VA	23224	7/6/1988	Closed
20018076	American Legion Post 137	2 Chuckatuk Ave	Richmond	VA	23224	3/30/2001	Closed
20004367	Bowden Property	2 E Belt Blvd	Richmond	VA	23224	1/12/2000	Closed
19994119	Southside Builders Supply	20 Westover Hills Blvd	Richmond	VA	23225	10/2/1998	Closed
19964185	Southside Builders Supply	20 Westover Hills Blvd	Richmond	VA	23225	4/1/1996	Closed
19911188	Manchester Board and Paper	200 Orleans St	Richmond	VA	23231	2/15/1991	Closed
19940557	First Energy Corporation	200 Maury St	Richmond	VA	23218	6/2/1993	Closed
19940982	First Energy Corporation	200 Maury St	Richmond	VA	23218	12/1/1993	Closed
20074258	First Energy Corporation	200 Maury St	Richmond	VA	23218	10/18/2006	Closed
20074298	Kinder Morgan Southeast Terminals - Richmond Term	2000 Trenton Ave	Richmond	VA	23234	11/21/2006	Closed
19943253	McLane Construction Co	2036 Botetourt St	Richmond	VA	23220	4/4/1994	Closed
20184057	Magellan Terminals Holdings LP - Richmond Terminal	204 E First St	Richmond	VA	23224	8/10/2017	Open

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20014451	Baldwin Site	2040 Botetourt St	Richmond	VA	23220	12/27/2000	Closed
19920753	Baldwin Site	2040 Botetourt St	Richmond	VA	23220	10/22/1991	Closed
20044034	City Auto Wrecking Incorporated Former	2050 W Moore St	Richmond	VA	23220	7/16/2002	Closed
20144172	Rountree Jeff and Lisa Residence	206 Portland Pl	Richmond	VA	23221	11/6/2013	Closed
19931290	MPN Industries	2100 Commerce Rd	Richmond	VA	23234	1/5/1993	Closed
19944273	Falling Creek WWTP	2100 Station Rd	Richmond	VA	23237	6/13/1994	Closed
19984142	Falling Creek WWTP	2100 Station Rd	Richmond	VA	23237	12/30/1997	Closed
19990220	Falling Creek Wastewater Plant	2100 Station Rd	Richmond	VA	23237	7/31/1992	Closed
19990242	Michel Real Estate	2101 E Belt Blvd	Richmond	VA	23224	8/4/1992	Closed
19901797	Crewe Transfer Inc	2114 Bellemeade Rd	Richmond	VA	23224	6/20/1990	Closed
20014147	Ponn Residence	213 Plazaview Rd	Richmond	VA	23224	9/8/2000	Closed
19931651	RF and P Office Building	2134 W Laburnum Ave	Richmond	VA	23230	3/1/1993	Closed
19940615	Timlaph Property Former	217 Maury St	Richmond	VA	23224	10/12/1993	Closed
19953225	Kenan Transport Co	2201 E Belt Blvd	Richmond	VA	23224	5/22/1995	Closed
19920748	Barnes Const Co Inc	2221 E Belt Blvd	Richmond	VA	23224	10/21/1991	Closed
20074221	TenCarva Machinery	2231 E Belt Blvd	Richmond	VA	23224	10/13/2006	Closed
20084537	Dutton Jack Property	225 Plaza View	Richmond	VA	23224	3/19/2008	Closed
19891771	Ryder Truck Rental	2300 Station Rd	Richmond	VA	23234	6/19/1989	Closed
20074447	Tawes Jackie Residence	2407 Aberdeen Rd	Richmond	VA	23237	1/25/2007	Closed
19940054	Ryer Residence	2407 Breckenridge Rd	Richmond	VA	23225	7/13/1993	Closed
19974198	Ryer Residence	2407 Breckenridge Rd	Richmond	VA	23225	3/10/1997	Closed
20114142	Yeary LLC Property	2414 Breckenridge Rd	Richmond	VA	23225	9/22/2010	Closed
20054231	Totty Carolyn Residence	2419 Aberdeen Rd	Richmond	VA	23237	9/22/2004	Closed
20094237	Cecil Patricia B Property	2432 Breckenridge Rd	Richmond	VA	23225	12/4/2008	Closed
20064528	Spain Ronald Property	2507 Dwight Ave	Richmond	VA	23237	4/5/2006	Closed
19880303	McEwen Lumber Company	2508 Hermitage Rd	Richmond	VA	23230	10/1/1987	Closed
19890299	American Tobacco Co	2620 E Cary St	Richmond	VA	23223	8/1/1988	Closed
19974275	American Tobacco Co	2620 E Cary St	Richmond	VA	23223	5/15/1997	Closed
20084187	Lucky Strike Power Plant	2700 E Cary St	Richmond	VA	23223	9/27/2007	Closed
19964199	Greyhound Terminal	2910 N Boulevard	Richmond	VA	23230	5/2/1996	Closed
19920100	Greyhound Terminal	2910 N Boulevard	Richmond	VA	23230	7/16/1991	Closed
20094557	TMS Corporation	3001 E Parham Rd	Richmond	VA	23228	6/23/2009	Closed
19910630	Tarmac Ready Mix Concrete Plant	3011 Dock St	Richmond	VA	23223	10/25/1990	Closed
19942762	Tarmac Ready Mixed Concrete Plant	3011 Dock St	Richmond	VA	23223	3/10/1994	Closed
20164317	Barlow Ronald Residence	3020 Pinehurst Rd	Richmond	VA	23228	1/27/2016	Closed
19964064	Froehling and Robertson Inc	3015 Dumbarton Rd	Richmond	VA	23228	9/26/1995	Closed
19953158	Froehling and Robertson Inc	3015 Dumbarton Rd	Richmond	VA	23228	3/3/1995	Closed
20034156	Perry Kenneth Residence	3029 Kingsland Rd	Richmond	VA	23237	10/18/2002	Closed
19901282	Lehigh Portland Cement Co	3111 Water St	Richmond	VA	23223	3/29/1990	Closed
20064375	Solomon Louis Property	3131 Southside Ave	Richmond	VA	23228	1/20/2006	Closed
20164376	Fulton Gas Works	3301 Williamsburg Ave	Richmond	VA	23223	3/4/2016	Closed

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19931040	Liphart Steel Company Inc	3308 Rosedale Ave	Richmond	VA	23230	11/24/1992	Closed
20104372	Croxton Sara Residence	3418 W Franklin St	Richmond	VA	23221	1/15/2010	Closed
19920382	Penn Market Properties Ltd	3600 W Broad St	Richmond	VA	23230	6/30/1992	Closed
19942925	7 Eleven 30480	3600 W Cary St	Richmond	VA	23221	3/17/1994	Closed
20064099	Hogge Avis H Property	3714 Ellwood Ave	Richmond	VA	23220	8/22/2005	Closed
20024254	Sanko Auto Parts	3716 W Broad St	Richmond	VA	23230	2/28/2002	Closed
20094033	Hewitt Associates Property	3801 Stuart Ave	Richmond	VA	23221	7/21/2008	Closed
20044428	McGowan Jean Residence	3803 Stuart Ave	Richmond	VA	23221	2/20/2004	Closed
20154060	Harris William H III and Gail E Residence	3805 Queen Charlotte Rd	Richmond	VA	23221	8/7/2014	Closed
19974291	CSC Equipment and Supply Co	3805 Talley Rd	Richmond	VA	23228	6/20/1997	Closed
20054550	Wise Karen Residence	3806 Dover Rd	Richmond	VA	23221	3/30/2005	Closed
20004396	New Residence	3806 Tomace Rd	Richmond	VA	23221	2/8/2000	Closed
20034183	Newman Karen Residence	3807 Dover Rd	Richmond	VA	23221	11/6/2002	Closed
20064124	Claude E Bevan Residence	3809 Kensington Ave	Richmond	VA	23221	8/26/2005	Closed
20014976	Reeves Residence	3810 Dover Rd	Richmond	VA	23221	3/29/2001	Closed
20084401	Gray Donald L Residence	4200 Sheffield Rd	Richmond	VA	23224	11/26/2007	Closed
20084198	Hayes Otis P Residence	4210 Sheffiend Rd	Richmond	VA	23224	10/5/2007	Closed
20084303	Stoots Sherman B Residence	4216 Sheffield Rd	Richmond	VA	23224	11/15/2007	Closed
20084543	Allen Jr Leamon Residence	4301 Clarkson Rd	Richmond	VA	23224	3/12/2008	Closed
20084544	Brown Hazel L Residence	4307 Clarkson Rd	Richmond	VA	23234	3/12/2008	Closed
20034469	Crown Terminal Former	4400 E Main St	Richmond	VA	23231	4/23/2003	Closed
19940866	Crown Richmond Terminal	4405 E Main St	Richmond	VA	23231	11/12/1993	Closed
19900531	Crown Richmond Terminal	4405 E Main St	Richmond	VA	23231	8/19/1988	Closed
20144016	Cafritz Diane Residence	4510 Cary St	Richmond	VA	23221	7/22/2013	Closed
19930617	M and Q Plastics	4725 Jefferson Davis Hwy	Richmond	VA	23234	9/23/1992	Closed
20054362	Quick Way Facility Former	4923 Old Midlothian Tpke	Richmond	VA	23224	12/8/2004	Closed
19910016	Quick Way Inc	4923 Old Midlothian Tpke	Richmond	VA	23224	7/5/1990	Closed
19920142	Pond 3 Richmond Flood Wall	4th St and Gordon Ave	Richmond	VA	23224	7/22/1991	Closed
20018223	Chaffin Lyn Residence	5003 Douglas Ave	Richmond	VA	23234	6/12/2001	Closed
19920223	VDOT Equipment Division	503 Bickerstaff Rd	Richmond	VA	23224	1/8/1992	Closed
19921545	BMG Metals Inc	5100 Old Osborne Tpke	Richmond	VA	23231	3/10/1992	Closed
19932318	BMG Metals Inc	5100 Old Osborne Tpke	Richmond	VA	23231	5/19/1993	Closed
20174322	Balloun Robert Residence	5112 Boscobel Ave	Richmond	VA	23225	3/8/2017	Closed
20104194	Romero Kathleen P Residence	5206 Dorchester Rd	Richmond	VA	23225	10/27/2009	Closed
19994430	Harris Residence	5224 Pinecrest Ave	Richmond	VA	23225	5/3/1999	Closed
20054488	Former Hughes Loretta Property	5238 Jahnke Rd	Richmond	VA	23225	2/24/2005	Closed
19940277	CSX Fulton Yard	5310 Newton Rd	Richmond	VA	23231	8/13/1993	Closed
19880604	CSX Fulton Yard	5310 Newton Rd	Richmond	VA	23231	2/2/1988	Closed
19930134	CSX Fulton Yard	5310 Newton Rd	Richmond	VA	23231	6/11/1992	Closed
19900861	Forest View Vol Rescue Squad	5327 Forest Hill Ave	Richmond	VA	23225	1/12/1990	Closed
19940997	Bethany Christian Church	5400 Forest Hill Ave	Richmond	VA	23225	12/2/1993	Closed

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19931046	General Electric Co	5401 Staples Mill Rd	Richmond	VA	23228	11/25/1992	Closed
20074278	Wright Rebecca Residence	5406 Dorchester Rd	Richmond	VA	23225	11/7/2006	Closed
20084209	Haener Barbara S Property	5423 Dorchester Rd	Richmond	VA	23225	10/9/2007	Closed
20114545	Holt Ronald T Property	5426 Dorchester Rd	Richmond	VA	23225	6/29/2011	Closed
20034076	Ring Diana Residence	5432 Dorchester Rd	Richmond	VA	23223	8/20/2002	Closed
20044419	Former Joyner Charles Residence	5502 Dorchester Rd	Richmond	VA	23225	2/17/2004	Closed
20024142	Messitt Peter Residence	5503 Dorchester Rd	Richmond	VA	23225	11/7/2001	Closed
20174457	Gilmore Ross Residence	5504 Dorchester Rd	Richmond	VA	23225	6/13/2017	Closed
20114018	Estate of William R Pully	5505 Dorchester Rd	Richmond	VA	23225	7/16/2010	Closed
20044116	Barr Amy Residence	5506 Dorchester Rd	Richmond	VA	23225	8/27/2003	Closed
20014652	Butzner Residence	5507 Dorchester Rd	Richmond	VA	23225	3/5/2001	Closed
20124326	Middleton Ann M Residence	5508 Riverside Dr	Richmond	VA	22225	11/11/2011	Closed
20164526	Wesley LLC Property	5518 Riverside Dr	Richmond	VA	23225	5/23/2016	Closed
20114033	Langston Melanie Residence	5561 Riverside Dr	Richmond	VA	23225	7/27/2010	Closed
20054243	Taylor Frances Residence	5570 New Kent Rd	Richmond	VA	23225	9/23/2004	Closed
20034125	Brown Brian Residence	5571 Riverside Dr	Richmond	VA	23225	9/26/2002	Closed
20054397	Paul Jones Estate Property	5614 Campbell Ave	Richmond	VA	23231	1/12/2005	Closed
19941213	Barker Construction Co Inc	5616 Greendale Rd	Richmond	VA	23228	12/8/1993	Closed
20004199	Catlett Johnson Corporation	5711 Greendale Rd	Richmond	VA	23228	10/8/1999	Closed
19890108	Winns Hauling Inc	5801 School Ave	Richmond	VA	23228	7/28/1988	Closed
19910197	Winns Hauling Inc	5801 School Ave	Richmond	VA	23228	6/30/1992	Closed
20134214	5805 School Avenue LLC	5805 School Ave	Richmond	VA	23228	8/17/2012	Closed
20144061	Air Liquide	5901 Jefferson Davis Hwy	Richmond	VA	23234	7/23/2013	Closed
20024119	Dalton Richard Estate	601 Arizona Dr	Richmond	VA	23224	10/18/2001	Closed
20004282	Putney Residence	601 S Nansemond St	Richmond	VA	23221	11/24/1999	Closed
20024032	Watson Wyatt Property	605 Arizona Ave	Richmond	VA	23224	7/20/2001	Closed
20084496	Collins Priscilla Residence	617 Arizona Dr	Richmond	VA	23224	2/21/2008	Closed
20084321	Randolph Carolyn B Residence	623 Arizona Dr	Richmond	VA	23224	11/26/2007	Closed
19940380	Chevron 4036109	700 Goodes St	Richmond	VA	23224	9/1/1993	Closed
19940567	Chevron 4036109	700 Goodes St	Richmond	VA	23224	9/1/1993	Closed
19930192	Chevron Bulk Storage Facility	700 Goodes St	Richmond	VA	23224	7/27/1992	Closed
20134232	Watson William Property	706 Arizona Pl	Richmond	VA	23224	11/26/2012	Closed
20054462	Wilson Jamie L Property	706 S Nansemond St	Richmond	VA	23221	2/10/2005	Closed
20054476	Miller Reginald Residence	707 Boroughbridge Rd	Richmond	VA	23225	2/17/2005	Closed
19910526	Halifax Paper Board Co	711 Hospital St	Richmond	VA	23219	10/8/1990	Closed
19911191	Halifax Paper Board Co	711 Hospital St	Richmond	VA	23219	2/15/1991	Closed
20104289	Harrison Clarence E Residence	713 Arizona Pl	Richmond	VA	23234	12/11/2009	Closed
20114014	Whiting William Residence	718 Arizona Pl	Richmond	VA	23224	7/15/2010	Closed
19890841	Shell Fuel Distribution Terminal	8102 Shell Rd	Richmond	VA	23234	7/11/1988	Closed
20074469	Johnson Garnett Property	813 Boroughbridge Rd	Richmond	VA	23225	2/8/2007	Closed
19974058	Apache Chemical	8150 Shell Rd	Richmond	VA	23237	8/29/1996	Closed

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19974048	Apache Chemical	8150 Shell Rd	Richmond	VA	23237	8/29/1996	Closed
19901591	Southern States Tri County	8259 Hermitage Rd	Richmond	VA	23228	5/14/1990	Closed
19921017	Wilton Properties	8430 Sanford Dr	Richmond	VA	23228	10/24/1991	Closed
20124239	Diesel Power of Virginia	8620 Broadway Ave	Richmond	VA	23228	10/29/2011	Closed
20074094	Axtell Street Property	900 Oak St	Richmond	VA	23220	8/15/2006	Closed
20034075	Williams Crane and Rigging Incorporated	938 E 4th St	Richmond	VA	23224	8/20/2002	Open
20024185	Bills Quality Auto Care	9411 Old Staples Mill Rd	Richmond	VA	23228	12/12/2001	Closed
19931892	Airco Welding Products	Bickerstaff Rd	Richmond	VA	23231	3/31/1993	Closed
19921510	CSX Transportation	Brown and 17th St	Richmond	VA	23219	6/30/1992	Closed
19921519	CSX Transportation	Brown and 17th St	Richmond	VA	23219	3/3/1992	Closed
19994151	Chippenham 895 Project	Chippenham Pkwy	Richmond	VA	23234	11/9/1998	Closed
19931907	Tarmac Richmond Block Plant	Ellen and Rosedale Ave	Richmond	VA	23230	3/31/1993	Closed
19911217	RF and P Railroad	I64 and Route 33	Richmond	VA	23230	2/22/1991	Closed
20154424	Lewis Street and Nicholson Street	Lewis St and Nicholson St	Richmond	VA	23231	3/16/2015	Closed
19943868	VDOT Ditch Marathon Oil	Marathon Oil Lebanon Chemical	Richmond	VA	23219	5/12/1994	Closed
19901167	Cxpress	Mayo Is	Richmond	VA	23219	3/8/1990	Closed
19900103	Windsor Fields	Portland Pl and Douglasdale Rd	Richmond	VA	23221	7/21/1989	Closed
19869997	Armada Trucking Company	1350 Loisdale Rd	Springfield	VA	22150	5/15/1986	Closed
19901321	Dry Plunge	6584 Fleet Dr	Springfield	VA	22310	4/4/1990	Closed
20133188	East Coast Pro Landscaping Incorporated	7809 Loisdale Rd Lot B	Springfield	VA	22150	5/9/2013	Closed
19921833	Schaeffer Industrial Park	7817 Loisdale Rd	Springfield	VA	22150	3/23/1992	Closed
20143090	Schaeffer Industrial Park	7817 Loisdale Rd	Springfield	VA	22150	11/16/2013	Closed
19830163	Maddox, Michael Residence	1108 Linden St	Woodbridge	VA	22191	8/27/1982	Closed
19890760	The Wrench Group (former Bethlehem Rebar)	1250 Featherstone Rd	Woodbridge	VA	22191	1/9/1989	Closed
19963099	Star 230641303	13254 Jefferson Davis Hwy	Woodbridge	VA	22191	8/2/1994	Closed
19943516	Exxon 23886	13324 Jefferson Davis Hwy	Woodbridge	VA	22191	4/19/1994	Closed
19921776	Amoco 60015	13400 Jefferson Davis Hwy	Woodbridge	VA	22191	12/20/1990	Closed
19860179	Amoco 1655	13404 Jefferson Davis Hwy	Woodbridge	VA	22191	8/30/1985	Closed
19983641	Station Plaza Shopping Center	13450 Jefferson Davis Hwy	Woodbridge	VA	22191	1/6/1998	Closed
19891223	Chevron 135468	13452 Jefferson Davis Hwy	Woodbridge	VA	22191	4/4/1989	Closed
19954078	Exxon 24209	13452 Jefferson Davis Hwy	Woodbridge	VA	22191	10/6/1994	Closed
19942943	Cowles Ford	13494 Jefferson Davis Hwy	Woodbridge	VA	22191	3/18/1994	Closed
19900188	Exxon 23903	13601 Jefferson Davis Hwy	Woodbridge	VA	22191	8/11/1989	Closed
19901828	Exxon 23903	13601 Jefferson Davis Hwy	Woodbridge	VA	22191	6/22/1990	Closed
20143037	MJM Auto	13608 Jefferson Davis Hwy	Woodbridge	VA	22191	8/6/2013	Closed
19911567	RF and P Facility - Woodbridge Auto	13609 Jefferson Davis Hwy	Woodbridge	VA	22191	4/24/1991	Closed
20143038	Checkeder Flag and A-1 Tires	13614 Jefferson Davis Hwy	Woodbridge	VA	22191	8/6/2013	Closed
19983712	Hess 46206 former	13623 Jefferson Davis Hwy	Woodbridge	VA	22192	3/24/1998	Closed
20143039	Next Car Rental/Rainbow Auto	13701 Jefferson Davis Hwy	Woodbridge	VA	22191	8/6/2013	Closed

93

20073056	Purvis Steve Residence	14708 Featherstone Rd	Woodbridge	VA	22191	12/15/2005	Closed
19860823	Modern Transportation Services	15481 Farm Creek Dr	Woodbridge	VA	22191	6/13/1986	Closed
19860589	United Fiberglass	Insulation Ave	Woodbridge	VA	22191	3/16/1986	Closed

93

Please note that the DEQ's Pollution Complaint (PC) cases identified should be further evaluated by the ACP project engineer or manager to establish the exact location, nature and extent of the petroleum release and the potential to impact the proposed project. Also, the project engineer or manager should contact the Tank Programs at the corresponding DEQ Regional Offices as listed below:

94

Northern Virginia Regional Office (703) 583-3800
 Piedmont Regional Office (804) 527-5020

GENERAL COMMENTS

Applicable state laws and regulations include: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-81); Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Applicable Federal laws and regulations include: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Part 107.

95

Asbestos and/or Lead-based Paint

All structures being demolished/renovated/removed should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, state regulations 9VAC 20-81-620 for ACM and 9VAC 20-60-261 for LBP must be followed. Questions may be directed to the following person at the locations listed below:

96

Northern Virginia Regional Office, Kathryn Perszyk (703) 583-3856
 Piedmont Regional Office, Jason Miller (804) 527-5028

Pollution Prevention – Reuse - Recycling

97

Please note that DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation or discovery of hazardous wastes should be minimized and handled appropriately.

If you have any questions or need further information, please contact Katy Dacey at (804) 698-4274.

VIRGINIA DEQ (continued)

(For response to comment 93, refer to page B-102)

- 94. Further evaluation of hazardous sites/facilities, including Pollution Complaint cases, that could potentially affect the Project, will be completed in a Phase I Environmental Site Assessment (ESA) prior to property acquisition, if required. At that time, Phase I ESA investigators will contact the Tank Programs at the DEQ Regional Offices to gather information on sites of concern.
- 95. As noted in Section 3.5.1 of the Draft EIS, the federal government and the Commonwealth of Virginia regulate hazardous materials under multiple statutes. Project construction and operation will comply with the requirements of all applicable federal and state laws and regulations for hazardous materials.
- 96. This requirement is contained within Section 5 (“Solid and Hazardous Wastes and Hazardous Materials”) of DEQ’s main letter. Refer to DRPT-numbered statement #21.
- 97. This statement is contained within Section 15 (“Pollution Prevention”) of DEQ’s main letter. Refer to DRPT-numbered statement #61.

**MEMORANDUM
DEPARTMENT OF ENVIRONMENTAL QUALITY
Piedmont Regional Office**

4949-A Cox Road Glen Allen, VA 23060 804/527-5020

TO: Janine Howard
 Environmental Program Planner

FROM: Kelley West
 Environmental Planner

DATE: October 10, 2017

SUBJECT: DC to Richmond Southeast High Speed Rail (17-134F).

I have reviewed the Draft EIS for the above referenced project by which the Federal Railroad Administration (FRA) and the Virginia Department of Rail and Public Transportation (DRPT) propose to install rail infrastructure and improvements from the Washington DC to Richmond Corridor that will include an additional main line high speed rail and track crossovers (DC2RVA) to connect into a larger southeast high speed rail (SEHSR) corridor. The portion of the rail this review covers for the PRO office includes a small section of the Central Virginia (area 4), Ashland (area 5) and Richmond (area 6). Multiple alternatives were presented for each of these areas, DEQ-PRO recommends the FRA and DRPT choose an alternative that causes the least amount of impacts to the natural environment. My comments are as follows:

Water- Erosion and Sediment Control and Storm Water Management: DEQ has regulatory authority for the Virginia Pollutant Discharge Elimination System (VPDES) programs related to municipal separate storm sewer systems (MS4s) and construction activities. Erosion and sediment control measures are addressed in local ordinances and State regulations. Additional information is available at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement.aspx>. Non-point source pollution resulting from this project should be minimized by using effective erosion and sediment control practices and structures. Consideration should also be given to using permeable paving for parking areas and walkways where appropriate and denuded areas should be promptly revegetated following construction work. If the total land disturbance exceeds 10,000 square feet, an erosion and sediment control plan will be required. Some localities also require an E&S plan for disturbances less than 10,000 square feet. A stormwater management plan may also be required. For any land disturbing activities equal to one acre or more, you are required to apply for coverage under the VPDES General Permit for Discharges of Storm Water from Construction Activities. The Virginia Stormwater Management Permit Authority may be DEQ or the locality. Specific questions regarding the Stormwater Management Program requirements should be directed to John McCutcheon at DEQ-PRO 804-527-5117.

Water-Wetlands: The project discusses many impacts to wetlands and streams. A Virginia Water Protection (VWP) permit may be required. DEQ-PRO recommends that all construction activities avoid wetlands to the maximum extent possible. For any questions or additional information concerning VWP Permit requirements, please contact Allison Dunaway at (804) 527-5086.

VIRGINIA DEQ (continued)

- 98. This content is addressed within Section 3 (“Erosion and Sediment Control and Stormwater Management”) of DEQ’s main letter. Refer to DRPT-numbered statements #8 through #12.
- 99. This content is addressed within Section 1 (“Water Quality and Wetlands”) of DEQ’s main letter. Refer to DRPT-numbered statements #2 through #4.

98

99

Air: DEQ-PRO recommends the proposed actions shall operate in a manner consistent with air pollution control practices for minimizing emissions, especially during periods of high ozone. Fugitive dust should be kept to a minimum, (9 VAC5-50-60). For further questions concerning air quality issues, please contact James Kyle at (804) 527-5047.

100

Waste: The draft EIS discussed several contaminated sites in the proposed project areas. The generation or recovery of any hazardous waste materials should be tested and removed in accordance with the Virginia Hazardous Waste Management Regulations (9 VAC 20-60) and/or the Virginia Solid Waste Management Regulations (9 VAC 20-81). Please understand that it is the generator's responsibility to determine if a solid waste meets the criteria of a hazardous waste and as a result be managed as such. In addition, asbestos waste, lead waste, or contaminated residues generated must be handled and disposed of in accordance with the VSWMR or VHWMR as applicable. DEQ recommends that pollution prevention principles be implemented to reduce the amount of wastes at the source, such as the re-use and recycling of construction waste materials. If you have any questions concerning hazardous/solid waste management, please contact Jason Miller at (804)527-5028.

101

Above/Underground Storage Tanks (AST/UST): Due to the historical uses of the proposed alternatives, all necessary precautions should be taken to avoid or minimize potential environmental/health risks. Please report the installation, relocation or removal of any above or below ground petroleum storage tank to DEQ Piedmont Regional Office. For any petroleum contaminated soil/groundwater that are encountered during the sub-surface phases of this project, please contact your Local Fire Marshall with any personal safety concerns and report any such contamination to DEQ-PRO. The disposal of contaminated soils and groundwater should be done in accordance with DEQ regulatory guidelines. If you have any further questions or concerns or need to report the installation, relocation or removal of a tank please contact the DEQ-PRO at (804) 527-5020.

102

VIRGINIA DEQ (continued)


- 100. This content is addressed within Section 4 ("Air Pollution Control") of DEQ's main letter. Refer to DRPT-numbered statements #13 through #18.
- 101. This content is addressed within Section 5 ("Solid and Hazardous Wastes and Hazardous Materials") of DEQ's main letter. Refer to DRPT-numbered statements #19 through #24.
- 102. This content is addressed within Section 5 ("Solid and Hazardous Wastes and Hazardous Materials") of DEQ's main letter. Refer to DRPT-numbered statements #19 through #24.

VIRGINIA DEQ (continued)

- 103. This topic is covered in Section 7 (“Recreational Resources, Scenic Rivers and Byways”) in DEQ’s main letter. Refer to DRPT-numbered statement #32.
- 104. Viewsheds from the Potomac Heritage National Scenic Trail have been clarified as sensitive visual resources, where applicable; refer to the errata table for the Draft EIS, which is Appendix A of the Final EIS.
- 105. The requested clarifications have been addressed in the errata table for the Draft EIS, which is Appendix A to the Final EIS.
- 106. This topic is covered in Section 7 (“Recreational Resources, Scenic Rivers and Byways”) in DEQ’s main letter. Refer to DRPT-numbered statement #33.

Molly Joseph Ward
Secretary of Natural Resources

Clyde E. Cristman
Director



Rochelle Altholz
Deputy Director of
Administration and Finance

David C. Dowling
Deputy Director of
Soil and Water Conservation
and Dam Safety

Thomas L. Smith
Deputy Director of Operations

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

MEMORANDUM

DATE: October 11, 2017

TO: Janine Howard, DEQ

FROM: Roberta Rhur, Environmental Impact Review Coordinator

SUBJECT: DEQ 17-134F, DC to Richmond Southeast High Speed Rail

Division of Planning and Recreation Resources

The Department of Conservation and Recreation (DCR), Division of Planning and Recreation Resources (PRR), develops the *Virginia Outdoors Plan* and coordinates a broad range of recreational and environmental programs throughout Virginia. These include the Virginia Scenic Rivers program; Trails, Greenways, and Blueways; Virginia State Park Master Planning and State Park Design and Construction.

02-26 Purpose and Need The “Purpose and Need” should recognize the inter-connected and multi-modal character of transportation in the 21st century and, in the Tier II DEIS, recognize ways in which rail stations associated with a potential high speed rail line would serve as trailheads for domestic and international travelers and as gateways to outdoor recreational experiences, including local and long-distance bicycling, hiking and paddling. While recognizing some impacts to parks and trails, the document fails to describe adequately mitigation opportunities, including a continuous, associated non-motorized trail network between, at minimum, Leesylvania State Park and Falmouth and the need for crossings that meet ADA guidelines.

Section 3.9.2 Aesthetics and Visual Environment,
Consider adding the Potomac Heritage National Scenic Trail (PHNST) viewshed to the “Sensitive Resources” sidebar under the VAUs

Table 3.14-3 (page 3-176): Add PHNST to “Features” cell for Veterans Memorial Park, Leesylvania, and Cockpit Point (and any other relevant local/state jurisdiction parks), as a feature of the parks that may be impacted.

Section 4.15.2.2 (page 4-199) – Effects on Bicycle and Pedestrian Connectivity: This section states that “Opportunities for additional bicycle and pedestrian accessibility improvements, including updates to ADA facilities, would be incorporated during final design in coordination with FRA after the Draft EIS.” Since there have been a number of bike/ped accidents and fatalities along the East Coast Greenway, please consider how this project can help address bike-ped safety—particularly in the Northern Virginia and George Washington regions. This project can help address major waterway barriers that preclude the development of safe passage for bicyclists and pedestrians through this heavily travelled region.

600 East Main Street, 24th Floor | Richmond, Virginia 23219 | 804-786-6124


State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation

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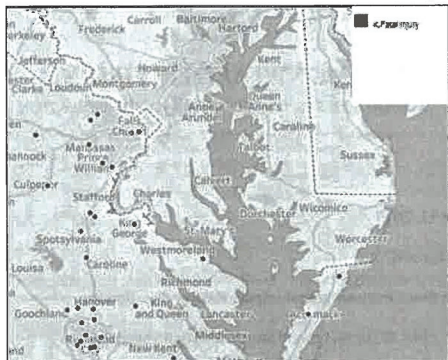


B-119

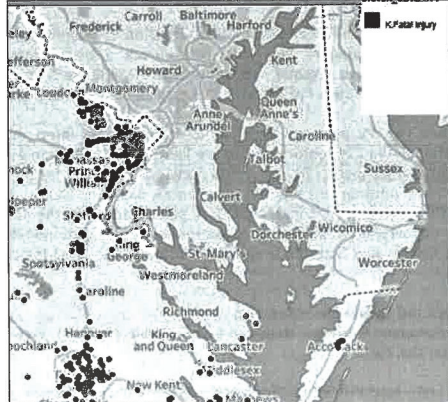
VIRGINIA DEQ (continued)

(Response to comment 106 on previous page)

- 107. The requested modifications were addressed in the Final EIS. The requested clarification has been addressed in the errata table for the Draft EIS, which is Appendix A to the Final EIS.
- 108. An updated discussion of public health and safety is provided in Final EIS Section 5.18. A shared-use path within the Project right-of-way is beyond the Purpose and Need of the DC2RVA Project. The DC2RVA Project will address bike/pedestrian safety at public at-grade crossings along the DC2RVA rail corridor, in keeping with the Project’s Basis of Design and applicable FRA, Amtrak, CSXT, and VDOT safety standards.



Bicyclist fatalities 2011-2017 (Tableau Crash Analysis Tool)



Pedestrian fatalities 2011-2017 (Tableau Crash Analysis Tool)

106

03-182 Affected Environment The label “Potomac Heritage Trail” in the table should read “Potomac Heritage National Scenic Trail.”

107

A model for examining the public health impact of this project is the Health Impact Assessment completed for the California High Speed Rail-San Jose to Merced Corridor, which considered the following health determinants:

108

VIRGINIA DEQ (continued)

(Response to comment 108 on previous page)

- 109. This topic is covered in Section 7 (“Recreational Resources, Scenic Rivers and Byways”) in DEQ’s main letter. Refer to DRPT-numbered statement #34 and #37.
- 110. Section 4.2 of the Scoping Report explains that 1,220 of the 1,614 public scoping letters received were form letters, one form letter from Virginians for High Speed Rail, and another from the East Coast Greenway Alliance. These letters were summarized in the scoping report, and a full response was provided for each one. The information from the scoping report has been clarified in the Final EIS; refer to the errata table for the Draft EIS, which is Appendix A to the Final EIS.

TABLE 3.2 HEALTH DETERMINANTS CONSIDERED

Transportation	Land Use	Demographics	Economic	Ecological	Political
VMT	Farmland	Gentrification	Poverty	Wildlife	Local buy-in
Traffic delays, Congestion	City revitalization	Spatial mismatch	Ridership	Sustainable E source	Community input
Accidents, Injury	Aesthetics	Social cohesion	Alternate modes	Wildlife corridors	Model for other states
Noise	Walkability	Segregation	Income gain	Parks & Rec	Vulnerable sub-groups
Pollution	Open space		Tax Revenue		Alignment
Existing infrastructure	Watershed quality		Job access & creation		Shifts in political rep.
Access to health care			Property values		Safety net serv. at-risk
Parking Lots			Retail access		
Freight trucks			Competition		
Air Quality			Cost effective		

108

At a minimum, we recommend that this project consider the health impact of not providing a safe corridor for bicyclists and pedestrians through this heavily congested, dangerous area by providing a shared-use path alongside the rail corridor.

Portions or perhaps all of Leesylvania State Park is protected in perpetuity by section 6(f) (3) of the Land and Water Conservation Fund Act. Section 6 (f) (3) of the Land & Water Conservation Fund Act states that: “No property acquired or developed with assistance under this section shall without approval of the Secretary [of the Interior] be converted to other than public outdoor recreation uses”. The LWCF program realizes that in certain instances there is no alternative to converting a portion of a LWCF property. In those extreme cases where there is no feasible alternative, a conversion of use process must be initiated with DCR for approval from the National Park Service. In short, the conversion of use process requires that a suitable piece of replacement property be found before a conversion occurs at a LWCF protected site. “Suitable” means equivalent in fair market value and can serve as a viable public outdoor recreation area without reliance upon adjoining or additional areas. Conversion of use processes must be initiated with DCR by the governmental body that owns the property. We recommend you coordinate with Synthia Waymack at synthia.waymack@dcr.virginia.gov to fully understand the requirements of conversation under this program.

Table 6.1-3: Scoping Comments These comments do not reflect The DC to Richmond Scoping Summary Report for the Southeast High Speed Rail, which acknowledged receiving 792 letters requesting that a parallel greenway be included in the Tier II EIS Study.

109

110

Richmond Quad

This project is within a portion of the James River that has been designated as a scenic river. Due to this designation, if there is any change to the existing tracks that cross the James, we recommend you contact Lynn Crump of the DCR-Division of Planning and Recreation at 804-786-5054 or Lynn.Crump@dcr.virginia.gov.

Division of Natural Heritage

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

Alexandria Quad

Biotics historically documents the presence of natural heritage resources within two miles of the project area. However, due to the scope of the activity and the distance to the resources, we do not anticipate that this project will adversely impact these natural heritage resources.

Quantico, Guinea, Occoquan, Bowling Green, Ashland, Glen Allen, Ruther Glen, and Yellow Tavern Quads

Biotics documents the presence of natural heritage resources within two miles of the project area. However, due to the scope of the activity and the distance to the resources, we do not anticipate that this project will adversely impact these natural heritage resources.

Annandale Quad

According to information currently in our files, the Rusty patched bumble bee (*Bombus affinis*, G1/S1/LE/NL) has been historically documented within two miles of the project area. The Rusty patched bumble bee is listed as endangered under the Endangered Species Act by U.S. Fish and Wildlife Service (USFWS) effective March 21, 2017. Since the late 1990s, the Rusty patched bumble bee has declined throughout its historical range including Virginia and is anticipated to be extinct in all ecoregions by 2030. Threats to the Rusty patched bumble bee include disease, pesticides, climate change, habitat loss and small population dynamics.

DCR recommends the implementation of the following USFWS voluntary measures for the conservation of the Rusty patched bumble bee: avoid pesticide use, avoid herbicide use, and plant native flowers that bloom throughout the spring and summer to support pollinator habitat.

Fort Belvoir Quad

According to the information currently in our files, the Marumsc Conservation Site is located downstream of the project site. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation sites are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. Marumsc Conservation Site has been given a biodiversity

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VIRGINIA DEQ (continued)

- 111. Comment noted. The Preferred Alternative as analyzed in the Final EIS is based on construction of substructure/foundation for a new two-track rail bridge on the S-Line across the James River, parallel and adjacent to the existing CSXT James River Bridge connecting to Main Street Station, on the downstream (eastern) side; however, the Project will only construct a single-track bridge with space to add a second track, if required for future capacity. DRPT will continue to coordinate with DCR during final design, after funding becomes available and incremental improvements are scheduled.
- 112. and 113. Table 5.10-2 of the Final EIS documents the estimated acreage of permanent and temporary impacts of the Preferred Alternative to Priority Conservation Areas, which include VDCR-DNH-Natural Heritage Plan Conservation Sites and Stream Conservation Units, and sites identified in the Priority Wildlife Conservation Areas dataset.
- 114. The species list for the analyses conducted for the Draft EIS was provided by the USFWS on October 19, 2015, prior to listing of the Rusty patched bumble bee (*Bombus affinis*). The Final EIS (Section 5.10.3) has been updated to include a discussion of the Rusty patched bumble bee.
- 115. This recommendation is provided within Section 6 ("Natural Heritage Resources") of DEQ's main letter. Refer to DRPT-numbered statement #26.

VIRGINIA DEQ (continued)

116. DRPT appreciates the information provided by DCR concerning the Marumsc Conservation Site and the fine-lined emerald (*Somatochlora filosa*). As noted in Section 5.10.2.3 of the Final EIS, DRPT anticipates that the proposed Project will not adversely affect downstream aquatic species with implementation of Best Management Practices, including use of silt curtains and limiting overflow from dredging equipment, and other erosion and sediment control measures. DRPT will continue to work with VDGIF, NMFS, and USFWS to develop specific measures for avoidance, minimization, and mitigation of impacts to aquatic wildlife during final design, after funding becomes available and incremental improvements are scheduled.
117. Information regarding Crow’s Nest Natural Area Preserve and its sensitive habitats is presented in Section 3.10.1.2 of the Draft EIS. As noted in Section 5.10.1.1 of the Final EIS, the Preferred Alternative will avoid direct impacts to existing state and county wildlife conservation areas, except for the Mattaponi Wildlife Management Area. Potential indirect impacts to downstream aquatic habitats are addressed in Section 5.20.1.6 of the Final EIS. As noted in Section 5.20.1.7 of the Final EIS, indirect impacts of the Project can be minimized with implementation of temporary and permanent stormwater management features and erosion and sediment controls. BMPs for avoidance of introducing new invasive species and preventing the spread of existing populations will also help minimize impacts to downstream aquatic habitats.

significance ranking of B5, which represents a site of moderate significance. The natural heritage resource of concern at this site is:

Somatochlora filosa, Fine-lined emerald G5/S2/NL/NL

The Fine-lined emerald is a state rare dragonfly species measuring 54-66 mm in length (Needham and Westfall, 1975). This colorful, slender species inhabits slow-flowing blackwater with sand, mud or silt substrate and emergent vegetation along the banks (NatureServe, 2009). The Fine-lined emerald ranges throughout the southeastern United States (Dunkle, 2000) and from several sites throughout the piedmont and coastal plain of Virginia.

Adult Odonata (dragonflies and damselflies), commonly seen flitting and hovering along the shores of most freshwater habitats, are accomplished predators. They lay their eggs on emergent vegetation or debris at the water’s edge. Unlike the adults, the larvae are aquatic where they typically inhabit the sand and gravel of the substrates. Wingless and possessing gills, they crawl about the submerged leaf litter and debris stalking their insect prey. The larvae seize unsuspecting prey with a long, hinged “grasper” that folds neatly under their chin. When larval development is complete, the aquatic larvae crawl from the water to the bank, climb up the stalk of the shoreline vegetation, and the winged adult emerges (Hoffman 1991; Thorpe and Covich 1991).

Because of their aquatic lifestyle and limited mobility, the larvae are particularly vulnerable to shoreline disturbances that cause the loss of shoreline vegetation and siltation. They are also sensitive to alterations that result in poor water quality, aquatic substrate changes, and thermal fluctuations.

Stafford Quad

According to the information currently in our files, the Crow’s Nest Conservation Site is located within two miles of the project site. Crow’s Nest Conservation Site has been given a biodiversity significance ranking of B2, which represents a site of very high significance. The natural heritage resource of concern at this site is:

Tidal Freshwater Marsh (Mixed High Marsh Type) G3/S4?/NL/NL

Tidal Freshwater Marsh (Mixed High Marsh Type) (*Impatiens capensis-Peltandra virginica-Polygonum arifolium-Schoenoplectus fluviatilis-Typha angustifolia* Tidal Herbaceous Vegetation) occupies the higher elevation zone of freshwater to slightly oligohaline marshes on the Atlantic Coast from Maine to Virginia. From Delaware to northern Virginia, this is the principal mixed freshwater tidal marsh community and forms extensive patches along many tidal rivers. This community is composed of mixed, dense, and often diverse marsh vegetation with highly variable species composition and patch dominance. The soils are highly variable, varying from silts and silty mucks to peats and sands across the range (NatureServe, 2010). In Virginia, this community occurs most extensively in estuarine reaches of the Potomac River drainage, but has also been documented along the Rappahanock, Pamunkey, Mattaponi, and James Rivers.

Freshwater tidal marshes are naturally dynamic systems that are best developed where there is a major input of freshwater, daily tidal range of at least 0.5 m, and a geomorphology that tends to constrict and magnify tidal influence in the upper reaches of the estuary. These marshes are subject to diurnal flooding by tides and river discharge (NatureServe, 2010). Principal threats include chronic sea-level rise leading to increasing upstream salinity, pollutants, and invasive exotic plants such as marsh dewflower (*Murdannia keissak*) (Fleming et al. 2011).

116

117

The Crow's Nest Natural Area Preserve is located downstream from the project site. DCR recommends coordination with Mike Lott, DCR - Division of Natural Heritage Northern Region Steward at (540) 658-8690 or Michael.lott@dcr.virginia.gov for additional information about the preserve and associated natural heritage resources.

118

Fredericksburg Quad

According to the information currently in our files, the South Fredericksburg Conservation Site is located within two miles of the project site. The South Fredericksburg Conservation Site has been given a biodiversity significance ranking of B2, which represents a site of very high significance. The natural heritage resource of concern at this site is:

Non-Riverine Wet Hardwood Forest (Northern Coastal Plain type) G2?/S2?/NL/NL

119

The Non-riverine Flatwood/Swamp occurs in the central and northern Virginia Coastal Plain on large, flat, imperfectly drained terraces and very wide, ancient floodplains that are no longer subject to alluvial processes. Its hydrology is seasonally to nearly permanently saturated, with occasional ponding or groundwater sheet flows, and is maintained by a high water table rather than riverine or estuarine flooding. (NatureServe, 2011). Habitats are essentially flat, with seasonally perched water tables. Shallow, braided channels and depressions which pond water intermittently are frequent habitat features. Surface soils are silt, sand, and clay loams, usually overlying dense clay subsoils (hardpans) that impede drainage. Mature stands of this association are dominated by variable mixtures of hydrophytic oaks (*Quercus* spp.), including swamp chestnut oak (*Quercus michauxii*), cherrybark oak (*Quercus pagoda*), willow oak (*Quercus phellos*), pin oak (*Quercus palustris*), and white oak (*Quercus alba*). Cutting and other disturbances result in higher proportions of sweetgum (*Liquidambar styraciflua*), red maple (*Acer rubrum*), and other intolerant trees. Small trees and shrubs include American hornbeam (*Carpinus caroliniana* ssp. *caroliniana*), American holly (*Ilex opaca* var. *opaca*), sweet pepper-bush (*Clethra alnifolia*), sweetbay (*Magnolia virginiana*), fetterbush (*Leucothoe racemosa*), and highbush blueberries (*Vaccinium* spp.). Herb layers usually contain netted chain fern (*Woodwardia areolata*) and a variety of sedges, (e.g., *Carex abscondita*, *Carex debilis* var. *debilis*, *Carex intumescens*). Late-successional non-riverine saturated forests have been greatly reduced in extent or modified by extensive agricultural clearing, logging, conversion to pine silvicultures, and hydrologic alterations such as ditching and draining. (Fleming, et al., 2011)

In addition, the Hazel Run Rt. 1 to Rt. 2 Stream Conservation Unit (SCU) is located downstream from the project site. SCUs identify stream reaches that contain aquatic natural heritage resources, including 2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. SCUs are also given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. The Hazel Run Rt. 1 to Rt. 2 SCU has been given a biodiversity ranking of B3, which represents a site of high significance. The natural heritage resources associated with this site are:

Aquatic Natural Community (NP-Lower Rappahannock Second Order Stream) G2?/S2?/NL/NL
 Aquatic Natural Community (NC-Lower Rappahannock Second Order Stream) G2G3/S2S3/NL/NL

The documented Aquatic Natural Communities are based on Virginia Commonwealth University's **INSTAR (Interactive Stream Assessment Resource)** database which includes over 2,000 aquatic (stream and river) collections statewide for fish and macroinvertebrate. These data represent fish and macroinvertebrate assemblages, instream habitat, and stream health assessments. The associated Aquatic Natural Communities are significant on multiple levels. First, these streams are a grade B, per the VCU-Center for Environmental Sciences (CES), indicating their relative regional significance, considering their aquatic community composition and the present-day conditions of other streams in the region. These stream reaches also hold a "Healthy" stream designation per the INSTAR Virtual Stream Assessment (VSS) score.

VIRGINIA DEQ (continued)

- 118. This recommendation is provided within Section 6 ("Natural Heritage Resources") of DEQ's main letter. Refer to DRPT-numbered statement #27.
- 119. Information regarding the South Fredericksburg Conservation Site and the Hazel Run Stream Conservation Unit (SCU), and the natural communities associated with these sites is presented in Table 3.10-2 of the Draft EIS. Table 5.10-2 of the Final EIS documents the estimated acreage of permanent and temporary impacts of the Preferred Alternative (as updated since the Draft EIS) to Priority Conservation Areas, which include VDCR-DNH-Natural Heritage Plan Conservation Sites and Stream Conservation Units, and sites identified in the Priority Wildlife Conservation Areas dataset. Outside of the CSXT right-of-way, approximately 0.04 acres of permanent impacts, and 0.35 acres of temporary impacts are anticipated at the South Fredericksburg Conservation Site under the Preferred Alternative 3B.

Refer to DRPT-numbered statement #117 regarding potential indirect impacts to downstream aquatic habitats and measures to minimize impacts.

VIRGINIA DEQ (continued)

(Response to comment 119 on previous page)

120. Information regarding the South Anna River – Falling Creek SCU is presented in Table 3.10-2 of the Draft EIS. Table 5.10-2 of the Final EIS documents the estimated acreage of permanent and temporary impacts of the Preferred Alternative to Priority Conservation Areas, which include VDCR-DNH-Natural Heritage Plan Conservation Sites and Stream Conservation Units, and sites identified in the Priority Wildlife Conservation Areas dataset. The estimated acreage of impacts to specific Natural Heritage Conservation Sites and Stream Conservation Units, are identified in Table 4-7 of Appendix M Natural Resources Technical Report of the Draft EIS. As noted there, the only impacts to the South Anna River – Falling Creek SCU are under Build Alternatives 5C and 5C – Ashcake, neither of which were selected as the Preferred Alternative. In Area 5, Alternative 5A was selected as the Preferred Alternative (refer to Section 4.3.5 of the Final EIS for details).

The state threatened green floater (*Lasmigonia subviridis*) is identified in Table 3.10-8 of the Draft EIS as being among species that may occur within the vicinity of the study area. A description of this species is provided in Section 3.10.5.3 of the Draft EIS. Potential direct impacts to this species from the Preferred Alternative are identified in Table 5.10-6 of the Final EIS. Indirect impacts to aquatic habitats, which are addressed in Section 5.20.1.6 of the Final EIS, are applicable to downstream populations of green floater and other aquatic species.

This score assesses the similarity of these streams to ideal stream conditions of biology and habitat for this region. Lastly, these streams contribute to high Biological Integrity at the watershed level (6th order) based on number of native/non-native, pollution-tolerant/intolerant and rare, threatened or endangered fish and macroinvertebrate species present.

Threats to the significant Aquatic Natural Communities and the surrounding watershed include water quality degradation related to point and non-point pollution, water withdrawal and introduction of non-native species.

In addition, Yellow lance (*Elliptio lanceolata*, G2G3/S2S3/SOC/NL) occurs in mid-sized rivers and second and third order streams. To survive, it needs a silt-free, stable streambed and well-oxygenated water that is free of pollutants. This species has been the subject of taxonomic debate in recent years (NatureServe, 2009). Currently in Virginia, the Yellow lance is recognized from populations in the Chowan, James, York, and Rappahannock drainages. Its range also extends into Neuse-Tar river system in North Carolina. In recent years, significant population declines have been noted across its range (NatureServe, 2009). Please note that this species is currently classified as a species of concern by the United States Fish and Wildlife Service (USFWS) however, this designation has no official legal status.

Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality, good physical habitat conditions, and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization, and dredging, and the invasion of exotic mollusk species. The Yellow lance may be particularly sensitive to chemical pollutants and exposure to fine sediments from erosion (NatureServe, 2009).

Ashland and Hanover Academy Quads:

According to the information currently in our files, the South Anna River – Falling Creek Stream Conservation Unit (SCU) is located downstream from the project site. SCUs identify stream reaches that contain aquatic natural heritage resources, including 2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. SCUs are also given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. The South Anna River – Falling Creek SCU has been given a biodiversity ranking of B3, which represents a site of high significance. The natural heritage resources associated with this site are:

<i>Elliptio lanceolata</i>	Yellow lance	G2G3/S2S3/SOC/NL
	Aquatic Natural Community (NP-Pamunkey Third Order Stream)	G2/S2/NL/NL

The documented Aquatic Natural Community is a grade B, per the VCU-Center for Environmental Sciences (CES), indicating its relative regional significance, considering its aquatic community composition and the present-day conditions of other streams in the region. This stream reach also holds a "Healthy" stream designation per the INSTAR Virtual Stream Assessment (VSS) score. Lastly, this stream contributes to high Biological Integrity at the watershed level (6th order) based on number of native/non-native, pollution-tolerant/intolerant and rare, threatened or endangered fish and macroinvertebrate species present.

Threats to the significant Aquatic Natural Community and the surrounding watershed include water quality degradation related to point and non-point pollution, water withdrawal and introduction of non-native species.

Additionally, Green floater (*Lasmigona subviridis*, G3/S2/NL/LT) has been historically documented downstream of the project site in the South Anna River.

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The Green floater, a rare freshwater mussel, ranges from New York to North Carolina in the Atlantic Slope drainages, as well as the New and Kanawha River systems in Virginia and West Virginia (NatureServe, 2009). In Virginia, there are records from the New, Roanoke, Chowan, James, York, Rappahannock, and Potomac River drainages. Throughout its range, the Green floater appears to prefer the pools and eddies with gravel and sand bottoms of smaller rivers and creeks, smaller channels of large rivers (Ortman, 1919) or small to medium-sized streams (Riddick, 1973). Please note that this species has been listed as state threatened by the Virginia Department of Game and Inland Fisheries (VDGIF).

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To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations, establishment/enhancement of riparian buffers with native plant species and maintaining natural stream flow.

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Richmond and Drewry's Bluff Quads

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According to information currently in our files, Laura's clubtail (*Stylurus laurae*, G4/S2/NL/NL), a state rare dragonfly, ranges from Ohio south to Florida with westward records to Texas (Kondratieff, 2000). In Virginia, there are records across the Piedmont and west to the Ridge and Valley region. Its habitat consists of moderated gradient streams with many shallow riffles and runs (NatureServe, 2009).

Threats include activities that alter the water flow or substrate such as: impoundments, channelization, dredging, siltation, agricultural non-point pollution, and municipal and industrial pollution. In addition, timber harvest may increase siltation and cause a decrease in dissolved oxygen as canopy cover is removed and water temperature rises (NatureServe, 2009).

Please note according to DCR's species distribution model, potential may exist for the Dwarf wedgemussel (*Alasmidonta heterodon*, G1G2/S1/LE/LE) within the project area or adjacent to the project area in the Fort Belvoir and Fredericksburg Quads. To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations, establishment/enhancement of riparian buffers with native plant species and maintaining natural stream flow. Due to the legal status of the Green floater and Dwarf wedgemussel, DCR also recommends coordination with Virginia's regulatory authority for the management and protection of these species, the VDGIF, to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

123

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. Provided adherence to Virginia's erosion and sedimentation control/stormwater management laws and regulations and the limits of disturbance to be within the current right-of-way, the current activity will not affect any documented state-listed plants or insects.

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New and updated information is continually added to Biotics. Please re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The Virginia Department of Game and Inland Fisheries (VDGIF) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Ernie Aschenbach at 804-367-2733 or Ernie.Aschenbach@dgif.virginia.gov. This project is located within 2 miles of a documented occurrence of a state listed animal in the Alexandria Quad. In addition, the

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VIRGINIA DEQ (continued)

(Response to comment 120 on previous page)

- 121. This recommendation is provided within Section 6 ("Natural Heritage Resources") of DEQ's main letter. Refer to DRPT-numbered statement #28.
- 122. DRPT appreciates the information provided by DCR concerning the Laura's clubtail (*Stylurus laurae*). The Draft EIS analysis of potential Project effects on sensitive species focuses on federal and state listed threatened and endangered species. Potential Project effects on other wildlife species are addressed in Section 5.10.2 of the Final EIS. Other applicable impacts analyses in the Final EIS include the discussions of impacts to streams (Section 5.1.1), wetlands (Section 5.1.2) and water quality (Section 5.1.3).
- 123. The Dwarf Wedgemussel (*Alasmidonta heterodon*) is identified in Table 5.10-5 of the Final EIS as having the potential to be affected by the Preferred Alternative within Areas 2 through 5 (i.e. Northern Virginia through Ashland). See response to DRPT-numbered statement #28 for a discussion of erosion and sediment control, stormwater management, and other measures to minimize impacts to aquatic habitats. DRPT will coordinate with VDGIF in accordance with the Virginia Endangered Species Act during final design and Project permitting, after funding becomes available and incremental improvements are scheduled.
- 124. This recommendation is provided within Section 6 ("Natural Heritage Resources") of DEQ's main letter. Refer to DRPT-numbered statement #30.
- 125. This recommendation is provided within Section 6 ("Natural Heritage Resources") of DEQ's main letter. Refer to DRPT-numbered statement #31.

VIRGINIA DEQ (continued)

(Response to comment 125 on previous page)

126. This topic and recommendation are addressed within Section 8 (“State Parks”) of DEQ’s main letter. Refer to DRPT-numbered statement #39.

Rappahannock River, which has been designated by the Virginia Department of Game and Inland Fisheries (VDGIF) as a “Threatened and Endangered Species Water” for the Green floater and the South Anna River which has been designated by the Virginia Department of Game and Inland Fisheries (VDGIF) as a “Threatened and Endangered Species Water” for the Dwarf wedgemussel are within 2 miles of the project area. Therefore, DCR recommends coordination with Virginia’s regulatory authority for the management and protection of this species, the VDGIF, to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

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Division of State Parks

DCR’s Division of State Parks is responsible for acquiring and managing, state parks. Park development and master planning are managed by the Division of Planning and Recreation Resources. Master plans are required prior to a parks opening and are updated every ten years (Virginia Code § 10.1-200 *et seq.*).

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This project has the potential to impact Leesylvania and Widewater State Parks, therefore we recommend coordination with State Parks Division Director, Craig Seaver at Craig.Seaver@dcr.virginia.gov.

The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

Cc: Craig Seaver, DCR
 Synthia Waymack, DCR
 Amy Ewing, VDGIF
 Troy Andersen, USFWS

VIRGINIA DEQ (continued)*(No comments on this page)*

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VIRGINIA DEQ (continued)

(No comments on this page)

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Howard, Janine (DEQ)

From: Holma, Marc (DHR)
Sent: Thursday, September 14, 2017 9:18 AM
To: Howard, Janine (DEQ)
Subject: SEHSR DC2RVA Environmental Impact Report (DHR #2014-0666/DEQ #17-134F)

Janine,

Please accept this email as DHR's response to DEQ's request for our review of the EIR for the above referenced project. The Federal Railroad Authority and the Department of Rail and Public Transportation have both been working closely with DHR pursuant to Section 106 of the National Historic Preservation Act on this project. We anticipate that both agencies will continue to coordinate with use per Section 106 and would request DEQ in its response to encourage them to do so.

Sincerely,
Marc Holma

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VIRGINIA DEQ (continued)

127. DRPT received notification from DHR under separate cover; refer to DHR's letter, which is included as part of the agency responses in the Final EIS, for comment/response.

VIRGINIA DEQ (continued)

128. This recommendation is provided within Section 10 (“Public Water Supply”) of DEQ’s main letter. Refer to DRPT-numbered statement #44.
129. DRPT appreciates the list of public groundwater wells provided by VDH – Office of Drinking Water. The extent of VDH’s list (11 wells within 1.0 mile of the Project site, two of which are within 1,000 feet of the rail) is comparable to the number of wells identified in Section 5.1.4 of the Final EIS (11 wells within 1.0 mile of the Project rail line, two of which are also within 1,000 feet of the Limits of Disturbance for the Preferred Alternative).
130. DRPT appreciates the list of surface water intakes within a 5-mile radius of the Project site provided by VDH – Office of Drinking Water. Three of the surface water intake systems were identified in Section 4.1.4 of the Draft EIS. DRPT has recently obtained an updated version (February 2018) of VDOT’s Comprehensive Environmental Data and Reporting System, which identifies all eight of the surface water intake locations within a 5-mile radius of the Project, as identified from VDH. The additional five locations are located upstream of the Project. This information has been incorporated into Section 5.1.4 of the Final EIS.

Howard, Janine (DEQ)

From: Warren, Arlene (VDH)
Sent: Wednesday, October 11, 2017 5:09 PM
To: Howard, Janine (DEQ)
Subject: 17-134F DRAFT PROJECT REVIEW FRA DC TO RICHMOND RAIL
Attachments: Comments from OEHS Onsite Sewage & Water Services.docx

Project Name: DC to Richmond Southeast High Speed Rail

Project #: 17-134F

UPC #: N/A

Location: Cities of Richmond and Fredericksburg, Chesterfield, Henrico, Hanover, Caroline, Spotsylvania, Stafford, Prince William, Fairfax, and Arlington Counties

VDH – Office of Drinking Water has reviewed the above project. Below are our comments as they relate to proximity to **public drinking water sources** (groundwater wells, springs and surface water intakes). Potential impacts to public water distribution systems or sanitary sewage collection systems **must be verified by the local utility.**

The following public groundwater wells are located within a 1-mile radius of the project site (wells within a 1,000-foot radius are formatted in **bold**):

PWS ID Number	City/County	System Name	Facility Name
6153765	PRINCE WILLIAM	TIM’S RIVERSHORE RESTAURANT	WELL #2 DRILLED 2011
6033362	CAROLINE	NPS - JACKSON SHRINE	DRILLED WELL
4087098	HENRICO	BUBBAS BAR AND GRILL	WELL NO. 2 (BORED)
4085129	HANOVER	CALVARY PENTECOSTAL CAMP	WELL #6
4085129	HANOVER	CALVARY PENTECOSTAL CAMP	WELL #5
4085920	HANOVER	RHAPSODY	DRILLED WELL
6033495	CAROLINE	MICHAEL D. DENT INDUSTRIAL PARK	WELL 8B
6033490	CAROLINE	MATTAPONI SPRINGS GOLF COURSE	DRILLED WELL
6033500	CAROLINE	MILFORD SANITARY DISTRICT	WELL 2
6179630	STAFFORD	POTOMAC POINT WINERY	WELL 1
6059505	FAIRFAX COUNTY	FAIRFAX YACHT CLUB	FX YACHT CLUB DRILLED WELL

The following surface water intakes are located within a 5-mile radius of the project site:

PWS ID Number	System Name	Facility Name
6059501	FAIRFAX COUNTY WATER AUTHORITY	OCCOQUAN RESERVIOR INTAKE
6179100	STAFFORD COUNTY UTILITIES	AQUIA CREEK
6153675	QUANTICO MARINE BASE-MAINSIDE	BRECKINRIDGE RE
6177300	SPOTSYLVANIA COUNTY UTILITIES	RAPPAHANNOCK RIVER INTAKE
6177300	SPOTSYLVANIA COUNTY UTILITIES	MOTTS RUN RESERVOIR - ALT INTAKE
6033425	LAKE CAROLINE	STEVENS MILL RN
4085398	HANOVER SUBURBAN WATER SYSTEM	NORTH ANNA RWI
4760100	RICHMOND, CITY OF	RAW WATER INTAKE

The project is within the watershed of the following public surface water sources (facilities where the project falls within 5 miles of the intake and is within the intake's watershed are formatted in bold):

PWS ID Number	System Name	Facility Name
4085398	HANOVER SUBURBAN WATER SYSTEM	NORTH ANNA RWI
3700500	NEWPORT NEWS, CITY OF	CHICKAHOMINY R
3670800	VIRGINIA-AMERICAN WATER CO	APPOMATTOX RIVER

- Radiological Health, Mr. Steven Harrison, Director – no comments were received.
- Comments are attached from OEHS Onsite Sewage & Water Services, Mr. Dwayne Roadcap
- OEHS Division of Shellfish Sanitation, Mr. Eric Aschenbach – no comments were received.

Best Management Practices should be employed, including Erosion & Sedimentation Controls and Spill Prevention Controls & Countermeasures on the project site.

Well(s) within a 1,000-foot radius from project site should be field marked and protected from accidental damage during construction.

Materials should be managed while on site and during transport to prevent impacts to nearby surface water.

Best Regards,

Arlene Fields Warren
GIS Program Support Technician
 Office of Drinking Water
 Virginia Department of Health
 109 Governor Street
 Richmond, VA 23220
 (804) 864-7781

The Virginia Department of Health – Office of Drinking Water appreciates the opportunity to provide comments. If you have any questions, please let me know.

From: Fulcher, Valerie (DEQ)
Sent: Tuesday, September 12, 2017 2:05 PM
To: dgif-ESS Projects (DGIF) <ESSProjects@dgif.virginia.gov>; Tignor, Keith (VDACS) <Keith.Tignor@vdacs.virginia.gov>; Rhur, Robbie (DCR) <Robbie.Rhur@dcv.virginia.gov>; odwreview (VDH) <odwreview-VDH@cov.virginia.gov>; Dacey, Katy (DEQ) <Katy.Dacey@deq.virginia.gov>; Narasimhan, Kotur (DEQ) <Kotur.Narasimhan@deq.virginia.gov>; Gavan, Larry (DEQ) <Larry.Gavan@deq.virginia.gov>; Moore, Daniel (DEQ) <Daniel.Moore@deq.virginia.gov>; Sepety, Holly (DEQ) <Holly.Sepety@deq.virginia.gov>; West, Kelley (DEQ) <Kelley.West@deq.virginia.gov>; Burstein, Daniel (DEQ) <Daniel.Burstein@deq.virginia.gov>; Kirchen, Roger (DHR) <Roger.Kirchen@dhr.virginia.gov>; Evans, Gregory (DOF) <Gregory.Evans@dof.virginia.gov>; Watkinson, Tony (MRC) <Tony.Watkinson@mrc.virginia.gov>; Jordan, Elizabeth (VDOT) <Elizabeth.Jordan@VDOT.Virginia.gov>; rlazaro@novaregion.org; Ware, Tim <ware@gwregion.org>; Sarah Stewart <sstewart@richmondregional.org>; tfoley@co.stafford.va.us; dmorris@craterpdc.org; Leonardr@chesterfield.gov; Olinger, Mark A. - PDR <Mark.Olinger@Richmondgov.com>; Vitoulkas, John <vit@henrico.us>; ctyadm@co.hanover.va.us; Culley, Charles <cculley@co.caroline.va.us>; NDickinson@spotsylvania.va.us; Baroody, Tim <tjbaroody@fredericksburgva.gov>; Patton, Justin S. <jspatton@pwcgov.org>; Denise.James@fairfaxcounty.gov; Brian Stout <Bstout@arlingtonva.us>
Cc: Howard, Janine (DEQ) <Janine.Howard@deq.virginia.gov>
Subject: NEW PROJECT FRA DC to Richmond Rail 17-134F

VIRGINIA DEQ (continued)

131. DRPT appreciates the list of public surface water sources within the same watershed as the Project provided by VDH – Office of Drinking Water. Hanover Suburban Water System, which is identified in Section 5.1.4 of the Final EIS, is the only surface water intake within the watershed that is within 5 miles of the Project.
132. These recommendations are provided within Section 10 (“Public Water Supply”) of DEQ’s main letter. Refer to DRPT-numbered statement #43.

VIRGINIA DEQ (continued)

133. This topic and its recommendations are addressed within Section 11 (“Septic Tanks and Drainfield Regulations”) of DEQ’s main letter. Refer to DRPT-numbered statements #45 through #47.

Comments on the Draft Environmental Impact Statement: Southeast High Speed Rail from Richmond to Washington, D.C.

Local health districts can provide available electronic information regarding the location of private wells and sewage systems near the proposed project area. OEHS recommends that the consultant contact each local health department in the project area, to the extent possible, to obtain appropriate records and ensure the project will not negatively impact private wells and onsite sewage systems. VDH does not have an accurate estimate of the number of private wells or septic systems in the project area.

From the 250-acre Acca Yard in Henrico County (CSX’s major transfer point in Virginia) to Parham Road and points North, the project is mostly near areas served by public water and sewer; however, older wells or septic systems might still be in use or present (and not used). From Parham Road North to the Chickahominy River crossing into Hanover County, and parallel to Old Washington Highway, the project is near areas primarily served by private wells and septic systems (e.g., Classic Catering and Hunton Park). The projected rail line covers about 22 linear miles through Chesterfield County and the south side of the James River in the City of Richmond. For construction within the City of Richmond, staff notes there are several churches and schools within or near the project area. Staff recommends that information be shared with the local communities and that appropriate points of contact be shared. If water, sewer, electricity, or other utility service might be impacted, then the local community should be informed in advance with accommodations provided as necessary. In the Hanover County project area, staff estimates that a few hundred wells and onsite sewage systems will be near the project area. Property owners must submit an application to the local health department to relocate any onsite sewage system impacted by the construction.

Dwayne Roadcap
 Director, Division of Onsite Sewage,
 Water Supplies, Environmental Engineering,
 and Marina Programs
 Virginia Department of Health
 109 Governor Street, 5th Floor
 Richmond, Virginia 23219
 Office: (804) 864-7458
 Cell: (804) 221-7335
 Fax: (804) 864-7475

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October 30, 2017

VIA EMAIL

Ms. Janine Howard
Department of Environmental Quality
Office of Environmental Impact Review
629 E. Main St., 6th Floor
Richmond, VA 23219

**RE: DEQ #17-134F (Draft EIS)
D.C. to Richmond Southeast High-Speed Rail Project (DC2RVA)**

Dear Ms. Howard:

The Virginia Outdoors Foundation (VOF) is in receipt of your email dated October 23, 2017, concerning the above-referenced project. VOF, an agency of the Commonwealth, was established by the General Assembly in 1966 to promote the preservation of Virginia's natural and cultural resources by encouraging private philanthropy in fulfillment of state policy. As a result of Virginia's commitment to ensure a vibrant natural environment for today and future generations, VOF owns thousands of acres managed for public access and holds more than 4,000 easements across the Commonwealth, and these easements protect in perpetuity over 800,000 acres of open-space.

We thank you for the opportunity to provide comments regarding the proposed passenger rail upgrades to the 123-mile CSXT railroad corridor between Long Bridge (Arlington County) and Centralia, Virginia (Chesterfield County). This project is located in a region that does not contain a high concentration of our open-space easements, due to the urbanized nature of the long-existing rail corridor, US Route 1, and Interstate 95 between Washington, D.C. and Richmond, Virginia.

Along the existing and preferred alignments, as outlined in the Tier II Draft Environmental Impact Statement (EIS) Appendix E, Build Alternatives Area 3-Fredericksburg, VOF does not hold any open-space easements within 1.5 miles of the railroad corridor. Furthermore, VOF is not currently working on any new open-space easement proposals within 1.5 miles of the railroad corridor. However, Alternative 3-C would cross 2 open-space easements in Caroline County and come within 1.5 miles of 2 additional open-space easements in Spotsylvania County. VOF supports the preferred Alternative 3-B as an avoidance to impacting existing easements.

In considering the potential impact that Alternative 3-C might have on conservation lands, an open-space easement is a legal interest in real property that creates a relationship between the holders of the easement and the property owner. By means of the easement, VOF has an interest in specific conservation values of the property and a legal obligation to protect these values.

—virginiaoutdoorsfoundation.org—

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VIRGINIA DEQ (continued)

134. This topic and its recommendations are addressed within Section 12 ("Open Space") of DEQ's main letter. Refer to DRPT-numbered statements #48 and #49.

VIRGINIA DEQ (continued)


(Response to comment 134 on previous page)

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VOF easements provide important public benefits by protecting in perpetuity significant tracts of mostly undeveloped land which may contribute to the protection of water quality, productive soils, natural heritage resources, historic resources, and scenic viewsheds. VOF easements represent over \$1 billion of public investment and fulfillment of Title XI of the Virginia Constitution and other public policies to ensure conservation of natural and cultural resources. These investments in conservation and future conservation opportunities may be jeopardized if a new high-speed railroad corridor impairs the protected resources and their character-defining setting. Degradation of protected resources may result in a loss of confidence in the effectiveness of conservation easements by the public.

Thank you for the notice and we look forward to working with you, the Virginia Department of Rail and Public Transportation, and the Federal Railroad Administration as necessary in the continued planning of this project. If you have any further questions, please feel free to contact me at (434) 906-0879 or via e-mail at bfuller@vofonline.org. You may also contact Martha Little, Director of Stewardship at (804) 577-3337 or via email at mlittle@vofonline.org.

Sincerely,



Brian G. Fuller
Assistant Director of Stewardship

CC: Valerie Fulcher, Environmental Program Specialist, DEQ (via email)
Martha Little, Director of Stewardship, VOF (via email)
Mike Hallock-Solomon, GIS/IT Specialist, VOF (via email)

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COMMONWEALTH of VIRGINIA

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director
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MEMORANDUM

TO: Janine Howard, DEQ EIR Coordinator
FROM: Daniel Moore, Principal Environmental Planner
DATE: September 13, 2017
SUBJECT: DEQ # 17-134F: FRA: DC to Richmond Southeast High Speed Rail, Cities of Richmond and Fredericksburg, Chesterfield, Henrico, Hanover, Caroline, Spotsylvania, Stafford, Prince William, Fairfax and Arlington Counties

We have reviewed the Draft Environmental Impact Statement (EIS) for the proposed project and offer the following comments regarding consistency with the provisions of the Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations):

In the Cities of Richmond and Fredericksburg and the Counties of Chesterfield, Henrico, Hanover, Caroline, Spotsylvania, Stafford, Prince William, Fairfax and Arlington, the areas protected by the Chesapeake Bay Preservation Act, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by the local government. RPAs include tidal wetlands, certain non-tidal wetlands and tidal shores, and a minimum 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow. Areas within the RMA are subject to the general performance criteria as specified in § 9VAC 25-830-130 of the Regulations and the local ordinance. Projects within the RMA must minimize land disturbance (including access and staging areas), retain existing vegetation and minimize impervious cover.

The project involves improvements to a 123 mile section of existing CRX railway, generally parallel to the I-95 corridor from Long Bridge in Arlington County to Centralia in Chesterfield County to increase rail capacity and rail speed between Washington DC and Richmond. Construction, installation, and operation and maintenance of railroads and their appurtenant structures are conditionally exempt from the Regulations provided they are constructed in accordance with:

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VIRGINIA DEQ (continued)

135. This topic and its recommendations are addressed within Section 13 ("Chesapeake Bay Preservation Areas") of DEQ's main letter. Refer to DRPT-numbered statements #50 and #51.

VIRGINIA DEQ (continued)

(Response to comment 135 on previous page)

1. regulations promulgated pursuant to the *Erosion and Sediment Control Law*, § 10.1-603 et seq. of the Code of Virginia, and the *Stormwater Management Act*, § 10.1-603.1 et seq. of the Code of Virginia;
2. an erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation; or,
3. local water quality protection criteria at least as stringent as the above state requirements.

Provided adherence to the above requirements, the proposed activity would be consistent with the *Chesapeake Bay Preservation Act* and the Regulations.

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