Ms. Angel Deem  
Virginia Department of Transportation  
Environmental Division  
1221 East Broad Street  
Richmond, VA 23219

Subject: Environmental Assessment Route 29 Bypass from Route 250 Bypass to US Route 29 North of South Fork Rivanna River, Albemarle County and City of Charlottesville, Virginia

Dear Ms. Deem,

In accordance with the National Environmental Policy Act of 1969 (NEPA), and Section 309 of the Clean Air Act, the United States Environmental Protection Agency (EPA) has reviewed the Environmental Assessment (EA) dated August 23, 2012 for the above referenced proposed project. The project is being studied by the Virginia Department of Transportation (VDOT) in cooperation with the Federal Highways Administration (FHWA) as co-lead agencies developing environmental analysis of impacts of the proposed study pursuant to NEPA. EPA recently responded to the request for scoping comments from VDOT and FHWA for their undertaking of a reevaluation of the environmental study for the proposed project. EPA’s correspondence is dated February 29, 2012. The lead agencies state that the EA was prepared to address changes to the project and new information or circumstances relevant to environmental concerns and bearing on the proposed project and its impacts since completion of previous documents issued for comment pursuant to NEPA. Historically, an Environmental Impact Statement (Draft EIS 1990, Final EIS 1993) and Supplemental EIS (Draft SEIS 2002, Final SEIS 2003) were completed for the project.

The proposed project’s purpose is to relieve congestion on the three-mile section of Route 29 between Route 250 Bypass and the crossing of the South Fork Rivanna River. It has been proposed that the need is best addressed by construction of a limited access road which is forecast to carry up to 28,000 vehicles per day by design year 2040. The project is expected to divert up to 28% of the traffic along the three miles of Route 29. The past environmental documents and subsequent Records of Decision (ROD) lead to, and upheld, the selection of Alternative 10 as the preferred alternative. Alternative 10 is a 4-lane bypass on new location west of the existing Rt 29 and passes through a scenic and historical area of rural residential housing, woodlands and farmlands. Alternative 10 impacts approximately 2.8 acres of wetlands, the highest of the alternatives studied. Over 3 miles of its 6.2 mile length is located in the watershed of a public water supply (South Fork Rivanna River Reservoir) and approximately 1/4 mile of roadway is located within 600 to 1300 feet of the reservoir. The Supplemental EIS...
focused on the two issues of potential impact to the South Fork Rivanna River Reservoir and effect on archaeological resources. EPA prepared comment letters on both the Draft EIS and the SEIS. It is clear from our formal record, that EPA raised significant concerns about the project.

Concerns remain from the original study, including potential risk to water supply by proximity of the roadway to the reservoir. Issues of concern in regard to new circumstances include need for analysis to support that construction and operation of a highway will not contribute to further degradation of water quality, in light of development of the Chesapeake Bay total maximum daily load (TMDL), the listing of streams in affected watersheds as impaired, the need to examine secondary development that may result from the project and secondary and cumulative impact analysis. Consideration and compliance should be made to new laws and Executive Orders, including the protection and restoration of the Chesapeake Bay. Please consider detailed comments on the review of the EA, provided as an attachment to this letter.

If the lead agencies proceed with a Clean Water Act Section 404 permit application to impact jurisdictional waters, the Army Corps of Engineers (Corps) and EPA will require a thoroughly vetted avoidance and minimization analysis as well as the alternatives analysis identifying all practicable alternatives. As the Corps can only permit the Least Environmentally Damaging Practicable Alternative (LEDPA), it must be demonstrated that the preferred alternative is the LEDPA. The study should analyze aquatic impacts based on current determinations of jurisdictional waters. The alternatives analysis is up to 20 years old and may not be sufficient for the CWA 404 permit application process review.

EPA understands that some controversy has existed with respect to this project over the years and we support VDOT and FHWA’s decision to include public involvement in the reevaluation and EA process. As you realize, the EA process can conclude in a Finding of No Significant Impact, but if controversy and environmental or community impacts appear significant pertaining to new information or circumstances, including new regulations, a higher level of study may be required (40 CFR 1508.26). Given the amount of time that has passed, it is prudent to allow for a comprehensive reevaluation of the project. EPA suggests that it might be appropriate for the lead agencies to provide an updated or new SEIS to reflect the environmental conditions since the last NEPA document, provide an up-to-date alternatives analysis reflecting current status of roadways and land use in the area; and have an alternatives analysis that will be appropriate for any future permit application in accordance with the CWA.

EPA appreciates the opportunity to provide input on the issues of this study. If there are any questions or concerns, please feel free to contact Ms. Barbara Rudnick, NEPA Team Leader, at 215-814-3322 or Mr. Mark Douglas, principle reviewer, at 215-814-2767.

Sincerely,

[Signature]

Jeffrey D. Lapp, Associate Director
Office of Environmental Programs

Enclosure
Attachment

Alternatives

The EA provides a summary of the previously considered alternatives, as stated in the document, for informational purposes only and an alternatives analysis will not be conducted anew as part of the EA, the project has a valid Record of Decision (ROD) from September 2003. Throughout this document, there are references to the amount of development within the study area as well as north of the study area in Greene County. The alternatives analysis does not account for current status of roadways nor consider new alternatives since the SEIS in 2003. These alternatives and alignments were based on traffic patterns and flow from the 1990’s as pointed out in the EA. EPA suggests additional considerations are afforded the alternatives analysis as the new development, and amount of time, since the ROD was issued that needs and alignment shifts may be warranted.

Chesapeake Bay TMDL and 303d Listed Sub-watersheds and associated TMDLs

The EA mentions that the bypass corridor passes through the South Fork Creek Rivanna River, Ivy Creek, Moores Creek, Meadow Creek watersheds all of which have been listed for aquatic life use since the ROD of 2003. A TMDL has been issued for Moores and Meadow Creeks for sediment, which was not mentioned in the EA, nor how the proposed project will comply with the TMDL implementation plan. The entire project is within the Rivanna River watershed which has a TMDL for sediment. The TMDL identifies sedimentation caused by higher runoff flows as the primary stressor on the impaired sections of the river. The EA does not mention, nor address the impacts of the project on the TMDL. The EA states that during construction, the applicable regulations for stormwater will be followed, but makes no mention of how the proposed project will potentially affect the already impaired watersheds with the increased surface disturbance, filling of 2.8 acres of wetlands, increased impermeable surfaces, impacts from the 24 stream crossings, runoff, and potential pollutants from the roadway once the roadway is in use. EPA suggests the applicant discuss what efforts will be employed to avoid further impairment of the waterways and if need be, consider an alternate route to avoid the impacts.

The EA acknowledges the development of the Chesapeake Bay TMDL. However, similar to the other TMDLs and impaired water bodies mentioned above, the EA does not discuss or demonstrate how the proposed project will meet the TMDL allocations, offset any new or increased discharges or loads, or limit additional impairment of the waterbodies as a result of the impacts associated with the construction of the roadway and additional SW runoff after construction. The EA claims that the TMDL cannot scale down to assess water quality on a project level for this analysis. The Chesapeake Bay Watershed model can be scaled down to the county level and to the drainage area of a river with flow of at least 100 cubic feet per second (cfs). Although it is not designed to assess compliance or site-specific developments, the Chesapeake Bay Program Watershed Model could support a general analysis of the potential increase in nitrogen, phosphorus and sediment delivered to the Chesapeake Bay resulting from an additional six miles of impermeable surface at these county and river segment scales.
Federal agencies are also required to address issues raised in EO13508 “Protecting and Restoring the Chesapeake Bay Watershed” which includes restoring wetlands, streams, and riparian forest buffers, in addition to reducing nitrogen, phosphorous, sediment and toxic contaminants to meet water quality goals.

**Stormwater**

EPA requests a further analysis of the post-construction storm water (SW) management plan. It is unclear what is meant by the statement on page 48 that the storm water management will capture all runoff from the project area. Does the SW management plan cover all SW events? Does it mean that all runoff is contained, infiltrated, evapotranspirated and/or reused, or does it mean that the storm water drains to a designated point? Considerable SW management methodologies have changed and new practices have been developed since the 2003 ROD’s SW management plans were put forth. These newer practices include low impact development (LID) best management practices (BMPs) incorporated into Green Infrastructure development.

**Secondary and Cumulative Impact Analysis**

As stated in EPA’s scoping letter, an assessment of indirect (including secondary growth) and cumulative effects, in accordance with Council on Environmental Quality (CEQ) guidance, has evolved (and been incorporated into some state transportation department’s NEPA process), it would be appropriate to perform a new secondary and cumulative impact study. The EA repeatedly points out the amount of development which has occurred along Route 29 in the study area since issuance of the most recent ROD in 2003. It is reasonable to assume that once the areas around the study area are built out, the development pressure will move further north in Greene County. It is also possible that if the bypass is constructed, the development of Greene County will, in fact speed up, as the potential commuting advantage between the area and Charlottesville could attract additional developers and residents that would have not had interest in the area prior to the bypass. In fact the EA mentions that the area north of the northern terminus has substantial new development; but does not discuss or offer analysis of potential secondary and cumulative impacts north of the northern bypass terminus. Models or expert land-use panels can be used to predict growth patterns. As pointed out in the EA, the development north of the study area may be driving the need for the bypass. Additionally, updates of land use should be included in this study. Discussion of integrating smart growth/sustainability into the project should be considered.

EPA has suggested in previous EIS reviews that cumulative long term pollutant loading and long-term risk from intentional or non-intentional contamination by hazardous material should be calculated for the life of the reservoir.

**Incorporation of planning, land use and traffic data**

The 2040 traffic flow forecasts are calculated from the constrained long range transportation plan (CLRP) which considers all of the foreseeable improvements to roadways in the study area. These other projects include widening of existing Route 29 northward from the
South Fork Rivanna River to Timberwood Boulevard; improvements to parallel secondary roads (Berkmar Drive, Hillsdale Drive) to expand options for local circulation; a grade-separated interchange at Route 29 and Rio Road; and improvements to the Route 29/Route 250 bypass interchange. These projects are proposed separate to the proposed project. It is possible that the projects along Route 29 may not go forward if the bypass is in-fact built due to the additional costs. Without the additional projects considered in the CLRP, the overall traffic flow improvements may not be to the extent forecasted in the EA. EPA suggests the applicant provide an analysis of the proposed project alone and not include the additional roadway improvements for an accurate build no-build comparison. Additionally, based on the information provided in Table 4, there does not appear to be a significant change in level of service on Route 29 between the build and no-build traffic forecasts of the representative interchanges. While the overall forecasted travel time is down, the level of service remains the same for all interchanges except for the Hilton Heights Road interchange goes from VDOT’s level of service (LOS) of ‘E’ to ‘D’.

Federal agencies are required to address issues raised in EO 13514, “Federal Leadership in Environmental, Energy and Economic Performance” and transportation reauthorization law which includes advancing regional and local integrated planning, and recognizing existing community transportation infrastructure. Local planning organization information and analysis should be incorporated where appropriate.

**Final Compensatory Mitigation Rule**

The EA did not directly address the change in regulatory practices since the issuance of the SEIS, including the revision to the regulations for compensatory mitigation for authorized impacts to waters of the U.S. under Section 404 of the Clean Water Act. The regulations, known as the Final Compensatory Mitigation Rule, are intended to standardize mitigation nationally as well as improve the effectiveness of mitigation to replace aquatic functions through permitted impacts to jurisdictional waters. The regulations were issued jointly by the Corps of Engineers and EPA in 2008 can be found at 40 CFR Part 230. EPA suggests a thorough discussion of the proposed impacts of 2.8 acres of wetlands and 24 stream crossings and how the mitigation efforts will follow the Final Compensatory Mitigation Rule.

**Conclusion**

EPA would suggest that given the time that has passed since the original study that an alternative that is sensitive to the environmental and social concerns be considered in addition to the preferred bypass. EPA has stated in previous letters that new evaluation of an upgrade to existing Route 29, with intersection grade separation, should be considered; it should also be determined if changes in the preferred bypass alignment could reduce impacts. As stated in our letter of 1990, the agency supports improvements utilizing existing alignments, whenever possible, in order to minimize environmental impacts; this is particularly true if a new alignment yields limited traffic relief in the corridor. Alternatives analysis is the heart of NEPA, as described by CEQ (40 CFR 1502.14)