



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street, SE
Charleston, WV 25304
Phone: 304-926-0495

Harold D. Ward, Cabinet Secretary
dep.wv.gov

September 28, 2021

Re: WV Permit No. WV0115924
WV Division of Highways
Registration No. WVR110602
Response to Public Comments

Dear Citizen,

The State of West Virginia, Department of Environmental Protection (DEP), Division of Water and Waste Management (DWWM) would like to take this opportunity to thank those who submitted written comments on the application from WV Division of Highways. This Response to Public Comments highlights the issues and concerns that were identified through the comments received during the public notice period.

WV Division of Highways (US 522 Project) will disturb 175.4 acres and consists of 3.1 miles of the US 522 Berkeley Springs Bypass project. The project begins just south of Winchester Grade Road (County Route 13) and terminates at County Route 9/9. The project involves grading, draining, paving, two mainline bridges, and one overpass bridge. Also included are three new at-grade intersections and an interchange with WV 9.

A Class I legal advertisement was published in The Morgan Messenger on September 9, 2020. This public notice allowed the DWWM to receive public comments on the proposed project. The public notice/public comment period closed on October 9, 2020. All commenters requested a public hearing. A second Class I legal advertisement was published on November 4, 2020, announcing that a virtual public hearing would be held on the Microsoft TEAMS videoconferencing platform at 6:00 pm on Tuesday, December 8, 2020, and that the comment period had been extended to accept written comments until 5 pm December 18, 2020. No oral comments were made at the virtual hearing.

DWWM received 67 sets of comments during the public notice period. Every attempt has been made to ensure that all issues and concerns relevant to the application and within the scope of the WV/NPDES General Permit for Stormwater Associated with Construction Activities (CSW GP) were considered and addressed. While all comments are reviewed, it is beyond the purview of the DWWM to respond to comments that are not related to the permit application or CSW GP. DWWM has reviewed and considered all comments received

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and has prepared a Response to Public Comments.

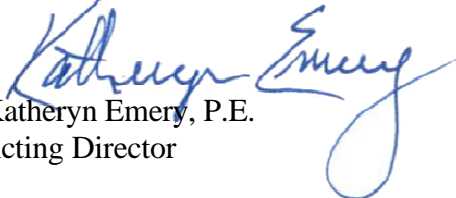
This permit registration was issued on September 28, 2021, with the following Special Condition:

WVDOH shall submit a modification application that includes a complete SWPPP and GPP with all required maps, site plans, design details, supporting calculations, construction details and all information necessary to demonstrate that the contractor's SWPPP and GPP satisfies all conditions of the CSW GP. This complete modification application will not be submitted until WVDOH has approved a complete project design proposed by the contractor and the mod application shall be submitted no less than 60 days prior to the anticipated construction date. The WVDOH understands and accepts that submittal of a permit modification application does not guarantee full permit issuance within 60 days of that submittal and that no earth disturbance associated with the project may occur prior to the contractor and WVDOH obtaining full permit registration approval as co-permittees from the Director.

Notice is hereby given of your right to appeal the terms and conditions of this permit registration of which you are aggrieved to the Environmental Quality Board by filing a NOTICE of APPEAL on the form prescribed by such Board, in accordance with the provisions of Section 21, Article 11, Chapter 22 of the Code of West Virginia within thirty (30) days after issuance of this permit registration.

Thank you for your interest and comments on the WV Division of Highways application. If you have any further questions or concerns, please do not hesitate to contact Rick Adams of my staff at 304-926-0499 ext. 43763 or by email at rick.d.adams@wv.gov.

Sincerely,


Katheryn Emery, P.E.
Acting Director

KDE/rda

Enclosure

Response to Public Comments
Registration No. WVR110602

Multiple comments were provided on specific issues. Those comments have been summarized and, in some cases, similar comments have been listed together. Comments are shown in italics with the agency response below in bold.

1. *Request for Public Hearing: Nearly all commenters requested that a public hearing be held concerning the construction of the Berkeley Springs Bypass.*

A virtual hearing was held on the Microsoft TEAMS videoconferencing platform at 6:00 pm on Tuesday, December 8, 2020. There were no oral comments made during the hearing.

2. *Increased Risk of Flooding and Flood Control Measures:*

a. *Several comments received were concerned about the increased risk of flooding and flood control measures proposed in the plan for the 522 Bypass.*

b. *I am concerned that storm runoff control practices in the NPDES application for the Berkeley Springs Bypass construction will result in an increase in flash flooding of Warm Springs Run, a stream that flows through the commercial district of the Town of Bath and Berkeley Springs State Park. This watershed is already subject to costly damage from flash flooding. Sediment basins near the run and its tributaries have altered the hydrograph of the stream causing down-cutting, streambank erosion, and sedimentation. The application calculates each basin separately and ignores the collective addition of numerous basins rapidly releasing storm runoff all at once.*

c. *The Town of Bath government and its partners have been installing low impact, green infrastructure projects to attempt to offset the existing flooding problems. Green infrastructure practices are necessary in this area because the soils are shallow, lack organic matter in the topsoil, and have poor cover. This application ignores practices that could improve infiltration and groundwater recharge and uses only hard storm water controls that perform poorly in the local soils.*

Flood control measures are not required in the 2019 Construction Stormwater General Permit (CSW GP) however WV Division of Highways has proposed 27 permanent stormwater management facilities to reduce the post developed peak runoff from that of pre-developed runoff for a 1-year/24-hour storm event. Per Attachment 17 – Peak Discharge Calculations Summary, the total post storm runoff discharge from construction projects 02, 03 and 04 is proposed to be reduced by 54% compared to that of the Pre-development.

During construction, 28 sediment basins are proposed to be incorporated with a combined storage volume of 3600 cubic feet per contributing drainage acre with half wet and half dry storage with a minimum of 1 foot of freeboard. The emergency spillways are designed for the peak rate of runoff from the 25-year/24-hour storm. When the storage volume of a sediment basin is reduced to half of its wet storage volume, the basins are proposed to be cleaned and restored to its original dimensions. The primary purpose of sediment basins is to prevent sediment from entering adjacent streams by detaining runoff and allowing suspended solids to settle out prior to the runoff leaving a site but with the dry storage

associated with these structures will prolong the flow time of runoff and reduce the peak discharge.

WVDOH shall submit a modification application and provide all required maps, site plans, design details, supporting calculations, construction details and all information necessary to demonstrate that the contractor will comply with the CSW GP. The project is proposed to be completed in multiple phases to ensure that during-development peak discharges are required to be evaluated and controlled at the discharge point for each drainage area during construction activity.

3. Expanded Impervious Footprint: *Several comments were received concerned that an expanded impervious footprint (19%) has exacerbated damage done by flooding in downtown Berkeley Springs. Commenters want to know what stormwater management practices are included in the plans for the 522 Bypass.*

Per the addendum for Chesapeake Bay Counties, the Urban Impervious area are proposed to be increased from 14.69 acres to 32.12 areas which is a 118% increase. See comment 2 for proposed stormwater practices.

4. Low Bidder: *Several comments received were concerned application places a burden on the successful low bidder to the project to interpret the necessary protections to streams and wetlands in the area. This seems deficient and an abdication of necessary guidance.*

WVDEP has issued a conditional approval for WVR110602. The contractor is required to provide a Storm Water Pollution Prevention Plan (SWPPP) and a Groundwater Protection Plan (GPP) that will comply with the terms and conditions of 2019 Construction Stormwater General Permit WV0115924 issued 1-10-2019 through submittal of a permit modification. The application for modification is required to be reviewed and approved by the Director before commencement of the proposed construction activity.

5. Long Term Maintenance:

a. *Several comments received were concerned about the responsibility of long-term maintenance of the permanent stormwater management facilities.*

b. *The sediment basins will be installed but no mention of how they will be maintained. Whose responsibility is it?*

The CSW GP does not address long term maintenance of permanent stormwater management facilities. However, all permanent stormwater management facilities are proposed to be constructed within the WVDOH Right-of-Way and required to be maintained by the WVDOH.

6. Stream and Wetland Mitigation:

a. *Several comments received were concerned about the inadequacy and implementation of mitigation for stream and wetland impacts.*

b. *The public was not included in the decisions or informed as to how these wetland*

impacts will be mitigated.

c. Where will the mandated stream and wetland impacts be mitigated?

Stream and wetland mitigation is not regulated under the CSW GP. However, this project's mitigation proposal under SWP-21-0003 issued on July 2, 2021, was approved by the WVDEP-DWWM to offset permanent wetland impacts associated with the proposed project activity.

In order to comply with the SWP and water quality standards regulations the following special conditions must be met:

- 1. To ensure that work is conducted in accordance with the terms and conditions of this SWP representatives from WVDEP-DWWM and WVDNR-WRS will be allowed to inspect the authorized activity at any time deemed necessary in accordance with the WV Water Pollution Control Act, W.Va. Code §22-11-4-17.c (2014).**
- 2. To prevent unnecessary impact of aquatic resources at points of ingress and egress, equipment is to disturb aquatic resources no more than is necessary to accommodate proper construction and operation in accordance with Requirements Governing Water Quality Standards, W.Va. C.S.R. §47-2-3.2 (2016).**
- 3. To protect water quality and the designated uses of waters within the vicinity of the Project, best management practices for sediment and erosion control will be utilized in accordance with the applicable Storm Water Pollution Prevention Plan. This condition is required in accordance with W.Va. C.S.R. §47-2-1 et seq. (2016) and the Antidegradation Implementation Procedures, W.Va. C.S.R §60-5-1, et seq (2008).**
- 4. Prior to impacts, 0.271 wetland credits must be purchased from a USACE mitigation bank or 0.620 wetland credits from the ILF Program to compensate for impacts. The applicant is required to notify the WVDEP-DWWM when mitigation obligations have been satisfied.**

The US 522 Berkeley Springs Bypass jurisdictional determination (JD) report was approved by the Department of Army Corps of Engineers on July 6, 2021. The overall roadway project has been assigned the following file number: LRH-2020-414-POT. See the following Special Condition:

To compensate for the permanent discharge of dredged and/or fill material into 2,976 linear feet of stream at 4 single and complete project locations, as described in attached Table 1, you have proposed to purchase a total of 1,670.795 credits from an approved mitigation bank program and/or, if bank credits are not available, purchase a total of 1,870.732 credits from the West Virginia In-Lieu Fee (WVILF) Program. You shall submit verification of the credit purchase prior to discharging permanent fill material into waters of the U.S.

7. Soils for the Project:

- a. *Over 89% of the area is comprised of Weikert or Weikert -Berks Soils, with highly erodible fine and usually with less than 18 to bedrock. The soil has severe limitations for construction of embankments and ability to establish vegetation.*
- b. *I am concerned that the planned stormwater and sediment control measures for the US 522 bypass at Berkeley Springs are insufficient. It appears that the designs are based on flawed data pertaining to the permeability of the local soils.*
- c. *The calculations used for sizing sediment basins uses a woods/grass combination in good or fair condition and a Hydrologic Soil Group B infiltration as the basis for sizing all basins. The soil is Hydrologic Group D, and there are many areas that would be considered poor cover due to the documented depletion of topsoil and organic matter.*

A soils report is provided in this application. Appropriate provisions are proposed to be addressed in the SWPPP for the successful construction of the ponds and the capability of the soils in the reservoir area to hold water, provide stable side-slopes and dams, and to establish vegetation.

Revised pre and post development drainage area maps were provided in Attachment 17 of the application. The curve number description used in the calculation of runoff has been revised to Hydrologic Group D. Using woods/grass combination in good or fair condition is appropriate. Appropriate vegetation is required in the CSW GP.

- 8. *The watershed hydrology is increasingly subject to flash flooding resulting from lower amounts of rain than previously caused such events. It is a narrow watershed with a large amount of impervious area. The addition of several sediment basins has altered the time of concentration and appear to increase the number of out of bank occurrences resulting in increased flood damage. Adding additional basins without improving infiltration of collected runoff will exacerbate flooding for the community.*

See Responses 2 and 3. The time of concentration and infiltration will both be increased with the addition of a series of diversions and sediment basins. Twenty-seven of the sediment basins are proposed to be retained as permanent stormwater management facilities.

9. Concerns for Adequate Sediment Control:

- a. *During the project about 175 acres of land will be disturbed or cleared. The risk of sediment entering the streams will be greatly increased during, and for some months after construction. If sediment control is not adequate and carefully monitored, there is a potential for clogging of waterways and deposition of sediment.*

- 9b. *Construction will disturb a large amount of land and create a lot of dust and mud.*

The sediment capacity has been calculated to treat a combined storage volume of 3600 cubic feet per contributing drainage acre with half wet and half dry storage with a minimum of 1 foot of freeboard. Part II. H. 3.b.10 through II.H.3.b.13. of the CSW GP list the design requirements for sediment basins and traps providing sediment control during

construction. Provisions are required to be made to control fugitive dust on and originating from the construction site.

10. The sediment capacity that has been calculated for the watershed is based upon information that is not specific to local soil types and drainage considerations. This may result in more rapid surface runoff than anticipated. Damage to stream health and ecology, both flora and fauna, due to scouring during floods and post flood sedimentation

Part II.H.1.e. of the CSW GP addresses Impact Reduction: The permit requires stable outlet channels with velocity dissipation which directs site runoff to a natural watercourse.

11. Concerns for Site Stabilization:

a. The destruction and movement of soils, over 3 million cubic yards of soil and rock will be moved during the project, much of this is soil. Will care be taken to ensure that areas are repaired using existing soils rather than soil being buried and shale being left exposed? This is common in many construction projects. Poor rehabilitation of soils will limit vegetation growth making establishment of vegetation difficult along the bypass route.

b. Concerns about how vegetation be reestablished, the form it will take, and what measures will be taken to prevent the increased influx of invasive species into the watershed?

Efforts shall be made to minimize soil compaction and preserve topsoil where feasible. Part II.H.1.e. requires the SWPPP to contain stabilization practices and vegetative practices.

A description of interim and final stabilization is required to be provided in the approved SWPPP submitted with the application for modification.

12. Sedimentation basins will be constructed. We are concerned that the land cover and soil types used in the calculation are inaccurate and believe that more sediment basins will be required than indicated.

Sediment basin volume are based on area. Appropriate soil types were used in the runoff calculations.

13. How will these basins be maintained post by-pass construction? What is the expectation that some of these will be managed as potential wetland habitats?

Most of the sediment basins are proposed to be converted to permanent stormwater management facilities and proposed to be maintained by WVDOT.

14. Who will be advising the contractors on environmental issues associated with the project?

The contractor has an employee training program for all on-site personnel directly involved with construction activities at all levels of responsibility that reiterates the components and goal of the SWPPP.

15. How can they possibly stop the runoff?

Runoff will not be stopped however is required to be controlled. See Responses 2 and 3.

16. How will existing stormwater structures will be incorporated into the plan.

See Responses 2 and 3. The existing stormwater control structures will not be incorporated into the plan.

17. Comments were made regarding the need for pedestrian accessibility, bike paths, economic impacts of the project, impacts to wildlife and flora health and diversity, impacts to existing trails and parks, air pollution and increased noise and the validity of the Environmental Impact Statement/Study used by WV Division of Highways in their development process

While all comments are reviewed, it is beyond the purview of DWWM to address comments that are not related to the Construction Stormwater General Permit requirement, application WV110602, stormwater or groundwater associated with construction activities or proposed erosion and sediment controls and best management practices for addressing stormwater runoff during construction activities are beyond the scope of this response to comments.