

August 17, 2023

Via Email: <a href="mailto:breisinger@c5ip.com">breisinger@c5ip.com</a>

Core5 Industrial Partners c/o Brian Reisinger 1250 N. Mountain Road Harrisburg, PA 17112

Re: Notice of Draft Individual NPDES Permit – Intent to Issue Notice of Technical Deficiencies Core5 at Route 100 NPDES Permit Application No. PAD390269 Lowhill Township, Lehigh County

Dear Mr. Reisinger:

The Department of Environmental Protection (DEP) has prepared the enclosed **draft** Individual NPDES Permit for Discharges of Stormwater Associated with Construction Activities ("Draft Individual NPDES Permit") for your review and comment.

Also enclosed is a copy of a public notice that, in accordance with DEP regulations at 25 Pa. Code § 92a.82(b), you are required to post near the entrance to your premises and, if the facility or discharge location is remote from these premises, at the entrance to the facility (project site) or at the discharge location. These postings shall remain for 30 days.

DEP will publish notice of the draft permit in the *Pennsylvania Bulletin* in the near future. You may provide written comments on the draft permit up to 30 days following publication of this notice. Following the 30-day public comment period (which may be extended by 15 days at DEP's discretion), DEP will consider any comments received and make a decision on whether to issue a final permit.

**Please be advised that your application contains technical deficiencies that must be corrected prior to DEP taking final action on your application**. The technical deficiencies void the permit decision guarantee and any agreements that have been made regarding the timeline for the permit application review. DEP will continue to follow the permit review process in the review and processing of this permit application.

#### **Technical Deficiencies**

- 1. §102.4(b)(5)(iv) The volume and rate of runoff from the project site and its upstream watershed area.
  - a. Maximum during construction drainage area map; Provide the maximum during construction drainage areas to the proposed swales.

- 2. §102.4(b)(5)(v) The location of all surface waters of this Commonwealth which may receive runoff within or from the project site and their classification under Chapter 93.
  - a. E&S plans and documents: Please provide all receiving water references to the Tributary to Jordan Creek (aka Cherith Brook), per Ch. 93 nomenclature, since Cherith Brook is not listed in Ch. 93.
  - b. Module 1 and E&S plans; Provide the impairments in addition to surface water designations.

### 3. §102.4(b)(5)(vii) A sequence of BMP installation and removal in relation to the scheduling of earth disturbance activities, prior to, during and after earth disturbance activities that ensure the proper functioning of all BMPs.

- a. EC-2, construction sequence; Provide for the stripping of topsoil prior to rough grading in step 6.
- b. EC-2, construction sequence; Clarify how sediment will be contained onsite during ingress and egress after the rock construction entrance is removed in step 10.
- c. EC-2, construction sequence; To avoid confusion, consider referencing the PCSM BMP construction sequence found on the PCSM plan in step 13 as opposed to the note after step 13.8. Additional critical stages of this step, are the installation of the level spreader, outfall structure alterations, planting soil and seeding installation.
- d. EC-2, construction sequence; Provide for the installation of the riparian buffer as a critical stage.

#### 4. §102.4(b)(5)(viii) Supporting calculations and measurements.

- a. E&S Narrative, level spreader: Provide calculations based on the flows for the 10year storm event leaving the detention basin, the level spreader is not designed according to the E&S manual, Page 444, Table G.4. Please provide a level spreader to meet this design criteria, 40 ft per 1 CFS or reducing the flows for the 10-year storm.
- b. E&S Narrative: Based on the E&S Manual, page 434, please provide calculations demonstrating criteria 3).
- c. E&S Narrative: provide calculations demonstrating the level spreader can safely convey flows and velocities up to the 100-year storm event, without providing accelerated erosion.
- d. E&S Worksheet #20: The design discharge for the temporary rip rap apron appears to exceed the pipe's capacity. Please address.
- e. E&S Worksheet #12: Reduction may not be taken for the dewatering zone in special protection watersheds. Please address.
- f. E&S Worksheet #12: Update the required storage volume after removing reductions taken for the dewatering zone.
- g. E&S Worksheet #12, 16: Dewatering time in a special protection watershed is 4-7 days. Please address.
- h. E&S Worksheet #12: Drainage area is more than 10% larger than pre-construction. Provide rip-rap protection at the bottom of the embankment to prevent scour.

- i. E&S Worksheet #12: The sediment basin does not appear to discharge directly to a surface water. Provide supporting calculations that accelerated erosion will not result from the proposed discharge.
- j. Worksheet 1; Please size the compost filter socks based on the longest run to top of slope during construction (usually existing contours). For example: compost filter sock #22 was sized at 12" according to a slope length of 46' at 10.9%, whereas the slope length to the top of slope appears to be closer to 60' at 10% plus 230' at 3.5% plus 115' at 5.2% plus 150' at 2%. In this case a 24" compost filter sock will likely be needed. Please size all compost filter socks based on the longest length to top of slope.
- k. E&S narrative; Replace level spreader calculations found in the E&S narrative with the updated calculations found in the PCSM narrative, appendix J as updated per PCSM comments.

### 5. §102.4(b)(5)(ix) Plan drawings.

- a. E&S plans; Ensure all earth disturbance for the roadway improvements are located within the LOD.
- b. E&S plans; Provide the level spreader to following the existing contours better. CO-A should be shifted to the southwest to get closer to the contour 610 bend. Also, consider placing the M-Inlet at the bend, so it distributes the flow to the perforated pipes more evenly.
- c. E&S plans; Provide riparian buffer planting areas as updated on the PCSM plans.
- d. E&S plans; Provide cover type labels such as lawn, meadow, woods, etc.
- e. E&S plans; Provide directional flow arrows on the stormwater pipes.
- f. E&S EC-2; Provide stabilized access into the sediment basin.
- g. E&S EC-2; It is unclear how the channelized area (running almost parallel to the emergency spillway) will be stabilized. Please indicate E&S control measures taken in this area.
- h. E&S plans; Provide during construction discharge point locations.
- i. E&S plans; Provide channel locations.
- j. E&S plans; Move compost socks out of proposed grading 9, such as compost filter socks 3 and 4. Additionally, allow an area upslope to allow for pooling of flow (guidance is 8').
- k. E&S plans; Provide the locations of the riparian buffer zones and include a reference to the planting plan and schedule for those zones on the E&S plans.
- 1. E&S details; Provide tree and shrub planting details.

#### 6. §102.4(b)(5)(xv) Identification of existing and proposed riparian forest buffers.

a. Provide an evaluation of the existing vegetation that is located in the Riparian Buffer area. Please include the number of native trees and shrubs, density of native trees and shrubs, species of native trees and shrubs and health of native trees and shrubs. Areas of this existing buffer that do not meet the proposed criteria should be amended as needed. Identify any maintenance that needs to be performed within the existing buffer such as removing noxious weeds or invasive species.

- b. Per Ch. 102.14(b)(1), the predominant vegetation must be composed of a variety of native riparian tree species and shrubs to meet a uniform canopy cover of 60%. Please confirm the proposed plantings will then satisfy the 60% canopy cover requirement. Provide on the buffer planting plan, if necessary, an increased number of native species and a plan to remove the noxious weeds and invasive species.
- c. Provide on the Riparian Forest Buffer Plans a tree shelter detail.
- d. Identify on the planting schedules on the Riparian Forest Buffer Plans LD-1, which plants/shrubs/grasses are proposed in which zone(s).
- e. Act 162 Offsetting requires a minimum caliper of 2-inch trees to be planted, please revise the Riparian Forest Buffer Plans LD-1 'Riparian Buffer Landscape Schedule' accordingly.
- f. Provide on the Riparian Forest Buffer Plans LD-1 and DN-1 the name, address and contact information for the responsible party regarding inspections and maintenance of the buffer.
- g. Clarify how the Riparian Forest Buffer Plan LP-2 will be permanently protected, including access easements. Provide metes and bounds for the Voluntary Riparian Forested Buffer on the plans.
- h. Provide on the Riparian Forest Buffer Plan direction regarding Reporting to the Department or Conservation District within 1 year of the establishment or protection of the buffer.
- i. Provide in the riparian buffer plan set, all of the areas which will receive the offsetting at a 1:1 ratio. Include all pertinent information regarding the buffers with respect to Act 162.
- j. For the offset areas, provide the acreages for each zone as well as the overall acreage.
- k. For the offset areas and voluntary forested riparian buffer area, provide the dimensions for each zone. Zone 1 should be a minimum of 50 ft and include all native trees, Zone 2 should be a minimum of 50 to 100 ft and include native trees and shrubs.
- 1. Per Act 162 requirements for offsetting, a minimum of 100 ft. (from top of bank) shall be established.
- m. Per Act 162 requirements for offsetting, the area to be offset should be a 1:1 ratio within the same drainage list. Update Module 4 if necessary.
- n. Provide on PCSM DN-1, the checklist from Chapter 8, Section 5.4.2 from the PA Stormwater Manual.
- o. LD-1, Provide a typical plant spacing detail for each zone.
- p. LD-1, Provide a tree shelter detail.
- q. DN-2, Surface Basin Cross Section Detail, Notes, remove all references to IWS and MRC.

### 7. §102.4(d) A person proposing or conducting an earth disturbance activity shall obtain the other necessary permits and authorizations from the Department.

- a. NOI, provide an update to obtaining the Act 537 approval for the project.
- 8. §102.6(a)(1) Submit to the Department or a conservation district a complete application or NOI, an E&S Plan meeting the requirements of § 102.4 (relating to

### erosion and sediment control requirements), a PCSM Plan meeting the requirements of § 102.8 (relating to PCSM requirements), and other information the Department may require.

a. The U.S. Army Corps of Engineers has released a public notice on behalf of the United States Fish and Wildlife Service (USFWS) effective March 31, 2023 requiring updated PNDI searches and clearances to be obtained for any project with a PNDI receipt dated prior to March 31, 2023. The PNDI search provided was conducted on March 19, 2021. Please provide a new PNDI search receipt and any updated federal clearance letters as required from the PNDI.

### 9. §102.8(c) Consistency with E&S Plan. The PCSM Plan shall be planned, designed and implemented to be consistent with the E&S Plan under § 102.4(b) (relating to erosion and sediment control requirements).

a. If any design changes made as a result of the above referenced E&S deficiencies should impact the PCSM plan, please make the necessary revisions and list them in the response letter.

# 10. §102.8(f)(4) An identification of the net change in volume and rate of stormwater from preconstruction hydrology to post construction hydrology for the entire project site and each drainage area.

- a. Please confirm whether or not that Exceptional Value (EV) wetlands (see Chapter 105.17 for EV wetland definition) are located on the project site or work on-site impacts EV wetlands (either directly or indirectly). Please provide a level of demonstration that there will be no degradation or adverse impacts to the EV wetland(s) which includes but is not limited to physical, chemical, thermal, biological, and volumetric impacts. This analysis should include assessing both the surface water and ground water hydrology and impact of the stormwater to the functionality and value of the wetland(s). The pre-construction rates for all year storm events and the volume of the 2-year storm event should be replicated. Release conditions of the stormwater to the EV wetland(s) should also be replicated according to pre-construction conditions as not to deprive any of the wetland(s) of stormwater or inundate those wetlands. The analysis may include but is not limited to calculations, reports, studies, assessments and any other necessary documentation.
  - i. What type of wetland is present, how is the hydrology of the wetland maintained, and the vegetation present within the wetlands.
  - ii. Pre and post-development flow distribution and characteristics as it relates to volume and flow to each of the EV wetlands on site.
  - iii. Discuss potential primary and secondary impacts to the functions and values of EV wetlands and proposed avoidance measures for the potential impacts.

### 11. §102.8(f)(5) An identification of the location of surface waters of this Commonwealth, which may receive runoff within or from the project site and their classification under Chapter 93 (relating to water quality standards).

a. Please provide all receiving water references to the Tributary to Jordan Creek (aka Cherith Brook), per Ch. 93 nomenclature, since Cherith Brook is not listed in Ch. 93.

### 12. §102.8(f)(8) Supporting calculations.

- a. PCSM Narrative, page 9, 13.0 Riparian buffer design, change the 15 ft to 150 ft.
- b. PCSM Narrative, page 9, 14.0 Conclusion, add verbiage for the voluntary riparian forest buffer and how it is met from a regulatory standpoint under a non-discharge alternative §102.14(e)(1) and (3).
- c. PCSM Narrative, Appendix C, Basin 1, Summary for Pond 1P, Device #2, orifice at 634.00, provide consistency with the orifice size shown and what is shown on PCSM Sheet 11, DN-2, Permanent Outlet Structure Detail, Invert Orifice #1. (i.e. 2.5" vs 3")
- d. PCSM Narrative, Appendix C, Pre and Post development routings, provide the summary sheets for each storm event.
- e. PCSM Narrative, Appendix C, provide Tc calculations for pre and post development conditions in the PCSM narrative.
- f. PCSM Narrative, Appendix J, based on the flows for the 10-year storm event leaving the detention basin, the level spreader is not designed according to the E&S manual, Page 444, Table G.4. Please provide a level spreader to meet this design criteria, 40 ft per 1 cfs or reducing the flows for the 10-year storm.
- g. PCSM Narrative, Appendix J, based on the E&S Manual, page 432, 3. Soil Slope, please analyze the proposed slope below the level spreader. The existing grades in this area exceed 6% slopes and run the risk of reconcentrating before hitting the surface water.
- h. PCSM Narrative, Appendix J, based on the E&S Manual, page 434, please revise the design to meet criteria d.
- i. PCSM Narrative, Appendix J, based on the E&S Manual, page 434, please provide calculations demonstrating criteria 3).
- j. PCSM Narrative, Appendix J, provide calculations demonstrating the level spreader can safely convey flows and velocities up to the 100-year storm event, without providing accelerated erosion.
- k. PCSM Narrative, Page 9, Section 13.0, please clarify the discussions regarding fringe wetlands surrounding the pond and the findings of the wetland report in Appendix H.

### 13. §102.8(f)(9) Plan drawings.

- a. PCSM Plans, ensure all earth disturbance for the roadway improvements are located within the LOD.
- b. PCSM Plans, provide stage storage information for Detention Basin 1 on the PCSM plans.
- c. PCSM Plans, the riparian buffer setback identified on the PCSM plans does not accurately reflect the surface water shown on the plan near UNK-MH. It appears that grading and the level spreader is within the 0 to 150 ft setback, therefore, per Act 162, an equivalency demonstration and offsetting is required. Please provide worksheets 12-15, to demonstrate water quality is met. Please provide offsetting for the entire area that is affected from 0-150 ft at a 1:1 ratio. Update Module 4 accordingly.

- d. PCSM plans, provide the level spreader to following the existing contours better. CO-A should be shifted to the southwest to get closer to the contour 610 bend. Also, consider placing the M-Inlet at the bend, so it distributes the flow to the perforated pipes more evenly.
- e. PCSM plans, the entire area from the surface water to the level spreader should be planted and considered part of the voluntary forested riparian buffer.
- f. PCSM plans, provide all storm sewer T/G, invert in and out, pipe size, slopes, material, etc. on the plans.
- g. PCSM plans; Provide cover type labels such as lawn, meadow, woods, etc.
- h. PCSM plans; Provide directional flow arrows on the stormwater pipes.
- i. PCSM-1, please clarify/relocate the "Assumed 50' Floodway" leader.
- j. PCSM-2, OS-1C structure is not shown at the bed bottom contour of 634.00. If the discharge pipe gets longer, update any calculations, if necessary.
- k. PCSM DN-1, Permanent Lawn Seed Mixtures information is not shown.

#### 14. §102.8(f)(10) A long-term operation and maintenance schedule, which provides for inspection of PCSM BMPs, including the repair, replacement, or other routine maintenance of the PCSM BMPs to ensure proper function and operation. The program must provide for completion of a written report documenting each inspection and all BMP repair and maintenance activities and how access to the PCSM BMPs will be provided.

a. Provide and label all existing and proposed right of way and easements on the PCSM plan.

# 15. §102.5(m)(3)(i)(B) [The Department] will provide an opportunity for interested members of the public, Federal and State Agencies to provide written comments on a proposed general permit.

- a. Please find attached to this letter, public comments received by the Department for this application. Please provide a written response to the comments in the resubmission.
- 16. Per the Lehigh County Conservation District's fee policy, all resubmittals will incur an additional fee. The first resubmission fee is 10% of the original fee and any further resubmittals will be 15% of the original fee. For clarification, please refer to our web site (<u>www.lehighconservation.org</u>) or contact our office. §102.6(b)(3)

You must submit a response fully addressing each of the technical deficiencies set forth above. Please note that this information **must be received within 30 calendar days from the date of this letter, on or before September 18, 2023, or DEP may consider the application to be withdrawn**.

Please submit a complete set of revised information to the District electronically, using Lehigh County Conservation District's submittal procedures which can be found on our website. Contact the District for any questions regarding resubmittal procedures. It is not necessary to provide hard copies of plan submittals. Please be advised that if your response does not satisfy the technical deficiencies, in general your application will proceed to an Elevated Review. If you do not believe the technical deficiencies can be fully addressed within the required timeframe, you should consider a voluntary withdrawal. If a permit application is denied, there is no recovery of fees available; however, if you voluntarily withdraw the NOI or application and then submit a new NOI or application for the same project, previously paid disturbed acreage fess will be reapplied to the new NOI or application.

If you believe that any of the stated deficiencies are not significant, instead of submitting a response to that deficiency, you have the option of requesting that DEP make a permit decision based on the information you have already provided regarding the subject matter of that deficiency. If you choose this option with regard to any deficiency, you should explain and justify how your current submission satisfies that deficiency.

If you have PCSM questions about your application, please contact Garrett Cook by e-mail at gcook@lehighconservation.org or by telephone at 610.391.9583 x 2986 or if you have E&S questions about your application, please contact Ann Sellers by e-mail at asellers@lehighconservation.org or by telephone at 610.391.9583 x 2988 and refer to Application No. PAD390269, to discuss your questions or to schedule a meeting. You must attempt to schedule any meeting within the 30 calendar days allotted for your reply.

Sincerely,

Vamela R. Kania

Pamela R. Kania, P.E. Environmental Program Manager Waterways & Wetlands Program

- cc: BL Companies, Greg Holtzman, <u>gholtzman@blcompanies.com</u>
  Lehigh County Conservation District, Cammy Kiechel, <u>ckiechel@lehighconservation.org</u>
  Lowhill Township, Jill Seymour <u>jseymour@lowhilltwp.org</u>
  Lehigh Valley Planning Commission, Susan Rockwell, <u>SRockwell@lvpc.org</u>
- Enclosures: Public Comments for review and comment Draft Individual NPDES Permit Fact Sheet Public Notice for Posting at Site