



August 11, 2023

Mr. David Koerner
Prologis LP
400 Boulder Drive, Suite 200
Breinigsville, PA 18031

Re: Technical Deficiency Letter
Prologis 7464-7600 Linglestown Road
NPDES Permit Application No. PAC220379
West Hanover Township, Dauphin County

Dear Mr. Koerner:

The Department of Environmental Protection (DEP) and the Dauphin County Conservation District (District) have reviewed the above referenced NOI and has identified the technical deficiencies listed below. The *Pennsylvania Erosion and Sediment Pollution Control Program Manual* (E&S Manual) and the *Pennsylvania Stormwater Best Management Practices Manual* (BMP Manual) include information that may aid you in responding to some of the deficiencies listed below. The deficiencies are based on applicable laws and regulations, and the guidance sets forth DEP's established means of satisfying the applicable regulatory and statutory requirements.

Technical Deficiencies

E&S Plan [identified by the District unless otherwise noted]

1. Per DEP, there appears to be a typo in the Crest Elevation (WCE) for Basin 2 on the *Sediment Basin Emergency Spillway with TRM Lining* detail on E&S Control Sheet 18 of 19. Given relative elevations, it is assumed to be 568' versus the written 658'. Review and revise as appropriate. [25 Pa. Code §102.4(b)(5)(ix)]
2. Per DEP, the *Sediment basin Emergency Spillway with TRM Lining* detail and schedule, Sediment Basin 5 has an invert elevation of 562.0' and per the *Spillway & Emergency Spillway Channel* detail and schedule, Dry Extended Detention Pond 5 has an invert elevation of 562.5'. Verify that this is the intended design as raising a spillway crest may be problematic after the initial spillway is established and stabilized. Review and revise as appropriate, ensuring to add notes, specifications, and/or revisions to the sequence of construction. [25 Pa. Code §102.4(b)(5)(vii) and 25 Pa. Code §102.4(b)(5)(ix)]
3. Per DEP, potentially sediment laden stormwater directed towards Sediment Basin D are proposed to be redirected to BMP 5 (and subsequently BMPs 6 & 7) during active construction via a temporary flow path (refer to Phase IIB). Clarify how BMPs 5, 6, & 7 will be protected from clogging of the underlying subsoil, especially given that BMPs 6 and 7 rely on storage and infiltration capacity for PCSM treatment. Provide soil amendments and over-excavation, as necessary, to account for clogging of the underlying soil during the active construction phase for BMPs 5, 6, and 7. Any mention of this should be noted in both the general and PCSM specific sequence of construction under a critical stage given its importance for BMP functionality. [25 Pa. Code §102.4(b)(5)(vii) and 25 Pa. Code §102.4(b)(5)(ix)]

Waterways & Wetlands Program

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4. Per DEP, BMP 1 (a subsurface infiltration bed) is within the footprint of Sediment Basin A and therefore there is risk of clogging of the underlying soil during the active construction phase of Sediment Basin A. DEP acknowledges the mention of 6" over-excavation from the proposed PCSM basin bottom (for a total of 1.5' from the proposed E&S basin bottom given E&S condition is 1' above the PCSM condition) in the PCSM-specific sequence of construction. However, this over-excavation, and prevention of subsoil over-compaction, should also be explicitly noted in the general sequence of construction under a critical stage given the importance of this. Revise the general sequence of construction as noted. The DEP notes that consideration should be given to having the 6" specification as a minimum, with additional depth potentially needed based on the overseeing engineer or their designee. *[25 Pa. Code §102.4(b)(5)(vii) and 25 Pa. Code §102.4(b)(5)(ix)]*
5. Per DEP, BMP 2 (an infiltration basin) is within the footprint of Sediment Basin B and therefore there is risk of clogging of the underlying soil during the active construction phase of Sediment Basin B. DEP acknowledges the mention of 6" over-excavation from the proposed PCSM basin bottom (for a total of 1.5' from the proposed E&S basin bottom given E&S condition is 1' above the PCSM condition) in the PCSM-specific sequence of construction. However, this over-excavation, and prevention of subsoil over-compaction, should also be explicitly noted in the general sequence of construction under a critical stage given the importance of this. Revise the general sequence of construction as noted. The DEP notes that consideration should be given to having the 6" specification as a minimum, with additional depth potentially needed based on the overseeing engineer or their designee. *[25 Pa. Code §102.4(b)(5)(vii) and 25 Pa. Code §102.4(b)(5)(ix)]*
6. Per DEP, according to Sequence of Construction Phase I Item 13, Level Spreaders 1 and 2 associated as outfalls for Sediment Basin B/PCSM BMP 2 and Sediment Basin C/PCSM BMP 3 respectively, are to be constructed and functional during the construction phase – meaning sediment laden water will have opportunity to clog the level spreader prior to conversion to PCSM. Provide direction on cleaning/replacing the level spreaders at the point of PCSM conversion in both the general and PCSM-specific sequence of construction. *[25 Pa. Code §102.4(b)(5)(vii) and 25 Pa. Code §102.4(b)(5)(ix)]*

PCSM Report

7. Wetlands are a surface water in which a surface water demonstration that rate control, volume management, and water quality compliance is to be provided. In addition, the projects impact on subsurface hydrology are to be analyzed to better ensure the wetlands continue to receive groundwater in a manner that mimics pre-development conditions and will protect the existing and designated use functions and values. The project proposes work upslope and immediately adjacent to the wetlands and several analysis points may be necessary to demonstrate all areas of the wetland are project and maintained. The DEP did not locate an analysis for Wetlands C and D that are down gradient of PCSM BMP 5. As a part of the demonstration, provide the following: *[25 Pa. Code §102.8(g)(3), §102.8(g)(2), §102.8(g)(3), and §102.8(g)(6)]*
 - a. A clear demonstration of the primary source of hydrology to each wetland point of analysis. The groundwater or seasonal high groundwater elevations should be located upslope of the wetlands to better show the moment of the table.

- b. Pre- and Post-construction infiltration volumes for the upslope contributing areas to the point of analysis at the wetland.
- c. A discussion on the project's effect on groundwater movement from the excavation, compaction, and installation of below grade barriers (walls, clay cores, key trenches) as well as the impervious covering that redirects and concentrates surface water that would have otherwise percolated into the permeable areas of the site and become groundwater.

PCSM Plan

8. PCSM Sheet SW 16 - Label all surface waters with unique identifiers that are consistent with the 'Wetland and Watercourse Delineation Report'. Ensure the labels are visible and not obscured by other features of the site. [25 Pa. Code §102.8(f)(5)]
9. There is disparity regarding the Level Spreader 7 lip elevation between the *Level Spreader 7* detail (528.5') [E&S Plans, Sheet 19 of 19 & PCSM Plans, Sheet 5 of 10] and the *Level Spreader Design Calculations LS-7* computations sheet (530.0') [PCSM Report, Page 373 of 820]. Review and revise as appropriate. [25 Pa Code §102.8(f)(6) and 25 Pa Code §102.8(f)(9)]
10. There is disparity regarding the Level Spreader 6 inflow spillway pipe between the *Level Spreader 6* detail (15") [E&S Plans, Sheet 19 of 19 & PCSM Plans, Sheet 5 of 10] and the hydraulic computations for BMP 8 (18") [PCSM Report, Page 240 of 820]. Review and revise as appropriate. [25 Pa Code §102.8(f)(6) and 25 Pa Code §102.8(f)(9)]
11. There is disparity regarding the BMP 5 bottom elevation between the *Permanent Facility Cross Section at Outlet Structure* detail (557') [PCSM Plan Sheet, 6 of 10] and the *Dry Detention Basin Cross Section* (558') [PCSM Plan Sheet, 7 of 10]. Further, neither detail seems to be appropriate given that a riser/outlet structure is not being proposed for BMP 5 (shown as a simple headwall in plan view). Review and revise as appropriate. [25 Pa Code §102.8(f)(6) and 25 Pa Code §102.8(f)(9)]
12. There is disparity regarding the BMP 9 outlet pipe material between the *Outlet Structure - OS-9* detail (SLPEP) [PCSM Plans, Sheet 7 of 10] and the hydraulic computations (RCP) [PCSM Report, Page 242 of 820]. Review and revise as appropriate. [25 Pa Code §102.8(f)(6) and 25 Pa Code §102.8(f)(9)]
13. There is disparity regarding the BMP 9 outlet pipe invert between the *Outlet Structure - OS-9* detail (563.3') [PCSM Plans, Sheet 7 of 10] and the hydraulic computations (564.5') [PCSM Report, Page 242 of 820]. Review and revise as appropriate. [25 Pa Code §102.8(f)(6) and 25 Pa Code §102.8(f)(9)]
14. Areas of the proposed grading appear to be steeper than 3:1 (H:V), which is the standard acceptable maximum grade for slope stability. These areas specifically are located along the northern and western bounds of the proposed structure and are approximately between a 2:1 and 2.5:1 grade. Provide justification that the proposed slopes are stable and do not pose a significant risk of erosion and foundational stability to the proposed structure – otherwise, revise the grading an necessary to achieve slope stability. [25 Pa Code §102.8(f)(3) and 25 Pa Code §102.11(a)(2)]

15. Given the prevalence of karst topography within the project site, justify the proposed use of unlined basins and infiltrating BMPs within the project footprint. The scale of the proposed impervious means considerable runoff will be directed to these BMPs in short time. Karst topography is particularly susceptible to sinkhole formation when large quantities of water are impounded and/or infiltrated directly into the underlying soil. Further, discharging stormwater runoff from potentially polluted (i.e. vehicular fluids, particulates, etcetera) truck parking to areas of noted karst topography creates a risk of injecting contaminants into the underlying water supply – for which the vast majority of surrounding residents rely on via private wells. DEP acknowledges the proposed filter inlets for water quality management. *[25 Pa Code §102.8(f)(9) and 25 Pa Code §102.11(a)(2)]*

Additional Technical Deficiencies

16. Confirm that the area around Wetland J has been investigated for a potential dump area of construction and/or other wastes. If found, clarify if the wastes will be removed from the site and disposed of in a permitted land fill. *[25 Pa. Code §102.4(b)(5)(xi) and §102.8(f)(3)]*
17. On March 31, 2023 the U.S. Army Corps of Engineers issued a Special Public Notice (Special Public Notice-23-17) establishing a special condition to all existing authorizations under Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act authorizations/verifications in Pennsylvania. It requires that for any authorization or verification where work was not completed by March 31, 2023 an updated habitat screening using the Pennsylvania Natural Diversity Index (PNDI) be conducted, and that any and all avoidance measures listed in the PNDI for Northern Long-Eared Bats are conditions of these permits and therefore must be followed. Provide an updated PNDI search receipt dated April 1, 2023 or later. Further, ensure that the revised PNDI output has completed Project Contact Information and is signed/dated. Provide clearance letters for potential impacts generated. *[25 Pa. Code §102.6(a)(2)]*
18. As part of the noted commentary in the provided PNDI, ensure all seasonal tree cutting restrictions are noted on the plan set (specifically, tree cutting is only to occur between October 1 to March 31). *[25 Pa Code §102.8(f)(9)]*
19. Per recommendation in the Geotech report, provide additional notation on the plan sets and/or reference in the sequence of construction that the Contractor may encounter bedrock or groundwater within the footprint of the project site. Given provided field data for the infiltration test pits, bedrock is likely to be encountered to some degree (anywhere from approximately 0' to 3' depths) during construction (specifically, IT-3 and IT-4 as part of the BMP 1 footprint, IT-15 and IT-16 as part of the BMP 5 footprint, IT-17 and IT-18 as part of the BMP 6 footprint, and IT-19 as part of the BMP 7 footprint). *[25 Pa Code §102.8(f)(9)]*

DEP would like you to consider the following comments on your permit application. While these are not technical deficiencies related to 25 Pa. Code Chapter 102 and will not result in a delay to your permit application, they may relate to potential issues during construction and/or implementation of the E&S and/or PCSM Plans.

- A. DEP would like to reiterate that, per the provided response on the Application Earth Disturbance Information Question 15, an Act 537 Approval Letter must be obtained prior to construction of the project.

- B. Consider a 2- or 3-story parking garage in lieu of the proposed employee parking area within the current footprint of Stream 2 as a way to prevent loss of existing water resources and minimize earth disturbances.
- C. Consider means of light and sound mitigation resultant of the proposed development, both during and after construction.

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 11, 2023 or DEP may withdraw or deny the NOI.

Unless the District prefers an alternate method, please submit 2 copies of the revised information to the District at 1451 Peter's Mountain Rd, Dauphin, PA 17018, and an electronic copy to the DEP via the DEP's OnBase system (<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>). For ease of review, the DEP requests a single upload with multiple files versus a single upload with one large document. **Please do not upload ZIP files.** Use the following OnBase form codes:

Form Name/NO. – Chapter 102 General NPDES Permit (PAG-02)
Resubmittal - No

Please be advised that if your response does not satisfy the technical deficiencies, in general your NOI 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 NOI is denied, there is no recovery of fees available; however, if you voluntarily withdraw the NOI and then submit a new NOI for the same project, previously paid disturbed acreage fees will be reapplied to the new NOI.

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 questions about your NOI, please contact Mr. Eric Simmons by e-mail at ersimmons@pa.gov or by telephone at 717.705.4779 and refer to Application No. PAC220379, to discuss your concerns or to schedule a meeting. Please attempt to request any meeting within 15 days of the date of the letter to better ensure a meeting can be scheduled, held, and allow time for you to provide a response with the 30 calendar days allotted for your reply.

Sincerely,

Nathan Phillips, P.E.
Permits Section Chief
Waterways and Wetlands Program

cc: Dauphin County Conservation District
Todd Stager, P.E., Pennoni Associates, Inc.