April 18, 2017

John Grace, Chief
Source Protection and Appropriations Division
Maryland Department of the Environment
1800 Washington Boulevard, Suite 450
Baltimore, MD 21230

Dear Mr. Grace:

On behalf of the Town of Chevy Chase, I submit the following comments on the Water Appropriation and Use Permit requested by Purple Line Transit Constructors (PLTC) to appropriate water for construction of the Purple Line Bethesda Shaft submitted to your office on February 10, 2017.

PLTC requests a permit to withdraw from 50,000 to 100,000 gallons of water per day from a construction site on Elm Street just west of Wisconsin Avenue in Bethesda. The request does not specify a duration for these withdrawals and indicates that this water will be discharged to the Little Falls Branch watershed. On a website dedicated to the permit application, PLTC provides a hydrogeological report prepared by a contractor that projects the rate of groundwater withdrawal that will be necessary to dewater the Shaft during construction. A one-page Preliminary Impact Assessment Summary issued by the Maryland Water Management Administration dated January 30, 2017 indicates that the rate of water withdrawals cited above will continue over the four year construction period for the Bethesda shaft, and provides some assessment of the likely impact of this rate of withdrawal on the groundwater resource nearby. None of the available documents indicates whether some amount of water withdrawal will need to continue after construction.

However, neither the Summary, the permit application, the contractor report, nor any other material available on the PLTC website provide any information about any possible impacts of the proposed water withdrawal on surface waters or biota. The application is broadly deficient insofar as it fails to account for the environmental impacts of the water withdrawal and its discharge to surface waters. In our view, a permit should only be granted after such deficiencies have been corrected.

We are particularly concerned because the limited materials supporting the permit application suggest that a significant share of the groundwater proposed for withdrawal will be drawn from

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the source of Coquelin Run within the Town of Chevy Chase. We interpret the available materials as suggesting a likelihood that the proposed withdrawal could dry up the uppermost reach of Coquelin Run, with substantial negative impacts on the associated aquatic and terrestrial biota. In an attachment to these comments, we provide further discussion of our specific concerns.

Furthermore, the Final Environmental Impact Statement supporting the Purple Line does not include any notice of the need to withdraw and divert water from the Elm Street location and no assessment of the potential environmental impacts of this proposed action. Referencing the National Environmental Policy Act[1], the parallel Maryland law requiring Environmental Effects Reports, and the regulations implementing NEPA, the proposed dewatering in close proximity to our town appears to constitute "...significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts" and require that the responsible agencies "... prepare supplements to either draft final environmental impact statements."

In sum, the lack of sufficient information about the potential impacts of the proposed water withdrawal, the deficiencies concerning the duration of the activity, and the apparent non-consideration of the dewatering in the Purple Line Final Environmental Impact Statement result in an insufficient factual record for your office to make a determination as to whether the application meets regulatory and permit requirements.

Therefore, we request the permit be deferred until PLTC, the Maryland Transit Administration or your office provides a legally adequate public assessment of the activity and the environmental impacts of both the water withdrawal and discharge into the communities surrounding the activity. There should also be an opportunity for public review and comment on that more informative assessment before you consider granting the proposed permit or any similar permit.

We trust you understand that our Town Council has a responsibility to protect the public interest, and that these matters raise sufficiently serious concerns regarding environmental impact to warrant your careful attention before taking action on the requested permit.

If you have any questions, please contact Todd Hoffman, the Town Manager in the Town Office at 301-654-7144. Thank you.

Sincerely,

Scott Fosler
Mayor

[1] 42 U.S.C. §§4321-4347, and in particular §4332(C), are applicable because the project and the water withdrawal which is part of it are proposed to be undertaken with Federal funds and permits, including but not limited to permits under Sections 401 and 404 of the Clean Water Act. The parallel state requirement is Md. Nat. Res. Code Ann. §§1-301 to 1-305. The relevant implementing regulations for NEPA [40 C.F.R. §1502.9(c) (1), quoted above] require a Supplemental Environmental Impact Statement in situations as described above.

Attachment to the Letter from the Town of Chevy Chase on the Purple Line Permit Application for Dewatering the Bethesda Shaft

We are concerned about the potential negative impact of the proposed dewatering on the uppermost reach of Coquelin Run within the Town.

Coquelin Run first appears immediately to the east of Elm Street Park in the Town of Chevy Chase, fed apparently by springs and/or ground-water flow in the vicinity of the Park. The uppermost reach of Coquelin Run continues for several hundred yards through the back yards of properties along the North/West sides of Elm Street and Oakridge Lane and is supplemented by flow from storm sewers in Bethesda, most notably a discharge through a 24" cast iron outfall just below and to the south of the Georgetown Branch Interim Trail. During and soon after precipitation events, the stormwater flow from this outfall greatly exceeds the combination of base flow and additional stormwater flow from the uppermost segment of Coquelin Run, and thus Coquelin Run downstream of the junction is often mostly stormwater flow. The Maryland Transit Administration in various water-related studies associated with the proposed Purple Line appears to have confused the stormwater flows from Bethesda feeding this cast iron outfall, and particularly the concrete-lined channel that runs eastward along the north side of the current Trail, with the true uppermost reach of Coquelin Run which flows exclusively within the Town of Chevy Chase. The true uppermost reach of Coquelin Run is a very small, but perennial, stream fed largely by springs and groundwater flow from the vicinity of Elm Street Park. It flows eastward to the south of, and never to the north of, the Trail. This uppermost reach of Coquelin Run begins less than 400 feet from the site of the proposed Purple Line Transit Constructors' well intended to dewater the Bethesda Shaft.

The Dewatering Rate Estimate Report that is available on the Purple Line Transit Partners (PLTP) website referenced on the MDE's website about the dewatering permit application (http://www.mde.state.md.us/programs/Water/Water_Supply/Pages/BethesdaPurpleShaft.aspx) provides information suggesting that this uppermost reach of Coquelin Run may be substantially adversely affected by the proposed water withdrawal. This Report concludes:

> "Within a year, we might expect more than 10 feet of drawdown [of the water table] at 300 feet from the center of dewatering and up to 3 or 4 feet at a distance of 1,000 feet." (final page before References, shown as 17 of 32 on the pdf of the report that we obtain from the PLTP website).

At roughly 400 feet from the dewatering site, the source of Upper Coquelin Run would likely experience impacts from the proposed dewatering that are somewhere between those estimated in the report to occur at a distance of 300 feet and those estimated to occur at 1,000 feet. If the dewatering were indeed to lower the water table between 4 and 10 feet at a distance of 400 feet from the proposed well, this would likely have a serious negative impact on Upper Coquelin Run. This much lowering of the water table at the source of Coquelin Run would likely dry up Upper Coquelin Run, at least as far as the point at which it receives significant stormwater flows from Bethesda. This impact on Upper Coquelin Run would begin soon after the dewatering begins and for as long as the dewatering continues. (The dewatering permit application does not indicate whether the dewatering is proposed as temporary or permanent, and if temporary only,

the application does not indicate how long it will continue.) This would eliminate the aquatic biota of Upper Coquelin Run, and would have a moderate negative effect on biota farther downstream as the downstream segments would become more "flashy" than they are now. The dewatering also would likely negatively affect the biota of the several small seep areas on land near the banks of Upper Coquelin Run, as these seeps would perhaps be dried up also.

Neither the applicant nor MDE appears to have investigated or evaluated these potential negative impacts of the proposed water withdrawal on Upper Coquelin Run.

The applicant's presentations give the impression of being unaware that Upper Coquelin Run even exists. In another water-related study associated with the Purple Line (Purple Line Concept Stormwater Management Report, dated November 2013), the MTA erroneously refers to the concrete channel north of the Trail as the uppermost segment of Coquelin Run. Also, in the Dewatering Rate Estimate Report on the PLTP website, the MTA's contractor consistently fails to recognize the existence of Upper Coquelin Run. The contractor's calculations about likely water withdrawal rates and potentiometric impacts are based on wrongly assuming the:

> "… absence of surface water bodies within 4000 feet of the [dewatering] site" (Page 7) and "… the distance to the nearest stream [from the dewatering site] is approximately 4,000 feet," (Page 9) and "Because there are no apparent streams within 4,000 feet of the proposed dewatering, …" (Page 13).

As best we can understand the contractor's analysis in this Report, we would guess that the contractor would estimate that larger water withdrawals would be needed and/or for a longer period if he were correctly to identify Coquelin Run as a surface water body within 400 (not 4,000) feet of the proposed well site.

MDE also has not investigated or analyzed the potential negative impacts of the proposed water withdrawal on Upper Coquelin Run. The MDE's one-page Preliminary Impact Analysis Summary for the permit application investigates the impact on the "resource," but it seemingly defines the "resource" to consist only of groundwater, without including either surface water or biota as other "resources" that might also be affected by the proposed withdrawal. Possible impacts on surface waters (perhaps Coquelin Run, and/or perhaps the Little Falls Branch) or on biota are not addressed in MDE's Impact Analysis.

In conversations with MDE staff, Town representatives have been told as a general matter that the Water Management Administration of MDE often does not feel it necessary to investigate the potential surface water impacts of a proposed construction dewatering withdrawal if the water is not contaminated and is returned to the same watershed from which it is withdrawn. In our view, though, this condition will <u>not</u> be met by PLTC's proposed dewatering of the Bethesda Shaft. Although the physical location of the proposed dewatering well is within the Little Falls Branch watershed and the application proposes disposal of the wastewater also to the Little Falls Branch (via a storm drain discharging to the Willett Branch which discharges to the Little Falls Branch), a meaningful share of the groundwater that is collected by the well will derive from the Lower Rock Creek watershed rather than the Little Falls Branch. The location of the proposed well is very near the hydrologic divide between the Little Falls and Lower Rock Creek watersheds, and

the zone of influence of the proposed well will extend significantly into the Lower Rock Creek watershed.[2] If the water drawn into the well comes equally from all directions, a reasonable guess is that something approaching half of all the water that is withdrawn will come from the Lower Rock Creek watershed. The dewatering activity as the applicant now proposes it will, in effect, result in transferring a significant quantity of water from the Lower Rock Creek watershed to the Little Falls Branch watershed.

The proposed dewatering activity also does not appear to meet another of MDE's apparent criteria for quick permit approval. The document available at:

http://www.mde.state.md.us/programs/Permits/Documents/2008permitguide/WMA/3.15.pdf

indicates that a MD water appropriation and use permit application will typically be granted within 90 days if it requests approval to withdraw less than 10,000 gallons per day, while an application to withdraw 10,000 gallons per day or more will typically require 18 months for approval, presumably because a large withdrawal requires greater scrutiny. The proposed dewatering for the Bethesda Shaft will involve withdrawal of much more than 10,000 gallons per day. The document also states as a condition for approval of a permit that:

> "An applicant must provide satisfactory proof that the proposed withdrawal of water is reasonable and the impacts on the water resource and other users are acceptable."

We do not believe that the applicant has yet made this required showing that the impacts are acceptable on the "water resource" – if defined to include surface waters as well as groundwater – and on "other users" -- if defined to include the Town of Chevy Chase, its residents, and those who use and enjoy Coquelin Run further downstream.

In sum, we are concerned that the proposed dewatering for the Bethesda Shaft could cause substantial harm to Upper Coquelin Run and to the aquatic and terrestrial biota that depend on this watercourse. We request that MDE and the applicant investigate these potential impacts and provide sufficient information to the public to understand them so meaningful public comment can be part of any consideration given to granting the requested permit. We request that a public informational hearing be held on this matter.

We further suggest that the State and the public should review both the proposed water withdrawal and the proposed discharge of the withdrawn water simultaneously.[3] We believe it

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[2] The proposed well appears to be roughly 100 feet from the divide between the two watersheds. If the zone of influence for the well extends for at least 1,000 feet (and presumably significantly farther) as the contractor's report suggests, then at least 900 feet of the radius of the zone of influence will be within the Lower Rock Creek Watershed, far beyond the source of Coquelin Run.

[3] This is despite recent changes to the State's requirements for discharge permits that appear to no longer require an individual permit for discharge of the substantial quantity water that is proposed to be withdrawn. Under these new regulations, discharge of water from construction dewatering, even at this large volume, is apparently authorized under the State's construction general permit. The Director has authority, however, to require an individual permit instead, and we suggest that he do so.

would be reasonable that the applicant specify his proposal for both the withdrawal and the discharge fully (location, amount, duration, range of variation over time), that appropriate information be developed regarding all the expected impacts from the entire proposed set of actions to both ground and surface waters and aquatic and terrestrial biota, and that both of the required permits be treated as individual (not general) permits and considered simultaneously.