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Executive Director

ENVIRONMENT COMMITTEE MEETING
Tuesday, March 26th, 2024, 10:30 AM
AGENDA

THE MEETING CAN BE ACCESSED AT <https://tinyurl.com/LVPC2024> OR VIA PHONE 610-477-5793 Conf ID: 928 251 831#.

Roll Call

Courtesy of the Floor

Committee Business and Information:

1. *ACTION ITEM*: Act 537 Review – Revised Sewage Facilities Plan Update – South Whitehall Township
2. *ACTION ITEM*: Comment Letter on the Draft 2024 Lehigh Valley Hazard Mitigation Plan
3. *ACTION ITEM*: Federal Energy Regulatory Commission – Preliminary Permit Application for Chain Dam Hydroelectric Project, Palmer Township/City of Easton
4. *ACTION ITEM*: Comment Letter to the Ad Hoc Pennsylvania Department of Environmental Protection Committee on Proposed Stormwater Best Management Practices for Karst Terrain (SSM)
5. *INFORMATION ITEM*: Kline’s Island Act 537 Planning Effort – Presentation by Liesel Gross, Lehigh County Authority
6. *INFORMATION ITEM*: PA Department of Environmental Protection Intergovernmental Review
7. *INFORMATION ITEM*: Climate Pollution Reduction Program
 - a. Priority Climate Action Plan Status
 - b. Grant Implementation Status Update

Next Environment Committee Meeting:
April 23, 2024 at 10:30 AM



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Executive Director

March XX, 2024

Mr. Thomas Petrucci, MPA, Manager
South Whitehall Township
4444 Walbert Avenue
Allentown, PA 18104

**Re: Act 537 Review - Revised Sewage Facilities Plan Update – South Whitehall Township,
Lehigh County**

Dear Mr. Petrucci:

The Lehigh Valley Planning Commission (LVPC), at its regular monthly meeting on March 28, 2024, reviewed the above-referenced plan according to the requirements of the Pennsylvania Sewage Facilities Act (Act 537). Our review was based on the goals and policies of *FutureLV: The Regional Plan*. We offer the following comments.

The LVPC reviewed a previous version of the plan update in October 2023. The purpose of the revised plan update remains to officially recognize the public-to-public wastewater disposal system transfer from South Whitehall Township Authority to South Whitehall Township. The transfer of property from the Authority to the Township is completed with the recording of a Certificate of Termination, which cannot be completed without the required Act 537 planning.

According to the 2023 plan, the Township has the staff and administrative resources to properly operate and maintain the sewer system. Ensuring the proper management of the sewage disposal system supports the *FutureLV: The Regional Plan* action to ‘protect the quality and quantity of surface and groundwater’ (of Policy 3.2). The 2023 plan identified a future sewer service area expansion proposed for Phase 2 of the Ridge Farms development, located between Walbert Avenue and Huckleberry Road adjacent to North Cedar Crest Boulevard. The overall Ridge Farms mixed-use development, proposed for public sewage disposal, was previously found consistent with FutureLV in the LVPC land development review in August 2020. In addition, the plan identified previous Township sewage planning not yet implemented that includes the areas of Orefield and Guthsville in the northwest portion of the Township, which will be addressed in a future plan update. The LVPC will provide comments on any future Township plan update per Act 537 requirements.

The current version of the plan dated February 2024 involves revisions to meet PA Department of Environmental Protection planning requirements and clarification of the dissolution process, as well as a revised Future Sewer Service Expansion Area map. The revised map delineates future expansion areas over the next five to ten years, whereas the 2023 plan map did not. The overall future service area has not changed from the 2023 plan. Therefore, the comments from our October 31, 2023 review letter as noted above remain relevant to the 2024 plan update.

Mr. Thomas Petrucci
South Whitehall Township
March XX, 2024
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Please call if you have any questions.

Sincerely,

Susan L. Rockwell
Senior Environmental Planner

cc: David Manhardt, Director of Community Development, South Whitehall Township
Jennifer Gomez, Director of Planning & Zoning, City of Allentown
Cathy Bonaskiewich, Manager, Salisbury Township
Bruce Beitel, Manager, Lower Macungie Township
Robert Ibach, Manager, Upper Macungie Township
Matthew Harleman, Manager, Coplay-Whitehall Sewer Authority
Amy Bellanca, PE, PA Department of Environmental Protection



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Executive Director

March 25, 2024

Mr. Thomas Guth
Hazard Mitigation /Disaster Recovery Manager
Northampton County Emergency Management Services
100 Gracedale Ave
Nazareth, PA 18064

Ms. Tanya Hook, Director
Lehigh County Office of Emergency Management
640 W Hamilton Street, 8th Floor
Allentown, PA 18101

Re: 2024 Lehigh Valley Hazard Mitigation Plan

Dear Mr. Guth and Ms. Hook:

The Lehigh Valley Planning Commission (LVPC) will consider the above-referenced plan at the following Environment Committee and Full Commission meetings. A revised letter will be provided based on any additional comments from the Committee and Commission.

LVPC Environment Committee Meeting:

March 26, 2024, at 10:30AM

<https://tinyurl.com/LVPC2024>

LVPC Full Commission Meeting:

March 28, 2024, at 7:00PM

www.tinyurl.com/LVPC2024

Hazard mitigation planning reduces the long-term risk to life and property by minimizing the impact of disasters through identification of the risks and vulnerabilities for an area then developing actions for protecting life and property from similar events. The Lehigh and Northampton County Emergency Management Agencies recently prepared a draft 2024 Hazard Mitigation Plan for the Lehigh Valley. Federal regulations require that local governments update the plan every five years, while monitoring and evaluating the data, events and actions that make up the plan. The 2024 Lehigh Valley Hazard Mitigation Plan is the fourth for the region, updating plans adopted in 2006, 2013 and 2018. For local communities to have access to federal hazard mitigation funding, they must both participate in and adopt the plan. Participation includes attending meetings, completing various worksheets and providing actions to mitigate hazards.

The LVPC identified the *FutureLV: The Regional Plan* goals, policies and actions related to each of the eight hazard mitigation plan goals, which show how closely aligned the plans are, integrating hazard mitigation planning with comprehensive planning. The Hazard Mitigation Plan goals are:

1. Minimize the risk to human life associated with natural and non-natural hazards.

Aligns with *FutureLV: Goal 5 (Safe, Healthy, Inclusive and Livable Communities)* policy to “Promote safe and secure community design and emergency management” and actions to “educate the public on hazard impacts and mitigation techniques” and “enhance planning and emergency response efforts among emergency management personnel.”

- 2. Promote hazard avoidance, especially in floodplains.**
Aligns with *FutureLV*: Goal 3 (Protected and Vibrant Environment) policy to “Minimize environmental impacts of development to protect the health, safety and welfare of the public” and action to “discourage development in hazard-prone areas” and Goal 5 (Safe, Healthy, Inclusive and Livable Communities) policy to “Promote safe and secure community design and emergency management” and action to “incorporate resiliency and hazard mitigation into planning and design, including 100- and 500-year floodplains.”
- 3. Reduce the damages and functional loss from natural and non-natural hazards to existing and future public and private assets.**
Aligns with *FutureLV*: Goal 1 (Efficient and Coordinated Development Pattern) policy to “Maintain regional character by preserving priority environmental, historic, cultural, scenic and agricultural assets” and actions to “protect assets from potential threats” and “enhance the long-term viability of assets.”
- 4. Preserve and enhance the effectiveness of natural resources to provide resiliency benefits.**
Aligns with *FutureLV*: Goal 1 (Efficient and Coordinated Development Pattern) policy to “Preserve natural areas and farmland by managing growth and development to enhance and strengthen cities, boroughs, suburbs and rural communities” and Goal 3 (Protected and Vibrant Environment) policies to “Conserve and manage natural lands and water resources for environmental and recreational benefits” and “Minimize environmental impacts of development to protect the health, safety and welfare of the public.”
- 5. Impacts of natural and non-natural hazards.**
Aligns with *FutureLV*: Goal 4 (Competitive, Creative and Sustainable Region) policy to “Promote the fiscal health and sustainability of municipalities” and Goal 5 (Safe, Healthy, Inclusive and Livable Communities) policy to “Promote safe and secure community design and emergency management” and action to “incorporate resiliency and hazard mitigation into planning and design, including 100- and 500-year floodplains.”
- 6. Improve local regulations to reduce the impacts of natural and non-natural hazards.**
Aligns with *FutureLV*: Goal 5 (Safe, Healthy, Inclusive and Livable Communities) policy to “Promote safe and secure community design and emergency management” and action to “incorporate resiliency and hazard mitigation into planning and design, including 100- and 500-year floodplains.”
- 7. Enhance planning and emergency response efforts among federal, state, county, and local emergency management personnel to protect public health and safety.**
Aligns with *FutureLV*: Goal 5 (Safe, Healthy, Inclusive and Livable Communities) policy to “Promote safe and secure community design and emergency management” and action to “enhance planning and emergency response efforts among emergency management personnel.”
- 8. Promote public awareness on both the potential impacts of natural and non-natural hazards and actions to reduce those impacts.**
Aligns with *FutureLV*: Goal 3 (Protected and Vibrant Environment) policy to “Reduce climate change impacts through mitigation and adaptation” and action to “educate elected officials and the public on climate change impacts, adaptation and mitigation” and Goal 5 (Safe, Healthy, Inclusive and Livable Communities) policy to “Promote safe and secure community design and emergency management” and action to “educate the public on hazard impacts and mitigation techniques.”

Please notify us upon plan approval by the Federal Emergency Management Agency.

Please call if you have any questions.

Sincerely,

Susan L. Rockwell
Senior Environmental Planner



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CHRISTINA V. MORGAN
Vice Chair

ARMANDO MORITZ-CHAPELLIQUEN
Treasurer

BECKY A. BRADLEY, AICP
Executive Director

March XX, 2024

Ms. Debbie-Anne A. Reese, Acting Secretary
Federal Regulatory Energy Commission
888 First Street, NE, Room 1A
Washington, DC 20426

**Re: Federal Regulatory Energy Commission - Preliminary Permit Application
Lock 47 Hydro, LLC - Chain Dam Hydroelectric Project
Palmer Township/City of Easton
Docket No. P-15337**

Dear Ms. Reese:

The Lehigh Valley Planning Commission (LVPC), at its regular monthly meeting on March 28, 2024, reviewed the above-referenced application based on the adopted plans and policies of the LVPC. We offer the following comments and questions.

The applicant submitted a preliminary permit application to the Federal Regulatory Energy Commission to secure and maintain priority of licensing for a proposed project at the existing Lehigh River Chain Dam. The permit application notes the need to secure and maintain priority of licensing while obtaining the necessary data and information to determine the feasibility of the project. The proposed feasibility study is anticipated to include engineering, environmental, socioeconomic, economic and financial analyses, as well as consultations with federal, state and local agencies, authorities and stakeholders. Under the preliminary permit, no earth-disturbing activities are allowed to take place. The proposed term of the permit is four years.

The Chain Dam spans the Lehigh River, with a length of approximately 700 feet and height of 20 feet, and abuts land owned by Palmer Township and the City of Easton, including Riverview Park and Hugh Moore Park. About 500 feet upstream of the Dam is the entrance to the Lehigh Canal. The Dam feeds the adjacent portion of the Canal.

The proposed project would involve the installation of two new turbine bays, four new identical turbine generator units, a new control building housing the electrical equipment and controls for the turbines, and a new 2,900-foot-long underground transmission line extending from the turbine generator units to an existing utility pole on Lehigh Drive. In addition, there is an existing fish passage on the Dam that would be modified to encourage fish to use the entrance. The proposed project is estimated to generate an average of 10,500 megawatt-hours of electricity annually.

The use of hydropower aligns with the *FutureLV: The Regional Plan* action to support renewable energy and diversification of sources (of Policy 3.4). The LVPC *Climate + Energy Element* also supports the

diversification of energy sources that lower cost and carbon emissions and reduce impacts to the environment (of Energy Goal 3).

The Lehigh River represents a very high conservation priority in the Natural Resources Plan component of FutureLV. FutureLV further promotes the preservation of priority environmental, historic, cultural, scenic and agricultural assets in the region (Policy 1.3). The Lehigh Canal, Hugh Moore Park and Chain Dam are part of the cultural heritage of the Delaware and Lehigh National Heritage Corridor. The proposed project should clearly evaluate potential impacts to these important features as part of the feasibility study. To that end, we have prepared the following questions that we recommend be considered and addressed as part of the feasibility study:

1. The chain dam was damaged by a significant breach due to ice flows in 1965. What are the precautionary measures being implemented to reduce the impacts from such natural hazards?
2. The project description indicates that fish passage is intended to provide passage for blueback herring, alewife, American shad and other Alosines and that the existing fish passage structure is believed to require upgrades to make it more effective. The Pennsylvania Fish and Boat Commission reported a steep decline in American Shad migration since 2001. We encourage the applicant to implement recommendations from the Pennsylvania Fish and Boat Commission, US Fish and Wildlife Service, and National Oceanic and Atmospheric Administration/National Marine Fishery Service when designing a new or upgraded fish passage on this site. Additionally, the feasibility study should describe expected migration percentages from downstream to upstream and proposed mitigation measures should these percentages fall short of projections.
3. The preliminary permit application indicates that the maximum storage capacity of the reservoir is 1,197 acre-feet. The feasibility study should clarify whether this figure will change due to the hydroelectric operation and whether there will be extra ponding upstream. This includes assurances that there will be no negative impacts to the canal watering associated with the project and will support the continued operation of the National Canal Museum and the Delaware and Lehigh National Heritage Corridor.
4. The flow duration curve shows that the flow varies approximately between 500 cubic feet per second (cfs) to 18,000 cfs, and the hydroelectricity production starts when the river flow is higher than 547cfs. It appears that there will be at least one unit in operation year-round. We recommend information be included that shows the cutoff values at which flow in one unit starts generating and when all four units will be operating.
5. The proposal notes that the project will have de-minimis effect on land, water and other resources in the project area. The feasibility study should share results from impact studies, especially on minimum water flow, water quality, change in temperature and impact on endangered species.
6. The feasibility study should explain how the dam operates during low flow and high flow and describe negative effects from the hydropower operation during low flow and high flow.
7. Since this is a recreational area, proposed restrictions for recreational activity in or near the dam after the hydroelectric project is operational should be included.

We hope these comments are helpful in preparing for the next phase of this proposed project. Please feel free to contact us if you have any questions.

Sincerely,

Susan Myerov, AICP
Director of Environmental Planning

Denjam Khadka
Sr. Environmental Engineer



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ARMANDO MORITZ-CHAPELLIQUEN
Treasurer

BECKY A. BRADLEY, AICP
Executive Director

March 19, 2024

Cristine Vinciguerra, P.G.
Department of Environmental Protection
Regional Permit Coordination Office
Rachel Carson State Office Building
400 Market St. | Harrisburg, PA 17101

Re: PA Karst Working Group - Stormwater Best Management Practices in Karst Terrain – Draft Guidance

Dear Ms. Vinciguerra:

Thank you for the opportunity for the Lehigh Valley Planning Commission (LVPC) to review and comment on the above-referenced technical guidance document prepared by the PA Karst Working Group. The LVPC is the official planning commission for Lehigh and Northampton counties and operates under a series of federal, state and county laws, including the implementation of the County Planning Program, as required by the Pennsylvania Municipalities Planning Code (MPC) (Act of 1968, P.L. 805, No. 247, as enacted and amended), the execution of the County Watershed Management Program, as required by Pennsylvania Storm Water Management Act (Act of 1978. P.L. 864, No. 167, as enacted and amended), and the associated federal Municipal Separate Storm Sewer System Program of the Clean Water Act. The LVPC has been delegated the authority to review the stormwater management plan submissions related to land development for each of the 62 municipalities in the Lehigh Valley. The LVPC is acutely aware of the significance of the extensive carbonate bedrock that underlies portions or the entirety of 47 of the 62 municipalities in Lehigh and Northampton counties.

The Stormwater Best Management Practices in Karst Terrain draft guidance provides a great resource for municipalities in Pennsylvania evaluating stormwater control measures in areas with special geologic features as part of its land development process. We recommend, however, that the guidance also refer readers to local Act 167 Ordinances (e.g. Monocacy Creek – 2018) to compare and contrast recommended design criteria. For example, discharges directly to sinkholes are prohibited in the Monocacy Creek Ordinance.

In 2002, the LVPC commissioned a comprehensive technical study to provide guidance for stormwater management systems within these special geographic areas of the Little Lehigh Creek Watershed. ⁱ This information provided guidance in developing standards and criteria for Little Lehigh Creek and then in developing all future Lehigh Valley Act 167 plans, including the Monocacy Creek. We request that this technical guidance document be included as an additional resource in Appendix B and incorporated into this guidance document, as appropriate.

In addition to the general comments noted above, we have several questions and suggested edits to consider in this draft:

Purpose of this Best Management Practice Document

The final paragraph notes that the best local approach to minimize risk in sensitive geologic terrain is to craft stronger comprehensive land use plans that direct new growth away from karst areas to more appropriate locations. This type of approach may be difficult in many of the Lehigh Valley's communities. We agree that these areas require special design consideration, but for communities that have significant karst landscape, it is only one of the many factors in defining future growth areas such as proximity to public infrastructure. Municipalities with significant karst landscape must incorporate the technical guidance included in this document in their local codes as a starting point to fully vet proposals and be mindful of potential impacts should a development be permitted in sensitive geologic areas.

Section 2.1 – Preliminary Site Assessment

All projects should be required to begin with a desktop preliminary site assessment and require field reconnaissance to verify desktop findings. We also recommend that the analysis of subsurface heterogeneity through geophysical and/or geotechnical techniques be required as part of this stage.

Section 2.5 - Plan Submittals

The recommendation that existing sinkholes should be surveyed and recorded on the property deed, is an interesting idea. However, many karst features beyond sinkholes may be identified and mapped across a development site including closed depressions, bedrock pinnacles, etc. Possibly additional Karst features should be considered for recording. We suggest further evaluation of this recommendation, including legal review to determine the best strategy.

Section 4.2 – Stormwater Design Principles for Karst

Bullet item #3 – Please provide reference used to define the Contributing Drainage Area (CDA) and surface ponding depth for centralized stormwater facilities. *(20,000 square feet of Impervious Cover and surface ponding depth greater than three feet)*

Bullet item #5 – The language notes that designers should maintain both the quality and quantity of runoff to predevelopment levels and minimize rerouting of stormwater from existing drainage for all storms up to the 100 year/ 24-hour storm event. This should be clarified to differentiate between water quality and water quantity treatment. Water quality stormwater control measures should treat up to the 2-yr storm before bypassing to the existing drainage facility. This is consistent with the draft PA DEP Post Construction Stormwater Manual recommendations.

Section 4.5 - Karst Swale Protection for Stormwater Management -

We note that the acronym “IC” is used here for Infiltration Capacity, but elsewhere as Impervious Cover. This should be clarified or corrected.

Section 7 – Definitions

We suggest defining for following terms found in the text but not included in this section:

karren, phreatic zone, regolith, severe stormwater hotspot, vadose zone, vug, zone of aeration

Also, terms in the definition list which are not referenced in the document (Epikarst, Estavelle, Grike), should be removed.

The LVPC appreciates the opportunity to comment on this guidance. Please contact us if you have any additional questions.

Sincerely,

Susan Myerov, AICP
Director of Environmental Planning

Geoff Reese, P.E.
Master Planner and Engineer

ⁱ Lehigh Valley Planning Commission, Cahill Associates & USFilter, 2002. *Technical Best Management Practice Manual & Infiltration Feasibility Report: Infiltration in Stormwater Areas Underlain by Carbonate Bedrock within the Little Lehigh Creek Watershed.*