## CITY OF BETHLEHEM

## Department of Community and Economic Development Interoffice Memo

**TO:** Planning Commission members

**FROM:** Darlene L. Heller, Director of Planning and Zoning

**RE:** Act 537 Special Study

City of Bethlehem Wastewater Treatment Plant

The purpose of Pa DEP's Act 537 Sewage Facilities Program is to help address existing sewage disposal needs, and to help prevent future problems through the proper planning, permitting and design of all types of sewage facilities. Typically, all new land developments are required to complete planning modules that are specific to their individual projects as Act 537 Sewage Plan updates. In this case, the City of Bethlehem wishes to update our current Act 537 Plan with this Special Study to address ongoing increases in the concentration of organic waste entering the City's Wastewater Treatment Plant (WWTP). The Study includes an evaluation of alternatives to upgrade the WWTP to increase its organic design capacity from the currently permitted 39,365 pounds per day of biochemical oxygen demand (BOD) to 50,000 pounds per day.

The Act 537 Special Study's selected alternative for this increase is the installation of a Chemically Enhanced Primary Treatment (CEPT) system at the WWTP. CEPT involves the addition of a coagulant to the primary clarifiers. The coagulant acts to improve solids settling so that more solids can be pumped to the anaerobic digesters. This process effectively increases the overall organic treatment capacity of the WWTP so that it can process a higher quantity of BOD loading, up to 50,000 lbs/day. The CEPT alternative provides for a cost-effective and phased solution to address the increasing trend in organic concentration.

Recommendations of the City of Bethlehem Comprehensive Plan note that the City should "continue providing cost effective and reliable wastewater treatment services in full compliance with applicable environmental safeguards". In addition, it recommends the city should continue "funding and implementing capital improvements needed to the water supply system and the wastewater treatment system". (Page 10-1)

With this Act 537 Special Study, Bethlehem continues to implement required upgrades to the WWTP in ways that are cost effective, environmentally sensitive and dependable.

This Special Study requires review and comment from the Bethlehem Planning Commission. The Study has already been reviewed favorably by the LVPC. This project will be placed on the August 17 agenda for consideration. The link to review the plan on the city website is: Bethlehem-pa.gov/Water-Sewer-Resources/Public-Information.

CC: Edward J. Boscola, Director of Water and Sewer Resources

DATE: 8/8/23

Darlene L. Heller, AICP

Director of Planning and Zoning