



PROJECT NAME: PPL Tower

LOCATION: 2 North 9th Street, City of Allentown

PREPARED BY: TMM Date 9/10/2024; Revised 1/16/2025

CHECKED BY: MJC Date 9/19/2024; Revised 1/16/2025

Job Number: SCR-2402091.00

Sheet Number: 1 of 1

Equivalent Dwelling Units 238GPD=1 EDU (City of Allentown)

Sewage Generation Calculations

Project Narrative
The project proposes converting the PPL Tower Office Complex into apartments and commercial space. The campus consists of 3 buildings: Tower Building, Tie Building and North Building. All three buildings have their own sewer laterals. The campus is located on two parcels. The proposed project encompasses the Tower Building and the Tie Building. The Tower and the Tie Building are located on the same parcel which has a Tax Parcel ID of 54979081926. Sewage planning is only being prepared for the Tower and Tie Building (Tax Parcel ID: 54979081926). The North Building (Tax Parcel ID 549790734206) will require sewage planning when a tenant/ use is determined. It is the future tenant/ developer to complete sewage planning for the North Building. The proposed renovations to the Tower Building and Tie Building will include 112 apartments with on site amenities, a 100 seat restaurant/bar, and office space. Currently the Tower and Tie Building contain office space for 1200 employees, a 90 seat cafeteria, a 125 seat auditorium and conference room spaces. The exiting auditorium will be removed as part of this project. Public restrooms in the Tie Building will remain. Apartment amenities will not generate additional sewage flows. The Tower Building has a 8” sewer lateral and the Tie Building has a 6” sewer lateral.

Building Name	Existing Conditions				Proposed Conditions			
	Use	Flow (GPD)	Quantity	Calculated Flow	Use	Flow (GPD)	Quantity	Calculated Flow
Tower Building	Office Building, Per Employee	10	1200	12000 GPD	Apartments, per Unit	238	112	26656 GPD
	Cafeteria- Single Use, Kitchen waste, Per Seat	3	90	270 GPD	Restaurant, Per Seat	10	90	900 GPD
					Restaurant, Per Bar Seat	2	10	20 GPD
					Office Space, per Employee	10	40	400 GPD
	Total Sewage Flow			12270 GPD	Total Sewage Flow			27976 GPD
Tie Building	Auditorium, Per Seat	3	125	375 GPD	Gym, No Showers/ locker room	0	1	0 GPD
	Public Restrooms (for Conference Rooms)	238	13	3094 GPD	Public Restrooms for Amenities	238	13	3094 GPD
	Total Sewage Flow			3469 GPD	Total Sewage Flow			3094 GPD
	Tower/Tie Building Complex Total Existing Sewage Flows			15739 GPD	Tower/Tie Building Complex Total Proposed Sewage Flows			31070 GPD
	Total Equivalent Dwelling Units-City of Allentown			66 EDU	Total Equivalent Dwelling Units-City of Allentown			131 EDU

Net Increase In Sewage Flows
15331 GPD
64 EDU-City of Allentown

Notes and Assumptions

1. Lehigh County Authority's Equivalent Dwelling Unit (EDU) differs from PA DEP. Lehigh County Authority 1EDU=238GPD.
2. Tie Building Public Restrooms will remain and serve the proposed apartment ammenities. Assumed 238GPD per toilet. 13 Toilets exist currently in the Tie Building
3. Public Restrooms in the Tie Building will not generate additional flows from current to proposed conditions. Fixture count to remain the same-13 toilets.
4. Proposed Apartment amenities will not generate additional sewage flows, no common showers or laundry facilities are proposed.
5. The auditorium was molded as a church, no food service as it is the most similar use. 3GPD per seat.