



Department of Natural Resources
and Environmental Control
89 Kings Hwy
Dover, DE 19901
dnrec.delaware.gov

Division of Water
Commercial and Government Services Section

Phone: (302) 739-9948

INSTRUCTIONS FOR COMPLETING THE PERMIT APPLICATION FOR THE CONSTRUCTION OF WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS

The following items must accompany the application. **Please note that incomplete application packages will be returned in their entirety and not reviewed until such time as all required information is received.**

- ☒ 1. A narrative summary of the intended purpose and design of the proposed facilities.
- ☒ 2. One (1) set of final construction plans and specifications (paper copy), if applicable, signed and sealed by a Delaware-registered Professional Engineer, or a Delaware-registered Professional Land Surveyor for gravity systems only.
- ☒ 3. One (1) electronic copy of final Plans.
- ☒ 4. The final plans must be drawn to scale showing slopes, inverts, pipe types and sizes, existing and proposed ground surfaces, tops of manholes, water lines, stormwater and stream crossings, encasements shown in plan and profile, and other information if pertinent or requested.
- ☒ 5. For pump/lift stations and force mains, include all calculations and pump/performance curves.
- ☒ 6. A check made payable to the **State of Delaware** for two thousand and five hundred dollars (\$2500.00), the non-refundable permit review fee. This fee covers the initial review and one follow-up review of any corrections or changes made to address the Division's comments. An additional two thousand and five hundred dollars (\$2500.00) non-refundable review fee must be submitted for resubmission of the plans if changes are made to the project which trigger a complete review of the permit application.
- ☒ 7. Your permit will have a public notice requirement if your system includes force mains or pump/lift stations. Include a check made payable to the State of Delaware for three hundred dollars (\$300.00) for the reimbursement of legal notices if the system has a force main connection or a pump/lift station.
- ☒ Please submit the completed application package, as outlined above, to DE DNREC, Division of Water, Commercial and Government Services Section, 89 Kings Highway, Dover, DE 19901. Please note, a new application, including the review fee, must be submitted if the Division's comments are not addressed or if requested supplemental information is not provided within one (1) year of the comment or request date.
- ☒ The following items must be submitted prior to permit issuance:
- ☒ 8. Verification from the appropriate county or municipal planning authority that the project has the proper zoning approval.
- ☒ 9. A letter from the owner/operator of the wastewater facilities to which the proposed collection and conveyance facilities connect. The letter must include confirmation that the owner/operator has approved the project, that the owner/operator will take responsibility for treating and disposing of the wastewater to be conveyed and that the downstream facilities have the capacity to manage the additional flows without causing or contributing to violations of Delaware's Environmental Protection Act (7 Del. C., Chapter 60) and the regulations promulgated thereafter. This includes, but is not limited to, unauthorized discharges such as overflows at manholes and violations of the treatment system's operating permit (for example, the National Pollutant Discharge Elimination System (NPDES) permit).

- Visit us on the web at: <https://dnrec.delaware.gov/water/commercial-government/>

APPLICATION FOR THE CONSTRUCTION OF WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS

Application must be complete, typewritten or clearly printed

Date Application Submitted _____

PROJECT INFORMATION			
Project Name and Location/ Address Mispollion III Apartments Renovations 1001-1406 Mispollion III Apartments Milford, DE 19963			
Tax Parcel Number(s) 330-10.16-3.03			
County ☐ Kent ☐ New Castle ☒ Sussex	Watershed (www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx) ☐ Chesapeake Bay ☒ DE Bay/Estuary ☐ Inland Bays/Atl Ocean ☐ Piedmont		
Sewer District or Interceptor Municipal Contract User/ City of Milford	Wastewater Treatment/Disposal Facility Name Kent County Resource Recovery Facility		
Anticipated Construction Start Date 11/1/2026	Treatment/Disposal Facility Owner and Operating Permit Number DE0020338		
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting plan review and comment or <u>WPCC Construction Permit issuance</u> ? (circle one)			
Design Flow (gallons/day) Average 2,000 gpd / PS (10,000 total)	Peak 8,000 gpd / PS (32,000 total)	Peak Factor 4	Basis of Design Kent County code 128-18.A. 250 gpd / apt. unit 8 apt units / building (5 total buildings)
Description No new development or change to existing sewer flows. Existing grinder pump station to be removed and replaced with 5 prefabricated grinder stations (one for each of the five existing 8 unit apartment buildings). New systems tie into existing force main, to remain in operation.			
OWNER/DEVELOPER			
Company Name CE Mispollion III, LP (c/o Case Edwards)			
Mailing Address 410 Severn Avenue, Suite B413			
City Annapolis	State MD	Zip 21403	
Contact Name Grant Searfoss			
E-Mail Address GrantS@severncos.com			
Telephone 410-269-0900 x116	Cell 610-417-8288	Fax	

ENGINEER					
Company Name VanDemark & Lynch, Inc.					
Mailing Address 4305 Miller Road					
City Wilmington		State DE		Zip 19802	
Contact Name Douglas S. Bower, P.E.					
E-Mail Address dbower@vdleng.com					
Telephone 302-764-7635		Cell		Fax 302-764-4170	
GRAVITY SEWER INFORMATION					
Ownership ☐ Public ☒ Private		Type of Sewer System ☒ Residential ☐ Commercial ☐ Industrial ☐ Other?		If Other, list below	
Type of Pipe PVC SDR-26	Length (ft) 187	Diameter (in) 6	Joint Specification gasket push on	Min. Slope (ft/ft) 0.022	Min. Velocity (ft/sec) 2.0
Minimum Pipe Cover (ft) +/- 1' (existing)	Number of Manholes None	Drop manholes provided? ☐ Yes ☒ No		Maximum Distance Between Manholes (ft) N/A	
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? ☒ Yes ☐ No			If not, explain provisions to prevent cross-contamination:		
Explain any special challenges (for example, stream, highway and/or railroad crossings, directional drilling, elevated sewers, etc.)					
Comments					

Note: 5 identical prefabricated pump stations are proposed

PUMP/LIFT STATION INFORMATION				
Ownership ☐ Public ☒ Private		Type of Wastewater ☒ Residential ☐ Commercial ☐ Industrial ☐ Other?		If Other, list below
Pump Station Flows (gallons/day) Design 8 EDUs / PS (40 total)		Average 2,000 gpd / PS (10,000 total)	Peak 8,000 gpd / PS (32,000 total)	Peak Factor 4
Basis of Design Kent County/ City of Milford DPWs, eOne Design Assist.			Pump Type Grinders	
Will peak flows be accommodated if largest unit fails? ☒ Yes ☐ No		Pump calc's and pump curves attached? ☒ Yes ☐ No	Cycle Time (minutes) 22.57	Wet Well Detention Time (minutes) 20.16
Check valves provided on discharge line? ☒ Yes ☐ No			Gate valves provided on discharge line? ☒ Yes ☐ No	
If not, explain alternate procedure:				
Ventilation provided in wet well? ☒ Yes ☐ No		Dry Well? ☐ Yes ☒ No	Is an alarm system included? ☒ Yes ☐ No	Alternate source of power? ☐ Yes ☒ No
What other provisions for emergency operations? Duplex Pump Station, Receptacle for portable generator connection				
Height of Influent Above Pump (suction head) (ft) 2.47'		Height of Effluent Above Pump (discharge head) (ft) 3.20'		Friction Loss (ft) +/- 28.3'
Pump Design Point 13 gpm @ 35'	Pump Operating Point 13 gpm @ 35'	Static Head (ft) +/- 6.7'	Total Head (ft) +/- 35'	Required Motor Horsepower (hp) 1
FORCE MAIN INFORMATION				
Type of Pipe HDPE SDR-11		Length (ft) 208' (1-1/4" FM) 203' (2" FM)		Diameter (in) 1-1/4" 2"
Hazen-Williams "C" Design Factor 140	Type of Joints Fused and/or Compression Fittings	Velocity Under Design Conditions (ft/sec) 3.4	Minimum Pipe Cover (ft) 3.5'	
Air relief valves specified? ☐ Yes ☒ No	Clean-outs provided? ☐ Yes ☒ No	Maximum distance between clean-outs (ft) None		
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? ☒ Yes ☐ No		If not, explain provisions to prevent cross-contamination:		
Comments One prefabricated grinder station is proposed for each of the five existing 8 unit apartment buildings. Pump and force main information provided above is typical for each of the five proposed grinder stations. New systems tie into existing force main, to remain in operation.				