



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 Project Name: Harrington Industrial Park Address: 249 Cluckey Drive Harrington, DE 19952			
Tax Parcel Number(s) 6-09-18005-01-5900, 6-09-18000-01-0700, and 6-09-18000-01-1400			
County <input checked="" type="checkbox"/> Kent <input type="checkbox"/> New Castle <input type="checkbox"/> Sussex		Watershed (www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx) <input type="checkbox"/> Chesapeake Bay <input checked="" type="checkbox"/> DE Bay/Estuary <input type="checkbox"/> Inland Bays/Atl Ocean <input type="checkbox"/> Piedmont	
Sewer District or Interceptor KC - Harrington		Wastewater Treatment/Disposal Facility Name Kent County Regional Resource Recovery Facility.	
Anticipated Construction Start Date 5/1/26		Treatment/Disposal Facility Owner and Operating Permit Number Owner: City of Harrington Permit #: 0020338	
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting plan review and comment <u>or WPCC Construction Permit issuance?</u> (circle one)			
Design Flow (gallons/day) Average 7,500 GPD (30 EDU's)	Peak 20,791 GPD	Peak Factor 2.77	Basis of Design Average Flow is based on 30 New EDU's in the Industrial Park
Description The scope of work includes installation of one (1) sanitary sewer manhole, sixty (60) linear feet of eight-inch (8") SDR-35 PVC gravity sewer pipe, 4,935 linear feet of SDR 11 HDPE pipe for the grinder pump station network, and 2,861 linear feet of DR-18 C900 PVC force main for the future pump station.			
OWNER/DEVELOPER			
Company Name City of Harrington			
Mailing Address 106 Dorman Street			
City Harrington	State DE	Zip 19952	
Contact Name Amanda Marlow			
E-Mail Address amarlow@thecityofharrington.com			
Telephone (302) 398-3530	Cell (302) 270-2206	Fax N/A	

ENGINEER					
Company Name Siteworks Engineering, LLC					
Mailing Address PO Box 2					
City Harrington		State DE		Zip 19952	
Contact Name Dave Heatwole, PE					
E-Mail Address Dave.Heatwole@Siteworkseng.com					
Telephone (302) 841-7901		Cell (302) 841-7901		Fax N/A	
GRAVITY SEWER INFORMATION					
Ownership <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Type of Sewer System <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Other?			If Other, list below	
Type of Pipe SDR 35 PVC	Length (ft) 60 LF	Diameter (in) 8"	Joint Specification Bell & Spigot	Min. Slope (ft/ft) 0.30 %	Min. Velocity (ft/sec) 2.0 FT / SEC
Minimum Pipe Cover (ft) 3 ft (+ or -)	Number of Manholes 1	Drop manholes provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Maximum Distance Between Manholes (ft) 300 LF	
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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.) There are no exceptional challenges associated with this project.					
Comments					

PUMP/LIFT STATION INFORMATION				
Ownership <input type="checkbox"/> Public <input type="checkbox"/> Private	Type of Wastewater <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?		If Other, list below	
Pump Station Flows (gallons/day) Design	Average	Peak	Peak Factor	
Basis of Design		Pump Type		
Will peak flows be accommodated if largest unit fails? <input type="checkbox"/> Yes <input type="checkbox"/> No	Pump curve's and pump curves attached? <input type="checkbox"/> Yes <input type="checkbox"/> No	Cycle Time (minutes)	Wet Well Detention Time (minutes)	
Check valves provided on discharge line? <input type="checkbox"/> Yes <input type="checkbox"/> No	Gate valves provided on discharge line? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If not, explain alternate procedure:				
Ventilation provided in wet well? <input type="checkbox"/> Yes <input type="checkbox"/> No	Dry Well? <input type="checkbox"/> Yes <input type="checkbox"/> No	Is an alarm system included? <input type="checkbox"/> Yes <input type="checkbox"/> No	Alternate source of power? <input type="checkbox"/> Yes <input type="checkbox"/> No	
What other provisions for emergency operations?				
Height of Influent Above Pump (suction head) (ft)	Height of Effluent Above Pump (discharge head) (ft)		Friction Loss (ft)	
Pump Design Point	Pump Operating Point	Static Head (ft)	Total Head (ft)	Required Motor Horsepower (hp)
FORCE MAIN INFORMATION				
Type of Pipe DR-18 C900 PVC & SDR 11 HDPE	Length (ft) 2,861 - DR-18 PVC (4") 4,935 - SDR 11 HDPE (See Comment Section Below)	Diameter (in) 4" - DR-18 PVC 1" - 4" - SDR 11 HDPE		
Hazen-Williams "C" Design Factor 140 - DR-18 PVC 150 - SDR 11 HDPE	Type of Joints Bell & Spigot - DR-18 PVC Welded Joint - SDR 11 HDPE	Velocity Under Design Conditions (ft/sec) 2.0 ft/sec	Minimum Pipe Cover (ft) 3'-6"	
Air relief valves specified? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Clean-outs provided? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Maximum distance between clean-outs (ft) 1,500 LF - The Air Release Vaults Will Also Function as a Cleanout		
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If not, explain provisions to prevent cross-contamination:			
Comments SDR 11 HDPE Pipe Total: 4,935 - 1.5": 850 LF - 2.0": 679 LF - 3.0": 2,116 LF - 4.0": 1,290 LF There are no exceptional challenges associated with this project.				