

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
APPLICATION FOR RENEWAL OF WATER ALLOCATION PERMITS

Columbia Aquifer

November 27, 2024



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STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
APPLICATION FOR A WATER ALLOCATION PERMIT

VIOLATIONS ARE SUBJECT TO PENALTY PROVIDED BY 7 DEL. C. CHAPTER 60

MAIL TO:

Water Supply Assessment & Protection
DNREC - Div. of Water
89 KINGS HIGHWAY
DOVER, DE 19901
(302) 739-9948
<https://dnrec.alpha.delaware.gov/>

OFFICIAL USE ONLY:

DNREC ALLOCATION NO. _____
DRBC DOCKET NO. D-_____-_____- CP

PLEASE TYPE OR PRINT

1. Owner Name City of Dover
Address P.O. Box 475
City Dover State DE Zip 19903 Phone # 302-736-7025
Email Address kmills@dover.de.us
2. Project Name Columbia Aquifer Water Allocation Permit Renewal Request
Address _____
City _____ State _____ Zip _____ Telephone # (____) _____
3. Date of Application November 27, 2024
4. Name, address, and telephone # of geologist (or engineer): N/A

Attach a map location of all facilities (wells, streams, and pond intakes). Applications for irrigation systems needs the acreage for each facility. All applications must show, if applicable, the locations of service areas, water tanks, interconnections, and property/corporate boundaries.

5. Purpose (check): ☒ Public _____ Industrial Process _____ Industrial Cooling _____ Irrigation
_____ Commercial _____ Contaminant /Recovery Other _____
6. Facility information: (attach additional sheet(s) if needed)

A. Facility Local ID	B. Facility Permit No.	C. Maximum Pump Capacity (GPM)	D. Maximum Use (GPD)	E. Acreage Total / Irrigated
MW-1C	80997			
MW-1A	77093			
PW-1A	85025	720,000	500	
MW-1B	80996			
PW-8A	85020	432,000	300	
PW-2	59727	720,000	500	
PW-4B	85021	576,000	400	
PW-5	85022	720,000	500	

A. Facility Local ID	B. Facility Permit No.	C. Maximum Pump Capacity (GPM)	D. Maximum Use (GPD)	E. Acreage Total / Irrigated
MW-1	77092			
PW-6A	85023	720,000	500	
MW-5	77097			
MW-2	77094			
MW-4	77096			
MW-3	77095			

8. Requested rates (MG): 3,000,000 Day 69,120,000 Month 630,000,000 Year
Sub-Total ✓ System Total _____

9. For irrigation projects only: Total tillable acreage: N/A Irrigated acreage: N/A

10. What is the estimated consumptive use, as a percentage of the total withdrawal?

10% in 2023. This percentage is based on our annual water loss report to the Delaware River Basin Commission.

11. Can water be **transferred** from facilities other than those listed in #8 (above)? Yes If so, give the name and location, the use for the water, and list average daily, monthly, and yearly flows. (Interconnections with other systems should be marked on the map attached for #6).

Tidewater Interconnections (three (3) total): Potable water use

- Sheffield PWSID # DE0000004; *87 Tgals daily, 2,652 Tgals monthly, 31,828 Tgals yearly
- Carlisle / Planter's Wood PWSID # DE00A0684; *67 Tgals daily, 2,033 Tgals monthly, 24,397 Tgals yearly
- Beechwood PWSID # DE0000546; *22 Tgals daily, 657 Tgals monthly, 7,882 Tgals yearly

*Used two years of data for averages

12. Discuss the feasibility of interconnecting with other systems. (n/a to irrigation projects).

The City of Dover is not involved in any interconnection discussion with any nearby water systems which are not already connected to our system. Other nearby water systems include Artesian and Camden. If a discussion occurs with either of these water systems, both parties would need to determine the current water demand, the future demand, water quality, maintenance agreements, infrastructure required for the interconnection, physical location for the interconnection, and current status meeting the most current drinking water regulations. The City of Dover would also need to consider the available allocation levels and review the agreements with existing interconnections.

13. For each well listed in #8 (above), attach Completion Reports and pumping test reports as specified in the Well Permit. If these reports do not exist, attach all available information about the wells or intakes.

See Appendix A.

14. Attach the latest reports on chemical and bacteriological analyses for the water from each facility. (n/a to irrigation wells and irrigation surface-intakes).

See Appendix B. Please note that all wells listed under this allocation application provide raw water to the City of Dover's Long Point Water Treatment Plant. See treatment at the treatment plant listed below.

15. Describe all treatment the withdrawn water will receive prior to use.

pH control with hydrated lime, chlorination using sodium hypochlorite, filtration using greensand plus and granular activated carbon, and fluoridation using hydrofluosilicic acid.

16. Describe the method of treatment for this project's wastewater. If the wastewater is discharged to surface waters or lands, attach the latest chemical and bacteriological analyses of the effluent, including temperature (DMRs), and where appropriate the disposal project study. Otherwise, name the treatment facility for this wastewater.

N/A

17. Are all facilities listed in #7 (above) individually metered? Yes. Identify those not metered and submit a proposed schedule for meter installation.

18. For public supply projects only: what percent of individual service-connections are metered? 100% If not 100%, when will it be 100%. What is the present population? 39,513 in five years? 39,923 (Data Source: Delaware Population Consortium (<https://stateplanning.delaware.gov/demography/dpc-projection-data.shtml>)).

19. Conservation Program for projects with total system water withdrawals over of 1.0 mgd. Attach the appropriate program description. (n/a to irrigation projects).

A. **Public water supply systems:** A Conservation Program for the monitoring, prevention, and repair of leakage throughout the system, provides customer information relating to water conservation and water-saving devices.

See Appendix C.

B. **Industrial, Commercial, and other water supply projects:** A Conservation Program that provides the investigation of conservation measures and provides the implementation of those as soon as possible. A description of leak-detection monitoring and all feasible process-modifications for minimizing both water usage and loss.

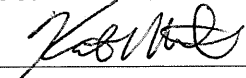
20. Drought Emergency Plan for projects with total system water withdrawal over 1.0 mgd. Attach the following plan description. (n/a to irrigation projects).

A. Identification of all priority uses for water throughout the system or service are, priority locations, water usage restriction schedules, implementation procedures, and any alternate sources of water.

See Appendix D.

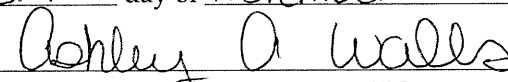
21. AFFIDAVIT

I, Kate Mills, hereby affirm this application and any plans, reports, or documents submitted with this application to be true and correct to the best of my knowledge.

Signature 

Date 11/27/2024

SWORN TO AND SUBSCRIBED before me the 27th day of November A.D., 2024.


NOTARY PUBLIC

*Applications for withdrawal for agricultural/irrigation are not required to be notarized.