

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:

OFFICIAL USE ONLY:

WATER ALLOCATIONS BRANCH  
DNREC - DIVISION OF WATER  
89 KINGS HIGHWAY  
DOVER, DE 19901  
(302) 739-9945  
<http://www.dnrecstate.de.us>

DNREC ALLOCATION NO. "05-0009M1 + 05-0010M1."  
DRBC DOCKET NO. D- \_\_\_\_\_ - \_\_\_\_\_ CP

PLEASE TYPE OR PRINT

1. Owner Name Artesian Water Company  
Address 664 Churchmans Road  
City Newark State DE Zip 19702 Phone # (302) 453-6935
2. Project Name Chesapeake City Road Water Allocation - Replacement well 3R  
Address 3149 Chesapeake City Road  
City Newark State DE Zip 19702 Telephone # (302) 453-6900
3. Date of Application 10/26/2020 Peter Demicco, P.G.  
310 Landenberg Road, Landenberg, PA 19350
4. Name, address, and telephone # of geologist (or engineer): (908) 507-9992
5. Attach a map (USGS 7 1/2 minute quadrangle only) with clearly marked locations of all facilities (wells, streams, and pond intakes). Applications for irrigation systems must also show the acreage served by each facility. All applications must show, if applicable, the locations, of service areas, water tanks, interconnections, and property/corporate boundaries.  
See attached map.
6. Purpose (check): ☒ Public ☐ Industrial Process ☐ Industrial Cooling ☐ Irrigation  
☐ Commercial ☐ Contaminant / Recovery ☐ Other \_\_\_\_\_
7. 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
Brennan 1R*	198538	900	1,296,000	N/A
Brennan 2R*	200384	750	1,108,000	N/A
CCR 3R*	262749	850	1,224,000	N/A
CCR 2**	102148	225	324,000	N/A

\* - Lower Potomac Aquifer - Existing Permit 05-009

\*\* - Upper Potomac Aquifer - Existing Permit 05-010

8. Requested rates(MG): Day 3.492 Month 104.76 Year 1,095  
☒ 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? 9.3%
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).  
The Chesapeake City Road well field is part of Artesian's regional Northern New Castle County system.
12. Discuss the feasibility of interconnecting with other systems. (not applicable to irrigation projects).  
Artesian's system is interconnected with Wilmington, Newark, New Castle, SUEZ Delaware, and Chester Water Authority.
13. For each well listed in #8 (above), attach copies of 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.  
Aquifer test and completion reports for well 3R are attached. Remaining reports are on file with DNREC.
14. Attach copies of the latest reports on chemical and bacteriological analyses for the water from each facility. (not applicable to irrigation wells and irrigation surface-intakes).  
A water quality report for well 3R is attached. Remaining reports are on file with DNREC.
15. Describe all treatment the withdrawn water will receive prior to use.  
Treatment consists of chlorination, pH adjustment with Sodium Hydroxide, filtration, fluoridation, and phosphate addition.
16. Describe the method of treatment for this project's waste water. If the waste water is discharged to surface waters or lands, attach copies of 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 waste water.  
Filter backwash water is recycled through the treatment process after settling. Residual iron sludge is hauled off-site for disposal.
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%, give a schedule of when it will be 100%. What is the present population? \_\_\_\_\_ in five years? \_\_\_\_\_.
19. Conservation Program for projects with total system water withdrawals over of 1.0 mgd. Attach the appropriate program description. (not applicable to irrigation projects). Conservation Program is on file with DNREC.
- A. Public water supply systems: A Conservation Program which provides for the monitoring, prevention, and repair of leakage throughout the system, provides customer information relating to water conservation and water-saving devices.
- B. Industrial, Commercial and other water supply projects: A Conservation Program which provides for the investigation of all feasible conservation measures, and provides for the implementation of those feasible 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. (not applicable to irrigation projects). Drought Emergency Plan is on file with DNREC.
- 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.

21. AFFIDAVIT  
I, Nicholle Taylor, 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 and belief.

Signature [Signature]

Date 10/31/2020

SWORN TO AND SUBSCRIBED before me the 31st day of October A.D., 2020

Lora A Fracek  
NOTARY PUBLIC

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

