

**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. _____
DRBC DOCKET NO. D-_____ - _____ CP

PLEASE TYPE OR PRINT

1. Owner Name Tidewater Utilities, Inc.
Address 1100 South Little Creek Road
City Dover State DE Zip 19901 Phone # 302-734-7500
2. Project Name Rehoboth-Lewes
Address _____
City _____ State _____ Zip _____ Telephone # (____) _____
3. Date of Application 8/7/2024
4. Name, address, and telephone # of geologist (or engineer): _____
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 Exhibits A & B**
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

8. Requested rates(MG): _____ Day 7.241 Month 209.492 Year 1644.398
Sub-Total _____ System Total _____
9. For irrigation projects only: Total tillable acreage: N/A Irrigated acreage: N/A

**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. _____
DRBC DOCKET NO. D-_____ - _____ CP

PLEASE TYPE OR PRINT

1. Owner Name Tidewater Utilities, Inc.
Address 1100 South Little Creek Road
City Dover State DE Zip 19901 Phone # 302-734-7500
2. Project Name Rehoboth-Lewes
Address _____
City _____ State _____ Zip _____ Telephone # (____) _____
3. Date of Application 8/7/2024
4. Name, address, and telephone # of geologist (or engineer): _____
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 Exhibits A & B**
6. Purpose (check): Public Industrial Process Industrial Cooling Irrigation
 Commercial Contaminant /Recovery Other _____
7. Facility information: (attach additional sheet(s) if needed) Columbia

A. Facility Local ID	B. Facility Permit No.	C. Maximum Pump Capacity (GPM)	D. Maximum Use (GPD)	E. Acreage Total / Irrigated
Bay Vista 189219	189219	430	619,200	
Colonial East 10705	10705	160	230,400	
Love Creek Woods 92263	92263	200	288,000	
Love Creek Woods 92264	92264	180	259,200	
Paynters Mill 193788	193788	315	453,600	
Paynters Mill 193789	193789	300	432,000	
Rehoboth Mall 62742	62742	220	316,800	

Note: Bay Vista 231572 is a monitoring well only and is not allocated.

8. Requested rates(MG): _____ Day 2.282 Month 70.754 Year 833.076
Sub-Total System Total _____
9. For irrigation projects only: Total tillable acreage: N/A Irrigated acreage: N/A

**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. _____
DRBC DOCKET NO. D-_____ - _____ CP

PLEASE TYPE OR PRINT

1. Owner Name Tidewater Utilities, Inc.
Address 1100 South Little Creek Road
City Dover State DE Zip 19901 Phone # 302-734-7500
2. Project Name Rehoboth-Lewes
Address _____
City _____ State _____ Zip _____ Telephone # (____) _____
3. Date of Application 8/7/2024
4. Name, address, and telephone # of geologist (or engineer): _____
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 Exhibits A & B**
6. Purpose (check): Public Industrial Process Industrial Cooling Irrigation
 Commercial Contaminant /Recovery Other _____
7. Facility information: (attach additional sheet(s) if needed) Pocomoke

A. Facility Local ID	B. Facility Permit No.	C. Maximum Pump Capacity (GPM)	D. Maximum Use (GPD)	E. Acreage Total /Irrigated
Briarwood Estates 86831	86831	70	100,800	
Briarwood Estates 86832	86832	30	43,200	
Glade 72567	72567	290	417,600	
Glade 177914	177914	325	468,000	
Maplewood 94743	94743	290	417,600	
Rolling Meadows 74787	74787	265	381,600	

8. Requested rates(MG): _____ Day 1.217 Month 37.721 Year 444.132
Sub-Total System Total _____
9. For irrigation projects only: Total tillable acreage: N/A Irrigated acreage: N/A

**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. _____
DRBC DOCKET NO. D-_____ - _____ CP

PLEASE TYPE OR PRINT

1. Owner Name Tidewater Utilities, Inc.
Address 1100 South Little Creek Road
City Dover State DE Zip 19901 Phone # 302-734-7500
2. Project Name Rehoboth-Lewes
Address _____
City _____ State _____ Zip _____ Telephone # (____) _____
3. Date of Application 8/7/2024
4. Name, address, and telephone # of geologist (or engineer): _____
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 Exhibits A & B
6. Purpose (check): Public Industrial Process Industrial Cooling Irrigation
 Commercial Contaminant /Recovery Other _____
7. Facility information: (attach additional sheet(s) if needed) Columbia-Gap IC w/confined Pocomoke

A. Facility Local ID	B. Facility Permit No.	C. Maximum Pump Capacity (GPM)	D. Maximum Use (GPD)	E. Acreage Total / Irrigated
Rolling Meadows 184338	184338	330	475,200	
Seasons 216860	216860	430	619,200	

8. Requested rates(MG): _____ Day 1.094 Month 33.926 Year 399.456
Sub-Total System Total _____
9. For irrigation projects only: Total tillable acreage: N/A Irrigated acreage: N/A

**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. _____
DRBC DOCKET NO. D-_____ - _____ CP

PLEASE TYPE OR PRINT

1. Owner Name Tidewater Utilities, Inc.
Address 1100 South Little Creek Road
City Dover State DE Zip 19901 Phone # 302-734-7500

2. Project Name Rehoboth-Lewes
Address _____
City _____ State _____ Zip _____ Telephone # (____) _____

3. Date of Application 8/7/2024

4. Name, address, and telephone # of geologist (or engineer): _____

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 Exhibits A & B

6. Purpose (check): Public Industrial Process Industrial Cooling Irrigation
 Commercial Contaminant /Recovery Other _____

7. Facility information: (attach additional sheet(s) if needed) Beaverdam

A. Facility Local ID	B. Facility Permit No.	C. Maximum Pump Capacity (GPM)	D. Maximum Use (GPD)	E. Acreage Total / Irrigated
Angola 61102	61102	250	360,000	
Angola 39165	39165	250	360,000	
Meadows 30036	30036	65	93,600	
Meadows 40091	40091	70	100,800	
Meadows 59397	59397	500	720,000	
Lochwood 93143	93143	170	244,800	
Lochwood 93144	93144	185	266,400	

8. Requested rates(MG): _____ Day 4.291 Month 133.027 Year 1566.288
Sub-Total System Total _____

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

**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. _____
DRBC DOCKET NO. D-_____-_____- CP

PLEASE TYPE OR PRINT

1. Owner Name Tidewater Utilities, Inc.
Address 1100 South Little Creek Road
City Dover State DE Zip 19901 Phone # 302-734-7500
2. Project Name Rehoboth-Lewes
Address _____
City _____ State _____ Zip _____ Telephone # (_____) _____
3. Date of Application 8/7/2024
4. Name, address, and telephone # of geologist (or engineer): _____
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 Exhibits A & B
6. Purpose (check): Public Industrial Process Industrial Cooling Irrigation
 Commercial Contaminant /Recovery Other _____
7. Facility information: (attach additional sheet(s) if needed) Beaverdam

A. Facility Local ID	B. Facility Permit No.	C. Maximum Pump Capacity (GPM)	D. Maximum Use (GPD)	E. Acreage Total / Irrigated
Lochwood 90439	90439	200	288,000	
Long Neck Church 99346	99346	200	576,000	
Oak Crest Farms 188521	188521	240	345,600	
Oak Crest Farms 188465	188465	95	136,800	
Woods on Herring Creek 61099	61099	210	302,400	
Woods on Herring Creek 61100	61100	225	324,000	
Vera Lane 31821	31821	120	172,800	

8. Requested rates(MG): _____ Day _____ Month _____ 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?
Approximately 10%
11. Can water be **transferred** from facilities other than those listed in #8 (above)? No 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).
12. Discuss the feasibility of interconnecting with other systems. (not applicable to irrigation projects).
This application is submitted for the interconnection of the Rehoboth-Lewis District with four other Tidewater systems: Angola, Meadows, Oak Crest Farms, & Love Creek Woods.
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.
See Exhibit C
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).
See Exhibit D
15. Describe all treatment the withdrawn water will receive prior to use.
Sodium Hypochlorite for disinfection purposes, Sodium Hydroxide to neutralize pH, Ion Exchange for nitrate removal, Ion Exchange for PFAS removal
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.
Sussex County Sewer & individual septic systems
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? 57,462 in five years? 71,118.
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).

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.

Water Conservation on file at DNREC.

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).

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.

Emergency on file at DNREC.

21. AFFIDAVIT

I, Bruce E. Patrick, 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

Bruce E. Patrick

Date

8-7-2024

SWORN TO AND SUBSCRIBED before me the 7th day of August A.D., 2024

Karen Elaine McTaggart
NOTARY PUBLIC

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

KAREN ELAINE MCTAGGART
NOTARY PUBLIC
STATE OF DELAWARE
My Commission Expires September 18, 2026



A Middlesex Water Company Affiliate

August 7, 2024

Ms. Patricia Murray
DNREC Division of Water
89 Kings Highway
Dover, DE 19901

RE: Rehoboth-Lewes District
Water Allocation Permit

Dear Ms. Murray,

Enclosed please find the DNREC Water Allocation Permit Application for the Rehoboth-Lewes District located in Sussex County, Delaware. The Rehoboth-Lewes District has been interconnected with four of Tidewater's other systems: Angola, Meadows, Oak Crest Farms, and Love Creek Woods. This application is a modification to the following Permit #s: 01-0020AM4, 01-0020B, 01-0020C, 91-0006M1, 91-0001M2, and 06-0002. Love Creek Woods does not have a permit number because it was an independent district which did not require an allocation prior to the interconnection.

The water allocation requests are as follows:

Day	7.241 MG
Month	209.492 MG
Year	1,644,398 MG

The application includes 30 wells in 4 aquifers: Beaverdam Aquifer, Columbia Aquifer, Pocomoke Aquifer, & Columbia-Gap IC with Confined Pocomoke Aquifer. Attachment 1 lists the status of the 30 wells in addition to the status of the wells not included in the application. Attachment 2 shows the calculations used to determine the water allocation requests. The withdrawal rates are calculated by applying a daily, monthly, and annual multiplier for each projected customer.

The DNREC Portal limits the size of attachments to 10MB. Two of the attachments are larger than 10MB; therefore, Exhibits A & C are being submitted via email for your review.

If you would like to field verify the existing wells, please contact Paul Peris at 302-747-1371 to make arrangements to tour the facilities. If you have any questions or need additional information regarding this application, please feel free to contact me at 302-734-1339.

Sincerely,

A handwritten signature in cursive script that reads "Tawanda Priester".

Tawanda Priester
Project Engineer

Attachments

cc: Bruce Patrick, Tidewater Utilities, Inc.
Brian Carbaugh, Tidewater Utilities, Inc.
Paul Peris, Tidewater Utilities, Inc.

ATTACHMENT 1

Rehoboth-Lewes District

Wells Included in Application

No.	Well #	Name/Location	Pump Capacity (gpm)	Well Status
1	61102	Angola	250	Main
2	39165	Angola	250	Main
3	189219	Bay Vista	430	Main
4	231572	Bay Vista	na	Monitoring
5	86831	Briarwood Estates	70	Backup
6	86832	Briarwood Estates	30	Backup
7	10705	Colonial East	160	Main
8	72567	Glade	290	Main
9	177914	Glade	325	Backup
10	94743	Maplewood	290	Main
11	30036	Meadows	65	Main
12	40091	Meadows	70	Main
13	59397	Meadows	500	Main
14	93143	Lochwood	170	Main
15	93144	Lochwood	185	Main
16	90439	Lochwood	200	Main
17	99346	Long Neck Church	400	Main
18	92263	Love Creek Woods	200	Main
19	92264	Love Creek Woods	180	Main
20	188521	Oak Crest Farms	240	Main
21	188465	Oak Crest Farms	95	Main
22	193788	Paynters Mill	315	Main
23	193789	Paynters Mill	300	Main
24	62742	Rehoboth Mall	220	Backup
25	74787	Rolling Meadows	265	Main
26	184338	Rolling Meadows	330	Main
27	61099	Woods on Herring Creek	210	Main
28	61100	Woods on Herring Creek	225	Main
29	216860	Seasons	430	Main
30	31821	Vera Lane	120	Main

Wells Not Included in Application

Well #	Name/Location	Well Status
64912	The Plantations	To be Abandoned

ATTACHMENT 2

Rehoboth-Lewes District

Allocated District	2018 Year End Customers	2023 Year End Customers	5 Year Actual Growth Customers	5 Year Projected Growth Customers
Rehoboth (Consolidated)	19,822	26,001	6,179	32,180

5 Year Projected Growth Customers	Daily Multiplier 225	Monthly Multiplier 210	Annual Multiplier 140
32,180	7,240,500	209,491,800	1,644,398,000

Requested Allocation		
Day	Month	Year
7.240 MG	209,492 MG	1,644,398 MG