

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND ENVIRONMENTAL CONTROL (DNREC)



Groundwater Discharges Section (UIC Program)
89 Kings Hwy, Dover, DE 19901
(302) 739-9948

Underground Injection Control (UIC) Class V Well Application Form

Note: Information that has been previously submitted to another DNREC Division, Section or Branch, other than the Groundwater Discharges Section (GWDS), is not considered part of this application.

The Secretary shall not issue a permit before receiving a complete application for a permit. An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to his or her satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity. [40 CFR §144.31]

All information provided shall be considered public information and shall be considered part of the public record pertaining to the permit application. If the applicant can demonstrate that information provided is not a matter of public record at the time of the application, and that the release of such information to the public would constitute an invasion of personal privacy or would seriously affect the applicant's business or competitive situation, the Department may designate such information as confidential information. [7 Del. C §7903]

Any underground injection, except into a well authorized by rule or except as authorized by permit issued under the UIC program, is prohibited. The construction of any well required to have a [UIC] permit is prohibited until the [UIC] permit has been issued. [40 CFR §144.11]

Instructions: All applicable items must be completed in order to avoid delay in processing this application. Where attached sheets or other technical documentation are utilized in lieu of filling in the blank spaces on this form, please provide a cross reference in the blank spaces and identify each attachment by item number. Only original signatures are acceptable. When possible, please submit your application and associated paperwork on double-sided paper.

If you will need to re-inject at this site, please contact the GWDS prior to completing a new UIC application.

**DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND ENVIRONMENTAL CONTROL**
Underground Injection Control (UIC) Class V Well Application Form

If each well is identical, you may complete one application, to cover all wells

Number of identical wells: 1

Application Date: 9/2/2025 (M/D/YYYY)

A. APPLICANT

- The applicant is the person applying for the UIC approval; this is the person who will sign the application and any reports; the address/phone number is for the applicant

Applicant Name: LARRY FINNICUM

Company Name: VEOLIA WATER DELAWARE INC.

Address: 2000 FIRST STATE BLVD

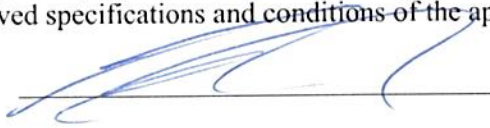
City: WILMINGTON , County: NEW CASTLE , State: DE

Zip code: 19804-3569

Telephone: (302)252-3035 Fax:

In accordance with 40 CFR §144.32, all applications shall be signed by an authorized official, and shall include the following certification statement:

"I hereby certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining said information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties, including the possibility of fines and imprisonment, for submitting false information. I agree to construct, operate, maintain, repair, and I agree to, applicable, abandon the injection well and all related appurtenances in accordance with the approved specifications and conditions of the approval."

Signature: 

Print Applicant Name & Title: LARRY FINNICUM, PRESIDENT OF MID-ATLANTIC DIVISION

B. PROPERTY OWNER (if different from applicant)

- If the applicant is not the property owner, the property owner must sign this page; if you need to send this page to the property owner, you may submit this page separately (resulting in submitting two (2) copies of this page – one with a signature and one without)

Name: SAME AS ABOVE

City: _____, County: _____, State: _____
Zip code: _____
Telephone: _____

CONSENT OF PROPERTY OWNER

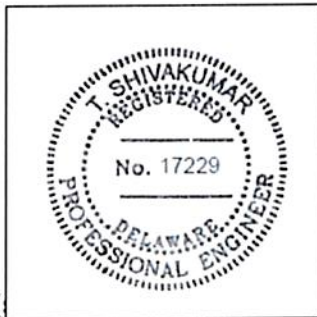
If the property is owned by someone other than the applicant, the property owner hereby consents to allow the applicant to construct each injection well as outlined in this application and that it shall be the responsibility of the applicant to ensure that each injection well conforms to the Well Construction Standards.

Signature of Property Owner if Different from Applicant _____

Print Owner Name & Title: SAME AS ABOVE

C. DELAWARE-REGISTERED PROFESSIONAL ENGINEER/GEOLOGIST (Optional)

"I certify that the features of this injection point have been designed or examined by me and/or found to be in conformity with modern principles of injection of fluids and well design for the purpose described in this application. There is reasonable assurance, in my professional judgment, that the injection point, when properly maintained and operated, will discharge the fluid in compliance with all applicable statutes of the State of Delaware and the rules of the Department of Natural Resources and Environmental Control. It is agreed that the undersigned will furnish the applicant with a set of instructions for proper maintenance and operation of the injection point."



Signature: [Handwritten Signature]

Print Name & Title: Shiva Kumar, Program Manager

Company name: Veolia, Delaware

Mailing address: 2000 First State Blvd
Wilmington, DE 19804

DE Registration number: 17229 Issue date: 2005 Expiration date: 6/30/2026

D. STATUS OF APPLICANT

Federal State Private Native American Lands
Public Commercial Other (please specify) - _____

E. FACILITY (SITE) DATA

- o All of the requested information is required; when describing the activities which require UIC approval, one example may be: "leaking USTs were found in area of former gas dispensing equipment"

Name of Business or Facility: VEOLIA, ST. GEORGES AQUIFER STORAGE & RECOVERY

Address: 308 CLARKS CORNER ROAD

Name of Business or Facility: VEOLIA, ST. GEORGES AQUIFER STORAGE & RECOVERY

Address: 308 CLARKS CORNER ROAD

City: DELAWARE CITY, County: NEW CASTLE, State: DE

Zip code: 19720

Telephone: (302)252-3101 Fax: (302)633-5918

Contact Person (name & title): ROBERT E. PENMAN III, SR. OPERATIONS MANAGER

Tax Map number: 28.1, TAX PARCEL #1202810001

4-digit SIC code (up to 4 codes): 4941, _____, _____, _____

Is business currently in operation or have operations ceased? If still in operation, provide current business name. BUSINESS CURRENTLY IN OPERATION. VEOLIA WATER DELAWARE INC.

Please provide a description of the activities conducted by the applicant which require a UIC permit or Authorization. Please also include the event(s) which led to the need for remediation, if applicable: INJECTION OF TREATED POTABLE DRINKING WATER AND EXTRACTION OF THE SAME, MIXED WITH GROUND WATER FOR USE AS AN AQUIFER STORAGE AND RECOVERY (ASR) WELL. SEE EXISTING PERMIT #UIC 5R21-10-06N

Please mark in the appropriate box a listing of all permits or construction approvals received or applied for under any of the following programs:

- Hazardous Waste Management program under RCRA.
- UIC program under SDWA.
- NPDES program under CWA.
- Prevention of Significant Deterioration (PSD) program under the Clean Air Act.
- Nonattainment program under the Clean Air Act.
- National Emission Standards for Hazardous Pollutants (NESHAP) preconstruction approval under the Clean Air Act.
- Ocean dumping permits under the Marine Protection Research and Sanctuaries Act.
- Dredge and fill permits under section 404 of CWA.

Other relevant environmental permits, including State permits. Explain: UIC PERMIT #UIC 5R21-10-06N, DNREC WELL #216229, OFFICE OF DRINKING WATER SYSTEM #0000564

F. INJECTION PROCEDURE (Briefly describe the injection method, how the injection point(s) will be used, including quantities per injection point, and the expected duration of injection activities.)
INJECTION TYPICALLY OCCURS FROM MID FEBRUARY THROUGH SEPTEMBER EVERY

YEAR PER EXISTING PERMIT REQUIREMENTS. THE pH OF THE RECHARGE WATER IS ADJUSTED TO APPROXIMATELY 8.4 BY ADDING POTASSIUM HYDROXIDE PRIOR TO INJECTION. PERIODIC BACK FLUSHES ARE REQUIRED TO PRECLUDE ACCUMULATION OF SOLIDS ON THE WELL SCREEN DURING RECHARGE. THE INJECTED WATER IS RECOVERED PER EXISTING REQUIREMENTS, TYPICALLY OCTOBER THROUGH DECEMBER TO MEET PEAK DEMAND PERIODS. RECHARGE/ RECOVERY DATES OF OPERATION SUBJECT TO CHANGE BASED ON DEMAND.

G. PROJECT DESCRIPTION

- 1) Description and Use of Facility; include a brief description of the nature of the business
VEOLIA WATER DELAWARE PROVIDES POTABLE WATER TO SEVERAL COMMUNITIES, BUSINESSES AND INDUSTRIES IN NORTHERN NEW CASTLE COUNTY. THE ASR FACILITY HOUSES EQUIPMENT AND SUPPLIES TO TREAT, INJECT INTO AND RECOVER WATER FROM AN UNDERGROUND AQUIFER

- 2) Description of Injectate (include MSDS sheet(s), for each constituent of the injectate)
POTABLE WATER- (CONSTITUENTS- H2O, TRACE AMOUNTS OF HYDROFLUOROSILIC ACID, SODIUM HYPOCHLORITE & POTASIAM HYDROXIDE. SEE ATTACHED SDS SHEETS.

- 3) Treatment of Injectate prior to Injection (including mixing ratios)
THE WATER INJECTED INTO THE AQUIFER IS pH ADJUSTED TO APPROXIMATELY 8.4 USING 45% POTASSIUM HYDROXIDE.

- 4) Description of any withdrawn/recovered fluid, including destination of withdrawn fluid.
DURING THE RECOVERY PERIOD, POTABLE WATER IS RECOVERED FROM THE ASR. THE WATER IS pH-STABILIZED, FLORIDATED, AND DISINFECTED BEFORE BEING SENT TO THE EXISTING PUBLIC WATER DISTRIBUTION NETWORK. DURING RECHARGE PERIOD, APPROXIMATELY ONCE A WEEK, THE WELL IS BACKFLUSHED FOR APPROXIMATELY 1 HOUR AT 800 GPM. BACKFLUSHED WATERS IS THEN CONVEYED TO A STORM MANAGEMENT POINT IN AN ADJACENT SUBDIVISION.

- 5) Please attach any approval letters from any DNREC Division (including the Tank Management Section (TMS) or the Site Investigation and Restoration Branch (SIRB)), in relation to the injection activities.

H. CONSTRUCTION DATA (check one)

The construction of any well required to have a [UIC] permit is prohibited until the [UIC] permit has been issued. [40 CFR §144.11]

- Select the appropriate box, for well type; note that you must have UIC approval prior to applying for a well permit; when applying for a well permit, please note the UIC Permit or UIC Authorization number associated with your project; if any of the questions are not applicable to your injection well (such as casing extending above ground level), just enter "N/A"

- EXISTING INJECTION WELL** to be modified. Provide the data in (1) through (6) below as *PROPOSED* construction specifications. You may be required to submit a copy of the completion report.

- EXISTING WELL** being proposed for use as an injection well. Provide the data in (1) through (6) below to the best of your knowledge. You may be required to submit a copy of the well permit and completion report.

- PROPOSED WELL** to be constructed for use as an injection well. Provide the data in (1) through (6) below as *PROPOSED* construction specifications. You may be required to submit a copy of the completion report after construction.

If each well is identical, you may complete one application, to cover all wells

Number of identical wells: 1

Well permit number(s) (if existing wells): 216229, _____

NOTE: The well drilling contractor can supply the data for either existing or proposed well if this information is unavailable by other means.

(1) Well drilling Contractor's Name: UNI-TECH DRILLING CO. INC.

Drillers License Number: 928

(2) Date to be constructed: 12/1/2006 (M/D/YYYY)

Approximate depth: 685 ft

(3) Well casing:

(a) Type: Galvanized steel Black steel Plastic

Other (specify) - _____

(b) Inside diameter: 16.876 inches;

Wall thickness 0.562 inches or Schedule # 40

(c) Casing depth: From FROM LAND SURFACE to 560 ft. (reference to land surface)

(d) Casing extending above ground 24 inches

(4) Grout Seal:

(a) Around inner or "primary" casing: From 0 to 560 ft. (from the land surface to the point of injection)

(b) Around outer (pit) casing, if present: From _____ to _____ ft.

(c) Type CEMENT

(5) Screens (if applicable):

(a) Type: SLOTTED MUNI-PAK; Inner diameter 12 inches

(b) Depth: From 545 to 665 feet below land surface

(6) Gravel (if applicable): From 455 to 685 feet below land surface

I. PROPOSED OPERATING DATA

- (1) Injection rate: Maximum (daily) 250 gallons per minute (gpm)
Average (daily) 220 gallons per minute (gpm)
How will the rate be measured? INLINE MAGNETIC FLOW METER
- (2) Injection volume: Maximum 75,000,000 GALLONS PER YEAR gallons per minute (gpm)
Average 75,000,000 GALLONS PER YEAR gallons per minute (gpm)
How will the volume be measured? TOTALIZER FLOW METER, ELECTRONIC AND
MANUAL READINGS
- if you have a finite amount of injectate (for example, you have X buckets of ORC powder), state that in the box asking how the volume will be measured
- (3) Total quantity of each injected material (include units): 75 MILLION GALLONS- POTABLE WATER,
 , and
- (4) Injection pressure: Maximum 70 pounds/square inch (psi)
Average 65 pounds/square inch (psi)
How will the pressure be measured? ONSITE DIGITAL PRESSURE GAUGE
- (5) Depth to injection area: 562-685 FEET BELOW GRADE (SEPARATED BY BLANK
SCREENS AT VARIOUS INTERVALS) feet
- (6) Expected lifetime of *injection* activities: 360 months
- (7) Anticipated start date: MARCH 2007
- (8) Estimated radius of influence of injectate: 3000 feet

J. INJECTION-RELATED EQUIPMENT

Attach a diagram showing the layout of the (i) injection equipment, (ii) exterior piping/tubing associated with the injection operation, and (iii) the proposed injection points. A hand-written drawing is fine; it does not need to be to scale. The map of proposed injection points should show all points, even if they are off of the site/property boundaries.

K. TOPOGRAPHIC MAP

Attach a scaled, color topographic map extending 500 feet beyond the property boundaries of the source (not to exceed one (1) mile), depicting the facility and the following: the facility's intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; and each well where fluids from the facility are injected underground. Also include those wells, springs, and other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within a 500 ft radius of the injection area. The map should be clear enough to read the contour lines.

L. AREA OF REVIEW

Attach a detailed, scaled color map of the site of the facility, showing the location of and distances between the proposed well(s) (source wells and injection wells) and any waste (including hazardous waste) treatment, storage or disposal facilities; buildings; property boundaries; surface water bodies; and any other potential source of groundwater contamination. Additionally, indicate on the map the direction and distance to existing wells (injection wells, water supply wells) located within 500 feet of the proposed injection well(s). Include with the map a description of each existing well incorporating type, construction information, date drilled, and depth. Indicate on the map at least two nearby reference points such as roads, road intersections, streams, etc., and identify them by numbers or name. Label all features clearly. Include a north arrow on the map to indicate orientation. If there are none of the above-referenced features within a 500 ft radius, a statement shall be noted on the map.

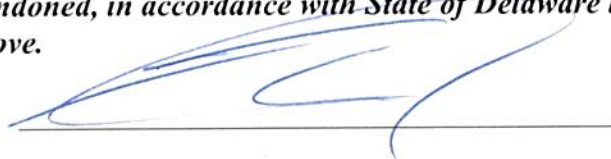
The map shall include a drawing indicating the plume of contamination (including the entire boundary of the contamination), groundwater flow and the direction of movement of the injected fluid (*this may be shown on any submitted map*). If you are submitting multiple maps (for multiple plumes), each map must show the boundary of the plume of contamination, direction of groundwater flow and the direction of movement of the injected fluid.

M. ABANDONMENT PLAN

Plugging and abandonment. Any Class I permit shall include, and any Class V permit or Authorization may include, conditions to ensure that plugging and abandonment of the well will not allow the movement of fluids either into an underground source of drinking water or from one underground source of drinking water to another. For purposes of this paragraph, temporary, intermittent cessation of injection operations is not abandonment. Abandonment (closure) of the injection points shall be completed in accordance with the State of Delaware "**Regulations Governing Underground Injection Controls**" and the "**Regulations Governing the Construction and Use of Wells**." The abandonment shall be performed by or under the direct on-site supervision of an individual licensed pursuant to the requirements of 7 Del. C. §6023 and the requirements of the "**Regulations Governing the Construction and Use of Wells**." Certification of injection well abandonment by a duly authorized individual shall be submitted to the GWDS within 30 days of completion.

I certify that upon cessation of injection activities, all injection points shall be properly abandoned, in accordance with State of Delaware laws and regulations, as described above.

Signature:



Print Applicant Name & Title: LARRY FINNICUM, PRES. OF MID-ATLANTIC DIV.

Please return the completed application package to:

**DNREC - GWDS
89 Kings Highway
Dover, DE 19901
Telephone: 302-739-9948
Email: john.rebar@delaware.gov**

When possible, please submit your application and associated paperwork on double-sided paper.

VEOLIA WATER DELAWARE INC.
2025 ASR UIC PERMIT RENEWAL APPLICATION
Exhibit 5
ABANDONMENT PLAN AND FINANCIAL RESPONSIBILITY

Abandonment Plan

If at any time in the future the ASR-1 well ceases to be in operation, the well will be abandoned in accordance with all Delaware regulations regarding well abandonment. Prior to abandonment, DNREC's Ground Water Discharge Section (GWDS), and Water Supply Section (WSS) will be notified of intent to abandon ASR-1 well along with a description of abandonment procedures. Also, a description of the rationale for abandoning ASR-1 will be provided. Upon approval of the abandonment method from GWDS and WSS, ASR-1 will be abandoned by a Delaware licensed drilling contractor. Appropriate forms and documentation will be completed and signed by the drilling contractor, and then submitted to GWDS and WSS to confirm abandonment.

Financial Responsibility

Veolia Water Delaware is a subsidiary of Veolia, one of the largest, private water purveyors in the United States. Veolia's stock is traded on public market and is subject to all financial reporting regulations of the Federal Securities and Exchange Commission. Furthermore, Veolia Water Delaware, as a private utility in Delaware, is regulated by the Public Service Commission and is financially responsible for its many water supply and treatment facilities.