



AUTHORIZATION TO OPERATE AND DISCHARGE
UNDER THE LAWS OF THE
STATE OF DELAWARE

Permittee: Willow Creek Plaza, LLC.
1 South Cleveland Avenue
Wilmington, Delaware 19805

Facility: Willow Creek Plaza On-site Wastewater Treatment & Disposal Facility
16287 Willow Creek Road
Lewes, Delaware 19958

Tax Map No. 2-35-23.00-4.10

1. Pursuant to the provisions of 7 Del. C. §6003, the Permittee is herein authorized to operate the above referenced wastewater treatment system and to discharge treated wastewater via pressure dosed beds for final disposal.
2. The Delaware Department of Natural Resources and Environmental Control's (the Department or DNREC) purpose in issuing this Permit, and in imposing the requirements and conditions specified herein, is for the protection of public health and the environment as required by 7 Del. Admin. C. §7101 *Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems* (the Regulations). The effluent limitations, monitoring requirements and other permit conditions are set forth herein.

Derrick P. Caruthers, P.E.
Environmental Engineer
Groundwater Discharges Section
Delaware Department of Natural Resources
and Environmental Control

7-16-2020

Date Signed

LOCATION MAP





PART I

A. General Description of Operations and Discharges

The Willow Creek Plaza On-site Wastewater Treatment and Disposal System (OWTDS) is authorized to receive and treat sanitary wastewater from commercial facilities located within the plaza. The influent flows to the OWTDS shall not exceed a daily average of 3,330 gallons per day (gpd). The sanitary wastewater is treated by one (1) 1,000 gallon, two (2) 1,500 gallon and one (1) 2,800 gallon septic tanks. The wastewater then flows to one (1) 6,000 gallon dosing tank and then discharged to four (4) pressure dosed beds for final disposal.

B. Influent Limitations

Beginning on the effective date and lasting through the expiration date of this Permit, the Permittee is authorized to receive and treat the volume of wastewater specified below.

1. The daily average of influent flow shall not exceed 3,330 gpd.

C. Effluent Limitations

Beginning on the effective date and lasting through the expiration date of this Permit, the Permittee is authorized to discharge all treated wastewater to the pressure dosed beds the quantity and quality of effluent specified below.

1. The daily average of effluent discharged to the pressure dosed beds shall not exceed 3,330 gpd.

D. Monitoring Requirements

Beginning on the effective date and lasting through the expiration date of this Permit, the Permittee shall monitor the facility's operations as specified below.

1. Monitoring Well (Groundwater) Sampling

- a. The following monitoring wells:

DNREC ID
229573
229574
229575

Shall be sampled by the Permittee for the following parameters:

Parameter	Unit Measurement	Monitoring Frequency	Sample Type
pH	S.U.	Quarterly	Field Test
Temperature	°F	Quarterly	Field Test
Specific Conductance	μS/cm	Quarterly	Field Test
Dissolved Oxygen	mg/L	Quarterly	Field Test
Depth to Water Table	Hundredth of a foot	Monthly	Field Test
Ammonia Nitrogen	mg/L	Quarterly	Grab
Nitrate + Nitrite Nitrogen	mg/L	Quarterly	Grab
Total Nitrogen	mg/L	Quarterly	Grab
Total Coliforms	Col/100 ml	Quarterly	Grab
Fecal Coliform	Col/100 ml	Quarterly	Grab
Total Phosphorus	mg/L	Quarterly	Grab
Sodium	mg/L	Quarterly	Grab
Chloride	mg/L	Quarterly	Grab
Total Dissolved Solids	mg/L	Quarterly	Grab

Samples taken in compliance with the monitoring requirements specified shall be taken at each monitoring point in accordance with procedures approved by the Department.

Groundwater monitoring results for each monitoring well shall be reported using the State of Delaware Well Identification Tag Number that is required on all wells in accordance with the State of Delaware *Regulations Governing the Construction and Use of Wells*, Section 10 A.

All field sampling logs and laboratory results for samples obtained from a well shall be identified by the DNREC ID affixed to the well.

If water levels in the well(s) rise above the minimum isolation distance of two (2) feet, the discharge shall be reduced at the area of concern and the Ground Water Discharge Section shall be notified within 24 hours.

Whenever, a new monitoring well is installed, the Permittee shall take immediate samples in compliance with the monitoring requirements specified above and in accordance with procedures approved by the Department.

- a. Groundwater monitoring results for each new monitoring well shall be reported using the State of Delaware Well Identification Tag Number that is required on all wells in accordance with the Delaware Regulations Governing the Construction and Use of Wells, Section 10 A.
- b. All field sampling logs and laboratory results for samples obtained from a well shall be identified by the DNREC ID affixed to the well.
- c. Initial groundwater results shall be submitted to the Groundwater Discharges Section within 45 days of sample collection and monitoring wells shall be sampled in accordance with the parameters and frequency specified above from that point forward.

E. Monitoring Reporting

In accordance with Section 6.9 of the Regulations, the Permittee shall submit to the Department an annual report summarizing operations, management, administration, and maintenance of the facility for the calendar year. The annual report shall be submitted to the Department on or before February 28th of each year.

Monitoring results obtained during the previous one (1) month/quarter shall be summarized for each month/quarter and reported on an approved On-Site Effluent/Groundwater Monitoring Report Form postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein shall be submitted to the Department at the following address:

Delaware Department of Natural Resources and Environmental Control
Ground Water Discharges Section
89 Kings Highway
Dover, DE 19901
Telephone: (302) 739-9948

The Department may provide written requirements for the Permittee to submit monitoring data electronically. Upon notification from the Department, the Permittee shall transition (as directed) to the Department's electronic database system. The submission may need to be electronically signed. Upon Department notification electronic submission of signed monitoring reports may also be required.

F. Representative Samples

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

Monitoring results reported as less than the detectible limit shall be reported with the less than symbol "<" before the detection limit. The full detection limit value shall be utilized in any necessary calculations. The less than symbol shall be carried through the calculation. The resulting value shall include any appropriate less than or greater than symbol resulting from the calculation.

G. Test Procedures

Test procedures for the analysis of pollutants shall conform to the applicable test procedures identified in 40 C.F. R. Part 136, unless otherwise specified in this Permit.

H. Recording of Results

For each measurement or sample taken pursuant to the requirements of this Permit, the Permittee shall record the following information:

1. The exact place, date and time of sampling and/or measurement;
2. The person(s) who performed the sampling and/or measurement;
3. The date(s) the analyses were performed and the time the analyses were begun;
4. The person(s) who performed the analyses; and
5. The results of each analysis.

I. Records Retention

All records and information resulting from the monitoring activities required by this Permit including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation shall be retained for five (5) years. This period of retention shall be extended automatically during litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Department.

J. Additional Monitoring by Permittee

If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this Permit, using approved analytical methods specified herein, then the results of such monitoring shall be included in the calculation and reporting of the values required in the appropriate reporting form. Such increased frequency shall also be indicated.

K. Schedule of Compliance

1. The Permittee shall submit information needed for proper operation of the on-site wastewater treatment and disposal system in accordance with the following schedule:
 - a. Within 90 days of issuance of this Permit, the Permittee shall submit to the Department an emergency contingency plan to demonstrate preparedness in the event the wastewater treatment facility experiences a significant natural occurrence. The contingency plan must address, but must not be limited to, extended periods of excessive precipitation.
 - i. The contingency plan must delineate the wastewater treatment facility's available options to reduce, eliminate and/or prevent non-compliant conditions.

PART II

A. Operational Requirements

1. Duty to Comply

The Permittee shall comply with all the terms and conditions of this Permit.

The discharge of any pollutant more frequently than, or at a level in excess of that identified and authorized herein, shall constitute a violation of the terms and conditions of this Permit. The violation of any influent/effluent limitation or of any other condition specified in this Permit is a violation of 7 Del. C. Chapter 60 and is grounds for enforcement as provided in 7 Del. C., Chapter 60 "Enforcement; civil and administrative penalties; and expenses.", "Criminal Penalties." and "Cease and desist order." for Permit termination or loss of authorization to discharge pursuant to this Permit, for Permit revocation and reissuance, or Permit modification, or denial of a Permit renewal application. The Department may seek voluntary compliance by way of warning, notice or other educational means, pursuant to 7 Del. C., Chapter 60 "Voluntary compliance." or any other means authorized by Law. However, the Law does not require that such voluntary means be used before proceeding by way of compulsory enforcement.

2. Groundwater Requirements

The operation of the wastewater treatment facility shall not cause the quality of Delaware's groundwater resources to be in violation of applicable Federal or State Drinking Water Standards.

3. Facilities Operations

The Permittee shall properly maintain and operate all structures, pipelines, systems and equipment for collection, treatment control and monitoring which are used by the permittee to achieve compliance with the terms and conditions of the Permit. Proper operation and maintenance may include, but is not limited to, effective performance based on designed facility removals, adequate funding, effective management, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures.

The operation of this wastewater treatment and disposal facility requires a Class I operator. The operator is responsible for operation, maintenance, and sampling of the facility. The operator shall perform site checks at a minimum of once every two weeks or as needed to adequately operate the facility.

An operator log shall always be kept onsite along with all facility records and copies of monitoring reports. This log shall, at a minimum, include the following:

- a. time spent at the treatment facility on any date;

- b. details of the operation and maintenance performed on the system on any date;
- c. The volume of wastewater treated and discharged;
- d. identification of and description of any portions of the disposal system that were underperforming;
- e. record of any deviations from the operation and maintenance manual;
- f. general daily weather conditions;
- g. record of all actions taken to correct violations of this Permit and the Department's regulations
- h. record of all site management activities undertaken; and
- i. record the date and volumes, and destination of biosolids removed from the facility.

4. Meter Calibration

The Permittee shall calibrate all flow meters in accordance with the Manufacturer's recommendations. Calibration shall include, but not be limited to influent, effluent, continuous online turbidity and chlorine residual monitors. The calibration documentation shall be submitted with the Annual Report in accordance with this Permit.

5. Operation and Maintenance Plan (O&M)

The Permittee shall operate and maintain wastewater treatment and disposal system in accordance with the approved Operation and Maintenance Plan (O&M). A copy of the O&M shall always be onsite. The Permittee shall maintain the O&M's accuracy and applicability in accordance with both their Permit and the Regulations. In the event of a discrepancy between the O&M and the Permit or Regulations, the requirements of the Permit and the Regulations would govern.

6. Adverse Impacts

The Permittee shall take all reasonable steps to eliminate or minimize any adverse impact to waters of the State resulting from this Permit, including such accelerated or additional monitoring as necessary to determine the source, nature, and extent of the impact from a noncomplying discharge. In addition, at the direction of the Department, the Permittee shall submit a corrective action plan which will include a description of the proposed actions to mitigate or eliminate the source of the impact and an associated completion schedule. The plan shall be enacted as approved by the Department.

7. Emergency Repairs

Emergency repairs or the replacement of critical "like kind" components of the wastewater treatment facility necessary for the continued operation of the facility

may be performed without first obtaining a construction permit from the Department.

A report shall be submitted to the Department within five (5) days of completion of the emergency repairs or the replacement of critical “like kind” components of the wastewater treatment facility necessary for the continued operation of the facility. The report shall summarize the nature of the emergency and the repairs performed. All violations resulting from emergency repairs shall also be reported.

8. Bypassing

The diversion of flow from any portion of the treatment facility’s process flow (including, but not limited to, pretreatment, storage, distribution, and land application) necessary to maintain compliance with the terms and conditions of this Permit is prohibited unless:

- a. The bypass is unavoidable to prevent personal injury, loss of life, severe property damage, or materially adversely affect public health and/or the environment; or
- b. There are no alternatives readily available.

The Groundwater Discharges Section shall be orally notified within 24 hours after such bypass; and, a written submission and proposed corrective actions regarding the bypass shall be submitted within five days of the Permittee's becoming aware of the bypass. Where the need for a bypass is known (or should have been known) in advance, this notification shall be submitted to the Groundwater Discharges Section for approval at least ten days prior, or as soon as possible, before the date of bypass. Proposed corrective actions shall be implemented within 30 days of Department approval and the treatment facility shall be repaired and restored to the permitted design operations process flow.

9. Power Failures

An alternative power source, which is enough to operate the wastewater treatment and disposal facilities, shall be available. If such alternative power source is not available, the Permittee shall halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater facilities.

B. Management Requirements and Responsibilities

1. Change in Discharge

Any usage authorized herein shall be consistent with the terms and conditions of this Permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges shall be

reported by submission of a written report to the Department with the following timelines:

- a. Thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any change in information that was submitted to the Department.
- b. Thirty (30) days before any anticipated change which would result in noncompliance with any Permit condition or the Regulations.
- c. Immediately after the Permittee becomes aware of relevant facts not submitted or incorrect information submitted in a Permit application or any report to the Department. Those facts or the correct information shall be submitted as soon as possible and be included as part of the report.

2. Non-Compliance Notification

The Permittee shall report to the Groundwater Discharges Section orally within 24 hours from the time the Permittee became aware of any noncompliance that may endanger the public health or the environment by contacting the Groundwater Discharges Section.

If for any reason the Permittee does not comply with, or will be unable to comply with, any effluent limitations or other conditions specified in this Permit, the Permittee shall provide the Department with the following information in writing within five days of becoming aware of any actual or potential noncompliance:

- a. A description and cause of the non-compliance with any limitation or condition;
- b. The period of non-compliance including exact dates and times; or, if not yet corrected, the anticipated time the non-compliance is expected to continue; and
- c. The steps being taken or planned to reduce, eliminate and/or prevent recurrence of the non-compliant condition.

3. Spill Reporting

In the event of any environmental release of pollutants (i.e., spill), the Permittee shall call the Department's 24-hour Emergency Release Reporting Hotline at (800) 662-8802.

The Permittee shall also notify the GWDS regarding any environmental release of pollutants (i.e., spill) into surface water or groundwater or on land, within 24-hours from the time the Permittee becomes aware of the release and activate their emergency site plan. In addition, the following information shall be reported to the GWDS within five days.

- a. The facility name and location of release;
- b. The chemical name or identity of any substance involved in the release;
- c. An indication of whether the substance is an extremely hazardous substance;

- d. An estimate of the quantity of any such substance that was released into the environment;
- e. The time and duration of the release;
- f. The medium or media into which the release occurred;
- g. Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals;
- h. Proper precautions to take as a result of the release, including evacuation;
- i. The names and telephone number of the person or persons to be contacted for further information; and
- j. Such other information as the GWDS may require.

4. Right of Entry

The permittee shall allow, at reasonable times, the Secretary of the Department, or their authorized representatives, upon the presentation of credentials and such other documents as may be required by law:

- a. To enter upon the permittee's premises where the on-site wastewater treatment and disposal system is located or where any records are required to be kept under the terms and conditions of this permit;
- b. To have access to and copy any records required to be kept under the terms and conditions of this permit;
- c. To inspect any facility, equipment, monitoring method, monitoring equipment, practice or operation permitted or required under this permit; and
- d. To sample or monitor for the purpose of assuring permit compliance with any condition of this permit, the regulations or 7 Del C., Chapter 60.

5. Reapplication for a Permit

At least 180 days prior to the expiration date of the Permit, the Permittee shall apply for renewal, or notify the Department of the intent to cease discharging by the expiration date.

In the event that a timely and complete application has been submitted as determined by the Department, and the Department is unable, through no fault of the Permittee, to issue a new Permit before the expiration date of this Permit, the terms and conditions of this Permit are automatically continued and remain fully effective and enforceable until a decision is made on the new application.

6. Transfer of Ownership and Control

No person shall transfer a Permit from one location to another or from one piece of equipment to another. No person shall transfer a Permit from one person to another unless thirty days written notice is given to the Department, indicating the transfer is agreeable to both persons, and approval of such transfer is obtained in writing

from the Department, and any conditions of the transfer approved by the Department are complied with by the transferor and the transferee.

The notice to the Department shall contain a written agreement between the transferor and the transferee, indicating the specific date of proposed transfer of permit coverage and acknowledging responsibilities of current and new permittees for compliance with and liability for the terms and conditions of this Permit. The notice shall be signed by both the transferor and the transferee.

7. Wastewater Treatment Facility Closure/Abandonment

In the event the wastewater treatment facility, or a component of the facility, is proposed to be abandoned, the permittee shall submit a proposed closure and abandonment work plan with procedures on how the facility will be abandoned for review and approval by the Department. The work plan shall address remediation if monitoring data indicates impacts to the environment. Upon review and approval of the work plan and completion of all closure and abandonment actions the permittee must contact the Department for a final inspection of the site.

8. Availability of Reports

All reports prepared in accordance with the terms of this Permit shall be available for public inspection at the offices of the Department of Natural Resources and Environmental Control. Monitoring data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in 7 Del. C., §6013.

9. Permit Modification, Revocation, and Termination

This permit may be modified, terminated, or revoked in whole or in part during its term for cause including, but not limited to, any of the following:

- a. Violation of any terms of conditions of this Permit, the regulations, 7 Del. C., Chapter 60 or failure to pay applicable Department fees;
- b. Obtaining this Permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- d. If the Department finds that the health, safety or welfare of the public requires emergency action, the Department shall incorporate findings in support of such action in a written notice of emergency revocation issued to the Permittee. Emergency revocation shall be effective upon receipt by the Permittee. Thereafter, if requested by the Permittee in writing, the Department shall provide the Permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with 7 Del. C., Chapter 60.

10. State Laws

This Permit shall not be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

11. Property Rights

The issuance of this Permit does not convey any property rights of either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

12. Severability

The provisions of this Permit are severable. If any provision of this Permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

PART III

A. Special Conditions

1. Connections or additions to the on-site wastewater treatment and disposal system other than those indicated on the approved plans will not be allowed without prior approval of the Department.
2. Roof downspouts, foundation drains, area drains, storm sewers, combined sewers or appurtenances thereto or any sewer or device carrying storm water shall not be connected to the on-site wastewater treatment and disposal system unless the system is designed to receive such flows.
3. If the Permittee installs new monitoring wells/observation wells, the Permittee shall submit to the Department new elevation details relative to the common benchmark previously established.
4. The septic tanks shall be pumped by a Delaware Licensed Class F liquid waste hauler at a minimum of once every 3 years. Septic tanks constructed of non-masonry materials should be pumped only when the seasonal water table is low. In the event that the pumping must occur during wet periods, the tank must be immediately refilled by the owner.
5. The Department will conduct an annual compliance inspection with the facility's operator of the on-site wastewater treatment and disposal system. An inspection fee will be charged.

6. This Permit does not relieve the permittee of complying with any other applicable Federal, State or local regulations.