

In accordance with the provisions of Article 11 of Chapter 130A, General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations

PERMISSION IS HEREBY GRANTED TO

SOUTHERN SHORES OWNER, LLC

For the operation of:

**The Market Place**  
Dare County, NC

For the operation of a 19,000 GPD domestic-only wastewater treatment and disposal system consisting of:

- Gravity sewer (8-inch, 7 manholes); Food Lion septic tank and milk/juice holding tank (2000 and 500 gallons, respectively); Ten grease traps; Raw Sewage Lift Station (10-ft diameter, 4512 gallons, including 4000-gallon emergency storage holding tank); 3-inch force main; existing septic tank and pump tank (17,142 and 12,566 gallons, respectively);
- Modifications/Upgrades to Existing System Components:
  - All collection system cleanouts to be ensured to be accessible, repaired as needed, service lines cleared, and flow from each design unit service line verified;
  - Manhole inserts to be added (Manholes A, B, C, D, and E), Asphalt covering removed (Manhole E), Manhole ring repaired (Manhole D), and test/repaired as needed to ensure watertight integrity; Cover added over Chinese Restaurant can wash;
  - Condensate lines re-routed as needed to not be connected into the collection sewer;
  - All Grease traps and Food Lion septic tank to be pumped out, leak-tested and repaired as needed, flow sources verified, and effluent filters provided (1/32-inch for grease traps and 1/16-inch for septic tank).
  - Raw sewage lift station and emergency storage tank to be pumped out, leak-tested and repaired as needed, pumps replaced, and guide-rail pump removal system repaired.
  - Existing septic tank and dosing tank to be cleaned, inspected for watertight integrity, leak tested and verified to be acceptable for continued use. Dosing tank is to be converted to an additional settling tank (with dual effluent filters and new aluminum access hatch), and all access manholes inspected and repaired or replaced as needed to ensure watertight integrity and soundness.
  - Existing dosing pumps and LPP drain fields to be completely removed and properly disposed
- New System Components: three septic tanks (8,100 gallons each in series, with dual effluent filters); gallon equalization tank (9346 gallons); two recirculation tanks (9,346 gallons each), each feeding 8 and 10 EZ-Treat Model 1200 Pods, respectively (total of 18 pods); calcite filter within EZ-Treat Model 600 Pod; 8-bulb UV disinfection unit; pumped interconnection from second recirc. tank to final settling tank; provisions for future carbon feed; 9,346 gallon final dosing tank, dual alternating pumps, two LPP drain fields (3,176 linear feet, total); flow meters, standby power system with automatic transfer switch, and

telemetry system. RPZ-protected wash down water supply, fencing of treatment system area, and lighting to be provided.

- System classification: VIa, requiring two days/week inspection by the ORC and quarterly inspection reports submitted to the local health department, and at least semi-annual inspection by your department. It is strongly recommended that your department conduct inspections of this facility more frequently.

## **I. PERFORMANCE STANDARDS**

1. The water treatment and disposal facilities shall be effectively maintained and operated at all times so that there is no discharge to the ground surface or to surface waters, nor any contamination of ground waters which will render them unsatisfactory for use. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions or failure of the subsurface disposal area to adequately assimilate the wastewater, the Permittee shall take immediate corrective actions including those actions that may be required by the DCDHHS, such as the construction of additional or replacement wastewater treatment and disposal facilities.
2. The issuance of this permit shall not relieve the Permittee of the responsibility for damages to surface or groundwaters resulting from the operation of this facility.
3. The residuals generated from these treatment facilities must be disposed in a manner approved by DENR.
4. Diversion or bypassing of the untreated wastewater from the treatment facilities is prohibited.
5. The applicable horizontal separations of 15A NCAC 18A .1950 must be maintained.

## **II. OPERATION AND MAINTENANCE REQUIREMENTS**

1. The facilities shall be properly maintained and operated at all times.
2. This system is classified as a Type VIa subsurface system. A certified subsurface system operator who must also have at least Grade II biological wastewater treatment certification shall be contracted to operate the treatment and subsurface system. The operator shall inspect the system at least twice weekly and report findings to the health department quarterly (sampling data to be provided monthly). The health department shall review/inspect system operation semi-annually (recommend more frequent inspections, if possible). Daily wastewater system flows shall be recorded for reporting, and wastewater sampling shall to be required for this system
3. A suitable, year-round vegetative cover shall be maintained on the disposal areas.
4. The facilities shall be effectively maintained and operated as a sub-surface disposal system to prevent the discharge of any wastewater resulting from the operation of this facility.

## **III. MONITORING AND REPORTING REQUIREMENTS**

1.
  - Any monitoring (including groundwater, surface water, and soil or plant tissue analyses) deemed necessary by the DCHHS to ensure surface and ground water protection will be established and an acceptable sampling reporting schedule shall be followed.

2.

- The effluent must be sampled at the dosing tank monthly and analyzed for CBOD5, TSS, Total Nitrogen and fecal coliforms at a NC certified wastewater laboratory. The samples must be obtained, preserved and analyzed in accordance with 40 CFR 136 procedures, and chain-of-custody documentation must be provided with all monitoring reports. The treated effluent must meet a CBOD5 of 10 mg/l, a TSS of 10 mg/l, Total Nitrogen of 20 mg/l, and 200 colonies/100 ml fecal coliforms. If the analyses indicate that any one or more of these limits is not being met, then the operator must contact your office within 24 hours.
- Influent to the system shall also be sampled at least quarterly at either the raw sewage lift station or at the influent to the new initial settling tank (after the existing septic tank/converted settling tank) and analyzed for BOD5, TKN, and FOG. Influent must meet a BOD5 of 450 mg/l, a TKN of 100 mg/l, and a FOG of 30 mg/l. If the analyses indicate that any one or more of these limits is not being met, then the operator must contact your office within 24 hours.

Every month, a written report documenting the daily flows and sampling data must be included in a report submitted to the health department. The operator's log to be retained at all times on site must also include elapsed time clock and cycle count readings for all pumps.

7. **Noncompliance Notification:**

The Permittee shall report by telephone to the DCHHS, telephone number (252)475-5080, as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence or first knowledge of the occurrence of any of the following:

- a. Any occurrence at the wastewater treatment facility which results in the treatment of significant amounts of wastes which are abnormal in quantity or characteristic, such as the dumping of the contents of a sludge digester; the known passage of a slug of hazardous substance through the facility; or any other unusual circumstances.
- b. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater treatment such as mechanical or electrical failures of pumps, aerators, compressors, etc.
- c. Any failure of a pumping station, sewer line, or treatment facility resulting in a by-pass directly to receiving waters without treatment of all or any portion of the influent to such station or facility.
- d. Any time that self-monitoring information indicates that the facility has gone out of compliance with its permit limitations.
- e. Any wastewater surfacing in the drainfield.

Persons reporting such occurrences by telephone shall also file a written report in letter form within five (5) days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur.

of standards at the Review Boundary shall require remediation action on the part of the permittee.

V. **INSPECTIONS**

1. Adequate inspection, maintenance, and cleaning shall be provided by the Permittee to ensure proper operation of the subject facilities.

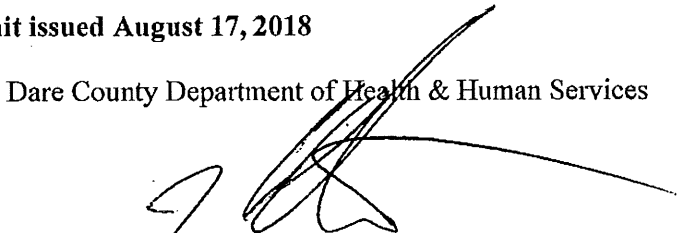
2. The Permittee or his designee shall inspect the wastewater treatment and disposal facilities to prevent malfunctions and deterioration, operator errors and discharges which may cause or lead to the release of wastes to the environment, a threat to human health, or a nuisance. The Permittee shall keep an inspection log or summary including at least the date and time of inspection, observations made, and any maintenance, repairs, or corrective actions taken by the Permittee. This log of inspections shall be maintained by the Permittee for a period of three years from the date of the inspection and shall be made available upon request to the Division or other permitting authority.
3. Any duly authorized officer, employee, or representative of the DCHHS or DENR may, upon presentation of credentials, enter and inspect any property, premises or place on or related to the disposal site or facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be maintained under the terms and conditions of this permit, and may obtain samples of groundwater, surface water, or influent wastewater or effluent wastewater.

#### **VI. GENERAL CONDITIONS**

1. This permit shall become voidable unless the facilities are constructed in accordance with the conditions of this permit, the approved plans and specifications, and other supporting data.
2. This permit is effective only with respect to the nature and volume of wastes described in the application and other supporting data.
4. Failure to abide by the conditions and limitations contained in this permit may subject the Permittee to an enforcement action by the DCHHS or DENR.
5. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by other government agencies (local, state, and federal) which have jurisdiction.
6. A set of approved plans and specifications for the subject project must be retained by the Permittee for the life of the project.

**Permit issued August 17, 2018**

Dare County Department of Health & Human Services



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Josh Coltrain, REHS

**Permit No. 970007579**