

Regulation 15 NCAC 2H .0404; entitled Facility Location and Design; has been amended as follows:

.0404 FACILITY LOCATION AND DESIGN

(a) No domestic sewage regardless of the treatment proposed and no other waste which could adversely affect the taking of shellfish for market purposes shall be discharged into water classified "SA" or to waters in such close proximity as to adversely affect such "SA" waters. Wastes discharged into waters tributary to waters classified "SA" shall be treated in such manner as to assure that no impairment of water quality in the "SA" segments will occur. No permits shall be issued for discharges into waters classified "SA" unless Shellfish Sanitation, Environmental Health Section, Department of Human Resources, provides written concurrence that the discharge would not adversely affect shellfish water quality or the propagation of shellfish.

(b) No wastes shall be discharged to waters classified "SB" unless these wastes are treated to the extent necessary to assure protection of assigned water quality standards.

(c) No waste discharge shall be allowed to any surface waters that experience excessive growths of microscopic or macroscopic vegetation or that, because of their relative size and lack of water exchange, are found by the commission to be subject to such excessive growths.

(d) No waste discharge shall be allowed to the waters of the Atlantic Ocean except in compliance with regulations promulgated by the Environmental Management Commission pursuant to General Statute 143-214.2(c).

(e) In all cases where connection to an area-wide sewerage system is feasible, such connection thereto shall be required.

(f) Septic tank systems shall not be approved in high density areas. For purposes of this regulation high density areas are defined as those areas producing more than 1,200 gallons of waste per acre per day or which contain more than three residential units per acre. For purposes of this regulation a septic tank system is defined as a ground absorption sewage disposal system consisting of a holding or settling tank and a ground absorption field. Septic tank systems shall be designed and constructed in accordance with Environmental Management Commission regulations governing septic tank systems.

(g) Interim Treatment and Disposal Facilities. In those cases where an approved area-wide collection and treatment system is not available, and where discharge to the surface waters is prohibited in Sections a, b, c, d, and where use of a septic tank system is prohibited by Section f, interim treatment and disposal facilities may be approved subject to their meeting the following requirements.

- (1) Wastes other than those disposed of by spray irrigation shall receive tertiary treatment followed by adequate bactericidal treatment. For purposes of this regulation tertiary treatment shall constitute biological treatment followed by acceptable solids removal to the

- extent accomplished by filtration. Also, flow equalization will be required unless it can be adequately demonstrated that either the wastewater influent flow rate will be of a uniform nature or that the proposed treatment units are designed such that they can adequately treat this wastewater without experiencing hydraulic overload.
- (2) Waste treatment facilities (except septic tank-surface sand filter systems) shall be located at least 10 feet from adjacent property under separate ownership, developed or undeveloped, and at least 10 feet from on-property residential units if these units are to be sold, e.g., condominiums, residential subdivision houses. Septic tank-surface sand filter systems shall be located at least 200 feet from on-property residential units if these units are to be sold and at least 200 feet from adjacent property under separate ownership.
  - (3) Waste treatment facilities shall be equipped with effective noise and odor control devices and are to be enclosed by a solid or semi-solid structure or other approved structure. An automatically activated standby power source shall be provided. All essential treatment and disposal units shall be provided in duplicate.
  - (4) Treated wastes may be disposed of in on-site disposal facilities, which shall be located at least 500 feet from any impounded public surface water supply or public shallow (less than 50 feet deep) ground water supply, and at least 100 feet from a private ground water supply except when a study of the soil would indicate a lesser separation acceptable.
  - (5) Waste disposal facilities shall be located at least 100 feet from any waters classified SA and at least 50 feet from any other waters. In the case of drainage ditches that are normally dry this distance may be reduced to 25 feet.
  - (6) Waste disposal facilities are to be designed on the basis of site conditions and soil percolation rates. In A, B, and C below are given the maximum loading rates for three different treatment systems. Higher loading rates or other methods of waste disposal may be approved by the Director based upon data submitted by the applicant.
    - (A) Subsurface Disposal Trench  
One and one-half gallons per day per square foot of trench bottom based on maximum trench width of 3 feet. Trenches shall be separated at least eight feet center to center.
    - (B) Low Pressure Distribution System  
One gallon per day per square foot of effective absorption area encompassed by the distribution system. The calculation of the amount of effective absorption area required shall be based on a maximum distribution line separation of five (5) feet center to center.

(C) Rotary Distributors

Ten gallons per day per square foot  
of surface area.

- (7) Waste disposal areas are to contain at least 1,000 square feet of open "green area" for each residential unit served, or 2,500 square feet per thousand gallons per day of waste flow, whichever is less. The term "green area" contained herein is defined as an area suitable for waste disposal, either in its natural state or which has been modified by planting vegetative cover of grasses or low growing shrubbery. Green areas shall not include street or roadway right-of-ways or areas not available for waste disposal. Not more than 25 percent of the required area may be covered with non-traffic bearing paved surfaces such as walkways or patios. Subsurface disposal areas shall not be used as parking lots, drive-ways, or for other vehicular traffic uses.
- (8) Wastes that are to be disposed of by spray irrigation shall receive a level of treatment which will not render either the irrigation system or the disposal area unworkable. Spray irrigation systems shall be located at least 200 feet from any adjoining property, buffered by trees to prevent excessive drift. Such areas shall be surrounded by fencing with warning signs to discourage human use or trespass, and designed according to good engineering practices with the application rate not to exceed one and three fourth inches per week - unless the Director determines, based on data submitted by the applicant, that a higher application rate is justified.

History Note: Statutory Authority G.S. 143-215.3(a) (1);  
143-211; 143-215.1(a); 143-215.1(b) (1);  
Eff. February 1, 1976;  
Amended Eff. September 13, 1981; May 11, 1980.