"Extends from a point on the North Carolina/South Carolina state line near Calabash, North Carolina, generally along the lines of the Atlantic Coast Line Railroad and Norfolk Southern Railway, northeasterly and northerly to River Mile 66.0 (Lock No. 1) on to the Cape Fear River; thence northerly to River Mile 3.4 on Black River; thence easterly to River Mile 48 on North East Cape Fear River; thence northerly and easterly to River Mile 22.5 in New River; thence easterly and northerly to River Mile 25.0 on White Oak River (Atlantic Coast Line Railroad Bridge); thence northerly and easterly to River Mile 38.9 on Neuse River (Norfolk Southern Railway Bridge); thence northerly to River Mile 44.6 on Pamlico River (Norfolk Southern Railway Bridge); thence northeasterly and northerly crossing Albemarle Sound along Norfolk Southern Railway Bridge; thence northerly and easterly to River Mile 13.5 on Perquimans River (Norfolk Southern Railway Bridge); thence easterly to River Mile 20.0 on Pasquotank River (Norfolk Southern Railway Bridge); and thence northerly to the North Carolina/Virginia state line near Moyock, North Carolina."

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.

.0404 FACILITY LOCATION AND DESIGN

(a) No wastewater will be discharged into water classified "SA" for the taking of shellfish for market purposes nor to waters in such close proximity as to adversely affect such waters regardless of treatment proposed. 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.

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

(c) No 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 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 Statutes

143-214.2(c).

(e) In all cases where connection to an existing area-wide sewerage system or where establishment of an area-wide sewerage system is feasible, such connection thereto or establishment thereof shall be required. If immediate establishment of such a sewerage system is not feasible, a phased approach to such system should be begun.

(f) Septic tank-nitrification systems will not be approved in high density areas. High density areas are hereby defined as those areas producing more than 1,200 gallons of wastewater per acre per day or which contain more than three residential

units per acre.

(g) Interim Treatment and Disposal Facilities- In those cases where an approved area-wide collection and treatment system is not available and cannot be provided, and where discharge to the surface waters is prohibited in Sections 1, 2, 3, or 4, interim treatment and disposal facilities may be approved subject to their meeting the following requirements:

(1) Wastewaters shall receive tertiary treatment (Biological treatment followed by acceptable solids removal) and

adequate bactericidal treatment.

(2) Wastewater treatment facilities (except septic tanks) 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.

(3) Waste treatment facilities are to be equipped with effective noise and odor control devices and are to be enclosed by a solid or semi-solid open-topped structure or other approved structure. An automatically activated standby power sources must be provided. All essential operating

units must be provided in duplicate.

(4) Treated wastewaters may be disposed of in subsurface disposal facilities, which are to 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 private shallow ground water supply except when a study of the soil would indicate a lesser separation acceptable.

(5) Site or subsurface disposal facility shall be located at least 100 feet from any surface water body, except that in the case of drainage ditches that are normally

dry this distance may be reduced to 25 feet.

(6) Subsurface disposal facilities are to be designed on the basis of site conditions and soil percolation rates. The loading rate shall not exceed 1½ gallons per square foot of trench bottom, except upon a finding by this

- office, based upon data submitted by the applicant, that a higher loading rate is justified. Trenches may be up to 3 feet wide and parellel trenches must be separated at least 8 feet center to center.
- (7) Subsurface disposal areas are to contain at least 1000 square feet of open "green area" for each residential unit served, or 2,500 square feet per thousand gallons per day of waste flow. The term "green area" contained herein is defined as an area either in its natural state or which has been modified by planting vegetative cover of grasses or low growing shrubbery. Not more than 25 per cent of the required area may be covered with non-traffic bearing paved surfaces such as tennis courts, walkways or patios. Subsurface disposal areas shall not be used as parking lots, driveways, or for other vehicular traffic uses.
- (8) Treated wastewater may be disposed of in spray irrigation systems which 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 ¼ inch per acre per day.
- (9) The appropriate local governing body (ies) in the area in which the proposed project is located shall be notified of the proposed action at least fifteen (15) days before a permit for the proposed action is issued.

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.

## .0405 PRIVATELY OWNED INSTALLATIONS

- (a) Privately owned collection and treatment systems serving establishments existing on the effective date of these Regulations shall comply with the requirements enumerated in these Regulations unless impossible. If adherence to the guides is not possible, the highest level of control technology consistent with site limitations shall be employed. No expansion of the load tributary to existing non-public facilities will be allowed until compliance with the guides established in these Regulations is obtained.
- (b) Privately owned wastewater collection, treatment and disposal systems serving establishments not in existence on the effective date of these Regulations shall comply with the provisions of these Regulations.