

**15A NCAC 18A .1950 LOCATION OF SANITARY SEWAGE SYSTEMS**

(a) Every sanitary sewage treatment and disposal system shall be located at least the minimum horizontal distance from the following:

- |       |   |                                       |
|-------|---|---------------------------------------|
| (1)   | Any private water supply source, including any well or spring         | 100 feet;                             |
| (2)   | Any public water supply source  | 100 feet;                             |
| (3)   | Streams classified as WS-I  | 100 feet;                             |
| (4)   | Waters classified as S.A.   | 100 feet, from mean high water mark;  |
| (5)   | Other coastal waters  | 50 feet, from mean high water mark;   |
| (6)   | Any other stream, canal, marsh, or other surface waters               | 50 feet;                              |
| (7)   | Any Class I or Class II reservoir                                     | 100 feet, from normal pool elevation; |
| (8)   | Any permanent storm water retention pond                              | 50 feet, from flood pool elevation;   |
| (9)   | Any other lake or pond  | 50 feet, from normal pool elevation;  |
| (10)  | Any building foundation   | 5 feet;                               |
| (11)  | Any basement  | 15 feet;                              |
| (12)  | Any property line   | 10 feet;                              |
| (13)  | Top of slope of embankments or cuts of 2 feet or more vertical height | 15 feet;                              |
| (14)  | Any water line  | 10 feet;                              |
| (15)  | Drainage Systems:   |                                       |
| (A)   | Interceptor drains, foundation drains, and storm water diversions     |                                       |
| (i)   | upslope   | 10 feet,                              |
| (ii)  | sideslope   | 15 feet, and                          |
| (iii) | downslope   | 25 feet;                              |
| (B)   | Groundwater lowering ditches and devices                              | 25 feet;                              |
| (16)  | Any swimming pool   | 15 feet;                              |
| (17)  | Any other nitrification field (except repair area)                    | 20 feet;                              |

(b) Ground absorption sewage treatment and disposal systems may be located closer than 100 feet from a private water supply, except springs and uncased wells located downslope and used as a source of drinking water, for repairs, space limitations, and other site-planning considerations but shall be located the maximum feasible distance and in no case less than 50 feet.

(c) Nitrification fields and repair areas shall not be located under paved areas or areas subject to vehicular traffic. If effluent is to be conveyed under areas subject to vehicular traffic, ductile iron or its equivalent pipe shall be used. However, pipe specified in Rule .1955 (e) may be used if a minimum of 30 inches of compacted cover is provided over the pipe.

(d) In addition to the requirements of Paragraph (a) of this Rule, sites to be used for subsurface disposal for design units with flows over 3,000 gallons per day, as determined in Rule .1949 (a) or (b) of this Section, which include one or more nitrification fields with individual capacities of greater than 1,500 gallons per day, shall be located at least the minimum horizontal distance from the following:

- |     |   |                                      |
|-----|---|--------------------------------------|
| (1) | Any Class I or II reservoir or any public water supply source utilizing a shallow (under 50 feet) groundwater aquifer | 500 feet;                            |
| (2) | Any other public water supply source, unless determined to utilize a confined aquifer                                 | 200 feet;                            |
| (3) | Any private water supply source, unless determined to utilize a confined aquifer                                      | 100 feet;                            |
| (4) | Waters classified as SA   | 200 feet, from mean high water mark; |
| (5) | Any waters classified as WS-I   | 200 feet;                            |
| (6) | Any surface waters classified as WS-II, WS-III, B, or SB  | 100 feet; and                        |

- (7) Any property line 25 feet.
- (e) Collection sewers, force mains, and supply lines shall be located at least the minimum horizontal distance from the following:
- (1) Any public water supply source, including wells, springs, and Class I or Class II reservoirs 100 feet, unless constructed of leakproof pipe, such as ductile iron pipe with mechanical joints equivalent to water main standards, in which case the minimum setback may be reduced to 50 feet;
  - (2) Any private water supply source, including wells and springs 50 feet, unless constructed of similar leakproof pipe, such as ductile iron pipe with mechanical joints equivalent to water main standards, in which case the minimum setback may be reduced to 25 feet;
  - (3) Any waters classified as WS-I, WS-II, WS-III, B, SA, or SB 50 feet, unless constructed of similar leakproof pipe, such as ductile iron pipe with mechanical joints equivalent to water main standards, in which case the minimum setback may be reduced to 10 feet;
  - (4) Any other stream, canal, marsh, coastal waters, lakes and other impoundments, or other surface waters 10 feet;
  - (5) Any basement 10 feet;
  - (6) Any property line 5 feet;
  - (7) Top of slope of embankments or cuts of two feet or more vertical height 10 feet;
  - (8) Drainage Systems:
    - (A) Interceptor drains, storm drains, and storm water diversions 5 feet;
    - (B) Ground-water lowering ditches and devices 10 feet;
  - (9) Any swimming pool 10 feet;
  - (10) Any other nitrification field 5 feet.
- (f) Sewer lines may cross a water line if 18 inches clear separation distance is maintained, with the sewer line passing under the water line. When conditions prevent an 18-inch clear separation from being maintained or whenever it is necessary for the water line to cross under the sewer, the sewer line shall be constructed of ductile iron pipe or its equivalent and the water line shall be constructed of ferrous materials equivalent to water main standards for a distance of at least ten feet on each side of the point of crossing, with full sections of pipe centered at the point of crossing.
- (g) Sewer lines may cross a storm drain if:
- (1) 12 inches clear separation distance is maintained; or
  - (2) the sewer is of ductile iron pipe or encased in concrete or ductile iron pipe for at least five feet on either side of the crossing.
- (h) Sewer lines may cross a stream if at least three feet of stable cover can be maintained or the sewer line is of ductile iron pipe or encased in concrete or ductile iron pipe for at least ten feet on either side of the crossing and protected against the normal range of high and low water conditions, including the 100-year flood/wave action. Aerial crossings shall be by ductile iron pipe with mechanical joints or steel pipe. Pipe shall be anchored for at least ten feet on either side of the crossing.

(i) Septic tanks, lift stations, wastewater treatment plants, sand filters, and other pretreatment systems shall not be located in areas subject to frequent flooding (areas inundated at a ten-year or less frequency) unless designed and installed to be watertight and to remain operable during a ten-year storm. Mechanical or electrical components of treatment systems shall be above the 100-year flood level or otherwise protected against a 100-year flood.

*History Note: Authority G.S. 130A-335(e) and (f);  
Eff. July 1, 1982;  
Amended Eff. January 1, 1990; October 1, 1982.*