

SECTION .1400 - IRRIGATION TO FOOD CHAIN CROPS

15A NCAC 02U .1401 IRRIGATION TO FOOD CHAIN CROPS

(a) Irrigation to food chain crops shall be limited as follows:

- (1) Reclaimed water utilized for direct or indirect contact irrigation of food chain crops that will be peeled, skinned, cooked, or thermally processed before consumption shall be treated to Type 1 reclaimed water standards;
- (2) For the purposes of this Rule, tobacco is not considered a food chain crop;
- (3) Reclaimed water shall not be utilized for direct contact irrigation of food chain crops that will not be peeled, skinned, cooked, or thermally processed before consumption except as approved in Subparagraph (5) of this Paragraph;
- (4) Reclaimed water utilized for indirect contact irrigation of food chain crops that will not be peeled, skinned, cooked, or thermally processed before consumption shall be treated to Type 2 reclaimed water standards; and
- (5) If requested, the Department shall authorize demonstration projects to collect and present data related to the direct application of reclaimed water on crops that are not peeled, skinned, cooked, or thermally processed before consumption. Crops produced during such demonstration projects may be used as animal feed or may be thermally processed, cooked, or otherwise prepared for human consumption in a manner approved by the North Carolina Department of Agriculture and Consumer Services. If the applicant, based on the data collected, demonstrates to the Department that public health will be protected if their reclaimed water is directly applied to crops that are not peeled, skinned, cooked, or thermally processed, the Department shall waive the prohibition described in Subparagraph (3) of this Paragraph for that project. When considering such demonstration projects, the Department shall seek the advice of the North Carolina Department of Agriculture and Consumer Services.

(b) In addition to the requirements established in Rule .0201 or Rule .0202 of this Subchapter, all new and expanding irrigation to food chain crops systems shall submit a Standard Soil Fertility Analysis for each field to be irrigated. The Standard Soil Fertility Analysis shall include the following parameters:

- (1) acidity;
- (2) base saturation (by calculation);
- (3) calcium;
- (4) cation exchange capacity;
- (5) copper;
- (6) exchangeable sodium percentage (by calculation);
- (7) magnesium;
- (8) manganese;
- (9) percent humic matter;
- (10) pH;
- (11) phosphorus;
- (12) potassium;
- (13) sodium; and
- (14) zinc.

(c) When a water balance is required by Rule .0202(e) of this Subchapter, the water balance shall include seasonal water requirements for the crops.

(d) For irrigation sites not owned by the permittee, a land owner agreement shall be provided to the Division. The land owner agreement shall include the following:

- (1) a description of the approved uses and conditions for use of the reclaimed water consistent with the requirements of this Rule;
- (2) a condition requiring the reclaimed water supplier to provide the landowner with the results of sampling performed to document compliance with the reclaimed water effluent standards; and
- (3) a condition requiring the landowner to report to the permittee any use of the reclaimed water inconsistent with the uses in the agreement.

(e) All renewal applicants for dedicated irrigation to food chain crop systems shall submit:

- (1) A Standard Soil Fertility Analysis for each field to be irrigated. The Standard Soil Fertility Analysis shall include the parameters from Paragraph (b) of this Rule;

- (2) The inventory of commercial agricultural operations using reclaimed water to irrigate food chain crops required in Subparagraph (f)(7) of this Rule; and
 - (3) For irrigation sites not owned by the permittee, a land owner agreement pursuant to Paragraph (d) of this Rule.
- (f) Reclaimed water facilities providing reclaimed water for the irrigation of food chain crops shall meet the criteria below:
- (1) Crops irrigated by direct contact with reclaimed water shall not be harvested within 24 hours of irrigation with reclaimed water;
 - (2) Notification at the utilization site shall be provided by the permittee or its representative to inform the public of the use of reclaimed water and that the reclaimed water is not intended for drinking;
 - (3) The reclaimed water generator shall develop and maintain a record keeping program for distribution of reclaimed water;
 - (4) The permittee shall develop and maintain an education program for users of reclaimed water for irrigation to food chain crops;
 - (5) The reclaimed water generator shall provide all landowners receiving reclaimed water for irrigation of food chain crops a summary of all reclaimed water system performance as required in G.S. 143-215.1C;
 - (6) The reclaimed water generator shall develop and maintain a routine review and inspection program for all irrigation to food chain crop systems; and
 - (7) The permittee shall maintain an inventory of commercial agricultural operations using reclaimed water to irrigate food chain crops for each year of operation. The inventory shall be maintained for five years. The inventory of food chain crop irrigation shall include the following:
 - (A) name of the agricultural operation;
 - (B) name and telephone number of the owner or operator of the agricultural operation;
 - (C) address of the agricultural operation;
 - (D) food chain crops irrigated with reclaimed water;
 - (E) type of application method used; and
 - (F) approximate irrigation area where food chain crops are grown.

*History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. June 18, 2011;
Readopted Eff. September 1, 2018.*