UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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NOV 26 2007

Ms. Coleen H. Sullins
Director
Division of Water Quality
North Carolina Department of Environment and Natural Resources
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

Dear Ms. Sullins:

The Environmental Protection Agency (EPA) has completed its review of North Carolina's revisions to the Surface Water Quality Standards and Stream Classifications rules adopted by the North Carolina Environmental Management Commission (EMC) on March 8, 2007. These revisions, which constitute the 2004 - 2006 Triennial Review for the State, as required by Section 303(c) of the Clean Water Act (CWA), were submitted to the EPA for review by letter dated June 22, 2007, and received on June 26, 2007. The submittal to EPA was accompanied by a letter from the North Carolina Attorney General, dated June 13, 2007, certifying that the rules were adopted following three public hearings in July 2006 and are valid and enforceable in the State of North Carolina as of May 1, 2007. In accordance with the May 2000 changes to EPA's water quality standards regulations contained at 40 CFR § 131.21(d), new and revised state and Tribal water quality standards are not considered effective for CWA purposes until approved by EPA.

The triennial review revisions include new and revised standards in North Carolina Administrative Code (NCAC) Subchapter 02B – *Classifications and Water Quality Standards Applicable to Surface Waters and Wetlands of North Carolina,* as follows:

- Human health updates to North Carolina's standards for toxic substances, including:
  - Updates to the procedures for interpretation of the narrative standard for toxic substances. This includes two modifications to the equations for the calculation of water quality criteria for non-carcinogens, as follows:
    - Use of EPA's new national default value for fish consumption rates; and,
    - The use of Relative Source Contribution (RSC) rather than the previously used Dietary Intake (DI));
  - Updates to the numeric standards for carcinogens based on the latest scientific updates from EPA, including:
    - Revisions or recalculations for aldrin, benzene, carbon tetrachloride, chlordane, DDT, dieldrin, dioxin, heptachlor, hexachlorobutadiene, polychlorinated biphenyls (PCBs), tetrachloroethane, trichloroethylene and vinyl chloride;

- Addition of tetrachloethylene as a carcinogen, and,
- Removal of beryllium as a carcinogen.

- Adoption of the EPA Section 304(a) criteria for tributyltin; and,
- Adoption of enterococci as the indicator organism for coastal areas as required under the Beaches Environmental Assessment and Coastal Health (BEACH) Act.

EPA's review of each of these modifications is enclosed. (Enclosure 1).

Based on EPA's review of the revisions adopted by the State during the triennial review of water quality standards, it is EPA's determination that the revisions to State water quality standards identified above are consistent with the applicable provisions of the Clean Water Act and the requirements of 40 CFR Part 131 and are therefore approved. The one revision to an aquatic life standard, the adoption of the Section 304(a) criteria for tributyltin, is approved subject to the results of consultation under Section 7(a)(2) of the Endangered Species Act (ESA), as discussed in the enclosed review summary.

EPA is approving revisions to the State's water quality standards which comply with the provisions of the BEACH Act, namely revisions to the State's coastal recreation standard to replace fecal coliform with enterococci as the bacteriological indicator. This approved coastal recreation standard includes and incorporates by reference the "Coastal Recreational Waters Monitoring, Evaluation and Notification," regulations (15A NCAC 18A .3400) ("Coastal Recreation Regulations"), which are administered by the North Carolina Division of Environmental Health. (Enclosure 2). EPA finds that these combined provisions, as they are currently drafted and promulgated, meet the minimum requirements of Section 303(i) of the Clean Water Act and the BEACH Act Rule. EPA notes, however, that the standard includes reference to "any subsequent amendments" of the Coastal Recreation Regulations, and therefore it is essential to point out that EPA is specifically not approving any subsequent amendments to the referenced regulations at this time. EPA's approval of this standard is explicitly limited to the current language of this provision and the incorporated regulations as of the date of this approval. Should these regulations be revised or modified in any way, this would be considered a change to standards requiring a review under Section 303(c) of the Clean Water Act. Therefore, any amendments to the Coastal Recreation Regulations would not be applicable as water quality standards for any Clean Water Act purposes until formally approved by EPA.

With the approval of North Carolina's revised coastal recreation standards, action can be initiated to remove North Carolina from the November 16, 2004, EPA rulemaking (69 Fed. Reg. 67217 – 67243), which promulgated the federally designated water quality criteria in all coastal recreational waters for all states which did not have such requirements (the "BEACH Act Rule"). By copy of this letter, EPA Region 4 is notifying EPA Headquarters of the approval of North Carolina's BEACH Act provisions, and requesting the removal of North Carolina from the federal promulgation.

During the triennial, the State conducted a review of the variances to water quality standards for Blue Ridge Paper Products, Mount Olive Pickle Company (Mount Olive) and Bay Valley Foods. EPA and the State are currently conducting a comprehensive review of the Blue Ridge Paper Product's variance concurrent with the National Pollutant Discharge Elimination System (NPDES) permit reissuance process. Final decisions on the continuation of the variance will be made once the review is complete. Mount Olive and Bay Valley Food's comprehensive reviews were completed in 2006 taking into account all new information available. The review supported a continuation of these variances, as detailed in EPA's approval letter dated April 23, 2006.

The Division of Water Quality and, in particular, Connie Brower of the Classification and Standards Unit, are to be commended for conducting an excellent technical review of the State's water quality standards program and submittal of a complete and timely package for review. During this triennial, your staff made an outstanding effort to include stakeholders and the general public in the development and review of revised water quality standards. EPA notes that more than 18 meetings were held for various stakeholder groups in anticipation of the revisions. Three public hearings were held in geographically diverse locations across the State to facilitate maximum public input. North Carolina continues to exemplify the model for effective consultation with the public and the U.S. Fish and Wildlife Service. It was apparent that this coordination enhanced the outcome of the final triennial review package.

Thank you again for your Division's continuing efforts to protect and enhance the quality of North Carolina's waters. If you have any questions regarding this review, please call me or have your staff contact Lisa Perras Gordon at (404) 562-9317.

Sincerely,

James D. Giattina, Director
Water Management Division

Enclosures (2)

Connie Brower, NC DWQ
Jeff Manning, NC DWQ
Alan Clark, NC DWQ
J.D. Potts, Division of Environmental Health, NC DENR
Lars Wilcut, U.S. EPA

EPA's Review of the 2004-2006 Triennial Review

Human Health Updates

Revisions to 15A NCAC 02B .0208 (Standards for Toxic Substances and Temperature)
15A NCAC 02B .0212, .0214, .0215, .0216 and .0218 (Fresh Surface Water Quality Standards for Class WS-I, WS-II, WS-III, WS-IV, and WS-V Waters)

The following updates have been published since the beginning of the previous North Carolina triennial review period:

- In October 2000, EPA published revisions to the 1980 Ambient Water Quality Criteria National Guidelines. This document, *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (2000 Methodology) (EPA-822-B-00-004)*, incorporated significant advances in areas such as cancer and non-cancer risk assessments, exposure assessments and bioaccumulation in fish.
- In November 2002, EPA published an updated compilation of its national recommended water quality criteria for 158 pollutants, many of which were revised based on the *2000 Methodology*. (*National Recommended Water Quality Criteria: 2002, EPA-822-R-02-047* and *National Recommended Water Quality Criteria: 2002, Human Health Criteria Calculation Matrix, EPA -822-R-02-012).*
- On December 31, 2003, EPA published updated national recommended water quality criteria for the protection of human health for 15 specific pollutants. (*National Recommended Water Quality Criteria for the Protection of Human Health,* 68 Fed.Reg. 75507-15).
- A complete publication of all National Recommended Water Quality Criteria was published by EPA in 2006 which included all of the above updates.

Section 303(c)(2)(B) of the Clean Water Act states that whenever a State reviews or adopts new water quality standards, States shall adopt criteria for all toxic pollutants listed pursuant to section 307(a)(1) of the Clean Water Act for which criteria have been published under section 304(a) ("304(a) criteria"), the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the states.

Pursuant to a December 12, 1988, EPA memo, states have options for accomplishing the section 303(c)(2)(B) requirements of adopting new or revised 304(a) recommended criteria for priority toxic pollutants. One option is to adopt specific numeric criteria in state water quality standards for section 307(a) toxic pollutants as necessary to support designated uses where such pollutants are discharged or are present in the affected waters and could reasonably be expected to interfere with designated uses. Another option is to adopt a procedure to be applied to a toxicity narrative to be used by the state to calculate a water quality standard. States are not required to adopt specific criteria and/or a new methodology for EPA listed pollutants that are not discharged or present in the state's waters or would not be reasonably expected to interfere with designated uses.

North Carolina implemented a dual approach, using both options referenced above, as its process for adopting toxic criteria into its water quality standards. For non-carcinogens, North Carolina adopted two equations for use in interpreting the narrative for toxics that would be applicable to all waters; one to protect human health for the exposure routes of fish tissue consumption and the other to protect human health through water consumption (with a correction for fish consumption). For carcinogens, North Carolina opted for listing individual chemicals (or groups of chemicals) and included a specific numeric water quality criterion for each.

In this triennial, North Carolina is modifying the equations for all non-carcinogens as recommended by the 2000 Methodology. North Carolina is also updating the specific criteria for 13 carcinogens, adding 1 new carcinogen and removing 1 carcinogen based upon the latest EPA recommendations.

Non-carcinogens: Based on the most recent scientific updates published by EPA, the State is making the following changes to the calculations for deriving water quality criteria for non-carcinogens:

- The State had previously used "Dietary Intake" (DI), which is the estimated non-fish dietary intake. In this triennial, the State is replacing DI with the more up-to-date Relative Source Contribution (RSC) methodology used by EPA in the 2000 Methodology. EPA introduced a revised RSC policy for assessing total human exposure to a contaminant and apportioning the reference dose among the media of concern.
- North Carolina is also adopting EPA's new national default fish consumption rate of 17.5 gram/person-day for freshwater/estuarine fish for use in deriving or revising the Ambient Water Quality Criteria. This replaces the previously used fish consumption rate of 6.5 grams/person-day.

Incorporating both of these changes, the new equations are as follows:

For fish tissue consumption:

$$WQS = (RfD \times RSC) \times Body\ Weight/(FCR \times BCF)$$

For water consumption (including a correction for fish consumption):

$$WQS = (RfD \times RSC) \times Body\ Weight/[WCR + (FCR \times BCF)]$$

Where:

WQS = Water Quality Standard
RfD = Reference Dose
RSC = Relative Source Contribution
FCR = Fish Consumption Rate (based upon 17.5 gm/person-day)

~~BCF = Bioconcentration Factor, or Bioaccumulation Factor (BAF), as appropriate~~
WCR = Water Consumption Rate (assumed to be two liters per day for adults.)

Carcinogens: Prior to the revisions in this triennial, North Carolina had specific numeric water quality standards for 16 carcinogens. The list of carcinogens is being modified based on the most recent scientific updates by EPA as follows:

- Eleven of those carcinogens, aldrin, carbon tetrachloride, chlordane, DDT, dieldrin, dioxin, heptachlor, hexachlorobutadiene, PCBs, tetrachloroethane, and trichloroethylene are being revised to incorporate EPA's new national default fish consumption rate.
- Two carcinogens, benzene and vinyl chloride are being revised based on EPA's new national default fish consumption rate and updated cancer potency factors.
- Beryllium is being eliminated from the carcinogen list for human health protection as a result of the updates. In 1998, EPA updated the Integrated Risk Information System (IRIS) based on a revised human health assessment for a non-cancer endpoint which resulted in a value that was significantly higher in concentration than the aquatic life value. At this time, EPA does not have a recommended criteria for beryllium for either human health or aquatic life. However, North Carolina is retaining the more stringent aquatic life number.
- Tetrachloroethylene is being added to the list of carcinogens.

Standards to protect human health from carcinogens through the consumption of fish and shellfish are applicable to all waters (*15A NCAC 02B .0208*). These are listed as Human Health (HH) in the table below. Standards to protect human health from carcinogens through water and fish tissue consumption are listed under the Water Supply (WS) classification (*15A NCAC .0212, .0214, .0215, .0216 and .0218*). These are listed as WS in the table below. The specific new criteria are as follows:

Chemical	Classification	North Carolina's Previous Criteria (ug/l)	North Carolina's Proposed Criteria (ug/l)	EPA Recommended 304(a) Criteria (ug/l)
Aldrin	HH	0.000136	0.00005	0.00005
	WS	0.000127	0.00005	0.000049
Benzene	HH	71.4	51	51
Beryllium	HH	0.117	--	--
	WS	.0068	--	--
Carbon tetrachloride	HH	4.42	1.6	1.6
Chlordane	HH	0.000588	0.0008	0.00081
	WS	0.000575	0.0008	0.00080
DDT	HH	0.000591	0.0002	0.00022
	WS	0.000588	0.0002	0.00022

Dieldrin	HH	0.000144	0.00005	0.000054
	WS	0.000135	0.00005	0.000052
Dioxin	HH	0.000000014	0.000000005	0.0000000051
	WS	0.000000013	0.000000005	0.0000000050
Heptachlor	HH	0.000214	0.00008	0.000079
	WS	0.000208	0.00008	0.000079
Hexachlorobutadiene	HH	49.7	18	18
	WS	0.445	0.44	0.44
PCBs	HH	0.000079	0.000064	0.000064
Tetrachloroethane (1,1,2,2)	HH	10.8	4	4
	WS	0.172	0.17	0.17
Tetrachloroethylene	HH	--	3.3	3.3
	WS	0.8	0.7	0.69
Trichloroethylene	HH	92.4	30	30
	WS	3.08	2.5	2.5
Vinyl chloride	HH	525	2.4	2.4
	WS	2	0.025	0.025

Table 1: Changes to Human Health Toxicity Criteria for Carcinogens

North Carolina's proposed changes for human health criteria for toxics meets the applicable provisions of the CWA and the requirements of 40 CFR Part 131.11(b) The proposed changes are consistent with EPA's Section 304(a) criteria. Therefore, EPA is approving these revisions.

BEACH Act Revisions

Revisions to 15A NCAC 02B .0220 (Tidal Salt Water Quality Standard for Class SC Waters) and 15A NCAC 02B .0222 (Tidal Salt Water Quality Standards for Class SB Waters)

On October 10, 2000, Congress passed the BEACH Act, an amendment to the CWA. The BEACH Act requires states and territories to adopt more protective water quality standards for pathogens and pathogen indicators in coastal recreational waters.

The BEACH Act also required EPA to enact these provisions should the states or tribes fail to enact standards that are at least as protective of human health as EPA's 1986 published bacteria criteria guidance. Section 303(c) of the CWA authorizes the EPA Administrator to promulgate water quality standards to supersede State, Territorial, or authorized Tribal standards that have been disapproved or in any case where the Administrator determines that a new or revised standard is needed to meet the CWA's requirements. The States were required to adopt new or revised standards consistent with the BEACH Act provisions by April 10, 2004. On November 16, 2004, EPA published a final rulemaking (69 Fed. Reg. 67217 – 67243), which promulgated the federally designated water quality criteria in all coastal recreational waters for all states which had not adopted such standards, including North Carolina (the "BEACH Act Rule").

During the current triennial, North Carolina revised its bacteriological indicator to enterococci, as recommended by EPA. The new language which applies to both Class SC (all tidal salt waters) and to Class SB (tidal surface waters that are used for primary recreation, including frequent or organized swimming) is as follows:

> "Enterococcus, including *Enterococcus faecalis, Enterococcus faecium, Enterococcus avium* and *Enterococcus gallinarium*: not to exceed a geometric mean of 35 enterococci per 100 ml based on a minimum of five samples within any consecutive 30 days. In accordance with 33 U.S.C. 1313 (Federal Water Pollution Control Act) for purposes of beach monitoring and notification, "Coastal Recreational Waters Monitoring, Evaluation and Notification" regulations (15A NCAC 18A .3400) are hereby incorporated by reference including any subsequent amendments;"

EPA finds that this provision, in combination with the "Coastal Recreation Waters Monitoring, Evaluation and Notification" regulations (the "Coastal Recreation Regulations") as they are currently drafted and promulgated, meet the minimum requirements of Section 303(i) of the CWA and the BEACH Act Rule. Specifically, the State has adopted the appropriate indicator organism for all coastal recreation waters and has adopted the geometric mean concentration for all purposes under the CWA. Additionally, the State has adopted, by reference, into its water quality standards, the applicable single sample maxima for all coastal recreation programs and applied these maxima to the beach monitoring and notification program authorized under Section 406 of the CWA.

EPA's approval of North Carolina's revised coastal recreation standard is explicitly limited to the current language of this provision and the incorporated regulations as of the date of this approval. EPA is specifically not approving any subsequent amendments to the referenced regulations at this time. Should these regulations be revised or modified in any way, this would be considered a change to standards requiring a review under Section 303(c) of the CWA. Therefore, any amendments to the Coastal Recreation Regulations would not be applicable as water quality standards for any CWA purposes until formally approved by EPA.

EPA notes that the Division of Environmental Health (DEH), under the North Carolina Department of Environmental and Natural Resources, administers the coastal monitoring program and the Coastal Recreation Regulations. The activities under these regulations are funded, in part, by BEACH Act grants administered by EPA. The regulations are reviewed annually by the Regional BEACH Act coordinator during the disbursement of these grants.

EPA is approving these revisions, which comply with the applicable provisions of the CWA and the requirements of 40 CFR Part 131. With the approval of these water quality standards, EPA will now initiate the process to remove North Carolina from under the federal promulgation of November 16, 2004. Headquarters has been notified of the pending approval and the request for removal of North Carolina from the federal BEACH Act Rule.

Tributyltin

Revisions to 15A NCAC .0211 (Fresh Surface Water Quality Standards for Class C Waters) and 15A NCAC .0220 (Tidal Salt Water Standards for Class SC Waters)

Tributyltin (TBT), one of the most toxic species of trialkyltin compounds, has been used in the textile industry as a biocide and as an anti-fouling agent in paints for ship bottoms and in cooling towers. TBT has been responsible for aquatic life impairments to North Carolina waters, including one incident so severe that cows were killed downstream from one user of TBT. North Carolina, along with several other states, instituted restrictions on its use. In the early 1980's, the State also developed its own water quality standard to protect aquatic life in surface waters. At that time, EPA had yet to develop a Section 304(a) criteria guidance for TBT. The State used the best available scientific information at the time and developed an aquatic life water quality standard (see Table 2).

In December 2003, EPA published the *Ambient Aquatic Life Water Quality Criteria for Tributlytin (TBT) – Final ("TBT Criteria Document") (EPA 822-R-03-031)* based on the most recent scientific data and literature reviews. The National Recommended Water Quality Criteria for TBT were higher (i.e. less stringent) than the previously adopted aquatic life criteria in use by the State. In this triennial, the State has adopted the newly published EPA criteria.

Water Quality Criteria for Tributyltin	Previous NC Aquatic Life Criteria (ug/l)	EPA's 304(a) Criteria/NC's Adopted Criteria (ug/l)
Freshwater	0.008	0.072
Saltwater	0.002	0.007

Table 2: Previous and Adopted Aquatic Life Criteria for Tributyltin

Although North Carolina's adopted criteria are less stringent than their previous numbers, they are equivalent to the most scientifically updated Section 304(a) criteria currently recommended by EPA, and therefore deemed protective of the designated use. North Carolina's proposed changes for aquatic life criteria for TBT meet the applicable provisions of the CWA and the requirements of 40 CFR § 131.11(b) in that the adopted criteria will result in implementation of EPA's Section 304(a) criteria. Therefore, EPA is approving these revisions subject to the results of consultation under Section 7(a)(2) of the Endangered Species Act.

Variance Reviews

Under 40 CFR Section 131.20, each state is required, at least once every three years, to re-examine any water body segment with water quality standards which do not include the uses specified in Section 101(a)(2) of the Act to determine if any new information has become available to indicate the uses are now attainable. North Carolina has three variances from water quality standards in the State, which are subject to this triennial evaluation requirement, as discussed below.

Mount Olive Pickle (Barlow Branch in the Cape Fear River Basin)
Bay Valley Foods (Unnamed tributary to Panther Creek in the Cape Fear River Basin)

The triennial package included an update on the variances to the water quality standard for chloride held by Mount Olive Pickle Company (NC 0001074) and Bay Valley Foods (NC 0001970). Both facilities have excess sodium chloride from pickle processing. Limited technology exists for removal of sodium chloride from the waste stream.

An extensive review of each of these variances and the associated National Pollutant Discharge Elimination System (NPDES) permits was conducted in 2005 by the NPDES permitting and water quality standards staffs at the North Carolina Division of Water Quality and EPA Region 4. New permits were issued in February 2006, which reflected a comprehensive review of the chloride variance with associated decreases in permit limits and requirements for continued research. EPA approved the revised variances on April 23, 2006. The next comprehensive review of the permits and the variances is scheduled for the 2008-11 triennial review when the current permits expire.

Blue Ridge Paper (Pigeon River)

Blue Ridge Paper Products (NC0000272) has a color variance, which was renewed by the State effective October 10, 2001, and was scheduled to be reviewed for CWA purposes on or before October 10, 2006. The variance and the permit have been the subject of numerous meetings between EPA Region 4, North Carolina and Tennessee (downstream of the discharge) during 2006 and 2007. A comprehensive review and evaluation of the status of the variance is ongoing concurrent with the facility's permit reissuance process, which will include public hearings and opportunity for comments. Comments received by the State during the triennial will be considered during the permit and variance review as well. Therefore, at this time the review of this variance has not been completed.

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL HEALTH

SHELLFISH SANITATION AND RECREATIONAL WATER QUALITY SECTION

15A NCAC 18A .3400

COASTAL RECREATIONAL WATERS MONITORING, EVALUATION, AND NOTIFICATION

SECTION .3400 - COASTAL RECREATIONAL WATERS MONITORING, EVALUATION, AND NOTIFICATION

15A NCAC 18A .3401 DEFINITIONS

The following definitions shall apply throughout Section 18A .3400 of this Subchapter:

(1) "Enterococcus" means a gram positive coccoid-shaped bacteria that is found in the intestinal tracts of warm-blooded animals that include *Enterococcus faecalis, Enterococcus faecium, Enterococcus avium, and Enterococcus gallinarium.*

(2) "Geometric mean" means the mean of "n" positive numbers obtained by taking the "n"th root of the product of the numbers with at least five samples collected within a 30 day period.

(3) "Point source discharge"' means the discharge of liquids through a pipe, drain, ditch or other conveyance into a swimming area.

(4) "Primary contact" means an activity in water in which a person's head is partially or completely submerged.

(5) "Storm water discharge" means any natural or manmade conveyance of rainwater or the resultant runoff into recreational waters.

(6) "Swimming advisory" means a notification to the public that recommends no primary contact with the water in a specific area for public health reasons but does not close a swimming area to the public. A swimming advisory shall include a sign posted at the site of the advisory and a press release to notify the public of the risks of swimming in the area.

(7) "Swimming alert" means a notification to the public by media contact including a press release to warn the public of risks of swimming in an area that exceeds bacteriological swimming area levels.

(8) "Swimming area" means a coastal recreation area that is used for primary contact located within waters classified by the Division of Water Quality as SA, SB, or SC.

(9) "Swimming season" means from April 1 through October 31 of each year.

(10) "Tier I swimming area" means a swimming area used daily during the swimming season, including any public access swimming area and any other swimming area where people use the water for primary contact, including all oceanfront beaches.

(11) "Tier II swimming area" means a swimming area used an average of three days a week during the swimming season.

(12) "Tier III swimming area" means a swimming area used an average of four days a month during the swimming season.

(13) "Winter season" means from November 1 through March 31 of each year.

History Note: *Authority G.S. 130A-233.1;*
Eff. February 1, 2004.

15A NCAC 18A .3402 BACTERIOLOGICAL LIMITS FOR SWIMMING AREAS

(a) The enterococcus level in a Tier I swimming area shall not exceed either:

(1) A geometric mean of 35 enterococci per 100 milliliter of water, that includes a minimum of at least five samples collected within 30 days; or

(2) A single sample of 104 enterococci per 100 milliliter of water.

(b) The enterococcus level in a Tier II swimming area shall not exceed a single sample of 276 enterococci per 100 milliliter of water.

(c) The enterococcus level in a Tier III swimming area shall not exceed two consecutive samples of 500 enterococci per 100 milliliter of water.

History Note: *Authority G.S. 130A-233.1;*
Eff. February 1, 2004

15A NCAC 18A .3403 PUBLIC NOTICE OF INCREASED HEALTH RISKS IN SWIMMING AREAS

(a)Tier I Swimming areas:

(1) A swimming advisory shall be issued by the Division when samples of water from a swimming area exceeds a geometric mean of 35 enterococci per 100 milliliter during the swimming season.

(2) A swimming alert shall be issued by the Division when a single sample of water from a swimming area exceeds 104 enterococci per 100 milliliter and does not exceed 500 enterococci per 100 milliliter during the swimming season.

(3) A swimming advisory shall be issued by the Division when a sample of water from a swimming area exceeds a single sample of 500 enterococci per 100 milliliter during the swimming season.

(4) A swimming advisory shall be issued by the Division when at least two of three concurrent water samples collected at a swimming area exceeds 104 enterococci per 100 milliliter during the swimming season.

(b) Tier II swimming areas:

(1) A swimming alert shall be issued by the Division when a single sample of water from a swimming area exceeds 276 enterococci per 100 milliliter and does not exceed 500 enterococci per 100 milliliter during the swimming season.

(2) A swimming advisory shall be issued by the Division when a single sample of water from a swimming area exceeds 500 enterococci per 100 milliliter during the swimming season.

(c) A Tier III swimming area with a water sample result of 500 enterococci per 100 milliliter or higher on the first sample shall be resampled the following day. If the laboratory results of the second sample exceed 500 enterococci per 100 milliliter a swimming advisory shall be issued by the Division.

(d) Signs posted pursuant to this Section shall be placed or erected in open view where the public may see the sign(s) prior to entering the water.

(e) Signs shall convey the following:

ATTENTION: SWIMMING IN THIS AREA IS NOT RECOMMENDED. BACTERIA TESTING INDICATES LEVELS OF CONTAMINATION THAT MAY BE HAZARDOUS TO YOUR HEALTH. THIS ADVISORY AFFECTS WATERS WITHIN 200' OF THIS SIGN. OFFICE OF THE STATE HEALTH DIRECTOR.

History Note: *Authority G.S. 130A-233.1;*
Eff. February 1, 2004.

15A NCAC 18A .3404 SWIMMING ADVISORIES FOR POINT SOURCE DISCHARGES INTO SWIMMING AREAS

(a) A wastewater treatment plant that discharges into swimming waters shall be posted by the Division with at least one sign until the discharge is removed. The sign(s) for a wastewater treatment plant discharge shall convey the following:

ATTENTION: THESE WATERS MAY BE CONTAMINATED BY HUMAN OR ANIMAL WASTE. SWIMMING IS NOT ADVISED IN THESE WATERS BECAUSE OF THE INCREASED RISK OF ILLNESS. OFFICE OF THE STATE HEALTH DIRECTOR.

(b) A swimming advisory shall be issued by the Division and at least two signs shall be posted at a storm drain or storm water discharge that is actively discharging into a swimming area. Signs shall be placed to advise the public as they enter the area impacted by the drain. The signs for a storm drain or storm water discharge shall convey the following:

SWIMMING IS NOT RECOMMENDED BETWEEN SIGNS. WATERS MAY BE CONTAMINATED BY DISCHARGE FROM PIPE. OFFICE OF THE STATE HEALTH DIRECTOR.

(c) A swimming advisory shall be issued by the Division and at least two signs shall be posted at a storm drain where flood waters are being pumped into a swimming area. The signs shall remain posted for at least 24 hours after the pumping of flood waters has ceased. The signs shall convey the following:

SWIMMING IS NOT RECOMMENDED BETWEEN SIGNS. WATERS MAY BE CONTAMINATED BY DISCHARGE FROM PIPE. OFFICE OF THE STATE HEALTH DIRECTOR.

(d) A swimming advisory shall be issued by the Division and at least two signs shall be posted at an area receiving dredge material on a swimming beach when the dredge material is being pumped from an area closed to shellfish harvesting. The signs shall convey the following:

> SWIMMING IS NOT RECOMMENDED BETWEEN SIGNS. WATERS MAY BE CONTAMINATED BY DISCHARGE FROM PIPE. OFFICE OF THE STATE HEALTH DIRECTOR.

History Note: *Authority G.S. 130A-233.1;*
Eff. January 1, 2004.

15A NCAC 18A .3405 RESCINDING A SWIMMING ADVISORY OR SWIMMING ALERT

(a) A Tier I swimming area advisory shall be rescinded when two consecutive weekly water samples and the geometric mean meet the bacteriological limits in Rule 18A .3402(a) of this Section. A swimming alert shall be rescinded within 24 hours of compliance with Rule 18A .3402(a)(2) of this Section.

(b) A Tier II or Tier III swimming area advisory or alert shall be rescinded after water samples meet the bacteriological standard in Rule 18A .3402(b) or (c) of this Section.

(c) A swimming advisory resulting from a point source discharge or the discharge of dredge material shall be rescinded 24 hours after the discharge has ceased.

(d) When a swimming advisory or alert has been rescinded, the Division shall issue a press release to announce the lifting of the advisory or the alert and the sign(s) shall be removed immediately by the Division.

History Note: *Authority G.S. 130A-233.1;*
Eff. January 1, 2004.

15A NCAC 18A .3406 DESTRUCTION OF SIGNS

A person shall not mutilate, deface, pull down, destroy, hide, or steal any sign posted pursuant to this Section.

History Note: *Authority G.S. 130A-233.1;*
Eff. January 1, 2004.

15A NCAC 18A .3407 APPLICABILITY OF RULES

The rules of this Section shall apply to all marine recreational waters in coastal North Carolina.

History Note: *Authority G.S. 130A-233.1;*
Eff. January 1, 2004.