

ROY COOPER Governor MICHAEL S. REGAN Secretary BRAXTON C. DAVIS

CRC-17-23

September 12, 2017

# **MEMORANDUM**

TO: Coastal Resources Commission

FROM: Mike Lopazanski

**SUBJECT:** Amendments to CRC Temporary Erosion Control Structures Rules

At the July 2017 meeting of the CRC, Staff briefly reviewed previously proposed amendments to your rules governing the use of sandbags as temporary erosion control structures. Those proposed amendments included changes that were initiated by the Commission and Advisory Council, as well as directives from the Legislature in 2015. Staff also advised the Commission of the General Assembly's most recent action, S.L. 2017-10 (Senate Bill 131), which contained further directives for the Commission regarding temporary erosion control structures.

SECTION 3.14.(a) of S.L. 2017-10 **repeals** Sections 14.6(p) and 14.6(q) of S.L. 2015-241 which directed the CRC to adopt rules that:

- (1) Allow the placement of temporary erosion control structures on a property that is experiencing coastal erosion even if there are no imminently threatened structures on the property if the property is adjacent to a property where temporary erosion control structures have been placed.
- (2) Allow the placement of contiguous temporary erosion control structures from one shoreline boundary of a property to the other shoreline boundary, regardless of proximity to an imminently threatened structure.
- (3) The termination date of all permits for contiguous temporary erosion control structures on the same property shall be the same and shall be the latest termination date for any of the permits.
- (4) Allow the replacement, repair, or modification of damaged temporary erosion control structures that are either legally placed with a current permit or legally placed with an expired permit, but the status of the permit is being litigated by the property owner.

S.L. 2017-10 Section 3.14.(b) further states "Notwithstanding G.S. 150B-21.1A(a), the Coastal Resources Commission may adopt an emergency rule for the use of temporary erosion control structures consistent with the amendments to the temporary erosion control structure rules adopted by the Commission as agenda item CRC-16-23 on May 11, 2016, with any further modifications in the Commission's discretion. The Commission shall also adopt temporary and permanent rules to implement this section."

You will recall that there was much concern among Commissioners and the Division that the 2015 legislative directives could lead to a proliferation of sandbags and that their use would be allowed in cases where there were no threatened structures present. Given that the new legislation repeals the directives of S.L. 2015-241 while also allowing the CRC to consider any further modifications in the

Commission's discretion, Staff recommends that the 2015 legislative provisions noted above be reconsidered.

The Commission and Advisory Council spent a significant amount of time considering amendments to address the management of sandbags and address the time limits for permitted sandbag structures, provisions for removal when no longer necessary, the allowance for structures to remain beyond permitted time limits when "covered and vegetated."

As a reminder, the CRC/CRAC amendments:

- Remove the distinction between structures greater or less than 5,000 square feet, setting the time limit at eight years for all structures;
- Remove the "vegetated" requirement for sandbag structures to remain beyond their permitted time when covered by sand;
- Require that only sandbags exposed above grade be removed at the expiration of the permit;
- Modify the "no longer necessary" provisions to require the removal of sandbags that are exposed above grade upon <u>completion</u> of a beach nourishment or inlet relocation/stabilization project.
- Clarifies that structures determined by the Division of Coastal Management to be imminently
  threatened upon the expiration date of permitted temporary erosion control structures may be
  permitted to remain in place for an additional eight years if they are located in a community
  pursuing beach nourishment, inlet relocation or stabilization.

Staff is also recommending language to address gaps in adjoining sandbag structures on a sitespecific basis.

In summary, the revised language would manage sandbags in the following manner:

## Sandbags Permitted

- On properties with an imminently threatened structure or accelerated erosion.
- Can be extended beyond the protected structure to address gaps in adjoining sandbag walls.

#### Time Limits

- Sandbag permits will be valid for eight years for all structures regardless of structure size.
- Sandbag structures placed incrementally will have time limits corresponding to the installation of the first bags.

#### Removal

- If the structure is demolished or relocated, all sandbags must be removed.
- Upon completion of beach fill/inlet relocation or stabilization project, sandbags exposed above grade must be removed.
- Upon expiration of the eight-year permit, sandbags exposed above grade must be removed.
- Sandbags covered by sand do not need to be removed.

Attached are two versions of the rule. Version **A** includes the legislative directives of 2015. Version **B** only includes the CRC/CRAC proposed amendments. It was noted at the meeting that there are several new Commissioners who may not be familiar with the use of sandbags as temporary erosion control structures so I have included a history as an attachment.

#### Version A

Proposed Amendments to 15 NCAC 7H .0308; 7H .1704; 7H .1705 Temporary Erosion Control Structures \*2015 Legislatively Directed Amendments Highlighted in Yellow \*\*Proposed Amendments in Bold

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#### 15A NCAC 07H .0308 SPECIFIC USE STANDARDS FOR OCEAN HAZARD AREAS

- (a) Ocean Shoreline Erosion Control Activities:
  - (1) Use Standards Applicable to all Erosion Control Activities:
    - (A) All oceanfront erosion response activities shall be consistent with the general policy statements in 15A NCAC 07M .0200.
    - (B) Permanent erosion control structures may cause significant adverse impacts on the value and enjoyment of adjacent properties or public access to and use of the ocean beach, and, therefore, unless specifically authorized under the Coastal Area Management Act, are prohibited. Such structures include bulkheads, seawalls, revetments, jetties, groins and breakwaters.
    - (C) Rules concerning the use of oceanfront erosion response measures apply to all oceanfront properties without regard to the size of the structure on the property or the date of its construction.
    - (D) All permitted oceanfront erosion response projects, other than beach bulldozing and temporary placement of sandbag structures, shall demonstrate sound engineering for their planned purpose.
    - (E)(D) Shoreline erosion response projects shall not be constructed in beach or estuarine areas that sustain substantial habitat for fish and wildlife species, as identified by natural resource agencies during project review, unless mitigation measures are incorporated into project design, as set forth in Rule .0306(i) .0306(h) of this Section.
    - (F)(E) Project construction shall be timed to minimize adverse effects on biological activity.
    - (G)(F) Prior to completing any erosion response project, all exposed remnants of or debris from failed erosion control structures must be removed by the permittee.
    - (H)(G) Erosion Permanent erosion control structures that would otherwise be prohibited by these standards may be permitted on finding by the Division that:
      - (i) the erosion control structure is necessary to protect a bridge which provides the only existing road access on a barrier island, that is vital to public safety, and is imminently threatened by erosion as defined in **provisionPart** (a)(2)(B) of this Rule;
      - (ii) the erosion response measures of relocation, beach nourishment or temporary stabilization are not adequate to protect public health and safety; and
      - (iii) the proposed erosion control structure will have no adverse impacts on adjacent properties in private ownership or on public use of the beach.
    - (I)(H) Structures that would otherwise be prohibited by these standards may also be permitted on finding by the Division that:
      - (i) the structure is necessary to protect a state or federally registered historic site that is imminently threatened by shoreline erosion as defined in provision (a)(2)(B) of this Rule;
      - (ii) the erosion response measures of relocation, beach nourishment or temporary stabilization are not adequate and practicable to protect the site;
      - (iii) the structure is limited in extent and scope to that necessary to protect the site; and
      - (iv) any A permit for a structure under this Part (1) may be issued only to a sponsoring public agency for projects where the public benefits outweigh the short or long range significant adverse impacts. Additionally, the permit shall include conditions providing for mitigation or minimization by that agency of any unavoidable significant adverse impacts on adjoining properties and on public access to and use of the beach.
    - (J)(I) Structures that would otherwise be prohibited by these standards may also be permitted on finding by the Division that:
      - (i) the structure is necessary to maintain an existing commercial navigation channel of regional significance within federally authorized limits;
      - (ii) dredging alone is not practicable to maintain safe access to the affected channel;
      - (iii) the structure is limited in extent and scope to that necessary to maintain the channel;
      - (iv) the structure shall not adversely impact have significant adverse impacts on fisheries or other public trust resources; and
      - (v) any permit for a structure under this Part (J) may be issued only to a sponsoring public agency for projects where the public benefits outweigh the **short or long range significant** adverse impacts. Additionally, the permit shall include conditions

\*2015 Legislatively Directed Amendments Highlighted in Yellow

\*\*Proposed Amendments in **Bold** June 28, 2017

providing for mitigation or minimization by that agency of any unavoidable adverse impacts on adjoining properties and on public access to and use of the beach.

- (K)(J) The Commission may renew a permit for an erosion control structure issued pursuant to a variance granted by the Commission prior to 1 July 1995. The Commission may authorize the replacement of a permanent erosion control structure that was permitted by the Commission pursuant to a variance granted by the Commission prior to 1 July 1995 if the Commission finds that:
  - (i) the structure will not be enlarged beyond the dimensions set out in the permit;
  - (ii) there is no practical alternative to replacing the structure that will provide the same or similar benefits; and
  - (iii) the replacement structure will comply with all applicable laws and with all rules, other than the rule or rules with respect to which the Commission granted the variance, that are in effect at the time the structure is replaced.
- (L)(K) Proposed erosion response measures using innovative technology or design shall be considered as experimental and shall be evaluated on a case-by-case basis to determine consistency with 15A NCAC 7M .0200 and general and specific use standards within this Section.
- (2) Temporary Erosion Control Structures:
  - (A) Permittable temporary erosion control structures shall be limited to sandbags placed landward of mean high water and parallel to the shore.
  - (B) Temporary erosion control structures as defined in Part (2)(A) of this Subparagraph shall may be used to protect only imminently threatened roads and associated right of ways, and buildings and their associated septic systems. A structure is considered imminently threatened if its foundation, septic system, or right-of-way in the case of roads, is less than 20 feet away from the erosion scarp. Buildings and roads located more than 20 feet from the erosion scarp or in areas where there is no obvious erosion scarp may also be found to be imminently threatened when site conditions, such as a flat beach profile or accelerated erosion, increase the risk of imminent damage to the structure. Temporary erosion control structures may be used to protect properties that are experiencing erosion when there are no imminently threatened structures on the property if an adjacent property has an existing temporary erosion control structure that is in compliance with the Commission's rules. Temporary erosion control structures used to protect property without imminently threatened structures shall be sited to align with and shall be no further waterward than the most landward adjacent temporary erosion control structure.
  - (C) Temporary Nothwithstanding Part (B) of this Subparagraph, temporary erosion control structures shall be used to protect only the principal structure-and its associated septic system, but not appurtenances such as pools, gazebos, decks or any amenity that is allowed <u>under 15A NCAC 07H .0309</u> as an exception to the erosion setback requirement.
  - (D) Temporary erosion control structures may be placed seaward waterward of a septic system when there is no alternative to relocate it on the same or adjoining lot so that it is landward of or in line with the structure being protected.
  - (E) Temporary erosion control structures shall not extend more than 20 feet past the sides of the structure to be protected. The landward side of such temporary erosion control structures shall not be located more than 20 feet seaward waterward of the structure to be protected protected, or the right-of-way in the case of roads. If a building or road is found to be imminently threatened and at an increased risk of imminent damage due to site conditions such as a flat beach profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet seaward waterward of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or their the Director's designee in accordance with Part (2)(A) of this Subparagraph.
  - (F) Temporary erosion control structures may remain in place for up to two years after the date of approval if they are protecting a building with a total floor area of 5000 sq. ft. or less and its associated septic system, or, for up to five eight years for a building with a total floor area of more than 5000 sq. ft. and its associated septic system, system. Temporary erosion control structures may remain in place for up to five years if they are protecting a bridge or a road. The termination date of all contiguous temporary erosion control structures on the same property shall be the same and shall be the latest termination date of any of the permitted temporary erosion control structures. The property owner shall be responsible for removal of any portion

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<u>of the temporary erosion control structure exposed above grade</u> the temporary structure within 30 days of the end of the allowable time period.

- An imminently threatened structure or property may be protected only once, regardless of ownership, unless the threatened structure or property is located in a community that is actively pursuing a beach nourishment project, or an inlet relocation or stabilization project in accordance with Part (H) of this Subparagraph. Existing temporary erosion control structures may be permitted for additional eight-year periods provided that the structure or property being protected is still imminently threatened, the temporary erosion control structure is in compliance with requirements of this Subchapter, and the community in which it is located is actively pursuing a beach nourishment or an inlet relocation or stabilization project in accordance with Part (H) of this Subparagraph. In the case of a building, a temporary erosion control structure may be extended, or new segments constructed, if additional areas of the building become imminently threatened. Where temporary structures are installed or extended incrementally, the time period for removal under Part (F) or (H) of this Subparagraph shall begin at the time the most recent erosion control structure was installed. For the purpose of this Rule:
  - (i) a building and its septic system shall be considered separate structures.
  - (ii) a road or highway may be incrementally protected as sections become imminently threatened. The time period for removal of each contiguous section of temporary erosion control structure shall begin at the time that the most recent section was installed, in accordance with Part (F) of this Subparagraph.
- (G)(H) Temporary sandbag erosion control structures may remain in place for up to eight years from the date of approval if they are located in a community that is actively pursuing a beach nourishment project, or if they are located in an Inlet Hazard Area adjacent to an inlet for which a community is actively pursuing an inlet relocation or stabilization project in accordance with G.S. 113A-115.1 For purposes of this Rule, a community is considered to be actively pursuing a beach nourishment, nourishment or an inlet relocation or stabilization project in accordance with G.S. 113A-115.1 if it has:
  - (i) has been issued an active CAMA permit, where necessary, approving such project; or
     (ii) been identified by a U.S. Army Corps of Engineers' Beach Nourishment Reconnaissance Study, General Reevaluation Report, Coastal Storm Damage Reduction Study Study or an ongoing feasibility study by the U.S. Army Corps of Engineers and a commitment of local or federal money, when necessary; or
  - (iii) **has** received a favorable economic evaluation report on a federal project; or
  - (iv) is in the planning stages of a project designed by the U.S. Army Corps of Engineers or persons meeting applicable State occupational licensing requirements and initiated by a local government or community with a commitment of local or state funds to construct the project and or the identification of the financial resources or funding bases necessary to fund the beach nourishment or the inlet relocation or stabilization project.

If beach nourishment or inlet relocation or stabilization is rejected by the sponsoring agency or community, or ceases to be actively planned for a section of shoreline, the time extension is void for that section of beach or community and existing sandbags are subject to all applicable time limits set forth in Part (F) of this Subparagraph. The termination date of all permits for contiguous temporary erosion control structures on the same property shall be the same and shall be the latest termination date of any of the permits.

(H)(I) Once the <u>a</u> temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to relocation or removal of the threatened structure, <u>it shall</u> be removed to the maximum extent practicable by the property owner within 30 days of official notification from the Division of Coastal Management regardless of the time limit placed on the temporary erosion control structure. If the temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to the completion of a storm protection project constructed by the U.S. Army Corps of Engineers, a large-scale beach nourishment project, project, or an inlet relocation or stabilization project, any portion of the temporary erosion control structure exposed above grade it shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management Management regardless of the time limit placed on the temporary erosion control structure.

\*\*Proposed Amendments in **Bold** 

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- (I)(J) Removal of temporary erosion control structures is not required if they are covered by dunes sand. with stable and natural vegetation. Any portion of the temporary erosion control structure that becomes exposed above grade after the expiration of the permitted time period shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management.
- (J)(K) The property owner shall be responsible for the removal of remnants of all portions of any damaged temporary erosion control structure.
- (K)(L) Sandbags used to construct temporary erosion control structures shall be tan in color and three to five feet wide and seven to 15 feet long when measured flat. Base width of the <u>temporary erosion control</u> structure shall not exceed 20 feet, and the <u>total</u> height shall not exceed six <u>feet.</u> feet, as measured from the bottom of the lowest bag.
- (L)(M) Soldier pilings and other types of devices to anchor sandbags shall not be allowed.
  - An imminently threatened structure may be protected only once, regardless of ownership, unless the threatened structure is located in a community that is actively pursuing a beach nourishment project, or in an Inlet Hazard Area and in a community that is actively pursuing an inlet relocation or stabilization project in accordance with Part (G)(H) of this Subparagraph. Existing temporary erosion control structures located in Inlet Hazard Areas may be eligible for an additional eight year\_permit extension provided that the structure being protected is still imminently threatened, the temporary erosion control structure is in compliance with requirements of this Subchapter\_ and the community in which it is located is actively pursuing a beach nourishment, inlet relocation or stabilization project in accordance with Part (G) of this Subparagraph. In the case of a building, a temporary erosion control structure may be extended, or new segments constructed, if additional areas of the building become imminently threatened. Where temporary structures are installed or extended incrementally, the time period for removal under Part (F) or (G) of this Subparagraph shall begin at the time the initial erosion control structure is installed. For the purpose of this Rule:
  - (i) a building and septic system shall be considered as separate structures.
  - (ii) a road or highway shall be allowed to be incrementally protected as sections become imminently threatened. The time period for removal of each section of sandbags shall begin at the time that section is installed in accordance with Part (F) or (G) of this Subparagraph.
- (N) Existing sandbag structures may be repaired or replaced within their originally permitted dimensions during the time period allowed under Part (F) or (G) of this Subparagraph. Existing sandbag structures that were legally placed pursuant to permits that have since expired may be replaced, repaired, or modified within their permit dimensions if the status of the permit is being litigated by the property owner in state, federal or administrative court.

#### 15A NCAC 07H .1704 GENERAL CONDITIONS

- (a) Work permitted by means of an emergency general permit shall be subject to the following limitations:
  - (1) No work shall begin until an onsite meeting is held with the applicant and a Division of Coastal Management representative so that the proposed emergency work can be delineated. Written authorization to proceed with the proposed development may be issued during this visit.
  - (2) No work shall be permitted other than that which is necessary to **reasonably** protect against or reduce the imminent danger caused by the emergency, to restore the damaged property to its condition immediately before the emergency, or to re-establish necessary public facilities or transportation corridors.
  - (3) Any permitted <u>temporary</u> erosion control projects shall be located no more than 20 feet waterward of the imminently threatened structure or the right-of way in the case of <u>roads</u>, <u>roads</u>, <u>except as provided</u> <u>under 15A NCAC 07H .0308</u>. If a building or road is found to be imminently threatened and at increased risk of imminent damage due to site conditions such as a flat beach profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet <u>seaward waterward</u> of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or <u>the Director's</u> designee.
  - (4) Fill materials used in conjunction with emergency work for storm or erosion control shall be obtained from an upland source. Excavation below MHW in the Ocean Hazard AEC may be allowed to obtain material to fill sandbags used for emergency protection.
  - (5) Structural work shall meet sound engineering practices.

- (6) This permit allows the use of oceanfront erosion control measures for all oceanfront properties without regard to the size of the existing structure on the property or the date of construction.
- (b) Individuals shall allow authorized representatives of the Department of Environment and Natural Resources Environmental Quality to make inspections at any time deemed necessary to be sure that the activity being performed under authority of this general permit is in accordance with the terms and conditions in these Rules.
- (c) Development shall not jeopardize the use of the waters for navigation or for other public trust rights in public trust areas including estuarine waters.
- (d) This permit shall not be applicable to proposed construction where the Department has determined, based on an initial review of the application, that notice and review pursuant to G.S. 113A-119 is necessary because there are unresolved questions concerning the proposed activity's impact on adjoining properties or on water quality, air quality, coastal wetlands, cultural or historic sites, wildlife, fisheries resources, or public trust rights.
- (e) This permit does not eliminate the need to obtain any other state, local, or federal authorization.
- (f) Development carried out under this permit must be consistent with all local requirements, CAMA rules, and local land use plans, storm hazard mitigation, and post-disaster recovery plans current at the time of authorization.

History Note: Authority G.S. 113-229(cl); 113A-107(a),(b); 113A-113(b); 113A-118.1; Eff. November 1, 1985; Amended Eff. December 1, 1991; May 1, 1990; RRC Objection due to ambiguity Eff. May 19, 1994; Amended Eff. May 1, 2010; August 1, 1998; July 1, 1994;

#### 15A NCAC 07H .1705 SPECIFIC CONDITIONS

- (a) Temporary Erosion Control Structures in the Ocean Hazard AEC.
  - (1) Permittable temporary erosion control structures shall be limited to sandbags placed landward of mean high water and parallel to the shore.
  - (2) Temporary erosion control structures as defined in Subparagraph (1) of this Paragraph shall may be used to protect only imminently threatened roads and associated right of ways, and buildings and their associated septic systems. A structure is considered imminently threatened if its foundation, septic system, or, or right-of-way in the case of roads, roads is less than 20 feet away from the erosion scarp. Buildings and roads located more than 20 feet from the erosion scarp or in areas where there is no obvious erosion scarp may also be found to be imminently threatened when the Division determines that site conditions, such as a flat beach profile or accelerated erosion, increase the risk of imminent damage to the structure. Temporary erosion control structures may be used to protect properties that are experiencing erosion when there are no imminently threatened structures on the property if an adjacent property has an existing temporary erosion control structure that is in compliance with the Commission's rules. Temporary erosion control structures used to protect property without imminently threatened structures shall be sited to align with and shall be no farther waterward than the most landward adjacent temporary erosion control structure.
  - (3) Temporary Notwithstanding Part (a)(2) of this Subparagraph, temporary erosion control structures shall be used to protect only the principal structure and its associated septic system, but not appurtenances such as pools, gazebos, decks or any amenity that is allowed under 15A NCAC 07H .0309 as an exception to the erosion setback requirement.
  - (4) Temporary erosion control structures may be placed seaward waterward of a septic system when there is no alternative to relocate it on the same or adjoining lot so that it is landward of or in line with the structure being protected.
  - (5) Temporary erosion control structures shall not extend more than 20 feet past the sides of the structure to be protected. The landward side of such temporary erosion control structures shall not be located more than 20 feet seaward\_waterward of the structure to be protected or the right-of-way in the case of roads. If a building or road is found to be imminently threatened and at increased risk of imminent damage due to site conditions such as a flat beach profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet seaward\_waterward of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or the Director's designee in accordance with Subparagraph (1) of this Paragraph.
  - (6) Temporary erosion control structures may remain in place for up to two years after the date of approval if they are protecting a building with a total floor area of 5,000 square feet or less and its associated septic system, or for up to five eight years for a building with a total floor area of more than 5,000 square feet and its associated septic system, system, Temporary erosion control

structures may remain in place for up to five eight years if they are protecting a bridge or a road. The termination date of all permits for contiguous temporary erosion control structures on the same property shall be the same and shall be the latest termination date of any of the permits. The property owner shall be responsible for removal of any portion of the temporary erosion control structure exposed above grade the temporary structure within 30 days of the end of the allowable time period.

- (7) Temporary sandbag erosion control structures may remain in place for up to eight years from the date of approval if they are located in a community that is actively pursuing a beach nourishment project, or if they are located in an Inlet Hazard Area adjacent to an inlet for which a community is actively pursuing an inlet relocation or stabilization project in accordance with G.S. 113A 115.1. For purposes of this Rule, a community is considered to be actively pursuing a beach **nourishment**, **nourishment or an** inlet relocation or stabilization project if it **has**:
  - (A) <u>has</u> an active CAMA permit, where necessary, approving such project; or
  - (B) <u>has</u> been identified by a U.S. Army Corps of Engineers' Beach Nourishment Reconnaissance Study, General Reevaluation Report, Coastal Storm Damage Reduction Study, or an ongoing feasibility study by the U.S. Army Corps of Engineers and a commitment of local or federal money, when necessary; or
  - (C) <u>has</u> received a favorable economic evaluation report on a federal project; or
  - (D) is in the planning stages of a project designed by the U.S. Army Corps of Engineers or persons meeting applicable State occupational licensing requirements and initiated by a local government or community with a commitment of local or state funds to construct the project and or the identification of the financial resources or funding bases necessary to fund the beach nourishment, nourishment or inlet relocation or stabilization project.

If beach nourishment, inlet relocation or stabilization is rejected by the sponsoring agency or community, or ceases to be actively planned for a section of shoreline, the time extension is void for that section of beach or community and existing sandbags are subject to all applicable time limits set forth in Subparagraph (6) of this Paragraph. The termination date of all permits for contiguous temporary erosion control structures on the same property shall be the same and shall be the latest termination date of any of the permits.

- (8) Once the a temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to relocation or removal of the threatened structure, it shall be removed by the property owner to maximum extent practicable within 30 days of official notification from the Division of Coastal Management regardless of the time limit placed on the temporary erosion control structure. If the temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to the completion of a storm protection project constructed by the U.S. Army Corps of Engineers, a large scale beach nourishment project, or an inlet relocation or stabilization project, any portion of the temporary erosion control structure exposed above grade it shall be removed by the permittee within 30 days of official notification by the Division of Coastal Management, regardless of the time limit placed on the temporary erosion control structure.
- (9) Removal of temporary erosion control structures is not required if they are covered by dunes sand with stable and natural vegetation. Any portion of a temporary erosion control structure that becomes exposed after the expiration of the permitted time period shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management.
- (10) The property owner shall be responsible for the removal of remnants of all portions of any damaged temporary erosion control structure.
- (11) Sandbags used to construct temporary erosion control structures shall be tan in color and 3 to 5 feet wide and 7 to 15 feet long when measured flat. Base width of the structure shall not exceed 20 feet, and the **total** height shall not exceed 6-**feet. feet, as measured from the bottom of the lowest bag.**
- (12) Soldier pilings and other types of devices to anchor sandbags shall not be allowed.
- (13) Excavation below mean high water in the Ocean Hazard AEC may be allowed to obtain material to fill sandbags used for emergency protection.
- (14) An imminently threatened structure may be protected only once regardless of ownership, unless the threatened structure is located in a community that is actively pursuing a beach nourishment project, or in an Inlet Hazard Area and in a community that is actively pursuing an inlet relocation or stabilization project in accordance with Subparagraph (7). Existing temporary erosion control structures may be permitted eligible for an additional eight-year permit extension provided that the structure being protected is still imminently threatened, the temporary erosion control structure is in compliance with requirements of this Subparagraph Subparagraph, and the community in which it is located is

actively pursuing a beach nourishment, nourishment or an inlet relocation or stabilization project in accordance with Subparagraph (7) of this Paragraph. In the case of a building, a temporary erosion control structure may be extended, or new segments constructed, if additional areas of the building become imminently threatened. Where temporary structures are installed or extended incrementally, the time period for removal under Subparagraph (6) or (7) shall begin at the time the initial most recent erosion control structure is installed. For the purpose of this Rule:

- (A) a building and **its associated** septic system shall be considered as separate structures.
- (B) a road or highway shall be allowed to be incrementally protected as sections become imminently threatened. The time period for removal of each <u>contiguous</u> section of sandbags shall begin at the time that <u>the most recent</u> section is installed in accordance with Subparagraph (6) or (7) of this Rule.
- (15) Existing sandbag temporary erosion control structures may be repaired or replaced within their originally permitted dimensions during the time period allowed under Subparagraph (6) or (7) of this Rule. Paragraph. Existing sandbag structures that were legally placed pursuant to permits that have since expired may be replaced, repaired, or modified within their permit dimensions if the status of the permit is being litigated by the property owner in state, federal or administrative court.
- (b) Erosion Control Structures in the Estuarine Shoreline, Estuarine Waters, and Public Trust AECs. Work permitted by this general permit shall be subject to the following limitations:
  - (1) No work shall be permitted other than that which is necessary to reasonably protect against or reduce the imminent danger caused by the emergency or to restore the damaged property to its condition immediately before the emergency;
  - The erosion control structure shall be located no more than 20 feet waterward of the imminently threatened structure. If a building or road is found to be imminently threatened and at increased risk of imminent damage due to site conditions such as a flat shore profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet seaward waterward of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or the Director's designee. Temporary erosion control structures may be used to protect properties that are experiencing erosion when there are no imminently threatened structures on the property if an adjacent property has an existing temporary erosion control structure that is in compliance with the Commission's rules.

    Temporary erosion control structures used to protect property without imminently threatened structures shall be sited to align with and be no further waterward than the most landward adjacent temporary erosion control structure.
  - (3) Fill material used in conjunction with emergency work for storm or erosion control in the Estuarine Shoreline, Estuarine Waters and Public Trust AECs shall be obtained from an upland source.
- (c) Protection, Rehabilitation, or Temporary Relocation of Public Facilities or Transportation Corridors.
  - (1) Work permitted by this general permit shall be subject to the following limitations:
    - (A) no work shall be permitted other than that which is necessary to protect against or reduce the imminent danger caused by the emergency or to restore the damaged property to its condition immediately before the emergency;
    - (B) the erosion control structure shall be located no more than 20 feet waterward of the imminently threatened structure or the right-of-way in the case of roads. If a public facility or transportation corridor is found to be imminently threatened and at increased risk of imminent damage due to site conditions such as a flat shore profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet seaward waterward of the facility or corridor being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or the Director's designee in accordance with Subparagraph (a)(1) of this Rule. Temporary erosion control structures may be used to protect properties that are experiencing erosion when there are no imminently threatened structures on the property if an adjacent property has an existing temporary erosion control structure that is in compliance with the Commission's rules. Temporary erosion control structures used to protect property without imminently threatened structures shall be sited to align with and be no further waterward than the most landward adjacent temporary erosion control structure;
    - (C) any fill materials used in conjunction with emergency work for storm or erosion control shall be obtained from an upland source except that dredging for fill material to protect public facilities or transportation corridors shall be considered in accordance with standards in 15A NCAC 7H .0208; 7H .0208; and

- (D) all fill materials or structures associated with temporary relocations which are located within Coastal Wetlands, Estuarine Water, or Public Trust AECs shall be removed after the emergency event has ended and the area restored to pre-disturbed conditions.
- (2) This permit authorizes only the immediate protection or temporary rehabilitation or relocation of existing public facilities. Long-term stabilization or relocation of public facilities shall be consistent with local governments' post-disaster recovery plans and policies which are part of their Land Use Plans.

History Note: Authority G.S. 113-229(cl); 113A-107(a),(b); 113A-113(b); 113A-115.1; 113A-118.1;

Eff. November 1, 1985;

Amended Eff. April 1, 1999; February 1, 1996; June 1, 1995; Temporary Amendment Eff. July 3, 2000; May 22, 2000;

Amended Eff. May 1, 2013; May 1, 2010; August 1, 2002. Temporary Amendment Eff. July 3, 2000; May 22, 2000

#### Version B

**CRC/CRAC** Proposed Amendments to 15 NCAC 7H .0308; 7H .1704; 7H .1705 Temporary Erosion Control Structures September 12, 2017

## 15A NCAC 07H .0308 SPECIFIC USE STANDARDS FOR OCEAN HAZARD AREAS

- (a) Ocean Shoreline Erosion Control Activities:
  - (1) Use Standards Applicable to all Erosion Control Activities:
    - (A) All oceanfront erosion response activities shall be consistent with the general policy statements in 15A NCAC 07M .0200.
    - (B) Permanent erosion control structures may cause significant adverse impacts on the value and enjoyment of adjacent properties or public access to and use of the ocean beach, and, therefore, unless specifically authorized under the Coastal Area Management Act, are prohibited. Such structures include bulkheads, seawalls, revetments, jetties, groins and breakwaters.
    - (C) Rules concerning the use of oceanfront erosion response measures apply to all oceanfront properties without regard to the size of the structure on the property or the date of its construction.
    - (D) All permitted oceanfront erosion response projects, other than beach bulldozing and temporary placement of sandbag structures, shall demonstrate sound engineering for their planned purpose.
    - (E)(D) Shoreline erosion response projects shall not be constructed in beach or estuarine areas that sustain substantial habitat for fish and wildlife species, as identified by natural resource agencies during project review, unless mitigation measures are incorporated into project design, as set forth in Rule .0306(i) .0306(h) of this Section.
    - (F)(E) Project construction shall be timed to minimize adverse effects on biological activity.
    - (G)(F) Prior to completing any erosion response project, all exposed remnants of or debris from failed erosion control structures must be removed by the permittee.
    - (H)(G) Erosion Permanent erosion control structures that would otherwise be prohibited by these standards may be permitted on finding by the Division that:
      - (i) the erosion control structure is necessary to protect a bridge which provides the only existing road access on a barrier island, that is vital to public safety, and is imminently threatened by erosion as defined in **provisionPart** (a)(2)(B) of this Rule;
      - (ii) the erosion response measures of relocation, beach nourishment or temporary stabilization are not adequate to protect public health and safety; and
      - (iii) the proposed erosion control structure will have no adverse impacts on adjacent properties in private ownership or on public use of the beach.
    - (<u>I)(<u>H)</u> Structures that would otherwise be prohibited by these standards may also be permitted on finding by the Division that:</u>
      - (i) the structure is necessary to protect a state or federally registered historic site that is imminently threatened by shoreline erosion as defined in provision (a)(2)(B) of this Rule;
      - (ii) the erosion response measures of relocation, beach nourishment or temporary stabilization are not adequate and practicable to protect the site;
      - (iii) the structure is limited in extent and scope to that necessary to protect the site; and
      - (iv) any A permit for a structure under this Part (1) may be issued only to a sponsoring public agency for projects where the public benefits outweigh the short or long range significant adverse impacts. Additionally, the permit shall include conditions providing for mitigation or minimization by that agency of any unavoidable significant adverse impacts on adjoining properties and on public access to and use of the beach.
    - (J)(I) Structures that would otherwise be prohibited by these standards may also be permitted on finding by the Division that:
      - the structure is necessary to maintain an existing commercial navigation channel of regional significance within federally authorized limits;
      - (ii) dredging alone is not practicable to maintain safe access to the affected channel;
      - (iii) the structure is limited in extent and scope to that necessary to maintain the channel:
      - (iv) the structure shall not adversely impact have significant adverse impacts on fisheries or other public trust resources; and
      - (vi) any permit for a structure under this Part (J) may be issued only to a sponsoring public agency for projects where the public benefits outweigh the **short or long range significant** adverse impacts. Additionally, the permit shall include conditions providing for mitigation or minimization by that agency of any unavoidable adverse impacts on adjoining properties and on public access to and use of the beach.

- (K)(J) The Commission may renew a permit for an erosion control structure issued pursuant to a variance granted by the Commission prior to 1 July 1995. The Commission may authorize the replacement of a permanent erosion control structure that was permitted by the Commission pursuant to a variance granted by the Commission prior to 1 July 1995 if the Commission finds that:
  - (i) the structure will not be enlarged beyond the dimensions set out in the permit;
  - (ii) there is no practical alternative to replacing the structure that will provide the same or similar benefits; and
  - (iii) the replacement structure will comply with all applicable laws and with all rules, other than the rule or rules with respect to which the Commission granted the variance, that are in effect at the time the structure is replaced.
- (L)(K) Proposed erosion response measures using innovative technology or design shall be considered as experimental and shall be evaluated on a case-by-case basis to determine consistency with 15A NCAC 7M .0200 and general and specific use standards within this Section.
- (2) Temporary Erosion Control Structures:
  - (A) Permittable temporary erosion control structures shall be limited to sandbags placed landward of mean high water and parallel to the shore.
  - (B) Temporary erosion control structures as defined in Part (2)(A) of this Subparagraph shall may be used to protect only imminently threatened roads and associated right of ways, and buildings and their associated septic systems. A structure is considered imminently threatened if its foundation, septic system, or right-of-way in the case of roads, is less than 20 feet away from the erosion scarp. Buildings and roads located more than 20 feet from the erosion scarp or in areas where there is no obvious erosion scarp may also be found to be imminently threatened when site conditions, such as a flat beach profile or accelerated erosion, increase the risk of imminent damage to the structure.
  - (C) Temporary erosion control structures shall be used to protect only the principal structure-and its associated septic system, but not appurtenances such as pools, gazebos, decks or any amenity that is allowed **under 15A NCAC 07H .0309** as an exception to the erosion setback requirement.
  - (D) Temporary erosion control structures may be placed seaward waterward of a septic system when there is no alternative to relocate it on the same or adjoining lot so that it is landward of or in line with the structure being protected.
  - (E) Temporary erosion control structures shall not extend more than 20 feet past the sides of the structure to be protected. protected except to align with temporary erosion control structures on adjacent properties, where the Division has determined that gaps between adjacent erosion control structures may result in an increased risk of damage to the structure being protected. The landward side of such temporary erosion control structures shall not be located more than 20 feet seaward waterward of the structure to be protected protected, or the right-of-way in the case of roads. If a building or road is found to be imminently threatened and at an increased risk of imminent damage due to site conditions such as a flat beach profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet seaward waterward of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or their the Director's designee in accordance with Part (2)(A) of this Subparagraph.
  - (F) Temporary erosion control structures may remain in place for up to two years after the date of approval if they are protecting a building with a total floor area of 5000 sq. ft. or less and its associated septic system, or, for up to five eight years for a building with a total floor area of more than 5000 sq. ft. and its associated septic system, system. Temporary erosion control structures may remain in place for up to five years if they are protecting a bridge or a road. The property owner shall be responsible for removal of any portion of the temporary erosion control structure exposed above grade the temporary structure within 30 days of the end of the allowable time period.
  - (G) An imminently threatened structure or property may be protected only once, regardless of ownership, unless the threatened structure or property is located in a community that is actively pursuing a beach nourishment project, or an inlet relocation or stabilization project in accordance with Part (H) of this Subparagraph. Existing temporary erosion control structures may be permitted for additional eight-year periods provided that the structure or property being protected is still imminently threatened, the temporary erosion control structure is in compliance with requirements of this Subchapter, and the

community in which it is located is actively pursuing a beach nourishment or an inlet relocation or stabilization project in accordance with Part (H) of this Subparagraph. In the case of a building, a temporary erosion control structure may be extended, or new segments constructed, if additional areas of the building become imminently threatened. Where temporary structures are installed or extended incrementally, the time period for removal under Part (F) or (H) of this Subparagraph shall begin at the time the initial erosion control structure was installed. For the purpose of this Rule:

- (i) a building and its septic system shall be considered separate structures.
- (ii) a road or highway may be incrementally protected as sections become imminently threatened. The time period for removal of each contiguous section of temporary erosion control structure shall begin at the time that the inital section was installed, in accordance with Part (F) of this Subparagraph.
- (G)(H) Temporary sandbag erosion control structures may remain in place for up to eight years from the date of approval if they are located in a community that is actively pursuing a beach nourishment project, or if they are located in an Inlet Hazard Area adjacent to an inlet for which a community is actively pursuing an inlet relocation or stabilization project in accordance with G.S. 113A-115.1 For purposes of this Rule, a community is considered to be actively pursuing a beach nourishment, nourishment or an inlet relocation or stabilization project in accordance with G.S. 113A-115.1 if it has:
  - (i) has been issued an active CAMA permit, where necessary, approving such project; or
     (ii) been identified by a U.S. Army Corps of Engineers' Beach Nourishment Reconnaissance Study, General Reevaluation Report, Coastal Storm Damage Reduction Study Study, or an ongoing feasibility study by the U.S. Army Corps of Engineers and a commitment of local or federal money, when necessary; or
  - (v) **has** received a favorable economic evaluation report on a federal project; or
  - (vi) is in the planning stages of a project designed by the U.S. Army Corps of Engineers or persons meeting applicable State occupational licensing requirements and initiated by a local government or community with a commitment of local or state funds to construct the project and or the identification of the financial resources or funding bases necessary to fund the beach nourishment or the inlet relocation or stabilization project.

If beach nourishment or inlet relocation or stabilization is rejected by the sponsoring agency or community, or ceases to be actively planned for a section of shoreline, the time extension is void for that section of beach or community and existing sandbags are subject to all applicable time limits set forth in Part (F) of this Subparagraph.

- (H)(I) Once the <u>a</u> temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to relocation or removal of the threatened structure, <u>it shall</u> be removed to the maximum extent practicable by the property owner within 30 days of official notification from the Division of Coastal Management regardless of the time limit placed on the temporary erosion control structure. If the temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to the completion of a storm protection project constructed by the U.S. Army Corps of Engineers, a large-scale beach nourishment project, project, or an inlet relocation or stabilization project, any portion of the temporary erosion control structure exposed above grade it shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management Management regardless of the time limit placed on the temporary erosion control structure.
- (I)(J) Removal of temporary erosion control structures is not required if they are covered by dunes sand. with stable and natural vegetation. Any portion of the temporary erosion control structure that becomes exposed above grade after the expiration of the permitted time period shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management.
- (J)(K) The property owner shall be responsible for the removal of remnants of all portions of any damaged temporary erosion control structure.
- (K)(L) Sandbags used to construct temporary erosion control structures shall be tan in color and three to five feet wide and seven to 15 feet long when measured flat. Base width of the temporary erosion control structure shall not exceed 20 feet, and the total height shall not exceed six feet. feet, as measured from the bottom of the lowest bag.
- (L)(M) Soldier pilings and other types of devices to anchor sandbags shall not be allowed.

An imminently threatened structure may be protected only once, regardless of ownership, unless the threatened structure is located in a community that is actively pursuing a beach nourishment project, or in an Inlet Hazard Area and in a community that is actively pursuing an inlet relocation or stabilization project in accordance with Part (G)(H) of this Subparagraph. Existing temporary erosion control structures located in Inlet Hazard Areas may be eligible for an additional eight year\_permit extension provided that the structure being protected is still imminently threatened, the temporary erosion control structure is in compliance with requirements of this Subchapter\_ and the community in which it is located is actively pursuing a beach nourishment, inlet relocation or stabilization project in accordance with Part (G) of this Subparagraph. In the case of a building, a temporary erosion control structure may be extended, or new segments constructed, if additional areas of the building become imminently threatened. Where temporary structures are installed or extended incrementally, the time period for removal under Part (F) or (G) of this Subparagraph shall begin at the time the initial erosion control structure is installed. For the purpose of this Rule:

- (i) a building and septic system shall be considered as separate structures.
- (ii) a road or highway shall be allowed to be incrementally protected as sections become imminently threatened. The time period for removal of each section of sandbags shall begin at the time that section is installed in accordance with Part (F) or (G) of this Subparagraph.
- (N) Existing sandbag structures may be repaired or replaced within their originally permitted dimensions during the time period allowed under Part (F) or (G) of this Subparagraph.

## 15A NCAC 07H .1704 GENERAL CONDITIONS

- (a) Work permitted by means of an emergency general permit shall be subject to the following limitations:
  - (1) No work shall begin until an onsite meeting is held with the applicant and a Division of Coastal Management representative so that the proposed emergency work can be delineated. Written authorization to proceed with the proposed development may be issued during this visit.
  - (2) No work shall be permitted other than that which is necessary to **reasonably** protect against or reduce the imminent danger caused by the emergency, to restore the damaged property to its condition immediately before the emergency, or to re-establish necessary public facilities or transportation corridors.
  - (3) Any permitted <u>temporary</u> erosion control projects shall be located no more than 20 feet waterward of the imminently threatened structure or the right-of way in the case of <u>roads</u>, <u>roads</u>, <u>except as provided under 15A NCAC 07H .0308</u>. If a building or road is found to be imminently threatened and at increased risk of imminent damage due to site conditions such as a flat beach profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet <u>seaward waterward</u> of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or <u>the Director's</u> designee.
  - (4) Fill materials used in conjunction with emergency work for storm or erosion control shall be obtained from an upland source. Excavation below MHW in the Ocean Hazard AEC may be allowed to obtain material to fill sandbags used for emergency protection.
  - (5) Structural work shall meet sound engineering practices.
  - (6) This permit allows the use of oceanfront erosion control measures for all oceanfront properties without regard to the size of the existing structure on the property or the date of construction.
- (b) Individuals shall allow authorized representatives of the Department of **Environment and Natural Resources Environmental Quality** to make inspections **at any time deemed necessary** to be sure that the activity being performed under authority of this general permit is in accordance with the terms and conditions in these Rules.
- (c) Development shall not jeopardize the use of the waters for navigation or for other public trust rights in public trust areas including estuarine waters.
- (d) This permit shall not be applicable to proposed construction where the Department has determined, based on an initial review of the application, that notice and review pursuant to G.S. 113A-119 is necessary because there are unresolved questions concerning the proposed activity's impact on adjoining properties or on water quality, air quality, coastal wetlands, cultural or historic sites, wildlife, fisheries resources, or public trust rights.
- (e) This permit does not eliminate the need to obtain any other state, local, or federal authorization.
- (f) Development carried out under this permit must be consistent with all local requirements, CAMA rules, and local land use plans, storm hazard mitigation, and post-disaster recovery plans current at the time of authorization.

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Eff. November 1, 1985; Amended Eff. December 1, 1991; May 1, 1990; RRC Objection due to ambiguity Eff. May 19, 1994; Amended Eff. May 1, 2010; August 1, 1998; July 1, 1994;

#### 15A NCAC 07H .1705 SPECIFIC CONDITIONS

- (a) Temporary Erosion Control Structures in the Ocean Hazard AEC.
  - (1) Permittable temporary erosion control structures shall be limited to sandbags placed landward of mean high water and parallel to the shore.
  - (2) Temporary erosion control structures as defined in Subparagraph (1) of this Paragraph shall may be used to protect only imminently threatened roads and associated right of ways, and buildings and their associated septic systems. A structure is considered imminently threatened if its foundation, septic system, or, or right-of-way in the case of roads, roads is less than 20 feet away from the erosion scarp. Buildings and roads located more than 20 feet from the erosion scarp or in areas where there is no obvious erosion scarp may also be found to be imminently threatened when the Division determines that site conditions, such as a flat beach profile or accelerated erosion, increase the risk of imminent damage to the structure.
  - (3) Temporary erosion control structures shall be used to protect only the principal structure and its associated septic system, but not appurtenances such as pools, gazebos, decks or any amenity that is allowed **under 15A NCAC 07H .0309** as an exception to the erosion setback requirement.
  - (4) Temporary erosion control structures may be placed seaward waterward of a septic system when there is no alternative to relocate it on the same or adjoining lot so that it is landward of or in line with the structure being protected.
  - Temporary erosion control structures shall not extend more than 20 feet past the sides of the structure to be protected. protected except to align with temporary erosion control structures on adjacent properties, where the Division has determined that gaps between adjacent erosion control structures may result in an increased risk of damage to the structure being protected. The landward side of such temporary erosion control structures shall not be located more than 20 feet seaward-waterward of the structure to be protected or the right-of-way in the case of roads. If a building or road is found to be imminently threatened and at increased risk of imminent damage due to site conditions such as a flat beach profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet seaward\_waterward of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or the Director's designee in accordance with Subparagraph (1) of this Paragraph.
  - (6) Temporary erosion control structures may remain in place for up to two years after the date of approval if they are protecting a building with a total floor area of 5,000 square feet or less and its associated septic system, or for up to five eight years for a building with a total floor area of more than 5,000 square feet and its associated septic system. system, Temporary erosion control structures may remain in place for up to five eight years if they are protecting a bridge or a road. The property owner shall be responsible for removal of any portion of the temporary erosion control structure exposed above grade the temporary structure within 30 days of the end of the allowable time period.
  - (7) Temporary sandbag erosion control structures may remain in place for up to eight years from the date of approval if they are located in a community that is actively pursuing a beach nourishment project, or if they are located in an Inlet Hazard Area adjacent to an inlet for which a community is actively pursuing an inlet relocation or stabilization project in accordance with G.S. 113A-115.1. For purposes of this Rule, a community is considered to be actively pursuing a beach **nourishment**, **nourishment or an** inlet relocation or stabilization project if it **has**:
    - (A) **has** an active CAMA permit, where necessary, approving such project; or
    - (B) <u>has</u> been identified by a U.S. Army Corps of Engineers' Beach Nourishment Reconnaissance Study, General Reevaluation Report, Coastal Storm Damage Reduction Study, or an ongoing feasibility study by the U.S. Army Corps of Engineers and a commitment of local or federal money, when necessary; or
    - (C) <u>has</u> received a favorable economic evaluation report on a federal project; or
    - (D) is in the planning stages of a project designed by the U.S. Army Corps of Engineers or persons meeting applicable State occupational licensing requirements and initiated by a local government or community with a commitment of local or state funds to construct the project

**and** <u>or</u> the identification of the financial resources or funding bases necessary to fund the beach **nourishment**, **nourishment** <u>or</u> inlet relocation or stabilization project.

If beach nourishment, inlet relocation or stabilization is rejected by the sponsoring agency or community, or ceases to be actively planned for a section of shoreline, the time extension is void for that section of beach or community and existing sandbags are subject to all applicable time limits set forth in Subparagraph (6) of this Paragraph.

- (8) Once the <u>a</u> temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to relocation or removal of the threatened structure, <u>it shall be removed by the property owner to maximum extent practicable within 30 days of official notification from the Division of Coastal Management regardless of the time limit placed on the temporary erosion control structure. If the temporary erosion control structure is determined by the Division of Coastal Management to be unnecessary due to the completion of a storm protection project constructed by the U.S. Army Corps of Engineers, a large scale beach nourishment project, <u>or</u> an inlet relocation or stabilization project, <u>any portion of the temporary erosion control structure exposed above grade it</u> shall be removed by the permittee within 30 days of official notification by the Division of Coastal Management, regardless of the time limit placed on the temporary erosion control structure.</u>
- (9) Removal of temporary erosion control structures is not required if they are covered by dunes sand with stable and natural vegetation. Any portion of a temporary erosion control structure that becomes exposed after the expiration of the permitted time period shall be removed by the property owner within 30 days of official notification from the Division of Coastal Management.
- (10) The property owner shall be responsible for the removal of remnants of all portions of any damaged temporary erosion control structure.
- (11) Sandbags used to construct temporary erosion control structures shall be tan in color and 3 to 5 feet wide and 7 to 15 feet long when measured flat. Base width of the structure shall not exceed 20 feet, and the **total** height shall not exceed 6-**feet. feet, as measured from the bottom of the lowest bag.**
- (12) Soldier pilings and other types of devices to anchor sandbags shall not be allowed.
- (13) Excavation below mean high water in the Ocean Hazard AEC may be allowed to obtain material to fill sandbags used for emergency protection.
- (14) An imminently threatened structure may be protected only once regardless of ownership, unless the threatened structure is located in a community that is actively pursuing a beach nourishment project, or in an Inlet Hazard Area and in a community that is actively pursuing an inlet relocation or stabilization project in accordance with Subparagraph (7). Existing temporary erosion control structures may be permitted eligible for an additional eight-year permit extension provided that the structure being protected is still imminently threatened, the temporary erosion control structure is in compliance with requirements of this Subparagraph Subparagraph, and the community in which it is located is actively pursuing a beach nourishment, nourishment or an inlet relocation or stabilization project in accordance with Subparagraph (7) of this Paragraph. In the case of a building, a temporary erosion control structure may be extended, or new segments constructed, if additional areas of the building become imminently threatened. Where temporary structures are installed or extended incrementally, the time period for removal under Subparagraph (6) or (7) shall begin at the time the inittial erosion control structure is installed. For the purpose of this Rule:
  - (A) a building and **its associated** septic system shall be considered as separate structures.
  - (B) a road or highway shall be allowed to be incrementally protected as sections become imminently threatened. The time period for removal of each **contiguous** section of sandbags shall begin at the time that section is installed in accordance with Subparagraph (6) or (7) of this Rule.
- (15) Existing sandbag temporary erosion control structures may be repaired or replaced within their originally permitted dimensions during the time period allowed under Subparagraph (6) or (7) of this Rule. Paragraph.
- (b) Erosion Control Structures in the Estuarine Shoreline, Estuarine Waters, and Public Trust AECs. Work permitted by this general permit shall be subject to the following limitations:
  - (1) No work shall be permitted other than that which is necessary to reasonably protect against or reduce the imminent danger caused by the emergency or to restore the damaged property to its condition immediately before the emergency;
  - (2) The erosion control structure shall be located no more than 20 feet waterward of the imminently threatened structure. If a building or road is found to be imminently threatened and at increased risk of imminent damage due to site conditions such as a flat shore profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet seaward waterward of the structure being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control

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structures shall be determined by the Director of the Division of Coastal Management or **the Director's** designee.

- (3) Fill material used in conjunction with emergency work for storm or erosion control in the Estuarine Shoreline, Estuarine Waters and Public Trust AECs shall be obtained from an upland source.
- (c) Protection, Rehabilitation, or Temporary Relocation of Public Facilities or Transportation Corridors.
  - (1) Work permitted by this general permit shall be subject to the following limitations:
    - (A) no work shall be permitted other than that which is necessary to protect against or reduce the imminent danger caused by the emergency or to restore the damaged property to its condition immediately before the emergency;
    - (B) the erosion control structure shall be located no more than 20 feet waterward of the imminently threatened structure or the right-of-way in the case of roads. If a public facility or transportation corridor is found to be imminently threatened and at increased risk of imminent damage due to site conditions such as a flat shore profile or accelerated erosion, temporary erosion control structures may be located more than 20 feet seaward waterward of the facility or corridor being protected. In cases of increased risk of imminent damage, the location of the temporary erosion control structures shall be determined by the Director of the Division of Coastal Management or the Director's designee in accordance with Subparagraph (a)(1) of this Rule:
    - (C) any fill materials used in conjunction with emergency work for storm or erosion control shall be obtained from an upland source except that dredging for fill material to protect public facilities or transportation corridors shall be considered in accordance with standards in 15A NCAC 7H .0208; 7H .0208; and
    - (D) all fill materials or structures associated with temporary relocations which are located within Coastal Wetlands, Estuarine Water, or Public Trust AECs shall be removed after the emergency event has ended and the area restored to pre-disturbed conditions.
  - (2) This permit authorizes only the immediate protection or temporary rehabilitation or relocation of existing public facilities. Long-term stabilization or relocation of public facilities shall be consistent with local governments' post-disaster recovery plans and policies which are part of their Land Use Plans.

History Note:

Authority G.S. 113-229(cl); 113A-107(a),(b); 113A-113(b); 113A-115.1; 113A-118.1;

Eff. November 1, 1985;

Amended Eff. April 1, 1999; February 1, 1996; June 1, 1995; Temporary Amendment Eff. July 3, 2000; May 22, 2000;

Amended Eff. May 1, 2013; May 1, 2010; August 1, 2002. Temporary Amendment Eff. July 3, 2000; May 22, 20

# Attachment Summary of Current Sandbag Rules

## Use of Sandbags

Under your current rules, sandbags may be used to protect imminently threatened roads and right of ways as well as buildings along with their associated septic systems. A structure is considered imminently threatened if its foundation or septic system is less than 20 feet from the erosion scarp. Buildings and roads more that 20 feet from the erosion or in areas where there is no erosion scarp may also be consider imminently threatened when sites conditions such as a flat beach profile or accelerate erosion increase the risk of imminent damage to the structure. This determination is at the discretion of the DCM Director. Sandbags may not be used to protect structures such as pools, decks, gazebos, or any amenity that is not the principal structure.

# Siting and Size of Sandbags

Your rules also govern the siting and size of sandbags structures as well as the dimensions of individual bags. Sandbags are required to be located landward of mean high water and be parallel to the shoreline. The sandbag structure can not extend more than 20 feet past the building being protected and the dimensions of the sandbag structure are limited to 20 feet wide at the base and six feet in height. Soldier pilings and other anchoring devices are not allowed. The bags themselves are required to be tan in color and 7-15 long when measured flat.

## Sand Bag Time Limits

Sand bags may remain in place for two years if they are protecting a structure that is less than 5,000 square feet floor area or up to five years for structures greater than 5,000 square feet and for bridges and roads. The time limit is extended to eight years if the sand bags are located in a community that is actively pursuing a beach nourishment or an inlet relocation or stabilization project (terminal groin). To be consider actively pursing one of these projects, a community must have one of they following; an active CAMA permit; identified in an USACE Beach Nourishment Reconnaissance Study, General Reevaluation Report, Coastal Storm Damage Reduction Study or an ongoing feasibility study with a commitment of local or federal money; a favorable economic evaluation report for a federal project; or in the planning stages for a project designed by the USACE, or a locally contracted engineer with a commitment of local or state fund and identification of funding sources to complete the project. Time limits on sand bag permits are calculated from the date of the placement of the first bag(s).

#### Removal of Sand Bags

Sand bags must be removed within 30 days of notification by the Division if:

- Time has expired.
- The community is no longer considered to be pursuing a beach nourishment or inlet relocation/stabilization project (standard time limits applied).
- The sand bags are no longer necessary due to relocation or removal of the threatened structure.
- Completion of a beach nourishment or inlet relocation/stabilization project.

Removal of sand bags is not required if they are covered by dunes with stable and natural vegetation.

## **Evolution of Sandbag Rules**

#### 1984-1985

As the CRC began development of rules prohibiting the placement of permanent shoreline stabilization structures along the oceanfront, sandbags were allowed to be used as a temporary means of protecting imminently threatened structures. This policy was in accordance with the 1984 recommendations of the CRC Outer Banks Erosion Task Force that stated:

"Temporary measures to counteract erosion, such as beach nourishment, sandbag bulkheads and beach pushing, should be allowed, but only to the extent necessary to protect property for a short period of time until threatened structures may be relocated or until the effects of a short-term erosion event are reversed. In all cases, temporary stabilization measures should be compatible with public use and enjoyment of the beach."

The purpose of allowing the sandbags was to provide for the temporary protection of a structure until the owner could make arrangements to move the structure or until the beach and dune system could naturally repair itself. As the CRC developed the rule, it was noted that "temporary" would normally require time limits on projects. At that time, Staff explained that due to enforcement problems, limits on structural types, including the ephemeral nature of materials used for sandbags, was a more practical method of ensuring removal of the structure from the beach.

The original 1985 rule included some of the current provisions such as the definition of imminently threatened, the 20' seaward limit, adjacent property owner notification and no interference with use of the beach. The rule also included a provision requiring removal if the sandbag structure remained exposed for more than six months. The only other limit on the dimension of the structure was that it be no more than 15' wide and that it be above the high tide line.

# <u>1987</u>

In March of 1987, the CRC requested information on the effects of sandbag structure design and placement were having on the beach.

## 1990-1995

During the early 1990's, the Commission began hearing numerous complaints that sandbags were not being used as a temporary measure but as a permanent shoreline erosion measure. Many citizens complained that sandbags were blocking pedestrian access along the beach and in some cases sandbags were being fortified to become massive immovable structures. The temporary nature of sandbags was indirectly addressed in September 1991 when the CRC discussed the definition of threatened structures and considered requiring the relocation or demolition of a threatened structure 2-3 years from its designation.

A 1994 inventory of sandbags showed that approximately 15,000 linear feet of ocean shoreline were protected by sandbag structures with some of the structures being in place for as long as eight years. While most sandbag structures complied with the rules, some were installed without authorization and did not comply with the standards. Staff provided the CRC with an analysis of the problems associated with the sandbag rules including what types of structures can be protected by sandbags, when do sandbags interfere with the public use of the beach, monitoring burial, the limitation on width of the sandbag structure but not the height and most importantly, how long is temporary.

In 1995, the CRC amended the rules to address the size and physical location of sandbags, the types of structures that were eligible for protection, as well as the time they could remain in place if they were not covered by dunes with stable, natural vegetation. The rule was amended to allow a sandbag

structure to remain in place up to two years if it was protecting a small structure (less than 5,000 square feet floor area) and up to five years for larger structures. The rule also allowed the sandbags to remain for five years if they were located in a community actively pursuing a beach nourishment project. Existing sandbags installed prior to May 1, 1995 were grandfathered and allowed the full time period prior to removal.

## 1996-1999

While most of the beachfront communities qualified for the five-year time period, some sandbags structures in unincorporated areas were subject to removal in 1997. However, due to Hurricanes Bertha and Fran in 1996, the CRC extended the deadline to May 1998 for those areas declared federal disasters. This deadline was again extended to September 1998 after Hurricane Bonnie.

In 1997, four sites in Dare and Currituck Counties were subject to having their sandbags removed. Several of the owners applied for variances from the CRC but their petitions were denied and all the sandbag structures were subsequently removed.

Over the next couple of years the CRC began to receive variance requests from property owners wanting their sandbag structures to remain in place. In Onslow County, six property owners were granted variances to allow their sandbags to remain in place until August 31, 2001.

#### 2000

With the majority of sandbags subject to removal in 2000, the Division began preparing to notify property owners of the approaching deadline. Records indicated that 141 properties were to be subject to removal. The Division believed this number to be low since prior to 1995, the majority of sandbag permits were processed by local governments and their record keeping abilities varied greatly and in some cases, was nonexistent. A post Hurricane Floyd inventory revealed that 236 temporary sandbag structures had been permitted since the early 1980's.

In January 2000, Dare County submitted a Petition for Rule Making to the CRC requesting that properties protected by sandbags in communities pursuing beach nourishment be given an additional extension to 2006. The Division consulted with the CRC Science Panel and received a recommendation to grant an extension, but only to sandbag structures that currently conform to the size limits. Given the time it takes for communities to complete the necessary steps for a beach nourishment project, the CRC granted a coast-wide extension on sandbag permits in these areas to May 2008. The CRC also refined what it meant for a community to be actively pursuing beach nourishment. A community is considered to be actively pursuing beach nourishment if it has:

- 1. been issued a CAMA permit, where necessary, approving such project, or
- 2. been deemed worthy of further consideration by a U.S. Army Corps of Engineers' Beach Nourishment Reconnaissance Study, or an ongoing feasibility study by the U.S. Army Corps of Engineers and a commitment of local money, when necessary, or
- 3. received a favorable economic evaluation report on a federal project approved prior to 1986.

The CRC further added the stipulation that if beach nourishment is rejected by the sponsoring agency or community, or ceases to be actively planned for a section of shoreline, the time extension is void and existing sandbags are subject to all applicable time limits.

# 2005

The majority of sandbag structures were located in areas included in beach nourishment projects or studies, however, some structures needed to be removed by their owners prior to the May of 2008

deadline. In North Topsail Beach, an area within the Coastal Barriers Resource Act (CoBRA) Zone containing a significant number of sandbag structures was dropped by the US Army Corps of Engineers from further study. North Topsail Beach applied for permits to conduct a privately funded nourishment project to cover this area as was the case on the east end of Ocean Isle Beach and in the vicinity of The Point in Emerald Isle.

At this time, staff reported to the CRC that 251 sandbag structures had been permitted since 1996, 146 of these since 2001. Prior to 1995, local governments permitted sandbag structures and there was some question as to the accuracy of record keeping. For this reason, staff estimated that there were approximately 320 sandbag structures on the coast.

## 2006

Staff reported that enforcement of the six-foot height limitation on structures had become an issue. Owners were allowed to maintain the six-foot height of the structure as the bags become damaged or sink into the sand. During erosion episodes, the submerged bags once again became exposed, greatly increasing the overall height of the structure. Enforcement was also further being complicated by the fact that the bags can become covered or exposed before any enforcement action can be taken. The CRC directed the DCM staff, to measure the height of the sandbag wall from the base of the structure to the top rather than from the existing beach to the top, in order to ensure sandbag structures do not exceed six feet in height, unless otherwise permitted.

## 2007

With the May 2008 deadline approaching, the Division once again prepared to notify property owners of the requirement for removal. However, the situation along the ocean beaches was somewhat different than in 2000. The extensive beach nourishment that occurred along the coast during the intervening years presented a new set of challenges to ensuring compliance with the Commission's rules. Many sand bags structures were not removed prior to nourishment activities so the bags became covered with sand. Technically, these sand bag structures were out of compliance since the rule requires them to be covered and vegetated. It had also become typical to find sand bag structures where the bags are inter-laced across properties as adjoining properties become imminently threatened. Since the removal date is dictated by when the first bags are placed, long sand bag structures often have varying expiration dates across properties. Varying expiration dates could also be found when sand bags protecting large structures (5 years) are tied in with those protecting a small structure (2 years). Given the intricacies of ensuring compliance with the current rule, staff sought guidance from the Commission on how to address the upcoming deadline, the nuances of enforcement and compliance with the current rule and how aggressively to pursue removal of buried bags or bags that become exposed.

In addition to the current time limits and removal deadlines, the Commission discussed the possible utilization of degradable materials rather than polypropylene as a means of ensuring the eventual removal of sandbags from the oceanfront. DCM research revealed issues associated with the use of biodegradable textiles for sandbags, primarily concern over the length of time biodegradable bags can withstand the combination of elements present in the coastal environment. The complex nature of coastal beaches makes it difficult to predict how long a biodegradable sandbag would last, as a variety of assailants including; microorganisms, temperature, moisture, humidity, seawater composition and wave energy act upon beaches. In addition, pathogenic viruses, bacteria, and fungi are present in stormwater runoff. The combination of these reactants leads to the increased degradability of natural fibers used in sandbag installations.

The CRC ultimately decided that the current rule would be enforced and all uncovered sandbags would have to be removed in May 2008. Sandbag permits could still be applied for throughout this process and there was interest modifying the sandbag rules.

## November 2007

DCM sent letters to 371 property owners with active sandbag structure permits in preparation for the May 1, 2008 deadline for the removal of certain sandbag structures.

#### March - 2008

DCM begins to inventory sandbag structures, to determine which ones will need to be removed. Sandbags structures subject to removal are prioritize based on how long they have been in place, condition of the bags, and whether they are an impediment to the public's use of the beach. This prioritization is used to notify property owners that their sandbags must be removed.

The CRC receives a Petition for Rulemaking from the Landmark Hotel Group requesting amendments to the sandbag rules that would allow specific provisions for their use in protecting commercial structures and to allow indefinite maintenance of the structures. The CRC denied the petition.

## May 2008

The CRC receives a Petition for Rulemaking from the law firm Kennedy Covington Lodbell & Hickman L.L.P. representing property owners from Figure Eight Island, Nags Head and Ocean Isle Beach. The petition requested amendments to the sandbag rules to remove the time limits on sandbags and change the "actively pursuing beach nourishment" provision to a long-term erosion response plan that is modeled after the proposed static line exception. The petition also created a new sandbag management strategy for the inlet hazard areas where the maintenance of sandbags would be tied to an inlet relocation plan or an inlet-monitoring plan. The Division was supportive of the request to create a new strategy inside inlet hazard areas due to limited effectiveness of beach fill project and while the petition was denied, the CRC directed staff to incorporate some provisions of the petition that would improve the current rule language.

## Variance Requests:

By the May 2008 CRC meeting, the Division had received 29 sandbag variances requests.

Comprehensive Beach Management Task Force Subcommittee Report.

Recommends from the subcommittee include conditioning certain CAMA permits to preclude the use of sandbags under the single-family exception and consideration of alternative sandbag structure design.

## July 2008

The CRC approves amendments to the sandbag rules [15A NCAC 7H .0308(a)(2)] to allow sandbags to remain in place for eight years if the community is actively seeking an inlet relocation project; require sandbags to be removed when the structure is no longer threatened, when the structure is removed or relocated, or upon completion of an inlet relocation or beach nourishment project; and to allow structures to be protected more than one time in an inlet area. Additional language was also added to the criteria by which a community would be considered pursuing a beach nourishment or inlet relocation project.

#### September 2008

DCM sends 20 letters to property owners requesting removal of sandbag structures that have exceeded their time limits. In addition, the GIS map depicting sandbag locations is made available on the Division's web site.

# October 2008

As a result of Hurricane Hanna and an unnamed storm, Senator Basnight's office submitted a letter to the CRC stating, "If a storm exposes sandbags that had been covered and vegetated, I believe the affected property owner should be allowed to return his or her property to its pre-storm condition." In response to the storms, the CRC, under the authority of the Secretary's Emergency General Permit that was issued September 29, 2008, allowed sandbags which were previously covered and vegetated that became exposed and were in compliance prior to either Hurricane Hanna or the unnamed storm, to be re-covered with sand under Emergency General Permit 15A NCAC 7H .2500.

#### January 2009

Administrative Law Judge dismissed a motion to stay enforcement by 18 recipients of sandbag removal letters. The homeowners sought permission to repair their sandbag structures while they pursue variance relief, and also sought to keep DCM from going forward with enforcement. After the ruling, the Division sent Notices of Violation to homeowners who received the first round of sandbag removal letters in September 2008.

## August 2009

Session Law 2009-479 (House Bill 709) establishes a moratorium on certain actions of the Coastal Resources Commission (primarily enforcing time limits) preventing the removal of a temporary erosion control structure that is located in a community that is actively pursuing a beach nourishment project or an inlet relocation project. The moratorium did not prohibit the Commission from:

- Granting permit modifications to allow the replacement, within the originally permitted dimensions, of temporary erosion control structures that have been damaged or destroyed.
- Requiring the removal of temporary erosion control structures installed in violation of its rules.
- Requiring that a temporary erosion control structure be brought back into compliance with permit conditions.
- Requiring the removal of a temporary erosion control structure that no longer protects an imminently threatened road and associated right-of-way or an imminently threatened building and associated septic system.

While the imposition of the moratorium stopped enforcement action on sandbag structures due to time limits, it did not prevent the removal of sandbags that were out of compliance with other provisions of rules, such as structure dimensions and lack of necessity. Due to the large number of sandbag structures with expiring permits, the Division developed a protocol for prioritizing structures for removal in a rational and orderly manner. Structures were prioritized based on whether or not they were covered, vegetated, or impeded public access, as well as their age and physical condition.

Of the 19 structures with sandbags initially prioritized by the Division for removal (one of the 20 was a duplicate) prior to the moratorium:

- Five had been demolished.
- Two were relocated.
- Nine were condemned.
- One was abandoned and condemned.
- Two remained occupied.

# <u>2011 – Sandbag Stakeholder Committee</u>

Division engage stakeholders which included representatives of the Commission, Advisory Council, local government, and property owner representatives in an effort to discuss how sandbag structures

were being managed, nuances of the temporary erosion control structure rules and to facilitate possible changes in the implementation of the Commission's sandbag policy. The Committee focused on specific issues including the requirement for removal of sandbags prior to nourishment projects, the covered and vegetated requirements and the possible use of other criteria in the permitting and removal of sandbags such as beach elevation and shoreline recession.

Refinement of the issues led to discussions of FEMA and how insurance payouts related to the National Flood Insurance Program (NFIP) as well as building standards (piling depths) may be contributing to the problem. There was general agreement that while the focus has been on the sandbag structures protecting houses, it is houses on the public beach that continues to be the core issue. Since the NFIP does not pay the insurance claim until there is a loss, there is no incentive for the property owner to remove the structure prior to that event. Adding to the problem is the fact many of the structures are held by out of state owners or are owned by LLCs. In most cases it is the local government's responsibility to pursue removal of structures once they are condemned and there is considerable difficulty in locating owners, or the structures are simply abandoned. There has been little financial help for local governments as the state is under no obligation to assist the local government with removal of the structures from the public beach.

While many of the issues were more thoroughly considered during the stakeholder meetings, no specific recommendations were offered. See attached Sandbag Stakeholder Committee Summary Report (CRC-11-09).

## <u>August 2011</u>

Recognizing that the state has had a great deal more experience with the timeframes involved in securing a beach fill project and the degree of effort and commitment involved on the part of the beach communities in securing the funding and easements, the CRC amended the sandbag rules to:

- Extend the eight-year timeframe to the oceanfront in communities actively pursuing a beach nourishment project.
- Remove the one time per property restriction for oceanfront structures (under the same conditions already applied in the Inlet Hazard Areas).
- Expanded the activities a community could be actively pursuing that would warrant an extended permit time limit to include an inlet stabilization project in accordance with G.S. 113A-115.1 (CAMA amendment associated with terminal groin legislation).
- Retained the two- and five-year timeframes for structures located outside of areas seeking nourishment projects.