

# NORTH CAROLINA

## REGISTER

## IN THIS ISSUE



Volume 21, Issue 01

Pages 1 –172

July 3, 2006

This issue contains documents officially filed through June 12, 2006.

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<http://reports.oah.state.nc.us/cumulativeIndex.pl>

# NORTH CAROLINA ADMINISTRATIVE CODE CLASSIFICATION SYSTEM

*The North Carolina Administrative Code (NCAC) has four major classifications of rules. Three of these, titles, chapters, and sections are mandatory. The major classification of the NCAC is the title. Each major department in the North Carolina executive branch of government has been assigned a title number. Titles are further broken down into chapters which shall be numerical in order. Subchapters are optional classifications to be used by agencies when appropriate.*

NCAC TITLES		TITLE 21 LICENSING BOARDS	TITLE 24 INDEPENDENT AGENCIES
1	ADMINISTRATION	1 Acupuncture	1 Housing Finance
2	AGRICULTURE & CONSUMER SERVICES	2 Architecture	2 Agricultural Finance Authority
3	AUDITOR	3 Athletic Trainer Examiners	3 Safety & Health Review Board
4	COMMERCE	4 Auctioneers	4 Reserved
5	CORRECTION	6 Barber Examiners	5 State Health Plan Purchasing Alliance Board
6	COUNCIL OF STATE	8 Certified Public Accountant Examiners	
7	CULTURAL RESOURCES	10 Chiropractic Examiners	
8	ELECTIONS	11 Employee Assistance Professionals	
9	GOVERNOR	12 General Contractors	
10A	HEALTH AND HUMAN SERVICES	14 Cosmetic Art Examiners	
11	INSURANCE	16 Dental Examiners	
12	JUSTICE	17 Dietetics/Nutrition	
13	LABOR	18 Electrical Contractors	
14A	CRIME CONTROL & PUBLIC SAFETY	19 Electrolysis	
15A	ENVIRONMENT & NATURAL RESOURCES	20 Foresters	
16	PUBLIC EDUCATION	21 Geologists	
17	REVENUE	22 Hearing Aid Dealers and Fitters	
18	SECRETARY OF STATE	25 Interpreter/Transliterator	
19A	TRANSPORTATION	26 Landscape Architects	
20	TREASURER	28 Landscape Contractors	
21*	OCCUPATIONAL LICENSING BOARDS	29 Locksmith Licensing	
22	ADMINISTRATIVE PROCEDURES (REPEALED)	30 Massage & Bodywork Therapy	
23	COMMUNITY COLLEGES	31 Marital and Family Therapy	
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		48 Physical Therapy Examiners	
		50 Plumbing, Heating & Fire Sprinkler Contractors	
		52 Podiatry Examiners	
		53 Professional Counselors	
		54 Psychology	
		56 Professional Engineers & Land Surveyors	
		57 Real Estate Appraisal	
		58 Real Estate Commission	
		60 Refrigeration Examiners	
		61 Respiratory Care	
		62 Sanitarian Examiners	
		63 Social Work Certification	
		64 Speech & Language Pathologists & Audiologists	
		65 Therapeutic Recreation Certification	
		66 Veterinary Medical	
		68 Substance Abuse Professionals	
		69 Soil Scientists	

**Note:** Title 21 contains the chapters of the various occupational licensing boards and Title 24 contains the chapters of independent agencies.

**NORTH CAROLINA REGISTER**  
Publication Schedule for January 2006 – December 2006

FILING DEADLINES			NOTICE OF TEXT		PERMANENT RULE			TEMPORARY RULES
Volume & issue number	Issue date	Last day for filing	Earliest date for public hearing	End of required comment period	Deadline to submit to RRC for review at next meeting	Earliest Eff. Date of Permanent Rule	Delayed Eff. Date of Permanent Rule (first legislative day of the next regular session)	270 <sup>th</sup> day from publication in the Register
20:13	01/03/06	12/08/05	01/18/06	03/06/06	03/20/06	05/01/06	05/09/06	09/30/06
20:14	01/17/06	12/21/05	02/01/06	03/20/06	04/20/06	06/01/06	01/07	10/14/06
20:15	02/01/06	01/10/06	02/16/06	04/03/06	04/20/06	06/01/06	01/07	10/29/06
20:16	02/15/06	01/25/06	03/02/06	04/17/06	04/20/06	06/01/06	01/07	11/12/06
20:17	03/01/06	02/08/06	03/16/06	05/01/06	05/22/06	07/01/06	01/07	11/26/06
20:18	03/15/06	02/22/06	03/30/06	05/15/06	05/22/06	07/01/06	01/07	12/10/06
20:19	04/03/06	03/13/06	04/18/06	06/02/06	06/20/06	08/01/06	01/07	12/29/06
20:20	04/17/06	03/24/06	05/02/06	06/16/06	06/20/06	08/01/06	01/07	01/12/07
20:21	05/01/06	04/07/06	05/16/06	06/30/06	07/20/06	09/01/06	01/07	01/26/07
20:22	05/15/06	04/24/06	05/30/06	07/14/06	07/20/06	09/01/06	01/07	02/09/07
20:23	06/01/06	05/10/06	06/16/06	07/31/06	08/21/06	10/01/06	01/07	02/26/07
20:24	06/15/06	05/24/06	06/30/06	08/14/06	08/21/06	10/01/06	01/07	03/12/07
21:01	07/03/06	06/12/06	07/18/06	09/01/06	09/20/06	11/01/06	01/07	03/30/07
21:02	07/17/06	06/23/06	08/01/06	09/15/06	09/20/06	11/01/06	01/07	04/13/07
21:03	08/01/06	07/11/06	08/16/06	10/02/06	10/20/06	12/01/06	01/07	04/28/07
21:04	08/15/06	07/25/06	08/30/06	10/16/06	10/20/06	12/01/06	01/07	05/12/07
21:05	09/01/06	08/11/06	09/16/06	10/31/06	11/20/06	01/01/07	01/07	05/29/07
21:06	09/15/06	08/24/06	09/30/06	11/14/06	11/20/06	01/01/07	01/07	06/12/07
21:07	10/02/06	09/11/06	10/17/06	12/01/06	12/20/06	02/01/07	05/08	06/29/07
21:08	10/16/06	09/25/06	10/31/06	12/15/06	12/20/06	02/01/07	05/08	07/13/07
21:09	11/01/06	10/11/06	11/16/06	01/01/07	01/22/07	03/01/07	05/08	07/29/07
21:10	11/15/06	10/24/06	11/30/06	01/15/07	01/22/07	03/01/07	05/08	08/12/07
21:11	12/01/06	11/07/06	12/16/06	01/30/07	02/20/07	04/01/07	05/08	08/28/07
21:12	12/15/06	11/22/06	12/30/06	02/13/07	02/20/07	04/01/07	05/08	09/11/07

## **EXPLANATION OF THE PUBLICATION SCHEDULE**

This Publication Schedule is prepared by the Office of Administrative Hearings as a public service and the computation of time periods are not to be deemed binding or controlling. Time is computed according to 26 NCAC 2C .0302 and the Rules of Civil Procedure, Rule 6.

### **GENERAL**

The North Carolina Register shall be published twice a month and contains the following information submitted for publication by a state agency:

- (1) temporary rules;
- (2) notices of rule-making proceedings;
- (3) text of proposed rules;
- (4) text of permanent rules approved by the Rules Review Commission;
- (5) notices of receipt of a petition for municipal incorporation, as required by G.S. 120-165;
- (6) Executive Orders of the Governor;
- (7) final decision letters from the U.S. Attorney General concerning changes in laws affecting voting in a jurisdiction subject of Section 5 of the Voting Rights Act of 1965, as required by G.S. 120-30.9H;
- (8) orders of the Tax Review Board issued under G.S. 105-241.2; and
- (9) other information the Codifier of Rules determines to be helpful to the public.

**COMPUTING TIME:** In computing time in the schedule, the day of publication of the North Carolina Register is not included. The last day of the period so computed is included, unless it is a Saturday, Sunday, or State holiday, in which event the period runs until the preceding day which is not a Saturday, Sunday, or State holiday.

### **FILING DEADLINES**

**ISSUE DATE:** The Register is published on the first and fifteen of each month if the first or fifteenth of the month is not a Saturday, Sunday, or State holiday for employees mandated by the State Personnel Commission. If the first or fifteenth of any month is a Saturday, Sunday, or a holiday for State employees, the North Carolina Register issue for that day will be published on the day of that month after the first or fifteenth that is not a Saturday, Sunday, or holiday for State employees.

**LAST DAY FOR FILING:** The last day for filing for any issue is 15 days before the issue date excluding Saturdays, Sundays, and holidays for State employees.

### **NOTICE OF TEXT**

**EARLIEST DATE FOR PUBLIC HEARING:** The hearing date shall be at least 15 days after the date a notice of the hearing is published.

**END OF REQUIRED COMMENT PERIOD**  
An agency shall accept comments on the text of a proposed rule for at least 60 days after the text is published or until the date of any public hearings held on the proposed rule, whichever is longer.

**DEADLINE TO SUBMIT TO THE RULES REVIEW COMMISSION:** The Commission shall review a rule submitted to it on or before the twentieth of a month by the last day of the next month.

**FIRST LEGISLATIVE DAY OF THE NEXT REGULAR SESSION OF THE GENERAL ASSEMBLY:** This date is the first legislative day of the next regular session of the General Assembly following approval of the rule by the Rules Review Commission. See G.S. 150B-21.3, Effective date of rules.

**EXECUTIVE ORDER NO. 102  
CONTINUITY OF OPERATIONS AND CONTINUITY  
OF GOVERNMENT PLANNING**

**WHEREAS**, natural and man-made emergencies and disasters can hinder the ability of State agencies to deliver essential services to the people of North Carolina; and

**WHEREAS**, the purpose of Continuity of Operations and Continuity of Government planning is to ensure survival of a constitutional form of government and the continuity of essential State functions under all circumstances; and

**WHEREAS**, effective State agency planning is vital to the implementation and operation of coordinated and well-managed Continuity of Operations and Continuity of Government plans; and

**WHEREAS**, it is imperative that all State agencies have in place a viable Continuity of Operations capability which outlines the performance of their essential functions during any emergency or situation that may disrupt normal operations; and

**WHEREAS**, North Carolina General Statute §147-33.89 requires that each State agency develop a business and disaster recovery plan with respect to information technology, a similar requirement for comprehensive Continuity of Operations and Continuity of Government planning is not part of State law; and

**WHEREAS**, North Carolina's citizens should expect to receive and State agencies must be prepared to deliver essential services to citizens and customers regardless of situation or circumstance;

**NOW, THEREFORE**, pursuant to the authority vested in me as Governor by the Constitution and laws of North Carolina, **IT IS ORDERED**:

Section 1. Each North Carolina Executive Branch agency (at the Division level) will prepare a Continuity of Operations and Continuity of Government Plan to ensure the State's ability to deliver essential services under any circumstance. Plans will be developed using the North Carolina Continuity of Operations Planning Manual to be published concurrently with this Order. Such plans will incorporate existing business continuity plans for information technology and will include:

1. Identification and listing of Essential Functions
2. Delegations of Authority
3. Orders of Succession
4. Alternate Facilities
5. Interoperable Communications
6. Vital Records
7. Human Capital Management
8. Provisions for Tests, Training, and Exercises
9. Devolution
10. Reconstitution

Section 2. The North Carolina Department of Crime Control and Public Safety (CCPS), Division of Emergency Management is designated as the lead agency for Continuity of Operations plans. CCPS is directed to establish and organize a Continuity of Operations Steering Committee comprised of all executive agency heads or their designated representatives and chaired by the Secretary of CCPS or his designated representative. The Division of Emergency Management is directed to provide advice and assistance to all State agencies developing Continuity of Operations plans.

Section 3. Upon completion of department and division Continuity of Operations plans, CCPS will arrange to prepare a consolidated State Continuity of Operations Plan. The North Carolina Department of Administration will be the lead agency for the consolidated State plan for purposes of procuring and assigning alternate facilities to displaced agencies.

Section 4. By November 1, 2006, each Executive Branch agency will develop a Continuity of Operations Plan, have its plan certified by the head of the agency, and present the plan for review by the Secretary of CCPS in his capacity as State Administrative Agent for Homeland Security. Plans are to be first exercised by May 1, 2007, and updated annually thereafter or as required.

Section 5. State agencies outside the Executive Branch and not directly subject to this order are invited and encouraged to participate in the North Carolina Continuity of Operations planning effort.

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***EXECUTIVE ORDERS***

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**IN WITNESS WHEREOF**, I have hereunto signed my name and affixed the Great Seal of the State of North Carolina at the Capitol in the City of Raleigh, this first day of June in the year of our Lord two thousand and six, and of the Independence of the United States of America the two hundred and thirtieth.

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Michael F. Easley  
Governor

**ATTEST:**

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Elaine F. Marshall  
Secretary of State

<p><b><i>Note from the Codifier:</i></b> This Section contains public notices that are required to be published in the Register or have been approved by the Codifier of Rules for publication.</p>
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North Carolina Department of Labor  
Division of Occupational Safety and Health  
4 West Edenton Street  
Raleigh, NC 27601

(919) 807-2875

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### **NOTICE OF VERBATIM ADOPTION OF FEDERAL STANDARDS**

In consideration of G.S. 150-B-21.5(c) the Occupational Safety and Health Division of the Department of Labor hereby gives notice that:

- rule changes have been submitted to update the *North Carolina Administrative Code* at 13 NCAC 07F .0101, 13 NCAC 07F .0201, 13 NCAC 07F .0301, 13 NCAC 07F .0501, and 13 NCAC 07F .0502 to incorporate by reference the occupational safety and health related provisions of Title 29 of the *Code of Federal Regulations* Part 1926 promulgated as of April 3, 2006, except as specifically described, and
- the *North Carolina Administrative Code* at 13 NCAC 07A .0301 automatically includes amendments to certain parts of the *Code of Federal Regulations*, including Title 29, Part 1904—Recording and Reporting Occupational Injuries and Illnesses.

This update encompasses recent verbatim adoptions concerning:

- Roll-Over Protective Structures  
(70 FR 76979 - 77025, December 29, 2005)
- Slip Resistance of Walking Surfaces of Coated Structural Steel Members  
(71 FR 2879 – 2885, January 18, 2006)
- Occupational Exposure to Hexavalent Chromium  
(71 FR 10099 – 10385, February 28, 2006)
- Technical Amendments  
(71 FR 16669 – 16675, April 3, 2006)

The *Federal Register* (FR), as cited above, contains both technical and economic discussions that explain the basis for each change.

For additional information, please contact:

Bureau of Education, Training and Technical Assistance  
Occupational Safety and Health Division  
North Carolina Department of Labor  
1101 Mail Service Center  
Raleigh, North Carolina 27699-1101

For additional information regarding North Carolina's process of adopting federal OSHA Standards verbatim, please contact:

A. John Hoomani, General Counsel  
North Carolina Department of Labor  
Legal Affairs Division  
1101 Mail Service Center  
Raleigh, NC 27699-1101

STATE OF NORTH CAROLINA

BEFORE THE  
TAX REVIEW BOARD

COUNTY OF WAKE

IN THE MATTER OF: )  
The Proposed Assessments of Additional )  
Income Tax for the Taxable Year 2002 )  
by the Secretary of Revenue of North )  
Revenue of North Carolina )  
 )  
vs. )  
 )  
 )  
James R. Rodd, Appellant )

**ADMINISTRATIVE**  
**DECISION NUMBER: 485**  
Docket No. 2005-24

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THIS MATTER is before the regular Tax Review Board (hereinafter "Board") upon petition for administrative review filed by James R. Rodd (hereinafter "Appellant") regarding the Final Decision of Eugene J. Cella, Assistant Secretary for Administrative Hearings of the North Carolina Department of Revenue (Assistant Secretary), sustaining the proposed assessment of additional individual income tax for taxable year 2002.

Pursuant to N.C. Gen. Stat. § 105-241.1, an assessment of tax, penalty and accrued interest for the taxable period was mailed to the Appellant. The Appellant protested the assessment and filed a request for an administrative hearing. After conducting a hearing, the Assistant Secretary entered a Final Decision that sustained the proposed assessment against the Appellant. Pursuant to N.C. Gen. Stat. § 105-241.2, the Appellant filed a notice of intent and petition for administrative review of the Assistant Secretary's final decision with the Tax Review Board.

Pursuant to N.C. Gen. Stat. § 105-241.2(c), the Board has examined the petition, the records and documents transmitted by the North Carolina Secretary of Revenue pertaining to this matter; and it appearing to the Board that the Appellant's petition should be dismissed since the grounds and arguments upon which relief is sought are deemed lacking in legal merit. Thus, the Board concludes that Appellant's petition for administrative review is frivolous and is filed for the purpose of delay.

**IT IS THEREFORE ORDERED, ADJUDGED AND DECREED** that Taxpayer's petition for administrative review be and is hereby **Dismissed**.

Made and entered into the 12 day of April 2006.

**TAX REVIEW BOARD**

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Stacey A. Phipps, Chief Deputy Treasurer, on  
behalf of Richard H. Moore, State Treasurer

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Jo Anne Sanford, Member  
Chair, Utilities Commission

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Noel L. Allen, Esq.





## COUNTY OF WAKE

VS.

**ADMINISTRATIVE  
DECISION NUMBER: 487**  
Docket No. 2004-480

Pursuant to N.C. Gen. Stat. § 105-241.1, an assessment of tax, penalty and accrued interest for the taxable period was mailed to the Appellant. The Appellant protested the assessment and filed a request for an administrative hearing. After conducting a hearing, the Assistant Secretary entered a Final Decision that sustained the proposed assessment against the Appellant. Pursuant to N.C. Gen. Stat. § 105-241.2, the Appellant filed a notice of intent and petition for administrative review of the Assistant Secretary's final decision with the Tax Review Board.

Pursuant to N.C. Gen. Stat. § 105-241.2(c), the Board has examined the petition, the records and documents transmitted by the North Carolina Secretary of Revenue pertaining to this matter; and it appearing to the Board that the Appellant's petition should be dismissed since the grounds and arguments upon which relief is sought are deemed lacking in legal merit. Thus, the Board concludes that Appellant's petition for administrative review is frivolous and is filed for the purpose of delay.

**IT IS THEREFORE ORDERED, ADJUDGED AND DECREED** that Taxpayer's petition for administrative review be and is hereby **Dismissed**.

Made and entered into the 12<sup>th</sup> day of April 2006.

## TAX REVIEW BOARD

Stacey A. Phipps, Chief Deputy Treasurer, on behalf of Richard H. Moore, State Treasurer

Jo Anne Sanford, Member  
Chair, Utilities Commission

Noel L. Allen, Esq.

U.S. Department of Justice

Civil Rights Division

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JKT:MSR:HEW:joh  
DJ 166-012-3  
2006-3215

*Voting Section – NWB.  
950 Pennsylvania Ave., NW  
Washington, D.C. 20530*

May 24, 2006

Mr. David A. Holec  
City Attorney  
P.O. Box 7207  
Greenville, NC 27835-7207

Dear Mr. Holec:

This refers to three annexations (Ordinance Nos. 06-05 through 06-10 (2006)) and their designation to District 5 of the City of Greenville in Pitt County, North Carolina, submitted to the Attorney General pursuant to Section 5 of the Voting Rights Act, 42 U.S.C. 1973c. We received your submission on March 28, 2006.

The Attorney General does not interpose any objection to the specified changes. However, we note that Section 5 expressly provides that the failure of the Attorney General to object does not bar subsequent litigation to enjoin the enforcement of the changes. Procedures for the Administration of Section 5 (28 C.F.R. 51.41).

Sincerely,

John Tanner  
Chief, Voting Section

**Note from the Codifier:** The notices published in this Section of the NC Register include the text of proposed rules. The agency must accept comments on the proposed rule(s) for at least 60 days from the publication date, or until the public hearing, or a later date if specified in the notice by the agency. If the agency adopts a rule that differs substantially from a prior published notice, the agency must publish the text of the proposed different rule and accept comment on the proposed different rule for 60 days.

Statutory reference: G.S. 150B-21.2.

## **TITLE 15A – DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

**Notice** is hereby given in accordance with G.S. 150B-21.2 that the Environmental Management Commission intends to amend the rules cited as 15A NCAC 02B .0204, .0208, .0211 - .0212, .0214 - .0216, .0218, .0220 - .0222.

**Proposed Effective Date:** January 1, 2007

**Public Hearing:**

**Date:** Monday, July 24, 2006

**Time:** 2:00 pm

**Location:** Mooresville Public Library, 304 South Main Street, Mooresville, NC 28115

**Public Hearing:**

**Date:** Tuesday, July 25, 2006

**Time:** 2:00 pm

**Location:** Ground Floor Hearing Room, Archdale Building, 512 North Salisbury Street, Raleigh, NC

**Public Hearing:**

**Date:** Wednesday, July 26, 2006

**Time:** 2:00 pm

**Location:** New Hanover County Public Library, Northeast Regional Branch, 1241 Military Cutoff Road, Wilmington, NC

**Reason for Proposed Action:** The Environmental Management Commission (EMC) has provided the Division of Water Quality with permission to conduct three public hearings to consider proposed permanent amendments to various rules that establish the surface water quality standards for North Carolina. These proposed amendments comprise the State's 2004 – 2006 Triennial Review of Surface Water Quality Standards, which is mandated by the Clean Water Act (CWA). If adopted, the proposals would implement the following changes to the surface water quality standards for North Carolina: 1) Replacement of the term "Dietary Intake" with the term "Relative Source Contribution." An assessment of total human exposure to a contaminant determines a Reference Dose; the Relative Source Contribution then apportions the Reference Dose among the media of concern. The use of Relative source Contribution provides the State with the ability to incorporate the latest scientific information by accounting for other sources of exposure, such as non-fish dietary intake and air, when deriving standards for non-carcinogens and non-linear carcinogens. 2) Updating the current fish consumption rate (FCR) to the national default fish consumption rate of 17.5 grams of fish/day. A default value of 17.5 grams/ person/ day is chosen to be protective of the majority of the general population. The US

EPA values represent the uncooked weight intake of freshwater/ estuarine finfish and shellfish. 3) Base on revised US EPA methodology and research, new cancer potency factors are available for benzene and vinyl chloride. When implemented, the standard will lower the applicable acceptable human health protective concentrations. 4) Updated aquatic life protective concentrations for Cadmium and Tributyltin. As with the human health changes, the revised aquatic life criteria reflect the latest scientific knowledge regarding the effects of the pollutants on aquatic organisms. The revised criteria are average concentrations that can be present in a water body, but should not result in unacceptable effects on aquatic organisms and their uses. 5) Revisions to bacterial indicators in marine waters are mandated by the federal Beaches Environmental Assessment and Coastal Health Act (BEACH act) of 2000. The BEACH requires programs to monitor and analyze samples for microbiological indicators and to notify the public of the potential exposure to disease-causing microorganisms in coastal recreation waters. The BEACH Act also amended Section 303 of the CWA to require coastal states to adopt, in their water quality standards, EPA's published indicators for pathogens with criteria as protective as those published by EPA. The recommended bacterial indicator for coastal waters is proposed to change from fecal coliform to the EPA recommended indicator, enterococci. The Division must retain the use of a fecal coliform indicator for Class SA waters to accomplish the goals for the Food and Drug Administration criteria; therefore SA waters will have a dual indicator. 6) The public will have the opportunity to comment on three variances from surface water quality standards and the current thermal (temperature) variances. The three surface water standards consist of two variances from the chloride standard for Mt. Olive Pickle Company and Bay Valley Foods, LLC (formerly Dean Pickle and Specialty Products Company) (NC0001074 & NC 0001970) and a variance from the color standard for Blue Ridge Paper Products (NC0000272). Information concerning these water quality standards variances can be obtained by contacting the individual named in the comment procedures.

**Procedure by which a person can object to the agency on a proposed rule:** Written comments may be submitted to Connie Brower at DENR/ Division of Water Quality Planning Section, 1617 Mail Service Center, Raleigh, NC 27699-1617, or fax to (919) 715-5637, or email to [Connie.Brower@ncmail.net](mailto:Connie.Brower@ncmail.net), or by phone to Connie Brower at (919) 733-5083 extension 380.

**Comments may be submitted to:** Connie Brower, DENR/ Division of Water Quality Planning Section, 1617 Mail Service Center, Raleigh, NC 27699-1617, phone (919) 733-5083 extension 380, fax (919) 715-5637, email [connie.brower@ncmail.net](mailto:connie.brower@ncmail.net)

**Comment period ends:** *September 1, 2006*

**Procedure for Subjecting a Proposed Rule to Legislative Review:**

If an objection is not resolved prior to the adoption of the rule, a person may also submit written objections to the Rules Review Commission. If the Rules Review Commission receives written and signed objections in accordance with G.S. 150B-21.3(b2) from 10 or more persons clearly requesting review by the legislature and the Rules Review Commission approves the rule, the rule will become effective as provided in G.S. 150B-21.3(b1). The Commission will receive written objections until 5:00 p.m. on the day following the day the Commission approves the rule. The Commission will receive those objections by mail, delivery service, hand delivery, or facsimile transmission. If you have any further questions concerning the submission of objections to the Commission, please call a Commission staff attorney at 919-733-2721.

**Fiscal Impact:** A copy of the fiscal note can be obtained from the agency.

- ☐ **State**
- ☒ **Local** 15A NCAC 02B .0220 - .0222
- ☐ **Substantive** (≥\$3,000,000)
- ☒ **None** 15A NCAC 02B .0204, .0208, .0211 - .0212, .0214 - .0216, .0218

**CHAPTER 02 - ENVIRONMENTAL MANAGEMENT**

**SUBCHAPTER 02B - SURFACE WATER AND WETLAND STANDARDS**

**SECTION .0200 - CLASSIFICATIONS AND WATER QUALITY STANDARDS APPLICABLE TO SURFACE WATERS AND WETLANDS OF NORTH CAROLINA**

**15A NCAC 02B .0204 LOCATION OF SAMPLING SITES AND MIXING ZONES**

(a) Location of Sampling Sites. In conducting tests or making analytical determinations of classified waters to determine conformity or nonconformity with the established standards, samples shall be collected outside the limits of prescribed mixing zones. However, where appropriate, samples shall be collected within the mixing zone in order to ensure compliance with in-zone water quality requirements as outlined in Paragraph (b) of this Rule.

(b) Mixing Zones. A mixing zone may be established in the area of a discharge in order to provide reasonable opportunity for the mixture of the wastewater with the receiving waters. Water quality standards will not apply within regions defined as mixing zones, except that such zones will be subject to the conditions established in accordance with this Rule. The limits of such mixing zones will be defined by the division on a case-by-case basis after consideration of the magnitude and character of the waste discharge and the size and character of the receiving waters. Mixing zones will be determined such that discharges will not:

- (1) result in acute toxicity to aquatic life [as defined by Rule .0202(1) of this Section] or

- prevent free passage of aquatic organisms around the mixing zone;
- (2) result in offensive conditions;
- (3) produce undesirable aquatic life or result in a dominance of nuisance species outside of the assigned mixing zone;
- (4) endanger the public health or welfare.

In addition, a mixing zone will not be assigned for point source discharges of fecal coliform organisms in waters classified "WS-II," "WS-III," "B," "~~SB~~," or "SA." Mixing zones will not be assigned for point source discharges of enterococci in waters classified "SB" or "SA." For the discharge of heated wastewater, compliance with federal rules and regulations pursuant to Section 316(a) of the Federal Water Pollution Control Act, as amended, shall constitute compliance with Subparagraph (b) of this Rule.

*Authority G.S. 143-214.1.*

**15A NCAC 02B .0208 STANDARDS FOR TOXIC SUBSTANCES AND TEMPERATURE**

(a) Toxic Substances. The concentration of toxic substances, either alone or in combination with other wastes, in surface waters shall not render waters injurious to aquatic life or wildlife, recreational activities, public health, or impair the waters for any designated uses. Specific standards for toxic substances to protect freshwater and tidal saltwater uses are listed in Rules .0211 and .0220 of this Section, respectively. Procedures for interpreting the narrative standard for toxic substances and numerical standards applicable to all waters are as follows:

- (1) Aquatic life standards. The concentration of toxic substances shall not result in chronic toxicity. Any levels in excess of the chronic value will be considered to result in chronic toxicity. In the absence of direct measurements of chronic toxicity, the concentration of toxic substances shall not exceed the concentration specified by the fraction of the lowest LC50 value that predicts a no effect chronic level (as determined by the use of acceptable acute/chronic ratios). If an acceptable acute/chronic ratio is not available, then that toxic substance shall not exceed one-one hundredth (0.01) of the lowest LC50 or if it is affirmatively demonstrated that a toxic substance has a half-life of less than 96 hours the maximum concentration shall not exceed one-twentieth (0.05) of the lowest LC50.
- (2) Human health standards. The concentration of toxic substances shall not exceed the level necessary to protect human health through exposure routes of fish (or shellfish) tissue consumption, water consumption, or other route identified as appropriate for the water body.
  - (A) For non-carcinogens, these concentrations shall be determined using a Reference Dose (RfD) as

published by the U.S. Environmental Protection Agency pursuant to Section 304(a) of the Federal Water Pollution Control Act as amended or a RfD issued by the U.S. Environmental Protection Agency as listed in the Integrated Risk Information System (IRIS) file or a RfD approved by the Director after consultation with the State Health director. Water quality standards or criteria used to calculate water quality based effluent limitations to protect human health through the different exposure routes are determined as follows:

- (i) Fish tissue consumption:  

$$WQS = \frac{(RfD - DT)(RfD \times RSC)}{FCR \times BCF} \times \text{Body Weight}$$
 where:  
 WQS = water quality standard or criteria;  
 RfD = reference dose;  
~~DT = estimated non fish dietary intake (when available);~~ RSC = Relative Source Contribution  
 FCR = fish consumption rate ~~(assumed to be 6.5~~ (based upon 17.5 gm/person-day);  
 BCF = bioconcentration factor, or bioaccumulation factor (BAF), as appropriate.

BCF or BAF values are based on U.S. Environmental Protection Agency publications pursuant to Section 304(a) of the Federal Water Pollution Control Act as amended, literature values, or site specific bioconcentration data approved by the Commission or its designee; FCR values are average consumption rates for a 70 Kg adult for the lifetime of the population; alternative FCR values may be used when it is considered necessary to protect localized populations that may be consuming fish at a higher rate; RSC values, when made available through U.S. Environmental Protection Agency publications pursuant to Section 304(a) of the Federal Clean Water Pollution Control Act to account for non-water sources of exposure. May be either a percentage (multiplied) or amount subtracted, depending on whether multiple criteria are relevant to the chemical.

- (ii) Water consumption (including a correction for fish consumption):

$$WQS = \frac{(RfD - DT)(RfD \times RSC)}{WCR + (FCR \times BCF)} \times \text{Body Weight}$$

where:

WQS = water quality standard or criteria;  
 RfD = reference dose;  
~~DT = estimated non fish dietary intake (when available);~~ RSC = Relative Source Contribution  
 FCR = fish consumption rate ~~(assumed to be 6.5~~ based upon 17.5 gm/person-day);  
 BCF = bioconcentration factor, or bioaccumulation factor (BAF), as appropriate;  
 WCR = water consumption rate (assumed to be two liters per day for adults).

To protect sensitive groups, exposure ~~may be~~ based on a 10 Kg child drinking one liter of water per day. Standards may also be based on drinking water standards based on the requirements of the Federal Safe Drinking Water Act [42 U.S.C. 300(f)(g)-1]. For non-carcinogens, specific numerical water quality standards have not been included in this Rule because water quality standards to protect aquatic life for all toxic substances for which standards have been considered are more stringent than numerical standards to protect human health from non-carcinogens through consumption of fish; standards to protect human health from non-carcinogens through water consumption are listed under the water supply classification standards in Rule .0211 of this Section; the equations listed in this Subparagraph shall be used to develop water quality based effluent limitations on a case-by-case basis for toxic substances that are not presently included in the water quality standards. Alternative FCR values may be used when it is considered necessary to protect localized populations that may be consuming fish at a higher rate;

- (B) For carcinogens, the concentrations of toxic substances shall not result in unacceptable health risks and shall be based on a Carcinogenic Potency Factor (CPF). An unacceptable health risk for cancer shall be considered to be more than one case of cancer per one million people exposed (10<sup>-6</sup> risk level). The CPF is a measure of the cancer-causing potency of a substance estimated by the upper 95 percent confidence limit of the slope of a straight line calculated by the Linearized

Multistage Model or other appropriate model according to U.S. Environmental Protection Agency Guidelines [FR 51 (185): 33992-34003; and FR 45 (231 Part V): 79318-79379]. Water quality standards or criteria for water quality based effluent limitations are calculated using the procedures given in Subparagraphs (A) and (B) of this Rule. Standards to protect human health from carcinogens through water consumption are listed under the water supply classification standards in Rules .0212, .0214, .0215, .0216, and .0218 of this Section; standards to protect human health from carcinogens through the consumption of fish (and shellfish) only are applicable to all waters as follows:

- (i) Aldrin: ~~0.1360~~0.05 ng/l;
- (ii) Arsenic: 10 ug/l;
- (iii) Benzene: ~~71.451~~ ug/l;
- (iv) Beryllium: ~~14750~~ ng/l;
- (v) Carbon tetrachloride: ~~4.4216~~ ug/l;
- (vi) Chlordane: ~~0.58808~~ ng/l;
- (vii) DDT: ~~0.59402~~ ng/l;
- (viii) Dieldrin: ~~0.144005~~ ng/l;
- (ix) Dioxin: ~~0.0000140~~0.000005 ng/l;
- (x) Heptachlor: ~~0.214008~~ ng/l;
- (xi) Hexachlorobutadiene: ~~49.718~~ ug/l;
- (xii) Polychlorinated biphenyls: ~~biphenyls (total of all identified PCBs and congeners):~~ 0.0790064 ng/l;
- (xiii) Polynuclear aromatic hydrocarbons: ~~hydrocarbons (total of all PAHs):~~ 31.1 ng/l;
- (xiv) Tetrachloroethane (1,1,2,2): ~~40.84~~ ug/l;
- (xv) Tetrachloroethylene: 3.3 ug/L;
- ~~(xvi)~~(xvi) Trichloroethylene: 92.430 ug/l;
- ~~(xvi)~~(xvii) Vinyl chloride: ~~5252.4~~ ug/l.

The values listed in Subparts (i) through ~~(xvi)~~(xvii) in Part (B) of Subparagraph (2) of this Rule may be adjusted by the Commission or its designee on a case-by-case basis to account for site-specific or chemical-specific information

pertaining to the assumed BCF, FCR or CPF values or other data.

(b) Temperature. The Commission may establish a water quality standard for temperature for specific water bodies other than the standards specified in Rules .0211 and .0220 of this Section, upon a case-by-case determination that thermal discharges to these waters, that serve or may serve as a source or receptor of industrial cooling water provide for the maintenance of the designated best use throughout a reasonable portion of the water body. Such revisions of the temperature standard must be consistent with the provisions of Section 316(a) of the Federal Water Pollution Control Act as ~~amended~~amended, ~~and shall be noted in Rule .0218 of this Section.~~ A listing of existing thermal revisions shall be maintained and made available to the public by the Division.

Authority G.S. 143-214.1; 143-215.3(a)(1).

### 15A NCAC 02B .0211 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS C WATERS

General. The water quality standards for all fresh surface waters are the basic standards applicable to Class C waters. See Rule .0208 of this Section for standards for toxic substances and temperature. Additional and more stringent standards applicable to other specific freshwater classifications are specified in Rules .0212, .0214, .0215, .0216, .0217, .0218, .0219, .0223, .0224 and .0225 of this Section.

- (1) Best Usage of Waters. Aquatic life propagation and maintenance of biological integrity (including fishing, and fish), wildlife, secondary recreation, agriculture and any other usage except for primary recreation or as a source of water supply for drinking, culinary or food processing purposes;
- (2) Conditions Related to Best Usage. The waters shall be suitable for aquatic life propagation and maintenance of biological integrity, wildlife, secondary recreation, and agriculture; sources of water pollution which preclude any of these uses on either a short-term or long-term basis shall be considered to be violating a water quality standard;
- (3) Quality standards applicable to all fresh surface waters:
  - (a) Chlorophyll a (corrected): not greater than 40 ug/l for lakes, reservoirs, and other waters subject to growths of macroscopic or microscopic vegetation not designated as trout waters, and not greater than 15 ug/l for lakes, reservoirs, and other waters subject to growths of macroscopic or microscopic vegetation designated as trout waters (not applicable to lakes and reservoirs less than 10 acres in surface area); the Commission or its designee may prohibit or limit any discharge of waste into surface waters if, in the opinion of the Director, the surface waters experience or the

- discharge would result in growths of microscopic or macroscopic vegetation such that the standards established pursuant to this Rule would be violated or the intended best usage of the waters would be impaired;
- (b) Dissolved oxygen: not less than 6.0 mg/l for trout waters; for non-trout waters, not less than a daily average of 5.0 mg/l with a minimum instantaneous value of not less than 4.0 mg/l; swamp waters, lake coves or backwaters, and lake bottom waters may have lower values if caused by natural conditions;
  - (c) Floating solids; settleable solids; sludge deposits: only such amounts attributable to sewage, industrial wastes or other wastes as shall not make the water unsafe or unsuitable for aquatic life and wildlife or impair the waters for any designated uses;
  - (d) Gases, total dissolved: not greater than 110 percent of saturation;
  - (e) Organisms of the coliform group: fecal coliforms shall not exceed a geometric mean of 200/100ml (MF count) based upon at least five consecutive samples examined during any 30 day period, nor exceed 400/100ml in more than 20 percent of the samples examined during such period; violations of the fecal coliform standard are expected during rainfall events and, in some cases, this violation is expected to be caused by uncontrollable nonpoint source pollution; all coliform concentrations are to be analyzed using the membrane filter technique unless high turbidity or other adverse conditions necessitate the tube dilution method; in case of controversy over results, the MPN 5-tube dilution technique shall be used as the reference method;
  - (f) Oils; deleterious substances; colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation or to aquatic life and wildlife or adversely affect the palatability of fish, aesthetic quality or impair the waters for any designated uses; for the purpose of implementing this Rule, oils, deleterious substances, colored or other wastes shall include but not be limited to substances that cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines pursuant to 40 CFR ~~110.4(a)-(b)~~ 110.3(a)-(b) which are hereby incorporated by reference including any subsequent amendments and additions. This material is available for inspection at the Department of Environment and Natural Resources, Division of Water Quality, 512 North Salisbury Street, Raleigh, North Carolina. Copies may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402-9325 at a cost of ~~thirteen dollars (\$13.00)~~ forty-five dollars (\$45.00).
  - (g) pH: shall be normal for the waters in the area, which generally shall range between 6.0 and 9.0 except that swamp waters may have a pH as low as 4.3 if it is the result of natural conditions;
  - (h) Phenolic compounds: only such levels as shall not result in fish-flesh tainting or impairment of other best usage;
  - (i) Radioactive substances:
    - (i) Combined radium-226 and radium-228: the maximum average annual activity level (based on at least four samples collected quarterly) for combined radium-226 and radium-228 shall not exceed five picoCuries per liter;
    - (ii) Alpha Emitters: the average annual gross alpha particle activity (including radium-226, but excluding radon and uranium) shall not exceed 15 picoCuries per liter;
    - (iii) Beta Emitters: the maximum average annual activity level (based on at least four samples, collected quarterly) for strontium-90 shall not exceed eight picoCuries per liter; nor shall the average annual gross beta particle activity (excluding potassium-40 and other naturally occurring radio-nuclides) exceed 50 picoCuries per liter; nor shall the maximum average annual activity level for



- tritium exceed 20,000  
picoCuries per liter;
- (j) Temperature: not to exceed 2.8 degrees C (5.04 degrees F) above the natural water temperature, and in no case to exceed 29 degrees C (84.2 degrees F) for mountain and upper piedmont waters and 32 degrees C (89.6 degrees F) for lower piedmont and coastal plain waters. The temperature for trout waters shall not be increased by more than 0.5 degrees C (0.9 degrees F) due to the discharge of heated liquids, but in no case to exceed 20 degrees C (68 degrees F);
- (k) Turbidity: the turbidity in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural background conditions, the existing turbidity level cannot be increased. Compliance with this turbidity standard can be met when land management activities employ Best Management Practices (BMPs) [as defined by Rule .0202 of this Section] recommended by the Designated Nonpoint Source Agency [as defined by Rule .0202 of this Section]. BMPs must be in full compliance with all specifications governing the proper design, installation, operation and maintenance of such BMPs;
- (l) Toxic substances: numerical water quality standards (maximum permissible levels) for the protection of human health applicable to all fresh surface waters are in Rule .0208 of this Section; numerical water quality standards (maximum permissible levels) to protect aquatic life applicable to all fresh surface waters:
- (i) Arsenic: 50 ug/l;
- (ii) Beryllium: 6.5 ug/l;
- (iii) Cadmium: ~~0.4 ug/l for trout waters and 2.0 ug/l for non-trout waters;~~ 0.16 ug/L; attainment of these water quality standards in surface waters shall be based on measurement of total recoverable metals
- concentrations unless appropriate studies have been conducted to translate total recoverable metals to a toxic form. Studies used to determine the toxic form or translators must be designed according to the "Water Quality Standards Handbook Second Edition" published by the Environmental Protection Agency (EPA 823-B-94-005a) or "The Metals Translator: Guidance For Calculating a Total Recoverable Permit Limit From a Dissolved Criterion" published by the Environmental Protection Agency (EPA 823-B-96-007) which are hereby incorporated by reference including any subsequent amendments. The Director shall consider conformance to EPA guidance as well as the presence of environmental conditions that limit the applicability of translators in approving the use of metal translators.
- (iv) Chlorine, total residual: 17 ug/l;
- (v) Chromium, total recoverable: 50 ug/l;
- (vi) Cyanide: 5.0 ug/l; unless site-specific criteria are developed based upon the aquatic life at the site utilizing The Recalculation Procedure in Appendix B of Appendix L in the Environmental Protection Agency's Water Quality Standards Handbook hereby incorporated by reference including any subsequent amendments;
- (vii) Fluorides: 1.8 mg/l;
- (viii) Lead, total recoverable: 25 ug/l; collection of data on sources, transport and fate of lead shall be required as part of the toxicity reduction evaluation for dischargers that are out of compliance with whole effluent toxicity testing requirements and the concentration of lead in the effluent is concomitantly

- determined to exceed an instream level of 3.1 ug/l from the discharge;
- (ix) Mercury: 0.012 ug/l;
- (x) Nickel: 88 ug/l; attainment of these water quality standards in surface waters shall be based on measurement of total recoverable metals concentrations unless appropriate studies have been conducted to translate total recoverable metals to a toxic form. Studies used to determine the toxic form or translators must be designed according to the "Water Quality Standards Handbook Second Edition" published by the Environmental Protection Agency (EPA 823-B-94-005a) or "The Metals Translator: Guidance For Calculating a Total Recoverable Permit Limit From a Dissolved Criterion" published by the Environmental Protection Agency (EPA 823-B-96-007) which are hereby incorporated by reference including any subsequent amendments. The Director shall consider conformance to EPA guidance as well as the presence of environmental conditions that limit the applicability of translators in approving the use of metal translators.
- (xi) Pesticides:
- (A) Aldrin: 0.002 ug/l;
- (B) Chlordane: 0.004 ug/l;
- (C) DDT: 0.001 ug/l;
- (D) Demeton: 0.1 ug/l;
- (E) Dieldrin: 0.002 ug/l;
- (F) Endosulfan: 0.05 ug/l;
- (G) Endrin: 0.002 ug/l;
- (H) Guthion: 0.01 ug/l;
- (I) Heptachlor: 0.004 ug/l;
- (J) Lindane: 0.01 ug/l;
- (K) Methoxychlor: 0.03 ug/l;
- (L) Mirex: 0.001 ug/l;
- (M) Parathion: 0.013 ug/l;
- (N) Toxaphene: 0.0002 ug/l;
- (xii) Polychlorinated biphenyls: biphenyls: (total of all PCBs and congeners identified) 0.001 ug/l;
- (xiii) Selenium: 5 ug/l;
- (xiv) Toluene: 11 ug/l or 0.36 ug/l in trout waters;
- (xv) Trialkyltin compounds: ~~0.008-0.07~~ ug/l expressed as tributyltin;
- (4) Action Levels for Toxic Substances: if the Action Levels for any of the substances listed in this Subparagraph (which are generally not bioaccumulative and have variable toxicity to aquatic life because of chemical form, solubility, stream characteristics or associated waste characteristics) are determined by the waste load allocation to be exceeded in a receiving water by a discharge under the specified low flow criterion for toxic substances (Rule .0206 in this Section), the discharger shall monitor the chemical or biological effects of the discharge; efforts shall be made by all dischargers to reduce or eliminate these substances from their effluents. Those substances for which Action Levels are listed in this Subparagraph shall be limited as appropriate in the NPDES permit based on the Action Levels listed in this Subparagraph if sufficient information (to be determined for metals by measurements of that portion of the dissolved instream concentration of the Action Level parameter attributable to a specific NPDES permitted discharge) exists to indicate that any of those substances may be a causative factor resulting in toxicity of the effluent. NPDES permit limits may be based on translation of the toxic form to total recoverable metals. Studies used to determine the toxic form or translators must be designed according to "Water Quality Standards Handbook Second Edition" published by the Environmental Protection Agency (EPA 823-B-94-005a) or "The Metals Translator: Guidance For Calculating a Total Recoverable Permit Limit From a Dissolved Criterion" published by the Environmental Protection Agency (EPA 823-B-96-007) which are hereby incorporated by reference including any subsequent amendments. The Director shall consider conformance to EPA guidance as well as the presence of environmental conditions that limit the applicability of translators in approving the use of metal translators.
- (a) Copper: 7 ug/l;

- (b) Iron: 1.0 mg/l;
- (c) Silver: 0.06 ug/l;
- (d) Zinc: 50 ug/l;
- (e) Chloride: 230 mg/l;

For purposes other than consideration of NPDES permitting of point source discharges as described in this Subparagraph, the Action Levels in this Rule, as measured by an appropriate analytical technique, per 15A NCAC 02B .0103(a), shall be considered as numerical ambient water quality standards.

*Authority G.S. 143-214.1; 143-215.3(a)(1).*

**15A NCAC 02B .0212 FRESH SURFACE WATER  
QUALITY STANDARDS FOR CLASS WS-I WATERS**

The following water quality standards apply to surface waters within water supply watersheds that are classified WS-I. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section also apply to Class WS-I waters.

- (1) The best usage of WS-I waters are as follows: a source of water supply for drinking, culinary, or food-processing purposes for those users desiring maximum protection of their water supplies, waters located on land in public ownership, and any best usage specified for Class C waters.
- (2) The conditions related to the best usage are as follows: waters of this class are protected water supplies within essentially natural and undeveloped watersheds in public ownership with no permitted point source dischargers except those specified in Rule .0104 of this Subchapter; waters within this class must be relatively unimpacted by nonpoint sources of pollution; land use management programs are required to protect waters from nonpoint source pollution; the waters, following treatment required by the Division of Environmental Health, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, and food-processing purposes which are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500; sources of water pollution which preclude any of these uses on either a short-term or long-term basis shall be considered to be violating a water quality standard. The Class WS-I classification may be used to protect portions of Class WS-II, WS-III and WS-IV water supplies. For reclassifications occurring after the July 1, 1992 statewide reclassification, the more protective classification requested by local governments shall be considered by the Commission when all local governments having jurisdiction in the affected area(s) have adopted a resolution and the appropriate ordinances to protect the watershed or the Commission acts to protect a watershed when one or more local

governments has failed to adopt necessary protection measures.

- (3) Quality standards applicable to Class WS-I Waters are as follows:

- (a) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;
- (b) Nonpoint Source Pollution: none that would adversely impact the waters for use as a water supply or any other designated use;
- (c) Organisms of coliform group: total coliforms not to exceed 50/100 ml (MF count) as a monthly geometric mean value in watersheds serving as unfiltered water supplies;
- (d) ~~Chlorinated~~ ~~Phenolic~~ ~~phenolic~~ compounds: not greater than 1.0 ug/l (~~phenols~~) to protect water supplies from taste and odor problems from chlorinated phenols;
- (e) Sewage, industrial wastes: none except those specified in Subparagraph (2) of this Paragraph or Rule .0104 of this Subchapter;
- (f) Solids, total dissolved: not greater than 500 mg/l;
- (g) Total hardness: not greater than 100 mg/l as calcium carbonate;
- (h) Toxic and other deleterious substances:
  - (i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for non-carcinogens in Class WS-I waters:
    - (A) Barium: 1.0 mg/l;
    - (B) Chloride: 250 mg/l;
    - (C) Manganese: 200 ug/l;
    - (D) Nickel: 25 ug/l;
    - (E) Nitrate nitrogen: 10.0 mg/l;
    - (F) 2,4-D: 100 ug/l;
    - (G) 2,4,5-TP (Silvex): 10 ug/l;
    - (H) Sulfates: 250 mg/l;
  - (ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for carcinogens in Class WS-I waters:

- (A) Aldrin: ~~0.127~~0.05 ng/l;
- (B) Arsenic: 10 ug/l;
- (C) Benzene: 1.19 ug/l;
- (D) Beryllium: ~~6.87~~ ng/l;
- (E) Carbon tetrachloride: 0.254 ug/l;
- (F) Chlordane: ~~0.575~~0.8 ng/l;
- (G) Chlorinated benzenes: 488 ug/l;
- (H) DDT: ~~0.588~~0.2 ng/l;
- (I) Dieldrin: ~~0.135~~0.05 ng/l;
- (J) Dioxin: ~~0.0000130~~0.000005 ng/l;
- (K) Heptachlor: ~~0.208~~0.08 ng/l;
- (L) Hexachlorobutadiene: ~~0.445~~0.44 ug/l;
- (M) Polynuclear aromatic hydrocarbons: ~~hydrocarbons~~hydrocarbons (total of all PAHs): 2.8 ng/l;
- (N) Tetrachloroethane (1,1,2,2): ~~0.172~~0.17 ug/l;
- (O) Tetrachloroethylene: ~~0.80~~7 ug/l;
- (P) Trichloroethylene: ~~3.082~~5 ug/l;
- (Q) Vinyl Chloride: ~~20.025~~ ug/l.

(3)

specified in Sub-Items (3)(b)(i)(A), (3)(b)(i)(B), (3)(b)(ii)(A) and (3)(b)(ii)(B) of this Rule; discharges which qualify for a General Permit pursuant to 15A NCAC 2H .0127, trout farm discharges, recycle (closed loop) systems that only discharge in response to 10-year storm events and other stormwater discharges are allowed in the entire watershed; new domestic and industrial discharges of treated wastewater are not allowed in the entire watershed; the waters, following treatment required by the Division of Environmental Health, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, and food-processing purposes which are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500; sources of water pollution which preclude any of these uses on either a short-term or long-term basis shall be considered to be violating a water quality standard. The Class WS-II classification may be used to protect portions of Class WS-III and WS-IV water supplies. For reclassifications of these portions of Class WS-III and WS-IV water supplies occurring after the July 1, 1992 statewide reclassification, the more protective classification requested by local governments shall be considered by the Commission when all local governments having jurisdiction in the affected area(s) have adopted a resolution and the appropriate ordinances to protect the watershed or the Commission acts to protect a watershed when one or more local governments has failed to adopt necessary protection measures.

Quality standards applicable to Class WS-II Waters are as follows:

- (a) Sewage, industrial wastes, non-process industrial wastes, or other wastes: none except for those specified in either Item (2) of this Rule and Rule .0104 of this Subchapter; and none which shall have an adverse effect on human health or which are not effectively treated to the satisfaction of the Commission and in accordance with the requirements of the Division of Environmental Health, North Carolina Department of Environment and Natural Resources; any discharger may be required upon request by the Commission to disclose all chemical constituents present or potentially present in their wastes and chemicals which could be spilled or be present in runoff from

*Authority G.S. 143-214.1; 143-215.3(a)(1).*

#### **15A NCAC 02B .0214 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS WS-II WATERS**

The following water quality standards apply to surface waters within water supply watersheds that are classified WS-II. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section also apply to Class WS-II waters.

- (1) The best usage of WS-II waters are as follows: a source of water supply for drinking, culinary, or food-processing purposes for those users desiring maximum protection for their water supplies where a WS-I classification is not feasible and any best usage specified for Class C waters.
- (2) The conditions related to the best usage are as follows: waters of this class are protected as water supplies which are in predominantly undeveloped watersheds and meet average watershed development density levels as

- their facility which may have an adverse impact on downstream water quality; these facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances;
- (b) Nonpoint Source and Stormwater Pollution: none that would adversely impact the waters for use as a water supply or any other designated use;
- (i) Nonpoint Source and Stormwater Pollution Control Criteria For Entire Watershed:
- (A) Low Density Option: Development density must be limited to either no more than one dwelling unit per acre of single family detached residential development (or 40,000 square foot lot excluding roadway right-of-way) or 12 percent built-upon area for all other residential and non-residential development in the watershed outside of the critical area; Stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;
- (B) High Density Option: If new development exceeds the low density option requirements as stated in Sub-Item (3)(b)(i)(A) of this Rule, then engineered stormwater controls must be used to control runoff from the first inch of rainfall; new residential and non-residential development shall not exceed 30 percent built-upon area;
- (C) Land within the watershed shall be deemed compliant with the density requirements if the following condition is met: The density of all existing development at the time of reclassification does not exceed the density requirement when densities are averaged throughout the entire watershed area at the time of classification;
- (D) Cluster development is allowed on a
- project-by-project basis as follows:
- (I) overall density of the project meets associated density or stormwater control requirements of this Rule;
- (II) buffers meet the minimum statewide water supply watershed protection requirements;
- (III) built-upon areas are designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas; and maximize the flow length through vegetated areas;
- (IV) areas of concentrated development are located in upland areas and away, to the maximum extent practicable, from surface waters and drainageways;
- (V) remainder of tract to remain in vegetated or natural state;
- (VI) area in the vegetated or natural state may be conveyed to a property owners association; a local government for preservation as a park or greenway; a conservation organization; or placed in a permanent conservation or farmland preservation easement;

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| <p>(VII) a maintenance agreement for the vegetated or natural area shall be filed with the Register of Deeds; and</p> <p>(VIII) cluster development that meets the applicable low density option requirements shall transport stormwater runoff from the development by vegetated conveyances to the maximum extent practicable;</p> <p>(E) A maximum of 10 percent of each jurisdiction's portion of the watershed outside of the critical area as delineated on July 1, 1993 may be developed with new development projects and expansions of existing development of up to 70 percent built-upon surface area in addition to the new development approved in compliance with the appropriate requirements of Sub-Item (3)(b)(i)(A) or Sub-Item (3)(b)(i)(B) of this Rule. For expansions to existing development, the existing built-upon surface area is not counted toward the allowed 70 percent built-upon surface area. A local government having jurisdiction within the watershed may transfer, in whole</p> | <p>or in part, its right to the 10 percent/70 percent land area to another local government within the watershed upon submittal of a joint resolution and review by the Commission.</p> <p>When the water supply watershed is composed of public lands, such as National Forest land, local governments may count the public land acreage within the watershed outside of the critical area in calculating the acreage allowed under this provision. For local governments that do not choose to use the high density option in that WS-II watershed, each project must, to the maximum extent practicable, minimize built-upon surface area, direct stormwater runoff away from surface waters and incorporate best management practices to minimize water quality impacts; if the local government selects the high density development option within that WS-II watershed, then engineered stormwater controls must be employed for the new development;</p> <p>(F) If local governments choose the high</p> |
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- density  
development option  
which requires  
stormwater  
controls, then they  
shall assume  
ultimate  
responsibility for  
operation and  
maintenance of the  
required controls as  
outlined in Rule  
.0104 of this  
Subchapter;
- (G) Minimum 100 foot  
vegetative buffer is  
required for all new  
development  
activities that  
exceed the low  
density option  
requirements as  
specified in  
Sub-Items  
(3)(b)(i)(A) and  
Sub-Item  
(3)(b)(ii)(A) of this  
Rule; otherwise a  
minimum 30 foot  
vegetative buffer  
for development  
activities is  
required along all  
perennial waters  
indicated on the  
most recent  
versions of  
U.S.G.S. 1:24,000  
(7.5 minute) scale  
topographic maps  
or as determined by  
local government  
studies; nothing in  
this Rule shall stand  
as a bar to artificial  
streambank or  
shoreline  
stabilization;
- (H) No new  
development is  
allowed in the  
buffer; water  
dependent  
structures, or other  
structures such as  
flag poles, signs  
and security lights,  
which result in only  
diminimus  
increases in
- impervious area  
and public projects  
such as road  
crossings and  
greenways may be  
allowed where no  
practicable  
alternative exists;  
these activities shall  
minimize  
built-upon surface  
area, direct runoff  
away from the  
surface waters and  
maximize the  
utilization of  
BMPs;
- (I) No NPDES permits  
shall be issued for  
landfills that  
discharge treated  
leachate;
- (ii) Critical Area Nonpoint  
Source and Stormwater  
Pollution Control Criteria:
- (A) Low Density  
Option: New  
development is  
limited to either no  
more than one  
dwelling unit of  
single family  
detached residential  
development per  
two acres (or  
80,000 square foot  
lot excluding  
roadway  
right-of-way) or six  
percent built-upon  
area for all other  
residential and  
non-residential  
development;  
Stormwater runoff  
from the  
development shall  
be transported by  
vegetated  
conveyances to the  
maximum extent  
practicable;
- (B) High Density  
Option: If new  
development  
density exceeds the  
low density  
requirements  
specified in  
Sub-Item

**PROPOSED RULES**

- (3)(b)(ii)(A) of this Rule, then engineered stormwater controls must be used to control runoff from the first inch of rainfall; new residential and non-residential development density not to exceed 24 percent built-upon area;
- (C) No new permitted sites for land application of residuals or petroleum contaminated soils are allowed;
- (D) No new landfills are allowed;
- (c) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;
- (d) Odor producing substances contained in sewage or other wastes: only such amounts, whether alone or in combination with other substances or wastes, as will not cause taste and odor difficulties in water supplies which cannot be corrected by treatment, impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class;
- (e) ~~Chlorinated~~ ~~phenolic~~ phenolic compounds: not greater than 1.0 ug/l (~~phenols~~) to protect water supplies from taste and odor problems from chlorinated phenols;
- (f) Total hardness: not greater than 100 mg/l as calcium carbonate;
- (g) Total dissolved solids: not greater than 500 mg/l;
- (h) Toxic and other deleterious substances:
- (i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for non-carcinogens in Class WS-II waters:
- (A) Barium: 1.0 mg/l;
- (B) Chloride: 250 mg/l;
- (C) Manganese: 200 ug/l;
- (D) Nickel: 25 ug/l;
- (E) Nitrate nitrogen: 10 mg/l;
- (F) 2,4-D: 100 ug/l;
- (G) 2,4,5-TP: TP (Silvex): 10 ug/l;
- (H) Sulfates: 250 mg/l;
- (ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for carcinogens in Class WS-II waters:
- (A) Aldrin: ~~0.127~~ 0.05 ng/l;
- (B) Arsenic: 10 ug/l;
- (C) Benzene: 1.19 ug/l;
- (D) Beryllium: ~~6.8~~ 7 ng/l;
- (E) Carbon tetrachloride: 0.254 ug/l;
- (F) Chlordane: ~~0.575~~ 0.8 ng/l;
- (G) Chlorinated benzenes: 488 ug/l;
- (H) DDT: ~~0.588~~ 0.2 ng/l;
- (I) Dieldrin: ~~0.1350~~ 0.05 ng/l;
- (J) Dioxin: ~~0.000013~~ 0.000005 ng/l;
- (K) Heptachlor: ~~0.208~~ 0.08 ng/l;
- (L) Hexachlorobutadiene: ~~0.445~~ 0.44 ug/l;
- (M) Polynuclear aromatic ~~hydrocarbons~~ hydrocarbons: total of all PAHs: 2.8 ng/l;
- (N) Tetrachloroethane (1,1,2,2): ~~0.172~~ 0.17 ug/l;
- (O) Tetrachloroethylene: ~~0.8~~ 0.7 ug/l;
- (P) Trichloroethylene: ~~3.08~~ 2.5 ug/l;
- (Q) Vinyl Chloride: ~~2~~ 0.025 ug/l.

Authority G.S. 143-214.1; 143-215.3(a)(1).

**15A NCAC 02B .0215 FRESH SURFACE WATER  
QUALITY STANDARDS FOR CLASS WS-III WATERS**



The following water quality standards apply to surface water supply waters that are classified WS-III. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section also apply to Class WS-III waters.

- (1) The best usage of WS-III waters are as follows: a source of water supply for drinking, culinary, or food-processing purposes for those users where a more protective WS-I or WS-II classification is not feasible and any other best usage specified for Class C waters.
- (2) The conditions related to the best usage are as follows: waters of this class are protected as water supplies which are generally in low to moderately developed watersheds and meet average watershed development density levels as specified in Sub-Items (3)(b)(i)(A), (3)(b)(i)(B), (3)(b)(ii)(A) and (3)(b)(ii)(B) of this Rule; discharges that qualify for a General Permit pursuant to 15A NCAC 2H .0127, trout farm discharges, recycle (closed loop) systems that only discharge in response to 10-year storm events, and other stormwater discharges are allowed in the entire watershed; treated domestic wastewater discharges are allowed in the entire watershed but no new domestic wastewater discharges are allowed in the critical area; no new industrial wastewater discharges except non-process industrial discharges are allowed in the entire watershed; the waters, following treatment required by the Division of Environmental Health, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes which are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500; sources of water pollution which preclude any of these uses on either a short-term or long-term basis shall be considered to be violating a water quality standard; the Class WS-III classification may be used to protect portions of Class WS-IV water supplies. For reclassifications of these portions of WS-IV water supplies occurring after the July 1, 1992 statewide reclassification, the more protective classification requested by local governments shall be considered by the Commission when all local governments having jurisdiction in the affected area(s) have adopted a resolution and the appropriate ordinances to protect the watershed or the Commission acts to protect a watershed when one or more local governments has failed to adopt necessary protection measures.
- (3) Quality standards applicable to Class WS-III Waters are as follows:
  - (a) Sewage, industrial wastes, non-process industrial wastes, or

other wastes: none except for those specified in Item (2) of this Rule and Rule .0104 of this Subchapter; and none which shall have an adverse effect on human health or which are not effectively treated to the satisfaction of the Commission and in accordance with the requirements of the Division of Environmental Health, North Carolina Department of Environment and Natural Resources; any discharger may be required by the Commission to disclose all chemical constituents present or potentially present in their wastes and chemicals which could be spilled or be present in runoff from their facility which may have an adverse impact on downstream water quality; these facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances;

(b) Nonpoint Source and Stormwater Pollution: none that would adversely impact the waters for use as water supply or any other designated use;

(i) Nonpoint Source and Stormwater Pollution Control Criteria For Entire Watershed:

(A) Low Density Option:  
Development density must be limited to either no more than two dwelling units of single family detached residential development per acre (or 20,000 square foot lot excluding roadway right-of-way) or 24 percent built-upon area for all other residential and non-residential development in watershed outside of the critical area; Stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;

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| <p>(B) High Density Option: If new development density exceeds the low density option requirements specified in Sub-Item (3)(b)(i)(A) of this Rule then development must control runoff from the first inch of rainfall; new residential and non-residential development shall not exceed 50 percent built-upon area;</p> |   | <p>areas and away, to the maximum extent practicable, from surface waters and drainageways;</p>   |
| <p>(C) Land within the watershed shall be deemed compliant with the density requirements if the following condition is met: The density of all existing development at the time of reclassification does not exceed the density requirement when densities are averaged throughout the entire watershed area;</p>         | <p>(V) remainder of tract to remain in vegetated or natural state;</p>  | <p>(VI) area in the vegetated or natural state may be conveyed to a property owners association; a local government for preservation as a park or greenway; a conservation organization; or placed in a permanent conservation or farmland preservation easement;</p> |
| <p>(D) Cluster development is allowed on a project-by-project basis as follows:</p>   | <p>(VII) a maintenance agreement for the vegetated or natural area shall be filed with the Register of Deeds; and</p>   | <p>(VIII) cluster development that meets the applicable low density option requirements shall transport stormwater runoff from the development by vegetated conveyances to the maximum extent practicable;</p>  |
| <p style="padding-left: 20px;">(I) overall density of the project meets associated density or stormwater control requirements of this Rule;</p>   | <p>(E) A maximum of 10 percent of each jurisdiction's portion of the watershed outside of the critical area as delineated on July 1, 1993 may be developed with new development projects and expansions of existing development of up to 70 percent built-upon surface area in addition to the new development approved in compliance with the appropriate requirements of Sub-Item (3)(b)(i)(A) or</p> |   |
| <p style="padding-left: 20px;">(II) buffers meet the minimum statewide water supply watershed protection requirements;</p>  |   |   |
| <p style="padding-left: 20px;">(III) built-upon areas are designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas; and maximize the flow length through vegetated areas;</p>                     |   |   |
| <p style="padding-left: 20px;">(IV) areas of concentrated development are located in upland</p>   |   |   |

Sub-Item (3)(b)(i)(B) of this Rule. For expansions to existing development, the existing built-upon surface area is not counted toward the allowed 70 percent built-upon surface area. A local government having jurisdiction within the watershed may transfer, in whole or in part, its right to the 10 percent/70 percent land area to another local government within the watershed upon submittal of a joint resolution and review by the Commission. When the water supply watershed is composed of public lands, such as National Forest land, local governments may count the public land acreage within the watershed outside of the critical area in figuring the acreage allowed under this provision. For local governments that do not choose to use the high density option in that WS-III watershed, each project must, to the maximum extent practicable, minimize built-upon surface area, direct stormwater runoff away from surface waters, and incorporate best management practices to minimize water quality impacts; if the local government selects the high density development option within that WS-III watershed, then engineered stormwater controls must be employed for the new development;

(F) If local governments choose the high density development option which requires engineered stormwater controls, then they shall assume ultimate responsibility for operation and maintenance of the required controls as outlined in Rule .0104 of this Subchapter;

(G) Minimum 100 foot vegetative buffer is required for all new development

activities that exceed the low density requirements as specified in Sub-Item (3)(b)(i)(A) and Sub-Item (3)(b)(ii)(A) of this Rule, otherwise a minimum 30 foot vegetative buffer for development is required along all perennial waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies; nothing in this Rule shall stand as a bar to artificial streambank or shoreline stabilization;

(H) No new development is allowed in the buffer; water dependent structures, or other structures such as flag poles, signs and security lights, which result in only diminimus increases in impervious area and public projects such as road crossings and greenways may be allowed where no practicable alternative exists; these activities shall minimize built-upon surface area, direct runoff away from surface waters and maximize the utilization of BMPs;

(I) No NPDES permits shall be issued for landfills that discharge treated leachate;

(ii) Critical Area Nonpoint Source and Stormwater Pollution Control Criteria:

(A) Low Density Option: New development limited to either no more than one dwelling unit of single family detached residential development per acre (or 40,000 square foot lot excluding roadway right-of-way) or 12 percent built-upon area for all other residential and non-residential development; Stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;

(B) High Density Option: If new development exceeds

- the low density requirements specified in Sub-Item (3)(b)(ii)(A) of this Rule, then engineered stormwater controls must be used to control runoff from the first inch of rainfall; development shall not exceed 30 percent built-upon area;
- (C) No new permitted sites for land application of residuals or petroleum contaminated soils are allowed;
- (D) No new landfills are allowed;
- (c) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;
- (d) Odor producing substances contained in sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or wastes, as shall not cause taste and odor difficulties in water supplies which cannot be corrected by treatment, impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class;
- (e) Chlorinated ~~Phenolic~~ phenolic compounds: not greater than 1.0 ug/l (~~phenols~~) to protect water supplies from taste and odor problems from chlorinated phenols;
- (f) Total hardness: not greater than 100 mg/l as calcium carbonate;
- (g) Total dissolved solids: not greater than 500 mg/l;
- (h) Toxic and other deleterious substances:
- (i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for non-carcinogens in Class WS-III waters:
- (A) Barium: 1.0 mg/l;
- (B) Chloride: 250 mg/l;
- (C) Manganese: 200 ug/l;
- (D) Nickel: 25 ug/l;
- (E) Nitrate nitrogen: 10 mg/l;
- (F) 2,4-D: 100 ug/l;
- (G) 2,4,5-TP (Silvex): 10 ug/l;
- (H) Sulfates: 250 mg/l;
- (ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for carcinogens in Class WS-III waters:
- (A) Aldrin: ~~0.1270~~ 0.05 ng/l;
- (B) Arsenic: 10 ug/l;
- (C) Benzene: 1.19 ug/l;
- (D) Beryllium: ~~6.87~~ 0.05 ng/l;
- (E) Carbon tetrachloride: 0.254 ug/l;
- (F) Chlordane: ~~0.5750~~ 0.8 ng/l;
- (G) Chlorinated benzenes: 488 ug/l;
- (H) DDT: ~~0.5880~~ 0.2 ng/l;
- (I) Dieldrin: ~~0.1350~~ 0.05 ng/l;
- (J) Dioxin: ~~0.0000130~~ 0.000005 ng/l;
- (K) Heptachlor: ~~0.2080~~ 0.08 ng/l;
- (L) Hexachlorobutadiene: ~~0.4450~~ 0.44 ug/l;
- (M) Polynuclear aromatic ~~hydrocarbons~~ hydrocarbons (total of all PAHs): 2.8 ng/l;
- (N) Tetrachloroethane (1,1,2,2): ~~0.1720~~ 0.17 ug/l;
- (O) Tetrachloroethylene: ~~0.80~~ 0.7 ug/l;
- (P) Trichloroethylene: ~~3.082~~ 2.5 ug/l;
- (Q) Vinyl Chloride: ~~20.025~~ 0.025 ug/l.

Authority G.S. 143-214.1; 143-215.3(a)(1).

#### **15A NCAC 02B .0216 FRESH SURFACE WATER QUALITY STANDARDS FOR WS-IV WATERS**

The following water quality standards apply to surface water supply waters that are classified WS-IV. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section also apply to Class WS-IV waters.

(1) The best usage of WS-IV waters are as follows: a source of water supply for drinking, culinary, or food-processing purposes for those users where a more protective WS-I, WS-II or

WS-III classification is not feasible and any other best usage specified for Class C waters.

(2) The conditions related to the best usage are as follows: waters of this class are protected as water supplies which are generally in moderately to highly developed watersheds or protected areas and meet average watershed development density levels as specified in Sub-Items (3)(b)(i)(A), (3)(b)(i)(B), (3)(b)(ii)(A) and (3)(b)(ii)(B) of this Rule. Discharges which qualify for a General Permit pursuant to 15A NCAC 02H .0127, trout farm discharges, recycle (closed loop) systems that only discharge in response to 10-year storm events, other stormwater discharges and domestic wastewater discharges shall be allowed in the protected and critical areas. Treated industrial wastewater discharges are allowed in the protected and critical areas; however, new industrial wastewater discharges in the critical area shall be required to meet the provisions of 15A NCAC 02B .0224(1)(b)(iv), (v) and (vii), and 15A NCAC 02B .0203. New industrial connections and expansions to existing municipal discharges with a pretreatment program pursuant to 15A NCAC 02H .0904 are allowed. The waters, following treatment required by the Division of Environmental Health, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes which are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500. Sources of water pollution which preclude any of these uses on either a short-term or long-term basis shall be considered to be violating a water quality standard. The Class WS-II or WS-III classifications may be used to protect portions of Class WS-IV water supplies. For reclassifications of these portions of WS-IV water supplies occurring after the July 1, 1992 statewide reclassification, the more protective classification requested by local governments shall be considered by the Commission when all local governments having jurisdiction in the affected area(s) have adopted a resolution and the appropriate ordinances to protect the watershed or the Commission acts to protect a watershed when one or more local governments has failed to adopt necessary protection measures.

(3) Quality standards applicable to Class WS-IV Waters are as follows:

- (a) Sewage, industrial wastes, non-process industrial wastes, or other wastes: none shall be allowed except for those specified in Item (2) of this Rule and Rule .0104 of this Subchapter and none shall be allowed which shall have an adverse effect on human health or which are not effectively treated to the satisfaction of the Commission and in accordance with the requirements of the Division of Environmental Health, North Carolina Department of Environment and Natural Resources. Any discharges or industrial users subject to pretreatment standards may be required by the Commission to disclose all chemical constituents present or potentially present in their wastes and chemicals which could be spilled or be present in runoff from their facility which may have an adverse impact on downstream water supplies.

These facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances;

- (b) Nonpoint Source and Stormwater Pollution: none shall be allowed that would adversely impact the waters for use as water supply or any other designated use.

- (i) Nonpoint Source and Stormwater Pollution Control Criteria For Entire Watershed or Protected Area:

- (A) Low Density Option: Development activities which require a Sedimentation/Erosion Control Plan in accordance with 15A NCAC 4 established by the North Carolina Sedimentation Control Commission or approved local government programs as delegated by the Sedimentation Control Commission shall be limited to no more than either: two dwelling units of single family detached development per acre (or 20,000 square foot lot excluding roadway right-of-way) or 24 percent built-upon on area for all other residential and non-residential development; or three dwelling units per acre or 36 percent built-upon area for projects without curb and gutter street systems in the protected area outside of the critical area; Stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;

- (B) High Density Option: If new development activities which require a Sedimentation/Erosion Control Plan exceed the low density requirements of Sub-Item (3)(b)(i)(A) of this Rule then development shall control the runoff from the first inch of rainfall; new residential and non-residential development shall not exceed 70 percent built-upon area;

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| <p>(C) Land within the critical and protected area shall be deemed compliant with the density requirements if the following condition is met: The density of all existing development at the time of reclassification does not exceed the density requirement when densities are averaged throughout the entire area;</p> <p>(D) Cluster development shall be allowed on a project-by-project basis as follows:</p> <p>(I) overall density of the project meets associated density or stormwater control requirements of this Rule;</p> <p>(II) buffers meet the minimum statewide water supply watershed protection requirements;</p> <p>(III) built-upon areas are designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas;</p> <p>(IV) areas of concentrated development are located in upland areas and away, to the maximum extent practicable, from surface waters and drainageways;</p> <p>(V) remainder of tract to remain in vegetated or natural state;</p> <p>(VI) area in the vegetated or natural state may be</p> | <p>conveyed to a property owners association; a local government for preservation as a park or greenway; a conservation organization; or placed in a permanent conservation or farmland preservation easement;</p> <p>(VII) a maintenance agreement for the vegetated or natural area shall be filed with the Register of Deeds, and;</p> <p>(VIII) cluster development that meets the applicable low density option requirements shall transport stormwater runoff from the development by vegetated conveyances to the maximum extent practicable;</p> <p>(E) If local governments choose the high density development option which requires engineered stormwater controls, then they shall assume ultimate responsibility for operation and maintenance of the required controls as outlined in Rule .0104 of this Subchapter;</p> <p>(F) Minimum 100 foot vegetative buffer is required for all new development activities that exceed the low density option requirements as specified in Sub-Item (3)(b)(i)(A) or Sub-Item (3)(b)(ii)(A) of this Rule, otherwise a minimum 30 foot vegetative buffer for development shall be required along all perennial waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as</p> |
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- determined by local government studies;
- (G) No new development shall be allowed in the buffer; water dependent structures, or other structures, such as flag poles, signs and security lights, which result in only diminimus increases in impervious area and public projects such as road crossings and greenways may be allowed where no practicable alternative exists; these activities shall minimize built-upon surface area, divert runoff away from surface waters and maximize the utilization of BMPs;
- (H) For local governments that do not use the high density option, a maximum of 10 percent of each jurisdiction's portion of the watershed outside of the critical area as delineated on July 1, 1995 may be developed with new development projects and expansions to existing development of up to 70 percent built-upon surface area in addition to the new development approved in compliance with the appropriate requirements of Sub-Item (3)(b)(i)(A) of this Rule. For expansions to existing development, the existing built-upon surface area shall not be counted toward the allowed 70 percent built-upon surface area. A local government having jurisdiction within the watershed may transfer, in whole or in part, its right to the 10 percent/70 percent land area to another local government within the watershed upon submittal of a joint resolution for review by the Commission. When the designated water supply watershed area is composed of public land, such as National Forest land, local governments may count the public land acreage within the designated watershed
- area outside of the critical area in figuring the acreage allowed under this provision. Each project shall, to the maximum extent practicable, minimize built-upon surface area, direct stormwater runoff away from surface waters and incorporate best management practices to minimize water quality impacts;
- (ii) Critical Area Nonpoint Source and Stormwater Pollution Control Criteria:
- (A) Low Density Option: New development activities which require a Sedimentation/Erosion Control Plan in accordance with 15A NCAC 4 established by the North Carolina Sedimentation Control Commission or approved local government programs as delegated by the Sedimentation Control Commission shall be limited to no more than two dwelling units of single family detached development per acre (or 20,000 square foot lot excluding roadway right-of-way) or 24 percent built-upon area for all other residential and non-residential development; Stormwater runoff from the development shall be transported by vegetated conveyances to the maximum extent practicable;
- (B) High Density Option: If new development density exceeds the low density requirements specified in Sub-Item (3)(b)(ii)(A) of this Rule engineered stormwater controls shall be used to control runoff from the first inch of rainfall; new residential and non-residential development shall not exceed 50 percent built-upon area;
- (C) No new permitted sites for land application of residuals or petroleum contaminated soils shall be allowed;

- (D) No new landfills shall be allowed;
- (c) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;
- (d) Odor producing substances contained in sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or waste, as will not cause taste and odor difficulties in water supplies which can not be corrected by treatment, impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class;
- (e) ~~Chlorinated Phenolic~~ phenolic compounds: not greater than 1.0 ug/l (~~phenols~~) to protect water supplies from taste and odor problems due to chlorinated phenols shall be allowed. Specific phenolic compounds may be given a different limit if it is demonstrated not to cause taste and odor problems and not to be detrimental to other best usage;
- (f) Total hardness shall not exceed 100 mg/l as calcium carbonate;
- (g) Total dissolved solids shall not exceed 500 mg/l;
- (h) Toxic and other deleterious substances:
- (i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for non-carcinogens in Class WS-IV waters shall be allowed as follows:
- (A) Barium: 1.0 mg/l;
- (B) Chloride: 250 mg/l;
- (C) Manganese: 200 ug/l;
- (D) Nickel: 25 ug/l;
- (E) Nitrate nitrogen: 10.0 mg/l;
- (F) 2,4-D: 100 ug/l;
- (G) 2,4,5-TP (Silvex): 10 ug/l;
- (H) Sulfates: 250 mg/l;
- (ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for carcinogens in Class WS-IV waters shall be allowed as follows:
- (A) Aldrin: ~~0.1270~~ 0.05 ng/l;
- (B) Arsenic: 10 ug/l;
- (C) Benzene: 1.19 ug/l;
- (D) Beryllium: ~~6.87~~ ng/l;
- (E) Carbon tetrachloride: 0.254 ug/l;
- (F) Chlordane: ~~0.5750~~ 0.8 ng/l;
- (G) Chlorinated benzenes: 488 ug/l;
- (H) DDT: ~~0.5880~~ 0.2 ng/l;
- (I) Dieldrin: ~~0.1350~~ 0.05 ng/l;
- (J) Dioxin: ~~0.0000130~~ 0.000005 ng/l;
- (K) Heptachlor: ~~0.2080~~ 0.08 ng/l;
- (L) Hexachlorobutadiene: ~~0.4450~~ 0.44 ug/l;
- (M) Polynuclear aromatic ~~hydrocarbons~~ hydrocarbons (total of all PAHs): 2.8 ng/l;
- (N) Tetrachloroethane (1,1,2,2): ~~0.1720~~ 0.17 ug/l;
- (O) Tetrachloroethylene: ~~0.80~~ 0.7 ug/l;
- (P) Trichloroethylene: ~~3.082~~ 2.5 ug/l;
- (Q) Vinyl Chloride: ~~20.025~~ 20 ug/l.

Authority G.S. 143-214.1; 143-215.3(a)(1).

#### **15A NCAC 02B .0218 FRESH SURFACE WATER QUALITY STANDARDS FOR CLASS WS-V WATERS**

The following water quality standards apply to surface water supply waters that are classified WS-V. Water quality standards applicable to Class C waters as described in Rule .0211 of this Section also apply to Class WS-V waters.

- (1) The best usage of WS-V waters are as follows: waters that are protected as water supplies which are generally upstream and draining to Class WS-IV waters or waters previously used for drinking water supply purposes or waters used by industry to supply their employees, but not municipalities or counties, with a raw drinking water supply source, although this type of use is not restricted to WS-V classification. Class WS-V waters are suitable



- for all Class C uses. The Commission may consider a more protective classification for the water supply if a resolution requesting a more protective classification is submitted from all local governments having land use jurisdiction within the affected watershed; no categorical restrictions on watershed development or wastewater discharges are required, however, the Commission or its designee may apply appropriate management requirements as deemed necessary for the protection of waters downstream of receiving waters (15A NCAC 2B .0203).
- (2) The conditions related to the best usage are as follows: waters of this class are protected water supplies; the waters, following treatment required by the Division of Environmental Health, shall meet the Maximum Contaminant Level concentrations considered safe for drinking, culinary, or food-processing purposes which are specified in the national drinking water regulations and in the North Carolina Rules Governing Public Water Supplies, 15A NCAC 18C .1500; sources of water pollution which preclude any of these uses on either a short-term or long-term basis shall be considered to be violating a water quality standard.
- (3) Quality standards applicable to Class WS-V Waters are as follows:
- (a) Sewage, industrial wastes, non-process industrial wastes, or other wastes: none which shall have an adverse effect on human health or which are not effectively treated to the satisfaction of the Commission and in accordance with the requirements of the Division of Environmental Health, North Carolina Department of Environment and Natural Resources; any discharges or industrial users subject to pretreatment standards may be required by the Commission to disclose all chemical constituents present or potentially present in their wastes and chemicals which could be spilled or be present in runoff from their facility which may have an adverse impact on downstream water supplies; these facilities may be required to have spill and treatment failure control plans as well as perform special monitoring for toxic substances;
  - (b) MBAS (Methylene-Blue Active Substances): not greater than 0.5 mg/l to protect the aesthetic qualities of water supplies and to prevent foaming;
  - (c) Nonpoint Source and Stormwater Pollution: none that would adversely impact the waters for use as water supply or any other designated use;
  - (d) Odor producing substances contained in sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or waste, as will not cause taste and odor difficulties in water supplies which can not be corrected by treatment, impair the palatability of fish, or have a deleterious effect upon any best usage established for waters of this class;
  - (e) ~~Phenolic~~Chlorinated ~~phenols~~ phenolic compounds: not greater than 1.0 ug/l (~~phenols~~) to protect water supplies from taste and odor problems due to chlorinated phenols; specific phenolic compounds may be given a different limit if it is demonstrated not to cause taste and odor problems and not to be detrimental to other best usage;
  - (f) Total hardness: not greater than 100 mg/l as calcium carbonate;
  - (g) Total dissolved solids: not greater than 500 mg/l;
  - (h) Toxic and other deleterious substances:
    - (i) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for non-carcinogens in Class WS-V waters:
      - (A) Barium: 1.0 mg/l;
      - (B) Chloride: 250 mg/l;
      - (C) Manganese: 200 ug/l;
      - (D) Nickel: 25 ug/l;
      - (E) Nitrate nitrogen: 10.0 mg/l;
      - (F) 2,4-D: 100 ug/l;
      - (G) 2,4,5-TP (Silvex): 10 ug/l;
      - (H) Sulfates: 250 mg/l.
    - (ii) Water quality standards (maximum permissible concentrations) to protect human health through water consumption and fish tissue consumption for carcinogens in Class WS-V waters:
      - (A) Aldrin: ~~0.427~~ 0.05 ng/l;
      - (B) Arsenic: 10 ug/l;

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| <p>(C) Benzene: 1.19 ug/l;<br/>         (D) Beryllium: <del>6.8</del> <u>7</u> ng/l;<br/>         (E) Carbon tetrachloride: 0.254 ug/l;<br/>         (F) Chlordane: <del>0.575</del> <u>0.8</u> ng/l;<br/>         (G) Chlorinated benzenes: 488 ug/l;<br/>         (H) DDT: <del>0.588</del> <u>0.2</u> ng/l;<br/>         (I) Dieldrin: <del>0.135</del> <u>0.05</u> ng/l;<br/>         (J) Dioxin: <del>0.000013</del> <u>0.000005</u> ng/l;<br/>         (K) Heptachlor: <del>0.208</del> <u>0.08</u> ng/l;<br/>         (L) Hexachlorobutadiene: <del>0.445</del> <u>0.44</u> ug/l;<br/>         (M) Polynuclear aromatic hydrocarbons: <del>hydrocarbons:</del> <u>hydrocarbons (total of all PAHs):</u> 2.8 ng/l;<br/>         (N) Tetrachloroethane (1,1,2,2): <del>0.172</del> <u>0.17</u> ug/l;<br/>         (O) Tetrachloroethylene: <del>0.8</del> <u>0.7</u> ug/l;<br/>         (P) Trichloroethylene: <del>3.08</del> <u>2.5</u> ug/l;<br/>         (Q) Vinyl Chloride: <del>2</del> <u>0.025</u> ug/l.</p> | <p>(3) Quality standards applicable to all tidal salt waters:</p> <p>(a) Chlorophyll a (corrected): not greater than 40 ug/l in sounds, estuaries, and other waters subject to growths of macroscopic or microscopic vegetation; the Commission or its designee may prohibit or limit any discharge of waste into surface waters if, in the opinion of the Director, the surface waters experience or the discharge would result in growths of microscopic or macroscopic vegetation such that the standards established pursuant to this Rule would be violated or the intended best usage of the waters would be impaired;</p> <p>(b) Dissolved oxygen: not less than 5.0 mg/l, except that swamp waters, poorly flushed tidally influenced streams or embayments, or estuarine bottom waters may have lower values if caused by natural conditions;</p> <p>(c) Floating solids; settleable solids; sludge deposits: only such amounts attributable to sewage, industrial wastes or other wastes, as shall not make the waters unsafe or unsuitable for aquatic life and wildlife, or impair the waters for any designated uses;</p> <p>(d) Gases, total dissolved: not greater than 110 percent of saturation;</p> <p>(e) <del>Organisms of coliform group: fecal coliforms not to exceed geometric mean of 200/100 ml (MF count) based upon at least five consecutive samples examined during any 30 day period; not to exceed 400/100 ml in more than 20 percent of the samples examined during such period; violations of the fecal coliform standard are expected during rainfall events and, in some cases, this violation is expected to be caused by uncontrollable nonpoint source pollution; all coliform concentrations are to be analyzed using the MF technique unless high turbidity or other adverse conditions necessitate the tube dilution method; in case of controversy over results the MPN 5 tube dilution method shall be used as the reference method; Enterococcus, including <i>Enterococcus faecalis</i>, <i>Enterococcus faecium</i>, <i>Enterococcus avium</i> and <i>Enterococcus gallinarum</i>: not to exceed a geometric mean of 35 enterococci per 100 ml based upon a</del></p> |
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Authority G.S. 143-214.1; 143-215.3(a)(1).

**15A NCAC 02B .0220 TIDAL SALT WATER QUALITY STANDARDS FOR CLASS SC WATERS**

General. The water quality standards for all tidal salt waters are the basic standards applicable to Class SC waters. Additional and more stringent standards applicable to other specific tidal salt water classifications are specified in Rules .0221 and .0222 of this Section.

- (1) Best Usage of Waters. Aquatic life propagation and maintenance of biological integrity (including fishing, fish and functioning PNAs), wildlife, secondary recreation, and any other usage except primary recreation or shellfishing for market purposes.
- (2) Conditions Related to Best Usage. The waters shall be suitable for aquatic life propagation and maintenance of biological integrity, wildlife, and secondary recreation; Any source of water pollution which precludes any of these uses, including their functioning as PNAs, on either a short-term or a long-term basis shall be considered to be violating a water quality standard.

- minimum of five samples within any consecutive 30 days. In accordance with 33 U.S.C. 1313 (Federal Water Pollution Control Act) for purposes of beach monitoring and notification, "Coastal Recreational Waters Monitoring, Evaluation and Notification" regulations (15A NCAC 18A .3400) are hereby incorporated by reference including any subsequent amendments;
- (f) Oils; deleterious substances; colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation or to aquatic life and wildlife or adversely affect the palatability of fish, aesthetic quality or impair the waters for any designated uses; for the purpose of implementing this Rule, oils, deleterious substances, colored or other wastes shall include but not be limited to substances that cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines pursuant to 40 CFR ~~140.4(a)-(b); 110.3;~~
  - (g) pH: shall be normal for the waters in the area, which generally shall range between 6.8 and 8.5 except that swamp waters may have a pH as low as 4.3 if it is the result of natural conditions;
  - (h) Phenolic compounds: only such levels as shall not result in fish-flesh tainting or impairment of other best usage;
  - (i) Radioactive substances:
    - (i) Combined radium-226 and radium-228: The maximum average annual activity level (based on at least four samples, collected quarterly) for combined radium-226, and radium-228 shall not exceed five picoCuries per liter;
    - (ii) Alpha Emitters. The average annual gross alpha particle activity (including radium-226, but excluding radon and uranium) shall not exceed 15 picoCuries per liter;
    - (iii) Beta Emitters. The maximum average annual activity level (based on at least four samples, collected quarterly) for strontium-90
  - (j) Salinity: changes in salinity due to hydrological modifications shall not result in removal of the functions of a PNA; projects that are determined by the Director to result in modifications of salinity such that functions of a PNA are impaired will be required to employ water management practices to mitigate salinity impacts;
  - (k) Temperature: shall not be increased above the natural water temperature by more than 0.8 degrees C (1.44 degrees F) during the months of June, July, and August nor more than 2.2 degrees C (3.96 degrees F) during other months and in no cases to exceed 32 degrees C (89.6 degrees F) due to the discharge of heated liquids;
  - (l) Turbidity: the turbidity in the receiving water shall not exceed 25 NTU; if turbidity exceeds this level due to natural background conditions, the existing turbidity level shall not be increased. Compliance with this turbidity standard can be met when land management activities employ Best Management Practices (BMPs) [as defined by Rule ~~.0202(6)~~.0202 of this Section] recommended by the Designated Nonpoint Source Agency (as defined by Rule .0202 of this Section). BMPs must be in full compliance with all specifications governing the proper design, installation, operation and maintenance of such BMPs;
  - (m) Toxic substances: numerical water quality standards (maximum permissible levels) to protect aquatic life applicable to all tidal saltwaters:
    - (i) Arsenic, total recoverable: 50 ug/l;
    - (ii) Cadmium: 5.0 ug/l;
 attainment of these water quality standards in surface waters shall be based on measurement of total recoverable metals
- shall not exceed eight picoCuries per liter; nor shall the average annual gross beta particle activity (excluding potassium-40 and other naturally occurring radio-nuclides) exceed 50 picoCuries per liter; nor shall the maximum average annual activity level for tritium exceed 20,000 picoCuries per liter;

- concentrations unless appropriate studies have been conducted to translate total recoverable metals to a toxic form. Studies used to determine the toxic form or translators must be designed according to the "Water Quality Standards Handbook Second Edition" published by the Environmental Protection Agency (EPA 823-B-94-005a) or "The Metals Translator: Guidance For Calculating a Total Recoverable Permit Limit From a Dissolved Criterion" published by the Environmental Protection Agency (EPA 823-B-96-007) which are hereby incorporated by reference including any subsequent amendments. The Director shall consider conformance to EPA guidance as well as the presence of environmental conditions that limit the applicability of translators in approving the use of metal translators.
- (iii) Chromium, total: 20 ug/l;
  - (iv) Cyanide: 1.0 ug/l;
  - (v) Mercury: 0.025 ug/l;
  - (vi) Lead, total recoverable: 25 ug/l; collection of data on sources, transport and fate of lead shall be required as part of the toxicity reduction evaluation for dischargers that are out of compliance with whole effluent toxicity testing requirements and the concentration of lead in the effluent is concomitantly determined to exceed an instream level of 3.1 ug/l from the discharge;
  - (vii) Nickel: 8.3 ug/l; attainment of these water quality standards in surface waters shall be based on measurement of total recoverable metals concentrations unless appropriate studies have been conducted to translate total recoverable metals to a toxic form. Studies used to determine the toxic form or translators must be designed according to the "Water Quality Standards Handbook Second Edition" published by the Environmental Protection Agency (EPA 823-B-94-005a) or "The Metals Translator: Guidance For Calculating a Total Recoverable Permit Limit From a Dissolved Criterion" published by the Environmental Protection Agency (EPA 823-B-96-007) which are hereby incorporated by reference including any subsequent amendments. The Director shall consider conformance to EPA guidance as well as the presence of environmental conditions that limit the applicability of translators in approving the use of metal translators.
- (viii) Pesticides:
    - (A) Aldrin: 0.003 ug/l;
    - (B) Chlordane: 0.004 ug/l;
    - (C) DDT: 0.001 ug/l;
    - (D) Demeton: 0.1 ug/l;
    - (E) Dieldrin: 0.002 ug/l;
    - (F) Endosulfan: 0.009 ug/l;
    - (G) Endrin: 0.002 ug/l;
    - (H) Guthion: 0.01 ug/l;
    - (I) Heptachlor: 0.004 ug/l;
    - (J) Lindane: 0.004 ug/l;
    - (K) Methoxychlor: 0.03 ug/l;
    - (L) Mirex: 0.001 ug/l;
    - (M) Parathion: 0.178 ug/l;
    - (N) Toxaphene: 0.0002 ug/l.
  - (ix) ~~Polychlorinated biphenyls:~~ Polychlorinated biphenyls: (total of all PCBs and congeners identified) 0.001 ug/l;
  - (x) Selenium: 71 ug/l;
  - (xi) Trialkyltin compounds: ~~0.0020,007~~ ug/l expressed as tributyltin.
- (4) Action Levels for Toxic Substances: if the Action Levels for any of the substances listed in this Subparagraph (which are generally not

bioaccumulative and have variable toxicity to aquatic life because of chemical form, solubility, stream characteristics or associated waste characteristics) are determined by the waste load allocation to be exceeded in a receiving water by a discharge under the specified low flow criterion for toxic substances (Rule .0206 in this Section), the discharger shall be required to monitor the chemical or biological effects of the discharge; efforts shall be made by all dischargers to reduce or eliminate these substances from their effluents. Those substances for which Action Levels are listed in this Subparagraph may be limited as appropriate in the NPDES permit if sufficient information (to be determined for metals by measurements of that portion of the dissolved instream concentration of the Action Level parameter attributable to a specific NPDES permitted discharge) exists to indicate that any of those substances may be a causative factor resulting in toxicity of the effluent. NPDES permit limits may be based on translation of the toxic form to total recoverable metals. Studies used to determine the toxic form or translators must be designed according to: "Water Quality Standards Handbook Second Edition" published by the Environmental Protection Agency (EPA 823-B-94-005a) or "The Metals Translator: Guidance For Calculating a Total Recoverable Permit Limit From a Dissolved Criterion" published by the Environmental Protection Agency (EPA 823-B-96-007) which are hereby incorporated by reference including any subsequent amendments. The Director shall consider conformance to EPA guidance as well as the presence of environmental conditions that limit the applicability of translators in approving the use of metal translators.

- (a) Copper: 3 ug/l;
- (b) Silver: 0.1 ug/l;
- (c) Zinc: 86 ug/l.

*Authority G.S. 143-214.1; 143-215.3(a)(1).*

**15A NCAC 02B .0221 TIDAL SALT WATER QUALITY STANDARDS FOR CLASS SA WATERS**

The following water quality standards apply to surface waters that are used for shellfishing for market purposes and are classified SA. Water quality standards applicable to Class SC and SB waters as described in Rule .0220 and Rule .0222 of this Section also apply to Class SA waters.

- (1) Best Usage of Waters. Shellfishing for market purposes and any other usage specified by the "SB" or "SC" classification;
- (2) Conditions Related to Best Usage. Waters shall meet the current sanitary and bacteriological standards as adopted by the

Commission for Health Services and shall be suitable for shellfish culture; any source of water pollution which precludes any of these uses, including their functioning as PNAs, on either a short-term or a long-term basis standard;

- (3) Quality Standards applicable to Class SA Waters:
  - (a) Floating solids; settleable solids; sludge deposits: none attributable to sewage, industrial wastes or other wastes;
  - (b) Sewage: none;
  - (c) Industrial wastes, or other wastes: none which are not effectively treated to the satisfaction of the Commission in accordance with the requirements of the Division of ~~Health Services~~ Environmental Health;
  - (d) Organisms of coliform group: fecal coliform group not to exceed a median MF of 14/100 ml and not more than 10 percent of the samples shall exceed an MF count of 43/100 ml in those areas most probably exposed to fecal contamination during the most unfavorable hydrographic and pollution conditions.

*Authority G.S. 143-214.1; 143-215.3(a)(1).*

**15A NCAC 02B .0222 TIDAL SALT WATER QUALITY STANDARDS FOR CLASS SB WATERS**

The following water quality standards apply to surface waters that are used for primary recreation, including frequent or organized swimming, and are classified SB. Water quality standards applicable to Class SC waters are described in Rule .0220 of this Section also apply to SB waters.

- (1) Best Usage of Waters. Primary recreation and any other usage specified by the "SC" classification;
- (2) Conditions Related to Best Usage. The waters shall meet accepted sanitary standards of water quality for outdoor bathing places as specified in Item (3) of this Rule and will be of sufficient size and depth for primary recreation purposes; any source of water pollution which precludes any of these uses, including their functioning as PNAs, on either a short-term or a long-term basis shall be considered to be violating a water quality standard;
- (3) Quality Standards applicable to Class SB waters:
  - (a) Floating solids; settleable solids; sludge deposits: none attributable to sewage, industrial wastes or other wastes;
  - (b) Sewage; industrial wastes; or other wastes: none which are not

effectively treated to the satisfaction of the Commission; in determining the degree of treatment required for such waters discharged into waters which are to be used for bathing, the Commission shall take into consideration quantity and quality of the sewage and other wastes involved and the proximity of such discharges to the waters in this class; discharges in the immediate vicinity of bathing areas may not be allowed if the Director determines that the waste can not be treated to ensure the protection of primary recreation;

- (c) ~~Organisms of coliform group: fecal coliforms not to exceed a geometric mean of 200/100 ml (MF count) based on at least five consecutive samples examined during any 30 day period and not to exceed 400/100 ml in more than 20 percent of the samples examined during such period.~~ Enterococcus, including *Enterococcus faecalis*, *Enterococcus faecium*, *Enterococcus avium* and *Enterococcus gallinarum*; not to exceed a geometric mean of 35 enterococci per 100 ml based upon a minimum of five samples within any consecutive 30 days. In accordance with 33 U.S.C. 1313 (Federal Water Pollution Control Act) for purposes of beach monitoring and notification, "Coastal Recreation Waters Monitoring, Evaluation and Notification" regulations (15A NCAC 18A .3400) are hereby incorporated by reference including any subsequent amendments.

Authority G.S. 143-214.1; 143-215.3(a)(1).

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**Notice** is hereby given in accordance with G.S. 150B-21.2 that the Water Pollution Control System Operator Certification Commission intends to adopt the rule cited as 15A NCAC 08G .0410, amend the rules cited as 15A NCAC 08G .0102, .0201 - .0205, .0301 - .0306, .0401 - .0409, .0501, .0503 - .0505, .0602 - .0603, .0701, .0801 - .0804, .1001, and repeal the rules cited as 15A NCAC 08G .0502, .0601, .0604, .0902, and .1101.

**Proposed Effective Date:** November 1, 2006

**Public Hearing:**

**Date:** July 18, 2006

**Time:** 10:00 am

**Location:** Archdale Building, Ground Floor Conference Room, 512 North Salisbury Street, Raleigh, NC

**Reason for Proposed Action:** *Revision of Rules Regulating Certification of Water Pollution Control System Operators and related Permit Owners is proposed to improve the rules and correct previous grammar and wording errors. Amendments are for clarification, language standardization, grammar corrections, updating terminology and to better reflect current regulatory needs and improve understanding of the rules. Rule .0410 "Reciprocity Certification" is proposed for adoption to replace Rule .0601 which is to be repealed. Section .0502 is to be repealed as it is redundant and unnecessary. Rule .0604 "Conversion of Voluntary Certificates" Section is to be repealed because there are no longer any voluntary certificates. Rule .0902 Annual Reports is to be repealed as these reports are no longer utilized. Section .1100 Administrative Duties is to be repealed as this is covered by NC General Statute 90A-42 and is not needed.*

**Procedure by which a person can object to the agency on a proposed rule:** *A person wishing to object to the proposed rule revision may do so by submitting written response to WPCSOCC at 1618 Mail Service Center, Raleigh, NC 27699-1618 or at a Public Hearing scheduled for July 18, 2006 in the Archdale Building Ground Floor Conference Room at 512 North Salisbury Street, Raleigh, NC 27604 beginning at 10:00 am.*

**Comments may be submitted to:** *Paul E. Rawls, Chairman, WPCSOCC, 1618 Mail Service Center, Raleigh, NC 27699-1618, fax (919) 733-1338, email jerry.rimmer@ncmail.net*

**Comment period ends:** September 1, 2006

**Procedure for Subjecting a Proposed Rule to Legislative Review:** If an objection is not resolved prior to the adoption of the rule, a person may also submit written objections to the Rules Review Commission. If the Rules Review Commission receives written and signed objections in accordance with G.S. 150B-21.3(b2) from 10 or more persons clearly requesting review by the legislature and the Rules Review Commission approves the rule, the rule will become effective as provided in G.S. 150B-21.3(b1). The Commission will receive written objections until 5:00 p.m. on the day following the day the Commission approves the rule. The Commission will receive those objections by mail, delivery service, hand delivery, or facsimile transmission. If you have any further questions concerning the submission of objections to the Commission, please call a Commission staff attorney at 919-733-2721.

**Fiscal Impact:**

- ☐ State
- ☐ Local
- ☐ Substantive ( $\geq$ \$3,000,000)
- ☒ None

**CHAPTER 08 - WATER POLLUTION CONTROL  
SYSTEM OPERATORS CERTIFICATION COMMISSION**

**SUBCHAPTER 08G - AUTHORITY: ORGANIZATION:  
STRUCTURE: DEFINITIONS**

**SECTION .0100 - GENERAL PURPOSE AND DEFINITIONS**

**15A NCAC 08G .0102 DEFINITIONS**

(a) "Activated sludge" shall mean a biological wastewater treatment process in which predominantly biodegradable pollutants in wastewater are absorbed, or adsorbed, by living aerobic organisms and bacteria in an aerated suspension which is separated from the treated wastewater gravimetrically.

(b) "Actual experience" shall mean the time working as a water pollution control system operator or operator in responsible charge. An operator is an individual whose principal job responsibility is the actual physical operation of process equipment and systems at a water pollution control system. Primary job responsibilities such as laboratory testing, facility and equipment maintenance, administrative support, or direct, or indirect, supervision do not qualify as actual experience.

(c) "Approved training" shall mean any training, required in order to be eligible for an examination or to meet continuing education requirements, ~~that has been approved by the Commission as established in accordance with 15A NCAC 08G .0400 and 15A NCAC 08G .0701.~~ The standards for approved training shall be developed by a committee consisting of representatives for training sponsors. DWQ staff, instructors and certified operators. The standards must be approved by the Commission and shall be known as "Water Pollution Control System Operator Certification Commission Training Course Standards" and/or "Needs to Know". These standards shall be developed by the appropriate committee for each certification type and grade.

(d) "Back-up ORC" shall mean Back-up Operator in Responsible Charge and refers to the operator who is designated to act as surrogate for the Operator in Responsible Charge (ORC) when the ORC is absent from their professional duties as set forth in G.S. 90A-44.

(e) "Basic sciences" shall mean courses in agronomy, biology, botany, chemistry, engineering, environmental health and sciences, geology, math, physics, soil science, and zoology offered by an accredited college or university.

~~(f) "Biological Nutrient Removal" shall mean the reduction of total nitrogen or total phosphorous by an activated sludge or fixed growth process.~~

~~(g)~~ (f) "Chemical process" shall mean a water pollution control system process consisting exclusively of the addition of chemicals to treat wastewaters.

~~(h)~~ (g) "Collection system" shall mean a continuous connection of pipelines, conduits, pumping stations and other related constructions or devices used to conduct wastewater to a water pollution control system.

~~(i)~~ (h) "Commission" shall mean the Water Pollution Control System Operators Certification Commission created by G.S. 143B-300.

~~(j)~~ (i) "Contact Hour" shall mean one hour of Commission approved operator instruction in accordance with 15A NCAC 8G .0701.

~~(k)~~ (j) "Contract operations firm" shall mean any commercial water pollution control system operations firm which contracts with the owner of a water pollution control system to provide operational services for the system pursuant to G.S. 90A-45(a).

~~(k)~~ "Contract operator" shall mean any certified water pollution control system operator who contracts with the owner of a water pollution control system to provide operational and other services for the system pursuant to G.S. 90A-45(a).

~~(m) "Currently valid certificate" shall mean the certificate of an operator that has all required renewal fees paid, all required continuing education training completed, and has not been revoked, relinquished, invalidated, or suspended.~~

~~(n)~~ (l) "Electrodialysis system" shall mean a system utilizing a selective separation of dissolved solids process that is based on electrical charge and diffusion through a semipermeable membrane.

~~(o)~~ (m) "Fixed growth" shall mean a biological wastewater treatment system in which the wastewater is treated by contact with a biological growth that is affixed to support media and includes systems such as trickling filters, rotating biological contactors, and biological tower treatment systems.

~~(p)~~ (n) "GED" shall mean general educational development in reference to a high school diploma equivalency.

(o) "Nutrient Reduction" shall mean the reduction of total nitrogen or total phosphorous by an activated sludge or fixed growth process.

(p) "Operator in Training (OIT)" shall mean the certificate issued, with Commission approval to an individual prior to the completion of the experience requirements for that level of certification.

(q) "Operator in Responsible Charge(ORC)" ~~"ORC"~~ shall mean the individual designated by a person, firm, or corporation (municipal or private) owning or having control of a water pollution control system as the operator of record of the water pollution control system and who has primary responsibility for the operation of such system as defined in G.S. 90A-46.

(r) "Owner" shall mean the person, firm, or corporation (municipal or private) owning or having control of a water pollution control system as described in G.S. 90A-44.

(s) "Passing score" shall mean earning 70 percent of the available points on an examination administered by the Commission.

(t) "Permanent certificate" shall mean the certificate of competency issued by the Commission to an individual as the result of the individual obtaining a passing score on an examination administered by the Commission, or a certificate issued by reciprocity agreement by the Commission, and is subject to the provisions of G.S. 90A-40(a).

(u) "Physical/Chemical system" shall mean any water pollution control system which utilizes a physical and/or a chemical process.

(v) "Physical process" shall mean any water pollution control system process consisting of electrodialysis, adsorption, absorption, air stripping, gravimetric sedimentation, flotation or filtration as the means of treatment.

(w) "Reciprocity certificate" shall mean a certificate issued of the appropriate type and grade without examination to any person who is properly registered on the "National Association of Boards of Certification" Reciprocity Register and who meets all other requirements of these Rules as set forth in G.S. 90A-40(b).

(x) "Regional office" shall mean one of the seven local offices of the Division of Water Quality located across the State.

(y) "Residuals" shall mean any solid or semisolid byproduct that is produced by the treatment of wastewater in a water pollution control system.

(z) "Reverse osmosis system" shall mean a system which utilizes solutions and semipermeable membranes to separate and treat wastewaters.

(aa) ~~"Satisfactory"~~ "Successful completion" shall mean the attendance of at least 80 percent of the approved ~~training~~ training for examination eligibility and 100 percent of training for continuing education.

(bb) "Temporary certificate" shall mean a certificate issued of an appropriate type and grade, without examination, to any person employed as a water pollution control system operator when the Commission finds that the supply of certified operators, or persons with the training and experience necessary for certification, is inadequate and the situation meets the requirements set forth in G.S. 90A-40(e).

(cc) "Ultrafiltration system" shall mean a system which utilizes a membrane filter process to remove pollutants from wastewater.

(dd) "Valid certificate" shall mean the certificate of an operator that has all required renewal fees paid, all required continuing education training completed, and has not been revoked relinquished, invalidated, or suspended.

~~(dd)~~(ee) "Water pollution control system" shall mean any system for the collection, treatment, or disposal of wastewater and is classified under the provisions of G.S. 90A-37.

*Authority G.S. 143B-300.*

## **SECTION .0200 - DUTIES AND RESPONSIBILITIES**

### **15A NCAC 08G .0201 REQUIREMENTS FOR CERTIFIED OPERATORS**

Owners of classified water pollution control systems shall designate operators, certified by the Water Pollution Control System Operators Certification Commission (WPCSOCC), of the appropriate type and grade for the system, and, for each system, must designate:

- (1) one Operator In Responsible Charge (ORC) who possesses a ~~currently~~ valid certificate of the type and grade at least equivalent to the type and grade of the system; and
- (2) one or more Back-up Operator(s) in Responsible Charge (Back-up ORCs) who possesses a ~~currently~~ valid certificate of the type of the system and no more than one grade less than the grade of the system, with the exception of ~~residential~~ no backup operator in responsible charge is required for systems whose minimum visitation requirements are twice per year with a design flow of less than 1,500 gallons per day.

*Authority G.S. 90A-37; 90A-38; 90A-39.*

### **15A NCAC 08G .0202 RESPONSIBILITIES OF SYSTEM OWNERS**

~~(a)~~ The owner of a classified water pollution control system must:

- (1) designate one Operator in Responsible Charge (ORC) and one or more Back-up Operator(s) in Responsible Charge (~~Back-up ORCs~~) ORCs, certified by the Commission, of the appropriate type and grade for the system as set forth in Rule .0201 of this Section; and
- (2) submit a ~~signed letter~~ completed Water Pollution Control System Operator Designation Form to the Commission (~~local or to the local health department~~ for owners of subsurface ~~systems~~); systems, countersigned by the designated certified operators, designating the Operator in Responsible Charge (ORC) and the Back-up Operator in Responsible Charge (Back-up ORC):
  - (a) 60 calendar days prior to wastewater or residuals being introduced into a new system; or
  - (b) within 120 calendar days following:
    - (i) receiving notification of a change in the classification of the system requiring the designation of a new Operator in Responsible Charge (ORC) and Back-up Operator in Responsible Charge (Back-up ORC) of the proper type and grade; or
    - (ii) a vacancy in the position of Operator in Responsible Charge (ORC) or Back-up Operator in Responsible Charge (Back-up ORC).
  - (c) within seven calendar days of vacancies in both ORC and Back-up ORC positions replacing or designating at least one of the responsibilities.

~~(b) Upon the vacancy of the Operator in Responsible Charge (ORC) position for a system, the owner of the system must notify the appropriate regional office of the Division of Water Quality (local health department for owners of subsurface systems) of the vacancy, within 10 working days. If the 10 day notification was not made in writing, then within 20 working days of the vacancy written notification must be submitted to the regional office.~~

*Authority G.S. 90A-37 through 90A-45.*

### **15A NCAC 08G .0203 RESPONSIBILITIES OF ALL CERTIFIED OPERATORS**

Certified operators shall:

- (1) comply with all terms and conditions of their certification as set forth in these Rules; ~~and~~
- (2) notify the Commission, in writing, within 30 calendar days of any changes in their mailing address; ~~and~~
- (3) be responsible for the renewal of their certification(s) as specified in Section .0700 of this Subchapter; and



- (4) comply with all statutes and rules regarding the operation of water pollution control systems.

*Authority G.S. 90A-40; 90A-41; 90A-42; 90A-44.*

**15A NCAC 08G .0204 RESPONSIBILITIES OF AN OPERATOR IN RESPONSIBLE CHARGE (ORC)**

An Operator in Responsible Charge (ORC) of a water pollution control system must:

- (1) possess a ~~currently~~ valid certificate of the appropriate type and grade for the system; ~~and~~
- (2) visit the system as often as is necessary to insure the proper operation of the system but in no case less frequently than specified in the following ~~schedule; schedule, unless otherwise specified in permit:~~
  - (a) biological grade I systems with the exception of Sub-item (2)(e) of this Rule; weekly;
  - (b) biological grade II, III, and IV systems, other than those systems specified in Sub-item(2)(f) of this Rule; five days per week, excluding ~~holidays; holidays and weekends unless otherwise specified in the permit;~~
  - (c) ~~spray-surface~~ irrigation systems with the exception of Sub-item (2)(e) of this Rule; weekly;
  - (d) collection systems; within 24 hours of knowledge of a bypass, spill, or overflow of wastewater from the system unless visited by a collection system Back-up Operator in Responsible Charge;
  - (e) domestic wastewater systems with a treatment capacity of 1500 gallons per day or less; twice per year with a six month interval between visits;
  - (f) domestic wastewater aerobic treatment units (ATUs) with a treatment capacity of 1500 gallons per day or less; weekly;
  - (g) systems permitted under rules adopted by the Commission for Health Services; as required by 15A NCAC 18A .1961;
  - (h) physical/chemical systems:
    - (i) grade I systems, including groundwater remediation systems; weekly;
    - (ii) grade II systems; five days per week, excluding ~~holidays; holidays and weekends unless otherwise specified in the permit;~~
  - (i) ~~systems not otherwise classified; as specified by the Commission based on the complexity of the system; and~~

- (i) ~~land application systems during application of residuals or within 48 hours of application of residuals;~~
- (j) ~~systems not otherwise classified; as specified by the Commission based on the complexity of the system;~~

- (3) operate and maintain the system efficiently and attempt to insure the compliance of the system with any permit(s) issued for the system as well as any other applicable local, state, and federal environmental permitting and regulatory requirements; ~~and~~
- (4) certify, by signature, as to the validity of all monitoring and reporting information performed on the system as prescribed in any permit issued for the system; ~~and~~
- (5) document the operation, maintenance, and all visitation of the system in a daily log that shall be maintained at the system; ~~and~~
- (6) notify the owner of the system in writing within five calendar days of first knowledge, of any:
  - (a) overflows from the system or any treatment process unit; ~~or~~
  - (b) bypasses of the system or any treatment process unit; ~~and~~
- (7) notify the owner, in writing, of the need for any system repairs and modifications that may be necessary to insure the compliance of the system with all local, state, and federal environmental permitting and regulatory requirements; ~~and~~
- (8) be available:
  - (a) for consultations with the system owner and regulatory officials; and
  - (b) to handle emergency situations; and
  - (c) to provide access to the facility by regulatory ~~agencies; agencies; and~~
- (9) upon vacating an ORC position, notify, in writing the Commission and the appropriate regional office of the Division of Water Quality (or the local health department for owners of subsurface systems) of the vacancy, within 14 calendar days.

*Authority G.S. 90A-37 through 90A-40; 90A-44.*

**15A NCAC 08G .0205 RESPONSIBILITIES OF A BACK-UP OPERATOR IN RESPONSIBLE CHARGE (BACK-UP ORC)**

The Back-up Operator in Responsible Charge (Back-up ORC):

- (1) may act as surrogate for the Operator in Responsible Charge (ORC), if ~~they~~ he/she ~~possess~~ possesses a currently-valid certificate of the appropriate type and grade for the system, for a period:
  - (a) not to exceed ~~2040~~ percent of the system visitations required per calendar year under Rule .0204(2) of this Section; or

- (b) not to exceed 120 consecutive calendar days when the Operator in Responsible Charge (ORC) is absent due to:
  - (i) the vacancy of the Operator in Responsible Charge (ORC) position; or
  - (ii) personal or familial illness; and
- (2) must fulfill all of the requirements of Rule .0204 of this Section when acting as surrogate for the Operator in Responsible Charge ~~(ORC)~~; and
- (3) upon vacating a Backup ORC position, notify in writing, the Commission and the appropriate regional office of the Division of Water Quality (or the local health department for owners of subsurface systems) of the vacancy within 14 calendar days.

*Authority G.S. 90A-37; 90A-44.*

### **SECTION .0300 - CLASSIFICATION OF WATER POLLUTION CONTROL SYSTEMS**

#### **15A NCAC 08G .0301 APPLICABILITY**

- (a) The purpose of this Section is to establish procedures for the classification of water pollution control systems.
- (b) Notwithstanding the requirements in Rules .0302 through .0307 of this Section, the Commission may modify the grade classification of a water pollution control system when:
  - (1) ~~special~~ conditions created by system design features, or inherent operational requirements, exist which make normal operation of the system more or less complex; ~~or~~
  - (2) upgrades or other modifications to a system are completed; or
  - (3) changes in Commission classification rules are made.
- (c) In-plant processes, and related water pollution control equipment which are integral parts of direct industrial production, shall not be considered water pollution control systems for the purpose of this Section.
- (d) Water Pollution Control Systems permitted under rules adopted by the Commission for Health Services shall be deemed classified pursuant to Rule .0307 of this Section.
- (e) Water Pollution Control Systems permitted under rules adopted by the Environmental Management Commission shall be classified by letter pursuant to Rules .0302 through .0308 of this Section.
- (f) Reservoirs, settling ponds and associated pumps and piping which are an integral part of closed-loop water recycle systems for the non-biological and non-toxic treatment of process water at sand, gravel, crushed stone and similar operations shall not be subject to the requirements of these Rules unless the Commission determines that the system is not being properly operated or maintained in accordance with permit conditions.
- (g) Any water pollution control system, regardless of type or ownership, may be classified and required to designate an Operator in Responsible Charge (ORC) and a Back-up Operator

in Responsible Charge (Back-up ORC), in the event that the Commission determines that the system is not being properly operated or maintained.

*Authority G.S. 90A-37.*

#### **15A NCAC 08G .0302 CLASSIFICATION OF BIOLOGICAL WATER POLLUTION CONTROL TREATMENT SYSTEMS**

- (a) The following discharging systems shall be assigned a classification of Grade I Biological Water Pollution Control System unless the permitted flow, or operational complexity of the ~~system~~, system requires a higher classification: ~~is sufficient to warrant special consideration by the Commission:~~
  - (1) septic tank/sand filter systems;
  - (2) biological lagoon systems; and
  - (3) constructed wetlands and associated appurtenances.
- (b) Systems that utilize an activated sludge or fixed growth process with a permitted flow less than or equal to 0.5 million gallons per day (mgd) shall be assigned the classification of Grade II Biological Water Pollution Control System.
- (c) Systems utilizing an activated sludge or fixed growth process with permitted flows of greater than 0.5 through 2.5 million gallons per day (mgd) shall be assigned the classification of Grade III Biological Water Pollution Control System.
- (d) Systems utilizing an activated sludge or fixed growth process with a permitted flow greater than 2.5 million gallons per day (mgd) shall be assigned a classification of Grade IV Biological Water Pollution Control System.
- (e) Any system receiving a classification of Grade II Biological Water Pollution Control System pursuant to Paragraph of this Rule, that is required to achieve ~~biological~~ nutrient reduction, shall be assigned the classification of Grade III Biological Water Pollution Control System.
- (f) Any system receiving a classification of Grade III Biological Water Pollution Control System pursuant to Paragraph of this Rule, that is required to achieve ~~biological~~ nutrient reduction, shall be assigned the classification of Grade IV Biological Water Pollution Control System.

*Authority G.S. 90A-37.*

#### **15A NCAC 08G .0303 CLASSIFICATION OF WATER POLLUTION CONTROL COLLECTION SYSTEMS**

- (a) Water pollution control collection systems operated to convey wastewater to water pollution control systems which are permitted or tributary to municipalities, regional water pollution control systems, water and sewer authorities, public utilities, or are a Grade II, III or IV state or federally owned system, shall be subject to classification in accordance with Rule .0303(b) of this Section. Any collection system, regardless of ownership, ~~may~~ shall be classified and required to designate an Operator in Responsible Charge (ORC) and a Back-up Operator in Responsible Charge (Back-up ORC) if the Commission determines that the system is not being operated and maintained in a manner which prevents the escape of wastewater from the system into the environment.
- (b) Collection systems shall be assigned ~~a classification the lower grade classification that is~~ is either:

- (1) the same as the grade of the biological water pollution control system to which the collection system is tributary; or
- (2) based on the population served by the collection system in accordance with the following ~~chart: chart, whichever provides the lower grade:~~
  - (A) 1,500 or less  
Grade I;
  - (B) 1,501 to 15,000  
Grade II;
  - (C) 15,001 to 50,000  
Grade III;
  - (D) 50,001 or more  
Grade IV.

In the event that the population served cannot be determined, the equivalent population served shall be calculated by using the design flow of the system divided by a flow of 60 gallons per day per person.

*Authority G.S. 90A-37.*

**15A NCAC 08G .0304 CLASSIFICATION OF SURFACE IRRIGATION WATER POLLUTION CONTROL SYSTEMS**

- (a) Systems which utilize ~~spray surface~~ irrigation for the ~~treatment~~ reuse or disposal of wastewater shall be classified as ~~spray surface~~ irrigation water pollution control systems. Those systems which contain only preliminary treatment processes such as septic tanks, sand filters, oil/water separators, lagoons, storage basins, physical screening, or sedimentation processes shall not be subject to additional operator requirements as specified in Rule .0302 or .0306 of this Section.
- (b) Any ~~spray surface~~ irrigation system that has, as part of its treatment process, systems other than those specified in Paragraph (a) of this Rule, shall be subject to additional ~~classification~~ ~~classification as is deemed necessary by the Commission.~~

*Authority G.S. 90A-37.*

**15A NCAC 08G .0305 CLASSIFICATION OF LAND APPLICATION OF RESIDUALS SYSTEMS**

Systems permitted ~~and dedicated~~ for the land application of:

- (1) residuals that are produced by a water pollution control system; or
- (2) contaminated soils;

shall be classified as a land application of residuals system.

*Authority G.S. 90A-37.*

**15A NCAC 08G .0306 CLASSIFICATION OF PHYSICAL/CHEMICAL WATER POLLUTION CONTROL TREATMENT SYSTEMS**

- (a) Any water pollution control system, including systems designed for the remediation of contaminated groundwater, that utilizes a primarily physical process to treat ~~wastewaters~~ ~~wastewaters, with the exception of reverse osmosis, electrodialysis, and ultrafiltration systems,~~ shall be classified as a Grade I Physical/Chemical Water Pollution Control System.

- (b) Any water pollution control system that utilizes a primarily chemical process to treat wastewaters, including those systems whose treatment processes are augmented by physical processes, shall be classified as a Grade II Physical/Chemical Water Pollution Control System. Reverse osmosis, electrodialysis, and ultrafiltration systems shall be classified as Grade II Physical/Chemical Water Pollution Control System.
- (c) Any water pollution control system that has, as part of its treatment process, a biological water pollution control system ~~that may be classified under Rule .0302 of this Section~~ shall be subject to additional classification as a biological water pollution control system.
- (d) Any water pollution control system subject to classification under Rule .0302 of this Section, utilizing a physical or chemical process to enhance an activated sludge or fixed growth process, shall not be subject to additional classification under this Rule.

*Authority G.S. 90A-37.*

**SECTION .0400 - ELIGIBILITY REQUIREMENTS FOR EXAMINATIONS**

**15A NCAC 08G .0401 GENERAL REQUIREMENTS**

- (a) An applicant for certification as an operator of a water pollution control system must meet the following criteria and possess the knowledge and abilities listed as they relate to the specific type of system for which certification is being sought and shall, at a minimum, include:

- (1) ~~possess~~ a high school diploma or a general educational development (GED) equivalent; ~~and~~
- (2) be at least 18 years of age; ~~and~~
- (3) have a general knowledge of typical wastewater characteristics and treatment processes; and
- (4) ~~have~~ the ability to:
  - (A) read and understand the statutes and rules which govern water pollution control system operators and the operation of the type of system for which certification is being sought; ~~and~~
  - (B) perform mathematical calculations required to operate the system for which certification is being sought; ~~and~~
  - (C) complete and maintain logs and regulatory reporting forms required to document the proper operation of the system; and
  - (D) ~~a knowledge of safely and effectively~~ operate the equipment employed in the ~~operation of the~~ type of system for which certification is being sought ~~along with the ability~~ and to describe the general maintenance requirements for such equipment.

- (b) An applicant who has failed to achieve a passing score on a specific type and grade of examination after three consecutive attempts must:

- (1) attend, and ~~satisfactorily complete,~~  
~~successfully complete a approved training~~  
~~program sponsored or co-sponsored by the~~  
~~Commission of for~~ the same type and grade as  
the certification being sought; and
- (2) provide verification, in the form of a certificate  
of completion or other such documentation, of  
the ~~satisfactory~~successful completion of the  
required training with any subsequent  
application made to the Commission to sit for  
the examination.

(c) An applicant for certification shall not have had any  
certification revoked by the Commission within the ~~730 calendar~~  
~~days two - year~~ period prior to the date of the application for  
certification.

(d) An applicant for certification shall not be allowed to sit for  
any examination offered by the Commission during the period of  
a suspension of any certification held by the applicant with the  
Commission.

(e) An applicant ~~that~~ who holds a valid biological or collection  
certification of any level on April 1, 1999, may progress to the  
highest level of certification of the same type without meeting  
the requirements of Subparagraph (a)(1) of this Rule.

*Authority G.S. 90A-39.*

**15A NCAC 08G .0402 ELIGIBILITY REQUIREMENTS  
FOR BIOLOGICAL WATER POLLUTION CONTROL  
SYSTEM OPERATORS**

Eligibility for certification as a Biological Water Pollution  
Control System Operator shall be based on the following  
qualifications:

- (1) for Grade I certification, the applicant must:  
have successfully completed ~~a training school~~  
~~sponsored or co-sponsored by approved~~  
~~training the Commission for~~ Grade I  
Biological Water Pollution Control System  
operators.
- (2) for Grade II certification, the applicant must:
  - (a) hold a valid North Carolina Grade I  
Biological Water Pollution Control  
System Operator certificate;
  - ~~(a)(b)~~ have 6 months of actual experience at  
a Grade II, or higher, biological water  
pollution control system; and
  - ~~(b)(c)~~ have successfully completed a  
~~training school sponsored or co-~~  
~~sponsored by approved training the~~  
~~Commission for~~ Grade II Biological  
Water Pollution Control System  
operators.
- (3) for Grade III certification, the applicant must:
  - (a) hold a ~~currently~~ valid North Carolina  
Grade II Biological Water Pollution  
Control System Operator certificate;  
and
  - (b) have successfully completed a  
~~training school sponsored or co-~~  
~~sponsored approved training by the~~  
~~Commission for~~ Grade III Biological

Water Pollution Control System  
operators; and

- (i) have two years of actual  
experience at a Grade II, or  
higher, biological water  
pollution control system, or
- (ii) be a graduate of two or four  
year college or university  
and have taken, and passed,  
a minimum of six courses in  
the basic sciences and have  
18 months of actual  
experience at a Grade II, or  
higher, biological water  
pollution control system.

(4) for Grade IV certification, the applicant must:

- (a) hold a ~~currently~~ valid North Carolina  
Grade III Biological Water Pollution  
Control System Operator certificate;  
and
- (b) have successfully completed a  
~~training school sponsored or co-~~  
~~sponsored approved training by the~~  
~~Commission for~~ Grade IV Biological  
Water Pollution Control System  
operators; and
  - (i) have three years of actual  
experience at a Grade III, or  
higher, biological water  
pollution control system, or
  - (ii) be a graduate of a two or  
four year college or  
university and have taken,  
and passed, a minimum of  
six courses in the basic  
sciences and have two years  
of actual experience at a  
Grade III, or higher,  
biological water pollution  
control system.

*Authority G.S. 90A-39.*

**15A NCAC 08G .0403 ELIGIBILITY REQUIREMENTS  
FOR WATER POLLUTION CONTROL COLLECTION  
SYSTEM OPERATORS**

Eligibility for certification as a Water Pollution Control  
Collection System Operator shall be based on the following  
qualifications:

- (1) for Grade I certification, the applicant must:  
have successfully completed ~~a training school~~  
~~sponsored or co-sponsored approved training~~  
~~by the Commission for~~ Grade I water pollution  
control collection system operators.
- (2) for Grade II certification, the applicant must:
  - (a) hold a ~~currently~~ valid North Carolina  
Grade I Water Pollution Control  
Collection System Operator  
certificate; and

- (b) have six months of actual experience in water pollution control collection system operations; and
  - (c) have successfully completed a ~~training school sponsored or co-sponsored by the Commission~~ approved training for Grade II water pollution control collection system operators.
- (3) for Grade III certification, the applicant must:
- (a) hold a ~~currently~~-valid North Carolina Grade II Water Pollution Control Collection System Operator certificate; and
  - (b) have successfully completed a ~~training school sponsored or co-sponsored by the Commission~~ approved training for Grade III water pollution control collection system operators; and
    - (i) have two years of actual experience in water pollution control collection system operations, or
    - (ii) be a graduate of a two or four year college or university and have taken, and passed, a minimum of six courses in a field directly related to the ~~construction, operation, and/or maintenance~~ operation and maintenance of a collection system, e.g. civil, mechanical, or environmental engineering, and have one year of actual experience in the operation of a water pollution control collection system.
- (4) for Grade IV certification, the applicant must:
- (a) hold a ~~currently~~-valid North Carolina Grade III Water Pollution Control Collection System Operator certificate; and
  - (b) have successfully completed a ~~training school sponsored or co-sponsored by the Commission~~ approved training for Grade IV water pollution control collection system operators; and
    - (i) have three years of actual experience in water pollution control collection system operations, or
    - (ii) be a graduate of a two or four year college or university and have taken, and passed, a minimum of six courses in a field directly
- related to the operation and maintenance of a collection system, e.g. civil, mechanical, or environmental engineering, and have two years of actual experience in the operation of a water pollution control collection system.
- Authority G.S. 90A-39.*
- 15A NCAC 08G .0404 ELIGIBILITY REQUIREMENTS FOR LAND APPLICATION OF RESIDUALS OPERATORS**
- An applicant for certification as a Land Application of Residuals Operator shall have ~~satisfactorily~~ successfully completed a ~~land application of residuals operator training school sponsored or co-sponsored by the Commission and~~ approved training for land application of residuals operators and:
- (1) have one year of actual experience in the land application of residuals; ~~or~~
  - (2) be a graduate of a two or four year college, or university, and have taken, and passed, a minimum of six courses in the basic sciences; or
  - (3) hold a valid grade III or higher biological water pollution control system operator certification.
- Authority G.S. 90A-39.*
- 15A NCAC 08G .0405 ELIGIBILITY REQUIREMENTS FOR PHYSICAL/CHEMICAL WATER POLLUTION CONTROL SYSTEM OPERATORS**
- ~~(a)~~—Eligibility for certification as a Physical/Chemical Water Pollution Control System Operator shall be based on the following qualifications:
- (1) for the Grade I have successfully completed a ~~training school sponsored or co-sponsored by the Commission~~ approved training for Grade I Physical/Chemical Water Pollution Control System Operators.
  - (2) for the Grade II:
    - (a) possess a ~~currently~~-valid Grade I Physical/Chemical Water Pollution Control System Operator certificate; ~~and~~
    - (b) have one year of actual experience at a Grade II Physical/Chemical Water Pollution Control System; and
    - (c) have successfully completed a ~~training school sponsored or co-sponsored by the Commission~~ approved training for Grade II Physical/Chemical Water Pollution Control System Operators.
- ~~(b) Individuals working at physical/chemical water pollution control systems as of the effective date of this Rule and holding a valid Grade I, II, III, IV wastewater treatment plant operator~~

~~certification, may apply for a conditional physical/chemical certificate without examination once the requirements of this Paragraph (a) of this Rule are met. For operators applying for a conditional Grade II physical/chemical certification, a Grade I physical/chemical certificate is not required. This conditional certificate allows the bearer to act as the Operator in Responsible Charge (ORC) or Back-up Operator in Responsible Charge (Back-up ORC) of that system only. This conditional certificate must be renewed per Section .0700 of this Subchapter.~~

*Authority G.S. 90A-39.*

**15A NCAC 08G .0406 ELIGIBILITY REQUIREMENTS FOR SPRAY IRRIGATION WATER POLLUTION CONTROL SYSTEM OPERATORS**

~~An applicant for certification as a Spray Surface Irrigation Water Pollution Control System Operator shall have satisfactorily successfully completed a spray irrigation water pollution control system operator training school sponsored or co-sponsored by the Commission and approved training for surface irrigation water pollution control system operators and:~~

- ~~(1) have one year of actual experience in the operation of a spray surface irrigation water pollution control system; ~~or~~~~
- ~~(2) be a graduate of a two or four year college or university and have taken, and passed, a minimum of six courses in the basic sciences; ~~or~~~~
- ~~(3) be a private homeowner who intends to operate only ~~their~~ his/her own domestic spray irrigation water pollution control system; or~~
- ~~(4) hold a valid grade III or higher biological water pollution control system operator certification.~~

*Authority G.S. 90A-39.*

**15A NCAC 08G .0407 ELIGIBILITY REQUIREMENTS FOR SUBSURFACE WATER POLLUTION CONTROL SYSTEM OPERATORS**

~~An applicant for certification as a Subsurface Water Pollution Control System Operator shall have successfully completed a subsurface water pollution control system operator training school sponsored or co-sponsored by the Commission approved training for subsurface water pollution controls system operator and:~~

- ~~(1) have one year of actual experience in the operation of a subsurface water pollution control system; ~~or~~~~
- ~~(2) be a graduate of a two or four year college or university and have taken, and passed, a minimum of six courses in the basic sciences; ~~or~~~~
- ~~(3) be a private homeowner who intends to operate only ~~their~~ his/her own domestic subsurface water pollution control system; or~~
- ~~(4) hold a valid grade III or higher biological water pollution control system operator certification.~~

*Authority G.S. 90A-39.*

**15A NCAC 08G .0408 ELIGIBILITY REQUIREMENTS FOR OPERATOR IN TRAINING (OIT) CERTIFICATION**

- (a) The Commission may allow an applicant for any water pollution control system operator certificate to take the examination if the individual has met all of the prerequisite education and certification requirements but is unable to meet the actual experience requirement.
- (b) Upon achieving a passing score on the examination, the applicant shall be issued an Operator In Training (OIT) certificate of the same type and grade as the examination.
- (c) ~~The Operator In Training (OIT) certificate does not qualify the applicant to~~ shall not be designated as the Operator in Responsible Charge (ORC) or Back-up Operator In Responsible Charge (Back-Up ORC) of a system.
- (d) Operator In Training (OIT) certificates shall be renewed annually as stipulated in 15A NCAC 8G .0701.
- (e) When the holder of an Operator in Training (OIT) certificate completes the prerequisite experience for the permanent certificate at that type and level, the holder must submit an application documenting the experience, with the appropriate fee for a replacement certificate in order to receive the permanent certificate at that level.

*Authority G.S. 90A-39.*

**15A NCAC 08G .0409 ELIGIBILITY REQUIREMENTS FOR CONDITIONAL WATER POLLUTION CONTROL SYSTEM OPERATORS**

~~An applicant for certification as a Conditional Water Pollution Control System Operator must successfully complete a training school sponsored or co-sponsored by the Commission for the operation of the water pollution control system. Individuals holding Conditional Certificates shall remain valid contingent upon meeting renewal requirements as found in Section .0700 of this Subchapter.~~

*Authority G.S. 90A-39.*

**15A NCAC 08G .0410 RECIPROCITY CERTIFICATION**

- (a) The Commission shall issue certification(s) to individuals certified in other States or legal jurisdictions if the individuals:
  - (1) meet or exceed all eligibility requirements or the equivalent thereof as determined by the Commission as found in Rules .0302 to .0308 of the Section, with the exception of completion of approved training,
  - (2) complete Application for Reciprocity Form and submit with the appropriate non-refundable fee as specified in G.S. 90A-42,
  - (3) provide a letter of verification from certifying State agency that applicant is certified at stated level and that no disciplinary actions are outstanding against the applicant, and
  - (4) apply for and achieve a passing score on a Commission-administered examination of the same type and grade as that for which reciprocity certification is being requested.

The requirement for completion of approved training is waived in the case of applicants pursuant to this Rule.

(b) Applicants pursuant to this Rule must not have taken and failed to achieve a passing score on a Commission-administered examination of the same type and grade as that for which reciprocity certification is being requested, within the previous two year period prior to the date of application for reciprocity.

(c) Applicants failing to achieve a passing score on three or more examinations of the same type and grade as that for which certification is being requested, shall successfully complete approved training for that certification before being eligible for that examination.

(d) Applicants who obtain certification by providing false information to the Commission shall be subject to disciplinary actions as set forth in Section .0800 of this Subchapter.

*Authority G.S. 90A-40; 90A-42.*

## **SECTION .0500 - CERTIFICATION BY EXAMINATION**

### **15A NCAC 08G .0501 APPLYING FOR EXAMINATION**

(a) All applications for examination submitted to the Commission must be:

- (1) submitted on an ~~application form~~ WPCSOCC Examination Application; and
- (2) accompanied by the appropriate ~~non-refundable application fee; fee per G.S. 90A-42; and~~
- (3) completed in entirety with all required information, documentation, and signatures provided; and
- (4) postmarked at least 30 days prior to the scheduled date of the examination.

(b) Upon receipt of an application by the Commission, the application shall be reviewed for completeness and a determination as to the eligibility of the applicant to sit for the requested examination ~~will~~ shall be made. Incomplete applications shall be returned to the applicant.

(c) Each applicant shall be notified, in writing, of ~~their~~ the applicant's eligibility to sit for the requested examination. Individuals determined to be eligible for an examination shall ~~receive~~ be sent written notification containing information concerning the date, time and location of the examination. This written notification shall be considered a receipt from the Commission to the applicant for the examination fee. Applicants found to be ineligible for an examination shall ~~receive~~ be sent written notification of the ineligibility determination.

(d) Any applicant who obtains certification by supplying false information to the Commission shall be subject to disciplinary action(s) as set forth in Section .0800 of this Subchapter.

*Authority G.S. 90A-39; 90A-41; 90A-42.*

### **15A NCAC 08G .0502 INELIGIBLE APPLICANTS**

~~(a) Any applicant who is found to be ineligible for an examination shall be notified, in writing, of the ineligibility determination. Upon receiving notification of the ineligibility determination, the applicant may submit additional information~~

~~if they feel that the additional information will change their eligibility for the examination. Additional information submitted must be received by the Commission at least 15 calendar days prior to the scheduled date of the examination. After the additional information is received and reviewed, the applicant shall be notified, in writing, of the final decision as to their eligibility for the requested examination.~~

~~(b) Upon receiving notification of ineligibility for an examination, an applicant may request a review of the ineligibility determination by the Commission. Such a request must be submitted to the Commission in writing. Once the request is received, the applicant shall be notified, by certified mail, of the date, time, and location of the Commission meeting at which the ineligibility determination will be reviewed. This notification shall be sent at least 15 days prior to the scheduled meeting of the Commission. The results of the review of the ineligibility determination by the Commission shall be submitted to the applicant in writing and this decision shall be considered final.~~

*Authority G.S. 90A-39.*

### **15A NCAC 08G .0503 EXAMINATION ADMINISTRATION**

(a) The Commission shall set the dates, times, and locations for all examinations.

(b) ~~Additional examinations~~ Examinations may be administered by the Commission at any time, or at any location, when a sufficient number of applications have been received to warrant such an examination.

(c) Before each applicant receives ~~his/her~~ an examination paper, ~~he/she~~ an applicant shall ~~identify themselves by way of display~~ a valid driver's license, photo identification or other form of ~~photo~~ identification satisfactory to the proctor.

*Authority G.S. 90A-39.*

### **15A NCAC 08G .0504 EXAMINATION GRADING**

(a) A passing score on any examination administered by the Commission is achieved by earning a minimum of 70 percent of the available points on the examination.

(b) Each applicant, and only the applicant, shall be notified, in writing, of ~~their~~ the results on an examination.

(c) If a passing score is attained by an applicant on an examination, the written notification to the applicant shall constitute the certification of the applicant as an operator or operator in training of a water pollution control system of the same type and grade as the examination.

*Authority G.S. 90A-39; 90A-40.*

### **15A NCAC 08G .0505 EXAMINATION REVIEWS**

(a) Any applicant that fails to make a passing score on an examination may request to review the examination. All requests to review an examination must be ~~submitted~~ received by ~~to~~ the Commission in writing within 15 calendar days of receiving notification of failing to make a passing score on an examination. ~~Only those applicants who fail to make a passing score on an examination will be allowed to review their examination.~~

(b) Applicants who submit a written request to review an examination shall be notified of a date, time, and location at which the applicant shall be given the opportunity to review ~~their~~ the examination. This shall be the only opportunity the applicant will be allowed for reviewing ~~their~~ the examination.

(c) ~~Under no circumstances shall an~~ An applicant shall not be allowed to review ~~their~~ the examination within 30 calendar days of an upcoming examination date.

*Authority G.S. 90A-39.*

## **SECTION .0600 - CERTIFICATION WITHOUT EXAMINATION**

### **15A NCAC 08G .0601 RECIPROCITY CERTIFICATION**

~~(a) The Commission may issue certification without examination to individuals listed on the National Association of Boards of Certification (ABC) Reciprocity Register who possess certification of the same type and grade as those certifications offered by the Commission.~~

~~(b) All requests for reciprocity certification must be submitted on an approved application form and must be accompanied by the required fee and proof of listing on the ABC Reciprocity Register. Upon receipt of a reciprocity certificate application, a copy of the rules which govern certified water pollution control system operators, along with a copy of a Commission approved Statement of Understanding agreement, shall be forwarded to the applicant. The applicant must return the signed, notarized Statement of Understanding agreement verifying that they have read and are familiar with the rules which govern certified water pollution control system operators.~~

~~(c) A reciprocity certificate shall be issued to the applicant upon receipt of the notarized Statement of Understanding by the Commission. Failure to complete and submit a notarized Statement of Understanding shall result in the request for reciprocity being denied.~~

~~(d) Applicants for reciprocity certification shall not have taken and failed to achieve a passing score on a Commission-administered examination, of the same type and grade as that for which reciprocity certification is being requested, within the previous 24 month period prior to the date of the application for reciprocity certification.~~

~~(e) Applicants who obtain reciprocity certification by providing false information to the Commission shall be subject to disciplinary action(s) as set forth in Section .0800 of this Subchapter.~~

*Authority G.S. 90A-40; 90A-42.*

### **15A NCAC 08G .0602 TEMPORARY CERTIFICATES**

(a) Temporary certificates, of any type and grade, may be issued by the Commission to the operator of a water pollution control system, for a period not to exceed one year, due to:

- (1) the ~~unexpected~~ vacancy of the Operator in Responsible Charge (ORC) or the Back-up Operator in Responsible Charge (Back-up ORC); ~~or~~
- (2) the suspension or revocation of the certification of the Operator in Responsible

Charge (ORC) or the Back-up Operator in Responsible Charge (Back-up ORC); ~~or~~

- (3) a change in the classification of the system due to the completion of an upgrade or expansion, or permit modification; or
- (4) a modification to Commission rules.

(b) Temporary Certificates shall only be issued for the Operator in Responsible Charge (ORC) or the Back-up Operator in Responsible Charge (Back-up ORC) of the system specified on the application.

(c) All applications for a temporary certificate must:

- (1) be submitted by the owner of the system for the applicant; ~~and~~
- (2) be accompanied by the required fee; and
- (3) include a letter from the owner that contains:
  - (A) an explanation for the need of a temporary certificate for the applicant; and
  - (B) an explanation of all of the efforts that were made to employ an operator who possessed the required certification; and
  - (C) a statement designating the applicant as either the Operator in Responsible Charge (ORC) or Back-up Operator in Responsible Charge (Back-up ORC) of the system; and
  - (D) a plan that describes the actions that:
    - (i) the applicant will pursue in order to attempt to obtain permanent certification during the effective period of the temporary certificate; and
    - (ii) the owner of the system will be pursuing in the event that the applicant fails to obtain permanent certification during the effective period of the temporary certificate.

(d) Applicants for a temporary certificate ~~must~~ either:

- (1) for biological or collection system grade II or higher operator certification, possess a ~~currently~~ valid certificate of the same type as the system and that is no more than one grade lower than the classification of the system when applying as an Operator in Responsible Charge (ORC) and no more than two grades lower than the classification of the system when applying as a Back-up Operator in Responsible Charge (Back-up ORC); or
- (2) have a minimum of three months of actual experience in the operation of the type of system for which a temporary certificate is being applied if the temporary certificate is requested for a Grade I biological, Grade I Physical/Chemical, Grade I Collection, ~~Spray Surface~~ Spray Surface Irrigation, Land Application, or Subsurface Water Pollution Control System; ~~and~~



- (3) be eligible for permanent certification prior to the expiration date of the temporary certificate; and
- (4) not have made three previous unsuccessful attempts to make a passing score on the same type and grade examination as the temporary certificate; and
- (5) have never relinquished, nor had revoked, any water pollution control operator certificate issued by the Commission.

(e) Applicants who obtain a temporary certificate by providing false information to the Commission shall be subject to disciplinary action(s) as set forth in Section .0800 of this Subchapter.

*Authority G.S. 90A-40; 90A-42.*

**15A NCAC 08G .0603 TEMPORARY CERTIFICATE RENEWAL**

- (a) All applications for renewal of a temporary certificate must:
- (1) be submitted by the owner of the system 60 calendar days prior to the expiration date of the original temporary certificate; ~~and~~
  - (2) be accompanied by the required fee; ~~and~~
  - (3) include a letter from the owner that explains:
    - (A) the need for renewal of the temporary certificate; ~~and~~
    - (B) the reasons for the failure of the applicant to obtain permanent certification during the original effective period of the temporary certificate; ~~and~~
    - (C) the efforts that have been made by the owner to employ a properly certified operator during the effective period of the original temporary certificate; and
    - (D) the actions that will be taken by:
      - (i) the applicant in order to obtain permanent certification during the effective period of the renewed temporary certificate; and
      - (ii) the owner if the applicant does not obtain permanent certification during the effective period of the renewed temporary certificate.
- (b) The renewal request shall be denied if the applicant has failed:
- (1) to seek permanent certification by examination during the original effective period of the temporary certificate; or
  - (2) to obtain permanent certification after four examination attempts during the original effective period of the temporary certificate.
- (c) A temporary certificate may only be renewed once for the same operator.

(d) Applicants who obtain a temporary certificate renewal by providing false information to the Commission shall be subject to disciplinary action(s) as set forth in Section .0800 of this Subchapter.

*Authority G.S. 90A-40; 90A-42.*

**15A NCAC 08G .0604 CONVERSION OF VOLUNTARY CERTIFICATION TO MANDATORY CERTIFICATION**

- ~~(a) Individuals who hold certificates of competency under a voluntary certification program, administered the North Carolina Water Environment Association, may apply for the conversion of the voluntary certificate into a certificate issued by the Commission once a mandatory certification program of the same type and grade as the voluntary program has been established by the Commission.~~
- ~~(b) All applications submitted to the Commission requesting the conversion of a voluntary certificate to a mandatory certificate must be accompanied by the appropriate fee and a copy of the voluntary certificate.~~

*Authority G.S. 90A-39; 90A-40; 90A-42.*

**SECTION .0700 - RENEWAL OF CERTIFICATION**

**15A NCAC 08G .0701 REQUIREMENTS**

- (a) In order to maintain a ~~currently~~ valid certificate, the certificate must be renewed annually by:
- (1) submitting payment of the appropriate required annual renewal fee, as set forth in G.S. 90A-42, by the end of the effective year; and
  - (2) ~~beginning December 31, 2000, and each successive year, each~~ Each operator operator, excluding those operators who hold only a conditional certificate, must provide documentation of a minimum of six contact hours of Commission approved training during each year following the year of initial certification. ~~The Commission will approve training if it finds that the course is applicable to a type of certification held by the certified operator.~~
- (b) Certificate(s) that are not renewed when due shall be considered invalid. In order to renew a certificate that has been invalid for up to two ~~consecutive~~ years, all outstanding renewal fees and ~~penalties supplemental processing fees and penalties~~ that have accrued since the certificate was last renewed must be paid and all accrued continuing education requirements must be met. In order to renew a certificate that has been invalid for ~~more than two or more~~ consecutive years the operator shall be required to take and make a passing score on an examination of the same type and grade as the former certificate. In order to qualify for the examination, all relative relevant requirements of Section .0400 of this Subchapter must be met. Any requirements in Section .0400 of this Subchapter for Commission approved training must have been met within the previous 12 month period. Invalid Conditional Certificates are not renewable.

(c) Renewal notices shall be mailed to each certified operator, at the last known address for the operator on file with the Commission, 60 calendar days prior to the renewal due date. Failure to receive a renewal notice does not relieve a certified operator of the responsibility to renew ~~their~~ the certificate by the renewal due date.

*Authority G.S. 90A-40; 90A-42; 90A-44; 90A-46.1.*

## **SECTION .0800 - DISCIPLINARY ACTIONS**

### **15A NCAC 08G .0801 GROUND FOR DISCIPLINARY ACTIONS**

The Commission may take disciplinary actions, in accordance with Rule .0802 of this Section, against a certified operator for:

- (1) practicing fraud or deception in the performance of ~~their~~ duties; ~~or~~
- (2) failure to ~~properly~~ use reasonable care or judgment in the performance of ~~their~~ duties; ~~or~~
- (3) failure to apply their knowledge or ability in the performance of ~~their~~ duties; ~~or~~
- (4) incompetence or the inability to ~~properly~~ perform ~~their~~ duties; ~~or~~
- (5) ~~intentionally~~ supplying false information in order to ~~obtain, or maintain,~~ obtain or maintain certification; or
- (6) cheating on a certification examination.

*Authority G.S. 90A-41.*

### **15A NCAC 08G .0802 DISCIPLINARY ACTIONS**

(a) The Commission shall revoke or suspend the certification of an operator or issue a letter of reprimand to an operator in accordance with the provisions of G.S. 90A-41, 150B-3 and this Rule. ~~The Chairman is delegated authority, if he is the designee of the Secretary, to issue a summary suspension pursuant to G.S. 150B-3(e). The remaining procedures in this Rule shall then be followed to determine if such suspension shall be made permanent.~~

(b) The Chairman of the Commission may issue notification of summary suspension, the intention to revoke or suspend ~~or summary suspension~~ of the certification of an operator or the intent to issue a letter of reprimand.

(c) The Chairman shall convene an advisory committee to review the circumstances of the proposed disciplinary action(s).

- (1) The advisory committee shall include at least:
  - (A) the Chairman of the Commission;
  - (B) the Vice Chairman of the Commission;
  - (C) the member of the Commission who represents the type of system at which the operator is employed or another member of the Commission appointed by the Chairman of the Commission; and
  - (D) a certified operator appointed by the Chairman.
- (2) The members of the advisory committee shall offer guidance to the Commission chairman in

regards to the actions that should be taken against an operator.

(d) Notification of the advisory committee meeting shall be sent by certified mail at least 15 calendar days prior to the date of the meeting, to the last known address of the operator. This notification shall contain the alleged facts or conduct upon which the proposed revocation or suspension of the certification or letter of reprimand is based.

~~(d)(e)~~ The operator shall have an opportunity to submit a written response to the Chairman prior to the date of the advisory committee meeting. The operator shall also be given the opportunity to make an oral statement before the advisory committee.

~~(e) The advisory committee shall include at least:~~

- ~~(1) the Chairman of the Water Pollution Control System Operators Certification Commission;~~
- ~~(2) the Vice Chairman of the Commission;~~
- ~~(3) the member of the Commission who represents the type of system at which the operator is employed or another member of the Commission appointed by the Chairman of the Commission; and~~
- ~~(4) a certified operator appointed by the Chairman.~~

~~The members of the advisory committee shall offer guidance to the Commission Chairman in regards to the actions that should be taken against an operator.~~

(f) Within 10 working days of the conclusion of the advisory committee meeting, the Chairman shall issue a decision. If this decision is to issue a revocation or suspension or a letter of reprimand, the Chairman shall advise the operator of the effective date of the action and the facts or conduct upon which the action is based. The revocation or suspension of a certification or the letter of reprimand shall be delivered to the affected operator and the owner of the system(s) at which the operator works by certified mail, at the last known address for the operator and owner on file with the Commission, at least 20 calendar days prior to the effective date of the revocation or suspension or letter of reprimand.

(g) ~~The revocation-revocation, or~~ suspension or letter of reprimand becomes a final Commission action if the operator does not file a petition for a contested case hearing in the Office of Administrative Hearings as provided in the Administrative Procedure Act, G.S. 150B.

(h) If an applicant is caught cheating on an examination by a proctor of the examination, the applicant shall be excused from the examination, the examination shall not be graded, the fee for the examination shall be forfeited by the applicant and any other certification(s) held by the applicant with the Commission shall be subject to revocation as set forth in G.S. 90A-41 and in this Rule. ~~Eligibility to sit for future examinations shall be determined as set forth in Rule .0502 of this Subchapter.~~

(i) If the Commission determines, after the examination has been graded, that an applicant cheated on an examination and certification has been conveyed to the applicant, the certification obtained through the examination shall be revoked and any other certification(s) held by the applicant with the Commission shall be subject to revocation as set forth in G.S. 90A-41 and in this Rule. ~~Eligibility to sit for future examinations shall be determined as set forth in Rule .0502 of this Subchapter.~~

*Authority G.S. 90A-40; 90A-41; 143B-300; 150B-23.*

**15A NCAC 08G .0803 CERTIFICATION FOLLOWING DISCIPLINARY ACTIONS**

(a) An individual who has had certification revoked by the Commission shall petition the Commission for any new certification sought and may not petition the Commission for such new certification sooner than ~~730 calendar days~~ two years after the effective date of the revocation. Following the denial of eligibility for re-certification after relinquishment or revocation, an operator must wait ~~365 calendar days~~ one year before reapplying for certification.

(b) The following information must be included in the petition for certification:

- (1) a written statement explaining the actions that the individual has taken to correct those problems that lead to the revocation of the certification previously held with the Commission; and
- (2) a statement that attests to the Commission that, upon obtaining certification, the individual will ~~shall~~ comply with all ~~rules and regulations~~ laws governing the proper operation of water pollution control systems.

~~(b)(c)~~ After submittal of the petition for certification, the petitioner may be required to appear before the Commission at a regularly scheduled meeting. The petitioner shall be notified, by certified mail, of the date, time and location of the meeting at least 15 calendar days prior to the meeting.

~~(e)(d)~~ Within 120 calendar days following receipt of a petition for certification, the Commission shall notify the individual, in writing, of its decision to deny or grant examination eligibility in accordance with the procedures set forth in Section .0500 of this Subchapter. Eligibility for certification shall ~~only~~ be granted only if there is substantial evidence that those conditions that lead to the revocation of previous certification held by the petitioner have been corrected.

~~(d)(e)~~ Certification of an individual whose previous certification has been revoked shall ~~only~~ occur only ~~by~~ after the individual ~~sitting sits~~ sits for, and ~~obtaining obtains~~ obtains a passing score on, an examination. ~~The examination requirement shall not be waived.~~ Once approval is granted by the Commission for certification after reviewing the petition for certification, the individual must submit an application, accompanied by the appropriate examination fee, and meet the examination eligibility requirements for the type of certification being sought as set forth in Section .0400 of this Subchapter. The individual must begin the certification process at the lowest grade level offered for the type of certification sought. Operational experience accrued by the individual prior to the revocation of any previously held certification(s) shall not be considered when determining the eligibility of the individual for the examination.

~~(e) If the Commission denies eligibility for certification to an individual whose previous certification was revoked, the individual may appeal the decision in accordance with the procedures contained in G.S. 150B of the Administrative Procedure Act.~~

(f) Applicants for certification who were previously determined to be ineligible for certification due to ~~intentionally~~ supplying

false information to the Commission must follow the procedures set forth in Paragraphs (a) through (e) of this Rule in order to obtain certification.

*Authority G.S. 90A-39; 90A-41; 150B-23.*

**15A NCAC 08G .0804 CONTESTED CASE PROCEDURES**

(a) Administrative hearings shall be held in accordance with G.S. 150B and the administrative hearing procedures codified at 15A NCAC 01B .0200 et seq., are hereby incorporated by reference including any subsequent amendments and additions.

~~(b) Copies of 15A NCAC 1B .0200 may be inspected at the offices of the Division of Planning and Assessment, 512 North Salisbury Street, 8<sup>th</sup> floor Arehdale Building, Raleigh, North Carolina 27611. Copies may be obtained at the noted location or from the Rules Division of the N.C. Office of Administrative Hearings at a cost determined by those offices~~

(b) For information on obtaining a copy of 15A NCAC 01B .0200, you may contact the Rules Division of the NC Office of Administrative Hearings.

*Authority G.S. 143B-300; 150B-23.*

**SECTION .0900 - CONTRACT OPERATION OF WATER POLLUTION CONTROL SYSTEMS**

**15A NCAC 08G .0902 ANNUAL REPORT**

~~On or before April 1 of each year, each contract operator, or contract operations firm, must submit an annual report to the Commission that includes:~~

- ~~(1) the name, street address, mailing address, and business telephone number of the contract operator, or contract operations firm; and~~
- ~~(2) the name, address, contact name, and telephone number of all water pollution control systems operated by the contract operator, or contract operations firm; and~~
- ~~(3) the name, social security number, certificate type(s) and grade(s), and certification number(s) of all certified operators employed by the firm; and~~
- ~~(4) the Operator in Responsible Charge (ORC) or Back up Operator in Responsible Charge (Back up ORC) designations for each operator employed by the firm and the name and permit number of each system for which each operator is the Operator in Responsible Charge (ORC) or Back up Operator in Responsible Charge (Back up ORC); and~~
- ~~(5) the name, street address, mailing address, and telephone number of the certified laboratory(s) utilized by the contract operator, or contract operations firm.~~

*Authority G.S. 90A-45.*

**SECTION .1000 - RULE MAKING PROCEDURES AND PETITIONS FOR REGULATORY ACTIVITY**

**15A NCAC 08G .1001 PETITIONS FOR REGULATORY ACTIVITY**

(a) Any person(s) desiring to request the adoption, amendment, or repeal of a rule may make such request in a petition filed pursuant to G.S. 150B-20, addressed to the Water Pollution Control System Operators Certification Commission. ~~Commission and mailed to the Chairman at Post Office Box 29535, Raleigh, North Carolina, 27626-0535.~~ Such petitions shall contain:

- (1) a draft of the proposed rule or a summary of its intent; ~~and~~
- (2) reasons for adoption of the proposed rule(s) and the effect it will have on existing rules and practices; and
- (3) the name(s) and address(es) of the petitioner(s).

(b) Petitions shall be placed on the agenda of the next regularly scheduled meeting of the Commission if received at least four weeks prior to the meeting. The Chairman shall prepare recommended responses to petitions for the Commission's consideration. Petitions shall be considered in accordance with the requirements of G.S. 150B-20.

*Authority G.S. 143B-300; 150B-20.*

**SECTION .1100 - ADMINISTRATIVE DUTIES**

**15A NCAC 08G .1101 REFUNDING OF FEES**

~~When refunding of fees becomes necessary, it will be the responsibility of the Commission to determine the fees, or portion of fees, to be refunded in accordance with G.S. 90A-42.~~

*Authority G.S. 90A-42.*

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*Notice is hereby given in accordance with G.S. 150B-21.2 that the Department of Environment and Natural Resources intends to amend the rule cited as 15A NCAC 09C .0903.*

**Proposed Effective Date:** *November 1, 2006*

**Public Hearing:**

**Date:** *September 1, 2006*

**Time:** *9:00 am – 11:00 am*

**Location:** *10<sup>th</sup> Floor Conference Room, Archdale Building, 512 North Salisbury Street, Raleigh, NC*

**Reason for Proposed Action:** *House Bill 698 expanded the allowable practices under the Forest Development Programs. Amendment is needed to include forest stand improvement as an approved practice.*

**Procedure by which a person can object to the agency on a proposed rule:** *Public hearing or written comments.*

**Comments may be submitted to:** *Dave Andres, NC Division of Forest Resources, 1616 Mail Service Center, Raleigh, NC 27699-1616, phone (919) 733-2162 ext. 245, fax (919) 715-5247, email dave.andres@ncmail.net*

**Comment period ends:** *September 1, 2006*

**Procedure for Subjecting a Proposed Rule to Legislative Review:**

If an objection is not resolved prior to the adoption of the rule, a person may also submit written objections to the Rules Review Commission. If the Rules Review Commission receives written and signed objections in accordance with G.S. 150B-21.3(b2) from 10 or more persons clearly requesting review by the legislature and the Rules Review Commission approves the rule, the rule will become effective as provided in G.S. 150B-21.3(b1). The Commission will receive written objections until 5:00 p.m. on the day following the day the Commission approves the rule. The Commission will receive those objections by mail, delivery service, hand delivery, or facsimile transmission. If you have any further questions concerning the submission of objections to the Commission, please call a Commission staff attorney at 919-733-2721.

**Fiscal Impact:**

- ☐ **State**
- ☐ **Local**
- ☐ **Substantive** ( $\geq \$3,000,000$ )
- ☒ **None**

**CHAPTER 09 - DIVISION OF FOREST RESOURCES**

**SUBCHAPTER 09C - DIVISION PROGRAMS**

**SECTION .0900 - FOREST DEVELOPMENT PROGRAM**

**15A NCAC 09C .0903 APPROVED PRACTICES**

The following practices, and sub-practices, are eligible for cost share payments:

- (1) Site Preparation. Preparation of a site for planting, seeding or natural regeneration of a commercial forest tree species; this may be accomplished by the following sub-practices used singularly or in combinations:
  - (a) Burning. The use of prescribed fire for the purpose of site preparation;
  - (b) Chopping. The use of a machine-pulled chopper to crush and chop non-merchantable trees, brush and other debris for the purpose of site preparation;
  - (c) Discing. The use of a machine-pulled disc to crush and destroy non-merchantable trees, brush and other debris for the purpose of site preparation;
  - (d) KGKG/V-Blade Shear. The use of a sharp-edged, angled blade (KG or V-blade) mounted on a tractor to shear non-merchantable trees and brush for the purpose of site preparation;
  - (e) KG and Pile. The use of a sharp-edged, angled blade (called KG blade) mounted on a tractor to shear non-merchantable trees and brush for

- the purpose of site preparation; this sheared material and other debris are pushed into piles or windrows;
- (f) Rake & Pile. The use of a toothed, rake-type blade mounted on a tractor to push logging debris, but not roots or soil, into piles or windrows;
  - (g) Bedding. The use of a bedding plow pulled by a tractor to prepare a bed or ridge for the purpose of site preparation;
  - (h) V-Blade Bedding. The use of a sharp angled blade mounted on a tractor to shear non-merchantable trees and brush and a bedding plow pulled by a tractor to prepare a bed or ridge for the purpose of site preparation in a single pass operation;
  - (i) Furrowing. The use of a plow pulled by a tractor to prepare a shallow trench or furrow to reduce competing vegetation for the purpose of site preparation;
  - (j) Bulldozing and Piling. The use of a bulldozer to push over non-merchantable trees and brush for the purpose of site preparation; the material is pushed into piles or windrows;
  - (k) Other. The use of hand tools or other machines to destroy or reduce competing vegetation for the purpose of site preparation;
  - (l) Chemical Control; Aerial. The use of herbicides, applied from the air, to reduce competing vegetation for the purpose of site preparation; and
  - (m) Chemical Control; Ground. The use of hand tools or ground chemical applications to reduce competing vegetation for the purpose of site preparation.
  - (n) Preharvest Treatment. Use of chemical or mechanical means, including hand methods, to control vegetation to develop a stand of trees from advanced hardwood regeneration, natural pine regeneration, or artificial regeneration.
    - (i) The landowner must agree to harvest overstory stand once regeneration of at least 300 seedlings of a commercial timber species is established;
    - (ii) This practice cannot be used to prepare an area for pine straw production; and
    - (iii) The only other site prep technique that can be cost shared at a later date is prescribed burning, if needed.
- (2) Silvicultural Clearcut. The felling of trees in unmerchantable stands for the purpose of removing all stems in the overstory to allow regeneration of desirable species by exposing the site to direct sunlight:
    - (a) Fell and Leave. Felling all trees on an area with no removal of merchantable material, for the purpose of accomplishing a silvicultural clearcut;
    - (b) Fell and Remove. Felling all trees on an area, both merchantable and unmerchantable, for the purpose of accomplishing a silvicultural clearcut; the stumpage value of all merchantable trees removed from the area, as determined by the Director, shall be deducted from the allowable cost of completing the practice.
  - (3) Tree Planting or Seeding. Planting seedlings or applying seed to establish a commercial forest stand:
    - (a) Hand Planting. The use of planting bars or other hand tools to plant forest tree seedlings;
    - (b) Machine Planting. The use of a planting machine to plant forest tree seedlings;
    - (c) Machine Plant – Chemical. The combined use of a planting machine to plant forest tree seedlings and application equipment to apply herbicides to reduce competing vegetation in a single pass operation.
    - (d) V-Blade Planting. The use of a tractor with attached V-shaped blade and planting machine to plant forest tree seedlings;
    - (e) Direct Seeding. The use of any type applicator to apply desirable forest tree seed directly to the soil.
  - (4) Tree Planting Followed by Site Preparation. Tree planting followed by the use of a herbicide treatment, within one year after planting.
  - (5) Mixed Stand Plantings. Tree planting to establish a mixed pine-hardwood stand, or a mixed stand of hardwood species.
  - (6) Release of Seedlings. Releasing established reproduction of desired tree species for the purpose of ensuring regeneration, of at least 300 seedlings of a commercial timber species, is established.
    - (a) Chemical Control: Aerial. The use of herbicides, applied from the air, to reduce competing vegetation for the

- purpose of releasing desirable reproduction;
- (b) Chemical Control; Ground. The use of hand tools or ground chemical applicators to reduce competing vegetation for the purpose of releasing desirable reproduction;
- (c) Mechanical Control. The use of hand tools or machines to reduce competing vegetation for the purpose of releasing desirable reproduction.
- (7) Uneven-Aged Management. A planned sequence of silvicultural treatments designed to maintain and regenerate a stand with three or more age classes.
- (8) Forest Stand Improvement. Practices that improve tree growth and overall forest health to insure maximum growth potential of forest stands to commercial production levels. These practices will improve immature forest stands for silvicultural purposes.
  - (a) Understory Release – Complete removal or deadening of older trees or saplings that have no merchantable value, to improve growing conditions for desirable tree species.
  - (b) Release of Seedlings - A mechanical or chemical treatment designed to free young trees from undesirable, usually over-topping, competing vegetation.
  - (c) Cull-tree Removal – Complete removal or deadening of trees having no merchantable value because of defects or inferior species. Differs from understory release in that removal is to favor growth on remaining established poles and small sawtimber of better quality and species. This treatment is used only in stands beyond the sapling size class.
  - (d) Crop Tree Crown Release – Removal or deadening of cull trees and other undesirable trees to release the crowns of crop trees with commercial value. Crop trees are high value species, which are dominant or co-dominant in position and are well-formed and free of major forest insects and diseases. Cull trees are trees that have little or no economic value due to poor form and/or presence of insects or disease. Less desirable trees have poorer growth characteristics or are in poorer condition than the crop trees.
  - (e) Non-Commercial Thinning – A felling, deadening or removal of immature trees in a stand

(predominately seedlings and saplings) which significantly reduces the stem density to accelerate growth and improve the health and form of the remaining trees.

- (f) Prescribed Burning – The use of fire in a planned and controlled manner to provide silvicultural benefits from forest fuel reduction and/or reduced understory competition. Prescribed burning should only be conducted under the supervision of a certified burner, using a burning plan.

*Authority G.S. 113A-176; 113A-183; 143B-10(j).*

## TITLE 21 – OCCUPATIONAL LICENSING BOARDS

### CHAPTER 8 - BOARD OF CERTIFIED PUBLIC ACCOUNTANT EXAMINERS

*Notice is hereby given in accordance with G.S. 150B-21.2 that the N.C. State Board of CPA Examiners intends to amend the rules cited as 21 NCAC 08G .0401, .0403 - .0404, .0406, .0409 - .0410.*

**Proposed Effective Date:** *January 1, 2007*

**Public Hearing:**

**Date:** *September 18, 2006*

**Time:** *10:00 am*

**Location:** *1101 Oberlin Road, Suite 104, Raleigh, N.C.*

**Reason for Proposed Action:** *The purpose of this rulemaking is to amend old rules to conform with the Uniform Accountancy Act.*

**Procedure by which a person can object to the agency on a proposed rule:** *A person may make a written comment and or be present at the public hearing to make an oral comment in objection to the rule.*

**Comments may be submitted to:** *Robert N. Brooks, N.C. State Board of CPA Examiners, P.O. Box 12827, Raleigh, N.C. 27605-2827, phone (919) 733-1425, fax (919) 733-4209, email [rnbrooks@nccpaboard.gov](mailto:rnbrooks@nccpaboard.gov)*

**Comment period ends:** *October 16, 2006*

**Procedure for Subjecting a Proposed Rule to Legislative Review:** *If an objection is not resolved prior to the adoption of the rule, a person may also submit written objections to the Rules Review Commission. If the Rules Review Commission receives written and signed objections in accordance with G.S. 150B-21.3(b2) from 10 or more persons clearly requesting review by the legislature and the Rules Review Commission approves the rule, the rule will become effective as provided in*

G.S. 150B-21.3(b1). The Commission will receive written objections until 5:00 p.m. on the day following the day the Commission approves the rule. The Commission will receive those objections by mail, delivery service, hand delivery, or facsimile transmission. If you have any further questions concerning the submission of objections to the Commission, please call a Commission staff attorney at 919-733-2721.

**Fiscal Impact:**

- ☐ **State**  
☐ **Local**  
☐ **Substantive** (≥\$3,000,000)  
☒ **None**

**SUBCHAPTER 8G - CONTINUING PROFESSIONAL  
EDUCATION (CPE)**

**SECTION .0400 - CPE REQUIREMENTS**

**21 NCAC 08G .0401 CPE REQUIREMENTS FOR CPAS**

(a) In order for a CPA to receive CPE credit for a course:

- (1) the CPA must attend or complete the course;
- (2) the course must meet the requirements set out in 21 NCAC 08G .0404(a) or (c);  
and
- (3) the course must increase the professional competency of the CPA.

(b) The Board registers sponsors of CPE courses. A CPE course provided by a registered sponsor is presumed to meet the CPE requirements set forth in 21 NCAC 08G .0404(a) if the sponsor has indicated that the course meets those requirements. However, it is up to the individual CPAs attending the course and desiring to claim CPE credit for it to assess whether it increases their professional competency.

(c) A course that increases the professional competency of a CPA is a course in an area of accounting in which the CPA practices or is planning to practice in the near future, or in the area of professional ethics or an area related to the profession.

(d) Because of differences in the education and experience of CPAs, a course may contribute to the professional competence of one CPA but not another. Each CPA must therefore exercise judgment in selecting courses for which CPE credit is claimed and choose only those that contribute to that CPA's professional competence.

(e) Active CPAs must complete 40 CPE hours, computed in accordance with 21 NCAC 08G .0409 by December 31 of each year, except as follows:

- (1) CPAs having certificate applications approved by the Board in April-June must complete 30 CPE hours during the same calendar year.
- (2) CPAs having certificate applications approved by the Board in July-September must complete 20 CPE hours during the same calendar year.
- (3) CPAs having certificate applications approved by the Board in October-December must complete 10 CPE hours during the same calendar year.

(f) There are no CPE requirements for retired or inactive CPAs.

(g) Any CPE hours completed during the calendar year in which the certificate is approved may be used for that year's requirement even if the hours were completed before the certificate was granted. When a CPA has completed more than the required number of hours of CPE in any one calendar year, the extra hours, not in excess of 20 hours, may be carried forward and treated as hours earned in the following year. A CPA may not claim CPE credit for courses taken in any year prior to the year of certification.

(h) Any CPE hours used to satisfy the requirements for change of status as set forth in 21 NCAC 08J .0105, for reinstatement as set forth in 21 NCAC 08J .0106, or for application for a new certificate as set forth in 21 NCAC 08I .0104 may also be used to satisfy the annual CPE requirement set forth in Paragraph (e) of this Rule.

(i) It is the CPA's responsibility to maintain records substantiating the CPE credits claimed for the current year and for each of the four calendar years prior to the current year.

(j) A non-resident licensee may satisfy the annual CPE requirements including 21 NCAC 08G .0401 in the jurisdiction in which he or she is licensed and currently works or resides. If there is no annual CPE requirement in the jurisdiction in which he or she is licensed and currently works or resides, he or she must comply with Paragraph (e) of this Rule.

*Authority G.S. 93-12(8b).*

**21 NCAC 08G .0403 QUALIFICATION OF CPE SPONSORS**

(a) The Board registers sponsors of CPE courses and not courses. The Board will maintain a list of sponsors which have agreed to conduct programs in accordance with the standards for CPE set forth in 21 NCAC 08G .0404. Such sponsors shall indicate their agreement by signing a CPE program sponsor agreement form provided by the Board. These sponsors are registered sponsors.

(b) Notwithstanding Paragraph (a) of this Rule, sponsors of continuing education programs which are listed in good standing on the National Registry of CPE Sponsors maintained by the NASBA are considered to be registered CPE sponsors with the Board. These sponsors, are not required to sign a CPE program sponsor agreement form with this Board.

(c) In the CPE program sponsor agreement with the Board, the registered sponsor shall agree to:

- (1) allow the Board to audit courses offered by the sponsor in order to determine if the sponsor is complying with the terms of the agreement and shall refund the registration fee to the auditor if requested by the auditor;
- (2) have an individual who did not prepare the course review each course to be sure it meets the standards in this Rule;
- (3) state the following in every brochure or other publication or announcement concerning a course:
  - (A) the general content of the course and the specific knowledge or skill taught in the course;
  - (B) any prerequisites for the course and any advance preparation required for

- the course and if none, that should be stated;
  - (C) the level of the course, such as basic, intermediate, or advanced;
  - (D) the teaching methods to be used in the course;
  - (E) the amount of sponsor recommended CPE credit a CPA who takes the course could claim; and
  - (F) the date the course is offered, if the course is offered only on a certain date, and, if applicable, the location;
  - (4) ensure that the instructors or presenters of the course are qualified to teach the subject matter of the course and to apply the instructional techniques used in the course;
  - (5) evaluate the performance of an instructor or presenter of a course to determine whether the instructor or presenter is suited to serve as an instructor or presenter in the future;
  - (6) encourage participation in a course only by those who have the appropriate education and experience;
  - (7) distribute course materials to participants in a timely manner;
  - (8) use physical facilities for conducting the course that are consistent with the instructional techniques used;
  - (9) assign accurately the number of CPE credits each participant may be eligible to receive by either:
    - (A) monitoring attendance at a group course; or
    - (B) testing in order to determine if the participant has learned the material presented;
  - (10) provide, before the course's conclusion, an opportunity for the attendees to evaluate the quality of the course by questionnaires, oral feedback, or other means, in order to determine whether the course's objectives have been met, its prerequisites were necessary or desirable, the facilities used were satisfactory, and the course content was appropriate for the level of the course;
  - (11) inform instructors and presenters of the results of the evaluation of their performance;
  - (12) systematically review the evaluation process to ensure its effectiveness;
  - (13) retain for five years from the date of the course presentation or completion:
    - (A) a record of participants completing course credit requirements;
    - (B) an outline of the course (or equivalent);
    - (C) the date and location of presentation;
    - (D) the participant evaluations or summaries of evaluations;
    - (E) the documentation of the instructor's qualifications; and
  - (F) the number of contact hours recommended for each participant;
  - (14) have a visible, continuous and identifiable contact person who is charged with the administration of the sponsor's CPE programs and has the responsibility and is accountable for assuring and demonstrating compliance with these rules by the sponsor or by any other organization working with the sponsor for the development, distribution or presentation of CPE courses;
  - (15) develop and promulgate policies and procedures for the management of grievances including, but not limited to, tuition and fee refunds;
  - (16) possess a budget and resources that are adequate for the activities undertaken and their continued improvement; and
  - (17) provide persons completing course requirements with written proof of completion indicating the participant's name, the name of the course, the date the course was held or completed, the sponsor's name and address, and the number of CPE hours calculated and recommended in accordance with 21 NCAC 08G .0409.
- (d) Failure of a registered sponsor to comply with the terms of the CPE program sponsor agreement shall be grounds for the Board to terminate the agreement, to remove the registered sponsor's name from the list of registered sponsors and to notify the public of this action.
- (e) Failure of a National Registry of CPE Sponsor to comply with the terms of this Rule shall be grounds for the Board to disqualify the sponsor to be registered as a CPE sponsor with this Board and to notify NASBA and the public of this action.

*Authority G.S. 93-12(8b).*

**21 NCAC 08G .0404 REQUIREMENTS FOR CPE CREDIT**

(a) A CPA shall not be granted CPE credit for a course unless the course:

- (1) is in one of the ~~six~~-seven fields of study recognized by the Board and set forth in Paragraph (b) of this Rule;
- (2) is developed by an individual who has education and work experience in the subject matter of the course; and
- (3) uses instructional techniques and materials that are current and accurate.

(b) The ~~six~~-seven fields of study recognized by the Board are accounting and auditing, consulting services, ethics, management, personal development, specialized knowledge and applications, and taxation.

- (1) ~~The accounting and auditing field of study includes accounting and financial reporting subjects, the body of knowledge dealing with recent pronouncements of authoritative accounting principles issued by the standard setting bodies, and any other related~~



subject—generally—classified—within—the accounting discipline. It also includes auditing subjects related to the examination of financial statements, operations systems, and programs; the review of internal and management controls; and the reporting on the results of audit findings, compilation, and review.

Accounting and Auditing

(A) Accountancy

(B) Accounting – Governmental

(C) Auditing

(D) Auditing – Governmental

- (2) The consulting services field of study deals with all consulting services provided by professional—accountants management, business, personal, and other. It includes management consulting services and personal financial planning services. This field also covers an organization's various systems, the services provided by consultant practitioners, and the engagement management techniques that are typically used. An organization's systems include those dealing with planning, organizing, and controlling any phase of individual financial activity and business activity. Services provided encompass those for management, such as designing, implementing, and evaluating operating systems for organizations, as well as business consulting services and personal financial planning.

Consulting Services

(A) Administrative Practice

(B) Social Environment of Business

- (3) The management field of study considers the management needs of individuals primarily in public practice, industry, and government. Some subjects concentrate on the practice management area of the public practitioner, such as organizational structures, marketing services, human resource management, and administrative practices. For individuals in industry, there are subjects dealing with the financial management of the organization, including information systems, budgeting, and asset management, as well as items covering management planning, buying and selling businesses, contracting for goods and services, and foreign operations. For CPAs in government, this curriculum embraces budgeting, cost analysis, human resource management, and financial management in state and local governmental entities. In general, the emphasis in this field is on the specific management needs of CPAs and not on general management skills.

Ethics

(A) Behavioral Ethics

(B) Regulatory Ethics

- (4) The personal development field of study includes becoming a competent people manager, which covers such skills as communications, managing the group process, and dealing effectively with others in interviewing, counseling, and career planning. Public relations and professional ethics are also treated.

Management

(A) Business Law

(B) Business Management and Organization

(C) Finance

(D) Management Advisory Services

(E) Marketing

- (5) The specialized knowledge and applications field of study treats subjects related to specialized industries, such as not-for-profit organizations, health care, and oil and gas.

Personal Development

(A) Communications

(B) Personal Development

(C) Personnel/HR

- (6) The taxation field of study includes subjects dealing with tax compliance and tax planning. Compliance covers tax return preparation and review and IRS examinations, ruling requests, and protests. Tax planning focuses on applying tax rules to prospective transactions and understanding the tax implications of unusual or complex transactions. Recognizing alternative tax treatments and advising the client on tax saving opportunities are also part of tax planning.

Special Knowledge and Applications

(A) Computer Science

(B) Economics

(C) Mathematics

(D) Production

(E) Specialized Knowledge and Applications

(F) Statistics

(7) Tax

(A) Tax

- (c) The following may qualify as acceptable types of continuing education programs, provided the programs comply with the requirements set forth in Paragraph (a) of this Rule:

- (1) professional development programs of national and state accounting organizations;
- (2) technical sessions at meetings of national and state accounting organizations and their chapters;
- (3) courses taken at regionally accredited colleges and universities;
- (4) educational programs that are designed and intended for continuing professional education activity conducted within an association of accounting firms; and
- (5) correspondence courses that are designed and intended for continuing professional education

~~activity. A CPA may claim credit for a course offered by a non-registered sponsor provided that the course meets the requirements of 21 NCAC 08G .0403(e), 21 NCAC 08G .0404, and 21 NCAC 08G .0409. The CPA shall maintain documentation proving that the course met these standards.~~

(d) CPE credit may be granted for teaching a CPE course or authoring a publication as long as the preparation to teach or write increased the CPA's professional competency and was in one of the ~~six~~ seven fields of study recognized by the Board and set forth in Paragraph (b) of this Rule.

(e) CPE credit shall not be granted for a self-study course if the material that the CPA must study to take the examination is not designed for CPE purposes. This includes periodicals, guides, magazines, subscription services, books, reference manuals and supplements which contain an examination to test the comprehension of the material read.

(f) A CPA may claim credit for a course offered by a non-registered sponsor provided that the course meets the requirements of 21 NCAC 08G .0403(c), 21 NCAC 08G .0404, and 21 NCAC 08G .0409. The CPA shall maintain documentation proving that the course met these standards.

*Authority G.S. 93-12(8b).*

#### **21 NCAC 08G .0406 COMPLIANCE WITH CPE REQUIREMENTS**

(a) All active CPAs shall file with the Board a completed CPE reporting form by the July 1 renewal date of each year.

(b) If a CPA fails to complete the CPE requirements prior to the end of the previous calendar year but the CPA has completed them by June 30, the Board may:

- (1) ~~change the CPA's status from active to conditional and require the payment of a civil penalty of one hundred dollars (\$100.00) for the first such failure within a five calendar year period; issue a letter of warning for the first such failure within a five calendar year period; and~~
- (2) ~~place the CPA on conditional status again and require the payment of a civil penalty of two hundred fifty dollars (\$250.00) for the second such failure within a five calendar year period; and~~
- (3)(2) deny the renewal of the CPA's certificate for a period of not less than 30 days and until the CPA meets the reinstatement requirements set forth in 21 NCAC 08J .0106 for the ~~third~~ second such failure within a five calendar year period.

*Authority G.S. 93-12(8b); 93-12(9)(e).*

#### **21 NCAC 08G .0409 COMPUTATION OF CPE CREDITS**

(a) Group Courses: Non-College. CPE credit for a group course that is not part of a college curriculum shall be given based on contact hours. A contact hour shall be 50 minutes of instruction. One-half credits shall be equal to 25 minutes after the first credit

hour has been earned in a formal learning activity. For example, a group course lasting 100 minutes shall be two contact hours and thus two CPE credits. A group course lasting 75 minutes shall be only one and one-half contact hours and thus one and one-half CPE credits. When individual segments of a group course shall be less than 50 minutes, the sum of the individual segments shall be added to determine the number of contact hours. For example, five 30-minute presentations shall be 150 minutes, which shall be three contact hours and three CPE credits. No credit shall be allowed for a segment unless the participant completes the entire segment.

(b) Completing a College Course. CPE credit for completing a college course in the college curriculum shall be granted based on the number of credit hours the college gives the CPA for completing the course. One semester hour of college credit shall be 15 CPE credits; one quarter hour of college credit shall be 10 CPE credits; and one continuing education unit (CEU) shall be 10 CPE credits. However, under no circumstances shall CPE credit be given to a CPA who audits a college course.

(c) Self Study. CPE credit for a self-study course shall be given based on the average number of contact hours needed to complete the course. The average completion time shall be allowed for CPE credit. A sponsor must determine, on the basis of pre-tests, the average number of contact hours it takes to complete a course. CPE credit for self-study courses shall be limited so that a CPA completes at least eight hours of non-self study each year.

(d) Instructing a CPE Course. CPE credit for teaching or presenting a CPE course for CPAs shall be given based on the number of contact hours spent in preparing and presenting the course. No more than 50 percent of the CPE credits required for a year shall be credits for preparing for and presenting CPE courses. CPE credit for preparing for and presenting a course shall be allowed only once a year for a course presented more than once in the same year by the same CPA.

(e) Authoring a Publication. CPE credit for published articles and books shall be given based on the number of contact hours the CPA spent writing the article or book. No more than 25 percent of a CPA's required CPE credits for a year shall be credits for published articles or books. An article written for a CPA's client or business newsletter is not applicable for this CPE credit.

(f) Instructing a College Course. CPE credit for instructing a graduate level college course shall be given based on the number of credit hours the college gives a student for successfully completing the course, using the calculation set forth in Paragraph (b) of this Rule. Credit shall not be given for instructing an undergraduate level course. In addition, no more than 50 percent of the CPE credits required for a year shall be credits for instructing a college course and, if CPE credit shall also be claimed under Paragraph (d) of this Rule, no more than 50 percent of the CPE credits required for a year shall be credits claimed under Paragraph (d) and this Paragraph. CPE credit for instructing a college course shall be allowed only once for a course presented more than once in the same year by the same CPA.

*Authority G.S. 93-12(8b).*

**21 NCAC 08G .0410      PROFESSIONAL ETHICS AND CONDUCT CPE**

(a) As part of the annual CPE requirement, all active CPAs shall complete CPE on professional ethics and conduct as set out in 21 NCAC 08N. They shall complete either two hours in a group study format or four hours in a self-study format. These courses shall be approved by the Board pursuant to 21 NCAC 08G .0400. This CPE shall be offered by a CPE sponsor registered with the Board pursuant to 21 NCAC 08G .0403(a) or (b).

(b) A non-resident licensee ~~who maintains an office whose primary office is in~~ North Carolina must comply with Paragraph (a) of this Rule. All other non-resident licensees may satisfy Paragraph (a) of this Rule by completing the ethics requirements in the jurisdiction in which he or she ~~resides, is licensed as a CPA and works or resides.~~ If there is no ethics CPE requirement in the jurisdiction where he or she ~~currently resides, is licensed and currently works or resides.~~ he or she must comply with Paragraph (a) of this Rule.

*Authority G.S. 93-12(8b).*

**TITLE 26 – OFFICE OF ADMINISTRATIVE HEARINGS**

*Notice is hereby given in accordance with G.S. 150B-21.2 that the Office of Administrative Hearings intends to amend the rules cited as 26 NCAC 02C .0105 and .0402.*

**Proposed Effective Date:** *November 1, 2006*

**Public Hearing:**

**Date:** *August 31, 2006*

**Time:** *9:00 am*

**Location:** *422 N. Blount Street, Raleigh, NC*

**Reason for Proposed Action:** *The requirement of an electronic version with every permanent rule is needed to make rules pending review by the RRC accessible to the public on the website and expedite the publication process for the approved rule.*

**Procedure by which a person can object to the agency on a proposed rule:** *Mail objections to Debra Gray, Rulemaking Coordinator, Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. Letters of objection must be received no later than September 1, 2006.*

**Comments may be submitted to:** *Debra Gray, Rulemaking Coordinator, 6714 Mail Service Center, Raleigh, NC 27699-6714, phone (919) 733-2678, fax (919) 733-3462, email debra.gray@ncmail.net*

**Comment period ends:** *September 1, 2006*

**Procedure for Subjecting a Proposed Rule to Legislative Review:** *If an objection is not resolved prior to the adoption of the rule, a person may also submit written objections to the Rules Review Commission. If the Rules Review Commission receives written and signed objections in accordance with G.S.*

*150B-21.3(b2) from 10 or more persons clearly requesting review by the legislature and the Rules Review Commission approves the rule, the rule will become effective as provided in G.S. 150B-21.3(b1). The Commission will receive written objections until 5:00 p.m. on the day following the day the Commission approves the rule. The Commission will receive those objections by mail, delivery service, hand delivery, or facsimile transmission. If you have any further questions concerning the submission of objections to the Commission, please call a Commission staff attorney at 919-733-2721.*

**Fiscal Impact:**

- ☐ **State**
- ☐ **Local**
- ☐ **Substantive** ( $\geq \$3,000,000$ )
- ☒ **None**

**CHAPTER 2 - RULES DIVISION**

**SUBCHAPTER 02C - SUBMISSION PROCEDURES FOR RULES AND OTHER DOCUMENTS  
TO BE PUBLISHED IN THE NORTH CAROLINA REGISTER AND THE NORTH CAROLINA ADMINISTRATIVE CODE**

**SECTION .0100 – GENERAL**

**26 NCAC 02C .0105      ELECTRONIC VERSION**

(a) The electronic version shall be a 3 1/2 inch (1.44 Mb) high density diskette or CD compatible with or convertible to the most recent version of Microsoft Word. The filed electronic version shall identify the name of the document to be retrieved and the software used. OAH shall refuse to accept for publication any document in which the electronic version is not compatible with or convertible to the most recent version of Microsoft Word.

(b) The diskette or CD may contain multiple rules filed at the same time. Each rule shall be saved as a separate document.

~~(b)(c)~~ An electronic version shall not be required if an agency that is unable to provide an electronic version that is compatible with or convertible to the most recent version of Microsoft Word submits a written statement to the Codifier of Rules to that effect. This statement shall be signed by the agency head or rule-making coordinator.

*Authority G.S. 150B-21.17; 150B-21.18; 150B-21.19.*

**SECTION .0400 - NORTH CAROLINA ADMINISTRATIVE CODE**

**26 NCAC 02C .0402      PUBLICATION OF A PERMANENT RULE**

An agency shall submit a permanent rule for publication in the Code with the following:

- (1) An original submission form and copy (Rule .0403 of this Section).
- (2) If applicable, a letter delegating authority for the signature on the submission form (Rule .0113 of this Subchapter).

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**PROPOSED RULES**

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|---|--|
| <p>(3) An original and copies of the permanent rule (Rule .0103 of this Subchapter) prepared in accordance with Rule .0108 of this Subchapter containing:</p> <ul style="list-style-type: none"><li>(a) an introductory statement (Rule .0404 of this Section);</li><li>(b) the body of the rule (Rule .0405 of this Section);</li><li>(c) any changes in the rule (Rule .0405 of this Section);</li><li>(d) the history note (Rule .0406 of this Section).</li></ul> | <p>(4) A return copy, if desired (Rule .0104 of this Subchapter).</p> <p>(5) An electronic version of the rule prepared in accordance with Rule .0105 of this Subchapter. <del>Subchapter if the rule differs from the proposed text published in the Register or if the rule was not published in the Register.</del></p> |
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*Authority G.S. 150B-21.19.*

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**APPROVED RULES**

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*This Section includes the Register Notice citation to rules approved by the Rules Review Commission (RRC) at its meeting May 18, 2006 and reported to the Joint Legislative Administrative Procedure Oversight Committee pursuant to G.S. 150B-21.16. The full text of rules are published below when the rules have been approved by RRC in a form different from that originally noticed in the Register or when no notice was required to be published in the Register. The rules published in full text are identified by an \* in the listing of approved rules. Statutory Reference: G.S. 150B-21.17.*

*These rules have been entered into the North Carolina Administrative Code.*

APPROVED RULE CITATION	REGISTER CITATION TO THE NOTICE OF TEXT
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15A NCAC 07I .0101*	n/a G.S. 150B-21.5(a)(2)
15A NCAC 07I .0206*	n/a G.S. 150B-21.5(a)(2)
15A NCAC 07I .0305*	n/a G.S. 150B-21.5(a)(2)
15A NCAC 07I .0502*	n/a G.S. 150B-21.5(a)(2) and (5)
15A NCAC 07I .0506*	n/a G.S. 150B-21.5(a)(2) and (5)
15A NCAC 07I .0509*	n/a G.S. 150B-21.5(a)(2)
15A NCAC 07J .0102*	n/a G.S. 150B-21.5(a)(2)
15A NCAC 12K .0105-.0106*	20:13 NCR
15A NCAC 12K .0108*	20:13 NCR
15A NCAC 18A .1935*	20:13 NCR
15A NCAC 18A .1957*	20:13 NCR
15A NCAC 18A .1969-.1970*	20:13 NCR
17 NCAC 07B .1101*	n/a G.S. 150B-1(d)(4)
17 NCAC 07B .1103-.1104*	n/a G.S. 150B-1(d)(4)
17 NCAC 07B .1107*	n/a G.S. 150B-1(d)(4)
17 NCAC 07B .1111*	n/a G.S. 150B-1(d)(4)
17 NCAC 07B .1115-.1120*	n/a G.S. 150B-1(d)(4)
17 NCAC 07B .1122-.1123*	n/a G.S. 150B-1(d)(4)
17 NCAC 07B .2801-.2802*	n/a G.S. 150B-1(d)(4)
17 NCAC 07B .4002*	n/a G.S. 150B-1(d)(4)
17 NCAC 07B .4006*	n/a G.S. 150B-1(d)(4)
17 NCAC 07B .5201-.5202*	n/a G.S. 150B-1(d)(4)
21 NCAC 02 .0205-.0206*	20:09 NCR
21 NCAC 02 .0210*	20:09 NCR
21 NCAC 02 .0213*	20:09 NCR
21 NCAC 02 .0217*	20:09 NCR
21 NCAC 02 .0303*	20:09 NCR
21 NCAC 02 .0901*	20:09 NCR
21 NCAC 02 .0904	20:09 NCR
21 NCAC 02 .0906*	20:09 NCR
21 NCAC 02 .0910	20:09 NCR
21 NCAC 16C .0101*	20:12 NCR
21 NCAC 16C .0202*	20:12 NCR
21 NCAC 16C .0203	20:12 NCR
21 NCAC 16C .0301	20:12 NCR
21 NCAC 16C .0303*	20:12 NCR
21 NCAC 16C .0304-.0310	20:12 NCR
21 NCAC 16C .0401-.0405*	20:12 NCR
21 NCAC 16M .0102*	20:12 NCR
21 NCAC 46 .3301*	20:16 NCR
21 NCAC 50 .0306*	20:13 NCR
21 NCAC 50 .1404*	20:13 NCR
21 NCAC 65 .0301*	20:16 NCR

**TITLE 15A – DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

**15A NCAC 07I .0101 AUTHORITY**

These Rules are promulgated pursuant to G.S. 113A-112 and G.S. 113A-124 by the Secretary of the Department of Environment and Natural Resources in his capacity as executive head of the North Carolina agency designated by the Governor to administer federal funds granted by the National Oceanic and Atmospheric Administration under the Federal Coastal Zone Management Act.

*History Note: Authority G.S. 113A-112; 113A-124;  
Eff. December 10, 1977;  
Amended Eff. June 1, 2006; May 1, 1990.*

**15A NCAC 07I .0206 FUTURE FUNDING**

The award of a grant by the Department of Environment and Natural Resources is not a commitment or agreement to award such grants in subsequent years or to enter into grant amendments in the case of grant award.

*History Note: Authority G.S. 113A-112; 113A-124;  
Eff. December 10, 1977;  
Amended Eff. June 1, 2006; May 1, 1990.*

**15A NCAC 07I .0305 GRANT ADMINISTRATION**

(a) Reimbursement shall be made quarterly upon submittal of composite records after the last day of the last month of the relevant quarter. Composite records will include each applicant's name, the date of the application, the date of public notice, the relevant AEC type, the permit decision, the decision date and any vouchers for training expenses, special projects or other documents as required by the contract between the locality and the Department of Environment and Natural Resources.

(b) Grant Contract. Prior to the disbursement of funds, the locality and the Department shall become parties to a contract.

*History Note: Authority G.S. 113A-112; 113A-124;  
Eff. August 1, 1978;  
Amended Eff. June 1, 2006; May 1, 1990; November 1, 1984;  
October 1, 1982; May 20, 1980.*

**15A NCAC 07I .0502 DEFINITIONS**

(a) All definitions set out in G.S. 113A - 100 through - 128 apply herein.

(b) The following definitions apply whenever these words appear in this Section:

- (1) City. The word "city" means any of the incorporated cities within the 20 coastal counties.
- (2) County. The word "county" means any one of the 20 counties in the coastal area.
- (3) Land Use Plan. The term "land use plan" refers to the plan prepared by local government for submission to the Coastal Resources Commission pursuant to Part 2 of the Coastal Area Management Act.
- (4) Local Management Program. The term "local management program" means the local

implementation and enforcement program of a coastal city or county that has expressed an intention (as described in G.S. 113A-117) to administer a permit program for minor development in areas of environmental concern located within such county or city.

- (5) Local Permit Officer. The term "local permit officer" refers to the locally designated official who will administer and enforce the minor development permit program in areas of environmental concern and all parts of the land-use plan which the local government may wish to enforce over the entire planning area.
- (6) Management Plan (Plan). The term "management plan" refers to the written description of the management program which shall be submitted to the Coastal Resources Commission.
- (7) Secretary. The word "Secretary" refers to the Secretary of Environment and Natural Resources.

*History Note: Authority G.S. 113A-116; 113A-117;  
113A-124(c);  
Eff. November 1, 1984;  
Amended Eff. June 1, 2006; May 1, 1990.*

**15A NCAC 07I .0506 ALLOCATION OF AUTHORITY**

(a) A county may establish permit-letting authority for any city or part thereof that lies within said county if such city does not submit a letter of intent to the Coastal Resources Commission or states to the Coastal Resources Commission its intent not to become a local permit-letting agency.

(b) A city management plan shall be limited to its corporate boundaries and to any extra-territorial zoning area over which it may have established control at the time it requested authority to act as a permit-letting agency or over which it later gains control.

(c) A county implementation and enforcement plan shall be limited to areas not covered by any city plans unless the county acts as the permit-letting agency for a city or cities. A county shall begin such duties only after the county's implementation and enforcement plan has been amended to include such areas.

(d) In any city in which neither the city nor the county elects to become the permit-letting agency, the secretary shall have that duty.

(e) Only the Department of Environment and Natural Resources shall issue a permit for major development.

*History Note: Authority G.S. 113A-117(b); 113A-124(c)(5);  
Eff. November 1, 1984;  
Amended Eff. June 1, 2006; May 1, 1990.*

**15A NCAC 07I .0509 NOTICE OF CIVIL ACTION**

Local permit officers shall notify the Division of Coastal Management of any civil action undertaken by or against them under the Coastal Area Management Act as soon as they become aware of such action.

*History Note: Authority G.S. 113A-117; 113A-126(b);*

*Eff. November 1, 1984;*  
*Amended Eff. June 1, 2006; May 1, 1990.*

**15A NCAC 07J .0102 GENERAL DEFINITIONS**

The following definitions apply whenever these words are used in this Subchapter:

- (1) "Areas of Environmental Concern" (AECs) means geographic areas within the coastal area which the Coastal Resources Commission chooses to designate for special environmental and land use regulations. The types of areas which may be designated as AECs are described in G.S. 113A-113. Areas which have already been designated are defined in 15A NCAC 7H, "State Guidelines for Areas of Environmental Concern."
- (2) "Department" (DENR) means the North Carolina Department of Environment and Natural Resources.
- (3) "Excavation Project" means any moving, digging, or exposing of bottom materials, marshland substrate or root or rhizome matter in the estuarine waters, tidelands, marshlands and state-owned lakes, regardless of the equipment or method used.
- (4) "Filling Project" means the placing of any materials in estuarine waters, tidelands, marshlands and state-owned lakes so as to raise the elevation of the area upon which the material is placed. Structure placement does not constitute a filling or excavation project. The placement of shell material specifically for the purpose of oyster culture also shall not be considered a filling project.
- (5) "Local Management Program" means the local implementation and enforcement program of a coastal city or county that has undertaken to administer a permit program for minor development in areas of environmental concern located within such city or county.
- (6) "Local Permit Officer" refers to the locally designated official who will administer and enforce the minor development permit program in areas of environmental concern and all parts of the land use plan which the local government may wish to enforce over the entire planning area.
- (7) "Division" means the Division of Coastal Management.
- (8) "Permit" refers to CAMA major development permits, CAMA minor development permits and dredge and fill permits unless the context clearly indicates otherwise.
- (9) "Secretary" refers to the Secretary of Environment and Natural Resources.

*History Note: Authority G.S. 113-229; 113A-116; 113A-117; 113A-118;*  
*Eff. March 15, 1978;*

*Amended Eff. June 1, 2006; April 1, 1997; May 1, 1990;*  
*November 1, 1984.*

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**15A NCAC 12K .0105 EVALUATION OF APPLICATIONS**

- (a) Each completed application shall be evaluated by the Department or its designee on the information provided in the application and in accordance with the PARTF criteria described in this Rule.
- (b) The Authority shall review the project evaluations and other relevant data prepared by the applicant and by Department staff. The Authority shall approve projects for funding.
- (c) If applicable to the project, the general criteria in Paragraph (d) of this Rule shall be addressed by the applicant. The Department or its designee shall review all applications for completeness. Incomplete applications shall be returned to the applicant.
- (d) The following general criteria shall be used to evaluate projects.
  - (1) New public recreation facilities provided by the project;
  - (2) The degree of local recreational planning for the project and how the specific elements in the project conform to the plan(s);
  - (3) The acquisition or the conservation of unique natural, cultural, recreational, or scenic resources;
  - (4) The level of public involvement in developing and supporting the project;
  - (5) The applicant's commitment to operating and maintaining the project; and
  - (6) The suitability of the site for the proposed project development.
- (e) The Authority shall also consider the following factors to evaluate projects: the geographic distribution of projects, the presence or absence of other funding sources, the population of the applicant, the level of compliance with prior grant agreements, the amount of funds available, and the amount of funds requested.

*History Note: Authority G.S. 113-44.15;*  
*Temporary Adoption Eff. November 1, 1994, for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;*  
*Eff. April 1, 1995;*  
*Amended Eff. June 1, 2006; August 1, 1998.*

**15A NCAC 12K .0106 GRANT AGREEMENT**

- (a) Upon Authority approval, a written agreement shall be executed between the grant recipient(s) and the Department.
- (b) The agreement shall define the Department's and grant recipient's responsibilities and obligations, the project period, project scope and the amount of grant assistance.
- (c) The approved application and support documentation shall become a part of the grant agreement.
- (d) State Clearinghouse environmental review comments made as a result of State Environmental Protection Act (SEPA) application review requirements shall be addressed by the

applicant prior to execution of the project agreement. Projects judged to have a significant environmental impact shall submit an environmental assessment as required by SEPA.

(e) The grant agreement may be amended upon mutual consent and approval by the Department and the grant recipient(s). The grant recipient(s) shall submit a written request to the Department. The Department shall approve the amendment if local circumstances justify the amendment request.

(f) Projects may not begin until the Department and grant recipient(s) sign the agreement unless a waiver has been requested by the applicant in writing and approved by the Authority or its executive committee. Waivers may be granted only for land acquisition projects requiring action prior to the anticipated signing of the agreement. A waiver shall be in effect for 18 months from the date of approval. A project receiving a waiver shall not receive preferential treatment in funding decisions.

(g) Following execution of the grant agreement, the Department shall reimburse the grant recipient for expenditures related to the project scope. All reimbursements shall be approved by the Department and shall total an amount that is less than or equal to the grant amount. The Department shall approve reimbursement requests for expenditures that are related to the project scope and occur during the project period. This provision is effective after the 2002-03 grant cycle.

(h) Complete accounting records including a certified project data sheet and performance report verifying eligible costs shall be submitted by the grant recipient(s) to the Department for approval prior to or at the time of the close-out inspection. The Department shall approve the accounting when the records are consistent with the project agreement and budget.

*History Note: Authority G.S. 113-44.15;  
Temporary Adoption Eff. November 1, 1994, for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;  
Eff. April 1, 1995;  
Amended Eff. August 1, 1998;  
Temporary Amendment Eff. April 4, 2000;  
Amended Eff. June 1, 2006; April 1, 2003; April 1, 2001.*

## **15A NCAC 12K .0108 ELIGIBLE PROJECTS AND COSTS**

(a) PARTF grants are awarded to grantees for projects that are for the sole purpose of providing local park and recreation opportunities to the public. Grantees may receive funds for the following types of projects:

- (1) Acquisition. Fee simple acquisition of real property for future recreational development and to protect areas with natural or scenic resources.
  - (A) Grantees acquiring property for recreation development have up to five years from when the Authority and the applicant sign the grant agreement to begin developing recreation facilities.
  - (B) Grantees acquiring property to protect areas with natural or scenic resources must open these areas to the general

public to the extent that the resources will not be impaired.

- (2) Development. Projects for the construction, expansion, and renovation/repair of the following:

- (A) Primary facilities including outdoor and indoor recreation facilities. Examples include camping facilities, picnic facilities, sports and playfields, trails, swimming facilities, boating/fishing facilities, spectator facilities, and gymnasiums.
- (B) Support facilities and improvements such as roads, parking areas, accessibility features, utilities, landscaping, and other infrastructure projects, that would have little or no recreational value without the primary recreation facilities.

(b) Other criteria for determining eligible projects and costs include:

- (1) Only development on or acquisition of a single project site is eligible for PARTF assistance.
- (2) Utility lines developed with PARTF assistance shall be placed underground.
- (3) The following costs are eligible within the limits that are identified.
  - (A) Land acquisition costs such as appraisals, surveys, title work, and attorney fees.
  - (B) Construction costs such as site planning, design drawings, construction drawings, preparing cost estimates, architectural and engineering fees, permits, construction management, and project inspection.
  - (C) The cost of preparing an application.
  - (D) The costs in Parts (A) through (C) of this Subparagraph shall not exceed 20 percent of the total cost of the project. These costs may be incurred within two years of the application deadline as well as during the project period.
  - (E) A contingency may be included in the development cost estimates, but shall not exceed five percent of total development costs.
- (4) PARTF-assisted facilities on school property shall not be recreational facilities generally provided by the school for the use of their students.

*History Note: Authority G.S. 113-44.15;  
Temporary Adoption Eff. November 1, 1994, for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;  
Eff. April 1, 1995;  
Amended Eff. June 1, 2006; April 1, 2003; August 1, 1998.*



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**15A NCAC 18A .1935 DEFINITIONS**

The following definitions shall apply throughout this Section:

- (1) "Alluvial Soils" means stratified soils without distinct horizons, deposited by flood waters.
- (2) "Alternative System" means any approved ground absorption sewage treatment and disposal system other than an approved privy or an approved septic tank system.
- (3) "Approved" means that which the State or local health department has determined is in accordance with this Section and G.S. 130A, Article 11.
- (4) "Approved Privy" means a fly-tight structure consisting of a pit, floor slab, and seat riser constructed in accordance with Rule .1959 of this Section.
- (5) "Areas subject to frequent flooding" means those areas inundated at a 10-year or less frequency and includes alluvial soils and areas subject to tidal or storm overwash.
- (6) "Certified Operator" means a person authorized to operate a wastewater system in accordance with G.S. 90A, Article 3 and applicable rules of the Water Pollution Control System Operators Certification Commission.
- (7) "Collection sewer" means gravity flow pipelines, force mains, effluent supply lines, and appliances appurtenant thereto, used for conducting wastes from building drains to a treatment system or to a ground absorption sewage treatment and disposal system.
- (8) "Designated wetland" means an area on the land surface established under the provisions of the Coastal Area Management Act or the Federal Clean Water Act.
- (9) "Design unit" means one or more dwelling units, places of business, or places of public assembly on:
  - (a) a single lot or tract of land;
  - (b) multiple lots or tracts of land served by a common ground absorption sewage treatment and disposal system; or
  - (c) a single lot or tract of land or multiple lots or tracts of land where the dwelling units, places of business or places of public assembly are under multiple ownership (e.g. condominiums) and are served by a ground absorption system or multiple ground absorption systems which are under common or joint ownership or control.
- (10) "Dwelling unit" means any room or group of rooms located within a structure and forming a single, habitable unit with facilities which are used or intended to be used for living, sleeping, bathing, toilet usage, cooking, and eating.
- (11) "Effluent" means the liquid discharge of a septic tank or other sewage treatment device.
- (12) "Estimated saturated hydraulic conductivity" - means a saturated hydraulic conductivity value based upon the soil profile evaluation and description of the soil texture, soil structure, soil consistency, soil pores, and roots following the procedures in Field Book for Describing and Sampling of Soils, NRCS, USDA and comparison to soil profile saturated hydraulic conductivity data for soil input files for similar soils. The Field Book is hereby incorporated by reference, including any subsequent amendments and editions, in accordance with G.S. 150B-21.6. Copies of the Field Book may be inspected at the Division of Environmental Health Raleigh Office, 2728 Capital Boulevard, Raleigh, 27604, and copies may be downloaded at no cost from the internet at [http://soils.usda.gov/procedures/field\\_bk/main.htm#intro](http://soils.usda.gov/procedures/field_bk/main.htm#intro), or obtained from the National Soil Survey Center, MS 34, Room 152, 100 Centennial Mall North, Lincoln, NE 68508-3866.
- (13) "Gravity distribution" means an approved drainfield utilizing gravity and not pressure to distribute effluent from the inlet to the distal end of each nitrification line.
- (14) "Ground absorption sewage treatment and disposal system" means a system that utilizes the soil for the subsurface disposal of partially treated or treated sewage effluent.
- (15) "Horizon" means a layer of soil, approximately parallel to the surface, that has distinct characteristics produced by soil forming processes.
- (16) "Horizon subdivision" - means a portion of a horizon, approximately parallel to the surface that has distinct characteristics produced by soil forming processes.
- (17) "Lateral water movement" - means the movement of water down slope on sites of at least a four percent slope and above a less permeable horizon, and as observed periodically in bore holes, excavations, or monitoring wells.
- (18) "Long Term Acceptance Rate (LTAR)" means the rate of wastewater effluent absorption by the soil in a ground absorption system after long-term use. The LTAR, in units of gallons per day per square foot (gpd/ft<sup>2</sup>), is assigned based upon soil textural class and system type, and is used to determine the required length of nitrification trenches and size of drainfield area when designing a ground absorption system, pursuant to applicable rules of this Section.

- (19) "Local health department" means any county, district, or other health department authorized to be organized under the General Statutes of North Carolina.
- (20) "Matrix" - means a volume equivalent to 50 percent or greater of the total volume of a horizon or horizon subdivision.
- (21) "Mean high water mark" means, for coastal waters having six inches or more lunar tidal influence, the average height of the high water over a 19 year period as may be ascertained from National Ocean Survey or U.S. Army Corps of Engineers tide stations data or as otherwise determined under the provisions of the Coastal Area Management Act.
- (22) "Mottle" - means a feature(s) which occupies less than 50 percent of the total volume of a horizon or horizon subdivision.
- (23) "NEMA 4X" means an enclosure for an electrical control panel or junction box that meets standards for protection of equipment due to the ingress of water (including rain and hose-directed water) and an additional level of protection against corrosion, as set forth in Standard 250 of the National Electrical Manufacturers Association. NEMA Standard 250 is hereby incorporated by reference, including any subsequent amendments and editions. Copies may be inspected at the On-Site Wastewater Section Central Office, located at 2728 Capital Blvd., Raleigh, NC in the Parker Lincoln Building, and copies may be downloaded from the internet at <http://www.nema.org/stds/250.cfm>, or obtained from HIS/Global, 15 Inverness Way East, Englewood, CO 80112, at a cost of sixty-one dollars (\$61.00).
- (24) "NSF-40 Systems" means individual residential wastewater treatment systems (RWTS) that are approved and listed in accordance with the standards adopted by NSF International for Class I residential wastewater treatment systems under NSF/ANSI Standard 40, and approved for use pursuant to G.S. 130A-342 and the rules in this Section.
- (25) "Naturally occurring soil" means soil formed in place due to natural weathering processes and being unaltered by filling, removal, or other man-induced changes other than tillage.
- (26) "Nitrification field" means the area in which the nitrification lines are located.
- (27) "Nitrification lines" means approved pipe, specially designed porous blocks, or other approved materials which receive partially treated sewage effluent for distribution and absorption into the soil beneath the ground surface.
- (28) "Nitrification trench," also referred to as a sewage absorption trench, means a ditch into which a single nitrification line is laid and covered by soil.
- (29) "Non-ground absorption sewage treatment system" means a system for waste treatment designed not to discharge to the soil, land surface, or surface waters, including approved vault privies, incinerating toilets, mechanical toilets, composting toilets, chemical toilets, and recycling systems.
- (30) "Operator in Responsible Charge ('ORC')" means the individual designated by the person owning or controlling the system as the certified operator of record of the system who has primary responsibility for the operation of such system as defined in G.S. 90A-46 and applicable rules of the Water Pollution Control System Operators Certification Commission.
- (31) "Organic soils" means those organic mucks and peats consisting of more than 20 percent organic matter (by dry weight) and 18 inches or greater in thickness.
- (32) "Parent material" means the mineral matter that is in its present position through deposition by water, wind, gravity or by decomposition of rock and exposed at the land surface or overlain by soil or saprolite.
- (33) "Ped" means a unit of soil structure, such as an aggregate, crumb, prism, block, or granule formed by natural processes.
- (34) "Perched water table" means a saturated soil horizon or horizon subdivision, with a free water surface periodically observed in a bore hole or shallow monitoring well, but generally above the normal water table, or may be as identified by drainage mottles or redoximorphic features, and caused by a less permeable lower horizon.
- (35) "Person" means any individual, firm, association, organization, partnership, business trust, corporation, company, or unit of local government.
- (36) "Place of business" means any store, warehouse, manufacturing establishment, place of amusement or recreation, service station, foodhandling establishment, or any other place where people work or are served.
- (37) "Place of public assembly" means any fairground, auditorium, stadium, church, campground, theater, school, or any other place where people gather or congregate.
- (38) "Pressure Dispersal" means an approved system utilizing an effluent pump or siphon to distribute effluent uniformly to each nitrification line and along each nitrification line in the drainfield through a pressurized pipe network.
- (39) "Privy building" means and includes any and all buildings which are used for privacy in the acts of urination and defecation which are constructed over pit privies and are not

- connected to a ground absorption sewage treatment and disposal system or a public or community sewage system.
- (40) "Public management entity" means a city (G.S. 160A, Article 16), county (G.S. 153A, Article 15), interlocal contract (G.S. 153A, Article 16), joint management agency (G.S. 160A-461-462), county service district (G.S. 153A, Article 16), county water and sewer district (G.S. 162A, Article 6), sanitary district (G.S. 130A, Article 2), water and sewer authority (G.S. 162A, Article 1), metropolitan water district (G.S. 162A, Article 4), metropolitan sewerage district (G.S. 162A, Article 5), public utility [G.S. 62-3(23)], county or district health department (G.S. 130A, Article 2), or other public entity legally authorized to operate and maintain on-site sewage systems.
- (41) "Redoximorphic features" - means a color pattern of a horizon or horizon subdivision due to a loss (depletion) or gain (concentration) of pigment compared to the matrix color, formed by oxidation/reduction of iron (Fe) coupled with its removal, translocation, or accrual; or a soil matrix color controlled by the presence of Fe+2 (see Field Book for Describing and Sampling of Soils, NRCS, USDA which is hereby incorporated by reference, including any subsequent amendments and editions, in accordance with G.S. 150B-21.6).
- (42) "Relocation" means the displacement of a residence, place of business, or place of public assembly from one location to another.
- (43) "Repair area" means an area, either in its natural state or which is capable of being modified, consistent with the rules in this Section, which is reserved for the installation of additional nitrification fields and is not covered with structures or impervious materials.
- (44) "Residence" means any home, hotel, motel, summer camp, labor work camp, mobile home, dwelling unit in a multiple-family structure, or any other place where people reside.
- (45) "Residential Wastewater Treatment Systems (RWTS)" means approved individual advanced pretreatment systems which are covered under standards of NSF International, in accordance with G.S. 130A-342 and applicable rules in this Section.
- (46) "Restrictive horizon" means a soil horizon that is capable of perching ground water or sewage effluent and that is brittle and strongly compacted or strongly cemented with iron, aluminum, silica, organic matter, or other compounds. Restrictive horizons may occur as fragipans, iron pans or organic pans, and are recognized by their resistance in excavation or in using a soil auger.
- (47) "Rock" means the body of consolidated or partially consolidated material composed of minerals at or below the land surface. Rock includes bedrock and partially weathered rock that is hard and cannot be dug with hand tools. The upper boundary of rock is "saprolite," "soil," or the land surface.
- (48) "Sanitary system of sewage treatment and disposal" means a complete system of sewage collection, treatment and disposal, including approved privies, septic tank systems, connection to public or community sewage systems, incinerators, mechanical toilets, composting toilets, recycling toilets, mechanical aeration systems, or other such systems.
- (49) "Saprolite" means the body of porous material formed in place by weathering of igneous or metamorphic rocks. Saprolite has a massive, rock-controlled structure, and retains the fabric (arrangement of minerals) of its parent rock in at least 50 percent of its volume. Saprolite can be dug with hand tools. The lower limit of saprolite is "rock" and its upper limit is "soil" or the land surface. The term "saprolite" does not include sedimentary parent materials.
- (50) "Saturated soils" - means a horizon or horizon subdivision with a free water surface at the corresponding depth and observed in a bore hole or monitoring well.
- (51) "Septic tank" means a water-tight, covered receptacle designed for primary treatment of sewage and constructed to:
- (a) receive the discharge of sewage from a building;
  - (b) separate settleable and floating solids from the liquid;
  - (c) digest organic matter by anaerobic bacterial action;
  - (d) store digested solids through a period of detention; and
  - (e) allow clarified liquids to discharge for additional treatment and final disposal.
- (52) "Septic tank system" means a subsurface sanitary sewage system consisting of a septic tank and a subsurface disposal field.
- (53) "Sewage" means the liquid and solid human waste and liquid waste generated by water-using fixtures and appliances, including those associated with food handling. The term does not include industrial process wastewater or sewage that is combined with industrial process wastewater.
- (54) "Site" means the area in which the sewage treatment and disposal system is to be located and the area required to accommodate repairs and replacement of nitrification field and permit proper functioning of the system.

- (55) "Soil" means the naturally occurring body of porous mineral and organic materials on the land surface. Soil is composed of sand-, silt-, and clay-sized particles that are mixed with varying amounts of larger fragments and some organic material. Soil contains less than 50 percent of its volume as rock, saprolite, or coarse-earth fraction (mineral particles greater than 2.0 millimeters). The upper limit of the soil is the land surface, and its lower limit is "rock," "saprolite," or other parent materials.
- (56) "Soil series" - means an official series name established by NRCS, USDA and confirmed to be present on the site by detailed on-site soil profile descriptions and taxonomic classification, and not necessarily the soil series mapped on the county soil survey.
- (57) "Soil structure" means the arrangement of primary soil particles into compound particles, peds, or clusters that are separated by natural planes of weakness from adjoining aggregates.
- (58) "Soil textural classes" means soil classification based upon size distribution of mineral particles in the fine-earth fraction less than two millimeters in diameter. The fine-earth fraction includes sand (2.0 - 0.05 mm in size), silt (less than 0.05 mm - 0.002 mm or greater in size), and clay (less than 0.002 mm in size) particles. The specific textural classes are defined as follows and as shown in the Field Book for Describing and Sampling Soils, NRCS, USDA. The Field Book is hereby incorporated by reference, including any subsequent amendments and editions. Copies of the Field Book may be inspected at the On-Site Wastewater Section Central Office, located at 2728 Capital Blvd., Raleigh, NC in the Parker Lincoln Building, and copies may be downloaded at no cost from the internet at <http://soils.usda.gov/technical/fieldbook>, or obtained from the US Government Printing office at <http://bookstore.gpo.gov/> at a cost of twenty-four dollars (\$24.00).
  - (a) "Sand" means soil material that contains 85 percent or more of sand; the percentage of silt plus 1.5 times the percentage of clay shall not exceed 15.
  - (b) "Loamy sand" means soil material that contains at the upper limit 85 to 90 percent sand, and the percentage silt plus 1.5 times the percentage of clay is not less than 15; at the lower limit it contains not less than 70 to 85 percent sand, and the percentage of silt plus twice the percentage of clay does not exceed 30.
  - (c) "Sandy loam" means soil material that contains either 20 percent clay or less, and the percentage of silt plus twice the percentage of clay exceeds 30, and contains 52 percent or more sand; or less than seven percent clay, less than 50 percent silt, and between 43 and 52 percent sand.
  - (d) "Loam" means soil material that contains seven to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand.
  - (e) "Silt loam" means soil material that contains 50 percent or more silt and 12 to 27 percent clay; or contains 50 to 80 percent silt and less than 12 percent clay.
  - (f) "Silt" means soil material that contains 80 percent or more silt and less than 12 percent clay.
  - (g) "Sandy clay loam" means soil material that contains 20 to 35 percent clay, less than 28 percent silt, and 45 percent or more sand.
  - (h) "Clay loam" means soil material that contains 27 to 40 percent clay and 20 to 45 percent sand.
  - (i) "Silty clay loam" means soil material that contains 27 to 40 percent clay and less than 20 percent sand.
  - (j) "Sandy clay" means soil material that contains 35 percent or more clay and 45 percent or more sand.
  - (k) "Silty clay" means soil material that contains 40 percent or more clay and 40 percent or more silt.
  - (l) "Clay" means soil material that contains 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.
- (59) "State" means the Department of Environment and Natural Resources, Division of Environmental Health.
- (60) "Stream" means a natural or manmade channel, including groundwater lowering ditches and devices, in which water flows or stands most of the year.
- (61) "Subsurface disposal" means the application of sewage effluent beneath the surface of the ground by distribution through approved nitrification lines.
- (62) "TS-I Systems" means advanced pretreatment systems which are approved in accordance with TS-I effluent quality standards in Table VII of Rule .1970.
- (63) "TS-II Systems" means advanced pretreatment systems which are approved in accordance with TS-II effluent quality standards in Table VII of Rule .1970.
- (64) "Third-Party" means a person or body that is independent of the parties involved which does not gain financially or otherwise benefit from the outcome of the testing, and which has a

knowledge of the subject area based upon relevant training and experience.

*History Note: Authority G.S. 130A-335(e) and (f);  
Eff. July 1, 1982;  
Amended Eff. July 1, 1995; January 1, 1990; August 1, 1988;  
April 1, 1985;  
Temporary Amendment Eff. June 24, 2003;  
Amended Eff. June 1, 2006; May 1, 2004.*

**15A NCAC 18A .1957 CRITERIA FOR DESIGN OF  
ALTERNATIVE SEWAGE SYSTEMS**

(a) **LOW-PRESSURE PIPE SYSTEMS:** Low-pressure pipe (LPP) systems with a two to five-foot pressure head may be utilized on sites which are **SUITABLE** or **PROVISIONALLY SUITABLE** for conventional or modified systems or on sites where soil and site conditions prohibit the installation of a conventional or modified septic tank system if the requirements of this Paragraph are met.

- (1) The LPP system shall consist of the following basic components:
  - (A) a network of small-diameter (one to two inches) perforated PVC 160 pounds per square inch (psi) or stronger pressure-rated pipe placed in naturally occurring soil at shallow depths (generally 12 to 18 inches) in narrow trenches not less than eight inches in width and spaced not less than five feet on center. Trenches shall include at least five inches of washed stone or washed gravel below the pipe and two inches above the pipe; and four inches of soil cover.
  - (B) an approved, two-compartment septic tank or other approved pretreatment system, and a pumping or dosing tank;
  - (C) a watertight supply manifold pipe, of Schedule 40 PVC or stronger pressure-rated material or other pressure rated pipe specified in a system designed by a registered professional engineer, for conveying

effluent from the dosing chamber to the low-pressure network.

- (2) The soil and site criteria for LPP systems shall meet the following requirements:
  - (A) LPP nitrification fields shall not be installed on slopes in excess of ten percent unless design procedures to assure proper distribution of effluent over the nitrification field are approved. Landscaping of the LPP distribution field shall be constructed to shed rainwater or runoff. All other requirements of Rule .1940 of this Section shall be met.
  - (B) Site suitability for an LPP system shall be based on the first 24 inches of soil beneath the naturally occurring soil surface. This 24 inches shall consist of **SUITABLE** or **PROVISIONALLY SUITABLE** soil as determined in accordance with Rules .1941 through .1944 and .1956 of this Section.
  - (C) Location of the septic tank, other approved pretreatment unit, pumping or dosing chamber, and nitrification field shall be in accordance with Rule .1950 of this Section. Horizontal distances from the nitrification field shall be measured from a margin two and one-half feet beyond the lateral and manifold pipes.
  - (D) There shall be no soil disturbance of the site or repair area for an LPP system except the minimum required for installation.
  - (E) The available space requirements of Rule .1945 of this Section shall apply.
- (3) Table IV shall be used in determining the long-term acceptance rate for LPP systems. The long-term acceptance rate shall be based on the most hydraulically limiting, naturally occurring soil horizon within two feet of the ground surface or to a depth of one foot below the trench bottom, whichever is deeper.

Table IV

SOIL GROUP	SOIL TEXTURAL CLASS	USDA CLASSIFICATION	LONG-TERM ACCEPTANCE RATE (gallons per day per square foot)
I	Sands (with suitable or provisionally suitable clay mineralogy)	Sand Loamy Sand	0.6 – 0.4
II	Coarse Loams (with suitable or provisionally suitable clay mineralogy)	Sandy Loam Loam	0.4 – 0.3
III	Fine Loams (with suitable or provisionally suitable clay mineralogy)	Sandy Clay Loam Silt Loam Clay Loam Silty Clay Loam Silt	0.3 – 0.15
IV	Clays (with suitable or provisionally suitable clay mineralogy)	Sandy Clay Silty Clay Clay	0.2 – 0.05

- The long-term acceptance rate shall not exceed 0.5, 0.35, 0.225 or 0.125 gallons per day per square foot for Soil Groups I, II, III, or IV, respectively, for food service facilities, meat markets, and other places of business where accumulation of grease can cause premature failure of a soil absorption system unless data from comparable facilities indicates that the grease and oil content of the effluent will be less than 30 milligrams per liter (mg/l) and the chemical oxygen demand (COD) will be less than 500 mg/l or an approved pretreatment system is used which is designed to produce equal or better effluent quality.
- (4) In calculating the number of square feet for the nitrification field, the design sewage flow shall be divided by the long-term acceptance rate from Table IV. In calculating the minimum length of trenches in the LPP system, the total square footage of the nitrification field shall be divided by five feet.
- (5) Low-pressure systems shall be designed for uniform distribution of effluent. The trenches shall be level and parallel to the ground elevation contours. Laterals, manifolds and LPP drainfields shall comply with the following design criteria:
- (A) The maximum lateral length shall yield no more than a ten-percent difference in discharge rate between the first and last hole along the lateral.
- (B) Minimum hole size shall be 5/32-inch for at least two-thirds of the field lateral lines. Smaller holes (no less than 1/8-inch) may be used in no more than one-third of the lateral lines where necessary to balance flow distribution on sloping sites. However, for systems serving restaurants, foodstands, meat markets and other establishments where effluent is expected to have a high clogging potential, the minimum hole size shall be 5/32-inch.
- (C) Maximum hole spacing shall be as follows: Soil Group I, five feet; Soil Group II, six feet; Soil Group III, eight feet; and Soil Group IV, ten feet.
- (D) The following design provisions are required for sloping sites:
- (i) Separately valved manifolds are required for all subfield segments where the elevation difference between the highest and lowest laterals exceeds three feet.
- (ii) The hole spacing, hole size or both shall be adjusted to compensate for relative head differences between laterals branching off a common supply manifold and to compensate for the bottom lines receiving more effluent at the beginning and end of a dosing cycle. The lateral network shall be designed to achieve a ten to 30 percent higher steady state (pipe full) flow rate into the upper lines, relative to the lower lines, depending on the

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- swales may be required upslope of the system to divert surface runoff or lateral flow from passing over or into the system.
- (D) The long-term acceptance rate shall be based on the most hydraulically limiting soil horizon within 18 inches of the naturally occurring soil surface or to a depth one foot below the trench bottom, whichever is deeper. The lowest long-term acceptance rate for the applicable soil group shall be used for systems installed pursuant to this Rule. However, the long-term acceptance rate shall not exceed 1.0 gallons per day per square foot for gravity distribution or 0.5 gallons per day per square foot for low-pressure pipe systems installed on sites with at least 18 inches of Group I soils below the naturally occurring soil surface or to a depth of one foot below the trench bottom, whichever is deeper.
- (E) If the fill system uses low-pressure pipe distribution, all the requirements of Paragraph (a) of this Rule, except Paragraph (a)(2)(B), shall apply. Systems with a design daily flow greater than 480 gallons per day shall use low-pressure pipe distribution.
- (F) Fill material shall have such soil texture to be classified as sand or loamy sand (Soil Group I) up to the top of the nitrification trenches. The final six inches of fill used to cover the system shall have a finer texture (such as Group II, III) for the establishment of a vegetative cover. Existing fill material shall have no more than ten percent by volume of fibrous organics, building rubble, or other debris and shall not have discreet layers containing greater than 35 percent of shell fragments.
- (G) Where fill material is added, the fill material and the existing soil shall be mixed to a depth of six inches below the interface. Heavy vegetative cover or organic litter shall be removed before the additional fill material is incorporated.
- (H) The fill system shall be constructed as an elongated berm with the long axis parallel to the ground elevation contours of the slope.
- (I) The side slope of the fill shall not exceed a rise to run ratio of 1:4. However, if the first 18 inches below the naturally occurring soil surface is Group I soil, the side slope of the fill shall not exceed a rise to run ratio of 1:3.
- (J) The outside edge of the nitrification trench shall be located at least five feet horizontally from the top of the side slope.
- (K) The fill system shall be shaped to shed surface water and shall be stabilized with a vegetative cover against erosion.
- (L) The setback requirements shall be measured from the projected toe of the slope. However, if this setback cannot be met, the setback requirements shall be measured from a point five feet from the nearest edge of the nitrification trench if the following conditions are met:
- (i) Slope of the site shall not exceed two percent;
  - (ii) The first 18 inches of soil beneath the naturally occurring soil surface shall consist of Group I soils;
  - (iii) The lot or tract of land was recorded on or before December 31, 1989; and
  - (iv) A condition is placed upon the Improvement Permit to require connection to a public or community sewage system within 90 days after such system is available for connection and after it is determined that 300 feet or less of sewer line is required for connection.
- (M) The available space requirements of Rule .1945 of this Section shall apply.
- (2) An existing fill site that does not meet the requirements of Paragraph (b)(1) of this Rule may be utilized for a sanitary sewage system if the following requirements are met:
- (A) Substantiating data are provided by the lot owner (if not readily available to the local health department) indicating that the fill material was placed on the site prior to July 1, 1977.
  - (B) The fill material placed on the site prior to July 1, 1977 shall have such soil texture to be classified as sand or loamy sand (Group I) for a depth of at least 24 inches below the existing ground surface. This fill material shall have no more than ten percent by volume of fibrous organics, building rubble, or other debris. This fill shall not have discreet layers containing greater than 35 percent of



- shell fragments. However, if at least 24 inches of Group I fill material was in place prior to July 1, 1977, additional fill with soil texture classified as Group I may be added to meet the separation requirements of Paragraph (b)(2)(D) of this Rule.
- (C) Soil wetness conditions, as determined by Rule .1942(a) in this Section, are 18 inches or greater below the ground surface of the fill placed on the lot prior to July 1, 1977. This requirement shall be met without the use of a groundwater lowering system.
- (D) Low-pressure pipe distribution shall be used and shall meet all the requirements of Paragraph (a) of this Rule, except (a)(2)(B). The long-term acceptance rate shall not exceed 0.5 gallons per day per square foot. However, for existing fill sites with 48 inches of Group I soils, conventional nitrification trenches utilizing a maximum long-term acceptance rate of 1.0 gallons per day per square foot may be installed in lieu of low-pressure pipe systems. The minimum separation distance between the trench bottom and any soil wetness condition or any soil horizon UNSUITABLE as to soil structure, clay mineralogy, organic soil, rock, or saprolite shall be 24 inches for low pressure pipe systems and 48 inches for conventional systems. This separation requirement may be met by adding additional Group I soil, but shall not be met with the use of a groundwater lowering system. Where fill is to be added, the requirements of Paragraphs (b)(1)(C), (F), (G), (H), (J), (K), of this Rule and the following requirements shall be met:
- (i) The side slope of the fill shall not exceed a side slope ratio of 1:3, and;
  - (ii) The setback requirements shall be measured from the projected toe of the slope. However, if this setback cannot be met, the setback requirements shall be measured from a point five feet from the nearest edge of the nitrification trench if the following conditions are met:
    - (I) Slope of the site shall not exceed two percent;
    - (II) The lot or tract of land was recorded on or before December 31, 1989; and
    - (III) A condition is placed upon the Improvement Permit to require connection to a public or community sewage system within 90 days after such system is available for connection and after it is determined that 300 feet or less of sewer line is required for connection.
- (E) The available space requirements of Rule .1945 of this Section shall apply.
- (F) The design flow shall not exceed 480 gallons per day.
- (3) Other fill systems may be approved by the local health department on a site-specific basis in accordance with Rule .1948(d) of this Section.
- (c) Residential Wastewater Treatment Systems (RWTS) that comply with the National Sanitation Foundation (NSF) Standard 40 for Class I residential wastewater treatment systems shall be designed and constructed and installed in accordance with this Rule to serve a facility with a design daily flow rate of up to 1500 gallons per day, as determined in Rule .1949(a) or .1949(b) of this Section. RWTS shall not be used, however, where wastes contain high amounts of fats, grease and oil (30 mg/l or more), including restaurants and food service facilities, and the strength of the influent wastewater shall be similar to domestic wastewater with raw influent Biological Oxygen Demand (BOD) and suspended solids not to exceed 350 parts per million. RWTS performance, siting, sizing, installation, operation, monitoring, maintenance and reporting requirements shall comply with G.S. 130A-342 and 15A NCAC 18A .1970. NSF Standard 40 for Class I residential wastewater treatment systems is hereby incorporated by reference including any subsequent amendments and editions. Copies of the standards may be inspected at the On-Site Wastewater Section Central Office, located at 2728 Capital Blvd., Raleigh, NC in the Parker Lincoln Building, and copies may be obtained on-line at <http://www.techstreet.com/nsfgate.html> at a cost of ninety-five dollars (\$95.00), or by mail from Techstreet, 777 East Eisenhower Parkway, Ann Arbor, MI 48108 at a cost of ninety-five dollars (\$95.00) plus shipping and handling. RWTS shall bear the NSF mark and the NSF listed model number or shall bear the certification mark and listed model number of a third party certification program accredited by the American National Standards Institute (ANSI), pursuant to ANSI Policy and Procedures for Accreditation of Certification Programs to certify residential wastewater treatment systems in accordance with NSF Standard Number 40. The following conditions for approval, design, construction and installation of RWTS shall be met:
- (1) An application shall be submitted in writing to the State for an RWTS, which shall include the following, as applicable:

- (A) manufacturer's name, address, phone number, plant location(s), and contact information for manufacturer's licensed distributors in North Carolina and their current service areas;
  - (B) verification of current approval and listing of a NSF Standard 40 Class I system by the National Sanitation Foundation or other ANSI-accredited third party certification program;
  - (C) manufacturer's identifying name or logo, listed model number(s) and treatment capacity (in gallons per day) to be imprinted on unit;
  - (D) three legible copies of plans and specifications, and information required to evaluate any tanks as required pursuant to 15A NCAC 18A .1953; and
  - (E) fee payment as required by G.S. 130A-343(k)(6), by corporate check, money order or cashier's check made payable to: North Carolina On-Site Wastewater System Account or NC OSWW System Account, and mailed to the On-Site Wastewater Section, 1642 Mail Service Center, Raleigh, NC 27699-1642 or hand delivered to Rm. 1A-245, Parker Lincoln Building, 2728 Capital Blvd., Raleigh, NC.
- (2) The rated capacity of RWTS listed as complying with NSF Standard 40 shall not be less than the design daily flow as determined by Rule .1949(a) or .1949(b) of this Section.
- (3) The following are minimum standards of design and construction of RWTS:
- (A) No blockouts or openings shall be permitted below the liquid level of the RWTS.
  - (B) RWTS shall be resilient, watertight, corrosion resistant structures, with all components needing to be routinely maintained easily accessible to the system operator. Access openings shall be provided in the RWTS top. Access shall be provided for:
    - (i) cleaning or rodding out the inlet pipe,
    - (ii) cleaning or clearing the air or gas passage space above the partition,
    - (iii) pumping of each compartment required to be pumped,
    - (iv) sampling the effluent, and
    - (v) repairing any system components or maintaining
- system component requiring repair or maintenance.
- (C) Tanks used in RWTS designed to hold sewage or effluent shall comply with the same design and construction requirements as septic tanks and pump tanks pursuant to 15A NCAC 18A .1954, as applicable.
  - (D) Fiberglass reinforced plastic tanks used in RWTS designed to hold sewage or effluent shall be constructed with materials capable of resisting corrosion from sewage and sewage gases, and the active and passive loads on the unit walls. Except as required by the rules of this Section, fiberglass tanks shall comply with IAPMO PS 1-2004, Standard for Prefabrication Septic Tanks, and CSA International B66-05, Standard for Design, Material, and Manufacturing Requirements for Prefabricated Septic Tanks and Sewage Holding Tanks, as applicable. IAPMO PS 1-2004 and CSA International B66-05 are hereby incorporated by reference including any subsequent amendments and editions. Copies of these standards may be inspected at the On-Site Wastewater Section Central Office, located at 2728 Capital Blvd., Raleigh, NC in the Parker-Lincoln Building, and copies may be obtained from the ANSI On-Line Store at <http://webstore.ansi.org/ansidocstore> at a cost of forty-nine dollars and ninety-five cents (\$49.95), and from the Canadian Standards Association, at 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6 Canada at a cost of one hundred dollars (\$100.00) plus shipping and handling, respectively. Documentation shall be provided that at least one of each size tank in each model meets specified physical properties set forth in IAPMO PS 1-2004 and CSA International B66-05, as applicable. At least one of each size of fiberglass reinforced plastic tank used in an RWTS shall be subjected to a vacuum test by an independent testing laboratory. Test unit must withstand negative pressure of 2.5 pounds per square inch (69.3 inches of water) without leakage or failure. Test results shall be included with the specifications that are provided to the state for approval.

- (E) Prefabricated tanks used in RWTS other than precast reinforced concrete or fiberglass reinforced plastic units shall be approved on an individual basis by the State based on information furnished by the designer which indicates the unit will provide effectiveness equivalent to reinforced concrete or fiberglass reinforced plastic units.
- (F) RWTS shall bear an imprint identifying the manufacturer, the RWTS serial number assigned to the manufacturer's model approved by the State, and the liquid or working capacity of the unit. The imprint shall be located to the right of the outlet opening pipe penetration point.
- (G) The design, construction, and operation of RWTS shall prevent bypass of wastewater.
- (H) Electrical circuits to the RWTS shall be provided with manual circuit disconnects within a watertight, corrosion-resistant, outside enclosure (NEMA 4X or equivalent) adjacent to the RWTS securely mounted at least 12 inches above the finished grade. Control panels provided by the manufacturer shall be installed in a watertight, corrosion-resistant enclosure (NEMA 4X or equivalent) mounted at least 12 inches above finished grade and located adjacent to the RWTS or in view of the RWTS on the side of the facility. The control panel shall not be located more than 50 feet from the RWTS components controlled by the panel. The control panel shall remain accessible at all times to the system operator (ORC). Conductors shall be conveyed to the disconnect enclosure and control panel through waterproof, gasproof, and corrosion-resistant conduits. Splices and wire junctions, if needed, shall be made outside the RWTS in a watertight, corrosion-resistant enclosure (NEMA 4X or equivalent) securely mounted adjacent to the unit at least 12 inches above the finished grade. Wire grips, duct seal, or other similar materials shall be used to seal around wire and wire conduit openings inside the RWTS and disconnect enclosure that shall prevent the transfer of liquid or gas into the RWTS or into the enclosure. The RWTS shall have an alarm device or devices to warn the

user or operator of a unit malfunction or a high water condition. The alarm shall be audible and visible by system users and securely mounted adjacent to the RWTS, at least 12 inches above finished grade or in view of the RWTS on the side of the facility. The alarm shall not be located more than 50 feet from the RWTS component triggering the alarm condition. The alarm shall remain accessible at all times to the system operator (ORC). The alarm shall meet NEMA 4X standards or otherwise be equivalently watertight and corrosion resistant. The alarm circuit or circuits shall be supplied ahead of any RWTS electrical control circuit overload and short circuit protective devices. Blower location shall be shown on plans and plans and specifications shall detail proposed corrosion-resistant blower enclosure, if applicable.

- (4) A settling tank shall be required prior to or as an integral part of the design of the RWTS. The liquid capacity of the settling tank shall be at least equal to half of the design daily flow of the RWTS, or as otherwise specified by the manufacturer, whichever is larger. The settling tank may either be an integral chamber of the RWTS tank, an approved prefabricated septic tank or another tank specially designed for a specific individual system and approved by the State as a part of the plans for the RWTS.
- (5) A manufacturer of an RWTS who desires consideration for approval as an Experimental, Controlled Demonstration, Innovative or Accepted system shall apply separately pursuant to Rule .1969 of this Section.

*History Note:* Authority G.S. 130A-335(e),(f); 130A-342;

*Eff.* July 1, 1982;

*Amended Eff.* June 1, 2006; April 1, 1993; May 1, 1991; December 1, 1990; January 1, 1990.

**15A NCAC 18A .1969 APPROVAL AND PERMITTING OF ON-SITE SUBSURFACE WASTEWATER SYSTEMS, TECHNOLOGIES, COMPONENTS, OR DEVICES**

(a) Experimental, controlled demonstration, and innovative wastewater systems (hereinafter referred to as E & I systems) are any wastewater systems, system components, or devices that are not specifically described in Rules .1955, .1956, .1957, or .1958 of this Section, including any system for which reductions are proposed in the minimum horizontal or vertical separation requirements or increases are proposed to the maximum long-term acceptance rates of this Section; or any E & I systems as defined by G.S. 130A-343(a) and approved pursuant to applicable laws and this Rule. Accepted systems are as defined

by G.S. 130A-343(a). This Rule shall provide for the approval and permitting of E & I and accepted systems.

(b) APPLICATION: An application shall be submitted in writing to the State for an E & I system. The application shall include the information required by G.S. 130A-343(d),(e),(f), and (g), and the following, as applicable:

- (1) specification of the type of approval requested as either innovative, controlled demonstration, experimental, or a combination;
- (2) description of the system, including materials used in construction, and its proposed use;
- (3) summary of pertinent literature, published research, and previous experience and performance with the system;
- (4) results of any available testing, research or monitoring of pilot systems or full-scale operational systems and shall identify whether the testing, research or monitoring provided was conducted by a third party research or testing organization;
- (5) specification of system evaluation protocol as either an approved and listed protocol by the State or the applicant shall submit an alternative protocol for the evaluation of the performance of the manufacturer's system. National Sanitation Foundation (NSF) Standard 40 has been approved as an evaluation protocol pursuant to G.S. 130A-343(d);
- (6) verification that a system being submitted for approval has been tested and certified in accordance with an approved evaluation protocol, if applicable. For systems with no prior approval pursuant to this Rule, the manufacturer shall provide an affidavit certifying that the product submitted for approval is the same as the certified or listed product or identify any modifications made to the submitted product.
- (7) identity and qualifications of any proposed research or testing organization and the principal investigators, and an affidavit certifying that the organization and principal investigators have no conflict of interest and do not stand to gain financially from the sale of the E & I system;
- (8) objectives, methodology, and duration of any proposed research or testing;
- (9) specification of the number of systems proposed to be installed, the criteria for site selection, and system monitoring and reporting procedures;
- (10) operation and maintenance procedures, system classification, proposed management entity and system operator;
- (11) procedure to address system malfunction and replacement or premature termination of any proposed research or testing;
- (12) notification of any proprietary or trade secret information, system, component, or device;

- (13) in the case of a request for innovative system approval intended by the applicant to be subsequently reclassified from an innovative to an accepted system, monitoring, reporting and evaluation protocols to be followed by the manufacturer, the results of which shall be submitted in its future petition for accepted status; and

- (14) fee payment as required by G.S. 130A-343(k), by corporate check, money order or cashier's check made payable to: North Carolina On-Site Wastewater System Account or NC OSWW System Account, and mailed to the On-Site Wastewater Section, 1642 Mail Service Center, Raleigh, NC 27699-1642 or hand delivered to Rm. 1A-245, Parker Lincoln Building, 2728 Capital Blvd., Raleigh, NC.

(c) REVIEW: The State shall review all applications submitted as follows:

- (1) the completeness of the application shall be determined, and a determination shall be made whether additional information is needed to continue the review. The State shall inform the applicant of the acceptance or rejection of the application, or of any additional information needed to continue the review, within 30 days. When an application is rejected, the State shall inform the applicant in writing of the reasons for rejection and whether additional information is required for the application to be reconsidered. Acceptance of the application does not constitute a qualitative review of the information provided, nor the approval or denial of the proposed system designation. Additional requested information for the application to be considered complete shall be received within 180 days, or the application file shall be closed. Notwithstanding a prior rejection or denial, an applicant may reapply pursuant to Paragraph (b) of this Rule;
- (2) the determination shall be made for a complete application whether the system meets the standards of an experimental system under G.S. 130A-343(a)(4), G.S. 130A-343(e) and Paragraph (d) of this Rule; a controlled demonstration system under G.S. 130A-343(a)(2), G.S. 130A-343(f) and Paragraph (e) of this Rule; or whether the system meets the standards of an innovative system under G.S. 130A-343(a)(5), G.S. 130A-343(g), and Paragraph (g) of this Rule, as applicable. This review shall be completed in accordance with the following time frame:

Table VI: Time Frame For State Review of Completed E & I System Applications

Type of Approval Requested	Normal Review	Fast Track Review	Rule Reference
Experimental	90 days	45 days	.1969(d)(2) of this Section
Controlled Demonstration	120 days	60 days	.1969(e)(4) of this Section
Innovative	180 days	120 days	.1969(g)(2) of this Section

and:

- (3) The State shall notify the applicant and local health department of the approval or denial of an E & I system. Such notice shall include conditions for permitting, siting, installation, use, monitoring, operation and maintenance, and number of systems which can be installed, as applicable.

(d) APPROVAL OF EXPERIMENTAL SYSTEMS: A system may be approved for use as an experimental system as follows:

- (1) the system shall be part of a research or testing program which has been approved by the State. The research or testing program shall be conducted by a third party research or testing organization which has knowledge and experience relevant to the proposed research or testing and has no conflict of interest and does not stand to gain financially from the sale of the proposed system. To be approved by the State, the proposed research or testing program shall:

- (A) Be designed such that, if the objectives were met, the system would satisfy the standards for approval as a controlled demonstration or an innovative system under Paragraph (e) or Paragraph (g) of this Rule, respectively; and
- (B) Be designed and include research and testing methodology that shall have a reasonable likelihood of meeting the objectives, and
- (C) Include in the proposal for evaluation all information required pursuant to G.S. 130A-343(e).

- (2) Applications for an experimental system shall be "Fast Track" approved or denied within 45 days from the acceptance of a complete application when the proposed research or testing program is a prior approved evaluation protocol.

(e) APPROVAL OF CONTROLLED DEMONSTRATION SYSTEMS: A system may be approved for use as a controlled demonstration system as follows:

- (1) Acceptable research is provided from prior evaluation of the system in North Carolina as an experimental system or from any comparable evaluations of the system in other states, including any prior evaluation pursuant to an approved evaluation protocol, which supports the proposed use of the system; and
- (2) Documentation is provided of at least 50 installations operational for at least 12-months, unless:

- (A) data have been collected that show all other requirements for controlled demonstration approval have been met from a lesser number of North Carolina installations in conjunction with an approved experimental research or testing program; or
- (B) documentation is provided of the system's design and functional similarity to another approved system and that substantiates performance in a manner equal or superior to the comparable approved system in terms of structural integrity, chemical durability, hydraulic performance and wastewater treatment; or
- (C) the provisions for "Fast-Track" approval of Subparagraph (4) of this Paragraph are met; and

- (3) The system shall be part of a research or testing program which has been approved by the State. To be approved by the State, the proposed research or testing program shall:

- (A) Be designed such that, if the objectives were met, the system would satisfy the standards for approval as an innovative system under Paragraph (g) of this Rule, and
- (B) Be designed and include testing methodology that shall have a reasonable likelihood of meeting the objectives, and
- (C) Include in the proposal for evaluation all information required pursuant to G.S. 130A-343(f).

- (4) Applications for a controlled demonstration shall be "Fast Track" approved or denied within 60 days from the acceptance of a complete application when the application includes TS-I or TS-II compliant certification data collected under NSF Standard 40 or another prior-approved evaluation protocol, and all other available field verification data provided under Subparagraph (b)(4) of this Rule are consistent with TS-I or TS-II performance standards.

(f) PERMITTING OF EXPERIMENTAL AND CONTROLLED DEMONSTRATION SYSTEM: A local health department shall issue an Improvement Permit and Construction Authorization and an Operation Permit for an

experimental or controlled demonstration system when the following conditions are met:

- (1) There is an application for an Improvement Permit and Construction Authorization in accordance with 15A NCAC 18A .1937(c), with the proposed use of an experimental or controlled demonstration system specified;
- (2) The proposed site is included as part of an approved research or testing program and any conditions specified for use of the system have been met;
- (3) When an experimental or controlled demonstration system is proposed to serve a residence, place of business or place of public assembly, there shall be a designated area for a repair system in accordance with the provisions of 15A NCAC 18A .1945(b) or an innovative or accepted system of this Rule, except:
  - (A) When an existing and properly functioning wastewater system is available for immediate use, including connection to a public or community wastewater system; or
  - (B) When the experimental or controlled demonstration system is used as a repair to an existing malfunctioning system when there are no other approved or accepted repair options; or
  - (C) As provided in G.S. 130A-343(f) for Controlled Demonstration Systems;
- (4) When an experimental or controlled demonstration system is proposed which shall not serve a residence, place of business, or place of public assembly, a repair area or backup system shall not be required.
- (5) The application for an experimental system shall include statements that the property owner is aware of its experimental nature, that the local health department and State do not guarantee or warrant that these systems will function in a satisfactory manner for any period of time, that use of the system may need to be discontinued if the system research or testing program is prematurely terminated, and that the site and system are to be accessible during reasonable hours for monitoring and evaluation by the research or testing organization. Such statements shall be signed by the owner;
- (6) Provisions shall be made for operation and maintenance of the system;
- (7) Any special conditions required for the installation of the experimental or controlled demonstration system shall be specified in the Improvement Permit and the Construction Authorization. Use of an experimental or controlled demonstration system and any conditions shall be described on the

Improvement Permit, Construction Authorization and any subsequent operation permits, with provisions for a repair area and backup system specified;

- (8) The State shall be notified of a proposed Improvement Permit, Construction Authorization and any subsequent operation permits for experimental or controlled demonstration systems prior to issuance by the local health department. The State shall notify the manufacturer and local health department if the proposed use is found to be inconsistent with the approved research or testing program.
- (9) Upon completion of the installation and prior to use, an Experimental or Controlled Demonstration System Operation Permit (ESOP or CDSOP) shall be issued by the local health department. The ESOP or CDSOP shall be valid for a specified period of time based upon the projected duration of the research and testing program, not to exceed five years. Maintenance, monitoring and testing requirements shall be specified as permit conditions, in accordance with the approved research or testing program. Failure to carry out these conditions shall be grounds for permit suspension or revocation.
- (10) Prior to expiration of the ESOP (CDSOP) and based upon satisfactory system performance as determined during the research or testing program, the local health department shall issue an Operation Permit. Premature termination of the research or testing program shall be grounds for ESOP (CDSOP) suspension or revocation.
- (11) Upon completion of monitoring, research and testing, the research or testing organization shall prepare a final report to the State including recommendations on future use of the system. If the State determines that the results indicate that the standards of Paragraph (e) or (g) of this Rule are met, the State shall approve the use as a controlled demonstration or an innovative system, respectively.

(g) **INNOVATIVE SYSTEMS:** Innovative systems, technologies, components, or devices shall be reviewed and approved by the State, and the local health department shall permit innovative systems in accordance with the following:

- (1) The State shall approve the system as an innovative system when there has been successful completion of a prior evaluation of the system in North Carolina as an experimental or controlled demonstration system or when sufficient documentation is provided from any comparable evaluations of the system in other states which support the proposed use of the system, and when the performance requirements for an innovative system of G.S. 130A-343(a) and G.S. 130A-

343(g) and the following conditions have been met:

- (A) The system, shall have been demonstrated to perform equal or superior to a system, which is described in Rules .1955, .1956, .1957, or .1958, of this Section, based upon controlled pilot-scale research studies or statistically-valid monitoring of full-scale operational systems;
  - (B) Materials used in construction shall be equal or superior in physical properties and chemical durability, compared to materials used for similar proposed systems, specifically described in Rules .1955, .1956, .1957, or .1958 of this Section; and
  - (C) Documentation is provided of at least 100 installations operational for at least 12-months unless data have been collected that show all other requirements for innovative approval have been met from a lesser number of North Carolina installations in conjunction with an approved experimental or controlled demonstration research or testing program.
- (2) In lieu of the requirements specified in Subparagraph (1) of this Paragraph, applications for innovative approval shall be "Fast Track" approved or denied within 120 days from the acceptance of a complete application when the application includes TS-I or TS-II compliant evaluation data collected under NSF Standard 40 or another prior approved evaluation protocol; and the following:
- (A) The system, shall have been demonstrated to perform equal or superior to a system, which is described in Rules .1955, .1956, .1957, or .1958, of this Section, and to comply with TS-I or TS-II standards, based upon statistically valid third-party field verification data which include at least 50 data points from a minimum of 15 sites, with a minimum of two data points per site, collected over at least a 12-month period, and with no data excluded from the field sampling sites; and
  - (B) Materials used in construction shall be equal or superior in physical properties and chemical durability, compared to materials used for similar proposed systems, specifically

described in Rules .1955, .1956, .1957, or .1958 of this Section.

- (3) Approved innovative systems shall be assigned a unique code for tracking purposes. Prior to making a request for reclassification of a system from innovative to accepted, the manufacturer shall have a system in place to keep track of the number and location of new system installations, and of any system installations it becomes aware of which were required to be repaired, and to provide this information to the State upon request and in any subsequent petition for accepted status.
- (4) A local health department shall issue an Improvement Permit and a Construction Authorization for any innovative system approved by the State upon a finding that the provisions of this Section including any conditions of the approval are met. Use of an innovative system and any conditions shall be described on the Improvement Permit, Construction Authorization, or Operation Permit.
- (5) Manufacturers of proprietary innovative systems which include an advanced pretreatment component may choose to comply with the performance audit requirements as stipulated in Subparagraph (h)(8) of this Rule, in lieu of routine effluent sampling for each system on an annual basis as may otherwise be required, and shall comply with those performance audit requirements prior to being granted accepted system status. The approved audit procedure shall be carried out annually until receipt of Accepted System approval by the Commission.

(h) **ACCEPTED SYSTEMS:** A petition to the Commission for reclassification of a proprietary innovative system to an accepted system, as defined in G.S. 130A-343(a)(1), shall be submitted by the manufacturer for review to the State, accompanied by the fee payment as required by G.S. 130A-343(k) and as stipulated in Paragraph (b) of this Rule. The State shall review all petitions submitted and evaluate the following: the completeness of the petition, and whether additional information is needed to continue the review; and whether the system meets the standards of an accepted system under G.S. 130A-343(a)(l), G.S. 130A-343(h), and this Section. The State shall inform the petitioner if the petition is determined to be complete or of any additional information needed to continue the review, within 30 days. When a petition is determined to be incomplete, the petitioner shall be informed in writing why and whether additional information is required for the petition to be reconsidered. This review of the petition for completeness does not constitute a qualitative review of the information provided, nor the approval or denial of the proposed system designation. Additional requested information for the petition to be considered complete shall be received within 180 days, or the petition file shall be closed. Upon request of the petitioner, the Commission may modify this 180 day time frame if the Commission determines that more time is necessary to obtain the additional information

requested by the State and it can be provided within the requested modified time frame. The petitioner may also request Commission review of the State's determination that a petition is incomplete or a request by the State for additional information. The State may also initiate a review of a nonproprietary innovative system pursuant to G.S. 130A-343(i)(2). The State shall submit to the Commission findings and recommendations based upon its review for final Commission action on system designation. The State's findings and recommendations for a proprietary innovative system shall be presented to the Commission within 120 days of receipt of a complete petition. The Commission shall designate a wastewater system technology, component or device as an accepted system when it finds that the standards set forth by G.S. 130A-343(a)(1) and G.S. 130A-343(h) have been met. The following factors shall be considered prior to granting accepted system status:

- (1) documentation provided that there have been at least 300 systems installed statewide and the system has been in use as an approved innovative system for more than five years;
- (2) data and findings of all prior evaluations of the system performance as provided by the manufacturer;
- (3) results of prior performance surveys of innovative systems in use in North Carolina for at least the five year period immediately preceding the petition, including any information available to the manufacturer pertinent to the accuracy and validity of performance surveys not completed under their control;
- (4) review(s) of records on system use and performance reported by local health departments and other information documenting the experiences with performance of the system in North Carolina, including information collected and reported pursuant to Subparagraph (g)(1) and Paragraph (p) of this Rule. Upon request of the manufacturer, the State and manufacturer shall meet to discuss the accuracy and validity of performance data and surveys to be considered for inclusion in the review. Local health departments shall be invited to participate in the discussion;
- (5) for proprietary nitrification trench systems, a statistically valid survey of system performance shall be performed, as follows:

- (A) The manufacturer shall provide a proposed survey plan for State concurrence prior to carrying out the survey. This plan shall specify the number of systems to be evaluated, period of evaluation, method to randomly select systems to be evaluated, methods of field and data evaluation, and proposed survey team members, including proposed cooperative arrangements to be made with State and local health

department on-site wastewater program staff. The State shall facilitate local health department participation with any performance review or survey. The State shall utilize the Division of Public Health's State Center for Health Statistics for assistance in evaluating the statistical validity of proposed evaluation protocols.

- (B) The survey shall include the field evaluation of at least 250 randomly selected innovative systems compared with 250 comparably-aged randomly selected conventional systems, with at least 100 of each type of surveyed system currently in use and in operation for at least five years. Systems surveyed shall be distributed throughout the three physiographic regions of the state (Mountain, Piedmont and Coastal Plain) in approximate proportion to the relative usage in the three regions. The survey shall determine comparative system failure rates, with field evaluations completed during a typical wet-weather season (February through early April), with matched innovative and conventional systems sampled during similar time periods in each region. The petitioner shall provide a statistical analysis of the survey results showing a "one-sided" test where, if the failure rate in the sample of 250 innovative systems is at least five percentage points higher than the failure rate in the sample of 250 conventional systems, there is only a five percent chance that a difference this large would occur by chance (95% confidence level). If a statistically significant higher failure rate in the innovative system is not detected, the Commission shall find that the innovative system performs the same as or better than the conventional system.

- (6) The Commission shall grant accepted status to an innovative system based upon a showing by the manufacturer that there have been at least 10,000 operational systems installed in the state, in more than one county of the state, over at least an eight year period with a total reported failure rate statewide based on records provided by the manufacturer and local health departments of less than one percent. However, the granting of accepted status based upon this criteria shall be conditioned on the manufacturer successfully



- completing an approved field survey pursuant to Parts (h)(5)(A) or (h)(5)(B) of this Rule within no more than 24 months of being granted accepted status;
- (7) The manufacturer of a proprietary innovative system, which includes an advanced pretreatment component designed to achieve NSF-40, TS-I or TS-II effluent quality standards requesting accepted status shall document that the system has received certification under NSF Standard 40 or another prior approved evaluation protocol. A certified system which has been modified pursuant to Paragraph (i) of this Rule or as otherwise necessary to be approved for use in North Carolina shall still be considered in compliance with this certification requirement. For approved innovative systems in general use in North Carolina for more than five years prior to January 1, 2006, which only lack certification under NSF Standard 40 or another approved evaluation protocol but meet all other requirements for Accepted System status, the Commission shall grant conditional accepted status provided such certification is obtained within 24 months from the date this conditional status is granted;
- (8) Performance Audit: Prior to Accepted System approval by the Commission of a proprietary innovation system which includes an advanced pretreatment component, a performance audit shall be run for a minimum of three consecutive years or until data have been collected from at least 30 separate operational North Carolina systems. The performance audit shall consist of third-party random sampling of a minimum of 10 separate operational North Carolina sites by an approved field evaluation protocol. The manufacturer shall propose the third-party, and the third-party shall submit a plan for system evaluation to include their third-party credentials and the number of systems to be sampled, the method for randomly selecting the sites to be sampled, and details of the procedure for sample collection and analysis, which shall be prior-approved by the State. Samples shall be collected by 24-hour composite sampling (grab sampling for fecal coliform) and analyzed by a wastewater laboratory certified by the Division of Water Quality for all applicable performance parameters. All systems to be included in the performance audit shall be found by the third-party to be in compliance with the design requirements of the Innovative Approval. In order to be granted accepted status, the following conditions shall be met:
- (A) the mean values of sample data from all sites statewide in each sampling year shall meet NSF-40, TS-I or TS-II effluent quality standards for each parameter, as applicable;
- (B) no more than 20 percent of these randomly sampled sites during each sampling year shall exceed the designated NSF-40, TS-I or TS-II effluent quality standards for any parameter, as applicable;
- (C) the sampled systems for the purposes of evaluation for Accepted System status shall be operational for at least three years, with at least 10 systems in operation for at least five years, and results from no more than 20 percent of these sampled systems over five years old shall exceed the designated NSF-40, TS-I or TS-II effluent quality standards for any parameter, as applicable;
- (D) no data collected and analyzed pursuant to Parts (A) through (C) of this Subparagraph shall be considered as part of the audit that is collected before April 1, 2006;
- (E) operation, maintenance or sampling activities that have taken place or are proposed by the third-party at the audited sites, including Operator reports, maintenance logs and projected sample collection days and laboratory reports for samples analyzed, shall be provided to the local health department and the State;
- (F) if the performance criteria in Parts (A) and (B) of this Subparagraph are not met in any sampling year, the sites from which substandard samples are obtained shall be resampled for any non-compliant parameter. If the performance criteria in Parts (A) and (B) of this Subparagraph are still not met using the results from the resampled data, at least 20 new sites or twice as many as were initially sampled, not to exceed 30, shall be sampled for all applicable performance parameters. If this second set of sample results does not meet performance criteria stipulated in Parts (A) and (B) of this Subparagraph, the accepted system status shall be denied.
- (9) Provisions shall be in place for the manufacturer of a proprietary accepted system which include an advanced pretreatment component to remain certified and listed under NSF Standard 40 or another prior State approved evaluation, certification and listing protocol that includes routine audits of the

system manufacturing facilities and of the performance of operational systems that verifies ongoing conformity with the approved protocol.

- (10) Other criteria for determining whether the proposed system has been in general use, and other surveys, including evaluations of different numbers of innovative and conventional systems, designed to verify equal or superior performance of the innovative system compared to the conventional system under actual field conditions in North Carolina shall be approved by the state when they are demonstrated to have comparable statistical validity as described in Subparagraphs (5) or (8) of this Paragraph, as applicable. The State's review and approval of proposed alternate criteria for determining whether the system has been in general use, or of other proposed surveys are subject to review and concurrence by the Commission.

(i) **APPROVAL AND PERMITTING OF ACCEPTED SYSTEMS:** The following conditions apply to the approval and permitting of accepted systems:

- (1) When a petition or recommendation for an accepted wastewater system designation is approved by the Commission, the State shall notify local health departments and publish a listing of accepted systems. The Commission shall impose any use, design, installation, operation, maintenance, monitoring, and management conditions pursuant to G.S. 130A-343.
- (2) The local health department shall permit systems designated as accepted nitrification trench systems that meet the requirements of this Section, laws, and conditions of its accepted system approval in an equivalent manner as a conventional system. The Owner may choose to substitute an accepted system for a conventional system or another accepted system without prior approval of the health department as long as no changes are necessary in the location of each nitrification line, trench depth, or effluent distribution method.
- (3) The owner may choose to substitute an accepted advanced pretreatment system for another accepted advanced pretreatment system provided the owner applies to the local health department and receives a revised Construction Authorization prior to its installation.
- (4) The type of accepted system installed shall be indicated on the Operation Permit, including designation of the manufacturer and model or unique code.

(j) **MODIFICATION OF APPROVED SYSTEMS:** Where a manufacturer of an approved E & I or accepted system seeks to modify such system or its conditions of approval (including

siting or sizing criteria) and retain its approved status, the manufacturer shall submit to the State a request for approval of the proposed modification. If the manufacturer demonstrates that the modified system will perform in a manner equal or superior to the approved system in terms of structural integrity, chemical durability, hydraulic performance and wastewater treatment, the state shall approve the modified system with the same status as the previously approved system. Approvals of proposed modifications to E & I systems pursuant to this Paragraph shall be made by the State. Approvals of proposed modifications to accepted systems pursuant to this Paragraph shall be made by the Commission when the manufacturer's demonstration provides clear, convincing and cogent supporting evidence. In order to confirm the satisfactory performance of an approved modified accepted system, the manufacturer shall conduct a survey or audit of installed modified systems in accordance with Subparagraphs (h)(5) or (h)(8) of this Rule, as applicable, within one year of the fifth anniversary of the approval of the modified system and shall submit the results of the survey to the State. The State may modify, suspend, or revoke its approval of the modified system based on the survey results or any other information that supports a finding that the modified system does not perform in a manner equal or superior to the previously approved E & I system. The Commission may similarly modify, suspend, or revoke its approval of a modified accepted system.

(k) The State may modify, suspend or revoke the approval of a system as provided for in G.S. 130A-343(c), and as follows:

- (1) The system approval shall be modified as necessary to comply with subsequent changes in laws or rules which affect their approval.
- (2) The approval of a system may be modified, suspended or revoked upon a finding that:
  - (A) subsequent experience with the system results in altered conclusions about system performance, reliability, or design;
  - (B) the system or component fails to perform in compliance with performance standards established for the system; or
  - (C) the system or component or the system applicant fails to comply with wastewater system laws, rules or conditions of the approval.
- (3) The State shall notify the Commission of any action required for Commission approval of any modifications to the status of an accepted system. The Commission may require the manufacturer or the State to complete a follow-up survey of a proprietary nitrification trench system or a performance audit of an advanced pretreatment system such as described in this Rule if the Commission determines further information is necessary prior to rendering a final decision on modification of the status of an accepted system.

(l) Modification, suspension or revocation of a system approval shall not affect systems previously installed pursuant to the approval.

(m) Reductions in total nitrification trench length allowed for systems, as compared to the system sizing requirements delineated in Rule .1955 of this Section for conventional systems based upon excavated trench width, apply only to drainfields receiving septic tank effluent of domestic strength or better quality. The system may be used for facilities producing non-domestic strength wastewater with nitrification trench length and trench bottom area determined based upon excavated trench width equal to what is required by Rule .1955 of this Section for a conventional gravel trench system, with no reduction or application of an equivalency factor. However, reductions up to 25 percent when allowed for approved innovative or accepted system models may be applied for facilities producing higher strength wastewater following a specifically approved pretreatment system designed to assure effluent strength equal to or better than domestic septic tank effluent, with a five-day Biochemical Oxygen Demand (BOD) less than 150 milligrams per liter (mg/l), total suspended solids (TSS) less than 100 mg/l and fats, oil and grease (FOG) less than 30 mg/l.

(n) A Performance Warranty shall be provided by the manufacturer of any approved innovative or accepted wastewater system handling untreated septic tank effluent which allows for a reduction in the total nitrification trench length of more than 25 percent as compared to the total nitrification trench length required for a 36-inch wide conventional wastewater system, pursuant to G.S. 130A-343(j). The Department shall approve the warranty when found in compliance with the applicable laws and this Paragraph. When a wastewater system warranted according to G.S. 130A-343(j) (warranty system) is proposed to serve a residence, place of business, or place of public assembly, the site shall include a repair or replacement area in accordance with Rule .1945(b) of this Section or an innovative or accepted system approved under this Rule with no more than a 25 percent reduction in excavated trench bottom area. The following conditions are applicable for the performance warranty and a system approved pursuant to this Paragraph:

- (1) The Manufacturer shall provide the approved Performance Warranty in effect on the date of the Operation Permit issuance to the owner or purchaser of the system. The warranty shall be valid for a minimum of five-years from the date the warranty system is placed into operation.
- (2) The Manufacturer shall issue the Performance Warranty to the property owner through its authorized installer who shall sign the Performance Warranty indicating the system has been installed in accordance with the manufacturer's specifications, any conditions of the system approval granted by the Department, and all conditions of the Authorization to Construct a Wastewater System by the local health department. The installer or contractor shall return a copy of the signed Performance Warranty to the Manufacturer within 10 days indicating the

physical address or location of the facility served by the warranty system, date the system was installed or placed into use, and type and model of system installed.

- (3) The Performance Warranty shall provide that the manufacturer shall furnish all materials and labor necessary to repair or replace a malfunctioning warranty system as defined in Rule .1961(a) of this Section or a warranty system that failed to meet any performance conditions of the approval. The system shall be repaired or replaced with a fully functional wastewater system at no cost to the Owner, in accordance with this Section and applicable laws.
- (4) Performance Warranty repairs such as full replacement of the nitrification system, extension of the nitrification system or other repairs shall be completed pursuant to a repair Authorization to Construct that is issued by the local health department in accordance with this Section.
- (5) The Performance Warranty shall be attached to the Operation Permit issued by the Health Department for the wastewater system. The Performance Warranty shall remain in effect, notwithstanding change in ownership, to the end of the five-year warranty period.

(o) Manufacturers of proprietary systems approved under this Rule shall provide a list of manufacturer's authorized installers to the Department and applicable local health departments, and update this list whenever there are additions or deletions. No Operation Permit shall be issued for a proprietary system installed by a person not authorized by the Manufacturer, unless the Manufacturer of the proprietary system specifically approves the installation in writing.

(p) The local health department shall include in its monthly activity report submitted to the State the number of new system Operation Permits issued for E & I and accepted systems. Additionally, the number of Operation Permits issued for repairs of E & I and accepted systems, and repair system type shall be reported to the State as part of the monthly activity report. The State shall accumulate and store this installation data for future reference and surveys, including site locations.

(q) The State shall provide assistance and training to its authorized agents to assure approved E & I and accepted systems are permitted, installed, operated and evaluated in accordance with the system approval.

*History Note: Authority G.S. 130A-335(e),(f); 130A-343; Eff. April 1, 1993; Temporary Amendment Eff. June 24, 2003; February 1, 2003; Amended Eff. June 1, 2006; February 1, 2005; May 1, 2004.*

#### **15A NCAC 18A .1970 ADVANCED WASTEWATER PRETREATMENT SYSTEM**

(a) **ADVANCED PRE-TREATMENT SYSTEM PERFORMANCE STANDARDS:** A wastewater system with a design flow of up to 3000 gallons per day approved pursuant to 15A NCAC 18A .1957(c) or .1969 that includes an advanced

pretreatment component shall be specifically designed to meet one of the effluent quality standards specified in Table VII prior to dispersal of the effluent to the soil and shall comply with the requirements of this Rule.

**Table VII (Effluent Quality Standards for Advanced Pretreatment Systems)**

Parameter	NSF-40	TS-I	TS-II
Carbonaceous Biochemical Oxygen Demand (CBOD)	<25 (mg/l) *	<15 (mg/l)	<10 (mg/l)
Total Suspended Solids (TSS)	<30 (mg/l)	<15 (mg/l)	<10 (mg/l)
Ammonium Nitrogen (NH <sub>4</sub> -N)		<10 (mg/l)	<10 (mg/l)
Total Nitrogen (TN) (TN is Total Kjeldahl Nitrogen plus Nitrate+Nitrite Nitrogen)			<20 mg/l or >60% removal
Fecal Coliform		<10,000 (colonies/100 ml)	<1,000 (colonies/100 ml)

\*mg/l is milligrams per liter

System performance monitoring, site and system compliance criteria pursuant to these standards are delineated in Paragraphs (n) and (o) of this Rule. These standards or modifications to these standards may be proposed to be complied with by the designer of systems with a design flow of over 3000 gallons per day or Industrial Process Wastewater Systems and approved by the State pursuant to Rules .1938(e) or .1938(f) of this Section, respectively, when documentation is provided that the performance criteria of Rule .1946 of this Section and 15A NCAC 02L shall be met.

(b) Design influent quality shall not exceed the criteria specified in Table VIII, unless the system is designed and approved by the

State to handle higher strength wastewater on a product or project-specific basis.

**Table VIII (Influent Quality Standards for Advanced Pretreatment Systems)**

Parameter	Influent Not to Exceed (mg/l)*
Biochemical Oxygen Demand (BOD)	350
Total Suspended Solids (TSS)	200
Total Kjeldahl Nitrogen (TKN)	100
Fats, Grease and Oil (FOG)	30

\*mg/l is milligrams per liter

Maximum influent characteristics in Table VIII are based upon septic tank pretreatment. The product's RWTS, Experimental, Controlled Demonstration, Innovative or Accepted System approval, as applicable, may include alternate or additional influent limitations, such as for systems designed to handle untreated wastewater and special limitations for TS-I and TS-II systems to achieve the proper amount of nitrification.

(c) The site shall be initially evaluated and classified in accordance with the rules of this Section or as otherwise specified in a system-specific approval issued pursuant to 15A NCAC 18A .1969. A ground absorption system receiving effluent from an advanced wastewater pretreatment system may be used on sites classified as SUITABLE or PROVISIONALLY SUITABLE for conventional, modified, alternative, or E & I or accepted systems in accordance with this Section. Modifications to siting and system design criteria pursuant to Paragraphs (d), (e), (f), (g), (h), (i), and (j) of this Rule shall be acceptable, as applicable.

(d) NSF-40 SYSTEMS SITING AND SIZING REQUIREMENTS: For systems approved to achieve at least NSF-40 standards and designed for no more than 1500 gallons per day, the following siting and sizing factors apply when designing the soil absorption system:

- (1) Trench or bed bottom separation distances are as specified in this Subparagraph. In Table IX, "SWC" means "Soil Wetness Condition," and "USC" means an "UNSUITABLE Soil/Fill Condition," other than a SWC.

**Table IX: Vertical Separation Requirements for NSF-40 Systems ≤1500 gallons per day**

Soil/System Criteria	Rule* Reference	Depth from Surface** to UNSUITABLE Soil/Fill Condition		Minimum Vertical Trench/Bed Bottom Separation Requirement			
		Gravity Distribution	Pressure Dispersal	Gravity Distribution		Pressure Dispersal	
				Depth to USC	Depth to SWC	Depth to USC	Depth to SWC
Soil Group I	Rules .1955, .1956, and .1957(a)	24- inches	24-inches	12-inches	12-inches	12-inches	12-inches
Soil Groups II-IV	Rules .1955, .1956, and .1957(a)	24-inches	24-inches	12-inches	12-inches	12-inches	12-inches

**APPROVED RULES**

New Fill	Rule .1957(b)(1)	18-inches to USC, and 12-inches to SWC	18-inches to USC, and 12-inches to SWC	18-inches	18-inches	18-inches	12-inches
Existing Fill (≤480 gpd only)	Rule .1957(b)(2)	36-inches of Group I Fill/Soils	24-inches of Group I Fill/Soils	36-inches	36-inches	18-inches	18-inches

\*Except as allowed in this Rule, all other requirements of the Rules referenced remain applicable

\*\*Minimum depth of soil/fill required at site to permit system. Depth shall be measured from the naturally occurring soil surface or Existing Fill surface, as applicable

- (2) The total drainfield trench length or bed system bottom area, as required for a ground absorption system receiving septic tank effluent, is reduced by 25 percent in soils which are Groups I or II with SUITABLE structure and clay mineralogy. No other reductions in linear footage of nitrification trench, square footage of trench bottom area or system area shall be applied when a PPBPS or

- (3) innovative trenches or accepted systems are used for the absorption field, except where based on an adjusted design daily flow rate granted in accordance with 15A NCAC 18A .1949(c). Bed systems remain restricted to a design flow of 600 gallons per day or less; and The minimum horizontal setback requirements of 15A NCAC 18A .1950, .1951 and .1956(6)(g), as applicable, shall be met, except as follows:

Table X

Minimum horizontal setbacks for ground absorption systems Where NSF-40 Pretreatment System are used for ≤ 1500 gallons per day	
Land Feature or Component	NSF-40 (feet)
Streams classified as WS-I, except for saprolite	70
Waters classified as S.A., from mean high water mark	70
Other coastal waters from mean high water mark	35
Any other stream, canal, marsh or other surface waters, from normal pool elevation	35
Any Class I or Class II reservoir from normal pool elevation	70
Any permanent storm water retention pond from flood pool elevation	35
Any other lake or pond from normal pool or mean high water elevation	35

The Provisions of Subparagraphs (1), (2) and (3) of this Paragraph are also applicable to systems approved as meeting TS-I or TS-II standards pursuant to 15A NCAC 18A .1969, unless otherwise restricted elsewhere in this Rule.

(e) TS-I SYSTEMS SITING AND SIZING REQUIREMENTS: Except as allowed in Parts (3)(A) and (3)(B) of this Paragraph, when trenches are used for the drainfield in conjunction with an advanced pretreatment system meeting TS-I standards, one and only one of the following siting, sizing or system factors pursuant to

Subparagraphs (1), (2) or (3) of this Paragraph apply when designing the ground absorption component of the system. When a system is permitted pursuant to this Paragraph, the provisions of Paragraph (d) of this Rule do not apply.

- (1) Trench bottom separation distances for a system with a design flow no greater than 1000 gallons per day are as specified in this Subparagraph. In Table XI, "SWC" means "Soil Wetness Condition," and "USC" means an "UNSUITABLE Soil/Fill Condition," other than a SWC.

Table XI: Vertical Separation Requirements for TS-I Systems ≤ 1000 gallons per day

Soil/System Criteria	Rule* Reference	Depth from Surface** to UNSUITABLE Soil/Fill Condition		Minimum Vertical Trench Bottom Separation Requirement			
		Gravity Distribution	Pressure Dispersal	Gravity Distribution		Pressure Dispersal	
				Depth to USC	Depth to SWC	Depth to USC	Depth to SWC

**APPROVED RULES**

Soil Group I	Rules .1955, .1956, and .1957(a)	24- inches	18-inches	12-inches	12-inches	9-inches	9-inches
Soil Groups II-IV	Rules .1955, .1956, and .1957(a)	21-inches	18-inches	9-inches	9-inches	9-inches	9-inches
New Fill	Rule .1957(b)(1)	14-inches to USC, and 12-inches to SWC	12-inches	18-inches	14 -inches	12-inches	9-inches
Existing Fill (≤480 gpd only)	Rule .1957(b)(2)	36-inches of Group I Fill/Soil	24-inches of Group I Fill/Soil	36-inches	36-inches	12-inches	12-inches

\*Except as allowed in this Rule, all other requirements of the Rules referenced remain applicable

\*\*Minimum depth of soil/fill required at site to permit system. Depth shall be measured from the naturally occurring soil surface or Existing Fill surface, as applicable

- (A) The trench bottom vertical separation distance shall not be reduced to less than 12 inches to rock or tidal water;
- (B) With the exception of the reduced setbacks to drainage devices pursuant to Table XII of this Rule, the minimum horizontal setback requirements of 15A NCAC 18A .1950, .1951 and .1956(6)(g), as applicable, shall be met;
- (C) A special site evaluation shall be provided to the local health department on behalf of the owner, pursuant to Paragraph (p) of this Rule; or
- (2) The long term acceptance rate (LTAR) that would be assigned by the local health department for a ground absorption system using septic tank effluent may be increased by up to a factor of two when all of the following conditions are met:
  - (A) A special site evaluation shall be provided to the local health department on behalf of the owner, pursuant to Paragraph (p) of this Rule, when Group III or IV soils or saprolite occur within three feet of the trench bottom or the site requires drainage of Group II or III soils or whenever the design flow exceeds 1000 gallons per day;
  - (B) No further reductions in linear footage of nitrification trench or system area shall be applied when a PPBPS or innovative trenches or accepted systems are used for the absorption field;
  - (C) For systems to be installed in fill, pressure dispersal (LPP or Drip distribution) shall be utilized;
  - (D) With the exception of the reduced setbacks to drainage devices pursuant to Table XII of this Rule or as allowed pursuant to Part (3)(B) of this Paragraph, the minimum horizontal setback requirements of 15A NCAC 18A .1950, .1951, and .1956(6)(g), as applicable, shall be met. For systems with a design flow in excess of 1000 gallons per day, a 25-foot horizontal separation shall be maintained to the property line, unless a site-specific nitrogen migration analysis indicates that a nitrate concentration at the property line will not exceed 10 milligrams per liter (mg/l); or
  - (3) The minimum horizontal setback requirements of 15A NCAC 18A .1950, .1951 and .1956(6)(g), as applicable, shall be met, except as follows for a system with a design flow not to exceed 1000 gallons per day:

Table XII

Minimum horizontal setbacks for ground absorption systems Where TS-I Pretreatment Systems are used for ≤ 1000 gallons per day	
Land Feature or Component	TS-I (feet)
Any public water supply	100
Streams classified as WS-I, except for saprolite	70
Waters classified as S-A, from mean high water mark	70
Other coastal waters, from mean high water mark	35
Any other stream, canal, marsh or other surface waters, from normal pool elevation	35

Any Class I or Class II reservoir, from normal pool elevation	70
Any permanent storm water retention pond, from flood pool elevation	35
Any other lake or pond, from normal pool or mean high water elevation	35
Any building foundation	5
Any basement	15
Any property line	10
Top of slope of embankments or cuts of 2 feet or more vertical height	15
Any water line	10
Upslope interceptor/foundation drains/diversions	7
Sideslope interceptor/foundation drains/diversions	10
Downslope interceptor/foundation drains/diversions	20
Groundwater lowering ditches or devices	20
Any swimming pool	15
Any other nitrification field (except the system repair area)	10

(A) With the exception of the reduced setbacks to drainage devices or as allowed pursuant to Part (B) of this Subparagraph, when any horizontal setbacks are proposed to be reduced pursuant to Table XII, the vertical separation modifications or LTAR increases shall not be concurrently applied pursuant to Subparagraphs (1) and (2) of this Paragraph, respectively.

(B) When an accepted system is used which allows for a 25 percent reduction in drainfield trench length, compared with a conventional trench system, for a system designed for 1000 gallons per day or less, the horizontal setback modifications in Table XII and a 25 percent trench length reduction may be concurrently applied when the site has space for an equivalently sized repair system. A special site evaluation shall be

provided to the local health department on behalf of the owner, pursuant to Paragraph (p) of this Rule, when Group III or IV soils or saprolite occur within three feet of the trench bottom.

(f) **TS-II SYSTEMS SITING AND SIZING REQUIREMENTS:** Except as allowed in Parts (3)(A) and (3)(B) of this Paragraph, when trenches are used for the drainfield in conjunction with an advanced pretreatment system meeting TS-II standards, one and only one of the following siting, sizing or system factors pursuant to Subparagraphs (1), (2) or (3) of this Paragraph apply when designing the ground absorption component of the system. When a system is permitted pursuant to this Paragraph, the provisions of Paragraph (d) of this Rule do not apply.

(1) Trench bottom separation distances for systems with a design flow no greater than 1000 gallons per day are as specified in this Subparagraph. In Table XIII, "SWC" means "Soil Wetness Condition," and "USC" means an "UNSUITABLE Soil/Fill Condition," other than a SWC.

**Table XIII: Vertical Separation Requirements for TS-II Systems ≤ 1000 gallons per day**

Soil/System Criteria	Rule* Reference	Depth from Surface** to UNSUITABLE Soil/Fill Condition		Minimum Vertical Trench Bottom Separation Requirement			
		Gravity Distribution	Pressure Dispersal	Gravity Distribution		Pressure Dispersal	
				Depth to USC	Depth to SWC	Depth to USC	Depth to SWC
Soil Group I	Rules .1955, .1956, and .1957(a)	24- inches	15-inches	12-inches	12-inches	6-inches	6-inches
Soil Groups II-IV	Rules .1955, .1956, and .1957(a)	21-inches	15-inches	9-inches	9-inches	6-inches	6-inches
New Fill	Rule .1957(b)(1)	14-inches to USC, and 12-inches to SWC	12-inches	18-inches	14-inches	12-inches	9-inches

**APPROVED RULES**

Existing Fill (≤480 gpd only)	Rule .1957(b)(2)	36-inches of Group I Fill/Soil	24-inches of Group I Fill/Soils	36-inches	36-inches	12-inches	12-inches
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\*Except as allowed in this Rule, all other requirements of the Rules referenced remain applicable

\*\*Minimum depth of soil/fill required at site to permit system. Depth shall be measured from the naturally occurring soil surface or Existing Fill surface, as applicable

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|--|--|
| <p>(A) The trench bottom vertical separation distance shall not be reduced to less than 12 inches to rock or tidal water;</p> <p>(B) With the exception of the reduced setbacks to drainage devices pursuant to Table XIV of this Rule, the minimum horizontal setback requirements of 15A NCAC 18A .1950, .1951 and .1956(6)(g), as applicable, shall be met;</p> <p>(C) A special site evaluation shall be provided to the local health department on behalf of the owner, pursuant to Paragraph (p) of this Rule; or</p> <p>(2) The long term acceptance rate (LTAR) that would be assigned by the local health department for a ground absorption system using septic tank effluent may be increased by up to a factor of 2.0 in Group II, III and IV Soils and by up to a factor of 2.5 in Group I Soils when all of the following conditions are met:</p> <p>(A) A special site evaluation shall be provided to the local health department on behalf of the owner, pursuant to Paragraph (p) of this Rule, when Group III or IV Soils or saprolite occur within three feet of the trench bottom or the site requires drainage of Group II or III soils, or whenever the design flow exceeds 1000 gallons per day;</p> <p>(B) No further reductions in linear footage of nitrification trench or system area shall be applied when a PPBPS or innovative trenches or accepted systems are used for the absorption field;</p> <p>(C) For systems to be installed in fill, a pressure dispersal system (LPP or Drip distribution) shall be utilized;</p> | <p>(D) With the exception of the reduced setbacks to drainage devices pursuant to Table XIV of this Rule or as allowed pursuant to Part (3)(B) of this Paragraph, the minimum horizontal setback requirements of 15A NCAC 18A .1950, .1951 and .1956 (6)(g), as applicable, shall be met;</p> <p>(E) For the LTAR to be increased by a factor above 2.0 (up to 2.5) for a system designed for 1000 gallons per day, or less, there must be at least 36 inches of Group I Soils from the naturally occurring soil surface, the depth to a soil wetness condition below the naturally occurring soil surface must be at least 24 inches, a pressure dispersal system (LPP or Drip) shall be utilized, and there must be a 100-percent repair area;</p> <p>(F) For the LTAR to be increased by a factor above 2.0 (up to 2.5) for a system designed for greater than 1000 gallons per day, there must be at least 48 inches of Group I Soils from the naturally occurring soil surface, the depth to a soil wetness condition below the naturally occurring soil surface must be at least 30 inches, a pressure dispersal system (LPP or Drip) shall be utilized, and there must be a 100-percent repair area; or</p> <p>(3) The minimum horizontal setback requirements of 15A NCAC 18A .1950, .1951 and .1956(6)(g), as applicable, shall be met, except as follows for a system with a design flow not to exceed 1000 gallons per day:</p> |
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Table XIV: Minimum horizontal setbacks for ground absorption systems Where TS-II Pretreatment Systems are used for ≤ 1000 gallons per day	
Land Feature or Component	TS-II (feet)
Any public water supply	100
Streams classified as WS-I, except for saprolite	50
Waters classified as S-A, from mean high water mark	50
Other coastal waters, from mean high water mark	25



Any other stream, canal, marsh or other surface waters, from normal pool elevation	25
Any Class I or Class II reservoir, from normal pool elevation	50
Any permanent storm water retention pond, from flood pool elevation	25
Any other lake or pond, from normal pool or mean high water elevation	25
Any building foundation	5
Any basement	15
Any property line	10
Top of slope of embankments or cuts of 2 feet or more vertical height	15
Any water line	10
Upslope interceptor/foundation drains/diversions	7
Sideslope interceptor/foundation drains/diversions	10
Downslope interceptor/foundation drains/diversions	15
Groundwater lowering ditches and devices	15
Any swimming pool	15
Any other nitrification field (except the system repair area)	10

- (A) With the exception of the reduced setbacks to drainage devices or as allowed pursuant to Part (B) of this Subparagraph, when any horizontal setbacks are proposed to be reduced pursuant to Table XIV, the vertical separation modifications or LTAR increases shall not be concurrently applied pursuant to Subparagraphs (1) and (2) of this Paragraph, respectively.

- (B) If the horizontal setbacks for a TS-II system are only proposed to be reduced to the extent allowed for a TS-I system (Table XII), for a system designed for 1000 gallons per day or less, a 25 percent trench length reduction may be concurrently applied, compared to the length required for any type of trench system receiving septic tank effluent, when the site has space for an equivalently sized repair system. A special site evaluation shall be provided to the local health department on behalf of the owner, pursuant to Paragraph (p) of this Rule when Group III or IV soils or saprolite occur within three feet of the trench bottom. No further reductions in linear footage of nitrification trench or system area shall be applied when a PPBPS or innovative trenches or accepted systems are used for the absorption field.

(g) ARTIFICIAL DRAINAGE SYSTEMS which include a TS-I or TS-II pretreatment system may be used when soils are Group I, II or III with SUITABLE clay mineralogy, and all other soil and site factors are SUITABLE or PROVISIONALLY SUITABLE or when a groundwater lowering system is proposed to meet the requirements for a fill

system, provided all other soil and site factors are met pursuant to 15A NCAC 18A .1957(b)(i). The following conditions shall be met:

- (1) The drainage system shall meet the requirements of Rule .1956(2)(c), (d) and (e) of this Section;
- (2) The provisions for LTAR or Horizontal Setbacks pursuant to Paragraphs (e) or (f) of this Rule for TS-I or TS-II systems, respectively, shall also apply to Artificial Drainage Systems. However, there shall be no vertical separation modifications pursuant to Subparagraph (e)(1) or (f)(1) of this Rule from as specified elsewhere in the rules of this Section;
- (3) A special site evaluation shall be provided to the local health department on behalf of the owner, pursuant to Paragraph (p) of this Rule, when there are Group III soils at any depth above the proposed drainage system invert elevation, when a groundwater lowering system is proposed for a fill system, or whenever the system is designed for greater than 1000 gallons per day; and
- (4) Plans and specifications are provided to the local health department of the drainage system pursuant to 15A NCAC 18A .1938(c).

(h) SAPROLITE SYSTEMS which include a TS-I or TS-II pretreatment system may be used for systems with a design flow not to exceed 1000 gallons per day when the following conditions are met:

- (1) The requirements of Rule .1956(6) of this Section shall be met, except where modifications are specifically allowed in this Paragraph.
- (2) Allowable saprolite textures include sandy clay loam in addition to sand, loamy sand, sandy loam, loam, or silt loam.
- (3) Maximum trench depth is five feet.
- (4) The provisions for LTAR or Horizontal Setback modifications as allowed in Paragraphs (e) or (f) of this Rule for TS-I or

- TS-II systems, respectively, shall also apply to Saprolite Systems. However, there shall be no vertical separation modifications from as specified elsewhere in the Rules of this Section;
- (5) For systems installed in saprolite with sandy clay loam texture, the maximum LTAR for gravity trenches shall be 0.2 gallons per day per square foot and 0.1 gallons per day per square foot for pressure dispersal (LPP or Drip) systems and
- (6) A special site evaluation shall be provided to the local health department on behalf of the

owner, pursuant to Paragraph (p) of this Rule.

(i) BED GROUND ABSORPTION SYSTEMS may be used in conjunction with a TS-I or TS-II system as specified in the system approval on sites with a design flow not to exceed 1000 gallons per day under the following circumstances:

- (1) Bed Systems designed for 1000 gallons per day or less shall be subject to the siting and system criteria of this Subparagraph. In Table XV, "SWC" means "Soil Wetness Condition," and "USC" means an "UNSUITABLE Soil/Fill Condition," other than a SWC.

Table XV: Vertical Separation Requirements for TS-I and TS-II Bed Systems Designed for ≤1000 Gallons Per Day				
Soils/System Criteria to Permit System	Allowable Adjustments to Soil Criteria to Permit System	Depth from Surface* to Soil Wetness Condition	Minimum Vertical Bed Bottom Separation Requirement	
			Depth to USC	Depth to SWC
SUITABLE or PROVISIONALLY SUITABLE Soils, 30-inches Group I or II Soils from naturally occurring soil surface, and slope ≤2%	can increase allowable slope from ≤2% to ≤10% based on hydraulic assessment	36 –inches	24-inches	12-inches
36-inches of Group I Soils from naturally occurring soil surface, and slope ≤2%	can reduce from 36 to 18-inches of Group I Soils based on hydraulic assessment, and/or b. can increase allowable slope from ≤2% to ≤10% based on hydraulic assessment	12-inches	12-inches	12-inches
24-inches of Group I Existing Fill meeting Rule .1957(b)(2)(A),(B), and (C), and only when design flow ≤480 gallons per day	No Adjustments Applicable	18-inches	18-inches	18-inches

\* Minimum depth of soil/fill required at site to permit system. Depth shall be measured from the naturally occurring soil surface or Existing Fill surface, as applicable

- (A) Vertical separation requirements may be met by adding additional SUITABLE Group I fill material, but shall not be met with the use of a groundwater lowering system.
- (B) The hydraulic assessment in Table XV shall be completed pursuant to Paragraph (p) of this Rule, and shall demonstrate that effluent will not discharge to the ground surface and the required separation distance to soil wetness can be maintained.
- (C) When effluent is distributed to the bed by a pump or siphon and the bed is not located directly beneath the pretreatment component,

effluent shall be uniformly distributed by a pressure dispersal system (LPP or Drip).

- (2) Horizontal separation distances specified in Subparagraphs (e)(3) and (f)(3) of this Rule are applicable for systems receiving TS-I or TS-II effluent, respectively. The setbacks shall be measured from the nearest edge of the gravel bed, except for fill systems. For fill systems, the setbacks shall be measured from a point five feet from the nearest edge of the gravel bed sidewall, or from the projected toe of the side slope of the fill that is required to meet soil and site limitations, whichever is greater. The system shall be considered to be a fill system only if the gravel bed bottom is installed less than six

- inches below the naturally occurring soil surface. For fill systems, the requirements of Rule .1957(b) of this Section, for the side slope of the fill shall be met, as determined beginning at a point six-inches above the top edge of the gravel bed.
- (3) The minimum number of square feet of bottom area shall be determined by dividing the design daily sewage flow by the LTAR, determined in accordance with Rule .1955 of this Section. When the bed is installed in fill material, the LTAR shall not exceed 1.0 gallons per day per square foot. The minimum bed size may be reduced as follows:
- (A) The minimum bed size may be reduced by 25 percent, unless the bed is installed in existing fill, in which case the bed area shall not be reduced; or
- (B) For sites that have Group I Soil in the first 36 inches of naturally occurring soil and no soil wetness condition exists within the first 30 inches below the naturally occurring soil surface, the minimum bed size may be reduced by 40 percent when a pressure dispersal system is utilized to distribute flow uniformly

throughout the bed area; a timer controller is used to distribute flow evenly over a 24-hour period; and the system is designed and approved to meet TS-II performance standards. Furthermore, the repair area exemption in 15A NCAC 18A .1945(c) does not apply when the bed size is reduced by more than 25 percent pursuant to this Part.

With the exception of reduced setbacks to drainage devices (Tables XII or XIV), whenever the minimum bed size is reduced pursuant to Parts (A) or (B) of this Subparagraph, the minimum horizontal setbacks as specified in Rules .1950, .1951 and .1956(6)(g) of this Section, as applicable, shall apply and with no reductions applied.

(j) BED GROUND ABSORPTION SYSTEMS may be used in conjunction with a TS-I or TS-II system as specified in the system approval on sites with a design flow greater than 1000 gallons per day not to exceed 3000 gallons per day under the following circumstances:

- (1) Bed Systems designed for greater than 1000 gallons per day but not exceeding 3000 gallons per day shall be subject to the siting and system criteria of this Subparagraph.

Table XVI: Vertical Separation Requirements for TS-I and TS-II Bed Systems Designed for >1000 to ≤3000 Gallons Per Day			
Soils/System Criteria	Depth from Surface* to Soil Wetness Condition	Minimum Vertical Bed Bottom Separation Requirement	
		Depth to Soil Wetness Condition	Allowable Adjustment in Depth to Soil Wetness Condition
54-inches of Group I Soils from naturally occurring soil surface	48-inches	24-inches	Can reduce from 24-inches to 12-inches in naturally occurring soil, or to 18-inches for fill systems based on groundwater mounding analysis

\*Minimum depth required at site to permit system shall be measured from the naturally occurring soil surface.

- (A) Vertical separation requirements may be met by adding additional SUIABLE Group I fill material, but shall not be met with the use of a groundwater lowering system.
- (B) A special site evaluation shall be provided to the local health department on behalf of the owner, pursuant to Paragraph (p) of this Rule. The groundwater mounding analysis in Table XVI must demonstrate that required vertical separations between bed bottom and a soil wetness condition shall be maintained after accounting for projected groundwater mounding.
- (C) Two or more equally sized beds shall be utilized for any TS-I

system designed for over 1000 gallons per day, or for any TS-II system designed for over 1500 gallons per day. When two beds are used, the minimum separation between beds shall be 20 feet, and when three or more beds are used, the minimum separation between beds shall be 10 feet. Effluent shall be distributed to the beds by a pump and timer control system to distribute flow evenly over a 24-hour period.

- (D) When the system is designed for greater than 1500 gallons per day, the beds shall be located in an area separate from the pretreatment components.

- (E) Whenever the beds are not located directly beneath the pretreatment components, effluent shall be uniformly distributed by a pressure dispersal system (LPP or Drip).
  - (2) Horizontal separation distances specified in Rules .1950(a), .1951, or .1956(6)(g) of this Section shall apply without reduction for bed systems designed for greater than 1000 gallons per day. Furthermore, a 25-foot horizontal separation distance shall be maintained from the bed to the property line and the bed, unless a site-specific nitrogen migration analysis indicates that the nitrate concentration at the property line will not exceed 10 milligrams per liter (mg/l), or TS-II effluent is produced by the approved system.
  - (3) The minimum number of square feet of bed bottom area shall be determined by dividing the design daily sewage flow by the LTAR, determined in accordance with Rule .1955 of this Section. When the bed is installed in fill material, the LTAR shall not exceed 1.0 gallons per day per square foot. The minimum bed size may be reduced as follows:
    - (A) The minimum bed size may be reduced by 25 percent, unless the bed is installed in existing fill, in which case the bed area shall not be reduced; or
    - (B) For sites that have Group I Soil in the first 54 inches below the naturally occurring soil surface and no soil wetness condition exists within the first 36 inches below the naturally occurring soil surface, the minimum bed size may be reduced by 40 percent when a pressure dispersal system (LPP or Drip) is utilized to distribute flow uniformly throughout the bed area; a timer controller is used to distribute flow evenly over a 24-hour period; the system is designed and approved to meet TS-II performance standards; and there shall be a 100-percent repair area.
- (k) DESIGN:
- (1) Special system design requirements shall be as prescribed in the product's RWTS, Experimental, Controlled Demonstration, Innovative or Accepted System approval, as applicable.
  - (2) Provisions shall be made to allow for the influent to and effluent from the system to be sampled while the system is operational, and
    - (3) The system design shall include a means to measure and record daily wastewater flows. The recording device shall provide a means for determining at least the last 30 days of wastewater flow to the system
- (l) INSTALLATION: Pre-treatment systems shall be installed according to the manufacturer's installation specifications and system-specific installation conditions prescribed in the product's RWTS, Experimental, Controlled Demonstration, Innovative or Accepted System approval, as applicable, by a manufacturer-authorized installer. Installation and construction specifications for the ground absorption system shall be in accordance with this Section and site-specific conditions as specified in the Authorization to Construct.
- (m) OPERATION AND MAINTENANCE: Maintenance, as specified in the product's RWTS, Experimental, Controlled Demonstration, Innovative or Accepted System approval, as applicable, shall be performed by the certified operator pursuant to 15A NCAC 18A .1961 and as specified in the product approval. The following provisions apply to the Operation and Maintenance of Advanced Pretreatment Systems:
- (1) For systems installed after July 1, 2006, the manufacturer of a proprietary advanced pretreatment system shall provide for the ongoing operation and maintenance of its systems. The manufacturer shall make available to the owner an operation and maintenance contract that meets the management entity requirements for the system pursuant to 15A NCAC 18A .1961. The contract shall be renewable and the contract term shall be for a minimum of one year.
  - (2) For systems installed prior to July 1, 2006, the manufacturer shall provide an optional renewable yearly operation and maintenance contract with the owner that fulfills the management entity requirements for the system pursuant to 15A NCAC 18A .1961.
  - (3) Prior to the issuance or re-issuance of an Operation Permit for a proprietary advanced pretreatment system after July 1, 2006, the owner shall provide to the health department documentation that a contract for operation and maintenance of the system is in place with either the manufacturer, manufacturer's representative, or with a certified operator authorized in writing by the manufacturer or manufacturer's representative to operate the system.
  - (4) The manufacturer shall notify the local health department and the State when the owner chooses to not renew an operation and maintenance contract executed pursuant to Subparagraphs (1) or (2) of this Paragraph.
- (n) SYSTEM PERFORMANCE: The performance of each system shall be monitored by the certified wastewater

treatment facility operator (ORC). A performance report shall be submitted annually to the local health department by the ORC. Type of monitoring and monitoring frequency shall vary by type of approval, the designated performance standard, system design flow, and history of system performance as follows:

- (1) Each system shall be visually inspected by the ORC at least annually using a procedure proposed by the manufacturer and approved by the state as part of the product's RWTS, Experimental, Controlled Demonstration, Innovative or Accepted System approval, as applicable,
- (2) The 7-day and 30-day influent wastewater flow from the facility to the system prior to a monitoring visit shall be measured by the ORC using the recording device delineated in Subparagraph (k)(3) of this Rule, or by an alternate approved means. For systems serving Vacation Rentals subject to the North Carolina Vacation Rental Act, G.S. 42A, this visit shall be scheduled during the seasonal high use period and shall be coincident with any required water quality sampling. For existing systems where it is not feasible to directly obtain the past 7-day and 30-day influent wastewater flow data, wastewater usage during the 7 to 30 day period prior to the monitoring visit shall be estimated by using either elapsed time clock readings when an effluent pump is present, water meter readings, or as otherwise specified in the product or site-specific system approval.
- (3) Effluent from an approved Controlled Demonstration, RWTS and Innovative System shall be sampled prior to disposal in the absorption field as follows:
  - (A) A Controlled Demonstration system shall be sampled quarterly for all applicable performance parameters until the system receives Innovative approval, unless the product specific approval includes an alternate monitoring schedule proposed by the manufacturer and approved by the State;
  - (B) Sites with an approved RWTS or Innovative system shall be grab or composite sampled annually for all applicable performance parameters (semi-annually when the design flow is 1500 to 3000 gallons per day). After two years of data have been collected from at least 50 separate sites that indicate compliant system performance, the number of parameters sampled for TS-I and TS-II Systems may be

reduced by 50 percent. An alternative monitoring schedule may be proposed by the manufacturer and approved by the State when determined to provide an equal or more reliable indication of system performance compliance; or

- (C) Sites with a design flow up to 1500 gallons per day, which are being managed under an on-going maintenance and operation contract between the owner and the system manufacturer or ORC authorized by the manufacturer, can alternatively be sampled randomly if the manufacturer chooses to comply with the performance audit requirements as stipulated in 15A NCAC 18A .1969(h)(8), when there are at least 10 operational systems covered under such contracts. The manufacturer can also choose to include other existing sites in the performance audit required prior to obtaining accepted system status. Notwithstanding this provision for random sampling, sampling at any other site not being sampled during the audit may be determined to be necessary by the ORC during the visual inspection of the system pursuant to Subparagraph (1) of this Paragraph.

An influent sample to the pre-treatment system (e.g., septic tank effluent) shall be taken concurrently whenever the system effluent is sampled and analyzed for at least BOD and TKN. Effluent shall be re-sampled within 15 days when laboratory results indicate non-compliance with Part (o)(1)(C) of this Rule and analyzed at least for the non-compliant parameter(s), unless an alternate re-sampling schedule is required for a site included in a performance audit. When re-sampling, an influent sample shall be collected concurrently and analyzed for the corresponding parameter.

- (4) An Accepted System with a design flow up to 1500 gallons per day shall comply with Subparagraphs (n)(1) and (n)(2) of this Rule and 15A NCAC 18A .1969(h)(9). Routine sampling of individual sites shall no longer be carried out, unless determined to be necessary during the visual inspection of the system pursuant to Subparagraph (n)(1) of this Rule or if required as part of an enforcement action by the local health department or the State. In the event that

sampling is determined to be necessary, an alternative monitoring schedule may be proposed by the manufacturer or the State and approved by the Commission when the system is granted accepted Status.

- (5) All samples shall be collected, preserved, transported and analyzed in compliance with 40 CFR 136. The manufacturer shall demonstrate that the system can be sampled in compliance with 40 CFR 136 and that the method for system sampling accurately monitors system performance. Samples shall be analyzed by a state certified laboratory. Samples shall be analyzed for the applicable parameters. The sample collector shall maintain a complete chain of custody from sample collection to analysis for each sample collected. The results of all analyses for each sample shall be reported by the certified wastewater laboratory directly to the ORC and simultaneously to the health department and the state. Repeat sampling at any site shall be performed as required in the system approval, approved performance audit, this Rule, or as otherwise directed by the health department or state as part of an enforcement action. The owner or manufacturer or manufacturer's representative may also re-sample a system to verify or refute sample results, as long as the results of all samples collected are similarly reported.

(o) **SITE AND SYSTEM COMPLIANCE:** Compliance with the performance standards shall be determined as follows:

- (1) An individual advanced pretreatment system at a single site shall be considered to be in compliance when:
  - (A) The annual visual inspection indicates compliant conditions as specified in the visual inspection procedure approved pursuant to Subparagraph (n)(1) of this Rule; and
  - (B) The 7-day inflow does not exceed 1.3 times the design daily flow and the 30-day inflow does not exceed the design daily flow; and
  - (C) Influent wastewater to the system does not exceed the requirements in Table VIII, at sites where influent sampling is required; and
  - (D) When annual effluent sampling is required, sample value is no more than two times (2.5 times for fecal coliform) the designated standard for one or more parameters in Table VII, even after re-sampling; or if four or more effluent samples are collected on different operating days over a one year period, the

arithmetic mean (geometric mean for fecal coliform) of the data does not exceed the designated standard for one or more parameters in Table VII, even when excluding from the mean a statistical outlier or an instance of non-compliance that has been remedied by corrective maintenance.

- (2) An approved system shall be considered in compliance when:

- (A) The arithmetic mean (geometric mean for fecal coliform) of all data collected from all sites during a given one-year period, or from a representative sampling of sites in the state (excluding statistical outliers) does not exceed the designated standard.
- (B) No more than 20 percent of the sites from which the data were collected in Part (o)(2)(A) of this Rule shall exceed the designated standard for one or more parameters (an individual non-compliant site shall be reclassified "compliant" if found to meet the designated standard upon re-sampling within 30 days).
- (C) No more than 10 percent of samples collected from all sites during a given one-year period or from a representative sampling of sites in the state shall exceed two times the designated standard for one or more parameters (with the exception of fecal coliform, for which a 2.5 multiplication factor shall be used).

When determining compliance with system performance standards set forth in Parts (A), (B) and (C) of this Subparagraph, data shall be excluded from individual advanced pretreatment systems at single sites found to be out of compliance pursuant to Parts (1)(B) and (1)(C) of this Paragraph and from individual sites that have otherwise been documented to have been subjected to significant abuse, as specified by the manufacturer in its operation and maintenance manual which has been provided to the system owner.

- (3) When a site or system is found to be out of compliance the following actions shall occur:

- (A) The Operator (ORC) shall inform the owner and the local health department of an individual system at a single site found to be out of compliance, including when

wastewater flow is greater than the system design flow rate; influent wastewater quality exceeds the standards set forth in Table VII; or maintenance/repairs are found to be needed as identified during system inspection. This notice shall identify non-compliant condition(s), explain potential impacts, and suggest methods to bring the system or use back into compliance.

- (B) The local health department shall issue a notice of violation to the owner of an individual system at a single site found to be out of compliance when, the system is found to be malfunctioning as determined during the visual inspection specified in Part (1)(A) of Paragraph (o) of this Rule; wastewater flow exceeds wastewater flow standards in Part (1)(B) of this Paragraph; or the effluent sample results are out of compliance as specified in Parts (1)(D) or (1)(E) of this Paragraph, even upon re-sampling. The notice shall identify the violations and steps necessary to remedy the problems, including modification of the system, establish time frame to achieve compliance, and other follow-up requirements and set forth further enforcement possibilities if compliance is not achieved.
- (C) The state shall issue a notice of violation to the manufacturer of a system found to be out of compliance as specified in Subparagraph (2) of this Paragraph. The notice shall identify the violations and steps necessary to remedy the problems, including modification of the system, establish time frame to achieve compliance, and other follow-up requirements and set forth further enforcement possibilities if compliance is not achieved, which may include action on the system's approval status pursuant to applicable Laws and Rules.
- (D) The local health department shall issue the manufacturer or manufacturer's representative an intent to suspend issuance of new construction authorizations for new systems of a particular

manufacturer that has installed and has in operation at least 10 systems in the county if more than 10 percent of the manufacturer's systems installed in the county are found to be malfunctioning during the visual inspection specified in Subparagraph (n)(1) of this Rule, or in violation of effluent performance standards as specified in Parts (1)(D) or (1)(E) of this Paragraph in any single year, excluding single sites found to be out of compliance pursuant to Parts (1)(B) or (1)(C) of this Paragraph, sites where the owner has not maintained a contract for operation and maintenance of the system pursuant to Rule .1961 of this Section, and individual sites that have otherwise been documented to have been subjected to significant abuse, as specified by the manufacturer in its operation and maintenance manual which has been provided to the system owner.

- (E) The local health department shall issue the manufacturer or manufacturer's representative an intent to suspend issuance of new construction authorizations for new systems of a particular manufacturer that has installed and has in operation at least 10 systems in the county if more than five percent of the manufacturer's systems installed in the county that are being managed under an ongoing maintenance and operation contract between the owner and the system manufacturer or ORC authorized by the manufacturer have required operation and maintenance activities under the control of the manufacturer that have not been completed for the last reported year.
- (F) All individual system compliance data and all operations and maintenance records shall be submitted to the local health department. The local health department shall convey information on individual system compliance to the State on at least an annual basis. Action by a local health department on approval of a system in a county does not preclude action by the State on the

system's approval status, pursuant to applicable Laws and Rules.

- (G) Notwithstanding the activities delineated for dealing with non-compliance elsewhere in Subparagraph (3) of this Paragraph, nothing shall preclude the local health department or State from using any available remedy when an imminent health hazard is determined to exist, in accordance with applicable Laws and Rules.

(p) **RESPONSIBILITIES AND PERMITTING PROCEDURES:** Special responsibilities and permitting procedures for pre-treatment systems shall be as prescribed in the system approval and applicable rules of this Section. The following summarize the conditions requiring a special evaluation of a site where the ground absorption system is to be preceded by an advanced pretreatment system, and what such an evaluation shall include:

- (1) Prior to the issuance of the Improvement Permit at a site where the drainfield is to be preceded by an advanced pre-treatment system, an evaluation shall be provided to the local health department on behalf of the owner when any of the following conditions are applicable:
  - (A) the initial vertical separation siting criteria or vertical separation distances for trench bottoms are proposed to be reduced in accordance with Subparagraphs (e)(1) or (f)(1) of this Rule,
  - (B) drainage is proposed for Group III soils or a groundwater lowering system is proposed to be used in conjunction with a fill system in accordance with Paragraph (g) of this Rule,
  - (C) sandy clay loam texture saprolite is proposed to be used in accordance with Paragraph (h) of this Rule,
  - (D) the LTAR is proposed to be increased on a site with Group III or IV soils within three feet of the proposed trench bottom or on a site where drainage of Group II or III soils is proposed, or on any site when the design flow exceeds 1000 gallons per day, in accordance with Subparagraphs (e)(2) or (f)(2) of this Rule, or
  - (E) for a bed system with flow exceeding 1000 gallons per day in accordance with Paragraph (j) of this Rule, or if required for other bed systems in accordance with Subparagraph (i)(1) of this Rule.
- (2) When a special site evaluation is required pursuant to Subparagraph (1) of this

Paragraph, it shall contain the following information, as applicable. This evaluation shall be prepared by a person or persons who are licensed or registered to consult, investigate, or evaluate soil and rock characteristics, hydraulic conductivity, lateral flow, groundwater hydrology and nutrient transport, if required pursuant to G.S. 89F or 89E. This evaluation shall be provided to the local health department in a written report sealed, signed and dated by any licensed or registered professionals who contributed to the report.

- (A) detailed descriptions of soil profiles and soil morphological conditions to a depth of at least three feet below the proposed trench or bed bottom and description of landscape setting in the initial system area and repair area;
- (B) field measurements of the depth and thickness of each of the soil horizons;
- (C) recommended location and depth for placement of the trenches or beds and the recommended LTAR;
- (D) hydraulic assessment, based on site-specific information, substantiating the projected effectiveness of system performance. This shall include supporting documentation that indicates the treated effluent applied at the proposed LTAR will not result in the discharge of effluent to the surface of the ground after the system is installed and operated within design parameters; that all required vertical separation distances shall be maintained; and justification for any proposed drainage systems or other site modifications. This hydraulic assessment shall require in-situ tests of saturated hydraulic conductivity, groundwater mounding analysis, lateral flow analysis, and monitoring or modeling of existing or projected depth to a soil wetness condition based upon procedures of Rule .1942 of this Section, as needed;
- (E) site-specific nitrogen migration analysis, if needed pursuant to Subparagraphs (e)(2) or (j)(2) of this Rule; and
- (F) proposed site-specific requirements for system design, installation, site preparation, modifications, final landscaping and vegetative cover.



*History Note: Authority G.S. 130A-334; 130A-335; 130A-336; 130A-337; 130A-340; 130A-342; 130A-343; Eff. June 1, 2006.*

**TITLE 17 – DEPARTMENT OF REVENUE**

**17 NCAC 07B .1101 FARM MACHINES:  
MACHINERY: TOBACCO ITEMS**

(a) Sales to farmers of farm machinery, attachment and repair parts for farm machinery, and lubricants applied to farm machinery for use by them in planting, cultivating, harvesting or curing of farm crops including nursery or greenhouse stock and products of the forest, or to dairy operators, poultry farmers, egg producers, and commercial producers of animals are exempt from sales and use tax. Sales of farm machinery, attachment and repair parts for farm machinery, and lubricants applied to farm machinery to farmers for any purpose or use not defined in this Rule, or to any person other than a farmer as herein defined, even though for a use or purpose herein defined, are subject to the applicable statutory state and local sales or use tax without limitation. In other words, to qualify for the exemption from sales and use tax, the transaction must be a sale of farm machinery, attachment and repair parts for farm machinery, and lubricants applied to farm machinery to a farmer for one of the uses or purposes herein defined and unless all three conditions are met, the sale is subject to the applicable statutory state and local sales or use tax without limit.

(b) Form E-595E, Streamlined Sales Tax Agreement Certificate of Exemption, may be completed by a farmer or producer and accepted by a vendor as the authority for exempting from the sales and use tax the following:

- (1) farm machinery, attachment and repair parts for farm machinery, and lubricants applied to farm machinery for use in planting, cultivating, harvesting or curing farm crops, including nursery or greenhouse stock and products of the forest, or for use in the production of dairy products, poultry, eggs, livestock, fish or aquatic plants.
- (2) The lease or rental of tobacco sheets used in handling tobacco in the warehouse and transporting tobacco to and from the warehouse.
- (3) A metal flue sold for use in curing tobacco, whether the flue is attached to a handfired furnace or used in connection with a mechanical burner.
- (4) A bulk tobacco barn or rack, parts and accessories attached to the tobacco barn or rack, and any similar apparatus, part, or accessory used to cure or dry tobacco or another crop.
- (5) A grain, feed, or soybean facility, and parts and accessories attached to the facility.
- (6) Containers for use in the planting, producing, harvesting, curing, marketing, packaging, sale, or transporting or delivery

of products when such containers do not go with and become a part of the sale of products.

- (7) Wrapping paper, labels, wrapping twine, paper, cloth, plastic bags, cartons, packages and containers, wooden boxes, baskets, coops, barrels, and like articles sold to farmers and producers when such materials are used for packaging, shipment or delivery of tangible personal property which is sold either at wholesale or retail and when such articles constitute a part of the sale of such tangible personal property and are delivered with it to the customer.

(c) When a customer makes a purchase and executes a Form E-595E, Streamlined Sales Tax Agreement Certificate of Exemption which is then furnished to the vendor, the vendor is relieved of the liability for any additional tax that is subsequently determined to be due and the purchaser has assumed liability for the tax if the vendor has a fully completed Form E-595E on file. In the absence of the certificate or other documentation to support an exemption from tax, the vendor is liable for any additional tax determined to be due on a transaction.

(d) The following are examples of sales of farm machinery, attachment and repair parts for farm machinery, and lubricants applied to farm machinery which are exempt when sold to farmers for use by them in planting, cultivating, harvesting or curing farm crops:

- (1) tractors,
- (2) plows,
- (3) harrows,
- (4) cultivators,
- (5) mowers,
- (6) planters,
- (7) corn pickers and snappers,
- (8) manure spreaders,
- (9) manure loaders,
- (10) harvester threshers,
- (11) rotary tillers,
- (12) fertilizer distributors,
- (13) wind-rowers,
- (14) forage blowers,
- (15) stalk cutters,
- (16) seeders,
- (17) grain loaders,
- (18) harvesters,
- (19) cotton pickers,
- (20) rotary hoes,
- (21) corn and hay elevators,
- (22) tobacco curers,
- (23) tobacco flues,
- (24) tobacco trucks or slides,
- (25) wagons,
- (26) non-highway trailers,
- (27) mechanical rakes,
- (28) balers,
- (29) rod weeders,
- (30) combines,
- (31) tobacco transplanters,

- (32) shredders for corn stalks,
- (33) power loader lifts,
- (34) platform carriers,
- (35) portable insecticide sprayers,
- (36) chain saws,
- (37) motor oils, greases, lubricants and anti-freeze;
- (38) hydraulic fluids.

(e) Examples of items which are subject to the applicable statutory state and local sales or use tax when sold to farmers for general purposes:

- (1) lawn mowers;
- (2) snow plows;
- (3) oil storage tanks and fittings;
- (4) drainage tile;
- (5) paint, cleaning compounds and brushes;
- (6) baler twine;
- (7) tobacco sticks and tobacco twine;
- (8) tools for maintaining machinery and equipment.

(f) The lists in Paragraphs (d) and (e) of this Rule are not intended to be exclusive, but are for illustrative purposes only. If there is any question as to the tax status of any item which does not appear therein, such question shall be submitted to the secretary, together with a detailed statement of the business of the purchaser, the design and structure of the article, and its use, to the end that the applicable rate of tax may be correctly determined.

(g) The word farmer as used in this Rule includes crop farmers, dairy operators, poultry farmers, egg producers, livestock farmers, nurserymen, greenhouse operators, farmers who raise fish or water plants, orchardmen and other persons coming within the generally accepted definition of the word. It does not include a person who merely cultivates a garden for personal use.

*History Note: Authority G.S. 105-164.4; 105-164.6; 105-164.13; 105-262; Article 39; Article 40; Article 42; Article 43; Article 44;*  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; August 1, 1996; April 1, 1995; July 1, 1994; October 1, 1993; June 1, 1992.*

**17 NCAC 07B .1103 TRACTORS: BACKHOES: DRAGLINES**

Sales of tractors, backhoes or draglines to farmers for use in the construction and maintenance of drainage facilities to promote the growth of farm crops are exempt from sales and use tax.

*History Note: Authority G.S. 105-164.6; 105-164.13; 105-262;*  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006.*

**17 NCAC 07B .1104 IRRIGATION EQUIPMENT**

Irrigation equipment, including irrigation pumps, irrigation pipe, sprays, and nozzles, is farm machinery when sold to farmers; these items are exempt from sales and use tax.

*History Note: Authority G.S. 105-164.6; 105-164.13; 105-262;*  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006.*

**17 NCAC 07B .1107 EGG CLEANING DETERGENT**

Sales of egg cleaning detergent to poultry farmers for use in cleaning eggs are subject to the applicable statutory state and local sales or use tax.

*History Note: Authority G.S. 105-164.4; 105-164.6; 105-262; Article 39; Article 40; Article 42; Article 43; Article 44;*  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; October 1, 1993; October 1, 1991.*

**17 NCAC 07B .1111 VENTILATORS**

Ventilators which have no moving parts and which are installed in tobacco barns, other than bulk tobacco barns, are subject to the applicable statutory state and local sales or use tax. The ventilators are a part of a building or structure and are not classified as farm machines or machinery.

*History Note: Authority G.S. 105-164.4; 105-164.6; 105-262;*  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; October 1, 1993; October 1, 1991.*

**17 NCAC 07B .1115 SNAPBEAN GRADERS**

Snapbean graders are not used in the planting, cultivating, harvesting or curing of farm crops and are subject to the applicable statutory state and local sales or use tax when sold to farmers for use.

*History Note: Authority G.S. 105-164.4; 105-164.6; 105-262; Article 39; Article 40; Article 42; Article 43; Article 44;*  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; October 1, 1993; October 1, 1991.*

**17 NCAC 07B .1116 LIQUID FERTILIZER APPLICATORS**

Sales of liquid fertilizer applicators to farmers for use in planting or cultivating farm crops are exempt from sales and use tax.

*History Note: Authority G.S. 105-164.6; 105-164.13; 105-262;*  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006.*

**17 NCAC 07B .1117 MECHANICAL POST HOLE DIGGERS**

Sales of mechanical post hole diggers to farmers for use in building fences for use in their farming operations are exempt from sales and use tax.

*History Note:* Authority G.S. 105-164.6; 105-164.13; 105-262;  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006.*

**17 NCAC 07B .1118 SICKLE GRINDERS**

Sales of sickle grinders to farmers for use are subject to the applicable statutory state and local sales or use tax.

*History Note:* Authority G.S. 105-164.4; 105-164.6; 105-262; Article 39; Article 40; Article 42; Article 43; Article 44;  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; October 1, 1993; October 1, 1991.*

**17 NCAC 07B .1119 TOBACCO TYING MACHINES**

Sales of tobacco tying machines to farmers for use in harvesting tobacco crops are exempt from sales and use tax.

*History Note:* Authority G.S. 105-164.6; 105-164.13; 105-262;  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006.*

**17 NCAC 07B .1120 COTTON BAGS AND SHEETS**

Sales to farmers of cotton picking bags and cotton sheets for use in harvesting cotton are exempt from sales and use tax.

*History Note:* Authority G.S. 105-164.6; 105-164.13; 105-262;  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; November 1, 1982.*

**17 NCAC 07B .1122 RIGHT-OF-WAY EQUIPMENT**

Sales of tractors and bush-cutting equipment to power companies, railroad companies, counties, cities, and contractors for use in cutting and maintaining rights-of-way are subject to the applicable statutory state and local sales or use tax.

*History Note:* Authority G.S. 105-164.4; 105-164.6; 105-262; Article 39; Article 40; Article 42; Article 43; Article 44;  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; October 1, 1993; October 1, 1991; October 1, 1988.*

**17 NCAC 07B .1123 CERTAIN SALES TO COMMERCIAL ANIMAL FARMERS**

For the purpose of this Rule, the word "animal" means swine, cattle, horses, mules, sheep, chickens, turkeys, fish, and other similar domestic animals held or produced for commercial purposes. The word "commercial" means held or produced for income or profit and does not include the production of animals for one's personal use or consumption and not for sale. Commercial animal farmers, contractors performing contracts with commercial animal farmers, and subcontractors performing contracts with general contractors who contract with commercial animal farmers may obtain a Streamlined

Sales Tax Agreement Certificate of Exemption, Form E-595E, from the North Carolina Department of Revenue, to be executed by them and furnished to their vendors to establish the vendors' authority to exempt purchases by them from sales and use taxes. If a Form E-595E is properly executed, a vendor is relieved of liability for any additional tax found to be due with reference to a sale for which the vendor did not charge sales tax in reliance on the fully completed certificate. By executing a fully completed certificate, the purchaser assumes liability for any sales tax subsequently determined to be due. The vendor is not protected in this manner without the certificate. Vendors that do not choose to use the Form E-595E must maintain other written evidence adequate to support the conclusion that a sale is exempt from tax in accordance with the provisions of G.S. 105-164.13(4c).

*History Note:* Authority G.S. 105-164.4; 105-164.6; 105-164.13; 105-262;  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; August 1, 1998; August 1, 1996; May 1, 1995; October 1, 1993; June 1, 1992; February 1, 1988.*

**17 NCAC 07B .2801 FLORISTS: NURSERYMEN: GREENHOUSE OPERATORS AND FARMERS**

(a) Retail sales of wreaths, bouquets and similar items are subject to the applicable statutory state and local sales or use tax.

(b) Retail sales of flowers, potted plants, shrubbery and similar nursery stock and retail sales of fruits, vegetables and other farm products are subject to the applicable statutory state and local sales or use tax unless the product in question is a product of the farm and is sold in its original state by the producer of the product who is not primarily a retail merchant at the location where the product is sold.

(c) For the purpose of the exemption afforded by G.S. 105-164.13(4b), nurserymen and greenhouse operators are considered to be farmers. Nursery stock which is not sold during the season in which it was purchased by the nurserymen, greenhouse operators and other farmers but is retained until the next season and growth is added thereto by virtue of such retention is considered to be a product of the farm and is exempt from sales and use taxes when sold by such nurserymen, greenhouse operators or farmers who are not selling primarily as retail merchants.

(d) Nurserymen, greenhouse operators and other types of farmers that make retail sales of farm products that they have produced which are in their original state are not liable for collecting and remitting sales tax on these sales unless they are selling primarily in their capacity as retail merchants. Such vendors are selling primarily as producers when the total dollar sales volume of their produced farm products in the original state regularly exceeds fifty percent of the total dollar sales volume of their purchased products and their produced products. Such vendors are selling primarily in their capacity as retail merchants when their total dollar sales volume of purchased products regularly exceeds fifty percent of the total dollar sales volume of their purchased and produced products. Such classification shall remain in effect until either category of sales on a regular basis has changed to another principal

type. If such producer-vendors operate more than one location, the preceding is applicable to the total dollar sales volume of each location separately. The total dollar sales volume to be used in determining the classification of "producer" or "retail merchant" shall include all sales of tangible personal property without regard to any items or sales that might otherwise be exempt from tax by the Sales and Use Tax Statutes.

(e) If such vendors are not classified primarily as retail merchants on the basis of the total dollar sales volume, sales of their produced products in the original state are exempt from tax; however, retail sales of any farm products or any other taxable merchandise acquired by purchase are subject to any applicable tax. If such vendors are classified primarily as retail merchants on the basis of the total dollar sales volume, they shall be liable for tax accordingly; i.e., all retail sales of both types of products shall be subject to the tax unless specific sales are statutorily exempt from tax.

(f) When vendors who are not primarily retail merchants make sales of farm products produced by them and products acquired by purchase, separate records must be maintained of sales of products produced by them. Records of purchased products, as well as sales thereof, must be kept and maintained in a manner that can be accurately and conveniently checked by the agents of the Secretary of Revenue; otherwise, all sales are subject to the tax.

(g) Producers making taxable sales must register with the Department of Revenue for the purpose of collecting and remitting the tax due thereon.

(h) When nurserymen, greenhouse operators, florists or other persons make taxable sales of shrubbery, young trees or similar items, and as a part of the transaction transplant them to the land of the purchaser for a lump sum or a flat rate, the entire amount of the transaction is subject to the applicable statutory state and local sales or use tax unless such vendors segregate on the invoice that portion of the charge which is for the property sold and that portion of the charge which is for transplanting.

(i) For the purpose of the exemption afforded by G.S. 105-164.13(4b), nurserymen and greenhouse operators are considered to be farmers; therefore, the fact that they may be selling tangible personal property primarily as a retailer and not as a producer does not preclude their purchases of tangible personal property for use from any exemption listed in G.S. 105-164.13. 17 NCAC 07B .1101 provides additional information regarding exemptions.

*History Note: Authority G.S. 105-164.4; 105-164.4A; 105-164.6; 105-164.13; 105-262; Article 39; Article 40; Article 42; Article 43; Article 44;*  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; July 1, 2000; October 1, 1993; June 1, 1992; October 1, 1991;*  
*March 1, 1987.*

#### **17 NCAC 07B .2802 FLORISTS' DELIVERY ASSOCIATIONS**

The tax due on transactions conducted through a florists' delivery association must be collected and remitted to the Department pursuant to the following principles:

- (1) All delivery and service charges associated with taxable sales of flowers or other tangible personal property in North Carolina, whether delivered to the purchaser or to a person other than the purchaser, are considered to be a part of the sales price and subject to the applicable statutory state and local sales or use tax.
- (2) Service or relay charges to purchasers for orders accepted in North Carolina and forwarded to other florists through a florist delivery association, regardless of whether the charges are separately stated on the bill to the purchaser, constitute a part of the sales price and are subject to the applicable statutory state and local sales or use tax.
- (3) A North Carolina florist receiving orders from other florists within or without North Carolina for delivery within or without North Carolina is not liable for any tax on the receipts derived from these transactions.

*History Note: Authority G.S. 105-164.4; 105-164.6; 105-262; Article 39; Article 40; Article 42; Article 43; Article 44;*  
*Eff. February 1, 1976;*  
*Amended Eff. June 1, 2006; April 1, 1999; October 1, 1993; October 1, 1991; March 1, 1987.*

#### **17 NCAC 07B .4002 FERTILIZER AND SEEDS**

(a) Sales of seeds to farmers for agricultural purposes are exempt from sales and use tax. The term "seeds" means seeds in their generally accepted sense and includes flower seed, sets, tubers, roots, tobacco plants, tomato plants, pepper plants, eggplants, potato plants, and other small plants that are raised in beds or hothouses for transplanting. The term "seeds" does not include potted plants, trees, shrubs, cut flowers, and other larger plants.

(b) Sales of the following to farmers are exempt from sales and use tax:

- (1) Commercial fertilizer;
- (2) Lime;
- (3) Land plaster;
- (4) Plastic mulch;
- (5) Plant bed covers; and
- (6) Potting soil.

(c) The term "agricultural," as used in this Rule, means cultivating the soil for the production of crops for sale in the regular course of business; the production of animals for sale in the regular course of business; or the holding and management of animals for the production of animal products for sale in the regular course of business. It includes beekeepers, dairy operators, poultry farmers, egg producers, livestock farmers, nurserymen, greenhouse operators, orchardmen and other persons engaged in the commercial production of plants and animals as described in this Rule for sale in the regular course of business. It does not include someone who merely cultivates the soil for the ornamental effects nor does it include home gardening or commercial activities other than the types described in this Rule.

*History Note: Authority G.S. 105-164.13; 105-262; Eff. February 1, 1976; Amended Eff. June 1, 2006; August 1, 2003; August 1, 1996; April 1, 1986; February 1, 1986.*

**17 NCAC 07B .4006 HOUSEHOLD INSECTICIDES: ETC.**

Sales of rodenticides, insecticides, herbicides, fungicides and pesticides for household purposes are subject to the applicable statutory state and local sales or use tax. Sales of insecticides for use on lawns and golf courses are subject to the applicable statutory state and local sales or use tax. Sales of insecticides and herbicides to contractors for use in performing contracts to clear highway rights-of-way are subject to the applicable statutory state and local sales or use tax.

*History Note: Authority G.S. 105-164.4; 105-164.6; 105-262; Article 39; Article 40; Article 42; Article 43; Article 44; Eff. February 1, 1976; Amended Eff. June 1, 2006; October 1, 1993; October 1, 1991; December 1, 1982.*

**17 NCAC 07B .5201 CHICKS: EGGS: EXEMPTION**

The following sales are exempt from tax:

- (1) sales of baby chicks and poults to poultry farmers, egg producers and hatcheries for commercial poultry or egg production;
- (2) sales of eggs to be used in hatching baby chicks and poults which will be sold or used for commercial poultry or egg production;
- (3) all sales of eggs, baby chicks and poults for resale, irrespective of by whom sold;
- (4) sales of eggs, baby chicks and poults by egg producers and poultry farmers when such sales are made by them in their capacity as producers; Generally, hatcheries do not qualify as producers of farm products within the provisions of G.S. 105-164.13(4b). Hatchery sales which are not exempt under Subparagraphs (1), (2) or (3) of this Rule are subject to the applicable statutory state and local sales or use tax.

*History Note: Authority G.S. 105-164.4; 105-164.13; 105-262; Article 39; Article 40; Article 42; Article 43; Article 44; Eff. February 1, 1976; Amended Eff. June 1, 2006; October 1, 1993; October 1, 1991.*

**17 NCAC 07B .5202 CHICKS: EGGS: TAXABLE**

All sales of eggs, baby chicks and poults which do not qualify for exemption under one or more of the provisions above set forth in 17 NCAC 07B .5201 are subject to the applicable statutory state and local sales or use tax.

*History Note: Authority G.S. 105-164.4; 105-164.6; 105-262; Article 39; Article 40; Article 42; Article 43;*

*Article 44; Eff. February 1, 1976; Amended Eff. June 1, 2006; October 1, 1993; October 1, 1991.*

**TITLE 21 – OCCUPATIONAL LICENSING BOARDS**

**CHAPTER 02 - BOARD OF ARCHITECTURE**

**21 NCAC 02 .0205 NAME OF FIRM**

(a) A licensee shall not engage in the practice of architecture under a professional or firm name which is misleading or deceptive in any way as to the legal form of the firm or the persons who are partners, officers, members, or shareholders in the firm. Examples of misleading or deceptive firm names include the following:

- (1) Use of the plural in any form when the number of architects in a firm does not warrant such use;
- (2) Use of the name of an employee unless that employee is a partner, member or shareholder;
- (3) Use of the name of a deceased architect in order to benefit from his reputation, when that architect was not a former partner, officer, member or shareholder in the present firm;
- (4) Use of a name which is deceptively similar to that of existing firm name; and
- (5) Use of a fictitious name by a sole proprietor or partnership or limited liability partnership.

(b) Names of all architectural firms shall be approved in writing by the Board before adopted or used by such firm. Provided, however, that this Rule shall not be construed to require any firm to seek approval of, or to change, any name adopted in conformity with Board rules in effect at the date of such adoption other than a rule that is a violation of Subparagraph (a)(1) of this Rule.

(c) Only firms established pursuant to 21 NCAC 02 .0214 (professional corporations), 21 NCAC 02 .0215 (qualified foreign corporations), or 21 NCAC 02 .0218 (professional limited liability companies) may engage in the practice of architecture under a fictitious name; provided, however, a registered firm in good standing having obtained written approval of its fictitious name prior to the adoption of this Rule and having continuously used such name may continue to use the previously approved name only for so long as:

- (1) said name complies with Paragraphs (a) and (b) of this Rule;
- (2) the firm's use of said name is continuous; and
- (3) the firm complies with any applicable statutes pertaining to the registration of fictitious names, including but not limited to G.S. 66, Article 14.

*History Note: Authority G.S. 55B-5; 83A-6; 83A-9; 83A-12;*

*Eff. February 1, 1976;*

*Readopted Eff. September 29, 1977;*

*Amended Eff. July 1, 2006; June 1, 1995, April 1, 1991; May 1, 1989.*

**21 NCAC 02 .0206 REQUIREMENT FOR AND USE OF PROFESSIONAL SEAL**

(a) As more fully set out in this Rule, an architect must seal his work whether or not the work is for an exempt project. An architect shall not sign nor seal drawings, specifications, reports or other professional work which were not prepared by the architect or under his direct supervision. Documents shall be sealed as follows:

- (1) Provided, however, that the architect may sign or seal those portions of the professional work that:
  - (A) were prepared by or under the direct supervision of persons who are registered under the architecture registration laws of this jurisdiction if the architect has reviewed in whole or in part such portions and has either coordinated their preparation or integrated them into his or her work; and
  - (B) are not required by law to be prepared by or under the responsible control of an architect if the architect has reviewed and adopted in whole or in part such portions and has integrated them into his or her work.
- (2) Individual Seal Design. Every licensed architect shall have an individual seal which shall be composed of two concentric circles with outer and inner circle diameters of approximately 1.5 inches and 1 inch respectively. The architect's name and place of business shall be between the inner and outer circles. The words "Registered Architect, North Carolina" shall be along the inside perimeter of the inner circle. The architect's North Carolina registration number shall be in the center of the inner circle. The signature of the individual named on the seal is a required part of an individual seal and a seal image lacking said signature is incomplete and shall not be considered a "seal" for purposes of these Rules.
- (3) Corporate Seal Design. Every corporation which shall have obtained from the Board a certificate for corporate practice shall have a corporate seal, which shall be composed of two concentric circles with outer and inner circle diameters of approximately 1.5 inches and 1 inch respectively. The Architectural Corporation's approved North Carolina name and place of business shall be between the inner and outer circles. The words "Registered Architectural Corporation,

North Carolina" shall be along the inside perimeter of the inner circle. The corporation's North Carolina registration number shall be in the center of the inner circle.

- (4) Seal Types. The seal required for use on opaque original technical submissions not intended for duplication shall be of a type which will produce an impression facsimile of the seal, or a rubber stamp which will produce an ink facsimile of the seal. The seal required for use on transparent original technical submissions intended for duplication shall be of a type which will produce an ink facsimile of the seal such as a rubber stamp, or a substantially similar electronic or digital representation of the design. The use of pre-printed documents bearing a pre-printed facsimile of the seal is prohibited. Technical submissions shall be defined to mean plans, drawings, specifications, studies and other technical reports prepared for use in this state in the course of practicing architecture.
- (5) Individual Seal, Signature and Date Required. Architects shall affix their seal on one original of all their drawings and sets of specifications prepared by them for use in this State as follows:
  - (A) on each design and each drawing;
  - (B) on the index page identifying each set of specifications; and
  - (C) on the index page of all other technical submissions.

The original signature of the individual named on the seal shall be considered part of an individual seal and appear across the face of each original seal imprint along with the date of affixation. For the purposes of this Rule, the term "for use in this State" means drawings and sets of specifications prepared for bidding, permitting or for construction. For purposes of this Rule, "original" means the version of drawings and sets of specifications from which all lawful copies can be made.
- (6) Presentation Documents. Presentation documents (renderings, drawings used to communicate conceptual information only) are not required to be sealed or signed.
- (7) Incomplete Documents. Documents considered incomplete by the architect may be released for interim review without the architect's seal or signature affixed, but shall be dated, bear the architect's name and be conspicuously marked to clearly indicate the documents are for interim review and not intended for bidding, permit, or construction purposes.

- (8) Sheets or Pages Prepared By Licensed Professional Consultants. Those sheets or pages prepared by licensed professional consultants (such as, for example, structural, mechanical or electrical engineers) retained by the architect shall bear the seal and registration number of the consultant responsible therefore and shall not be sealed by the architect.
- (9) Original Signature. The use of signature reproductions such as rubber stamps or computer generated or other facsimiles shall not be permitted in lieu of actual signatures; provided, however, a digital signature as defined in Paragraph (f) of this Rule may be used in lieu of a hand written signature.
- (10) Security of Seal. Authorized use of the prescribed seal is an individual act whereby the architect must personally sign over the imprint of the seal. The architect is responsible for security of the seal when not in use.
- (11) Use of Corporate Seal. The use of the corporate seal does not replace the statutory requirement for an architect's individual seal as required in Paragraph (d). The corporate seal must be affixed in addition to the individual seal on the cover sheet and each page of the table of contents of specifications and drawings.

(b) Standard Design Documents. Standard design documents prepared by architects who are registered in this state or in their state of origin may be sealed by a succeeding licensed architect registered in North Carolina provided:

- (1) the seal of the original architect appears on the documents to authenticate authorship;
- (2) the words "standard design document" be placed on each sheet of the documents by the original architect;
- (3) the succeeding North Carolina architect clearly identifies all modifications to the standard design documents;
- (4) the succeeding North Carolina architect assumes responsibility for the adequacy of the design for the specific application in North Carolina and for the design conforming with applicable building codes; and
- (5) the succeeding North Carolina architect affixes his seal to the standard design documents and a statement substantially as follows: "These documents have been properly examined by the undersigned. I have determined that they comply with existing local North Carolina codes, and I assume responsibility for the adequacy of the design for the specific application in North Carolina."

(c) Record Drawings – Post Construction record drawings prepared by an architect, but based upon representations of

contractors, are not plans that are for "bidding, permit or construction purposes" and therefore need not be sealed by the architect as long as the documents bear the name of the architect and include language stating "these drawings are based in part upon the representations of others and are not for bidding, permit or construction purposes".

(d) Responsible Control. No architect shall affix his seal and signature to contract documents developed by others not under his responsible control. Responsible control includes:

- (1) Dissemination of programmatic requirements;
- (2) Ongoing coordination and correlation of services with other aspects of the total design of the project;
- (3) Verification with consultant that owner's requirements are being met;
- (4) Authority over the services of those who assisted in the preparation of the documents;
- (5) Assumption of responsibility for the services; and
- (6) Incorporation of services into design documents to be issued for permitting purposes.

(e) For purposes of this Rule the term "Signature" shall mean handwritten or digital as follows:

- (1) A handwritten message identification containing the name of the person who applied it; or
- (2) A digital signature that is an electronic authentication process attached to or logically associated with an electronic document. The digital signature must be:
  - (A) Unique to the person using it;
  - (B) Capable of verification;
  - (C) Under the sole control of the person using it; and
  - (D) Linked to a document in such a manner that the digital signature is invalidated if any data in the document is changed.
- (3) A digital signature that uses a process approved by the Board shall be presumed to meet the criteria set forth in Parts (e)(2)(A) through (e)(2)(D) of this Rule.

*History Note: Authority G.S. 83A-6; 83A-10; 83A-12; Eff. February 1, 1976;*

*Readopted Eff. September 29, 1977;*

*Amended Eff. July 1, 2006; October 1, 1995; July 1, 1993; May 1, 1989; October 1, 1985.*

## **21 NCAC 02 .0210 INCOMPETENCE**

(a) In practicing architecture, an architect shall act with reasonable care and competence and shall apply the technical knowledge and skill which is ordinarily applied by architects of good standing, practicing in the same locality.

(b) In designing a project, an architect shall take into account all applicable state and municipal building laws and rules. While an architect may rely on the advice of other professionals (e.g., attorneys, engineers and other qualified

persons) as to the intent and meaning of such laws and rules, once having obtained such advice, an architect shall not design a project in violation of such laws and rules.

(c) An architect shall undertake to perform professional services only when he, together with those whom the architect may engage as consultants, are qualified by education, training and experience in the specific technical areas involved.

(d) No person shall be permitted to practice architecture if such person's professional competence is substantially impaired by physical or mental disabilities.

(e) Architects preparing plans for building permits for projects not exempt under G.S. 83A-13 shall submit plans that are complete and buildable. Such plans shall conform with the State Building Code and local plan submission requirements. Professional judgment shall be exercised to reflect sufficient documentation necessary for plan approval. Provided, however, this Rule does not alter any standard of liability applicable to licensees.

*History Note: Authority G.S. 83A-6; 83A-14; 83A-15; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. July 1, 2006; June 1, 1995; May 1, 1989; November 1, 1979.*

#### **21 NCAC 02 .0213 INDIVIDUAL LICENSES**

(a) Renewal. Licenses must be renewed on or before the first day of July in each year. No less than 30 days prior to the renewal date, a renewal application shall be mailed to each individual licensee. The licensee shall complete the current license renewal form provided by the Board, including continuing education credit earned. The completed form for license renewal, along with the annual license renewal fee shall be forwarded to the Board. If the application form is incomplete or the annual renewal fee is not paid, the application for renewal shall not be accepted. Also, if the accompanying draft or check in the amount of the renewal fee is dishonored by the architect's drawee bank for any reason, the annual license renewal shall be deemed to be not renewed. Once the annual renewal has been completed according to the provisions of G.S. 83A-11, as well as Section .0900 of these Rules, the Executive Director shall issue to the licensee a current license for the ensuing year.

(b) Late Renewal and Reinstatement. If the Board has not received the annual renewal fee and completed application on or before July 1st, the license shall expire and be deemed delinquent. The license may be renewed at any time within one year, upon the return of the completed application, the annual renewal fee and the late renewal penalty and compliance with Section .0900 of these Rules. After one year from the date of expiration for non-payment of the annual renewal fee the license shall be deemed automatically revoked. Reinstatement shall occur according to the directives of G.S. 83A-11 and Section .0900 of these Rules.

*History Note: Authority G.S. 83A-6; 83A-11; Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. July 1, 2006; July 1, 1999; May 1, 1989; November 1, 1979.*

#### **21 NCAC 02 .0217 ARCHITECT EMERITUS**

Resident architects who have been registered in this state who are retired from active practice or other related professional activities in any jurisdictions whatsoever, may apply for "Emeritus Status" by submitting a form provided by the Board showing compliance with the requirements of this Section. "Retired" means that the architect no longer practices architecture in that he/she no longer seals and certifies documents with his/her seal or otherwise offers to practice or practices architecture as defined in G.S. 83A-1 as amended. Nonresident architects who have been continuously certified by NCARB who are retired from active practice [or other related professional activities] in any jurisdictions whatsoever, and who are "emeritus", inactive or retired in every other jurisdiction in which they are licensed may also apply for "Emeritus Status" by submitting a form provided by the Board showing compliance with the requirements of this Section. Any such "architect emeritus" must renew that status on forms provided by the Board on or before the first day of July in each year. Any reference to an architect on "Emeritus Status" on any letter, title, sign, card or device shall list such architect as "Architect Emeritus".

*History Note: Authority G.S. 83A-4; 83A-6; 83A-11; 83A-12; Eff. November 1, 1991; Amended Eff. July 1, 2006.*

#### **21 NCAC 02 .0303 REGISTRATION BY RECIPROCITY WITHOUT WRITTEN EXAMINATION**

(a) Registration by "Blue Cover." The only means of individual reciprocity recognized by the Board is for an individual to hold a current license in good standing from another state and a Council Certificate (also known as "Blue Cover") issued by the National Council of Architectural Registration Boards (NCARB) or comply with the requirements of Paragraph (b) of this Rule. Upon receipt of a verified application from NCARB and the payment of the individual license application fee, the Board may issue a license to an applicant without written examination as provided in G.S. 83A-7(b). Revocation of the "Blue Cover" certificate by NCARB shall automatically terminate the architect's license to practice in North Carolina until such time as the "Blue Cover" is reinstated by NCARB.

(b) Registration other than "Blue Cover." The Board may grant a reciprocal certificate to an individual who does not qualify for a "Blue Cover" but who submits an NCARB "Buff Cover" or other verified evidence that he meets the following requirements:

- (1) the applicant has been continuously licensed in good standing in another jurisdiction; and
- (2) the applicant otherwise met the requirements for the "Blue Cover" or North Carolina registration in effect at the time of his original registration as an architect; and
- (3) the applicant agrees to an interview with the Board or a designee to satisfy the Board that he has had sufficient recent architectural practice experience to be able to



competently practice architecture in this state.

*History Note:* Authority G.S. 83A-6; 83A-7;  
*Eff. February 1, 1976;*  
*Readopted Eff. September 29, 1977;*  
*Amended Eff. July 1, 2006; July 1, 2000; October 1, 1995;*  
*May 1, 1989; October 1, 1984; September 1, 1982.*

**21 NCAC 02 .0901 SCOPE**

The rules in this Section set forth the continuing education requirements to be complied with by registrants.

*History Note:* Authority G.S. 83A-6(a)(4); 83A-6(a)(5);  
 83A-11;  
*Eff. July 1, 1998;*  
*Amended Eff. July 1, 2006.*

**21 NCAC 02 .0906 EXCEPTIONS**

A registrant shall be exempt from the continuing education requirements for any of the following reasons:

- (1) New registrants by way of examination or reciprocity for the current registration year.
- (2) A registrant serving on temporary active duty in the armed forces of the United States for a period of time exceeding 90 consecutive days in a year or as provided by statute, whichever is greater.
- (3) Registrants experiencing physical disability or illness if supporting documentation is approved by the Board. Such documentation shall be in the form of a sworn statement by the registrant, a statement from a physician, or medical records which show that the disability or illness prevented registrant's participation in a course which the registrant had enrolled, or prevented registrant's participation in the continuing education program for at least 90 consecutive days in a year.
- (4) Registrants who receive emeritus status from the Board. In order to return to active practice, registrants shall complete continuing education requirements for each exempted year not to exceed two years.

*History Note:* Authority G.S. 83A-6(a)(4); 83A-6(a)(5);  
 83A-11;  
*Eff. July 1, 1998;*  
*Amended Eff. July, 1, 2006.*

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**CHAPTER 16 – DENTAL EXAMINERS**

**21 NCAC 16C .0101 LICENSURE**

Before beginning the practice of dental hygiene in North Carolina, each applicant shall procure from the Board a license to practice dental hygiene. In order to receive such a

license, each applicant shall pass written and clinical examinations as set out in this Subchapter.

*History Note:* Authority G.S. 90-223; 90-224;  
*Eff. September 3, 1976;*  
*Readopted Eff. September 26, 1977;*  
*Amended Eff. June 1, 2006; May 1, 1989; January 1, 1983.*

**21 NCAC 16C .0202 STUDENT MAY APPLY**

The Board shall accept dental hygienist applications from students currently enrolled in schools of dental hygiene. The Board shall deny such applications if the applicant fails to complete the required course of study.

*History Note:* Authority G.S. 90-223; 90-224;  
*Eff. September 3, 1976;*  
*Readopted Eff. September 26, 1977;*  
*Amended Eff. June 1, 2006; May 1, 1989.*

**21 NCAC 16C .0301 APPLICATION FOR LICENSURE**

- (a) All applications for licensure shall be made on the forms furnished by the Board, and no application shall be deemed complete which does not set forth all the information required relative to the applicant. Any applicant who changes his address shall notify the Board office. Applicants shall arrange for and ensure submission to the Board office, sealed proof of graduation from the school, as required by G.S. 90-224(a).
- (b) The application fee shall accompany the application. Such fee is nonrefundable.
- (c) Applicants who are licensed in other states shall furnish verification of licensure from the secretary of the board of each state in which they are licensed. A photograph of the applicant, taken within six months prior to the date of the application, must be affixed to the application.
- (d) All applicants shall submit to the Board a signed release form, completed Fingerprint Record Card, and such other form(s) required to perform a criminal history check at the time of the application.
- (e) All applicants shall arrange for and ensure the submission to the Board office, the examination scores as required by 16C .0303(a) of this Subchapter. All applicants shall arrange for and ensure the submission to the Board office, the examination scores as required by 16C .0303(c), if applicable.

*History Note:* Authority G.S. 90-223; 90-224;  
*Eff. September 3, 1976;*  
*Readopted Eff. September 26, 1977;*  
*Amended Eff. June 1, 2006; May 1, 1989.*

**21 NCAC 16C .0303 BOARD APPROVED EXAMINATIONS**

- (a) The Board, having reviewed and evaluated the written examination as administered by the Joint Commission on National Dental Examinations and having found the same to be a reliable, accurate and valid examination, has adopted as a part of its written examination the National Board Dental Hygiene Examination. Applicants for dental hygiene licensure must achieve a passing score on such examination.

Each applicant shall arrange for and ensure that the applicant's National Board score is submitted to the Board office.

(b) All applicants for dental hygiene licensure shall achieve passing scores on the Board's sterilization and jurisprudence examinations. Reexamination on the written examinations shall be governed by Rule 16C .0405.

(c) In order to fulfill the clinical examination component for dental hygiene licensure, the Board shall accept passing scores from Board approved testing agencies which administer reliable, accurate and valid examinations and allow for Board representation on both the Board of Directors and the Examination Review Committee or equivalent committees and allow for Board input in the examination development and administration. The clinical examination shall:

- (1) be substantially equivalent to the clinical licensure examination most recently administered by the Board and include procedures performed on human subjects as part of the assessment of clinical competencies and shall have included probing, supra and subgingival scaling, and soft tissue management; and
- (2) include:
  - (A) anonymity between candidates and examination raters;
  - (B) standardization and calibration of raters; and
  - (C) a mechanism for post exam analysis.

(d) The Board shall accept scores upon examinations approved under Paragraph (c) of this Rule, for a period of five years following the date of such examinations. Each applicant shall arrange for and ensure that the applicant's scores are submitted to the Board office. The applicant shall comply with all requirements of such testing agency in applying for and taking the examination.

(e) In order to fulfill the sterilization examination component set forth in Paragraph (b) of this Rule, the Board shall accept passing scores from Board approved testing agencies which administer reliable, accurate and valid sterilization examinations and allow for Board representation on both the Board of Directors and the Examination Review Committee or equivalent committees and allow for Board input in the examination development and administration.

*History Note: Authority G.S. 90-224;  
Eff. September 3, 1976;*

*Readopted Eff. September 26, 1977;*

*Amended Eff. June 1, 2006; May 1, 1989; March 1, 1988.*

**21 NCAC 16C .0401 APPLICATION FOR EXAMINATION CONDUCTED BY THE BOARD**

(a) All applications for licensure examination conducted by the Board shall be made on the forms furnished by the Board, and no application shall be deemed complete which does not set forth all the information required by these Rules relative to the applicant. Any candidate who changes his address shall notify the Board office.

(b) The fee for such examination or re-examination must accompany the application. Such fee is non-refundable.

(c) Two identical photographs of the applicant, taken within six months prior to the date of the application, not over two inches in height, must be submitted. One photograph must be affixed to the application and the second photograph must be paper-clipped to the application to be used as part of the identification badge.

*History Note: Authority G.S. 90-223; 90-224.1;  
Eff. June 1, 2006.*

**21 NCAC 16C .0402 TIME FOR FILING**

The completed application, fee, photographs, and sealed proof of graduation from the school as required by G.S. 90-224(a) must be postmarked or delivered to the Board's office at least 90 days prior to the date of the examination conducted by the Board. Sealed proof of graduation from dental hygiene school for those still in dental hygiene school at the time of application must be sent in upon graduation. All data received by the Board concerning the applicant shall be part of the application and shall be retained as part of the record.

*History Note: Authority G.S. 90-223; 90-224;  
Eff. June 1, 2006.*

**21 NCAC 16C .0403 EXAMINATION CONDUCTED BY THE BOARD**

(a) Each candidate shall be given a numbered badge. This badge shall contain the candidate's photograph and shall be presented to the candidate prior to the examination. The number on the badge shall be the only identification allowed on any paper or manuscript during this examination. The badge must be returned to the Board at the completion of the examination.

(b) The Board may dismiss any candidate who is using or appears to be using any assistance not provided as an accommodation. If such violation is discovered by the Board after a license has been issued to the violator, the license shall be revoked.

*History Note: Authority G.S. 90-223; 90-224;  
Eff. June 1, 2006.*

**21 NCAC 16C .0404 PATIENTS AND SUPPLIES FOR BOARD CONDUCTED CLINICAL EXAMINATION**

(a) Each candidate must furnish his own patients and instruments for the Board conducted clinical examination.

(b) Supplies necessary for all clinical work are to be provided by the candidate.

*History Note: Authority G.S. 90-223; 90-224;  
Eff. June 1, 2006.*

**21 NCAC 16C .0405 BOARD CONDUCTED REEXAMINATION**

(a) A complete application, except for official proof of graduation as required by G.S. 90-224(a) and National Board score, is required in case of reexamination.

(b) Any applicant who has passed the written portion of the examination but has failed the clinical portion of the

examination conducted by the Board need not retake the written portion of the examination upon subsequent reexamination during one calendar year.

(c) Any applicant who has passed the clinical portion of the examination conducted by the Board but has failed the written portion of the examination may retake the written portion of the examination two additional times during a one year period and need not retake the clinical portion of the examination. If the applicant does not pass the written portion of the examination upon the second reexamination, the applicant must retake both the written and clinical portions of the examination upon subsequent reexamination.

*History Note: Authority G.S. 90-223; 90-224;  
Eff. June 1, 2006.*

**21 NCAC 16M .0102 DENTAL HYGIENISTS**

(a) The following fees shall be payable to the Board:

- (1) Application for examination conducted by the Board  
\$ 170.00
- (2) Renewal of dental hygiene license  
\$ 81.00
- (3) Reinstatement of license  
\$ 60.00
- (4) Application for provisional licensure  
\$ 60.00
- (5) Certificate to a resident dental hygienist desiring to change to another state or territory  
\$ 25.00
- (6) Application for license by credentials  
\$ 750.00
- (7) License application processing fee  
\$ 75.00

(b) Each dental hygienist renewing a license to practice dental hygiene in North Carolina shall be assessed a fee of twenty-five dollars (\$25.00), in addition to the annual renewal fee, to be contributed to the operation of the North Carolina Caring Dental Professionals.

*History Note: Authority G.S. 90-232; 150B-19(5);  
Eff. September 3, 1976;  
Readopted Eff. September 26, 1977;  
Amended Eff. May 1, 1989; March 1, 1988; May 1, 1987;  
Temporary Amendment Eff. August 20, 1999;  
Amended Eff. April 1, 2001;  
Temporary Amendment Eff. January 1, 2003;  
Amended Eff. June 1, 2006; March 1, 2004; January 1, 2004;  
April 1, 2003.*

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**CHAPTER 46 - BOARD OF PHARMACY**

**21 NCAC 46 .3301 REGISTRATION**

(a) Following initial registration with the Board, registration of a pharmacy technician shall be renewed annually and shall expire on December 31. It shall be unlawful to work as a pharmacy technician more than 60 days after expiration of the registration without renewing the registration. A registration

expired more than 60 days shall be reinstated pursuant to 21 NCAC 46 .1612.

(b) The current registration of a pharmacy technician shall be readily available for inspection by agents of the Board.

(c) The training program described in G.S. 90-85.15A(b) is not required for students enrolled in a community college pharmacy technician program.

(d) Volunteer pharmacy technicians providing services at a facility which has a pharmacy permit designated as a free clinic shall complete the training program described in G.S. 90-85.15A(b) but need not register with the Board.

(e) A pharmacist may not supervise more than two pharmacy technicians unless the additional pharmacy technicians have passed a national pharmacy technician certification examination administered by a provider whose examination assesses the ability of the technicians to function in accordance with G.S. 90-85.3(q2) and approved by the Board according to these standards.

*History Note: Authority G.S. 90-85.6; 90-85.15A;  
Eff. April 1, 2003;  
Amended Eff. February 1, 2006; February 1, 2005;  
Temporary Amendment Eff. March 28, 2006;  
Amended Eff. June 1, 2006.*

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**CHAPTER 50 - BOARD OF EXAMINERS OF  
PLUMBING, HEATING AND FIRE  
SPRINKLER CONTRACTORS**

**21 NCAC 50 .0306 APPLICATIONS: ISSUANCE  
OF LICENSE**

(a) All applicants for licensure or examination shall file an application in the Board office on a form provided by the Board.

(b) Applicants for each plumbing or heating examination shall present evidence at the time of application on forms provided by the Board to establish the equivalent of two years on-site full-time experience in the design and installation of plumbing or heating systems related to the category for which license is sought, whether or not license was required for the work performed. One year of experience in the design or installation of fuel piping is required for fuel piping license. Practical experience shall directly involve plumbing, heating or fuel piping and may include work as a field superintendent, project manager, journeyman, mechanic or plant stationary operator directly involved in the installation, maintenance, service or repair of such systems. Service; maintenance or repair activity; work as a local government inspector of plumbing or heating systems while qualified by the Code Officials Qualification Board; or work as a field representative of this Board; or work by a graduate of an ABET accredited engineering or engineering technology program with direct on-site involvement with plumbing or heating system construction, construction supervision, plant engineering or operation may be used as evidence of one-half the practical experience required; provided that Board members and employees may not sit for examination during their tenure with the Board. After review, the Board may request

additional evidence. No more than one-half the experience may be in academic or technical training, maintenance service or repair directly related to the field of endeavor for which examination is requested. The Board shall pro rate experience which involves the kind of work set out above less than 40 hours per week or part-time academic work of less than 15 semester or quarter hours.

(c) The Board shall issue a license certificate bearing the license number assigned to the qualifying individual.

(d) Fire Sprinkler contractors in the unlimited classification shall meet experience requirements in accordance with NICET examination criteria.

(e) Applicants for examination or licensure in the Limited Fire Sprinkler Inspection Technician classification shall submit evidence adequate to establish that the applicant has either:

- (1) 4000 hours experience involved in inspection and testing of previously installed fire sprinkler systems, consistent with NFPA-25, as a full-time employee of an Unlimited Fire Sprinkler Contractor or fire insurance underwriting organization; or
- (2) 4000 hours experience involved in inspection and testing of previously installed fire sprinkler systems, consistent with NFPA-25 as a full time employee of a hospital, manufacturing, government or university facility which provides or arranges academic and practical training in fire sprinkler inspections consistent with NFPA-25.

(f) Applicants for licensure in the Limited Fire Sprinkler Inspection Contractor classification shall meet experience requirements in accordance with NICET certification criteria.

(g) Applicants for initial licensure in the Limited Fire Sprinkler Maintenance classification after April 1, 2005, must submit evidence of 4000 hours experience at the place for which license is sought as a full-time maintenance employee in facility maintenance with exposure to periodic maintenance of fire protection systems as described in 21 NCAC 50. 0515 of this Chapter or 2000 hours of such experience, together with six hours classroom instruction in courses approved by the Board consisting entirely of training in fire system maintenance, repair and restoration to service. Applicants who have held Maintenance license previously at a different facility are not required to demonstrate experience in addition to the experience at the time of initial licensure but shall present evidence of two hours classroom instruction in courses approved by the Board consisting entirely of training in fire system maintenance, repair and restoration to service relevant to the systems in the new facility or place of employment.

*History Note: Authority G.S. 87-18; 87-21(b); Eff. February 1, 1976; Readopted Eff. September 29, 1977; Amended Eff. January 1, 2004; July 1, 2003; August 1, 2002; July 1, 1998; September 1, 1994; November 1, 1993; April 1, 1991; May 1, 1990; Temporary Amendment Eff. August 31, 2004; Amended Eff. June 1, 2006; March 1, 2005.*

## **21 NCAC 50 .1404 COURSE REQUIREMENTS AND LIMITATIONS**

(a) In order for course credit to be obtained, the course must be approved and consist of instruction in areas related to plumbing, heating, air conditioning and fire sprinkler contracting or inspection contracting such as the technical and practical aspects of the analysis of plans and specifications, estimating costs, fundamentals of installation and design, equipment, duct and pipe sizing, and NFPA code requirements, fire hazards and other subjects as those may relate to engaging in business as a plumbing, heating, fuel piping or fire sprinkler contractor or to plumbing or heating or fire sprinkler systems. Business ethics, taxation, payroll, cash management, bid and contract preparation, customer relations or similar subjects related to plumbing or heating contracting shall also be approved.

(b) In order for course credit to be obtained, the course must be taught by the instructor or alternate listed when the course was approved by the Board, absent specific request and approval of the course as modified prior to the delivery of the program.

(c) Courses shall have a minimum of two hours of actual instruction and a maximum of six hours of actual instruction, per day.

(d) Courses shall be held in facilities conducive to learning. Such facilities include community colleges, technical schools, or community centers.

(e) Courses shall be open to all interested licensees that the host facility can reasonably accommodate and for audit by Board representatives; courses may not be restricted to employees, dealers or members of a particular firm or group.

(f) Once listed on the six-month course roster, a course may not be cancelled during that six month period.

(g) Though courses may have commercial sponsors, the courses shall not include promotion of products or services of a particular firm or manufacturer.

(h) Correspondence, home study, license exam preparation (cram) courses shall not be approved.

(i) For the information of all licenses, the Board shall maintain a calendar of all courses available during a six-month period.

*History Note: Authority G.S. 87-21(b)(3); 87-22; Eff. April 1, 2001; Amended Eff. June 1, 2006; April 1, 2003.*

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## **CHAPTER 65 - THERAPEUTIC RECREATION CERTIFICATION BOARD**

### **21 NCAC 65 .0301 MINIMUM LEVEL OF EDUCATION AND COMPETENCY FOR LICENSED RECREATIONAL THERAPIST**

(a) For the purposes of G.S. 90C-27(a), a candidate for licensure must have graduated from an accredited college or university with a baccalaureate degree or higher and with a major or specialization in recreational therapy or therapeutic recreation. An academic major is defined as a degree in

recreational therapy or therapeutic recreation. A specialization in recreational therapy or therapeutic recreation is defined as a degree in recreation and leisure studies, or recreation, or health and physical education, or health and human performance with a specialization, also known as an option, emphasis or concentration, in therapeutic recreation or recreational therapy. An accredited college or university is defined as a college or university accredited by an accreditation body recognized by the United States Department of Education. The academic major or specialization must be verified by an official transcript. An academic major or specialization is defined by the following components:

- (1) Coursework for a degree or specialization in recreational therapy or therapeutic recreation must reflect a minimum of three courses (nine semester hours) and as of December 31, 2007 four courses (12 semester hours) and as of July 1, 2010 five courses (15 semester hours) in which the title, course description and course outline reflects recreational therapy or therapeutic recreation content according to the current National Council for Therapeutic Recreation Certification (NCTRC)© Job Analysis Study published by the National Council for Therapeutic Recreation Certification (NCTRC), herein incorporated by reference, and any subsequent amendments and changes; a copy may be found at no cost on the National Council for Therapeutic Recreation Certification (NCTRC) website at: <http://www.nctrc.org>. For candidates for licensure who have passed the National Council for Therapeutic Recreation Certification (NCTRC) examination and were certified by the National Council for Therapeutic Recreation Certification prior to December 31, 2002, a therapeutic recreation or recreational therapy content course taught is considered equivalent competency to taking a therapeutic recreation or recreational therapy content course. Candidates for licensure who have passed the National Council for Therapeutic Recreation Certification Therapeutic Recreation examination and were certified by the National Council for Therapeutic Recreation Certification (NCTRC) prior to December 31, 2002 but have not taken or taught three therapeutic recreation or recreational therapy content courses may work as a recreational therapy aide assisting in the provision of recreational therapy services while the required recreational therapy or therapeutic recreation content courses are completed.
- (2) Supportive coursework are courses, not including the recreational therapy or therapeutic recreation content courses, that

contribute to the knowledge base to practice recreational therapy or therapeutic recreation. Support content courses provide knowledge about human development, human functioning, health, illness and disabling conditions as well as health care and human services to contribute to the ability to safely and effectively practice recreational therapy or therapeutic recreation. Supportive coursework related to the practice of recreational therapy or therapeutic recreation is required for the major or specialization in recreational therapy or therapeutic recreation. Supportive coursework for a degree or specialization in recreational therapy or therapeutic recreation must include three semester hours of anatomy and physiology, three semester hours of abnormal psychology, three semester hours of human growth and development across lifespan, and nine semester hours in the area of health and human services. Health and human services coursework may include content in the areas of education, ethics, and other supportive coursework related to the practice of recreational therapy; candidates for licensure who have passed the National Council for Therapeutic Recreation Certification examination and were certified by the National Council for Therapeutic Recreation Certification (NCTRC) prior to December 31, 2002 who want to apply for licensure, but who lack required support content courses may be employed as a recreational therapy aide assisting in the provision of recreational therapy services while the required support content courses are completed.

- (b) Field placement shall be a minimum of 480 hours. Agency as well as college or university supervisors of recreational therapy or therapeutic recreation interns must be North Carolina Licensed Recreational Therapists or if the college or university is in a state other than North Carolina, the university supervisor of interns must be a National Council for Therapeutic Recreation Certification Council "Certified Therapeutic Recreation Specialist" who meets the requirements of Subparagraphs (a)(1) and (a)(2) of this Rule. If the internship is done between October 5, 2006 and January 15, 2008, in a state other than North Carolina, agency supervision must be by a National Council for Therapeutic Recreation Certification (NCTRC) "Certified Therapeutic Recreation Specialist" (CTRS). If the internship is done after January 15, 2008, in a state other than North Carolina, agency supervision must be provided by a National Council for Therapeutic Recreation Certification Council (NCTRC) "Certified Therapeutic Recreation Specialist" (CTRS) who meets the academic requirements for licensure adopted by the North Carolina Board of Recreational Therapy Licensure (NC BRTL) including the recreational therapy or therapeutic

recreation coursework and supportive coursework requirements as listed in Subparagraphs (a)(1) and (a)(2) of this Rule. The field placement must meet the criteria set forth by the National Council for Therapeutic Recreation Certification. Successful performance as an intern during the field placement must be demonstrated to the North Carolina Board of Recreational Therapy Licensure (NC BRTL), using an intern performance form adopted by the North Carolina Board of Recreational Therapy Licensure (NC BRTL), to verify competency to practice as a recreational therapist.

(c) Candidates for licensure, after January 15, 2008, who have completed all recreational therapy or therapeutic recreation content courses, all support content requirements and an internship out-of-state under the clinical supervision of a National Council for Therapeutic Recreation Certification "Certified Therapeutic Recreation Specialist" who meet all requirements of Chapter 90C and this Rule except the requirement to have the internship supervised by a clinical supervisor who is a Licensed Recreational Therapist (LRT), shall be issued a license to practice as a recreational therapist

if they verify a minimum of one year of successful work performance in another state as a recreational therapist or therapeutic recreation specialist during which time they were a "Certified Therapeutic Recreation Specialist" by National Council for Therapeutic Recreation Certification. Successful work performance must be verified to the North Carolina Board of Recreational Therapy Licensure (NC BRTL) on a performance appraisal form provided by the North Carolina Board of Recreational Therapy Licensure (NC BRTL).

(d) Candidates must submit evidence of a passing score on the National Council for Therapeutic Recreation Certification (NCTRC) examination. The passing score on the National Council for Therapeutic Recreation Certification Examination is determined by the National Council for Therapeutic Recreation Certification.

*History Note: Authority G.S. 90C-27(a); 90C-24;  
Temporary Adoption Eff. December 1, 2005;  
Eff. June 1, 2006.*

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## CONTESTED CASE DECISIONS

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*This Section contains the full text of some of the more significant Administrative Law Judge decisions along with an index to all recent contested cases decisions which are filed under North Carolina's Administrative Procedure Act. Copies of the decisions listed in the index and not published are available upon request for a minimal charge by contacting the Office of Administrative Hearings, (919) 733-2698. Also, the Contested Case Decisions are available on the Internet at <http://www.ncoah.com/hearings>.*

### OFFICE OF ADMINISTRATIVE HEARINGS

*Chief Administrative Law Judge*  
**JULIAN MANN, III**

*Senior Administrative Law Judge*  
**FRED G. MORRISON JR.**

### ADMINISTRATIVE LAW JUDGES

*Sammie Chess Jr.*

*Beryl E. Wade*

*Beecher R. Gray*

*Melissa Owens Lassiter*

*A. B. Elkins II*

<u>AGENCY</u>	<u>CASE NUMBER</u>	<u>ALJ</u>	<u>DATE OF DECISION</u>	<u>PUBLISHED DECISION REGISTER CITATION</u>
<b><u>CRIME VICTIMS COMPENSATION</u></b>				
Timothy P. Webber v. Crime Victims Compensation Commission	05 CPS 1568	Lassiter	06/08/06	21:01 NCR
Valerie Joy McGill v. Crime Victims Compensation Commission	06 CPS 0038	Gray	06/08/06	
Charles Leon Champion v. Crime Victims Compensation Commission	06 CPS 0155	Elkins	06/08/06	
A list of Child Support Decisions may be obtained by accessing the OAH Website: <a href="http://www.ncoah.com/decisions">www.ncoah.com/decisions</a> .				
<b><u>HEALTH AND HUMAN SERVICES</u></b>				
Gerald Wanamaker v. Ms Satana T. Deberry General Coun. DHHS	04 DHR 1513	Lassiter	06/14/06	
Patricia Filyaw's FCCH vs. Div. of Child Development	05 DHR 0803	Gray	05/30/06	
Shari Ann Torain v. DHHS	05 DHR 1317	Elkins	06/08/06	
County of Buncombe & NC Radiation Therapy Management Services, Inc. d/b/a 21 <sup>st</sup> Century Oncology v. DHHS, DFS, Certificate of Need Section, & Asheville Hematology and Oncology Associates, P.A.	05 DHR 1369	Gray	05/26/06	21:01 NCR
Jamie Bluto, Guardian of Heather Bluto v. Mecklenburg County Area Mental Health and Developmental Disabilities	05 DHR 1427	Chess	05/17/06	
Novant Health, Inc. and Forsyth Memorial Hospital, Inc. d/b/a Forsyth Medical , Center v. DHHS, DFS, Certificate of Need Section	05 DHR 1490	Lassiter	05/31/06	
Duke University Health System d/b/a Durham Regional Hospital v. DHHS, DFS, Certificate of Need Section	05 DHR 1491	Lassiter	05/31/06	
Duke University Health System d/b/a Durham Regional Hospital v. DHHS, DFS, Certificate of Need Section	05 DHR 1492	Lassiter	05/31/06	
Community General Health Partners, Inc. d/b/a Thomasville Medical Center v. DHHS, DFS, Certificate of Need Section	05 DHR 1506	Lassiter	05/31/06	
Bertha Graham v. DHHS, DFS, Health Care Personnel Registry	05 DHR 2040	McCotter	06/08/06	
Ruben Perez v. DHHS, Div. of Public Health Women and Children's Health Section	05 DHR 2225	Lassiter	05/10/06	
Richard Wayne Baird v. DHHS, DMA	06 DHR 0177	Gray	06/15/06	
Jansala Walker v. Healthcare Personnel Registry	06 DHR 0213	Wade	06/07/06	
Linwood B. Cameron d/b/a New Millennium Management Services v. DFS	06 DHR 0218	Elkins	06/08/06	
Deloris Johnson v. DHHS, Div. of Public Health, Child and Adult Care Food Program	06 DHR 0271	Gray	05/17/06	
Deloris Johnson v. DHHS, Div. of Public Health, Child and Adult Care Food Program	06 DHR 0488	Gray	05/17/06	
DeJuana Byrd Heavenly Angels Child Center v. Child Abuse/ Neglect Consultant Deanna Hoxworth	06 DHR 0720	Lassiter	06/14/06	
Edna Cray - Kid's Academy v. DHHS, Div. of Public Health Child and Adult Care Food Program	06 DHR 0887	Gray	06/13/06	
<b><u>DEPARTMENT OF ADMINISTRATION</u></b>				
Corporate Express Office Products, Inc. v. NC Division of Purchase and	06 DOA 0112	Gray	05/17/06	

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**CONTESTED CASE DECISIONS**

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Contract, & Office Depot, Inc.

**DEPARTMENT OF JUSTICE**

Steven Forrest Brubaker v. NC Criminal Justice Education and Training Standards Commission	05 DOJ 1405	Elkins	05/31/06	21:01 NCR
Michael Edward Sutton v. NC Criminal Justice Education & Training Standards Commission	06 DOJ 0012	Morrison	05/09/06	

**ENVIRONMENT AND NATURAL RESOURCES**

Anton Tomasetti v. DENR, Div. of Air Quality	05 EHR 0321	Gray	06/12/06	
John Graham v. DENR, Div. of Air Quality	05 EHR 2029	Gray	05/08/06	
Heyward Ledford, Wolfpen Associates, Inc. v. DENR	06 EHR 0679	Gray	06/12/06	

**OFFICE OF STATE PERSONNEL**

Sgt. Gerry R. Mouzon v. Crime Control & Public Safety, NC State Highway Patrol, and Brian Beatty, Secretary CC & PS	02 OSP 0392	Gray	06/15/06	
Sgt. Gerry R. Mouzon v. Crime Control & Public Safety, NC State Highway Patrol, and Brian Beatty, Secretary CC & PS	02 OSP 1036	Gray	06/15/06	
Hank L. Silverthorne v. DOT, Bridge Maintenance (Division One)	05 OSP 0291	Gray	05/11/06	
Thomas H. Jones v. NC State Highway Patrol, Dept. of Crime Control & Public Safety	05 OSP 1495	Chess	05/17/06	
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Kamaria Smith v. DHHS	06 OSP 0130	Mann	06/06/06	
Lisa A. Forbes v. Dorothea Dix Hospital	06 OSP 0134	Gray	03/29/06	
Lisa A. Forbes v. Dorothea Dix Hospital	06 OSP 0135	Gray	03/29/06	
Reginald Powe v. Public Schools of NC State Board of Education, Dept of Public Instruction	06 OSP 0238	Lassiter	05/09/06	
Lisa Green v. DOC	06 OSP 0379	Lassiter	06/02/06	
James Walter Gibson v. DOT	06 OSP 0543	Gray	05/19/06	

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Tisha L. Jones v. Dept. of Secretary of State	05 SOS 1987	Gray	05/19/06	
Temeka A. Brooks v. Dept of Secretary of State	06 SOS 0276	Mann	05/26/06	

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Linda Sisco v. UNC Hospitals	05 UNC 0781	Gray	05/09/06	
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**Timothy P Webber**  
**Petitioner**

VS.

**N. C. Crime Victims Compensation  
Commission  
Respondent**

## DECISION

On May 2, 2006, Administrative Law Judge Melissa Owens Lassiter conducted a contested case hearing in this matter. At the hearing, the undersigned Granted Respondent's Motion to Seal the record.

For Petitioner: Timothy P. Webber  
7311 Calibre Park Drive  
Apartment 101  
Durham, NC 27707

For Respondent: Michael R. Epperly  
Assistant Attorney General  
North Carolina Department of Justice  
Crime Control Section  
9001 Mail Service Center  
Raleigh, North Carolina 27699-9001

## For Petitioner: 1-2

For Respondent: 1-7, 9-30

1. Did Petitioner provide substantial evidence within the meaning of N.C.G.S. § 15B-2(12a) that he qualifies and is entitled to recovery under the Crime Victim's Compensation Act set forth in Chapter 15B of the North Carolina General Statutes?

2. Is there substantial evidence in the record to prove that the victim was participating in a non-traffic misdemeanor at or about the time the victim's injury occurred pursuant to N.C.G.S. § 15B-11(b)(2)?

## Procedural Background

1. On April 8, 2005, Petitioner completed and filed a Victim Compensation Application with Respondent, seeking compensation under the Crime Victims' Compensation Act pursuant to N.C. Gen. Stat. § 15B-1 et seq. As father of a victim who was shot to death, Petitioner applied for compensation for \$4500.00 in funeral expenses, and \$3500.00 in other out of pocket expenses, to cover among other things, mental counseling, medical expenses to EMS, travel and transportation of his son's body to Pennsylvania

for burial, and hazardous waste cleanup of his home left by EMS. In his application, Petitioner described the events and injuries sustained as follows:

Unknown assailant burst in my home demanding drugs or money. When he did not get what he wanted, he pulled a gun and shot my son to death. Now in custody.

Petitioner listed the name of the criminal offender as Ronald Bland, a stranger who was charged with attempted armed robbery and first-degree murder of Petitioner's son. (See Application attached to petition)

2. On September 8, 2005, Respondent denied Petitioner's claim pursuant to N.C. Gen. Stat. § 15B-11(b)(1), on the grounds that the "victim was participating in a non-traffic misdemeanor at or about the time that the victim's injury occurred." In its denial, Respondent also found that Petitioner was a claimant acting on behalf of a victim of criminally injurious conduct.

3. On October 10, 2005, Petitioner filed a contested case petition appealing Respondent's denial of his crime victim's compensation application. In his petition, Petitioner stated:

I believe I am entitled to victim's benefits arising from the murder of my son by an unknown assailant who forced his way into my home under the pre-text of wanting to buy marijuana. Then putting a gun to my son's chest and shooting him for not getting what he apparently wanted.

(Petition). Petitioner alleged that Respondent acted erroneously and arbitrarily or capriciously when it denied his application. Attached to the petition was Respondent's pamphlet describing the eligibility criteria for crime victim's compensation, a newspaper article describing a second arrest in the crime, and Petitioner's crime victim's compensation application.

#### Facts of March 26, 2005 Crime

4. On March 26, 2005, shortly before 10:00 p.m., Petitioner arrived home to find his son, Jason Webber, 2 females and 1 male standing outside Petitioner's residence at 4012 Lillington Drive, Durham, NC. Petitioner's residence was a three-story townhouse and the end unit of a multiple unit building. The front entrance to the residence opened into the first floor of the residence.

5. Jason asked Petitioner not to park in the driveway as he was getting ready to drive the female visitors home. Petitioner parked his car, entered his home, and walked upstairs to his bedroom.

6. Approximately 3-5 minutes later, Petitioner heard loud noises coming from downstairs. Petitioner called his son's name, but received no response. Petitioner ran downstairs to the first floor of his home, and discovered his son lying on the floor. The two females and one male ran out the front door, yelling, "Call 911. Your son needs help."

7. Petitioner called 911, and performed CPR on his son. Emergency Medical Services (EMS), Durham Fire Department, and Durham Police arrived within 5 minutes.

8. Durham Police Officer Jason Salmon was the first police officer on the scene. When Salmon entered the first floor of the home, he smelled a strong odor of what he believed to be marijuana. Salmon saw Jason Webber lying on the den/game room floor, unconscious, and very pale. Petitioner was very upset, and yelling at EMS to do their job. Petitioner told Officer Salmon that his son may have overdosed on heroin.

9. Based upon his training in identifying controlled substances, Officer Salmon observed what he believed to be marijuana seeds, stems, and crumbs on the mantle and on the air hockey table in the den/game room. Salmon noticed small plastic baggies inside an opened box on the coffee table.

10. As Salmon talked with Petitioner, he noticed a small hole on Jason Webber's left shoulder, and called his supervisor. Salmon also saw needle marks, aka "track marks," on Jason's arms. Salmon's supervisor, Corporal Allen arrived, and opined that the hole looked like a gunshot wound. Both police officers advised EMS of the possible gunshot wound. Salmon also located a shell casing on the ground to the right of Jason Webber.

11. EMS performed CPR on Jason Webber, but detected no pulse. EMS transported Jason Webber to Duke University Hospital, where Jason was pronounced dead.

12. Sgt. Alonzo Jaynes conducted the murder investigation for Durham Police Department. He visited Petitioner's residence on March 2, 2005, viewed the house and crime scene. He assigned tasks to different investigators such as searching the house, talked with Officer Salmon, and sent investigators to the hospital and headquarters to gather information on the victim.

13. Sgt. Jaynes and his officers searched the residence for a motive behind the murder of Jason Webber, and a cause of death. During their search of Petitioner's home, police found drug paraphernalia such as syringes and spoons in a third floor bedroom. They also discovered a syringe inside a chair in the first floor den/game room, and small plastic baggies in the den/game room.

14. During his investigation, Sgt. Jaynes interviewed several witnesses including Petitioner. On March 26, 2005, Petitioner advised Jaynes that his son had used drugs (heroin, crack cocaine). Jaynes also obtained the following statements from witnesses:

a. Shantel Bethea, another female, and one male were watching television at Jason's house, and smoking marijuana when Jason's dad came. Ronald Bland and another subject entered the home, and walked near the game table. Bethea saw Jason pull out what appeared to be marijuana, and laid it on the game table. Bland shot Jason, and both men ran out of the residence. Bethea and the two other individuals told Petitioner that his son needed help. (Jaynes' testimony at hearing)

b. David Stewart told Jaynes that he picked up Bland, drove Bland to Petitioner's home to buy marijuana, and was in the room at the time of the shooting. Bland and Stewart entered the home, and Stewart sat down. Stewart said Jason pulled a 5-gram bag of marijuana out of the closet. Stewart saw Bland pull a gun, attempt to rob Jason, and shot Jason. Stewart ran because he was afraid. About one-two months ago, Stewart was an inmate with the NC Department of Corrections.

c. Another subject advised Jaynes that he drove David Stewart and Ronald Bland to a house on Lillington Drive for the purpose of buying marijuana.

15. On March 31, 2005, Ronald Bland was charged with attempted armed robbery and first-degree murder of Jason Webber from March 26, 2005.

16. On April 24, 2005, Sgt. Jaynes advised Respondent's Investigator of the above witnesses' statements during a telephone interview with such investigator.

17. At the administrative hearing, Respondent stipulated that Jason Webber was a victim of criminally injurious conduct on March 26, 2005.

18. At hearing, Petitioner stipulated that the items shown in Respondent's Exhibits 16 and 17 are needles and syringes, what are commonly termed drug paraphernalia. He also stipulated that his son had drug issues, and had used heroin consistently for 5 years. However, his son had been using the prescription drug Suboxone, for 2 years pursuant to a rehabilitation program.

19. The Office of the Chief Medical Examiner tested Jason's blood. The Toxicology report from that testing showed the presence of cocaine and morphine in Jason Webber's blood when he died. However, the Report did not indicate that it tested the victim's blood for the presence of marijuana. (Respondent's Exhibit 24)

20. Respondent did not deny Petitioner's crime victim's compensation application based upon the victim possessing cocaine at the time of his death.

21. At the administrative hearing, Petitioner introduced a Proffer signed by Ronald Bland on March 9, 2005. (Petitioner's Exh 1) Bland and Assistant District Attorney Tracey Cline had signed this Proffer during plea negotiations on Bland's criminal court case. Petitioner did not receive a copy of this Proffer until shortly before the contested case hearing. In that Proffer, Bland acknowledged:

On March 26, 2005, Drastic, aka David Stewart, Big Mark and I went riding in Big Mark's van. Drastic made a call to Monte to get some marijuana. Drastic and I smoked four or five blunts. Drastic said he had a juke planned. A juke is a robbery. Drastic gave me his gun before we got into Big Mark's van. We rode around until we got to the house where Drastic had the juke planned.

When we got to the house, Big Mark stayed in the van. I went into the house with Drastic. There were many people in the house. I was nervous and told Drastic that there were too many people in the house and that we should forget it. Drastic did not listen to me and wanted to go through with the juke.

I saw a bag of marijuana on an air hockey table. I pulled out a gun and pointed it at a white male, who I now know to be Jason Webber. I looked at him, and said 'Run it.' Mr. Webber lunged toward me. I panicked and pulled the trigger once, shooting Mr. Webber in the arm. Drastic took the marijuana and we left.

I did not go to Mr. Webber's house with the intention of killing him. I know that I should not have had a gun and that I should not have been there at all. . . .

(Petitioner's Exh 1)

22. Sgt. Alonzo had not seen Petitioner's exhibit before the contested case hearing. After reviewing Petitioner's Exhibit 1, Sgt. Jaynes admitted that it would not make sense for Stewart and Bland to buy 5 grams of marijuana if they had been smoking 4-5 marijuana blunts before they arrived at Petitioner's home. Jaynes acknowledged that:

- a. Jason's Webber blood was not tested for the presence of marijuana by the Office of the Chief Medical Examiner.
- b. The Police did not test the syringes and plastic baggies they found at Petitioner's home for the presence of marijuana.
- c. Five grams of marijuana is called a "nickel bag," and is worth about \$5.00 to \$10.00.

23. Jaynes could not say that Jason Webber was selling marijuana that night as no witnesses heard the conversation between Bland and Jason before Bland shot Jason Webber.

24. At the hearing, Jaynes also acknowledged that in Petitioner's Exhibit 1, Bland admitted that he killed Jason Webber, and attempted armed robbery.

25. Respondent did not receive Sgt. Jaynes' statements and the other witnesses' statements (Respondent's Exhibit 8) until November 14, 2005, 2 months after Respondent made its decision on Petitioner's compensation application. For that reason, the undersigned did not receive Respondent's Exhibit 8 into evidence.

26. Petitioner's evidence at hearing showed that Jason did not consent, provoke, or incite Bland to shoot and kill him. The evidence showed that Jason did not commit a criminal act that proximately caused his death. In addition, Petitioner proved through his cross-examination of Sgt. Jaynes, there was no evidence how long the syringes and baggies had been in the home, and if Jason possessed these items with the intent to sell or use. Instead, Petitioner explained that his son injected the prescribed drug Suboxone with syringes for the past two years.

27. No one from Respondent's agency testified at the administrative hearing to explain what and how Respondent investigated this case, and upon what basis it denied Petitioner's application. Neither did anyone from Respondent's agency testify at hearing to rebut the inconclusive evidence as to who possessed marijuana at Petitioner's home on March 26, 2005, whether Jason gave Bland marijuana or the marijuana was lying on the air hockey table, or why would anyone who smoked 5 blunts of marijuana buy a "nickel bag" of marijuana. Instead, the preponderance of the evidence tended to show that Bland attempted armed robbery of Jason Webber.

28. Respondent failed to present any evidence rebutting Petitioner's evidence that Jason Webber did not provoke Bland to shoot and kill him, or that proximate cause existed between Jason's death and any possession by Jason of 5 grams of marijuana. Jaynes conceded during cross-examination that there was no evidence the March 26, 2005 incident was a drug deal, and no bags of marijuana were found at Petitioner's home. He also acknowledged that the evidence was inconclusive to whom the marijuana found at Petitioner's home belonged. Bethea had admitted to smoking marijuana at Petitioner's home.

29. There was insufficient evidence presented at this hearing competently proving the amount of marijuana in the bag Jason allegedly possessed.

### **CONCLUSIONS OF LAW**

1. Respondent has the authority and responsibility under North Carolina General Statutes Chapter 15B, the "North Carolina Crime Victims Compensation Act," to administer the Act in North Carolina, including the investigation and award or denial of claims.

2. The Petitioner bears the burden of establishing, by substantial evidence, that he is entitled as a "claimant," pursuant to N.C.G.S. § 15B-2(2), to compensation from the Respondent.

3. N.C. Gen. Stat. § 15B-4(a) provides that "compensation for criminally injurious conduct shall be awarded to a claimant if substantial evidence establishes that the requirements for an award have been met." Substantial evidence is defined pursuant to N.C.G.S. § 15B-2(12a) as "relevant evidence that a reasonable mind might accept as adequate to support a conclusion."

4. In this case, Petitioner presented substantial evidence to show that Jason Webber was the "victim" of "criminally injurious conduct" as those terms are defined in N.C.G.S. §§ 15B-2(5) and (13). Petitioner presented substantial evidence that he, as a claimant, met the requirements of N.C. Gen. Stat. § 15B-4(a), -7, and that he incurred allowable expenses within the meaning of N.C.G.S. § 15B-2(1). 11. Pursuant to N.C. Gen. Stat. § 15B-12(d), the undersigned may consider Bland's Proffer (Petitioner's Exhibit 1), as evidence to determine whether Petitioner qualifies for an award of compensation.

5. North Carolina General Statute § 15B-11 lists grounds upon which Respondent may deny a claim for compensation. Specifically, North Carolina General Statute § 15B-11(b) states that:

A claim may be denied . . . if:

- (1) The victim was participating in a nontraffic misdemeanor at or about the time the victim's injury occurred;  
...

The Commission shall use its discretion in determining whether to deny a claim under this subsection. In exercising its discretion, the Commission may consider whether any proximate cause exists between the injury and the misdemeanor . . .

6. Pursuant to the provisions of N.C.G.S. § 15B-11(b)(1), if substantial evidence establishes that the victim was participating in a misdemeanor, then Respondent has discretion and "may deny" the claim. Unlike the provisions of N.C.G.S. § 15B-11(a)(6), N.C.G.S. § 15B-11(b)(1) does not mandate that Respondent either award or deny a claim, as the Commission's decision based upon N.C.G.S. § 15B-11(b)(1) is discretionary in determining whether to deny a claim.

7. Since Chapter 15B does not define the term "participate," that term should be given its plain, ordinary, everyday meaning. Black's Law Dictionary defines the word "participate" as: "to receive or have a part or share of; to partake of; experience in a common with others; to have or enjoy a part or share in common with others." The American Heritage Dictionary defines "participate" as: "to take part; join or share with others" or to "partake of." Black's Law Dictionary 1118 (6th ed 1990) and The American Heritage Dictionary 905 (2d ed. 1985). The provisions of N.C.G.S. § 15B-11(a)(6) do not require that Respondent prove that the victim was, or could have been, charged or convicted with a felony, but merely "participating."

8. A proximate cause is one from which a person of ordinary prudence could reasonably have foreseen would produce injurious consequences. McCrimmon v. Crime Victims Compensation Com'n, 121 N.C.App. 144, 148, 465 S.E.2d 28, 31 N.C.App.,1995. "[P]etitioner need not necessarily have been able to foresee that his conduct would lead to his being shot, but only that 'consequences of a generally injurious nature were probable under all the facts as they existed.'" Hairston v. Alexander Tank & Equipment Co., 310 N.C. 227, 233, 311 S.E.2d 559, 565 (1984)).

9. In its closing argument, Respondent's counsel argued that there was substantial evidence in the record to show that Jason Webber was participating in two non-traffic misdemeanors on March 26, 2005; to wit, (1) delivering 5 grams of marijuana to Bland in violation of N.C. Gen. Stat. § 90-95(b)(2), and (2) possessing drug paraphernalia in violation of N.C. Gen. Stat. § 90-113.21(a) and (b).

However, Respondent failed to identify in its September 8, 2005 denial of Petitioner's application what was the non-traffic misdemeanor upon which it based its denial of Petitioner's claim. Respondent failed to present any evidence from anyone with Respondent's agency to support the claims argued in counsel's closing argument. Fairness and due process therefore dictate that the Agency inform a disappointed petitioner of all grounds upon which the denial of its request is based. See State ex rel. Comm'r of Ins. v. Rate Bureau, 300 N.C. 381, 456-57, 269 S.E.2d 547, 593.(1980) Respondent may not now change the basis of its decision.

10. Because Respondent failed to identify in its September 8, 2005 denial of Petitioner's application, the specific non-traffic misdemeanor upon which it based its denial of Petitioner's claim, Respondent denied Petitioner fairness and due process.

11. Assuming one could infer from the facts, the non-traffic misdemeanor upon which Respondent based its denial of Petitioner's claim, there was not substantial evidence in the record that: (1) Jason Webber intended to sell or deliver marijuana to Bland on March 26, 2005, (2) there was 5 grams of marijuana in the bag Jason possessed, or (3) that Jason intended to sell or transfer, the marijuana in violation of N.C. Gen. Stat. § 90-95 or intended to use drug paraphernalia in violation of N.C. Gen. Stat. § 90-113.21 or -22. Substantial evidence in the record did show that Jason never transferred the marijuana to Bland. Stewart grabbed the marijuana before he ran out the door.

12. A preponderance of the evidence showed that even if Jason "possessed" marijuana, no proximate cause existed between Jason's possession and Jason's death. (See Hairston, supra) The preponderance of the substantial evidence proved that Bland attempted

to rob Jason, and shot him when Jason did not respond. It was not reasonably foreseeable that Jason would be killed over an alleged "nickel bag" of marijuana when Bland and Stewart had already smoke four or five blunts.

13. According to 1 Kenneth S. Broun, *Brandis & Broun on North Carolina Evidence* § 30 (4th ed. 1993), the burden of proof encompasses both the burden of producing evidence and the burden of persuasion. The burden of producing evidence is the burden of a party to satisfy the trier of fact that sufficient evidence has been presented to justify a finding in that party's favor. *Id.* The burden of persuasion is the burden of convincing the trier of fact. *Id.* This burden generally falls on the party who will lose if the trier of fact is in doubt after all the evidence is in. *Id.* When statutes fail to dictate with whom the burden of persuasion lies, the burden is judicially allocated based on "considerations of policy, fairness and common sense . . . ." *Id.* at § 37. It is more than a scintilla or a permissible inference." *Lackey v. North Carolina Dep't of Human Resources*, 306 N.C. 231, 238, 293 S.E.2d 171, 176 (1982) (citations omitted). N.C. Gen. Stat. § 15B-11 does not dictate with whom the burden of persuasion lies.

14. Applying fairness and common sense to the facts of this case, Respondent has the burden of persuasion in this case. As noted above, Petitioner presented substantial evidence that he was entitled to victim's compensation under Chapter 15B of the North Carolina General Statutes. Respondent denied Petitioner due process when it failed to specify the basis of its denial of Petitioner's claim, i.e. the non-traffic misdemeanor that the victim was participating in, at the time his death occurred. In addition, Respondent failed to meet its burden of persuasion in proving that Petitioner was not entitled to benefits, due to his son participating in a non-traffic misdemeanor when Petitioner's son died. Fairness and equity dictate that the lack of proximate cause existing between Jason's "possession" of marijuana and Ronald Bland attempting to rob and then killing Jason Webber, is most significant in determining Petitioner's qualification for a crime victim's compensation award.

### **DECISION**

Based upon the foregoing Findings of Fact and Conclusions of Law, the undersigned determines that Respondent's decision to deny Petitioner's claim for crime victim's compensation should be **REVERSED**. Petitioner is entitled to crime victim's compensation in the amount allowed by N.C. Gen. Stat. § 15B-10.

### **ORDER AND NOTICE**

The North Carolina Crime Victims Compensation Commission will make the Final Decision in this contested case. N.C. Gen. Stat. § 150B-36(b), (b1), (b2), and (b3) enumerate the standard of review and procedures the agency must follow in making its Final Decision, and adopting and/or not adopting the Findings of Fact and Decision of the Administrative Law Judge.

Pursuant to N.C. Gen. Stat. § 150B-36(a), before the agency makes a Final Decision in this case, it is required to give each party an opportunity to file exceptions to this decision, and to present written arguments to those in the agency who will make the Final Decision. N.C. Gen. Stat. 150B-36(b)(3) requires the agency to serve a copy of its Final Decision on each party, and furnish a copy of its Final Decision to each party's attorney of record and to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714.

This the 8<sup>th</sup> day of June, 2004.

\_\_\_\_\_  
Melissa Owens Lassiter  
Administrative Law Judge

STATE OF NORTH CAROLINA

IN THE OFFICE OF  
ADMINISTRATIVE HEARINGS  
05 DHR 1369COUNTY OF BUNCOMBE

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MISSION HOSPITALS, INC.,	)
	)
Petitioner,	)
	)
and	)
	)
NORTH CAROLINA RADIATION THERAPY MANAGEMENT	)
SERVICES, INC., d/b/a 21 <sup>st</sup> CENTURY ONCOLOGY,	)
	)
Petitioner-Intervenor,	)
	)
v.	)
	)
N.C. DEPARTMENT OF HEALTH AND HUMAN SERVICES,	)
DIVISION OF FACILITY SERVICES, CERTIFICATE OF NEED	)
SECTION,	)
Respondent,	)
	)
and	)
	)
ASHEVILLE HEMATOLOGY AND ONCOLOGY	)
ASSOCIATES, P.A.,	)
	)
Respondent-Intervenor.	)
	)
	)

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**RECOMMENDED DECISION**

THIS MATTER came on for hearing before Beecher R. Gray, Administrative Law Judge, on April 3-7, April 19-20 and May 5 and 8, 2006 in Raleigh, North Carolina. The Undersigned, having heard all the evidence in the case, considered the arguments of counsel, examined all the exhibits, and reviewed the relevant law, makes the following findings of fact, by a preponderance of the evidence, enters his conclusions of law thereon, and makes the following recommended decision.

—————APPEARANCES—————

**For Petitioner Mission Hospitals, Inc. ("Mission"):**

Maureen Demarest Murray, Esq.  
William W. Stewart, Jr., Esq.  
SMITH MOORE LLP  
300 North Greene Street, Suite 1400  
Post Office Box 21927  
Greensboro, NC 27420

**For Petitioner-Intervenor North Carolina Radiation Therapy Management Services, Inc., d/b/a 21<sup>st</sup> Century Oncology ("21<sup>st</sup> Century")**

Susan H. Hargrove, Esq.  
Sean A. Timmons, Esq.  
SMITH, ANDERSON, BLOUNT, DORSETT, MITCHELL & JERNIGAN, LLP  
P.O. Box 2611  
Raleigh, NC 27602

**For Respondent N.C. Department of Health and Human Services, Division of Facility Services, Certificate of Need Section (the "CON Section" or the "Agency"):**

Thomas M. Woodward, Esq.  
Assistant Attorney General  
N.C. DEPARTMENT OF JUSTICE  
Post Office Box 629  
Raleigh, NC 27602-0629

**For Respondent-Intervenor Asheville Hematology and Oncology Associates, P.A. ("Asheville Hematology"):**

S. Todd Hemphill, Esq.  
Matthew A. Fisher, Esq.  
BODE, CALL & STROUPE, LLP  
3105 Glenwood Avenue  
P.O. Box 6338

**Raleigh, NC 27628**

**ISSUES**

1. Whether the Agency exceeded its authority or jurisdiction; acted erroneously; failed to use proper procedure; acted arbitrarily or capriciously; or failed to act as required by rule or law, in its August 2, 2005 determination that the Asheville Hematology proposal to acquire a linear accelerator did not require a certificate of need.
2. Whether the Agency exceeded its authority or jurisdiction; acted erroneously; failed to use proper procedure; acted arbitrarily or capriciously; or failed to act as required by rule or law, in its August 2, 2005 determination that the Asheville Hematology proposal to acquire a CT simulator did not require a certificate of need.
3. Whether the Agency exceeded its authority or jurisdiction; acted erroneously; failed to use proper procedure; acted arbitrarily or capriciously; or failed to act as required by rule or law, in its August 2, 2005 determination that the Asheville Hematology proposal to acquire treatment planning equipment did not require a certificate of need.
4. Whether the Agency exceeded its authority or jurisdiction; acted erroneously; failed to use proper procedure; acted arbitrarily or capriciously; or failed to act as required by rule or law, in its August 2, 2005 determination that the Asheville Hematology proposal to relocate an existing oncology treatment center did not require a certificate of need.
5. Whether Asheville Hematology acquired vested right to acquire the linear accelerator as addressed by the Agency in its August 2, 2005 "no review" determination pursuant to N. C. Gen. Stat. § 131E-176, as it existed prior to August 26, 2005.
6. Whether Asheville Hematology acquired vested right to acquire the CT simulator as addressed by the Agency in its August 2, 2005 "no review" determination pursuant to N. C. Gen. Stat. § 131E-176, as it existed prior to August 26, 2005.

**PARTIES**

1. Petitioner Mission is a nonprofit hospital located in Asheville, North Carolina, and licensed by the State of North Carolina pursuant to G.S. § 131E-100 *et seq.* Joint Stipulation filed April 7, 2006 (hereinafter, "Stipulation"), ¶3.
2. Petitioner-Intervenor 21<sup>st</sup> Century is a North Carolina corporation doing business in North Carolina. 21<sup>st</sup> Century owns an oncology treatment center in Asheville, North Carolina, which operates two linear accelerators and a simulator. Stipulation, ¶4.
3. Respondent CON Section is an agency of the State of North Carolina which administers the Certificate of Need Act (the "CON Law"), codified at Article 9 of Chapter 131E of the North Carolina General Statutes.
4. Respondent-Intervenor Asheville Hematology is a North Carolina professional corporation located in Asheville, North Carolina, which was formed in 1982, to engage in the practice of medical oncology. Stipulation, ¶1. Asheville Hematology operates an oncology treatment center at that location. Pet. Ex. 8.

**APPLICABLE LAW**



1. The procedural statutory law applicable to this contested case hearing is the North Carolina Administrative Procedure Act, G.S. § 150B-1 *et seq.*, to the extent not inconsistent with the CON Law, G.S. § 131E-175 *et seq.*
2. The substantive statutory law applicable to this contested case hearing is the North Carolina CON Law, G.S. § 131E-175 *et seq.*
3. The administrative regulations applicable to this contested case hearing are the North Carolina Certificate of Need program administrative regulations, 10A N.C.A.C. 14C *et seq.*, and the Office of Administrative Hearings regulations, 26 N.C.A.C. 03.0100 *et seq.*

**WITNESSES AT CONTESTED CASE HEARING**

**WITNESSES FOR PETITIONER MISSION HOSPITALS, INC., AND PETITIONER-INTERVENOR 21<sup>ST</sup> CENTURY ONCOLOGY**

1. Richard E. Righi, Director of Radiation Therapy and Cancer Data Services, Mission Hospitals, Inc.
2. John G. Coletti, Ph.D., Lead Medical Physicist, Mission Hospitals, Inc.
3. T. Randolph Whitt, CPA, ABV, Dixon Hughes, LLP
4. Timothy S. Knapp, AIA, Peterson & Associates
5. Lee B. Hoffman, Chief, Department of Health and Human Services, Division of Facility Services, Certificate of Need Section

**WITNESSES FOR RESPONDENT CON SECTION**

None

**WITNESSES FOR RESPONDENT-INTERVENOR ASHEVILLE HEMATOLOGY & ONCOLOGY ASSOCIATES, P.A.**

6. Charles Smith, Ph.D., Director of Imaging and Radiation Technologies, US Oncology
7. William Herman, Vice President and General Manager of Cancer Center Services, US Oncology
8. Kevin F. Krenzke, CPA, Controller and Vice President of Finance, US Oncology
9. Bryan Royal, Project Manager, The Harper Corporation
10. Mark Kury, Vice President, Centex-Concord
11. Catherine Langford, RT, East Region Director of Cancer Center Services, US Oncology

**EXHIBITS**

Documents marked as CONFIDENTIAL are protected under the Protective Order entered by the undersigned Administrative Law Judge, and were introduced under seal, unless such requirement was waived by the appropriate party. Documents so marked are indicated by the "†" indicator.

**JOINT EXHIBITS**

The following documents were Joint Exhibits admitted into evidence:

Joint Ex. 1      Agency File

**PETITIONER AND PETITIONER-INTERVENORS' EXHIBITS**

The following documents were offered by Petitioner and Petitioner-Intervenor and admitted into evidence:

- Pet. Ex. 2      C.V. of Richard Righi
- Pet. Ex. 3      C.V. of John Gerard Coletti, Ph.D.
- Pet. Ex. 4      C.V. of T. Randolph Whitt, CPA, ABV
- Pet. Ex. 5      C.V. of Timothy Scott Knapp, AIA
- Pet. Ex. 7      April 12, 2004 Letter to Agency from Asheville Hematology regarding request for determination of oncology treatment center status with attachments 1 through 16
- Pet. Ex. 8      June 25, 2004 Letter from Agency to Asheville Hematology in response to April 12, 2004 letter regarding request for determination of oncology treatment center status
- Pet. Ex. 9      Documents regarding no review request by Raleigh Hematology Oncology Associates, P.C. to the Agency regarding relocation of an existing oncology treatment center and acquisition of a LINAC, CT scanner and treatment planning equipment [MH 18-83]
- Pet. Ex. 15     Calendar Year 2004 American Association of Physicists in Medicine Professional Information Report; cover sheet, pp. 1-4, 18 [MH 100-104, 118]
- Pet. Ex. 16     March 10, 2006 Letter from Varian confirming LINAC Specifications [Asheville Hematology 1349] <sup>†</sup>
- Pet. Ex. 19     MEDRAD quotation and purchase order for CT injection system and accessories [MH 125-126] <sup>†</sup>
- Pet. Ex. 20     Edwards Equipment Co. invoice for cyberknife camera and monitor system [MH 127] <sup>†</sup>
- Pet. Ex. 21     LAP of America purchase order for astor red crosshair lasers [MH 128] <sup>†</sup>
- Pet. Ex. 23     Invoice from Dr. Patton McGinley for radiation shielding survey for CT room [MH 132] <sup>†</sup>
- Pet. Ex. 24     ADAC quotation for record and verify interface and Pinnacle (treatment planning) structure and interface [MH 133-135] <sup>†</sup>
- Pet. Ex. 27     Edwards Equipment Co. purchase order for camera for cyberknife [MH 138] <sup>†</sup>
- Pet. Ex. 33     Pages 3-12 of an 18 pg. Siemens quotation for a Primus LINAC, virtual wedge, beam shaper, MLC, base frame, power conditioner, cassette holder and other accessories [MH 144-153] <sup>†</sup>
- Pet. Ex. 49     Lease Agreement, eff. June 6, 2005 [Asheville Hematology 70-113] <sup>†</sup>
- Pet. Ex. 50     First Amendment to Lease Agreement, eff. September 2, 2005 [Asheville Hematology 114-117] <sup>†</sup>
- Pet. Ex. 52     Unexecuted Copy of the Second Amendment to Lease Agreement <sup>†</sup>
- Pet. Ex. 58     Fred H. Beck and Associates Real Estate Appraisal, August 15, 2005 [Centex 64-139] <sup>†</sup>
- Pet. Ex. 63     Construction Management Agreement Between Centex and Harper Construction [Centex 770-811] <sup>†</sup>
- Pet. Ex. 64     July 1, 2005 Response to Request for Proposal Submitted by Harper Construction [Harper 1-40] <sup>†</sup>
- Pet. Ex. 65     September 26, 2005 Change Order Number 1 with Spreadsheet of Costs [Centex 754-769] <sup>†</sup>
- Pet. Ex. 66     August 19, 2005 Spreadsheet Report Prepared by Harper Construction [Harper 3422-3435] <sup>†</sup>
- Pet. Ex. 84     August 25, 2005 email from Al Hirschler to Mark Kury regarding Asheville Cancer Center [Asheville Hematology 126-127] <sup>†</sup>
- Pet. Ex. 85     Chart regarding Cancer Center Construction Bid Estimate Comparison [Asheville Hematology 135] <sup>†</sup>
- Pet. Ex. 90     Statement of Financial Accounting Standards No. 13 with Status of Statement No. 13
- Pet. Ex. 91     Statement of Financial Accounting Standards No. 23, "Inception of the Lease," including FAS23 Status Page and FAS23 Summary
- Pet. Ex. 93     PPC's Guide to GAAP, including Preface and Chapter 33: "Leases"
- Pet. Ex. 95     Lease Payment Schedules prepared by T. Randolph Whitt regarding the June 6, 2005 Lease Agreement

Pet. Ex. 96	Lease Payment Schedules prepared by T. Randolph Whitt regarding the First Amendment to the Lease Agreement
Pet. Ex. 97	Lease Payment Schedules prepared by T. Randolph Whitt regarding the Second Amendment to the Lease Agreement
Pet. Ex. 101	US Oncology Form 10-K for fiscal year ended December 31, 2005
Pet. Ex. 102	1993 Ratified Bill, Chapter 7, Senate Bill 10 – An Act to Modify the Certificate of Need Law.
Pet. Ex. 104	G.S. § 131E-175. Findings of Fact. (eff. 01/01/02)
Pet. Ex. 105	G.S. § 131E-175. Findings of Fact. (eff. 08/31/05)
Pet. Ex. 106	G.S. § 131E-176. Definitions (eff. 08/07/03)
Pet. Ex. 107	G.S. § 131E-176. Definitions (eff. 08/26/05)
Pet. Ex. 108	G.S. § 131E-178. Activities requiring certificate of need (eff. 03/18/93)
Pet. Ex. 112	15A NCAC 11.0609. X-Ray and Electron Installations One MeV and Above
Pet. Ex. 114	Declaratory ruling regarding wellness center by Rex Hospital
Pet. Ex. 115	October 11, 1999, Declaratory Ruling (Jacksonville Hospital, Inc. d/b/a Onslow Memorial Hospital)
Pet. Ex. 116	February 9, 2005 denial of no review letter from the Agency to Mission regarding the relocation of three outpatient operating rooms, FID # 933468
Pet. Ex. 117	June 25, 2004 no review request by Mission regarding the relocation of three outpatient operating rooms
Pet. Ex. 118	October 8, 2004 letter from the CON Section to Caldwell Memorial Hospital requesting additional information regarding its no review request concerning the acquisition of a linear accelerator.
Pet. Ex. 119	November 29, 2004 response from Bode Call & Stroupe on behalf of Caldwell Memorial Hospital to the CON Section's October 8, 2004 letter
Pet. Ex. 120	February 11, 2005 denial of no review request made by Grace Hospital regarding the replacement and relocation of a linear accelerator, FID # 943191
Pet. Ex. 121	May 16, 2003 request for additional information from the CON Section to Carolina Radiation Oncology Services regarding the acquisition of a linear accelerator and the development of radiation oncology services
Pet. Ex. 122	July 11, 2003 request for additional information from the CON Section to Carolina Radiation Oncology Services regarding the acquisition of a linear accelerator and the development of radiation oncology services
Pet. Ex. 134	Deposition Transcript of Harper Corporation by Bryan Royal, with certain deposition exhibits (in separate notebook)
Pet. Ex. 135	15A N.C.A.C. 11.0900, <i>et seq.</i>
Pet. Ex. 136	10A N.C.A.C. 14C .0201
Pet. Ex. 137	10A N.C.A.C. 14C .0202
Pet. Ex. 138	G.S. § 131E-188
Pet. Ex. 139	G.S. § 131E-175. Findings of Fact. (1987 Session)
Pet. Ex. 142	Agency's Responses to Petitioner's First Set of Interrogatories and Requests For Production of Documents to Respondent (01/13/06)

Pet. Ex. 143	Single vault standards, construction plans, LC, LQ1
Pet. Ex. 144	Illustrative chart regarding entities
Pet. Ex. 145	Excerpts from Deposition Transcript of Gresham Smith and Partners by David M. Meech (pages 22, 23, 29, 30, 32, 76, 126 and 127)
Pet. Ex. 146	G.S. § 131E-176 Definitions (eff. 08/07/03)
Pet. Ex. 147	Respondent-Intervenor Asheville Hematology and Oncology Associates, P.A.'s Responses to Petitioner-Intervenor's First Set of Interrogatories and Request for Production of Documents to Respondent-Intervenor (3/28/06)
Pet. Ex. 148	July 11, 2005 e-mail from Mark Kury to Al Hirschler [ <i>Asheville Hematology 127</i> ] <sup>†</sup>
Pet. Ex. 149	July 5, 2005 e-mail from Stephanie Shearin to John Thompson and Mike Wallendal [ <i>Asheville Hematology 269</i> ] <sup>†</sup>
Pet. Ex. 150	July 5, 2005 – E-mail from Thompson to Royal regarding bid [ <i>Asheville Hematology 267</i> ] <sup>†</sup>
Pet. Ex. 151	July 5, 2005 - E-mail from Centex to Wallendal concerning bid [ <i>Asheville Hematology 268</i> ] <sup>†</sup>
Pet. Ex. 152	April 4, 2006 review determination and notice to cease and desist to Thomasville Medical Center regarding the acquisition of a linear accelerator, FID # for FMC: 923174, FID # for TMC: 923112
Pet. Ex. 153	April 4, 2006 review determination and notice to cease and desist to Forsyth Medical Center regarding the acquisition of a linear accelerator to be placed at Thomasville Medical Center, FID # for FMC: 923174, FID # for TMC: 923112
Pet. Ex. 154	Respondent-Intervenor Asheville Hematology's Responses to Petitioner's First Set of Interrogatories and Request for Production of Documents to Respondent-Intervenor (11/17/05)
Pet. Ex. 155	Application and Certificate for Payment, Period to 02/28/06 [ <i>Harper 5110-5116</i> ] <sup>†</sup>
Pet. Ex. 156	Petitioner-Intervenor North Carolina Radiation Therapy Management Services, Inc. d/b/a 21 <sup>st</sup> Century Oncology's Rule 30(b)(6) Notice of Deposition for Harper Corporation
Pet. Ex. 157	Letter dated February 20, 2006 regarding stipulations
Pet. Ex. 158	Chart of Harper Change Notifications – 10/05 through 4/06 (Illustrative)
Pet. Ex. 159	Documents produced by Harper Corporation – Change Notification Nos. 1 through 29 [ <i>Harper 10000 – 10144</i> ]

**RESPONDENT'S EXHIBITS**

The following documents were offered by Respondent CON Section and admitted into evidence:

None

**RESPONDENT INTERVENOR'S EXHIBITS**

The following documents were offered by Respondent-Intervenor Asheville Hematology and admitted into evidence:

AHO Ex. 3	Management Services Agreement – 10/01/1995 <sup>†</sup>
AHO Ex. 4	Amendment to Management Services Agreement – 07/01/2001 <sup>†</sup>
AHO Ex. 5	Amendment to Management Services Agreement– 12/01/2004 <sup>†</sup>
AHO Ex. 6	Fourth Amendment to Management Services Agreement – 09/01/2005 <sup>†</sup>
AHO Ex. 9	Varian Quote – LINAC – 06/03/2005 <sup>†</sup>

AHO Ex. 10	Varian Invoice – LINAC – 07/04/2005 <sup>†</sup>
AHO Ex. 11	USO Purchase Order – LINAC – 06/03/2005 <sup>†</sup>
AHO Ex. 12	Varian – Preliminary LINAC Quotation – 05/11/2005 <sup>†</sup>
AHO Ex. 13	Varian – Final LINAC Quotation – 05/11/2005 <sup>†</sup>
AHO Ex. 14	Varian Identification of LINAC – 03/10/2006 <sup>†</sup>
AHO Ex. 15	Down Payment Checks on LINAC <sup>†</sup>
AHO Ex. 19A	Lease Agreement between CC Asheville and AOR Management of Virginia <sup>†</sup>
AHO Ex. 19B	First Amendment to Lease Agreement <sup>†</sup>
AHO Ex. 20	Second Amendment to Lease Agreement <sup>†</sup>
AHO Ex. 22	Assignment and Assumption of Purchase & Sale Agreement <sup>†</sup>
AHO Ex. 24	GE Master Service Agreement <sup>†</sup>
AHO Ex. 26	GE CT Quote – 06/03/2005 <sup>†</sup>
AHO Ex. 27	GE CT Price Correction – 12/15/2005 <sup>†</sup>
AHO Ex. 38	Mission CON Submissions – 2004 Add 4 Dialysis Stations
AHO Ex. 40	Mission CON Submissions – 2005 Acquire Digital Mammography Unit
AHO Ex. 48	21st Century CON Submissions: 2004 – Replace Buncombe County LINAC
AHO Ex. 49	21st Century CON Submissions: 2004 – Acquire Buncombe County Columactor
AHO Ex. 55	Certified Cost Estimate from Timothy S. Knapp – 2 April 2004
AHO Ex. 72	Original Staff Costs Allocation Chart – June 2005 <sup>†</sup>
AHO Ex. 73	Updated Staff Costs Allocation Chart <sup>†</sup>
AHO Ex. 74	CV of Kevin Krenzke
AHO Ex. 75	2004 Caldwell Memorial Hospital Documents
AHO Ex. 76	CV of Charles Smith, Ph.D
AHO Ex. 77	Appraisal Documents – Fred H. Beck & Associates <sup>†</sup>
AHO Ex. 78	Consumer Price Index Documents
AHO Ex. 80	Harper Corporation Documents – Final LINAC Cost Analysis <sup>†</sup>
AHO Ex. 81	Harper Corporation Documents – Final Ancillary Room Cost Analysis <sup>†</sup>
AHO Ex. 82	Harper Corporation Documents – Final CT Simulator Cost Analysis <sup>†</sup>
AHO Ex. 83	Varian Final LINAC Pricing Letter <sup>†</sup>
AHO Ex. 84	GE Final CT Scanner Pricing Letter – 04/18/2006 <sup>†</sup>
AHO Ex. 85	Updated US Oncology Cost Breakout Spreadsheet Analysis <sup>†</sup>
AHO Ex. 86	Harper Corporation Payment Application Number 7 – 03/31/2006 <sup>†</sup>
AHO Ex. 88	Kevin Krenzke Cost Analysis
AHO Ex. 89	Commission for Subpoena of Harper Construction
AHO Ex. 91	Physics Commissioning Cost Estimate <sup>†</sup>
AHO Ex. 92	LINAC License Issued by NCDENR
AHO Ex. 93	Stipulation of Counsel on Issues Regarding Service Agreements
AHO Ex. 94	Revised LINAC Purchase Order <sup>†</sup>

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**FINDINGS OF FACT**

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**I. FACTUAL AND LEGAL BACKGROUND**

1. Lee B. Hoffman has been the chief of the CON Section since 1988. In this position, she is responsible for assisting project analysts in interpreting the laws and rules that are adopted for implementation by the North Carolina certificate of need section. She is also responsible for preparing draft amendments to CON rules and legislation and serving as liaison to the State Health Coordinating Council. (Hoffman, T. Vol. 3, pp. 7-8)

2. Ms. Hoffman has been reviewing requests for linear accelerators and CT scanners since at least March 18, 1993. (Hoffman T. Vol. 4, PP. 73-74)

3. The CON Section reviews approximately 200-300 requests for "no review" determinations and exemptions per year. (Hoffman T. Vol. 4, P. 76)

4. On February 1, 2005, Asheville Hematology submitted a letter to the CON Section with 12 exhibits attached, wherein Asheville Hematology asked the CON Section whether the following actions required a certificate of need ("CON"):

- (1) Acquire and offer a linear accelerator;**
- (2) Acquire and offer a computed tomography ("CT") scanner/simulator;**
- (3) Acquire and offer treatment planning software and equipment;**
- (4) Relocate and expand its existing oncology treatment center to a new building.**

(hereinafter collectively the "Asheville Hematology Project"). Stipulation, ¶19; Joint Ex. 1, Agency File, p. 1.

5. Asheville Hematology's request represented to the Agency that it was managed by US Oncology, and that used equipment would be transferred to Asheville Hematology from other facilities managed by US Oncology. Joint Ex. 1, Agency File, pp. 1, 4. Asheville Hematology also included in the cost of its proposal projected staff costs of US Oncology employees related to the development of the project. Joint Ex. 1, Agency File, pp. 97-99.

6. US Oncology is a company engaged in the management and operation of outpatient oncology medical procedures and outpatient cancer treatment centers. US Oncology manages 37 physician practices pursuant to management agreements with those practices. In that relationship, the physicians take care of the patients, and US Oncology manages the business of the practice. Stipulation, ¶5; Herman, T., Vol. 5, pp. 13-14.

7. The relationship between Asheville Hematology and US Oncology is governed by a "Management Services Agreement," "Purchase Agreement" and "Master Transaction Agreement." These agreements, as amended, are now between Asheville Hematology and AOR Management Company of Virginia, Inc. ("AOR Management"), a wholly owned subsidiary of US Oncology. Stipulation, ¶6; AHO Ex. 3-6.

8. By letter dated February 18, 2005, Asheville Radiology Associates, P.A. ("Asheville Radiology") submitted comments with supporting documentation to the CON Section opposing Asheville Hematology's project, and asked the CON Section to determine that Asheville Hematology must obtain a CON to develop its project. Stipulation, ¶28; Joint Ex. 1, Agency File, p. 61.

9. By letter dated March 10, 2005, Asheville Hematology responded to Asheville Radiology's February 18, 2005 submission, and set forth reasons why it disputed the contentions of Asheville Radiology. Stipulation, ¶29; Joint Ex. 1, Agency File, p. 85.

10. By letter dated June 24, 2005, Mission wrote the CON Section questioning the omission of land costs from Asheville Hematology's project costs, and requesting from the CON Section copies of the proposed lease of the building and land. Stipulation, ¶44; Joint Ex. 1, Agency File, p. 96. Mission's letter raised no other complaints regarding Asheville Hematology's project.

11. 21<sup>st</sup> Century did not file any comments or complaints with the CON Section regarding Asheville Hematology's project.

12. On August 2, 2005, Ronald Loftin, Project Analyst and Lee B. Hoffman, Chief of the CON Section issued four "no review" determinations to Asheville Hematology's counsel, determining that based upon the facts presented by Asheville Hematology, its proposal to relocate its existing oncology treatment center and acquire a linear accelerator, CT scanner and treatment planning equipment was not a new institutional health service, and therefore, Asheville Hematology could proceed with the proposal without first filing a certificate of need application and obtaining a certificate of need (hereinafter, the Determination"). Joint Ex. 1, Agency File, pp. 106, 112, 118, 128.

13. In issuing its Determination, the CON Section separately analyzed each piece of equipment, separating the cost of the linear accelerator, CT scanner/simulator, and treatment planning equipment. Stipulation, ¶52.

14. The CON Section's "no review" determination for the linear accelerator attributed the following activities and costs to the linear accelerator for purpose of determining the applicability of CON review:

\$743,039.00	Costs of linear accelerator equipment (in letter dated 2/01/05)
\$4,277.62	Cost of ¼ of staff effort (in letter dated 7/11/05)
<u>(\$900.00)</u>	<u>Less ¼ of legal fees for no review prep (in letter dated 7/26/05)</u>
\$746,416.62	Total costs

Stipulation, ¶53, Joint Ex. 1, Agency File, p. 118.

15. The CON Section's "no review" determination for the CT simulator attributed the following activities and costs to the CT simulator for purpose of determining the applicability of CON review:

\$485,170.00	Total costs (in letter dated 2/01/05)
\$4,277.62	Cost of ¼ of staff effort (in letter dated 7/11/05)
<u>(\$900.00)</u>	<u>Less ¼ of legal fees for no review prep (in letter dated 7/26/05)</u>
\$488,547.62	Total costs

Stipulation, ¶54, Joint Ex. 1, Agency File, p. 106

16. The CON Section's "no review" determination for the treatment planning equipment attributed the following activities and costs to the treatment planning equipment for purpose of determining the applicability of CON review:

\$147,758.00	Total costs (in letter dated 2/01/05)
\$230,000.00	Fair market value of IMPAC record and verify system (in letter dated 6/16/05)
\$4,277.62	Costs of ¼ of staff effort (in letter dated 7/11/05)
<u>(\$900.00)</u>	<u>Less ¼ of legal fees for no review prep (in letter dated 7/26/05)</u>
\$381,135.62	Total costs

Stipulation, ¶55, Joint Ex. 1, Agency File, p. 112.

17. The CON Section's "no review" determination for the relocation of the existing oncology treatment center, including the acquisition of the radiation oncology treatment equipment, attributed the following activities for purpose of determining the applicability of CON review:

\$381,135.62	Costs of the treatment planning equipment
\$488,547.62	Costs of the CT simulator equipment
\$746,416.62	Costs of the linear accelerator equipment
\$364,301.00	Costs of the construction/relocation (in letter dated 2/01/05)
\$1,500.00	Costs of the view boxes (in letter dated 6/16/05)
\$4,277.62	Costs for ¼ of staff effort (in letter dated 7/11/05)
<u>(\$900.00)</u>	<u>Less ¼ of legal fees for no review prep (in letter dated 7/26/05)</u>
\$1,985,278.49	Total costs

Stipulation, ¶57; Joint Ex. 1, Agency File, p. 128.

18. On September 1, 2005, Mission filed its petition for contested case hearing in this contested case, challenging the Agency's Determination.

19. By Order filed September 28, 2005, this Court allowed Asheville Hematology's Motion to Intervene in the contested case, in support of the Agency's Determination regarding Asheville Hematology's Project.

20. On or about November 18, 2005, 21<sup>st</sup> Century filed a Motion to Intervene, seeking to intervene in the contested case in support of Mission's challenge to the Agency's Determination. 21<sup>st</sup> Century's Motion was allowed by Order filed January 10, 2006.

## II. THE RADIATION THERAPY PROCESS

21. Radiation therapy utilizes high-energy ionizing radiation in the treatment of malignant neoplasm and certain non-malignant conditions. The clinical equipment associated with the radiation therapy process is as follows:

Simulation – Simulation is the process of establishing the radiation treatment portals to a specific treatment volume. Currently, simulation is usually performed utilizing a CT image data set and a dedicated CT simulation software and hardware package. The CT image is acquired on a CT scanner on or off the premise.

A CT simulator acts as the initial set-up of the patient for the actual course of therapy. The CT simulator creates images of the patient's anatomy, localizing the tumor in regards to the other portions of the anatomy. It acts in targeting the tumor that is of interest. That data is fed to a treatment planning computer, and the actual treatment parameters are determined. The CT simulator allows the radiation oncology facility to set up and position the patient in the treatment position that is going to be used over the course of therapy.

The only dedicated technology needed is a CT simulation software package. This software package can be procured as a module within the treatment planning package or a stand-alone hardware and software package.

Radiation Treatment Planning – Radiation treatment planning ensures that the targeted tumor receives the prescribed dose of radiation. A treatment plan determines the radiation dose at the target site and surrounding volume of tissue. This plan is developed and calculated utilizing dedicated treatment planning software and hardware.

The function of treatment planning equipment is to develop the treatment plan based on the images produced by the simulator. A treatment planning system is a sophisticated computer program that allows multiple plans to be made and multiple calculations to be done in a short period of time to give the physician a choice of different treatment courses. The treatment planning system allows the radiation oncology facility to reach a conclusion about the best way to approach treatment of a particular cancerous tumor. The treatment planning system does not deliver the treatment or the radiation. In layman's term, the treatment plan is the prescription or the road map for the radiation treatment.

Radiation Treatment Delivery – Daily radiation treatment doses are delivered via a dedicated linear accelerator. A linear accelerator is an x-ray machine that produces high voltage radiation similar to a diagnostic x-ray machine, but the power of the x-ray beam is about 100 times greater. The radiation produced has the effect of killing cancerous tumor cells. A linear accelerator is used to produce a high energy x-ray beam to a precise tumor target, in order to treat cancer patients. Due to the surrounding tissue and organ tolerances, the total prescribed radiation dose is administered over a period of time. The treatments are usually delivered over five consecutive days followed by one to two day breaks. In order for the linear accelerator to deliver accurate daily treatment, the unit has dedicated hardware and software.

Joint Ex. 1, pp. 100-02; Righi, T., Vol. 1, pp. 52-53, 57-59; Hoffman, T., Vol. 4, pp. 88, 91; Smith, T., Vol. 4, pp. 210-11.

22. The radiation oncology team which provides radiation therapy consists of the following members:

Radiation Oncologist – A physician who is highly trained and specializes in the treatment of cancer via ionizing radiation and is responsible for confirming the cancer diagnosis, prescribing the treatment course and approving the final treatment plan and patient positioning. A radiation oncologist is also versed in anatomy, physiology and physics.

Medical Physicist – Responsible for the quality control on all the equipment used to set up, plan and delivery the prescribed radiation treatments. The medical physicist ensures that the output of the treatment units is accurate, correct and consistent.

Medical Dosimetrist – Once the parameters of the treatment are set, the dosimetrist carries out the function of providing a specific treatment plan in regards to the dosage to the patient in the area to be treated. The dosimetrist performs all the calculations and beam manipulations on a treatment planning workstation. The dosimetrist and the medical physicist work hand in hand to verify the final treatment plans.

Radiation Therapist – The radiation therapist is responsible for accurate daily delivery of radiation plan as created by the dosimetrist and approved by the physician, precise patient positioning, ongoing patient education, and patient monitoring for potential side effects. The radiation therapist is in constant contact with the patient and family throughout their course of treatment.



The radiation therapist may also operate the CT simulator, doing the initial marking of the patient and targeting of the tumor that is to be treated, creating devices to secure the patient's immobilization, and manufacturing blocks in order to customize the radiation therapy beams.

Radiation Oncology Nurse – In conjunction with the radiation oncologist, the nurse performs the initial patient assessment. The nurse provides constant support, education as well as ongoing clinical assessments.

Joint Ex. 1, p. 100; Coletti, T., Vol. 1, pp. 171-72; Righi, T., Vol. 1, pp. 45-46.

### III. NATURE OF A NO REVIEW DETERMINATION

23. A no review request is a request submitted to the CON Section, asking the CON Section to determine whether a particular proposal is a new institutional health service, requiring a certificate of need. This is an optional procedure. There is nothing in the CON Law or rules which require someone to submit a request, and so there are many providers who never contact the CON Section, and instead develop their projects because, after their review of the CON Law, they do not believe it is a new institutional health service. Hoffman, T., Vol. 3, pp. 27-28.

24. The CON Section generally makes one of three determinations on a no review request: (1) the proposed service is a new institutional health service and does require a CON; (2) it is a new institutional health service but falls under one of the exemptions set forth in G.S. §131E-184, and therefore does not require a CON; or (3) the service is not regulated at all under the CON Law, does not meet any of the definitions of new institutional health service and does not require a CON. Hoffman, T., Vol. 3, p. 33.

25. The CON Section receives approximately 200-300 requests each year to issue a no review determination or an exemption under G.S. § 131E-184(a). Hoffman, T., Vol. 4, p. 76.

26. There is no provision in the CON Law for public comment or public hearing concerning no review requests. However, the CON Section does consider written comments or inquiries from others who happen to learn about a no review request and submit information to the CON Section. The CON Section will consider any such information it receives to make sure that it has addressed all the issues that the CON Section believes are appropriate to review with regard to a no review request. Hoffman, T., Vol. 3, pp. 43-44, 47.

27. Ms. Hoffman considered the Asheville Hematology no review request a more complex issue than a typical no review request, because she considers the definitions of oncology treatment center and diagnostic center to be among the most complex definitions in the CON Law. For that reason, she was more involved in reviewing this request than she typically is with other no review requests. Hoffman, T., Vol. 4, p. 76.

28. In all its four "no review" determinations regarding the Asheville Hematology proposal, the CON Section states the following:

*It should be noted that this determination is binding only for the facts represented by you. Consequently, if changes are made in the project or in the facts provided in the correspondence referenced above, a new determination as to whether a certificate of need is required would need to be made by the Certificate of Need Section. Changes in a project include, but are not limited to: (1) increases in the capital cost; (2) acquisition of medical equipment not included in original cost estimate; (3) modifications in the design of the project; (4) change in location; and (5) any increase in the number of square feet to be constructed.*

Stipulation, ¶58; Joint Ex. 1, Agency File, pp. 106, 112, 118, 128.

29. If the facts regarding a particular proposal are different than those set forth in the information supplied to the CON Section, then the CON Section's no review determination may not be valid. However, the CON Section does not expect a running litany of letters every time a project changes. Any such changes would be material only if the total costs associated with the proposal would exceed the cost thresholds in the CON Law. Hoffman, T., Vol. 3, pp. 227-29.

30. Nothing in the CON Law mandates or requires that the proponent of a project make a new request for a determination if, after changes occur in the scope of the project, the project still will not be a new institutional health service. Hoffman, T., Vol. 3, p. 229.

**IV. AGENCY DETERMINATION**

31. In making its Determination, the Agency reviewed and interpreted the following provisions of the CON Law:

G.S. § 131E-176(18a). *"Oncology treatment center" means a facility, program, or provider, other than an existing health service facility that provides services for diagnosis, evaluation, or treatment of cancer and its aftereffects or secondary results and for which the total cost of all the medical equipment utilized by the center, exceeds two hundred fifty thousand dollars (\$250,000). In determining whether costs are more than two hundred fifty thousand dollars (\$250,000), the costs of equipment, studies, surveys, designs, plans, working drawings, specifications, construction, installation, and other activities essential to acquiring and making operational the facility, program, or provider shall be included. The capital expenditure for the equipment shall be deemed to be the fair market value of the equipment or the cost of the equipment, whichever is greater.*

G.S. § 131E-176(14f). *"Major medical equipment" means a single unit or single system of components with related functions which is used to provide medical and other health services and which costs more than seven hundred fifty thousand dollars (\$750,000). In determining whether the major medical equipment costs more than seven hundred fifty thousand dollars (\$750,000), the costs of the equipment, studies, surveys, designs, plans, working drawings, specifications, construction, installation, and other activities essential to acquiring and making operational the major medical equipment shall be included. The capital expenditure for the equipment shall be deemed to be the fair market value of the equipment or the cost of the equipment, whichever is greater.*

G.S. § 131E-176(7a). *"Diagnostic center" means a freestanding facility, program, or provider, including but not limited to, physicians' offices, clinical laboratories, radiology centers, and mobile diagnostic programs, in which the total cost of all the medical diagnostic equipment utilized by the facility which cost ten thousand dollars (\$10,000) or more exceeds five hundred thousand dollars (\$500,000). In determining whether the medical diagnostic equipment in a diagnostic center costs more than five hundred thousand dollars (\$500,000), the costs of the equipment, studies, surveys, designs, plans, working drawings, specifications, construction, installation, and other activities essential to acquiring and making operational the equipment shall be included. The capital expenditure for the equipment shall be deemed to be the fair market value of the equipment or the cost of the equipment, whichever is greater.*

G.S. § 131E-176(9b). *"Health service facility" means a .... diagnostic center; oncology treatment center...*

G.S. § 131E-176(16). *"New institutional health services" means any of the following:*

- a. *The construction, development, or other establishment of a new health service facility.*
- b. *The obligation by any person of a capital expenditure exceeding two million dollars (\$2,000,000) to develop or expand a health service or a health service facility, or which relates to the provision of a health service. The cost of any studies, surveys, designs, plans, working drawings, specifications, and other activities, including staff effort and consulting and other services, essential to the acquisition, improvement, expansion, or replacement of any plant or equipment with respect to which an expenditure is made shall be included in determining if the expenditure exceeds two million dollars (\$2,000,000).*

\* \* \* \* \*

- p. *The acquisition by purchase, donation, lease, transfer, or comparable arrangement by any person of major medical equipment.*

Joint Ex. 1, pp. 2-7; Hoffman, T., Vol. 8, pp. 36-37.

32. Asheville Hematology is an oncology treatment center, within the meaning of G.S. § 131E-176(18a), and therefore, is an existing health service facility. Under the law applicable to the CON Section's Determination, an existing oncology treatment center may relocate its oncology treatment center and acquire certain items of medical equipment without obtaining a certificate of need, so long as the cost to acquire and make operational each unit of equipment does not exceed \$750,000, and so long as the

combination of the costs to acquire and make operational all such equipment and all other costs related to relocating the oncology treatment center, do not exceed \$2,000,000. Joint Ex. 1, Agency File, p. 3; Pet. Ex. 6-7; Hoffman, T., Vol. 8, pp. 36-37.

33. In addition, because a CT scanner is medical diagnostic equipment, the utilization of any medical diagnostic equipment, including a diagnostic CT scanner, which cost in excess of \$500,000, would cause Asheville Hematology to be a diagnostic center, which is a new institutional health service. Because Asheville Hematology is not currently a diagnostic center, it would not be able to acquire a diagnostic CT scanner without a CON, if the cost to acquire and make operational the CT scanner and the cost of any other medical diagnostic equipment currently utilized or proposed to be utilized at the facility would exceed \$500,000. Joint Ex. 1, Agency File, pp. 4-5; Hoffman, T., Vol. 8, pp. 36-37.

34. The definition of major medical equipment states that major medical equipment is "a single unit or single system of components with related functions." The definition also states that the costs attributed to the acquisition of this equipment shall include "the costs of the equipment, studies, surveys, designs, plans, working drawings, specifications, construction, installation, and other activities essential to acquiring and making operational the major medical equipment." The Agency has interpreted these provisions to mean that if an equipment component is not required for the operation of the proposed item of major medical equipment and it is operated separately from such equipment, then the two items of equipment are not a single system of components, and the equipment component is not essential to making operational the major medical equipment. Joint Ex. 1, Agency File, p. 86; Hoffman, T., Vol. 4, pp. 87-91.

35. Some providers who acquire linear accelerators do not also acquire simulators or treatment planning equipment or software. Rather, these components can be operated at a site other than where the linear accelerator is operated. This is one fact taken into consideration by the CON Section in making a determination that the acquisition of treatment planning and simulation equipment is not essential to the operation of a linear accelerator. Joint Ex. 1, Agency File, pp. 85-88; Hoffman, T., Vol. 4, pp. 88-91.

36. The above interpretation is consistent with the manner in which the CON Section has interpreted the CON law for several years with regard to requests for approval of similar services. Joint Ex. 1, Agency File, p. 86; AHO Ex. 75.

37. In its no review request, Asheville Hematology specifically advised the CON Section that the linear accelerator which it proposed to acquire "does not require on-site treatment planning equipment (or software) to perform radiation therapy." Asheville Hematology further represented that "[B]oth CT simulation and treatment planning could be performed off site, and the treatment planning equipment and software would be fully functional even if CT simulation were performed off site." Joint Ex. 1, Agency File, p. 98.

38. With regard to the equipment to be acquired by Asheville Hematology, the CON Section concluded that the linear accelerator, the CT simulator, and the treatment planning equipment were all separate units of medical equipment that do not constitute a single system of components with related functions. The CON Section made that determination because it concluded that each unit of equipment could be operated separately from each other, at different sites, and that each of the three units has different functions. Hoffman, T., Vol. 4, pp. 87-91.

## **V. ANALYSIS OF DISPUTED FACTUAL ISSUES**

### **A. RECORD AND VERIFY CLASSIFICATION**

39. Petitioners contend that the record and verify system to be used in conjunction with Asheville Hematology's radiation therapy program should be attributed to the cost of the linear accelerator. Prehearing Order, Exhibit I, Issue I.A.1; Righi, T., Vol. 1, p. 87; Coletti, T., Vol. 1, p. 226.

40. During the contested case, various experts were tendered and accepted by the parties with expertise related to the provision of radiation therapy. The witnesses accepted by the Court as experts in fields related to radiation therapy include:

(a) Richard Righi, was offered by Mission and accepted by the Court as an expert in the areas of:

- 1. the practice of radiation therapy;**
- 2. the management of a radiation therapy program;**
- 3. the selection and acquisition of radiation therapy equipment; and**
- 4. the customer supervision of installation of radiation therapy equipment such as linear accelerator and a CT simulator.**

(b) John Coletti, Ph.D., was offered by Mission and accepted by the Court as an expert in the areas of:

1. the physics of radiation therapy;
2. the shielding needed for installation of radiation therapy equipment;
3. the physics requirements of the testing necessary to install and operate the linear accelerator;
4. the physics aspects of the selection and acquisition of radiation therapy equipment; and
5. the operation of radiation therapy equipment with regard to functions.

(c) Charles Smith, Ph.D., was offered by Asheville Hematology and accepted by the Court as an expert in the areas of:

1. the physics of radiation therapy;
2. the shielding needed for installation of radiation therapy equipment;
3. the physics requirements of the testing necessary to install and operate the linear accelerator;
4. the physics aspects of the selection and acquisition of radiation therapy equipment; and
5. the operation of radiation therapy equipment with regard to functions.

(d) Catherine Langford, was offered by Asheville Hematology and accepted by the Court as an expert in the areas of:

1. the practice of radiation therapy;
2. the management of a radiation therapy program;
3. the selection and acquisition of radiation therapy equipment; and
4. the customer supervision of installation of radiation therapy equipment such as linear accelerator and a CT simulator.

**Righi, T., Vol. 1, pp. 72-73; Coletti, T., Vol. 1, pp. 218-20; Smith, T., Vol. 4, pp. 218; Langford, T., Vol. 8, pp. 30-46.**

41. In correspondence to the Agency prior to the Determination, Asheville Hematology described the record and verify system as follows:

*When treating patients with radiation on a linear accelerator, the use of a record and verify system serves as an optional component of a quality control system for the radiation therapists. The record and verify system provides electronic validation of the daily treatment parameters but is not necessary in administration of radiation therapy. As such, it is not essential to the operation of the linear accelerator. At most, it is an optional part of the treatment planning system, which is a separate piece of medical equipment, as set forth in our February 1, 2005 letter, pages 5-6.*

Joint Ex. 1, p. 94.

42. Asheville Hematology notified the Agency that it intends to use the IMPAC record and verify system, and will pay a monthly subscription fee determined by the applications selected. The subscription fee covers the cost of hardware, software, telecommunication, maintenance and software upgrades. If purchased rather than leased, the cost of the equipment and computer software license would be approximately \$230,000. Id.

43. Asheville Hematology also notified the CON Section that it can operate the treatment planning system without this record and verify system. Id.

44. Only 74 of the 94 radiation sites US Oncology manages have chosen to install a record and verify system. Id.

45. The record and verify system is a separate piece of equipment from and is not attached to the linear accelerator. It is manufactured by a company other than Varian, the manufacturer of Asheville Hematology's proposed linear accelerator. Righi, T., Vol. 1, p. 143; Langford, T., Vol. 8, pp. 125-31.

46. The record and verify system's primary role is to assure that the patient is treated with the proper parameters as described in the treatment plan. Righi, T., Vol. 1, p. 146; Langford, T., Vol. 8, pp. 125-31.

47. The record and verify system does not turn the linear accelerator "on" for the purpose of delivering radiation. Rather, it sets up the linear accelerator so that it is ready to deliver radiation, by ensuring that treatment parameters contained in the

treatment plan are accurate. In that regard, the record and verify system is an extension of the treatment planning system, because it manages the data contained in the treatment plan and provides it to the linear accelerator for delivery. Smith, T., Vol. 4, p. 219; Coletti, T., Vol. 1, p. 282; Langford, T., Vol. 8, pp. 125-31.

48. The radiation technologist is ultimately responsible for treating the patient with the linear accelerator. The radiation therapist has the ability to override the record and verify system. Even if a record and verify system is in place, and does not report any alerts indicating that the radiation technologist should not deliver the treatment, the radiation technologist still must independently determine whether it is appropriate to perform the radiation therapy. Furthermore, the radiation technologist must physically activate the linear accelerator to begin delivering treatment. Righi, T., Vol. 1, pp. 146-47; Smith, T., Vol. 4, p. 222; Langford, T., Vol. 8, pp. 125-31; Coletti, T., Vol. 1, pp. 281-82.

49. The record and verify system is connected electronically with the linear accelerator. However, so is the facility's e-mail system, among other things, so electronic communication does not, in itself, make the record and verify system a part of the linear accelerator. Smith, T., Vol. 4, p. 222; Langford, T., Vol. 8, pp. 125-31.

50. Prior to making the Determination, Lee Hoffman, Chief of the CON Section, visited Duke Health Raleigh Hospital's radiation oncology program. She met with Duke Health Raleigh staff, viewed the linear accelerator facility and reviewed Duke Health's documentation regarding its record and verify system. Duke Health Raleigh treated the record and verify system consistently with the way that Asheville Hematology had represented to the Agency; that is, as a separate treatment planning system apart from the linear accelerator. Hoffman, T., Vol. 4, pp. 77-79, 92-93.

51. Ms. Hoffman saw the record and verify system as a communication link or a bridge between the treatment plan and the delivery of the treatment. As a result, she determined that it was part of the treatment planning because it was to assure that the treatment delivered was consistent with the treatment plan. Hoffman, T., Vol. 4, p. 61.

52. In its "no review" determination for the treatment planning equipment, the CON Section combined the costs of the record and verify system with those of the treatment planning equipment for purposes of determining whether the CON cost threshold was exceeded. Stipulation, ¶56.

53. Prior to the CON Section's Determination, no contention was raised by Asheville Radiology or Mission in their letters to the CON Section, or by any other party, contending that the cost of the record and verify system should be attributed to the cost of the linear accelerator, rather than the treatment planning system. Joint Ex. 1, Agency File, pp. 61-66, 96; Righi, T., Vol. 1, p. 169.

## **B. DEVELOPER'S BASE COSTS**

54. In the materials submitted to the Agency, Asheville Hematology explained how it calculated developer's base costs:

*Throughout the calculations in this letter and the attachments, the developer's base cost for constructing the building are not included in the costs associated with the relocation of the oncology treatment center or the acquisition of the equipment described herein. The developer's base costs related to its construction of the building are included in a separate column in Exhibit 2. Developer's base cost is the cost which the developer will incur to build a basic medical office building. Only where such cost can be directly attributed to upfit of space that is necessary to make the equipment or health service operational, has that cost been attributed to the service.*

*This is true for space related to the linear accelerator, the treatment planning room, the CT scanner room and the medical oncology space. To the extent that each of those spaces is general office space, hard and soft costs are attributed to the developer's base costs. Only those additional upfit and related costs directly related to making either the equipment or the medical service operational are attributed to the cost thresholds. Where there are soft costs related to that upfit, they have been included in the calculation.*

Joint Ex. 1, p. 3.

55. CC Asheville MOB, LLC is a single purpose entity formed by Centex-Concord to develop, arrange for the construction of and own the building which will house Asheville Hematology's proposed relocated oncology treatment center (hereinafter, the "Building"). The Building is being built specifically to suit the needs and requests of Asheville Hematology and U.S. Oncology in return for a guaranteed, 20 year lease of the premises by AOR Management Company of Virginia, Inc. as Tenant, as managing agency for Asheville Hematology. Stipulation, ¶32.

56. Mark Kury, a Vice President with Centex-Concord, is involved in the day-to-day management of the development and construction of the Building. Kury, T., Vol. 7, pp. 134-35.
57. Mr. Kury was involved in projecting the allocation of the developer's base costs, the linear accelerator costs and the CT costs for Asheville Hematology's proposal to the Agency. Joint Ex. 1, Agency File, pp. 10-13; Kury, T., Vol. 7, p. 137.
58. Mr. Kury had been involved in the development of a cancer center for Raleigh Hematology and Oncology Associates, P.A., which also is managed by US Oncology. Prior to the Agency's approval of the Raleigh cancer center, Mr. Kury and others had met with Ms. Hoffman at the CON Section to explain how they calculated developer's base costs. Kury, T., Vol. 7, pp. 134, 303-05; Pet. Ex. 9, p. 39.
59. Mr. Kury's allocation of costs for the Asheville Hematology project was based on the same procedure and process Centex-Concord used to allocate costs for the Raleigh Hematology cancer center proposal. He determined developer's base costs by looking at the base costs that he would have as a developer for a medical office building. He then calculated the cost over and above the developer's base cost to be able to fit out areas for radiation treatment. Kury, T., Vol. 7, pp. 139-40.
60. In its Determination, the Agency did not include the developer's base costs in determining whether the cost of Asheville Hematology's proposal exceeded the cost thresholds for major medical equipment, diagnostic center, or relocation of a health service facility. This determination was consistent with the Agency's determination for the Raleigh cancer center. Joint Ex. 1, Agency File, pp. 106, 112, 118, 128; Pet. Ex. 9.
61. Ms. Hoffman explained her reasoning during the contested case hearing as to why developer's base costs are not included in the cost of the health service. She explained that the development of an office building, including a medical office building, is not a capital expenditure falling within the statutory definition of "new institutional health service" under the CON Law. Hoffman, T., Vol. 4, pp. 93-95.
62. If the builder is unrelated to the entity which will be providing the health service, and is only leasing space to the health service, then the CON Section only will look at what costs are going to be incurred to make that office building a health service facility. That is consistent with the way exemptions are handled in G.S. §131E-184(a), so the CON Section looks at no review requests the same way. Id.
63. If the builder is a party which is related to the provider of the health service, the CON Section considers the builder to be developing the health service facility, and therefore, the entire cost of the facility would be considered. Id.
64. Petitioners contended that Ms. Hoffman's interpretation of the CON Law in this matter was inconsistent with a prior Declaratory Ruling issued by the Director of the Division of Facility Services regarding the development of a diagnostic center in Onslow County. Pet. Ex. 115. Specifically, they argue that the Onslow Declaratory Ruling requires the Agency to apportion the cost of all of the Building to the proposed health service.
65. Prior to the issuance of the Onslow Declaratory Ruling, Ms. Hoffman discussed the proposed Declaratory Ruling with Lynda McDaniel, the Director of the Division of Facility Services who issued the Declaratory Ruling. During that conversation, Ms. Hoffman provided Ms. McDaniel her opinion concerning this request before the Declaratory Ruling was issued. After the Declaratory Ruling was issued, it conformed with the opinions that Ms. Hoffman gave to Ms. McDaniel. Hoffman, T., Vol. 4, pp. 71-72.
66. A Declaratory Ruling is relied upon by the Agency only where the facts of a subsequent matter are similar to those in the Declaratory Ruling. G.S. § 150B-4; Hoffman, T., Vol. 3, p. 138.
67. The facts in the Onslow Declaratory Ruling were different from the facts in the instant case. In that case, the lessor/owner of the building and the lessee/provider of the health service were related parties. Pet. Ex. 115, p. 2; Hoffman, T., Vol. 3, pp. 138-39.
68. Centex-Concord and CC Asheville MOB are not related entities to US Oncology or Asheville Hematology. Joint Ex. 1, Agency File, p. 1, footnote 1; Herman T., Vol. 5, p. 53.
69. The CON Section previously had disapproved a no review request by Mission to relocate operating rooms for a similar reason. In that instance, Mission owned the land on which the building in question would be built, and also intended to lease space from the builder. Because Mission owned the land, the Agency was required to count the cost of the land in the development of the project. Pet. Ex. 117, p. 1; Pet. Ex. 116, ¶5; Hoffman, T., Vol. 4, pp. 120-21, 193.

70. Neither Asheville Hematology nor US Oncology owns the Building or the land on which it is being constructed. Both are owned by CC Asheville MOB. Stipulation, ¶38; AHO Ex. 19A.

71. Based upon the reasons discussed above, Ms. Hoffman believes that the Agency's position regarding the allocation of developer's base costs in the Asheville Hematology Project is consistent with the Onslow Declaratory Ruling. Hoffman, T., Vol. 3, pp. 138-41

**C. OTHER SPACE ALLOCATIONS**

72. All of the costs of the vault were included with the cost of the linear accelerator. Joint Ex. 1, Agency File, p. 4. However, with regard to other rooms, Mr. Kury included only upfit costs associated with making the equipment operational, as opposed to the complete construction costs, because if Centex-Concord were going to develop a medical office building of that size, it would have standard rooms such as offices and exam rooms. Kury, T., Vol. 7, p. 143.

73. Asheville Hematology allocated the cost of upfit of the following spaces related to the linear accelerator and the CT simulator:

Linear Accelerator

Vault

Control room

Mold Room

Mechanical room

CT Scanner

CT room

Control room

Dark room

Joint Ex. 1, p. 2.

74. Asheville Hematology also allocated construction costs related to the upfit of space to be used for the relocated oncology treatment center. Joint Ex. 1, Agency File, pp. 7, 60.

75. Because there were no special upfit costs associated with the treatment planning room, no such costs were allocated to that space. Joint Ex. 1, Agency File, pp. 5-6.

76. Petitioners have not challenged Asheville Hematology's construction cost allocations related to treatment planning equipment or the relocated oncology treatment center.

77. During the course of the contested case hearing, Petitioners contended that the cost associated with the upfit of the dark room should have been allocated to the linear accelerator, because port films are taken using the linear accelerator. Port films are used to verify that what has been set up for the patient on the treatment planning system and/or the simulator has transferred to the accelerator. Righi, T., Vol. 1, p. 117; Langford, T., Vol. 8, pp. 94-95; Smith, T., Vol. 4, pp. 253-54.

78. Asheville Hematology's witnesses agreed that port films are taken with the linear accelerator, and that some cost associated with the upfit of the dark room should be attributed to the linear accelerator. However, they estimated that only seven to eight hours of the available dark room time during a 40-hour week, or 20%, is used for port films. Smith, T., Vol. 4, p. 253-54; Langford, T., Vol. 8, pp. 94.

79. Harper Construction Company ("Harper") is the general contractor which was retained by CC Asheville MOB to construct the Building. Pet. Ex. 63; Royal, T., Vol. 6, pp. 106-07.

80. Bryan Royal is Harper's project manager for the construction of the Building. Royal, T., Vol. 6, p. 106.

81. During the contested case hearing, Mr. Royal calculated all of the actual costs as of April 18, 2006, associated with the cost to construct the space for the linear accelerator, the CT scanner, and other ancillary spaces, including the dark room. Royal, T., Vol. 6, p. 139; AHO Ex. 81. The upfit costs for the dark room totaled \$3,569. Id.

82. During the contested case hearing, Asheville Hematology re-calculated all of the costs associated with acquiring and making operational the linear accelerator, the CT simulator, and the treatment planning equipment, and the relocation of the oncology treatment center. Langford, T., Vol. 8, p. 80; AHO Ex. 85. These included Mr. Royal's estimated actual construction costs described above. In making that calculation, Asheville Hematology included all of the upfit costs associated with the dark room in the cost of the linear accelerator, even though the dark room would not be used for the linear accelerator more than 20% of the time. AHO Ex. 85, p. 5.

83. Even if all of the dark room upfit costs were added to the cost of the linear accelerator, Asheville Hematology's revised cost projections show that the costs associated with the linear accelerator will not exceed \$750,000. AHO Ex. 85, p. 2.

84. Mr. Royal's calculation of actual upfit costs associated with the cost associated with the linear accelerator, the CT simulator and the relocated included the following spaces:

Linear Accelerator

Vault (including all construction costs)

Control room

Mold Room

Mechanical room

Dark room

CT Scanner

CT room

Control room

Relocated Oncology Treatment Center

Pharmacy

Lab

AHO Ex. 85, pp. 5, 8, 9, 11, 14; Royal, T., Vol. 6, p. 139, 173-75.

85. Petitioners also contended that the cost to construct other rooms should have been included in the costs attributed to the linear accelerator. Those rooms included the physicist's office; the therapist's office, the view room, the waiting room, and exam rooms. Coletti, T., Vol. 2, pp. 133-35.

86. However, none of those spaces are essential to making the linear accelerator operational. Hoffman, T., Vol. 4, pp. 114-16; Royal, T., Vol. 6, p. 179; Langford, T., Vol. 8, pp. 151-52, Vol. 9, pp. 78-80. Therefore, it would not be appropriate to allocate the cost to upfit that space to the linear accelerator.

87. In addition, Asheville Hematology has included view boxes, as discussed in Section K infra. in the linear accelerator vault and control room. Therefore, the view room is not necessary to review port films. Langford, T., Vol. 8, pp. 107-08, 119-20.

**D. GENERAL CONDITIONS COSTS**

88. General conditions are the general contractor's costs related to the overall construction of a project which are not specifically related to any one particular aspect of the construction project. Knapp, T., Vol. 2, p. 186. They include costs such as contractor employee salaries, construction trailer, office supplies, porta-johns, storage trailers, temporary utilities, waste receptacles and clean-up. Pet. Ex. 64, pp. 25-26; Royal, T., Vol. 6, pp. 140-141.

89. In its July 2005 bid proposal to CC Asheville MOB to construct the Building, Harper projected general conditions costs totaling \$320,825. Royal, T., Vol. 6, p. 106; Pet. Ex. 64, p. 26.

90. At the time of its initial bid proposal in June 2005, Harper was asked by Mr. Kury and John Thompson, the project architect, to estimate total costs associated with construction of the vault for the linear accelerator. Mr. Kury and Mr. Thompson provided each bidding contractor with a form on which to estimate vault costs. Kury, T., Vol. 7, pp. 179-80; Pet. Ex. 64, p. 28.

91. At the time of Harper's initial bid proposal, Mr. Royal estimated total general conditions costs for the linear accelerator vault of \$30,000. Pet. Ex. 64, p. 28. That estimate was Mr. Royal's best guess of the general conditions cost if Harper



were building nothing but a vault. Mr. Royal calculated that amount at that time because the architect's projected scope of work for the vault breakout was not clearly defined. Royal, T., Vol. 6, p. 213. Mr. Royal believed that his July 2005 estimate was reasonable at that time, based on the limited information provided to him by the architect. Royal, T., Vol. 6, pp. 176-77.

92. Mr. Kury considered the vault breakout form estimates which he and the architect provided to the contractors bidding on the project in June 2005 to be a failed exercise on his part. Kury concluded that insufficient information was provided to allow the contractors to estimate a reliable breakout of the vault. Kury, T., Vol. 7, p. 180.

93. The June 2005 vault breakout estimates were not used by CC Asheville MOB to select Harper as the general contractor for the project. Ultimately, it was Harper's estimate for the cost of the project as a whole which was the deciding factor leading to Harper's selection. Kury, T., Vol. 7, p. 180.

94. Harper calculates general conditions for a project using the industry standard practice, which is based on the duration of the project. Royal, T., Vol. 6, p. 140.

95. Harper planned on having the employees, equipment and supplies associated with general conditions on the Asheville Hematology project for a nine-month duration, whether the vault was built or not. The duration of the project was not affected by the construction of the vault. Royal, T., Vol. 6, pp. 140-41.

96. During the contested case hearing, Mr. Royal calculated all of the actual construction costs as of April 18, 2006, associated with the cost to construct the space for the linear accelerator, the CT scanner, and other ancillary spaces. Royal, T., Vol. 6, p. 139; AHO Ex. 80-83.

97. Because the cost to construct the vault did not increase the cost of general conditions related to the cost of construction for the medical office building, Mr. Royal's estimate of total linear accelerator costs did not include any general condition costs. Royal, T., Vol. 6, p. 140; AHO Ex. 80.

98. Had the vault not been constructed, total general conditions would have been the same. Consequently, there was no additional general condition cost incurred to build the vault. Royal, T., Vol. 6, pp. 140-41, Vol. 7, p. 72.

99. Mr. Royal's estimate that the cost of general conditions would not increase the cost to construct the linear accelerator is based upon the same methodology Asheville Hematology used to calculate developer's base costs.

100. The Agency would not consider general conditions to be a cost attributable to the linear accelerator if that cost would have been the same for the medical office building, and did not increase as a result of the construction of the vault. Hoffman, T., Vol. 4, pp. 93-97; T., Vol. 9, p. 233.

101. Mr. Knapp, an architect retained by Petitioners in this contested case to offer expert testimony, opined that some general conditions cost should be attributed to the linear accelerator, based on square footage. Knapp, T., Vol. 2, p. 187. However, in preparing a cost estimate to present to the CON Section for another linear accelerator project, Mr. Knapp did not specifically include in his estimate the cost of general conditions. Knapp, T., Vol. 2, pp. 226-27; AHO Ex. 55; AHO Ex. 75. Further, Mr. Knapp's opinions do not take into account the fact that Harper's general conditions costs would have been the same for a general medical office building, and did not increase as a result of the construction of the vault.

102. Mr. Royal's estimate that no general conditions cost should be attributable to the vault was reasonable.

#### **E. SITE WORK**

103. Mr. Royal calculated site excavation in a similar manner to general conditions. The entire site was graded and leveled off at the same time as the base building, so no additional cost was incurred for the linear accelerator vault. Had the vault not been built, the site excavation cost would not have been any different, because site work is typically based on acres of the site. Royal, T., Vol. 6, pp. 145-46.

104. The Agency would not consider site excavation to be a cost attributable to the linear accelerator if that cost would have been the same for the medical office building, and did not increase as a result of the construction of the vault. Hoffman, T., Vol. 4, pp. 93-97; T., Vol. 9, p. 233.

105. Mr. Royal's estimate that no site excavation cost should be attributable to the vault was reasonable.

**F. HVAC COSTS**

106. Petitioner's architect expert witness testified that he did not see the cost of an air compressor for the linear accelerator HVAC cooling system in the no review request submitted by Asheville Hematology to the CON Section. Knapp, T., Vol. 2, pp. 193-94.

107. Mr. Royal testified that all of the costs associated with an air compressor are specifically identified in his projected actual vault costs, in the HVAC and plumbing line items. AHO Ex. 80; Royal, T., Vol. 6, pp. 173-74.

108. Asheville Hematology's no review request projected that the HVAC unit on top of the building would need to be able to push five tons more air as a result of the addition of the linear accelerator. Mr. Kury estimated that cost would add an additional \$8,000 to the cost of installing the linear accelerator. Joint Ex. 1, Agency File, p. 36; Kury, T., Vol. 7, pp. 169-70.

109. Mr. Royal estimated that the total size of this unit would be 35 tons. However, he discovered that the cost of a 35-ton HVAC unit was the same price as a 30-ton HVAC unit, which would have been used had the vault not been built. Therefore, there was no additional cost for the HVAC unit as a result of the installation of the linear accelerator. This resulted in a savings of \$8,000 in the construction cost of the project. Royal, T., Vol. 6, pp. 164-66, Vol. 7, pp. 60-62; AHO Ex. 80.

110. In addition, Centex-Concord and Harper engaged in other value engineering techniques to reduce the cost of the HVAC system, including changing the duct work and eliminating the DDC control system, which is a computerized building monitor system that is able to control air flow and air temperature room by room. Royal, T., Vol. 6, p. 166-68.

111. Due to these changes in the construction of the project, Harper's estimated HVAC costs associated with the linear accelerator dropped from a projected cost of \$75,000 to an actual cost of \$18,472. Pet. Ex. 64, p. 28; AHO Ex. 80, p. 1; Royal, T., Vol. 6, p. 164.

**G. VAULT ROOF COSTS**

112. Asheville Hematology's no review request projected the construction of a single ply roof over the vault, at a cost of \$6,560. Joint Ex. 1, Agency File, p. 36. Such a roof is an appropriate and adequate covering for a linear accelerator vault. Royal, T., Vol. 6, p. 150; Kury, T., Vol. 7, pp. 165-66.

113. The property owners' association in the development which the Building is located required the developer to put a more expensive metal roof on the building, including the vault, for wholly aesthetic reasons. Kury, T., Vol. 7, pp. 284-85. This type of roof also required the installation of wooden trusses over the vault. Royal, T., Vol. 6, p. 149.

114. The cost to install the wood trusses over the vault will be \$16,828 and the metal roof over the vault will be \$13,470, for a total cost of \$30,298. AHO Ex. 80; Royal, T., Vol. 6, pp. 149-52.

115. This type of roof is not necessary for the operation of a linear accelerator. Mr. Royal has built vaults which had a much cheaper asphalt roof on top of them. Royal, T., Vol. 6, pp. 149-50.

116. The cost of the metal roof and the wood trusses over the vault are included in Mr. Royal's estimate of actual construction costs associated with the linear accelerator. AHO Ex. 80.

117. Mr. Royal's estimate did not include the cost of the metal roofing or trusses over the control room, mold room, mechanical room or dark room. Those spaces were constructed as part of the main medical office building, and Mr. Royal calculated only the upfit costs within those spaces necessary to make the linear accelerator operational. Royal, T., Vol. 6, pp. 149-53; Kury, T., Vol. 7, pp. 186-87.

118. Ms. Hoffman testified that any costs associated with the construction of the vault should be included in the cost of the linear accelerator. In her opinion, everything related to the construction of the vault should be included because there isn't any purpose for developing that vault except to operate the linear accelerator. Costs related to other spaces, however, would not need to be included in the cost of the linear accelerator, if that cost would have been incurred for a medical office building. Hoffman, T., Vol. 4, pp. 93-97.

119. Asheville Hematology's revised estimate of costs associated with the linear accelerator includes Mr. Royal's calculation of all costs associated with installing the wood trusses and metal roof over the vault. AHO Ex. 85, pp. 2, 5, 8; Langford, T., Vol. 8, pp. 83-87; 135-36; 153-54.

**H. VAULT CLADDING COSTS**

120. The outside of the Building has brick and stucco cladding. Royal, T., Vol. 6, p.159.

121. Asheville Hematology's no review request did not include the projected cost of the brick work and stucco cladding in the cost of the vault, because Mr. Kury believed that this cost properly was a developer's base cost. Both Mr. Kury and Petitioners' architect expert testified that the concrete walls of the vault are sufficient to prevent to protect the public from radiation, and that the brick was being added as an amenity. Kury, T., Vol. 7, p. 165; Knapp, T., Vol. 2, pp. 188-89; 230-31.

122. Ms. Hoffman testified that even if the brick and stucco cladding around the vault were not essential to the operation of the linear accelerator, these costs should be included. In her opinion, everything related to the construction of the vault should be included because there is no purpose for developing that vault except to operate the linear accelerator. Hoffman, T., Vol. 4, pp. 96-97.

123. The cost of the brick and stucco cladding around the vault are included in Mr. Royal's estimate of actual construction costs associated with the linear accelerator. Mr. Royal calculated the cost of the brick work and cladding based on the square footage of the linear accelerator vault. That cost will be \$5,836 for the brick work and \$8,118 for the stucco. AHO Ex. 80; Royal, T., Vol. 6, pp. 77, 159-61.

124. Mr. Royal's estimate did not include the cost of the brick and stucco outside the mechanical room. That space is necessary for any medical office building, so that brick work and stucco would have been on the building even if the vault had not been built. Royal, T., Vol. 6, p. 283; Kury, T., Vol. 7, pp. 188-89. This position is consistent with the CON Section's position with regard to calculating construction costs essential to making the linear accelerator operational. Hoffman, T., Vol. 4, pp. 93-97

125. Asheville Hematology's revised estimate of costs associated with the linear accelerator include Mr. Royal's calculation of all costs associated with installing the brick and stucco cladding around the vault. AHO Ex. 85, pp. 2, 5, 8; Langford, T., Vol. 8, pp. 83-87; 135-36; 153-54.

**H. ARCHITECT CERTIFICATION**

126. As part of its initial February 1, 2005, submission, to the Agency, Asheville Hematology provided an estimate of the expected costs and a series of cost breakdowns for the proposed cancer center. Joint Ex. 1, Agency File, pp. 9-15, 36-37, 49-50, 60.

127. G.S. § 131E-178 (d), provides:

*Where the estimated cost of a proposed capital expenditure, including the fair market value of equipment acquired by purchase, lease, transfer, or other comparable arrangement, is certified by a licensed architect or engineer to be equal to or less than the expenditure minimum for capital expenditure for new institutional health services, such expenditure shall be deemed not to exceed the amount for new institutional health services regardless of the actual amount expended, provided that the following conditions are met:*

*(1) The certified estimated cost is prepared in writing 60 days or more before the obligation for the capital expenditure is incurred. Certified cost estimates shall be available for inspection at the facility and sent to the Department upon its request.*

*(2) The facility on whose behalf the expenditure was made notifies the Department in writing within 30 days of the date on which such expenditure is made if the expenditure exceeds the expenditure minimum for capital expenditures. The notice shall include a copy of the certified cost estimate.*

128. A letter and supporting materials from the architect responsible for the design and management of the project, Mr. John L. Thompson, Jr., AIA, of Gresham Smith and Partners (hereinafter "Gresham Smith"), was included in these materials provided by Asheville Hematology, as a certified cost estimate of the probable construction costs of the project, as provided for under G.S. § 131E-178 (d), as quoted above. Joint Ex. 1, Agency File, pp. 9-15.

129. Mr. Thompson's letter stated as follows:

*We have reviewed the scope of work for the proposed Cancer Center to be developed by Centex Concord for Asheville Hematology Oncology Associates, P.C., as set forth in the enclosed Cancer Center Cost Breakdown Chart and related backup information.*

*I certify that I am a Licensed Architect in the State of North Carolina. To the best of my knowledge, information, and belief, and based on our experience with projects of similar scope, we estimate that probable costs associated with the construction of the entire Cancer Center should be \$4,608,912 as set forth in line items 1, 3, 4, 5, 6, 7, 9, 10, 11, 12, 22, 23, 24, 33 and 34 in the last column of the attached Chart. In addition, the cost breakdown associated with the construction of the Linear accelerator vault is reasonably projected to be \$362,354, as set forth in line items 1, 4, 5, 11, 22, 23, 24, 33, and 34 in the "Linear Accelerator" column.,[sic] The cost to upfit the CT scanner room over and above the developer's base costs, for shielding and increased electrical requirements, should be \$42,723 as set forth in the line items 1, 4, 5, 11, 22, 23, 24, 33, and 34 under the "CT" column. Finally, the cost to upfit the lab and pharmacy rooms should be \$10,122 as set forth in line items 1, 4, 23 and 33 under the "Other Cost" column.*

Joint Ex. 1, Agency File, p. 9.

130. Attached to Mr. Thompson's letter were a series of cost breakdowns in spreadsheet format setting forth the estimated costs for the various aspects of the project as a whole. Joint Ex. 1, Agency File, pp. 10-13. In addition to these global spreadsheets, additional spreadsheet breakouts were included as part of Asheville Hematology's initial submission breaking out the construction costs of: (1) the linear accelerator vault (Joint Ex. 1, Agency File, p. 36); (2) the CT simulator suite (Joint Ex. 1, Agency File, p. 49); and (3) other ancillary clinical spaces (Joint Ex. 1, Agency File, p. 60).

131. These materials were submitted to the Agency by Asheville Hematology in reliance upon G.S. § 131E-178(d), and its contemplation of possible costs in excess of a certified cost estimate. Joint Ex. 1, Agency File, pp. 3, 9-15, 36-37, 49-50, 60.

132. Timothy S. Knapp, AIA, an architect licensed to practice architecture in the State of North Carolina, was tendered to the Court as an expert in: (1) the general principles of architecture; (2) the architectural principles involved in the design and construction of a linear accelerator vault and the ancillary rooms; and (3) the certification of cost estimates by architects for health care projects to the CON Section, and was accepted by the Court as an expert in those areas. Knapp, T., Vol. 2, pp. 151-52.

133. Mr. Knapp testified that, in his professional opinion, *"the architect of record [Mr. Thompson] did not perform the necessary due diligence in the certification..."* of the costs for the Asheville Hematology Project, as provided to the CON Section. Knapp, T., Vol. 2, p. 158. Knapp further testified that in his opinion the certifying architect—Mr. Thompson— did not perform due diligence *"in accordance with industry standard"* in order to certify the costs submitted to the CON Section. Knapp, T., Vol. 2, p. 162.

134. Mr. Knapp's opinion was based, in part, upon Mr. Thompson's letter found in the Asheville Hematology initial submission (Knapp, T., Vol. 2, pp. 158-60; Joint Ex. 1, Agency File, pp. 9-14, 36), as well as the deposition testimony of Mr. David Meech, AIA, a principal with Gresham Smith, excerpts of which were received into the record as evidence. Pet. Ex. 145; Knapp, T., Vol. 2, p. 195.

135. Mr. Knapp testified that the cost breakdown submitted by Asheville Hematology, as certified by John Thompson, did not allocate costs to the linear accelerator vault, CT Simulator and other areas as a percentage of the overall square footage of the cancer center. Joint Ex. 1, Agency File, pp. 9-14; T., Knapp, Vol. 2, pp. 160-77.

136. Mark Kury, Vice President of Centex-Concord testified that he allocated the following costs (as set forth in the "Cancer Center Cost Breakdown" submitted to the Agency Joint Ex. 1, Agency File, pp. 10-11) for the linear accelerator, CT scanner and treatment planning equipment, based upon a percentage of constructions costs, rather than by square footage:

- (a) Bonds, insurance, surveys and testing (line 1);
- (b) Architect and engineering fees (line 4);
- (c) Construction management fees or costs (line 5);
- (d) Consulting fees (line 11);
- (e) Cost of financing (line 22);
- (f) Interest costs during construction (line 24); and

(g) Project contingency (line 34);

He explained that he did so because he found in the past that the actual costs related to these line items were more accurately based upon construction costs, rather than square footage. Therefore, an allocation of the linear accelerator, CT scanner and treatment planning equipment costs based upon construction costs more accurately reflected actual costs associated with these line items. Kury, T., Vol. 7, pp. 143-156; Joint Ex. 1, Agency File, pp. 10-11.

137. Knapp also opined that the cost certification provided by Gresham Smith lacked satisfactory indicia of due diligence, "consistent with industry standards" regarding the certification of costs to the CON Section or other agencies. Knapp, T., Vol. 2, pp. 195-209.

138. Knapp however, admitted that it was his understanding that Mr. Thompson was no longer employed by Gresham Smith, and Mr. Knapp had no information as to the actions taken by Mr. Thompson in certifying the cost estimate submitted to the Agency by Asheville Hematology, nor did he have any opportunity to review any working notes or memoranda created by Mr. Thompson related to the certification of costs related to the Asheville Hematology Project. Knapp, T., Vol. 2, p. 212.

139. Mark Kury, Vice President of Centex-Concord, the developer of the Asheville Hematology Project, testified that he provided Mr. Thompson with all of the information related to the cost breakouts contained in the initial Asheville Hematology submission to the Agency, and that he had between 10 and 15 separate conversations with Mr. Thompson regarding the basis for the cost estimates found in the materials attached to Mr. Thompson's letter. Kury, T., Vol. 7, pp. 161-62, 173-74. Mr. Kury indicated that his conversations with Thompson were lengthy, and that Mr. Thompson was "*very detail oriented*" throughout the process of creating the cost estimate. Kury, T., Vol. 7, pp. 173-74.

140. Mr. Kury further testified that he could only recall one conversation with Mr. David Meech of Gresham Smith, regarding the fact that Mr. Thompson was handling issues related to the cost projections and the certified cost estimate. Kury, T., Vol. 7, p. 163.

141. Mr. Knapp testified that, in his professional expert opinion, neither Thompson, Meech, nor Gresham Smith breached the professional standard of care applicable to practicing architects, and he was not of the opinion that any professional malpractice had been committed on their part in certifying the costs of the Asheville Hematology Project. Knapp, T., Vol. 2, p. 214. Knapp also testified that he was not aware of any standards of practice, AIA guidelines, or guidelines promulgated by the North Carolina Architectural Board defining the standard of practice or standard of care with respect to architects' certification of cost estimates. Knapp, T., Vol. 2, pp. 215-16.

142. Furthermore, Knapp admitted that he never spoke with any representatives of Centex-Concord or Gresham Smith regarding the basis for the cost estimates found in the initial Asheville Hematology submission to the CON Section. Knapp, T., Vol. 2, pp. 214-15.

143. Knapp also conceded that he previously had provided certified cost estimates to clients which ultimately were submitted to the CON Section, which contained less documentation than was contained in the cost estimate provided by Mr. Thompson and Gresham Smith. Knapp, T., Vol. 2, pp. 224-27; AHO Ex. 55.

144. Knapp's only opinions regarding the Asheville Hematology certified cost estimate, criticized the sufficiency of the efforts taken by the certifying architect in certifying the costs for the Asheville Hematology Project. Joint Ex. 1, Agency File, pp. 9-14; Knapp, T., Vol. 2, pp. 204-14.

145. Ms. Hoffman, however, testified that she did not consider the letter from Mr. Thompson to be a certified cost estimate as contemplated by G.S. § 131E-178(d). Ex. 1, Agency File, p. 9; Hoffman, T., Vol. 3, pp. 213-25, Vol. 4, p. 56, 108-11. The basis for Ms. Hoffman's conclusion that the Thompson letter did not rise to the level of a certified cost estimate, was due to her interpretation of the language used by Mr. Thompson in his letter. Id.

146. Ms. Hoffman also admitted that prior to April 4, 2005—after the trial of this case had commenced—the CON Section had never issued a decision determining that a cost estimate prepared by an architect was not a certified cost estimate as contemplated by G.S. § 131E-178(d). Pet. Ex. 151, 152; Hoffman, T., Vol. 4, pp. 110-11. Ms. Hoffman also testified that N.C. Gen. Stat § 131E-178(d), does not define what constitutes a certified cost estimate. Hoffman, T., Vol. 3, pp. 218-25.

147. Ms. Hoffman was neither tendered nor accepted as an expert in the area of architecture or the interpretation of architectural certified cost estimates.

148. Furthermore, Mr. Knapp, who was accepted as an expert in the area of architecture, at no time called into question whether the materials provided by Asheville Hematology to the CON Section—created by Messrs. Thompson, Meech, Kury, and Gresham Smith—in fact constituted a certified cost estimate by a licensed architect as contemplated under G.S. § 131E-178(d). In fact, throughout his testimony, Knapp referred to the documents found in the Agency File at pages 9-14, and 36, as a "Certified Cost Estimate," "Architect's Cost Certification," or similar language. See generally Knapp, T., Vol. 2.

149. A cost estimate certified by an architect or an engineer is only necessary to the extent that the actual construction costs of a project exceed those projected in the estimate. If the actual construction costs do not exceed the estimate, then G.S. § 131E-178(d) is not applicable.

150. As set forth in the Findings of Fact and Conclusions of Law below, the preponderance of the evidence demonstrates that the actual construction costs for the Asheville Hematology Project will not exceed the relevant cost thresholds in the CON Law.

#### **I. FILM PROCESSOR / FILM CASSETTES**

151. In its no review request, Asheville Hematology allocated the cost associated with a film processor, valued at \$9,481, with tax, to the CT scanner. The film processor develops x-ray films and will be located in the dark room. Joint Ex. 1, Agency File, pp. 5, 37; Langford, T., Vol. 8, p. 91- 92.

152. Because the CT scanner processes films digitally with a dry view image laser, the film processor will not be necessary to operate the CT scanner. Langford, T., Vol. 9, p. 93.

153. As with the dark room, Asheville Hematology's witnesses agreed that the film processor will be used for port films. Again, they estimated that only seven to eight hours of the available dark room time during a 40-hour week, or 20%, is used for port films. Smith, T., Vol. 4, p. 253-54; Langford, T., Vol. 8, p. 94.

154. In its calculation of actual construction and equipment costs incurred to date, Asheville Hematology included all of cost associated with purchasing the film processor, totaling \$9,435, with the cost of the linear accelerator, even though the film processor would not be used for the linear accelerator more than 20% of the time. AHO Ex. 85, p. 6; Langford, T., Vol. 8, pp. 94-95; Smith, T., Vol. 4, pp. 253-54.

155. Included in Asheville Hematology's no review request related to the CT simulator was one film cassette, used to hold x-ray films, at a cost of \$500. Joint Ex. 1, Agency File, p. 37.

156. In order to take a port film on the linear accelerator, a film cassette is needed. Smith, T., Vol. 4, pp. 288-89; Langford, T., Vol. 6, pp. 94-95.

157. Port films could be taken with just one cassette in the facility. Righi, T., Vol. 1, p. 117. However, based on his experience operating US Oncology cancer centers, Dr. Charles Smith believes that two film cassettes are necessary to take port films efficiently. Smith, T., Vol. 4, pp. 288-89.

158. Asheville Hematology, however, will not have to purchase any film cassettes. Kodak provides them free of charge with the x-ray film, which is a supply, and therefore not a capital expense. Langford, T., Vol. 8, p. 90.

159. In its calculation of actual construction and equipment costs incurred to date, Asheville Hematology included the cost of two film cassettes, totaling \$999, with the cost of the linear accelerator, even though the film processor would not be used for the linear accelerator more than 20% of the time, and even though Asheville Hematology will not be required to purchase any film cassettes. AHO Ex. 85, p. 6; Langford, T., Vol. 6, p. 90; Smith, T., Vol. 4, pp. 253-54.

#### **J. USE OF 40% OF COST FOR FMV OF TRANSFERRED EQUIPMENT**

160. Asheville Hematology's no review request identified used medical equipment which would be relocated to Asheville Hematology from other US Oncology facilities which have closed. This equipment was estimated to be three to four years old, and was valued at 40% of the cost of purchasing new equipment. Joint Ex. 1, Agency File, pp. 4, 14-15; Herman, T., Vol. 5, p. 105-06; Langford, T., Vol. 8, pp. 55-56.

161. Prior to the CON Section's Determination, no contention was raised by Asheville Radiology or Mission in their letters to the CON Section, or by any other party, contending that the value of used equipment relocated from other US Oncology facilities should be at a rate higher than 40% of its original cost. Joint Ex. 1, Agency File, pp. 61-66, 96.

162. In fact, this equipment is fully depreciated and has no market value, because there is not a secondary market where it could be sold. Asheville Hematology's estimate of 40% was a conservative estimate of the equipment's value. In reality, if it could not be relocated to another US Oncology facility, it would be thrown away. Herman, T., Vol. 5, p. 105-06; Langford, T., Vol. 8, pp. 55-56.

163. As discussed in Section U below, although this equipment would continue to be owned by US Oncology, it would be recorded on the books of US Oncology and Asheville Hematology as the equipment of Asheville Hematology. Thus, it would be transferred to Asheville Hematology by comparable arrangement under the CON Law.

164. Asheville Hematology's valuation of used equipment to be transferred from other US Oncology facilities at 40% of its original cost was reasonable and supported by the evidence.

#### **K. VIEW BOXES**

165. In its no review request, Asheville Hematology did not include any costs for view boxes, which are used for the viewing of x-ray and other film images. Joint Ex. 1, Agency File, pp. 14-15, 37, 50, 60; Langford T., Vol. 8, pp. 107-08, 119-20.

166. In her updated cost analysis, Ms. Langford included a set of two view boxes in the cost of the linear accelerator at a total cost of \$550. Langford T., Vol. 8, pp. 107-08, 119-20, AHO Ex. 85, p. 7.

167. Ms. Langford included a set of "4x4 View Boxes" in the cost of the CT Simulator at a total cost of \$1228. Langford T., Vol. 8, pp. 107-08, 119-20, AHO Ex. 85, p. 10. Ms. Langford included another set of "4x4 View Boxes"—costing \$1228—in the final cost of the treatment planning equipment for the Asheville Hematology Project as well. Langford T., Vol. 8, pp. 107-08, 119-20, AHO Ex. 85, p. 12.

168. Ms. Langford testified that view boxes were not necessary or essential to the operation of the linear accelerator, CT Simulator, or treatment planning equipment, but were included merely as a redundancy and for the convenience of the clinical staff at the Asheville Hematology facility. Ms. Langford included the cost of view boxes in her final cost analysis in an effort to include all possible costs. Langford T., Vol. 8, pp. 107-08, 119-20, 152-53; AHO Ex. 85.

169. Even if view boxes were essential to the operation of the linear accelerator, CT Simulator, or treatment planning equipment, the costs attributed by Ms. Langford are reasonable, and do not result in any of these categories exceeding the statutory thresholds applicable thereto.

#### **L. IMPAC WORKSTATION**

170. In the process of the Agency's review of the Asheville Hematology request, the Agency indicated that record and verify equipment should be classified under the "treatment planning equipment" category, as discussed in Section A, supra. After commencing the development of the Asheville Hematology Project, the "IMPAC" system was selected as the record and verify system to be used at the Asheville Hematology facility. Langford, T., Vol. 8, pp. 96, 111-17.

171. Catherine Langford testified that she included in her updated cost analysis, the cost of an IMPAC workstation in both the linear accelerator and CT scanner equipment costs, since these workstations will be physically present at each of these locations in the completed facility. Langford, T., Vol. 8, pp. 96, 111-17, 125-31; AHO Ex. 85, pp. 7, 10. The costs of these IMPAC workstations are \$1,284 and \$3,424 for the CT scanner and linear accelerator, respectively. Langford, T., Vol. 8, pp. 96, 111-17, 125-31; AHO Ex. 85, pp. 7, 10.

172. Ms. Langford, however, testified that these workstations relate solely to the record and verify system, and not to the operation of the CT scanner or the linear accelerator. Langford, T., Vol. 8, pp. 96, 111-17, 125-31. The only functions that these IMPAC workstations serve with regard to the linear accelerator and the CT scanner are wholly ancillary—such as patient scheduling—and are not essential to the operation of the diagnostic CT scanner or the linear accelerator. Nonetheless, Ms. Langford included the cost of these IMPAC workstations in her final cost analysis in an effort to include all possible costs. Langford T., Vol. 8, pp. 96, 111-17, 125-31, 152-53; AHO Ex. 85.

173. In light of the foregoing, the cost of the IMPAC workstations are not essential to the operation of either the diagnostic CT scanner or the linear accelerator, but rather relate solely to the record and verify capabilities of the treatment planning equipment proposed by Asheville Hematology. Accordingly, these costs should be re-allocated to the treatment planning category. Such a reallocation will not result in the total costs of the treatment planning equipment exceeding the statutory threshold applicable thereto.

174. Even if the cost of the IMPAC workstations were not reallocated to the treatment planning equipment category, it would not be appropriate to attribute its cost to the CT scanner for determining whether the cost of the CT scanner would exceed the cost threshold for a diagnostic center, or to the linear accelerator for determining whether the cost of the linear accelerator would exceed the cost threshold applicable thereto.

175. Finally, even if the cost of the IMPAC workstations were not reallocated to the treatment planning equipment category, the costs attributed to these workstations by Ms. Langford are reasonable and supported by the evidence. In any event, the inclusion of the costs associated with the IMPAC workstations—whether allocated to the CT scanner and linear accelerator, or to the treatment planning equipment—do not result in any of the categories within the Asheville Hematology exceeding the statutory thresholds applicable thereto.

#### **M. PATIENT MONITORING SYSTEM**

176. In its no review request, Asheville Hematology did not specifically itemize the costs of a patient audio or video monitoring system in the costs of the linear accelerator. Joint Ex. 1, Agency File, pp. 9-15, 36. Both an audio and video monitoring system is required in the LINAC vault before patients can be treated. Pet. Ex. 112; Righi, T., Vol. 1, pp. 94-100; Coletti, T., Vol. 1, pp. 266-67.

177. Catherine Langford testified that an integrated audio/video "CCTV" monitoring system is included in the upfit of the linear accelerator vault, as is the case for all cancer centers US Oncology manages. Langford, T., Vol. 8, pp. 229-33. Ms. Langford testified that the cost of this CCTV system is included within the cost of construction by the general contractor and, accordingly, the cost is not broken out separately as part of the equipment costs related to the development of the linear accelerator. Langford, T., Vol. 8, pp. 229-33; AHO Ex. 85, p. 8.

178. Bryan Royal, the project manager for the general contractor responsible for the construction of the Asheville Hematology facility, also testified that the cost of this CCTV monitoring system was included within the costs associated with "Division 10" of the construction project. Royal, T., Vol. 6, p. 163; AHO Ex. 80, p. 1, 26. Royal testified that the entire cost of the CCTV system and its installation totaled \$4,397, and was included within the scope of work for the electrical subcontractor for the Asheville Hematology Project. Royal, T., Vol. 6, p. 163; AHO Ex. 80, p. 1, 26.

179. In light of the foregoing, although the costs for an audio and video monitoring system were not specifically itemized in Asheville Hematology's initial submission to the Agency, it is evident that such a system was included in the costs for the construction of the linear accelerator vault, as submitted to the Agency.

180. Furthermore, the costs attributed to this monitoring system by Ms. Langford and Mr. Royal are reasonable and supported by the evidence. In any event, the inclusion of the cost of an audio and video monitoring system do not result in the linear accelerator exceeding the statutory threshold applicable thereto.

#### **N. CONTRAST WARMER AND INJECTOR**

181. In its no review request, Asheville Hematology did not include any costs for diagnostic contrast equipment—equipment used in the process of introducing contrast into a patient's body for the purpose of amplifying the clarity of a diagnostic CT scan. Joint Ex. 1, Agency File, p. 37; Langford T., Vol. 8, pp. 116-17, 135, Vol. 9, pp. 10-13.

182. Catherine Langford testified that these items were inadvertently omitted from the original Asheville Hematology submission to the Agency, and, as a result, she added these to her updated cost analysis. Langford T., Vol. 8, pp. 116-17, 135, Vol. 9, pp. 10-13; Joint Ex. 1, Agency File, p. 37; AHO Ex. 85, p. 10. Ms. Langford testified that these items will be transferred from another US Oncology facility and—valuing this equipment at 40% of the purchase price (as discussed in Section J, *supra*.) will result in an additional cost in the CT scanner category of \$8,400. Langford T., Vol. 8, pp. 116-17, 135, Vol. 9, pp. 10-13; Joint Ex. 1, Agency File, p. 37; AHO Ex. 85, p. 10.

183. The foregoing cost allocations are reasonable, and supported by the evidence. Furthermore, the addition of the costs associated with this equipment does not result in the CT scanner category exceeding the statutory thresholds applicable thereto.

#### **O. POSITIONING LASERS**

184. As part of the Asheville Hematology Project, two sets of "LAP Lasers" were included, to ensure that a patient can be positioned the same for both simulation and treatment. Langford, T., Vol. 8, pp. 76-77, 247-51. Catherine Langford testified that these lasers are an integral part of the treatment planning process, in that they allow the positioning of the patient's body for



simulation, to be replicated while the patient is receiving treatment. Langford, T., Vol. 8, pp. 76-77, 131-32, 247-51. One set of lasers is located in the linear accelerator vault, and another is located in the CT simulation area. Langford, T., Vol. 8, pp. 76-77, 247-51.

185. Ms. Langford testified that these LAP Lasers associated with the simulation side of the treatment planning process—those located in the CT simulation suite—are used exclusively for treatment planning purposes, and serve no use whatsoever in the performance of a diagnostic CT scan. Langford T., Vol. 8, pp. 75-79, 131-33, 247-51.

186. The cost of the CT LAP Lasers is \$37,660. AHO Ex. 27 and 85, p. 12.

187. Given the fact that these CT LAP Lasers serve no diagnostic purpose, and in fact cannot be used, in conducting diagnostic CT scans, Ms. Langford testified that these lasers were reallocated to the treatment planning category in her updated cost analysis. Langford T., Vol. 8, pp. 75-79, 131-33, 247-51; Joint Ex. 1, Agency File, p. 37; AHO Ex. 85, pp. 10, 12.

188. This reallocation of these LAP Lasers resulted in \$37,660 being deducted from the overall costs for the CT scanner, and a corresponding increase in the cost of the treatment planning equipment. Langford T., Vol. 8, pp. 75-79, 131-33, 247-51; Joint Ex. 1, Agency File, p. 37; AHO Ex. 85, pp. 10, 12.

189. No testimony was offered by Petitioners or the Agency rebutting, criticizing or questioning Ms. Langford's allocation of the LAP Lasers to the treatment planning system.

190. In light of the foregoing, the reallocation of the LAP Lasers—from the CT scanner to the treatment planning category—is reasonable, and supported by the evidence.

191. In addition, there are two separate cost issues related to the equipment and construction related to the CT scanner: (1) whether it is major medical equipment (exceeding the \$750,000 cost threshold), within the meaning of G.S. §131E-176(14f); and (2) is whether it is medical diagnostic equipment (exceeding the \$500,000 cost threshold) within the meaning of G.S. §131E-176(7a). Joint Ex. 1, Agency File, pp. 4-5.

192. Even if the LAP Lasers were not reallocated to the treatment planning equipment category, it would not be appropriate to attribute its cost to the CT scanner for determining whether the cost of the CT scanner would exceed the \$500,000 cost threshold for a diagnostic center. The LAP Lasers are not medical diagnostic equipment within the meaning of G.S. §131E-176(7a), because they are not attached to the CT scanner and play no role in the performance of diagnostic CT scans.

193. The combined cost of the LAP Lasers and the CT scanner would not make that combined equipment major medical equipment, because that cost would not exceed \$750,000.

#### **P. EXACT TREATMENT COUCH**

194. In its no review request, Asheville Hematology included within the cost of the CT scanner the cost of an "Exact Treatment Couch." Joint Ex. 1, Agency File, p. 37, Langford T., Vol. 8, pp. 75-76, 78-79, 118, 120-21, 132-33; AHO Ex. 85. Catherine Langford testified that this Exact Treatment Couch was used exclusively for the purpose of creating CT simulations for the purpose of treatment planning, and could not be used while performing a diagnostic CT scan. Langford T., Vol. 8, pp. 75-76, 78-79, 118, 120-21, 132-33. Ms. Langford further testified that, in order to conduct a diagnostic CT scan, the Exact Treatment Couch must be removed from the CT unit, and set aside. Langford T., Vol. 8, pp. 75-76, 78-79, 118, 120-21, 132-33.

195. The cost of the Exact Treatment Couch is \$10,914. AHO Ex. 27 and 85, p. 12.

196. Given the fact that the Exact Treatment Couch cannot be used in conducting diagnostic CT scans, Ms. Langford testified that this Exact Treatment Couch was reallocated to the treatment planning category in her updated cost analysis. Langford T., Vol. 8, pp. 75-76, 78-79, 118, 120-21, 132-33; Joint Ex. 1, Agency File, p. 37; AHO Ex. 85, pp. 10, 12.

197. This reallocation of the Exact Treatment Couch resulted in \$10,914 being deducted from the overall costs for the CT simulator, and a corresponding increase in the cost of the treatment planning equipment. Langford T., Vol. 8, pp. 75-76, 78-79, 118, 120-21, 132-33; Joint Ex. 1, Agency File, p. 37; AHO Ex. 85, pp. 10, 12.

198. No testimony was offered by Petitioners or the Agency rebutting, criticizing or questioning Ms. Langford's allocation of the Exact Treatment Couch to the treatment planning system.

199. In light of the foregoing, the reallocation of the Exact Treatment Couch—from the CT Simulator to the treatment planning category—is reasonable, and supported by the evidence.

200. Even if the Exact Treatment Couch were not reallocated to the treatment planning equipment category, it would not be appropriate to attribute its cost to the CT scanner for determining whether the cost of the CT scanner would exceed the \$500,000 cost threshold for a diagnostic center. The Exact Treatment Couch is not medical diagnostic equipment within the meaning of G.S. § 131E-176(7a), because it is not attached to the CT scanner when diagnostic CT scans are performed, and plays no role in the performance of diagnostic CT scans.

201. The combined cost of the Exact Treatment Couch, the LAP Lasers and the diagnostic CT scanner would not make that combined equipment major medical equipment, because that cost would not exceed \$750,000.

#### **Q. REMOVED EQUIPMENT**

202. In its no review request, Asheville Hematology originally included several items of equipment which have subsequently been removed from the scope of the project. Joint Ex. 1, Agency File, pp. 14-15, 37, 50, 60; Langford T., Vol. 8, pp. 95, 114-16, 152-53; AHO Ex. 85. Catherine Langford testified that these items of equipment were removed from the scope of the project due to the fact that they were not needed or that other provision had been made for these items. Langford T., Vol. 8, pp. 95, 114-16, 152-53; AHO Ex. 85.

203. In particular, Ms. Langford testified that the following items were removed from the project:

- (a) X-ray film cassettes were removed from the CT scanner equipment list, due to the fact that a dry view imager will be used for the processing of simulator images. Langford T., Vol. 8, pp. 115-16; AHO Ex. 85, p. 10. This resulted in a savings of \$127. Langford T., Vol. 8, pp. 115-16; AHO Ex. 85, p. 10.
- (b) A screen cleaner was removed from the CT scanner equipment list, due to the fact that a dry view imager will be used for the processing of simulator images. Langford T., Vol. 8, pp. 115-16; AHO Ex. 85, p. 10. This resulted in a savings of \$13. Langford T., Vol. 8, pp. 115-16; AHO Ex. 85, p. 10.
- (c) Sandbags were removed from the linear accelerator equipment list, due to the fact that this equipment is no longer used for patient mobilization. Langford T., Vol. 8, p. 95; AHO Ex. 85, p. 6. This resulted in a savings of \$32. Langford T., Vol. 8, pp. 95; AHO Ex. 85, p. 6.

204. Ms. Langford also testified that the "Profiler Beam QA Check" was partially removed, to the extent that the equipment is already owned by US Oncology and will be shared by multiple facilities which they manage. Langford T., Vol. 8, pp. 87-91. As a result, Ms. Langford testified that she reduced the cost of this equipment to reflect the fact that it will be shared, and added in the costs of shipping the equipment to the Asheville Hematology facility for use. Langford T., Vol. 8, pp. 87-91, AHO Ex. 85, p. 6. In total, the new cost for the "Profiler Beam QA Check" is \$1,000. Langford T., Vol. 8, pp. 87-91, AHO Ex. 85, p. 6. In reality, this equipment will not be acquired at all, but will be borrowed from a US Oncology Cancer Center located in Greenville, South Carolina on an intermittent, *ad hoc* basis. Langford, T., Vol. 8, pp. 87-91, 102.

205. In addition to the foregoing items which were removed from the scope of the project, other items, including: the dark room wet film processor, positioning lasers, Exact Treatment Couch, among others, were reallocated within the project to more accurately reflect their use within the Asheville Hematology facility. Langford, T., Vol. 8, pp. 81-87, 152-53. The reallocation of these items is discussed in greater detail in other sections herein.

206. Ms. Langford also testified that she inadvertently omitted from her updated cost analysis costs related to the purchase of a film bin for the linear accelerator and the cost of trays being transferred from a US Oncology facility in Florida. Langford, T., Vol. 9, pp. 66-69; AHO Ex. 85. The total cost of these omitted items is \$613. Langford, T., Vol. 9, pp. 66-69. The costs associated with these items, however, would be offset by the costs of the IMPAC workstations discussed in Section L, supra, and/or by the stated cost of film cassettes which are being provided for free by Kodak, as discussed in Section I, supra. Langford, T., Vol. 9, pp. 66-69

207. The removal and reallocation of the costs associated with the foregoing pieces of equipment are reasonable, and supported by the evidence.

#### **R. CHILLER COSTS**

208. In its initial no review request, Asheville Hematology included the cost of a chiller in the equipment break out for the linear accelerator, as well as the costs associated with the installation of such a piece of equipment, in the costs of construction for the linear accelerator vault. Joint Ex. 1, Agency File, pp. 14-15, 36; Langford T, Vol. 8, pp. 107-09; Royal, T., Vol. 6, 174-76; 294-95, Vol. 7, pp. 70, 84-85.

209. Catherine Langford testified that, for the sake of clarity, she specifically re-stated the costs associated with the chiller equipment in her updated cost analysis. Langford T, Vol. 8, pp. 107-09; AHO Ex. 85, p. 7. Ms Langford further testified that the chiller unit that will be used for the Asheville Hematology Project will be transferred from an existing US Oncology facility in Texas. Langford T, Vol. 8, pp. 107-09; AHO Ex. 85, p. 7. Accordingly, Ms. Langford also added the costs associated with the de-installation of the chiller unit and shipment of the unit to the Asheville Hematology facility. Langford T, Vol. 8, pp. 107-09; AHO Ex. 85, p. 7.

210. The total cost related to the chiller equipment, including de-installation and shipping, is \$17,459. AHO Ex. 85, p. 7.

211. Bryan Royal, the project manager for the general contractor charged with the construction of the Asheville Hematology facility, testified that the cost of the installation of the chiller unit was included in the scope of work for the HVAC/Plumbing contractor on the Asheville Hematology Project under "Division 16." Royal, T., Vol. 6, 174-76; 294-95, Vol. 7, pp. 70, 84-85; AHO Ex. 80, p. 1.

212. In light of the foregoing, it is apparent that the Asheville Hematology Project includes all costs associated with the purchase and installation of a chiller for use in connection with the operation of the linear accelerator.

213. Furthermore, while all of the costs associated with the chiller were not explicitly itemized in the initial Asheville Hematology submission to the Agency, the evidence indicates that the costs associated with the chiller were included within the capital cost projections submitted to the Agency, which formed the basis of the Agency's Determination at issue in this contested case.

214. Even if all costs associated with the chiller were not included in the materials submitted to the Agency by Asheville Hematology, the costs attributed by Ms. Langford and Mr. Royal are reasonable and supported by the evidence. In any event, the inclusion of the costs associated with the chiller do not result in the linear accelerator exceeding the statutory threshold applicable thereto.

#### **S. STAFF COSTS**

215. The initial Asheville Hematology submission to the CON Section contained no representations or information with regard to the internal costs of Asheville Hematology or US Oncology staff effort in furtherance of the project. Joint Ex. 1, Agency File, pp. 1-60, 90. By its June 6, 2005, letter to Asheville Hematology, the Agency requested additional information regarding the cost of staff and consulting time in furtherance of the project. Joint Ex. 1, Agency File, p. 90. Thereafter, Asheville Hematology provided the requested information via letter on July 11, 2005. Joint Ex. 1, Agency File, pp. 97-99.

216. In its July 11, 2005 letter, Asheville Hematology provided documentation of \$17,110.49 in internal staff costs as of that date. Joint Ex. 1, Agency File, pp. 97-99; Herman, T., Vol. 5, p. 175.

217. In its August 2, 2005, decision letters, the Agency attributed 25% each of these staff costs to the linear accelerator, CT Simulator, Treatment Planning, and the Oncology Treatment Center. Joint Ex. 1, Agency File, pp. 106, 112, 118, 128. Ms. Hoffman attributed staff costs in the manner because there was no information from Asheville Hematology as to how to allocate it. Ms. Hoffman, however, testified that there could be other reasonable ways to allocate staff costs. Hoffman, T., Vol. 4, pp. 122-23

218. No issue was raised by Petitioners in this contested case as to the correctness of the Agency's decision in allocating these staff costs to the Asheville Hematology Project.

219. William Herman testified that, subsequent to the submission of Asheville Hematology's July 11, 2005, letter containing staff costs, it was discovered that there was an error in the calculation of the staff costs submitted to the Agency, which resulted in those costs being overstated by \$3,821.83. Joint Ex. 1, Agency File, p. 98; AHO Ex. 72, pp. 1, 15; Herman T., Vol. 5, pp. 109-12. This overstatement of the staff costs occurred as a result of a miscalculation of the costs associated with the efforts of one particular individual referenced in Asheville Hematology's July 11, 2005 letter. This individual was identified during the contested case hearing, but the identity of that employee is omitted herein to protect personal and confidential staff information. Joint Ex. 1, Agency File, p. 98; AHO Ex. 72, pp. 1, 15; Herman T., Vol. 5, pp. 109-12.

220. Additional evidence was offered indicating that additional staff costs were incurred on the part of Asheville Hematology/US Oncology in furtherance of the development of the Project. AHO Ex. 73 and 85, p. 1, 15; Herman T., Vol. 5, pp. 112-23, Langford T., Vol. 8, pp. 87, 138-48.

221. Ultimately, the evidence offered indicated that all actual internal staff costs incurred by Asheville Hematology/US Oncology to date, along with the prospective staff costs reasonably anticipated to be incurred prior to the treatment of the first patient at the new Asheville Hematology facility, total \$30,402.41. (AHO Ex. 73 and 85, pp. 1, 15; Herman T., Vol. 5, pp. 112-23, Langford T., Vol. 8, pp. 87, 138-48).

222. Mr. Herman testified that the appropriate allocation of staff time would vary depending upon the staff member concerned. Herman, T., Vol. 5, pp. 112-23. Given the fact that their efforts were dedicated to the development of the Asheville Hematology Project—with no focus on any one particular area—Mr. Herman testified that staff costs should be allocated to the linear accelerator, CT Simulator, Treatment Planning, and the Oncology Treatment Center on a square footage basis for the following individuals: Bart Paschal, M.D.; William Herman; Jim Carrier, Pharm. D; Al Hirschler; Julie Fowler; Jamie Belton; Mike Wallendal; Ben Hext; Paul Jardina; W.F. "Dub" Sorsby; Marc Kerlin; Michael Neuberger; and Don Brelsford. AHO Ex. 73 and 85, p. 15; Herman, T., Vol. 5, pp. 112-23.

223. Catherine Langford confirmed the allocation for these individuals, and testified that using a square footage basis for allocating the staff costs associated with the efforts of the aforementioned individuals (totaling \$23,804) among the linear accelerator, CT Simulator, Treatment Planning, and the Oncology Treatment Center, the costs would be allocated as follows:

- (a) Linear Accelerator – 9.3% of overall Cancer Center – \$2,214;
- (b) CT Simulator – 3.0% of overall Cancer Center – \$714;
- (c) Treatment Planning – 0.75% of overall Cancer Center – \$179;
- (d) Other Costs – 86.95% of overall Cancer Center – \$20,698;

**Langford T., Vol. 8, pp. 87, 138-48; AHO Ex. 73 and 85, pp. 1, 15.**

224. The calculation of the square footage for the linear accelerator of 9.3% includes the square footage for the vault, control room, mechanical room, mold room, and dark room, as discussed in Sections C and I, supra. Langford, T., Vol. 8, pp. 144.

225. Mr. Herman further testified that the appropriate allocation of the staff time of Catherine Langford and all efforts related to the hiring of clinical staff—encompassing time by the Asheville Hematology Physicians; Dr. Victor Archie; a US Oncology Recruiter; and Asheville Hematology Practice Administrator, Sheena Agee—should be allocated equally between the linear accelerator, CT Simulator, Treatment Planning, and the Oncology Treatment Center at 25% each. AHO Ex. 73 and 85, p. 15; Herman, T., Vol. 5, pp. 112-23.

226. Ms. Langford confirmed this allocation and testified that the total staff cost for these activities totaled \$10,177. AHO Ex. 73 and 85, p. 15; Langford, T., Vol. 8, pp. 87, 138-48. Langford testified that—allocating these costs in such a manner—along with all staff costs allocated on a square footage basis, the total staff cost for the linear accelerator, CT Simulator, Treatment Planning, and the Oncology Treatment Center areas follows:

- (a) Linear Accelerator – \$5,606;
- (b) CT Simulator – 3.0% of overall Cancer Center – \$4,106;
- (c) Treatment Planning – 0.75% of overall Cancer Center – \$3,571;
- (d) Other Costs – 86.95% of overall Cancer Center – \$20,698;

**Langford T., Vol. 8, pp. 87, 138-48; AHO Ex. 73 and 85, pp. 1, 15.**

227. All the foregoing staff members were salaried employees of Asheville Hematology/US Oncology and that no additional cost was incurred as a result of their efforts in furtherance of the project. Their salaries would have been paid irrespective of the Asheville Hematology Project. Herman, T., Vol. 5, pp. 112-23; Langford, T., Vol. 8, pp. 87, 138-48.

228. Neither G.S. § 131E-176(7a) ("diagnostic centers") nor G.S. § 131E-176(14d) ("major medical equipment") specifically includes staff costs among the costs which are deemed essential to the operation of that equipment. Only G.S. § 131E-176(16)b ("New Institutional Health Service" / \$2 million total capital expenditure) specifically mentions staff costs in the cost threshold determination.

229. Ms. Hoffman stated, however, that in her opinion these staff costs were nonetheless attributable to the linear accelerator, the CT scanner, the treatment planning equipment, and total capital costs for the Asheville Hematology Project, despite the fact that no additional cost was incurred by Asheville Hematology/US Oncology as a result of their efforts in furtherance of the project. Hoffman, T., Vol. 4, pp. 121-22.

230. Furthermore, Ms. Hoffman admitted that, in numerous prior no-review determinations, the Agency had not included the cost of internal staff time in furtherance of a project in the total capital costs essential to making a health service operational. Hoffman, T., Vol. 4, pp. 123-39; AHO Ex. 38, 40, 48, 48 and 75.

231. In light of the foregoing, there were no staff costs, above and beyond staff costs which would have otherwise been incurred by Asheville Hematology or US Oncology irrespective of the Asheville Hematology Project, and therefore, there were no additional capital costs attributable to the Asheville Hematology Project, for the efforts of salaried staff in furtherance of the Asheville Hematology Project.

232. Notwithstanding this fact, even if costs related to the efforts of salaried staff in the employ of Asheville Hematology or US Oncology in furtherance of the Asheville Hematology Project are attributable, the allocations of the staff costs associated with the development of the Asheville Hematology Project are reasonable in light of the evidence adduced.

#### **T. LEGAL COSTS**

233. The initial Asheville Hematology submission to the CON Section projected legal costs totaling \$78,600. Joint Ex. 1, Agency File, pp. 10. Of this amount, \$ 75,000 was allocated to "Developer's Base Cost" and the remaining amount was allocated equally to the "Linear Accelerator," the "CT Simulator," "Treatment Planning" and "Other Costs" columns of the Cancer Center Cost Breakout—\$ 900.00 was allocated to each of these areas. Joint Ex. 1, Agency File, pp. 9.

234. In its August 2, 2005, decision letters, the Agency indicated that the \$ 900.00 in legal fees attributed to each of the foregoing categories for the cost of preparing Asheville Hematology's no review request, were not considered as part of the capital costs essential to making the equipment operational, and therefore these fees should not be counted as part of the overall capital cost for each of the component parts of the Asheville Hematology Project. Joint Ex. 1, Agency File, pp. 106, 112, 118, 128. No issue was raised by Petitioners in this contested case as to the correctness of the Agency's decision in determining that these fees were not includable in the capital costs for the Asheville Hematology Project.

235. Evidence was offered indicating that additional attorneys fees were incurred on the part of Asheville Hematology/US Oncology in furtherance of the development of the Project. AHO Ex. 85, pp. 1, 15; Herman T., Vol. 5, pp. 128-30, Langford T., Vol. 8, pp. 87, 137-48. These additional legal fees totaled \$7,862. AHO Ex. 85, p. 1, 15; Herman T., Vol. 5, pp. 128-30, Langford T., Vol. 8, pp. 87, 137-48.

236. William Herman testified that these legal fees were paid for services related to the review of the various lease documents related to the lease between Asheville Hematology/US Oncology and Centex-Concord (through their respective subsidiaries). Herman T., Vol. 5, pp. 128-30; AHO Ex. 85, pp. 1,15; AHO Ex. 19A, 19B, and 22; Pet. Ex. 49 and 50. As a result of the fact that these legal fees were related to the project as a whole, Herman testified that the most reasonable method for allocating these legal fees to the linear accelerator, CT Simulator, Treatment Planning, and the Oncology Treatment Center was as percentage of the square footage of the overall cancer center. Herman, T., Vol. 5, pp. 128-30.

237. Consistent with Mr. Herman's testimony, Catherine Langford testified that the legal fees were allocated to the linear accelerator, CT Simulator, Treatment Planning, and the Oncology Treatment Center based upon square footage as follows:

(a) Linear Accelerator – 9.3% of overall Cancer Center – \$731 ;

(b) CT Simulator – 3.0% of overall Cancer Center – \$236;

(c) Treatment Planning – 0.75% of overall Cancer Center – \$59;

(d) Other Costs – 86.95% of overall Cancer Center – \$6,836;

**Langford T., Vol. 8, pp. 87, 137-48; AHO Ex. 85, pp. 1, 15.**

238. In light of the fact that these additional legal fees were incurred as a result of professional service related to the land and lease transactions underlying the development of the Asheville Hematology Project, these allocations are reasonable.

#### **U. OWNERSHIP OF EQUIPMENT**

239. Asheville Hematology's no review request identifies the equipment to be acquired by Asheville Hematology for the relocated oncology treatment center. Some equipment will be purchased directly from vendors, and other equipment will be relocated from other US Oncology facilities that have recently been closed. Joint Ex. 1, Agency File, pp. 1-7.

240. The vendor quotes attached to Asheville Hematology's no review request show that the quotes were obtained by US Oncology for Asheville Hematology. Joint Ex. 1, Agency File, pp. 16, 35, 38, 42, 44, 48, 51, 53.

241. Pursuant to the Management Agreement between AOR Management and Asheville Hematology, US Oncology, through its subsidiary AOR Management, will own the equipment located at Asheville Hematology's relocated oncology treatment center. AHO Ex. 3, Section 4.1; Herman, T., Vol. 5, pp. 22.

242. However, this equipment would be identified on the financial records of US Oncology and Asheville Hematology as assets of Asheville Hematology. Depreciation for the equipment would be charged to expense over the estimated useful life of the asset on the books of Asheville Hematology. Krenzke, T., Vol. 6, pp. 58-59; Langford, T., Vol. 8, pp. 46-47.

243. Whether the equipment is owned by Asheville Hematology or its manager would not impact the CON Section's Determination. Whether a provider acquires medical equipment for purposes of the CON Law by purchase, lease, or other comparable arrangement, the CON Section's treatment of that acquisition is the same under the CON law. Such a comparable arrangement could be through a management agreement. Hoffman, T., Vol. 4, p. 145-46; G.S. § 131E-176(2d). Through its Management Agreement with US Oncology, Asheville Hematology will acquire the equipment to be located in the facility.

#### **V. BINDING EQUIPMENT CONTRACTS**

244. On March 25, 2006, Varian Medical Systems ("Varian") issued Quotation No. DJC20041123-001B to Asheville Hematology for a pre-owned Clinac 2100C linear accelerator for the price of \$312,000, and an Eclipse DX treatment planning workstation for the price of \$120,000. Joint Ex. 1, Agency File, pp. 16-17.

245. On May 11, 2005, Varian issued Quotation No. EHD20050511-002, for a pre-owned Clinac 2100C linear accelerator for the price of \$305,000. This quotation included the delivery, rigging and installation of the linear accelerator, as well as the base frame on which it would sit. The quote states that its terms are firm until July 10, 2005. Langford, T., Vol. 8, pp. 52-66; AHO Ex. 9 and 13.

246. Ms. Langford accepted this quote on behalf of Asheville Hematology on June 3, 2005. Stipulation, ¶35; AHO Ex. 9. Ms. Langford had the authority from US Oncology senior management and Asheville Hematology to accept this quote. Langford, T., Vol. 9, p. 50.

247. If a vendor agrees to lower the price after Ms. Langford has accepted a quote, she does not need approval to accept the lower price. Langford, T., Vol. 9, p. 50.

248. On June 3, 2005, US Oncology issued a purchase order to Varian for the linear accelerator described in Quotation No. EHD20050511-002. AHO Ex. 11; Langford, T., Vol. 9, p. 62.

249. Once US Oncology has issued a purchase order, that binds it to purchase the equipment described in the purchase order. Langford, T., Vol. 8, p. 184.

250. On July 10, 2005, Varian Medical System issued an invoice for the linear accelerator identified in Quotation No. EHD20050511-002. The invoice for the linear accelerator, consistent with the quote accepted by Ms. Langford, provides the payment terms as 10%/80%/10%, which means 10% due with order, 80% due on ship to site or storage and 10% due on the completion of installation. On or about August 9, 2005, U.S. Oncology paid the 10% deposit toward the linear accelerator in the amount of \$30,500. U.S. Oncology has not made any other payments towards the purchase of the linear accelerator. Stipulation, ¶46; AHO Ex. 11, 15.

251. The Varian quote did not identify the serial number of the exact unit that was to be purchased. Based on Ms. Langford's experience dealing with Varian, it was not identified because Varian has an ongoing inventory of linear accelerators. At

that time, delivery of this unit was not slated until almost a year from the date that this offer was accepted. Varian chose not to identify a unit at that particular time, based on their predictions of upcoming inventory. Langford, T., Vol. 8, p. 61. Ms. Langford and Mr. Herman both testified that US Oncology has a longstanding working relationship, and based upon this past course of dealing, they had no doubt that Varian would provide a satisfactory linear accelerator unit. Langford, T., Vol. 8, pp. 52-66; Herman T., Vol. 5, pp. 82-90; AHO Ex. 9 and 13.

252. Ms. Langford and Mr. Herman both further testified that it was their understanding that, after the June 3, 2005 acceptance of the Varian quote, Varian was obligated to provide a Clinac 2100 and US Oncology was obligated to purchase it. Langford, T., Vol. 8, pp. 52-66; Herman, T., Vol. 5, pp. 82-91; AHO Ex. 9 and 13.

253. On March 10, 2006, Varian identified the specific linear accelerator to be located at Asheville Hematology as a pre-owned Clinac 2100C, Serial No. 8125. AHO Ex. 14.

254. Mr. Herman testified that, in all projects, he continues to negotiate on the price of equipment up until the date it is delivered. Herman, T., Vol. 5, pp. 85-91.

255. On April 18, 2006, Varian issued Quotation No. EHD20050511-002A, reducing the price of the pre-owned Clinac 2100C linear accelerator described above to \$302,000. The quote states that its terms are firm until April 28, 2006. AHO Ex. 84. This was the same linear accelerator described in Quotation No. EHD20050511-002.

256. The quotation number is Varian's tracking mechanism of quotes that have been issued. Any time there is a revision in an existing quote, a letter is added to the end of the quote. The quotation numbers issued by Varian on May 11, 2005 and April 11, 2006 are the same, with the exception of the addition of the letter A to the latter quote. Langford, T., Vol. 8, p. 65.

257. On April 18, 2006, US Oncology issued a purchase order to Varian for the linear accelerator described in Quotation No. EHD20050511-002A. AHO Ex. 94; Langford, T., Vol. 9, p. 62.

258. There are no terms between Asheville Hematology or U.S. Oncology and Varian with regard to this price reduction other than as described in Quotation No. EHD20050511-002A. There is no agreement for U.S. Oncology or Asheville Hematology to acquire any additional services or pay for any other services as a result of this price reduction. Langford, T., Vol. 8, pp. 69-70.

259. On January 6, 2005, GE Medical Systems ("GE") issued to US Oncology a Preliminary Proposal for the Asheville Hematology site, for a Certified Goldseal HiSpeed NX/i Base CT Scanner with an RTP Exact Couch System, CT LAP Laser Marking System, and other features, for a proposed price of \$373,658.90. Joint Ex. 1, Agency File, pp. 38-41.

260. On June 3, 2005, GE issued Quotation No. KXGCDPA to US Oncology for the Asheville Hematology site, for a Certified GoldSeal QX/i Xtreme CT scanner with similar features as the CT scanner described above, for a proposed price of \$373,000. The Quote was for a newer CT scanner than in the Preliminary Proposal. The reason was because as of the date of the Quote, GE had launched a new CT system, and as a result, there are a lot of the QX/i's available in the market. At the time of the Preliminary Proposal, that was not the case. AHO Ex. 26; Langford, T., Vol. 9, pp. 39-40.

261. On June 8, 2005, US Oncology issued a purchase order to GE for the CT scanner described in Quotation No. KXGCDPA. AHO Ex. 27; Langford, T., Vol. 9, p. 74.

262. On December 15, 2005, GE issued two letters to US Oncology, identifying a price correction in the CT scanner described in Quotation No. KXGCDPA. The letters state that due to US Oncology's existing Master Service Agreement with GE, the cost of applications training for the CT scanner should not have been included in the purchase price. The elimination of this cost reduced the price of the CT scanner and accessories by \$9,300, to \$363,700. The letters identify the actual price of the CT scanner as \$327,604. AHO Ex. 27; Herman, T., Vol. 5, pp. 97-98, 100.

263. On December 15, 2005, US Oncology issued a revised purchase order to GE for the CT scanner described in Quotation No. KXGCDPA, to reflect GE's removal of the applications training cost of \$9,300. AHO Ex. 27; Langford, T., Vol. 9, p. 74.

264. On April 18, 2006, GE issued a letter to US Oncology, identifying a further price reduction in the CT scanner described in Quotation No. KXGCDPA. The letter states that the new price of the CT scanner and accessories will be \$353,896. The letter states that the price of the CT scanner will be \$308,500. AHO Ex. 27; Langford, T., Vol. 8, pp. 78-79.

265. There is no agreement between Asheville Hematology or U.S. Oncology and GE to acquire any additional equipment as a result of this price reduction. There is no agreement for U.S. Oncology or Asheville Hematology to acquire any additional services or pay for any other services as a result of this price reduction. Langford, T., Vol. 8, p. 79.

266. US Oncology has an ongoing relationship with Varian. US Oncology makes up about 36% of Varian's business. Its affiliated practices have approximately 105 linear accelerators under service agreement with Varian, and purchases approximately 10 to 12 linear accelerators per year. Each of the service agreements is worth about \$80,000 a year. Herman, T., Vol. 5, pp. 84-85

267. US Oncology helps Varian in its prioritization of product features. In this regard, US Oncology has an affiliated practice site in Austin that is designated as Varian's engineering development site. Herman, T., Vol. 5, pp. 84-85

268. Mr. Herman personally deals with Varian representatives two to three times per month. Ms. Langford personally deals with Varian representatives one to two times per week. Herman, T., Vol. 5, pp. 84-85; Langford, T. Vol. 8, p. 63.

269. US Oncology also has an ongoing relationship with GE. US Oncology spends 16 to 18 million dollars a year with GE. US Oncology has a multi-year contract with GE to buy CTs and PET units, as well as an agreement that GE will service US Oncology's GE equipment. GE also has rights of first refusal on US Oncology's used equipment. Herman, T., Vol. 5, p. 96.

270. Based on Ms. Langford's experience with Varian and GE, had the CON Section found that Varian Clinac 2100C linear accelerator or the GE GoldSeal QX/i Xtreme CT scanner described above could not be acquired at Asheville without a CON, US Oncology still would have been obligated to purchase that equipment. Had Varian or GE not agreed to lower the price of their equipment, US Oncology still would have been obligated to purchase it. Langford, T., Vol. 9, pp. 54-55. This has occurred in the past, when US Oncology was obligated to purchase a linear accelerator from Varian, even though it could not place it at the cancer center for which it was intended. Langford, T., Vol. 9, p. 86.

#### **W. LEASE TREATMENT**

271. In its February 1, 2005 request to the Agency seeking the Determination, Asheville Hematology represented that it would enter into an operating lease with the building developer for the Building. Joint Ex. 1, Agency File, p. 2.

272. On or about June 6, 2005, AOR Management, as managing agent for Asheville Hematology, entered into a binding lease with CC Asheville MOB, for the Building and the land on which it is located (hereinafter, the "Lease"). Stipulation, ¶38; AHO Ex. 19A.

273. On or about September 2, 2005, AOR Management, as managing agent for Asheville Hematology and CC Asheville MOB, entered into a "First Amendment to Lease Agreement" (hereinafter, the "First Amendment"). Stipulation, ¶38; AHO Ex. 19B.

274. On or about March 31, 2006, AOR Management, as managing agent for Asheville Hematology, and CC Asheville MOB entered into a "Second Amendment to Lease Agreement" (hereinafter, the "Second Amendment"). Stipulation, ¶38; AHO Ex. 20.

275. Under the Lease, the First Amendment, and the Second Amendment, no payments are to be made to CC Asheville MOB until the latter of (a) the date a certificate of occupancy or completion is issued for the Building or (b) the date that Asheville Hematology opens for business in the Building. AHO Ex. 19A, p. 71-72, Section (c). The contract completion date is July 3, 2006, so no certificate of occupancy has been issued, and Asheville Hematology has not moved its offices to the Building. Pet. Ex. 65, p. 1.

276. Under generally accepted accounting principles ("GAAP"), a building lease may be classified as an operating lease or a capital lease, depending upon certain circumstances.

277. A capital lease is treated differently on a company's books than an operating lease. A capital lease is considered a financing arrangement under GAAP, such that it is treated as an asset in the balance sheet of the lessee, with an off-setting debt in the balance sheet liabilities. An operating lease, however, would not be shown in the balance sheet. The expense of the lease would be shown, however, in the income statement. Whitt, T., Vol. 2, pp. 23-24.

278. GAAP is the convention or the rules that tell accountants how to record economic activity and how to present that economic activity in a financial statement so that readers, when looking at a financial statement, have some comfort level that what they are reading will be consistent among other financial statements. Whitt, T., Vol. 2, pp. 20-21.



279. The Financial Accounting Standards Board is the body that creates generally accepted accounting principles. Whitt, T., Vol. 2, p. 43.

280. Financial Accounting Standards Board FASB 13 provides guidance for accounting for leases. Whitt, T., Vol. 2, p. 43; Krenzke, T., Vol. 6, p. 15; Pet. Ex. 90.

281. Under FASB 13, a lease would be a capital lease if (a) the lease transfers ownership of the property at the end of the term; (b) the lease contains a bargain purchase option; (c) the lease term is equal to 75% or more of the estimated life of the leased property; or (d) the present value at the beginning of the lease term of the minimum lease payments equals or exceeds 90% of the fair market value of the leased property. Whitt, T., Vol. 2, pp. 47-50; Pet. Ex. 90, p. 8, ¶7.

282. Under FASB 13, determining the fair market value of leased property under subsection (d) depends upon whether the owner of the property can be considered a manufacturer or dealer. If so, the value of the property would be its normal selling price. If not, it would be the owner's out of pocket cost for the property. Pet. Ex. 90, p. 5, ¶5.c; Krenzke, T., Vol. 6, pp. 38-41.

283. Centex-Concord, the parent company of CC Asheville MOB, is a development company engaged in the primary business of constructing, owning, leasing, and selling real estate development properties. As such, it meets the definition of a manufacturer for determining the fair market value of the property. For the same reason, the value defined in an appraisal would be the proper basis for determining whether a lease for property developed by Centex-Concord is a capital lease or an operating lease under the 90% test. Krenzke, T., Vol. 6, pp. 39-40.

284. An appraisal of the property owned by CC Asheville MOB was conducted by Fred H. Beck and Associates ("Beck") in August 2005. Beck appraised the fair market value of the leased property as \$8,500,000. Stipulation, ¶59; Pet. Ex. 58.

285. T. Randolph Whitt is a certified public accountant with Dixon and Hughes, PLLC. He was tendered by Petitioners and accepted as an expert witness in the application of generally accepted accounting principles to leases. Pet. Ex. 4; Whitt, T., Vol. 2, pp. 29-30.

286. Kevin Krenzke is a certified public accountant and is the Vice President and Controller of US Oncology. Mr. Krenzke is responsible for filing financial reports on behalf of US Oncology and its affiliated practices. He was tendered by Asheville Hematology and accepted as an expert witness in general accounting and auditing, and the application of generally accepted accounting principles to leases. AHO Ex. 74; Krenzke, T., Vol. 6, pp. 8, 17, 21.

287. The Lease and the First Amendment contained a provision that the rental payment would increase annually at a rate of 2.5%. AHO Ex. 19A, p. 72; AHO Ex. 19B, p. 114. Based upon this annual increase, both the Lease and the First Amendment would be considered a capital lease, because the present value at the beginning of the lease term of the minimum lease payments would exceed 90% of the fair market value of the leased property. Whitt, T., Vol. 2, pp. 86-87; Krenzke, T., Vol. 6, pp. 27-28.

288. At the time the Lease and the First Amendment were executed, it was US Oncology's understanding that the Lease was an operating lease. After the First Amendment was executed, it and the Lease were submitted by US Oncology's capital planning group to Mr. Krenzke in his financial reporting capacity, to confirm whether or not that conclusion was correct. By the time his analysis was completed, he concluded that the Lease and the First Amendment as structured constituted a capital lease. That conclusion precipitated a broad review of other facility leases for approximately 40 other US Oncology-affiliated cancer centers. That analysis was completed in December 2005 or January 2006. Krenzke, T., Vol. 6, pp. 22-23.

289. From a financial standpoint, US Oncology prefers that all leases be operating leases. That preference has nothing to do with the CON Law in North Carolina. Rather, it is due to the fact that in August of 2004 US Oncology was purchased in a leveraged buyout, and became heavily leveraged. The terms of the indebtedness incurred in that transaction limited US Oncology's ability to incur additional indebtedness. Capital leases, for purposes of that indenture, are considered additional indebtedness. Therefore, to the extent that a transaction with very similar economics could be consummated as an operating lease instead of a capital lease, and preserve that basket of additional indebtedness for other alternatives, US Oncology would have a strong preference to do so. Id.

290. For the foregoing reasons, US Oncology and Centex-Concord renegotiated the Lease so that the minimum lease payments were changed under the Second Amendment. Instead of a 2.5% annual increase in the minimum rental payment, the annual increase would be tied to the Consumer Price Index ("CPI"), with a minimum annual increase of 1% and a maximum annual increase of 4%. AHO Ex. 20; Krenzke, T., Vol. 6, p. 30.

291. Under GAAP, minimum lease payments do not include contingent rentals. A contingent rental is a rental that is based upon future changes in an index, such as the CPI. Therefore, for purposes of computing minimum lease payments under the Lease, only the 1% minimum increase should be considered. Any increment above that related to a future change in the CPI is not considered a minimum lease payment. That changes the value of minimum lease payments under the Lease in a downward direction. Krenzke, T., Vol. 6, p. 30.

292. Mr. Whitt did not have an opinion as to whether Centex-Concord was a manufacturer or dealer for purposes of determining the fair market value of the property. However, he opined that the Beck appraisal could not be used to determine fair market value under the Second Amendment, because one of the assumptions used in the Beck appraisal for determining the value of the property was the 2.5% annual rent increase. He believed that the change from a 2.5% annual increase to an annual increase tied to the CPI could change the valuation of the property. Whitt, T., Vol. 2, pp. 84-85, 107.

293. However, information published by the U.S. Department of Labor Bureau of Labor Statistics on CPI since 1970 shows that based upon the current year, the last 5 years, the trailing 10 years, and the trailing 20 years, it has never been the case that CPI was lower than 2.5%. Krenzke, T., Vol.6, p. 44; AHO Ex. 78.

294. In addition, both the appraiser and Centex-Concord concluded that the change to CPI would not change the actual rental payments in a downward direction. Rather, their expectation is that the value would, if anything, stay the same or go up. If that occurs, then the appraised fair market value of the property, which is in part based upon the income stream of the property, would either stay the same or go up. Krenzke, T., Vol.6, p. 44; Kury, T., Vol. 7, pp. 195-97.

295. In fact, Centex-Concord accepted the Second Amendment specifically because they believed that the changes made therein would not reduce rental payments. Id.

296. For purposes of determining whether the Second Amendment is a capital lease, it is appropriate to value the property at \$8,500,000, as per the Beck appraisal. The preponderance of the evidence shows that the terms of the Second Amendment would not cause the appraised value in the Beck appraisal to decrease.

297. Further, under the Second Amendment, the present value at the beginning of the lease term of the minimum lease payments would be calculated under GAAP based upon a 1% annual increase. Using those assumptions, the present value at the beginning of the lease term of the minimum lease payments would be less than 90% of the fair market value of the leased property. Krenzke, T., p. 34-37; AHO Ex. 88. Therefore, the Second Amendment is an operating lease.

298. Had Ms. Hoffman been aware prior to the Determination that the Lease was a capital lease, she does not know if the CON Section would count the value of the Lease under the \$2,000,000 threshold in G.S. § 131E-176(16)b. If a capital lease is a capital expenditure under GAAP, then she guesses it would have to be included. Hoffman, T., Vol. 3, pp. 178-79.

299. G.S. § 131E-176(2d) defines a capital expenditure as follows:

*"Capital expenditure" means an expenditure for a project, including but not limited to the cost of construction, engineering, and equipment which under generally accepted accounting principles is not properly chargeable as an expense of operation and maintenance. Capital expenditure includes, in addition, the fair market value of an acquisition made by donation, lease, or comparable arrangement by which a person obtains equipment, the expenditure for which would have been considered a capital expenditure under this Article if the person had acquired it by purchase.*

300. A capital lease is not an expenditure for a project under G.S. § 131E-176(2d), because under GAAP, a capital lease is a non cash transaction. Capital expenditures in the financial statements appear in the statement of cash flows. In a capital lease, the acquisition of property and the incurrence of a related obligation occur without cash changing hands between the two parties to the transaction. Inside the statement of cash flows, which is where capital expenditures are reported, the addition of property under a capital lease is not classified as a capital expenditure. Similarly, on the indebtedness side, the incurrence of an obligation for a capital lease is not considered a financing cash flow. Krenzke, T., Vol. 6, p. 60.

301. A capital lease of real estate also would not be an acquisition made by donation, lease, or comparable arrangement by which a person obtains equipment, and therefore would not be a capital expenditure under G.S. § 131E-176(2a), because it is not a lease of equipment. Krenzke, T., Vol. 6, p. 64.

302. Therefore, under G.S. § 131E-176(2a) and under GAAP, a capital lease would not be considered a capital expenditure.

303. Even if payments under a capital lease were considered a capital expenditure, no lease payments have been made to CC Asheville MOB, because Asheville Hematology has not yet occupied the Building. Therefore, no capital expenditure was ever incurred under the Lease or the First Amendment.

304. Because the Second Amendment is an operating lease, lease payments which will be made to CC Asheville MOB under the Second Amendment will be operating expenses, which would not be counted toward Asheville Hematology's costs associated with the Building under the CON law.

305. As discussed in the Conclusions of Law hereinbelow, the fact that the Lease would have been considered a capital lease at the time it was entered in June 2005, does not affect Asheville Hematology's vested right to develop the project under the CON Law as it existed at the time of the Agency's Determination on August 2, 2005.

#### **X. LINAC COSTS**

306. All evidence presented as to the negotiation of the purchase price for the linear accelerator, makes it clear that this transaction was an "arms-length" one, between unrelated parties. Furthermore, the final purchase price for the linear accelerator of \$302,000 is reasonable and supported by the preponderance of the evidence.

307. Mr. Royal's and Mr. Kury's estimates and allocations of total construction costs related to the linear accelerator as presented at the hearing properly included the construction of all space essential to the installation and operation of the linear accelerator. Petitioners were given a thorough opportunity to cross examine Mr. Royal and Mr. Kury on the bases for those estimates, and the witnesses were able to demonstrate that all of the essential construction costs were included and supported by back-up documentation.

308. Further, Asheville Hematology's estimate of equipment and other costs essential to the operation of the linear accelerator as presented at the hearing properly identified all such essential equipment, and the cost attributed to that equipment was reasonable.

309. The preponderance of the evidence demonstrates that the actual cost to acquire and make operational the Asheville Hematology linear accelerator will not exceed \$750,000. AHO Ex. 80, 81, 83 and 85.

#### **Y. CT SCANNER COSTS**

310. All evidence presented as to the negotiation of the purchase price for the CT scanner, makes it clear that this transaction was an "arms-length" one, between unrelated parties. Furthermore, the final purchase price for the diagnostic CT scanner of \$308,500 is reasonable and supported by the preponderance of the evidence.

311. Mr. Royal's and Mr. Kury's estimates and allocations of total construction costs related to the CT scanner as presented at the hearing properly included the construction of all space essential to the installation and operation of the CT scanner. Petitioners were given a thorough opportunity to cross examine Mr. Royal and Mr. Kury on the bases for those estimates, and the witnesses were able to demonstrate that all of the essential construction costs were included and supported by back-up documentation.

312. Further, as discussed in Sections L, O and P, supra, equipment used for simulation which is not essential to the performance of diagnostic CT scans should not be included in the \$500,000 diagnostic center cost threshold, because such equipment is not medical diagnostic equipment within the meaning of the CON Law.

313. Asheville Hematology's estimate of equipment and other costs essential to the operation of the CT scanner as presented at the hearing properly identified all such essential equipment, and the cost attributed to that equipment was reasonable.

314. The preponderance of the evidence demonstrates that the actual cost to acquire and make operational the Asheville Hematology diagnostic CT scanner will not exceed \$500,000. AHO Ex. 80, 82, 84 and 85.

Based on the foregoing Findings of Fact, the undersigned Administrative Law Judge enters the following

#### **————CONCLUSIONS OF LAW————**

#### **I. AGENCY DETERMINATION**

1. To the extent that certain portions of the foregoing Findings of Fact constitute mixed issues of law and fact, such findings of fact shall be deemed incorporated herein by reference as Conclusions of Law. Similarly, to the extent that some of these Conclusions of Law are Findings of Fact, they should be so considered without regard to the given label.

2. The Office of Administrative Hearings has jurisdiction over the parties and the subject matter of this action. The parties received proper notice of the hearing in this matter.

3. This matter is an appeal of a Department decision pursuant to N.C. Gen. Stat. § 131E-188(a).

4. Petitioners bear the burden of proof on each and every element of their case. In a contested case, "[u]nder N.C. Gen. Stat. § 150B-23(a), the ALJ is to determine whether the petitioner has met its burden in showing that *the agency* substantially prejudiced petitioner's rights, and that the agency acted outside its authority, acted erroneously, acted arbitrarily and capriciously, used improper procedure, or failed to act as required by law or rule." Britthaven, Inc. v. N.C. Dept. of Human Res., 118 N.C. App. 379, 382, 455 S.E.2d 455, 459 (1995) (emphasis in original). The burden of persuasion placed upon Petitioners is the "greater weight of evidence." Dillingham v. N.C. Dept. of Human Resources, 132 N.C. App. 704, 712, 513 S.E.2d 823, 828 (1999) (stating "the standard of proof in administrative matters is by the greater weight of evidence. . .").

5. Administrative agency decisions may be reversed as arbitrary and capricious only if they are "patently in bad faith," or "whimsical" in the sense that "they indicate a lack of fair and careful consideration," or "fail to indicate 'any course of reasoning and the exercise of judgment'. . ." ACT-UP Triangle v. Comm'n for Health Services, 345 N.C. 699, 707, 483 S.E.2d 388, 393 (1997).

6. This court may not substitute its judgment for that of the Agency even though the court could justifiably have reached a different result had the matter been before it *de novo*. Charter Pines Hosp., Inc. v. N.C. Dept. of Human Resources, 83 N.C. App. 161, 171, 349 S.E.2d 639, 646 (1986).

7. Consistent with this principle, North Carolina law gives great weight to the Agency's interpretation of a law it administers. Frye Regional Medical Center v. Hunt, 350 N.C. 39, 45, 510 S.E.2d 159, 162 (1999). See also Carpenter v. North Carolina Dep't of Human Resources, 107 N.C. App. 278, 279, 419 S.E.2d 582, 584 (1992) (a reviewing court should defer to the agency's interpretation of a statute it administers "so long as the agency's interpretation is reasonable and based on permissible construction of the statute."); High Rock Lake Ass'n. v. N.C. Envtl. Mgmt. Comm'n, 51 N.C. App. 275, 279, 276 S.E.2d 472, 475 (1981) (the interpretation of a statute given by the agency charged with carrying it out is entitled to great weight).

8. North Carolina law also presumes that the Agency has properly performed its duties, and this presumption is rebutted only by a showing that the Agency was arbitrary or capricious in its decision making. In re Broad and Gales Creek Community Assoc., 300 N.C. 267, 280, 266 S.E.2d 645, 654 (1980); Adams v. N.C. State Bd. of Reg. for Prof. Eng. and Land Surveyors, 129 N.C. App. 292, 297, 501 S.E.2d 660, 663 (1998) (stating "proper to presume administrative agency has properly performed its official duties."); In re Land and Mineral Co., 49 N.C. App. 529, 531, 272 S.E.2d 6, 7 (1980) (stating that "the official acts of a public agency . . . are presumed to be made in good faith and in accordance with the law.").

9. In concluding that the linear accelerator, CT simulator and treatment planning equipment should be treated as separate units of medical equipment that do not constitute a single system of components with related functions, the CON Section did not exceed its authority; act erroneously; fail to use proper procedure; act arbitrarily or capriciously; or fail to act as required by rule or law.

10. In combining the costs of the record and verify system with those of the treatment planning equipment for purposes of determining whether the CON threshold was exceeded, the CON Section did not exceed its authority; act erroneously; fail to use proper procedure; act arbitrarily or capriciously; or fail to act as required by rule or law.

11. In allocating developer's base costs in Asheville Hematology's proposed project separately from costs associated with the linear accelerator, CT simulator and treatment planning equipment, the CON Section did not exceed its authority; act erroneously; fail to use proper procedure; act arbitrarily or capriciously; or fail to act as required by rule or law.

12. In accepting Asheville Hematology's representation that the lease of the Building with the developer would be an operating lease, the CON Section did not exceed its authority; act erroneously; fail to use proper procedure; act arbitrarily or capriciously; or fail to act as required by rule or law.

13. In determining that the Asheville Hematology proposal to acquire a linear accelerator did not require a certificate of need, the CON Section did not exceed its authority; act erroneously; fail to use proper procedure; act arbitrarily or capriciously; or fail to act as required by rule or law.

14. In determining that the Asheville Hematology proposal to acquire a CT simulator did not require a certificate of need, the CON Section did not exceed its authority; act erroneously; fail to use proper procedure; act arbitrarily or capriciously; or fail to act as required by rule or law.

15. In determining that the Asheville Hematology proposal to acquire treatment planning equipment did not require a certificate of need, the CON Section did not exceed its authority; act erroneously; fail to use proper procedure; act arbitrarily or capriciously; or fail to act as required by rule or law.

16. In determining that the Asheville Hematology proposal to relocate an existing oncology treatment center did not require a certificate of need, the CON Section did not exceed its authority; act erroneously; fail to use proper procedure; act arbitrarily or capriciously; or fail to act as required by rule or law.

17. The preponderance of the evidence demonstrates that Asheville Hematology will not incur capital expenditures in excess of \$750,000 to acquire and make operational a linear accelerator.

18. The preponderance of the evidence demonstrates that Asheville Hematology will not incur capital expenditures in excess of \$500,000 to acquire and make operational all medical diagnostic equipment, including a CT scanner.

19. The preponderance of the evidence demonstrates that Asheville Hematology will not incur capital expenditures in excess of \$750,000 to acquire and make operational treatment planning equipment.

20. The preponderance of the evidence demonstrates that Asheville Hematology will not incur capital expenditures in excess of \$2,000,000 to relocate its existing oncology treatment center.

## **II. VESTED RIGHTS**

21. The initial Asheville Hematology submission to the CON Section was submitted to the Agency on or about February 2, 2005. This submission was made in good faith reliance upon the CON Law—codified at Chapter 131E, Article 9, of the North Carolina General Statutes—then in existence, in particular G.S. § 131E-176 (2004). Herman, T., Vol. 5, pp. 132; Langford, T., Vol. 8, pp. 152-53.

22. The CON Law was amended effective August 26, 2005 by Session Law 2005-325, §1, more than six months after Asheville Hematology's initial submission to the CON Section. In particular, certain definitions regarding oncology treatment centers and the acquisition and operation of new linear accelerators, contained in N.C. Gen. Stat. § 131E-176, were amended. As a result, the statutory definition for oncology treatment center was stricken from the text of G.S. 131E-176(18a), and a new definition was added to that G.S. 131E-176, defining linear accelerators. Pet. Ex. 107.

23. G.S. 131E-176(14g) and G.S. 131E-176(16)f1.5a (2005), as amended, defines the "acquisition by purchase, donation, lease, transfer, or comparable arrangement" of a linear accelerator as a "new institutional health service" requiring a Certificate of Need, regardless of cost. *Id.*

24. The Agency rendered its decision determining that the Asheville Hematology Project did not require a CON on August 2, 2005, prior to the effective date of the 2005 amendment to the CON Law.

25. The issue of vested rights is not defined under the CON Law. Rather, it is a common law right, based upon the constitutional right prohibiting Congress or the states from enacting laws which would impair a party's right to contract. N.C. Const. Art. 1, § 17; U.S.C.A. Const. Art. 1; Trustees of Dartmouth College v. Woodward, 17 U.S. 518, 4 L. Ed. 629 (1819); Lester Bros., Inc. v. Pope Realty & Ins. Co., 250 N.C. 565, 109 S.E.2d 263 (1959).

26. The common law of North Carolina has addressed the issue of vested rights within the context of amendments to statutory law impacting government issued permits. See generally e.g., Booker v. Duke Medical Center, 297 N.C. 458, 256 S.E.2d 189 (1979); Lester Bros., Inc. v. Pope Realty & Ins. Co., *supra*; Patterson v. Hosiery Mills, 214 N.C. 806, 200 S.E. 906 (1939). Under these common law doctrines, a binding contract related to a service or asset at issue is considered the type of action that creates a vested right which cannot be abrogated by an amendment to the law. See generally *id.* The North Carolina Supreme Court has held that where a statutory change impacts the rights of individuals, "The proper question for consideration is whether the act as applied will interfere with rights which had vested or liabilities which had accrued at the time it took effect." Booker, 256 S.E.2d at 195. Furthermore the good-faith reliance of the concerned parties upon the then existing state of the law is a consideration in determining

whether such rights have vested. See Michael Weinman Associates General Partnership v. Town of Huntersville, 147 N.C. App. 231, 555 S.E.2d 342 (2001).

27. The fact that the August 26, 2005 amendment to the CON law did not have a provision specifically "grandfathering" services proposed prior to the amendment is immaterial. The concept of vested rights is based in constitutional and common law, and cannot be restricted by statute.

28. A lease of real estate is the type of contract which creates a vested right. Carolina Mineral Co. v. Young, 220 N.C. 287, 17 S.E.2d 119, 122 (1941). Furthermore, the terms of leases "are interpreted according to general principles of contract law." Wal-Mart Stores, Inc. v. Ingles Markets, Inc., 158 N.C. App. 414, 418-19, 581 S.E.2d 111, 115 (2003). Subsequent modifications to a lease do not impair vested contractual rights and obligations incurred as of the original date of the lease. See, Trustees of Dartmouth College, 17 U.S. at 642.

29. Under contract law (under which vested rights are determined), a modification to a contract such as a lease does not necessarily create a new contract. Instead, the intention of the parties governs. As the North Carolina Court of Appeals noted in construing the lease in Wal-Mart Stores, "the heart of a contract is the intention of the parties as determined from its language, purposes, and subject matter and the situation of the parties at the time of execution." Wal-Mart Stores, at 418-419, 581 S.E.2d 115 (internal quotes omitted).

30. Furthermore, the modification of an existing lease contract does not result in a rescission of the prior contract, but rather operates in concert and in addition to the terms of the original contract, if so intended by the parties. The Court of Appeals in In re: Fortesque, 75 N.C. App. 127, 330 S.E.2d 219 (1985), made this clear, holding:

*Where a second contract involves the same subject matter as the first, but where no rescission has occurred, the contracts must be construed together in identifying the intent of the parties and in ascertaining what provisions of the first contract remain enforceable, and in such construction the law pertaining to interpretation of a single contract applies.*

Id. at 130, 330 S.E.2d at 220.

31. Although the Lease of the Building entered into on June 6, 2005, between AOR Management, as managing agent for Asheville Hematology, and CC Asheville MOB, was modified in part by the First Amendment and the Second Amendment after the CON Law was amended on August 26, 2005, AOR Management and Asheville Hematology retain their vested rights in the Lease prior to the amendment of the CON Law.

32. As is clear from the evidence offered by the witnesses in this contested case, as well as the plain and unambiguous language of the contract documents, the only reasonable reading of the Lease and its subsequent amendments is to view all three writings as one contract memorialized by multiple writings, as contemplated by the Statute of Frauds in North Carolina. G.S. § 22-2, also see, Satterfield v. Pappas, 67 N.C. App. 28, 312 S.E.2d 511 (1984); Fuller v. Southland Corp., 57 N.C. App. 1, 290 S.E.2d 754 (1982).

33. Thus, for the purposes of determining the vesting of rights in the Lease of the Building, as set forth above, Asheville Hematology had vested rights in such Lease as of June 6, 2006.

34. Contracts for the sale of goods are governed by Article 2 of the UCC, codified at G.S. Chapter 25, Article 2 (hereinafter "Article 2 of the UCC"). The provisions of the UCC are controlling with respect to the construction and effect of all contracts for the sale of goods, and the rights attached thereto.

35. G.S. § 25-2-105 defines "goods" as follows:

*(1) "Goods" means all things (including specially manufactured goods) which are movable at the time of identification to the contract for sale other than the money in which the price is to be paid, investment securities (article 8) and things in action. "Goods" also includes the unborn young of animals and growing crops and other identified things attached to realty as described in the section on goods to be severed from realty.*

Id.

36. Under G.S. §§ 25-2-202, 25-2-207, 25-2-208, and 25-2-209, contracts for the sale of goods which are subsequently modified by the mutual assent of the parties, do not require any additional consideration. Under these provisions of Article 2 of the

UCC, such subsequent modifications do not change the basic terms of underlying prior agreement, but rather modify various parts thereof and supplement the original.

37. Under North Carolina law, a modification of a pre-existing contract does not discharge the original contract, unless specifically so intended, as cited above in Fortesque. The Fortesque Court built upon the logic employed in Commercial National Bank v. Charlotte Supply Co., 226 N.C. 416, 38 S.E.2d 503 (1946), which stated:

*The making of a second contract dealing with the subject matter of an earlier one does not necessarily abrogate the former contract. To have the effect of rescission, it must either deal with the subject matter of the former contract so comprehensively as to be complete within itself and to raise the legal inference of substitution, or it must present such inconsistencies with the first contract that the two cannot in any substantial respect stand together. Where, upon inspection of the instruments and consideration of the circumstances under which they were executed, it appears that rescission has not taken place, those provisions of the former instrument which are not substantially involved in the contradictions and thereby revoked still subsist and may be enforced. Before the new contract can be accepted as discharging the old, the fact that such was the intention of the parties must clearly appear.*

Id. at 426, 38 S.E.2d at 510.

38. Furthermore, "[t]he provisions of a written contract may be modified or waived by a subsequent parol agreement, or by conduct which naturally and justly leads the other party to believe the provisions of the contract are modified or waived." Mulberry Fairplains Water Assoc., Inc. v. Town of North Wilkesboro, 105 N.C. App. 258, 267, 412 S.E.2d 910, 916 (1992). This is especially true in light of G.S. § 25-2-208(3) which states:

*Subject to the provisions of the next section [§ 25-2-209] on modification and waiver, such course of performance shall be relevant to show a waiver or modification of any term inconsistent with such course of performance.*

G.S. § 25-2-208, which the Mulberry Court noted, stating: "Modification of a sales contract may be established by a course of conduct. Under the Code, course of performance is relevant to show a modification of any term inconsistent with the parties' course of performance." Mulberry at 267, 412 S.E.2d at 916.

39. Under G.S. §§ 25-2-202, 25-2-204, 25-2-206, 25-2-207, 25-2-208, and 25-2-209, great latitude is given to parties to contracts for the sale of goods with regard to the required terms which must be included for a sales contract to exist. As a result, terms such as a specific identification of the goods to be sold, the price terms, and other terms may be omitted from a contract for the sale of goods without effect on the binding nature of the contract. Id.

40. More precisely, G.S. § 25-2-204 states:

(1) A contract for sale of goods may be made **in any manner sufficient to show agreement, including conduct by both parties which recognizes the existence of such a contract.**

(2) An agreement sufficient to constitute a contract for sale may be found even though the moment of its making is undetermined.

(3) **Even though one or more terms are left open a contract for sale does not fail for indefiniteness if the parties have intended to make a contract** and there is a reasonably certain basis for giving an appropriate remedy.

Id. (emphasis added).

41. In addition, under G.S. §§ 25-2-202 and 25-2-208, where the parties to a contract for the sale of goods have an established course of dealing, the course of performance and course of dealing between the parties is relevant to determining the overall meaning of the agreement between the parties, and in determining the rights arising therefrom.

42. Finally, under G.S. § 25-2-202, where there are multiple writings which collectively form the terms of an agreement or the sale of goods, extrinsic evidence—such as parol evidence regarding the course of performance and course of dealing—is relevant and admissible in determining the meaning of the agreement and construing it. Also see Mulberry, 105 N.C. App. 258, 412 S.E.2d 910 (1992).

43. On their face, the linear accelerator and the CT Simulator to be purchased as part of the Asheville Hematology Project fall within the definition of "goods" in N.C. Gen. Stat § 25-2-105. Thus, the construction, effect, obligations, and rights under

the contracts for the purchase of the linear accelerator and the CT Simulator for the Asheville Hematology Project, are governed and controlled by the provisions of Article 2 of the UCC.

44. The evidence offered by Messrs. Herman and Smith and Ms. Langford on behalf of Asheville Hematology, establishes the prior course of dealing between US Oncology/Asheville Hematology and the vendors of the linear accelerator and CT simulator (Varian and GE Medical Systems, respectively) to be purchased for the Asheville Hematology Project.

45. Under Article 2 of the UCC, this prior course of dealing, as well as the course of performance under the contracts for the purchase of the linear accelerator and CT simulator, establishes that there exists only one contract each for the purchase of these pieces of equipment between Asheville Hematology/US Oncology and the vendors thereof.

46. Each of these contracts are made up of various writings, which in some cases modify prior writings related to the same contract, but all such writings, under Article 2 of the UCC, constitute but one contract for the purchase of each piece of equipment.

47. Under Article 2 of the UCC, all contractual rights and obligations for the purchase of the linear accelerator arose as of the date of the initial contract, June 3, 2005, which is the date the Purchase Order was issued to Varian. Those rights remain vested to the present. See AHO Ex. 9-15, and 83.

48. Similarly, under Article 2 of the UCC, all contractual rights and obligations for the purchase of the CT simulator arose as of the date of the initial contract, June 8, 2005, which was the date the Purchase Order was issued to GE. Those rights remain vested to the present. See AHO Ex. 26-28 and 84.

49. Thus, for the purposes of determining the vesting of rights in the purchase of a linear accelerator and a CT Simulator, as set forth above, Asheville Hematology and US Oncology had vested rights in such items as of June 3, 2005 and June 6, 2006, respectively.

50. "A valid contract requires offer, acceptance, consideration and no defenses to formation.... [T]he contract need not definitely and specifically contain in detail every fact to which the parties are agreeing. It is sufficient if the terms can be made certain by proof." Koltis v. North Carolina Dept. of Human Resources, Div. of Facility Services, Certificate of Need Section, 125 N.C. App. 268, 480 S.E.2d 702, 704 (1997) (citations omitted). In Koltis, the General Assembly included a "grandfather" provision in an amendment to the law governing the development of oncology treatment centers. The Koltis Court, held that a mere binding contract for "consulting services connected with the development of the proposed oncology treatment center" was sufficient to create vested rights on the part of the proponent of the project in question. Id. In so doing, the Koltis Court defined the scope of inquiry with regard to a determination as to whether binding contracts pre-dating a change in the laws of this state continue to be vested.

51. The above-described contracts meet the definition set forth in Koltis, of valid, binding contracts, and gave Asheville Hematology vested rights as of June 2005, in acquiring the linear accelerator and the CT simulator under the CON Law as it existed at the time of the Determination. Any one of these contracts would have created such vested rights.

52. The preponderance of the evidence demonstrated that some costs associated with the Asheville Hematology Project should have been allocated differently than as presented to the CON Section. However, the preponderance of the evidence also demonstrates that each aspect of the Asheville Hematology Project nevertheless will not be a new institutional health service, under the CON Law as it existed at the time of the Determination.

53. Therefore, there is no basis for overturning the CON Section's Determination that Asheville Hematology may acquire a linear accelerator, CT simulator and treatment planning equipment, and relocate its existing oncology treatment center, without a certificate of need.

**RECOMMENDED DECISION**

Based on the forging findings of fact and conclusions of law, it is hereby recommended as follows:

a. The acquisition of the linear accelerator, CT scanner and the treatment planning equipment proposed by Asheville Hematology and addressed by the Agency in its August 2, 2005 "no review" determinations do not constitute "new institutional health services" as defined by N.C. Gen. Stat. § 131E-176 at the time that Asheville Hematology acquired vested rights to develop these services. Accordingly, the acquisition of this equipment by Asheville Hematology does not require a CON.



b. The relocation of an existing oncology treatment center and acquisition of radiation oncology treatment equipment proposed by Asheville Hematology and addressed by the Agency in its August 2, 2005 "no review" determination does not constitute a "new institutional health service" as defined by N.C. Gen. Stat. § 131E-176 at the time that Asheville Hematology acquired vested rights to develop these services. Accordingly, the relocation of the center and acquisition of this equipment by Asheville Hematology does not require a CON.

—————**ORDER**—————

It is hereby ordered that the Agency serve a copy of the Final Decision on the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714, in accordance with G.S. § 150B-36(b).

—————**NOTICE**—————

Before the Agency makes the Final Decision, it is required by G.S. § 150B-36(a) to give each party an opportunity to file exceptions to this Recommended Decision, and to present written arguments to those in the Agency who will make the final decision.

The Agency is required by G.S. § 150B-36(b) to serve a copy of the Final Decision on all parties and to furnish a copy to the parties' attorneys of record.

This the 26<sup>th</sup> day of May, 2006.

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Beecher R. Gray  
Administrative Law Judge



witnesses by taking into account the appropriate factors for judging credibility, including but not limited to the demeanor of the witness, any interests, bias, or prejudice the witness may have, the opportunity of the witness to see, hear, know or remember the facts or occurrences about which the witness testified, whether the testimony of the witness is reasonable, and whether the testimony is consistent with all other believable evidence in the case.

### **FINDINGS OF FACT**

1. Petitioner received the notification of probable cause to suspend law enforcement officer certification letter mailed by the Respondent on August 22, 2005.

2. The North Carolina Criminal Justice Education and Training Standards Commission has the authority granted under Chapter 17C of the North Carolina General Statutes and Title 12 of the North Carolina Administrative Code, Chapter 9A, to certify law enforcement officers and to revoke, suspend, or deny such certification.

3. Petitioner was appointed as a full-time law enforcement officer with the Clayton Police Department on April 2, 1998. Petitioner received a general certification as a law enforcement officer from the Respondent pursuant to this appointment. That certification is currently valid.

4. Petitioner was criminally charged by a warrant for arrest with the offense of Misdemeanor Breaking and Entering on November 21, 2004, in violation of N.C. Gen. Stat. § 14-54(b), alleging Petitioner "unlawfully and willfully did wrongfully break and enter a building of Steven James Ward located at 120 Primrose Lane, Clayton, NC."

5. Petitioner was criminally charged by a warrant for arrest with the offense of Communicating Threats on November 21, 2004, in violation of N.C. Gen. Stat. § 14-277.1, alleging Petitioner "unlawfully and willfully did threaten to physically injure the person of Steven James Ward. The threat was communicated to Steven James Ward by stating in person 'Your easy to find, I am going to kill you' and the threat was made in a manner and under circumstances which would cause a reasonable person to believe that the threat would be carried out."

6. Petitioner was criminally charged by a warrant for arrest with the offense of Assault with a Deadly Weapon on November 21, 2004, in violation of N.C. Gen. Stat. § 14-33(c)(1), alleging Petitioner "unlawfully and willfully did assault Steven James Ward with a deadly weapon, a motor vehicle, by trying to run the victim over."

7. At a subsequent criminal proceeding in Johnston County (NC) District Court on this matter, the Misdemeanor Breaking and Entering charge was dismissed at end of the State's evidence. Petitioner was found not guilty of the offenses of Communicating Threats and Assault with a Deadly Weapon.

8. 12 NCAC 9A.0204(b)(3)(A) provides that the Commission may suspend, revoke, or deny the certification of a criminal justice officer when the Commission finds that the applicant for certification or the certified officer has committed or been convicted of a criminal offense or unlawful act defined in 12 NCAC 9A .0103 as a Class B Misdemeanor and which occurred after the date of initial certification. 12 NCAC 9A .0103 (4) defines "commission of an offense" as a finding by the North Carolina Criminal Justice Education and Training Standards Commission or an administrative body that a person performed the acts necessary to satisfy the elements of a specified criminal offense. The criminal offense of Assault with a Deadly Weapon, in violation of N.C. Gen. Stat. § 14-33(c)(1), constitutes a Class B misdemeanor pursuant to 12 NCAC 9A .0103(23)(b) and the Class B misdemeanor manual, as promulgated under the Commission's rules.

9. Subsequent to Petitioner's arrest in December, 2004, for the criminal charges of Misdemeanor Breaking and Entering, Communicating Threats and Assault with a Deadly weapon, the Criminal Justice Standards Division became aware of the charges through media reports. The first newspaper article was published on December 3, 2004 and indicated that Petitioner had been charged with Misdemeanor Breaking and Entering, Communicating Threats and Assault with a Deadly Weapon. A second newspaper article was published on January 19, 2005 and indicated that Petitioner had been acquitted in Johnston County District Court of Communicating Threats and Assault with a Deadly Weapon. The article indicated that the Breaking and Entering charge had been dismissed.

10. As a result of the first newspaper article, Richard Squires, an investigator with the Criminal Justice Standards Division, began an investigation into the charges. On January 24, 2005, Squires received a copy of the warrants and dispositions from the Johnston County Clerk of Court. The court records indicated that Petitioner was found not guilty of the Communicating Threats and the Assault with a Deadly Weapon charges. The Breaking and Entering charge was dismissed.

11. On January 31, 2005, the Criminal Justice Standards Division received from Thomas H. Lock, District Attorney for the

Eleventh Prosecutorial District, a copy of the State's Investigative file regarding Petitioner. This investigative file contained a copy of the Investigative Report prepared by the Detective Division of the Johnston County Sheriff's Office, a copy of the 911 calls placed at the time of the incident, and a copy of crime scene photographs.

12. Mr. Squires contacted Petitioner by mail. By letter dated February 18, 2005, Petitioner responded to Mr. Squires' inquiry. In that February 18, 2005 letter, Petitioner stated that he was upset and angry when he was at Mr. Ward's home. Petitioner understood that he had made a "dreadful judgment call".

13. Mr. Squires also contacted by mail and telephone, Steven James Ward, and Tara Ann Kitts and Charles Gabriel Perez.

14. At the hearing of this matter, Steven Ward testified that "out of the blue," on or about November 20, 2004, he got a call from Tara Kitts. Ward testified that he had been in a relationship with Ms. Kitts but that relationship had terminated some time before November. He told Ms. Kitts that he was going out to bar and she later on showed up there and then went to his house. On November 21, 2004 at two o'clock in the morning, Petitioner came to Ward's house in Clayton, North Carolina. Petitioner came to Ward's house looking for his (Petitioner's) fiancée, Tara Kitts. Petitioner knocked loudly on the door of Ward's house. Mr. Ward testified that the knocking caused "a little splintering" to the door. Ms. Kitts went to the door and let Petitioner in.

15. Petitioner had in his possession and at his side, a black tire changing tool that was a half inch in diameter and two and a half feet long. After Petitioner spoke to Ms. Kitts, Petitioner asked Mr. Ward if he was Steven Ward. Ward said no. Mr. Ward thought it would be prudent to say he was not Steven Ward. Petitioner appeared to be upset and this appeared to Mr. Ward to be a high tension situation. Ward testified that he believed Petitioner was justified to be upset. Mr. Ward stated that he was afraid that a scuffle might occur.

16. While Petitioner again talked to Ms. Kitts, Mr. Ward moved towards a door. At that point Mr. Ward's roommate, Charles Perez came out of his bedroom. Petitioner turned his attention to Mr. Perez and asked Perez if he was Steve Ward. Mr. Ward then ran out of the door. When Ward ran out of the house, Petitioner followed. Petitioner and Mr. Ward had words with each other. When Ward got out of the house, Petitioner never got close to Ward. Petitioner got in his car and drove it in the direction of Ward. Ward testified that he was in between some cars. Petitioner left. Mr. Ward testified that he spoke with police the next day but that he did not "lodge any charges."

17. Charles Perez testified that on November 21, 2004 he was living with Steven Ward. Perez was asleep when he was awakened by two loud bangs. He had been sleeping soundly having just recently smoked marijuana. He heard voices coming from the living room. He opened his bedroom door, walked out into the living room and saw Petitioner. Perez testified that Petitioner was holding a tire changing tool in his hand in the air. Mr. Perez testified that Petitioner asked Perez twice if he was Steve Ward. Perez told him no. About that time, Mr. Ward ran out of the house and Petitioner followed. Mr. Perez called 911. Mr. Perez stated that he had told the 911 operator that Petitioner had a hammer and that Petitioner and Ward were fighting. Perez testified that in fact Petitioner did not have a hammer and Ward and Petitioner were not fighting. He also stated at the criminal trial he had not recalled the tire changing tool being raised in the air. Perez testified that his mental faculties were clouded due to the effect of the marijuana he had been smoking.

18. Tara Kitts testified that she was at Ward's house on November 21, 2004 when Petitioner came to Ward's house. She stated that she and Petitioner have a child together and that at the time she was Petitioner's fiancée. Kitts stated that Petitioner knocked loudly on the door. Ms. Kitts opened the door for Petitioner. Petitioner was upset and asked Kitts what she was doing there. Petitioner had a tire iron in his hand. Kitts told Petitioner to leave and that she was leaving. Ms. Kitts went out the door.

19. Ms. Kitts called 911. She told the 911 operator that her boyfriend, Petitioner, was trying to kill Steve Ward. She told the 911 operator that Petitioner showed up over at Mr. Ward's house "flipping out". She told the 911 operator that she had to leave because Petitioner was "going ballistic". Petitioner was heard on the 911 tape yelling at Kitts. Petitioner loudly stated, "I thought it was over between you and fucking Steve. What the fuck are you still doing over there?" At that point, Petitioner got on the phone and told the 911 operator, "OK. Yeah. That's fine. But you know my girlfriend she's over at some guy's house . . . It's all good." The call then ended. Ms. Kitts did not "press charges," could not remember some of the night's events, and was "ready for it all to go away."

20. Petitioner testified that he went over to Steven Ward's house at two o'clock in the morning on November 21, 2004. Petitioner went there to confirm that his fiancée, Tara Ann Kitts, was at Ward's house when she had not come home after work. He had never been to Ward's house before. Petitioner determined that Kitts was at Ward's house because Petitioner's car was parked outside of Ward's house. Petitioner parked his car at the driveway of Ward's house, took a tire changing tool from his back floor board and went to the front door of the house. Petitioner had the tool out earlier in the day to check a noise in one of his hub caps. He had put in on the floor board when he was through. Petitioner rang the door bell but got not response. Petitioner then knocked on the door very hard. Petitioner took the tire tool with him because he did not want anyone to attack him and had it with him in case he needed to defend himself. He did not know how many people were in the house. He had just recently had hernia surgery and was still recovering with

staples still in the incision.

21. Petitioner stated he just wanted to confirm who Kitts was with. The tire tool was two feet long with a slight bend in it with a flat end and a lug nut on the other end. Petitioner kept the tire tool at his side. He took it with him in the event he may need to protect himself. Petitioner entered the house and asked Ward if he was Steve. Ward denied that he was Steve. Perez came out and Petitioner asked if he was Steve. Perez said he was not Steve. At that point Steve Ward went out the front door into the yard. Petitioner walked out on the front porch and then to his car. Words were exchanged between Ward and Petitioner. Petitioner testified that he was around 60 yards from Ward when they had words. Petitioner told Kitts to take his car home, and Petitioner then left the cul-de-sac. Petitioner stated that he never raised the tire tool, never swung at anyone and never threatened anyone with the tire tool.

22. Petitioner testified that he is currently employed with the Middlesex Police Department. Petitioner resigned from the Clayton Police Department. He was told he could resign or be terminated for conduct unbecoming an officer. The behavior that was conduct unbecoming an officer was yelling and screaming.

23. Numerous witnesses testified on behalf of Petitioner. Gary Ragland, Chief of Police for Clayton, testified that an internal investigation was conducted by the Clayton Police Department regarding the incident that occurred on November 21, 2004. Although Ragland was not involved in the investigation, he understood that the investigation revealed that Petitioner had engaged in conduct unbecoming of an officer. Ragland did not know what type of disciplinary action was recommended as a result of the internal investigation. Petitioner did not proceed through the disciplinary process because he resigned from the Clayton Police Department.

24. Besides being the Chief of Police of Clayton, Gary Ragland is an attorney and the legal counsel to the Clayton Police. He stated that Petitioner's reputation for truthfulness and honesty was impeccable. Chief Ragland stated that based on the internal investigation, he probably would not have terminated Petitioner, but that the Town Manager indicated he would not accept anything less than termination.

25. Jason Hutchins, Chadwick Allen and Samuel Lapsey are all Clayton Police Officers. Officer Lapsey is (at the time of the hearing) a Patrol Sergeant and Shift Supervisor. All three testified that Petitioner reputation for honesty and truthfulness were excellent and had never been questioned by anyone.

26. Charles Ferrell is the Chief of Police for the town of Middlesex. He stated that he was aware of the allegations against Petitioner. He stated he made a background check and took into account the charges when Petitioner has hired. Chief Ferrell stated that Petitioner had an outstanding reputation and that he wanted him as an employee.

27. Gerald Mitchell testified for the Petitioner. He is the Vice President of Continuing Education with Wake Technical Community College. He had been Chief of the New York City Department of Correction for 20 years, supervising some 13,000 employees. He has known Petitioner for a number of years and defined his relationship with him much like a father. Mr. Mitchell testified that Petitioner had never lied to him and was a very honest person.

**BASED UPON** the foregoing findings of fact and upon the preponderance or greater weight of the evidence in the whole record, the Undersigned makes the following:

### **CONCLUSIONS OF LAW**

1. The Office of Administrative Hearings has personal and subject matter jurisdiction over this contested case. The parties received proper notice of the hearing in the matter. To the extent that the findings of fact contain conclusions of law, or that the conclusions of law are findings of fact, they should be so considered without regard to the given labels.

2. The North Carolina Criminal Justice Education and Training Standards Commission has the authority granted under Chapter 17C of the North Carolina General Statutes and Title 12 of the North Carolina Administrative Code, Chapter 9A, to certify law enforcement officers and to revoke, suspend, or deny such certification.

3. Pursuant to 12 NCAC 9A.0204(b)(3)(A) the Commission may suspend, revoke, or deny the certification of a criminal justice officer when the Commission finds that the applicant for certification or the certified officer has committed or been convicted of a criminal offense or unlawful act defined in 12 NCAC 9A .0103 as a Class B Misdemeanor and which occurred after the date of initial certification. The criminal offense of Assault with a Deadly Weapon, in violation of N.C. Gen. Stat. §14-33(c)(1), constitutes a Class B misdemeanor pursuant to 12 NCAC 9A .0103(23)(b) and the Class B misdemeanor manual, as promulgated under the Commission's rules.

4. At a criminal proceeding in the District Court of Johnston County, North Carolina, on this matter, the Misdemeanor Breaking and Entering charge was dismissed at end of the State's evidence. Petitioner was found not guilty of both of the offenses of Communicating Threats and Assault with a Deadly Weapon. As such, Respondent may therefore not rely on "conviction of a criminal offense" or "committed" a "criminal offense" in its review of this matter.

5. Though Respondent may look to see if Petitioner has "committed" an "unlawful act," not only does common sense suggest that great deference be given to prior court action on the same criminal offense(s), but the law demands adherence to several legal principles.

6. Petitioner is entitled to rely on the principle of merger, that is, a collateral aspect of res judicata which determines the scope of claims precluded from relitigation by existing judgments. While res judicata precludes subsequent action based on the same claim, collateral estoppel bars subsequent determination of the same issue(s), even though the action may be premised upon a different claim. In this case as in all cases, collateral estoppel should be applied in particular situations as fairness and justice require.

7. The facts alleged by Respondent are the same facts raised in both the District Court action and in this contested case. The facts and issues (commission of certain criminal offenses) in this contested case are the same facts and issues (commission of certain criminal offenses), in the District Court action. The matters of guilt regarding the offenses of Communicating Threats and Assault with a Deadly Weapon have already been adjudicated in District Court by a finding of not guilty. The issue of the Misdemeanor Breaking and Entering charge has been decided when it was dismissed at end of the State's evidence.

8. As Respondent is proposing a change in the status quo, that is, suspending Petitioner's already established certification as a law enforcement officer, the burden of proof thereby lies with the Respondent. The responsible party for the burden of proof must carry that burden by a greater weight or preponderance of the evidence. Black's Law Dictionary cites that "preponderance means something more than weight; it denotes a superiority of weight, or outweighing."

9. The totality of the testimony and evidence before the Undersigned support the conclusion that, even absent consideration of the principles of merger and collateral estoppel, Respondent failed in its burden of proof regarding the foundation of its proposed suspension action. The finder of fact cannot properly act upon the weight of evidence, in favor of the one having the *onus*, unless it overbear, in some degree, the weight upon the other side.

**BASED UPON** the foregoing Findings of Fact and Conclusions of Law the Undersigned makes the following:

**PROPOSAL FOR DECISION**

There is sufficient evidence in the record to properly and lawfully support the Conclusions of Law cited above. Based on the conclusions above, including the principles of merger and collateral estoppel, the Respondent's proposed action of the suspension of law enforcement officer certification toward Petitioner are not supported by a preponderance of the evidence and should not proceed.

**NOTICE**

The agency making the final decision in this contested case is required to give each party an opportunity to file exceptions to this Proposal for Decision, to submit proposed findings of fact and to present oral and written arguments to the agency. N.C.G.S. § 150B-40(e).

The agency that will make the final decision in this contested case is North Carolina Criminal Justice Education and Training Standards Commission.

A copy of the final agency decision or order shall be served upon each party personally or by certified mail addressed to the party at the latest address given by the party to the agency and a copy shall be furnished to any attorney of record. N.C.G.S. § 150B-42(a).

**IT IS SO ORDERED.**

This the 30th day of May, 2006.

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Augustus B. Elkins II  
Administrative Law Judge

**STATE OF NORTH CAROLINA****COUNTY OF WAKE****IN THE OFFICE OF  
ADMINISTRATIVE HEARINGS  
06 DOA 0112**Corporate Express Office Products, Inc.  
Petitioner

vs.

N. C. Division of Purchase and Contract  
Respondent

and

Office Depot, Inc.  
Respondent Intervenor**DECISION**

This contested case was heard before Beecher R. Gray, Administrative Law Judge, in Raleigh, North Carolina on April 25, April 26, April 27, and April 28, 2006. Petitioner's motion for summary judgment on the question of whether the Secretary of Administration has authority to conduct a reverse auction was argued and determined at the outset of the hearing. The undersigned denied Petitioner's motion.

**APPEARANCES**

Petitioner:

Hampton Dellinger  
Christopher T. Graebe  
Eileen R. Youens  
Womble Carlyle Sandridge & Rice, PLLC  
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Respondent:

Donald R. Teeter, Sr.  
Special Deputy Attorney General  
Susan R. Lundberg  
Assistant Attorney General  
Ann Stone  
Assistant Attorney General  
9001 Mail Service Center  
Raleigh, NC 27699-9001

Respondent-Intervenor:

Hayden J. Silver, III  
Alan D. McInnes  
Kilpatrick Stockton LLP  
Suite 400  
3737 Glenwood Avenue  
Raleigh, NC 27612**ISSUES AND SUMMARY OF DECISION**

Whether Respondent Division of Purchase and Contract ("Respondent" or "P&C") substantially prejudiced Petitioner's rights, exceeded its authority or jurisdiction, acted erroneously, failed to use proper procedure, acted arbitrarily or capriciously, and/or failed to act as required by law or rule by: (1) allowing the P&C's consultant, Accenture, to aid the drafting and design of the 2005 Request for Proposals for the state office supplies contract, Term Contract 615A ("Term Contract 615A"), when Accenture had an undisclosed financial relationship with two of the bidders; (2) choosing to score the proposals submitted in response to the RFP in a manner that favored bidders with retail store outlets, even though the contract was an E-Procurement, delivery contract; (3) awarding Term Contract 615A to a single, higher-priced bidder without justification, when an award including Petitioner could have saved state taxpayers more than \$1.7 million a year; (4) conducting the bidding for Term Contract 615A by means of a reverse auction; and (5) conducting the bidding for Term Contract 615A by means of a reverse auction, when the scoring of the technical submittal was not disclosed to the bidders, such that bidders were prevented from seeing their true positions in the reverse auction.

For the reasons set forth in the findings of fact and conclusions of law that follow, the undersigned finds that Respondent's award of Term Contract 615A to Office Depot, Inc. as a sole source vendor is not supported by the evidence, is arbitrary and capricious, is affected by an appearance of impropriety, and is not in the best interest of, nor most advantageous to, the State of North Carolina.

#### **APPLICABLE STATUTES AND RULES**

N.C. Gen. Stat. § 143-49  
N.C. Gen. Stat. § 143-52  
N.C. Gen. Stat. § 143-53  
N.C. Gen. Stat. § 143-129  
N.C. Gen. Stat. § 150B-23

#### **EXHIBITS**

For Petitioner: 2, 4, 7, 8, 9, 11, 12, 15, 16, 19, 20, 21, 25, 26, 27, 29, 30, 31, 32, 33, 38, 39, 41, 44, 47, 49, 50, 58, 59, 60, 61, 62, 64, 65, 67, 71, 75, 78, 82, 105, 123, 148, 154, 155, 160, 161, 168, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179.

For Respondent: 1, 2, 3, 4, 14, 15, 16, 17, 20, 21, 22, 23, 24, 25, 26, 27.

For Respondent-Intervenor: 1 through 10.

#### **FINDINGS OF FACT**

In making the Findings of Fact, the undersigned has weighed all the evidence and assessed the credibility of the witnesses. The undersigned has taken into account the appropriate factors for judging credibility of witnesses, including but not limited to the demeanor of the witness and any interests, bias, or prejudice the witness may have. Further, the undersigned carefully has considered the opportunity of the witness to see, hear, know or remember the facts or occurrences about which the witness testified, whether the testimony of the witness is reasonable, and whether the testimony is consistent with all other believable evidence in the case.

After careful consideration of the sworn testimony presented at the hearing, the documents and exhibits admitted into evidence, and the entire record in this proceeding, the undersigned makes the following FINDINGS OF FACT:

1. The parties received notice of hearing by certified mail more than 15 days prior to the hearing.
2. Corporate Express Office Products, Inc. ("Petitioner") was the lowest price bidder during the process that led to the November 10, 2005 award of the state office supplies contract, Term Contract 615A ("Term Contract 615A") to Office Depot, Inc. ("Intervenor").
3. Petitioner was a vendor on Term Contract 615A for several years leading up to the November 10, 2005 award.
4. In 2002, Respondent issued an Invitation for Bids ("IFB") on Term Contract 615A.
5. Petitioner was the lowest bidder on the IFB, and was one of four vendors awarded the contract.



6. The 2002 IFB document stated that the record of each vendor's performance on the contract "will be considered in the evaluation of future bids."

7. The State Purchasing Officer, Mike Mangum ("Mangum"), testified that this statement meant that a vendor's good performance on the contract, as well as bad performance, would be considered in the evaluation of future bids.

8. Petitioner's Vice President of Operations for its South Atlantic Division, Paul Yates ("Yates"), testified that Petitioner performed the contract for three years with no complaints, except for one isolated incident that was fixed immediately once it was brought to Petitioner's attention.

9. Karen Woodall ("Woodall"), the State Procurement Specialist charged with administering Term Contract 615A, confirmed the testimony of Yates on this point.

10. Mervyn Gould ("Gould"), the former Chief Standards Engineer and Woodall's former supervisor, testified that, during a market survey he conducted on Term Contract 615A, he wrote that Petitioner was the only vendor of the four on the contract that honored the contract prices.

11. In 2003, Accenture LLP ("Accenture") began working with Respondent to develop a pilot reverse auction project.

12. By June of 2005, Term Contract 615A was selected by Respondent and Accenture as a reverse auction pilot project candidate. Respondent paid Accenture approximately \$325,000 for Accenture's work on this project.

13. In June or July of 2005, Respondent sent out surveys to the users of Term Contract 615A. No more than four of the more than 80 responders made any mention of retail stores. Five of the responders mentioned next-day delivery.

14. On July 20, 2005, Respondent and Accenture held a meeting with representative users of Term Contract 615A.

15. The minutes from the July 20, 2005 meeting list next-day delivery and the flexibility of desktop delivery or "central" delivery as suggestions for user requirements. Retail stores were not listed as user requirements and are not mentioned in the minutes at all.

16. On the following day, July 21, 2005, a meeting of the "Reverse Auction Project Team" was held. A PowerPoint presentation for that meeting summarizes the findings from the representative user group meeting and summarizes the findings from the user survey conducted by Respondent and Accenture. There is no mention of retail stores in this 20-page presentation, although both next-day delivery and the option for desktop or dock delivery are referred to as "key business requirements" identified by the representative user group.

17. No data was gathered nor analysis done of the costs or risks associated with state employees traveling to and from retail stores to procure office supplies covered by Term Contract 615A.

18. No mechanism is in place for payment of the 1.75% E-Procurement fee for all purchases made at retail stores.

19. Gould and Woodall, employees of Respondent, and James Bard ("Bard"), Accenture's Project Manager for the reverse auction pilot program, all testified that the 2005 Request for Proposals (the "RFP") for Term Contract 615A was developed by a "core team" made up of Gould, Woodall, Bard and Caprecia Poole ("Poole"), also from Accenture.

20. Gould, Woodall, and Bard testified that the RFP was modeled after an RFP that recently had been issued in Pennsylvania.

21. Gould also testified that the Pennsylvania RFP did not ask any questions about retail stores and did not use points to score the "technical," or non-price, portion, but used the technical questions to qualify vendors who could then proceed to a reverse auction.

22. Similarly, drafts of the RFP from August 11, 2005, August 15, 2005, and August 22, 2005 had no questions relating to retail stores and did not assign points to the technical questions.

23. On August 24, 2005, in an email to Gould and Woodall, Bard stated that not scoring the technical submittals "may lead to a sub-optimal outcome for the State."

24. On August 25, 2005, internal Accenture emails indicate that Accenture was trying to convince Respondent to score the technical submittal. In one email, Buffie Rodri, Accenture's Project Leader on the reverse auction pilot program, stated that "we'll try to help [Respondent] make the right decisions tomorrow."

25. On August 29, 2005, in an internal Accenture email to Bard, Damian Kelly ("Kelly"), also from Accenture, asked to meet with Bard "on the questions you [Bard] are reworking with Karen and Mervyn" because "I [Kelly] would really like to see these and get an understanding of the impact scores will have against the final cost proposal (e.g. can truly bad scores make the difference in someone bidding \$2m less than a vendor with better answers)."

26. On that same day, however, Bard sent an email to Bernard Donachie from Accenture stating:

P&C Management initially removed all scoring and wanted to have just Yes / No questions during Phase 1 qualify[ing] offerors for [the] Phase 2 reverse auction. We successfully got P&C to change their mind [sic] and now we will be using an Evaluation Committee to score technical proposals submitted during Phase 1.

27. The sudden shift from un-scored, qualifying questions to scored questions, and from no questions about retail stores to retail store questions, was memorialized in an email sent from Bard to Kelly at 3:07 p.m. on August 30, 2005. In this email, Bard stated that:

The team adopted the suggested adjustments to the evaluation questions / point allocation. We also reviewed two scenarios with Mervyn [Gould] and Karen [Woodall] to demonstrate the value of points:

No NC Retail Stores Offeror - this type of offeror will not have [the] opportunity for 20 points across two questions. This translates into these offerors having to have approximately \$500K better pricing offer [sic] than offerors with NC retail stores to remain competitive.

Small business Offeror - this type of offeror will not have [the] opportunity for 20 points across two questions. this translates into these offerors having to have approximately \$500K better pricing offer [sic] than offerors with NC retail stores to remain competitive.

I believe they [Gould and Woodall] understood this and were comfortable.

28. At 4:16 p.m. on August 30, 2005, an hour after sending his email to Kelly, Bard sent an email to Woodall and Gould with a new draft of the technical submittal portion of the RFP containing retail store questions and references to scoring. Also attached to the email was a "scoring guide" listing specific scoring criteria for each question in the technical portion of the RFP. Bard referenced the guide in his cover email in this way: "I took a pass at adding the scoring guide for each question . . . ."

29. On August 31, 2005, one day before the RFP was issued, Bard emailed Poole and Gould, with a copy to Woodall, Tina McLamb, Respondent's E-Procurement Project Director, and others, with a "sensitivity analysis" showing how different point splits would affect small companies. In this email, Bard stated:

At the current 25%-75% split between Technical / Price Submittals, a small company that receives the maximum available Technical Submittal points available to a small company (250 max points - 20 points for two questions that they will likely not earn any points = 230 scored points) will have to have a Price Submittal that is around \$496K less than a large sized company that gets the maximum Technical Submittal points . . .

as the split that was used in awarding Term Contract 615A. Using the figures discussed in Bard's email, a calculation of points per question demonstrates that each point in the Technical Submittal portion of the RFP was equal to \$24,800, and two points were equal to \$49,600.

30. Gould testified that Bard suggested using a total of 1000 points to score the proposals, and that Bard also suggested using the 25%-75% point split.

31. The RFP was issued on September 1, 2005.

32. The RFP was conducted in two phases. During Phase I, each offeror was required to submit a Technical Submittal to Respondent. This non-price portion was worth 250 points out of a total 1000 points. Phase II, worth 750 points, was an online reverse auction, in which the offerors competed against each other to submit the lowest-priced bid.

33. Mangum testified that points never before had been awarded for non-price factors in a commodities term contract procurement administered by Respondent.

34. At the time the RFP was issued, Respondent's employees McLamb, Woodall, and Gould were all aware of the effect that the point split would have on small companies, and Woodall and Gould also were aware of how the point split would affect offerors with no North Carolina retail stores. Woodall acknowledged in her testimony that a small business offeror with no retail stores would have started off 40 points behind a large company offeror with retail stores.

35. As stated in the terms of the RFP itself, the RFP is for the delivery of office supplies ordered through the E-Procurement system. Mangum, the State Purchasing Officer, testified that the E-Procurement system is the only means of ordering authorized by the terms of the RFP, and that delivery is the only method of transferring possession of goods authorized by the terms of the RFP. Orders under \$100 were not included in the scope of the contract; that is, the contract described in the RFP permits purchasers to procure office supplies in amounts less than \$100 outside the contract. Furthermore, the State Purchasing Manual permits purchasers to make emergency purchases outside the constraints of state term contracts generally.

36. Intervenor's Director of State Government and Education Sales, Billy Grimmer, testified that Intervenor's retail stores play no part in Intervenor's delivery of goods under Term Contract 615A nor do they play a part in E-Procurement.

37. The RFP also provides that Respondent "reserves the option to make multiple awards if it is determined to be in the best interest of the State." Mangum testified that Respondent would have the duty (as well as the right) to make a multiple award if such an award would be in the best interests of the State.

38. The RFP instructed offerors to prepare their proposals "simply and economically, providing a straightforward, concise description of the Offeror's ability to meet the requirements of the RFP."

39. The RFP did not specify how many points were assigned to each question in the Technical Submittal, and did not explain to offerors that 20 points would not be available to offerors without retail stores.

40. Offerors were permitted to submit questions about the RFP by September 13, 2005. Prospective offerors submitted numerous questions to Respondent.

41. On September 23, 2005, Respondent issued an addendum to the RFP that contained Respondent's answers to the questions submitted by offerors. Accenture prepared the first draft of Respondent's written answers to these questions.

42. Although offerors asked Respondent specific questions about the scoring method, including but not limited to whether a vendor with more retail locations would be scored higher, Respondent answered that it would "not provide point allocations for questions asked within the RFP" and would "not provide point allocations at the question level for the RFP." Respondent made a conscious decision not to reveal whether or how the questions would be individually scored, choosing specifically not to reveal that offerors with no retail stores could not receive 20 of the 250 available points.

43. Offerors asked numerous specific questions regarding multiple awards. In each case, Respondent referred the offeror to the RFP's provision that Respondent reserved the right to make a multiple award if a multiple award was in the best interests of the State.

44. While the offerors were preparing their proposals, the "core team" (Gould and Woodall from Respondent, and Bard and Poole from Accenture), provided the scoring guide that Bard first sent to Gould and Woodall on August 30, 2005 to the Evaluation Committee. The Evaluation Committee was made up of five members -- including Gould and Woodall -- and one alternate, all employees of Respondent. This group was given the task of scoring the Technical Submittals.

45. Ralph Edelberg ("Edelberg"), a member of the Evaluation Committee, testified that Bard from Accenture presented the scoring guide to the Evaluation Committee.

46. Eleven offerors submitted Phase I proposals in response to the RFP on September 28, 2005.

47. Two of these offerors, Staples, Inc. and Intervenor, were clients of Accenture at the time. Staples, Inc. was featured in Accenture's 2005 Annual Report, and Intervenor paid Accenture over \$30 million between February 2003 and December 2005.

48. There is no evidence of any wrongdoing or impropriety on the part of any employee or representative of Office Depot, Inc. with respect to the RFP or the award of Contract 615A.

49. Although Accenture personnel had the capability to determine whether offerors were clients of Accenture, the Accenture personnel working on the RFP did not do so until after the contract was awarded.

50. Bard, Accenture's project manager on the RFP, testified that he knew that Staples, Inc. was a client of Accenture's as well as an offeror on the RFP, but that he chose not to disclose that fact to Respondent.

51. Respondent did not ask Accenture whether any offerors also were current clients of Accenture.

52. In its proposal, Petitioner promised next-day desktop delivery on over 90% of orders while further offering same-day desktop delivery for items determined critical by the State.

53. The Evaluation Committee scored the proposals using the scoring guide drafted by Accenture. Edelberg testified that he and the other members of the Evaluation Committee did not use the scoring guide rubric as "suggestions" but as actual criteria to be followed.

54. This scoring guide provided that offerors with no retail stores received zero points on two 10-point questions.

55. According to the scoring guide, no points were awarded for next-day delivery, and no points were awarded for same-day delivery, both of which surpassed the requirements for the contract.

56. Under the scoring guide, no points were awarded for experience or past performance on Term Contract 615A. Evaluation Committee member Edelberg testified that, while he was scoring the proposals, he could not keep straight who was currently on the contract and who was not on the contract.

57. The Evaluation Committee finished scoring the Technical Submittals before the online reverse auction, Phase II of the RFP, was held. Staples, Inc. and Intervenor -- both Accenture clients -- finished first and second, respectively, in the scoring of the Technical Submittals.

58. Intervenor received 21 points more than Petitioner on the Technical Submittal. The value of these 21 points was \$520,800.00. However, Respondent chose not to reveal this fact, or any of the Technical Submittal scores, until after the reverse auction.

59. The reverse auction was held on November 2, 2005. Within 24 hours of the reverse auction, each offeror was required to submit a "Price Submittal," a spreadsheet containing pricing for three specific categories of items: Core Items, Generic Items, and Remaining Items.

60. According to the terms of the RFP, the total bid contained in the "Price Submittal" was required to match exactly the offeror's reverse auction bid.

61. Of the eleven bidders participating in the reverse auction, Petitioner submitted the lowest price bid, \$18,220,000.00, winning the reverse auction. Petitioner submitted its Price Submittal of \$18,220,000.00, to Respondent within 24 hours of the reverse auction.

62. Petitioner's Revised Total Price Submittal (after post-bid adjustments made by Respondent) came to \$18,200,178.43. As the lowest-price bidder, Petitioner received the maximum 750 points for Phase II.

63. Intervenor submitted the next lowest price bid at the reverse auction, \$18,261,576.79.

64. Intervenor's Price Submittal total, \$18,259,082.33, did not match its reverse auction bid, but Intervenor's Price Submittal was not rejected by Respondent. Intervenor's Revised Total Price Submittal (again, after post-bid adjustments made by Respondent) came to \$18,237,203.94, and Intervenor received 748 points for Phase II.

65. In Categories A (Core Items) and B (Generic Items) of the Price Submittal, Petitioner's bid was \$1.3 million less than Intervenor's bid in those categories, and Petitioner's bid on three of the four subcategories in Category C (Remaining Items) was an additional \$474,544 less than Intervenor's bid.

66. The other offerors' Revised Total Price Submittals ranged from \$19,484,272.91 to \$29,496,721.53, receiving points ranging from 697 to 284.

67. Intervenor received the most points overall from a combination of its Technical Submittal score and its Price Submittal score.

68. On November 10, 2005, Respondent issued written notice of its decision to award the contract to Intervenor as the "best analyzed value, but not lowest price."

69. Although Woodall and Gould testified that there were administrative costs to adding an additional vendor to the contract, Gould also testified that no analysis was conducted to quantify those costs.

70. Bard testified that a general industry rule is that the cost to manage a contract, per supplier, is approximately \$16,000 a year.

71. If Petitioner had been awarded the contract exclusively, the State would have saved almost \$40,000 a year.

72. If Respondent had awarded part of the contract to Petitioner and part of the contract to Intervenor, the State could have saved more than \$1.7 million a year.

73. The contract was for a three-year term, with an option for three one-year renewals. With the possibility of a six-year contract, the State could have potentially saved more than \$10 million overall by awarding part of the contract to Petitioner and part to Intervenor.

74. Respondent conducted no calculations or analysis to evaluate the potential savings to the State from adding an additional vendor to the contract.

75. Mangum, the State Purchasing Officer, testified that Respondent's goal is to "put out a fair and open bid."

76. Mangum also testified that Respondent should "give all bidders the same target to shoot at," and that Respondent "must ensure all bidders are on a level playing field." Mangum testified that it would be illegal to make changes to an RFP for the benefit of any particular vendor or any class of vendors.

77. After the award to Intervenor, and pursuant to 1 N.C.A.C. § 5B.1519, Petitioner timely submitted a protest letter to the State Purchasing Officer on December 9, 2005.

78. Respondent held its bid protest meeting with Petitioner on January 6, 2006.

79. In a letter dated January 17, 2006, State Purchasing Officer Mangum denied petitioner's bid protest, constituting notice of Respondent's decision under N.C.G.S. § 150B-23(f).

80. Petitioner filed this contested case on January 20, 2006, along with a motion for a preliminary injunction. The undersigned heard the preliminary injunction motion on January 26, 2006, and entered an order denying the motion on February 3, 2006.

81. Petitioner is ready, willing, and able to sell office supplies to the State under Term Contract 615A at the prices set forth in its submittal in response to the RFP.

82. North Carolina General Statutes Section 143-49 (3) provides, in pertinent part, that the Secretary of Administration has the power and authority:

[t]o purchase or to contract for, by sealed, competitive bidding *or other suitable* means, all contractual services and needs of the State government, or any of its departments, institutions, or agencies; or to authorize any department, institution or agency to purchase or contract for such services. (emphasis added).

**CONCLUSIONS OF LAW**

1. The parties properly are before the Office of Administrative Hearings.
2. Petitioner is an aggrieved person under Chapter 150B and is entitled to commence a contested case.
3. Petitioner has satisfied all conditions precedent and all timeliness requirements for initiating this contested case.
4. Petitioner has established by a preponderance of the evidence that Respondent gave Accenture too much control over the drafting and development of the RFP, where very small changes in the RFP and in the scoring guide used to score the proposals could -- and, in fact, did -- determine the outcome of the award.
5. In order to insure fairness and the avoidance of an appearance of impropriety, Respondent must maintain firm control over the RFP process, especially when, as here, new and untested procurement methods are used.
6. By giving Accenture too much control over the drafting and development of the RFP, Respondent acted erroneously, and, hence, the award of Term Contract 615A to Intervenor should be rescinded.
7. Petitioner has established by a preponderance of the evidence that Respondent failed to seek from Accenture full disclosure of potential conflicts of interest, such as client relationships between Accenture and any offerors on the RFP.
8. The evidence does not establish that Accenture and Intervenor engaged in actual collusion.
9. Nevertheless, there is an appearance of impropriety because of Accenture's contemporaneous relationships with Respondent and with Intervenor, and there was an opportunity for collusion.
10. This appearance of impropriety could have been avoided by full disclosure by Respondent and by Accenture.
11. By failing to seek full disclosure of potential conflicts of interest from Accenture, Respondent failed to use proper procedure in developing and scoring the RFP, and, hence, the award of Term Contract 615A to Intervenor should be rescinded.
12. Petitioner has established by a preponderance of the evidence that the RFP was drafted and scored in a manner that prejudiced offerors without retail stores.
13. By drafting and scoring the RFP so that offerors with no retail stores were denied 20 points, Respondent acted erroneously, failed to use proper procedure, and failed to act as required by law or rule, and, hence, the award of Term Contract 615A to Intervenor should be rescinded.
14. Petitioner has established by a preponderance of the evidence that the only method for purchasing supplies permitted under Term Contract 615A is through E-Procurement, and the only method for receiving supplies permitted under Term Contract 615A is through desktop or dock delivery, as directed by the purchaser.
15. By automatically denying 20 points to offerors with no retail stores on a delivery, E-Procurement contract, Respondent acted erroneously, arbitrarily and capriciously, and, hence, the award of Term Contract 615A to Intervenor should be rescinded.
16. Petitioner has established by a preponderance of the evidence that an award including Intervenor and Petitioner could have saved the State more than \$1.7 million a year and was in the best interests of the State of North Carolina.
17. By awarding Term Contract 615A exclusively to Intervenor when there was no evidence that an exclusive award to Intervenor was more advantageous to the State, and when an multiple award could have saved the State more than \$1.7 million a year, Respondent acted arbitrarily and capriciously, and, hence, the award of Term Contract 615A to Intervenor should be rescinded.

18. Petitioner sought summary judgment on the issue of whether Respondent lacked the authority to use a reverse auction in this procurement process. Section 143-53(a)(5) of the General Statutes provides that "[r]everse auctions may only be utilized for the purchase or exchange of supplies, equipment and materials as provided in G.S.115C-522 [relating to the purchase of supplies, equipment, and materials for public schools]." N.C. Gen. Stat. § 143-53(a)(5); *see also* 2002 N.C. Sess. Law 1170, § 3 ("The reverse auctions shall be utilized only for the purchase or exchange of those supplies, equipment, and materials as provided in G.S. 115C-522, for use by the public school systems."). Respondent urged that considerable discretion is given to the Secretary in the procurement of contracts under Article 3, Chapter 143. Although Petitioner's argument raises an interesting issue of law, the undersigned concludes that the use of a reverse auction in the procurement of Term Contract 615A was not improper under the authority granted the Secretary of Administration under G.S. Section 143-49 (3).

19. Petitioner has established by a preponderance of the evidence that Petitioner, the lowest bidder, was fully qualified to perform the contract, and had the ability to provide next-day delivery at no extra charge.

20. Respondent must award the contract to the company(ies) offering "the lowest and best bid(s) most advantageous to the State," or, put another way, to the "lowest responsible bidder or bidders." N.C. Gen. Stat. §§ 143-52, 143-129(b). Under either standard, the point is to give taxpayers the best value, starting with the lowest bidder.

21. Occasionally, a higher bidder is shown to be more advantageous or responsible than the lowest bidder, warranting an award to a higher bidder.

22. There was insufficient evidence that Intervenor, a higher-priced bidder, was either more advantageous or more responsible.

23. Because Petitioner, the lowest-priced bidder, was fully qualified to perform the contract, and because there was no evidence that an award to Intervenor was more advantageous to the State or that Intervenor was more responsible, by awarding the contract to Intervenor over Petitioner, Respondent failed to act as required by law, and, hence, the award of Term Contract 615A to Intervenor should be rescinded.

24. Petitioner has established that the RFP prejudiced small business offerors and offerors without retail stores.

25. Bid "specifications must be so framed as to secure fair competition upon equal terms to all bidders." *Profl Food Servs. Mgmt., Inc. v. N.C. Dep't of Admin.*, 109 N.C. App. 265, 269, 426 S.E.2d 447, 450 (1993).

26. By framing the RFP requirements in a manner that prejudiced offerors without retail stores, particularly when coupled with the intentional non-disclosure of the known prejudice to such offerors, Respondent acted arbitrarily, capriciously, erroneously, and without justification, failed to use proper procedure, and failed to act as required by law, and, hence, the award of Term Contract 615A to Intervenor should be rescinded.

27. At the inception of this proceeding, Petitioner sought a preliminary injunction that would have permitted it to sell office supplies under Term Contract 615A during the pendency of this proceeding. Without the benefit of discovery, Petitioner was unable to make a forecast of evidence sufficient to warrant injunctive relief. The case was heard on the merits on an expedited basis. Having heard all the evidence and having made the above findings of fact and conclusions of law, the undersigned finds that the interests of justice and of the State require that this matter finally be determined in an expeditious manner to avoid further prejudice to Petitioner and to avoid unnecessary expenditures by the State in the performance of Term Contract 615A as it presently is constituted.

### **DECISION**

Based upon the foregoing findings of fact and conclusions of law, the undersigned finds that Respondent's decision to award Term Contract 615A to Office Depot, Inc. is not supported by the evidence, is arbitrary and capricious, is affected by an appearance of impropriety, and is not in the best interest of, nor most advantageous to, the State of North Carolina. Respondent's decision to award Term Contract 615A to Office Depot, Inc. as its single source vendor is REVERSED

### **ORDER**

It hereby is ordered that the agency serve a copy of the final decision on each party's attorney of record and to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714, in accordance with N.C. Gen. Stat. § 150B-36(b).

**NOTICE**

The agency making the final decision in this contested case is required to give each party an opportunity to file exception to this Decision and to present written arguments to those in the agency who will consider this Decision. N.C. Gen. Stat. § 150B-36(a).

The agency is required by N.C. Gen. Stat. § 150B-36(b) to serve a copy of the final decision on all parties and to furnish a copy to the parties' attorneys of record and to the Office of Administrative Hearings. The agency that will make the final decision in this contested case is the North Carolina Department of Administration.

This the 17<sup>th</sup> day of May, 2006.

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Beecher R. Gray  
Administrative Law Judge