

SOUTH CAROLINA STATE REGISTER DISCLAIMER

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SOUTH CAROLINA STATE REGISTER

PUBLISHED BY
THE LEGISLATIVE COUNCIL
of the
GENERAL ASSEMBLY

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Published June 22, 2001

Volume 25 Issue No.6

This issue contains notices, proposed regulations, emergency regulations, final form regulations, and other documents filed in the Office of the Legislative Council, pursuant to Article 1, Chapter 23, Title 1, Code of Laws of South Carolina, 1976.

THE SOUTH CAROLINA STATE REGISTER

An official state publication, *The South Carolina State Register* is a temporary update to South Carolina's official compilation of agency regulations--the *South Carolina Code of Regulations*. Changes in regulations, whether by adoption, amendment, repeal or emergency action, must be published in the *State Register* pursuant to the provisions of the Administrative Procedures Act. The *State Register* also publishes the Governor's Executive Orders, notices or public hearings and meetings, and other documents issued by state agencies considered to be in the public interest. All documents published in the *State Register* are drafted by state agencies and are published as submitted. Publication of any material in the *State Register* is the official notice of such information.

STYLE AND FORMAT OF THE SOUTH CAROLINA STATE REGISTER

Documents are arranged within each issue of the *State Register* according to the type of document filed:

Notices are documents considered by the agency to have general public interest.

Notices of Drafting Regulations give interested persons the opportunity to comment during the initial drafting period before regulations are submitted as proposed.

Proposed Regulations are those regulations pending permanent adoption by an agency.

Pending Regulations Submitted to General Assembly are regulations adopted by the agency pending approval by the General Assembly.

Final Regulations have been permanently adopted by the agency and approved by the General Assembly.

Emergency Regulations have been adopted on an emergency basis by the agency.

Executive Orders are actions issued and taken by the Governor.

2001 PUBLICATION SCHEDULE

Documents will be accepted for filing on any normal business day from 8:30 A.M. until 5:00 P.M. All documents must be submitted in the format prescribed in the Standards Manual for Drafting and Filing Regulations.

To be included for publication in the next issue of the *State Register*, documents will be accepted no later than 5:00 P.M. on any closing date. The modification or withdrawal of documents filed for publication must be made **by 5:00 P.M.** on the closing date for that issue.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Submission Deadline	1/12	2/9	3/9	4/13	5/11	6/8	7/13	8/10	9/14	10/12	11/9	12/14
Publishing Date	1/26	2/23	3/23	4/27	5/25	6/22	7/27	8/24	9/28	10/26	11/23	12/28

REPRODUCING OFFICIAL DOCUMENTS

All documents appearing in the South Carolina *State Register* are prepared and printed at public expense. All media services are especially encouraged to give wide publicity to all documents printed in the *State Register*.

PUBLIC INSPECTION OF DOCUMENTS

A copy of each document filed with the Office of the State Register is available for public inspection during normal office hours, 8:30 A.M. to 5:00 P.M., Monday through Friday. The Office of the State Register is in the Legislative Council, Fourth Floor, Rembert C. Dennis Building, 1000 Assembly Street, in Columbia. Telephone inquiries concerning material in the *State Register* or the *South Carolina Code of Regulations* may be made by calling (803) 734-2145.

CERTIFICATE

Pursuant to Section 1-23-20, Code of Laws of South Carolina, 1976, this issue contains all previously unpublished documents required to be published and filed before the closing date of the issue.

Lynn P. Bartlett
Editor

ADOPTION, AMENDMENT AND REPEAL OF REGULATIONS

To adopt, amend or repeal a regulation, an agency must publish in the *State Register* a Notice of Drafting; a Notice of the Proposed Regulation that contains an estimate of the proposed action's economic impact; and, a notice that gives the public an opportunity to comment on the proposal. If requested by twenty-five persons, a public hearing must be held at least thirty days after the date of publication of the notice in the *State Register*.

After the date of hearing, the regulation must be submitted to the General Assembly for approval. The General Assembly has one hundred twenty days to consider the regulation. If no legislation is introduced to disapprove or enacted to approve before the expiration of the one-hundred-twenty-day review period, the regulation is approved on the one hundred twentieth day and is effective upon publication in the *State Register*.

EMERGENCY REGULATIONS

An emergency regulation may be promulgated by an agency if the agency finds imminent peril to public health, safety or welfare. Emergency regulations are effective upon filing for a ninety-day period. If the original filing began and expired during the legislative interim, the regulation can be renewed once.

REGULATIONS PROMULGATED TO COMPLY WITH FEDERAL LAW

Regulations promulgated to comply with Federal Law are exempt from General Assembly review. Following the notice of proposed regulation and hearing, regulations are submitted to the *State Register* and are effective upon publication.

EFFECTIVE DATE OF REGULATIONS

Final Regulations take effect on the date of publication in the *State Register* unless otherwise noted within the text of the regulation.

Emergency Regulations take effect upon filing with the Legislative Council and remain effective for ninety days. If the original ninety-day period begins and expires during legislative interim, the regulation may be renewable once.

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SUBSCRIPTIONS

The *State Register* is published on the fourth Friday of each month by the Legislative Council of the General Assembly of the State of South Carolina. Subscription rate is \$95.00 per year postpaid to points in the United States. Partial subscriptions may be ordered at the rate of \$8.00 per issue for the remainder of a subscription term. Subscriptions begin July 1 and end June 30.

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P.O. Box 11489
Columbia, South Carolina 29211**

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Enclosed is my check or money order for \$_____. Date _____

Name _____

Address _____

Telephone _____

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 South Carolina General Assembly Home Page: www.scstatehouse.net

DOC NO.	RAT NO.	FINAL SR	SUBJECT	EXP. DATE	AGENCY
1981	SR25-1		Policy Development	1 12 01	Board of Education
1984	SR25-1		Principal Evaluation	1 12 01	Board of Education
2481	SR25-2		School Transportation	1 24 01	Board of Education
2504	SR25-2		Environmental Protection Fees	1 27 01	Department of Health and Envir Control
2502	SR25-2		Public Pupil Transportation Services	2 04 01	Board of Education
2485	SR25-3		(Repeal) Credit and Discount Plans	2 20 01	Department of Insurance
2487	SR25-3		(Repeal) Merit Rating Plan	2 20 01	Department of Insurance
2486	SR25-3		(Repeal) Refusal to Write, Cancellation	2 20 01	Department of Insurance
2511	SR25-3		Hunt Units and WMA's	2 20 01	Department Natural Resources
2503	SR25-3		Optional State Supplementation Prog	2 27 01	Health and Human Services Commission
2507	SR25-3		Student Loan Corp, Repayment	3 06 01	Commission on Higher Education
2514	SR25-4		LIFE, Palmetto Fellows Sch Appeals	3 12 01	Commission on Higher Education
2521	SR25-4		(Repeal) Loan Eligibility Requirements	3 24 01	Jobs-Economic Development Authority
2497	SR25-5		Quarantine of Garbage Fed Swine	4 22 01	Clemson University
2496	SR25-5		Brucellosis Testing	4 22 01	Clemson University
2530	SR25-5		Waste Disp Sites, Landfill Design, Const	5 09 01	Department of Health and Envir Control
2532	SR25-5		SWM: Off Site Treatment Contam Soil	5 09 01	Department of Health and Envir Control
2528	SR25-5		Adjustment of Dollar Amounts	5 09 01	Board of Financial Institutions
2548	SR25-5		Contact with Patients Before Prescribing	5 09 01	LLR: Board of Medical Examiners
2549	SR25-5		Registration of Licenses	5 09 01	LLR: Long Term Health Care Admin
2550	R35 SR25-4		Physician Supervision of Nurses	5 09 01	LLR: Board of Medical Examiners
2526	SR25-5		Licensure Requirements	5 09 01	LLR: Board of Professional Counselors...
2538	SR25-5		X-Rays (Title B)	5 09 01	Department of Health and Envir Control
2579	SR25-5		Practices of Real Estate Appraisers	5 09 01	LLR: Real Estate Appraisers Board
2575	SR25-5		Forms of Practice	5 09 01	LLR: Board of Accountancy
2531	SR25-5		Stds Lic Fac Chem Depend/Addicted Per	5 09 01	Department of Health and Envir Control
2576	SR25-5		Continuing Education	5 09 01	LLR: Board of Architectural Exam
2551	SR25-5		Valuation of Life Insurance Policies	5 09 01	Department of Insurance
2578	R34 SR25-4		Official Identification	5 09 01	LLR: Board of Nursing
2553	R26 SR25-4		Annuity Mortality Tables	5 09 01	Department of Insurance
2525	SR25-5		Adjustment of Dollar Amounts	5 09 01	Department of Consumer Affairs
2547	SR25-5		Seed Certification Standards	5 09 01	Clemson University/Crop Pest Comm
2585	SR25-5		Reduct, Expan, Consolid, Closure, Instit	5 09 01	Commission on Higher Education
2574	SR25-5		Practices of Auctioneers Comm	5 11 01	LLR: Auctioneers Commission
2559	SR25-6		STAR Diploma	5 16 01	Board of Education
2572	SR25-6		Water Classifications and Standards	5 18 01	Department of Health and Envir Control
2457	SR25-6		Septic Tank Site Evaluation Fees	5 21 01	Department Health and Envir Control
2523	SR25-6		Sales Tax: Med, Prosthetic, Hearing Aids	5 23 01	Department of Revenue
2563	SR25-6		Definition of Facility Chap 6, Title 12	5 23 01	Department of Revenue
2561	SR25-6		Definition of Facility Chap 37 Title 12	5 23 01	Department of Revenue
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2552	SR25-6		Adjustment of Claims Unusual Circum	5 29 01	Department of Insurance
2568	SR25-6		Teaching Exp Acceptable for Credit	5 31 01	Board of Education
2571	SR25-6		Other Experience Acceptable for Credit	5 31 01	Board of Education
2565	SR25-6		Computing the Experience of Teachers	5 31 01	Board of Education

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2570		SR25-6	Student Teachers	5 31 01	Board of Education
2595		SR25-6	Chapter Revision	6 01 01	LLR: Engineers & Land Surveyors
2596	R27	SR25-4	Port of Charleston: Short Branch Qualif	6 01 01	LLR: Commissioners of Pilotage
2597		SR25-6	Admission of Expert's Report as Evidence	6 05 01	Workers' Compensation Commission
2580		SR25-6	Service Contracts	6 05 01	Department of Insurance
2582		SR25-6	Captive Insurance Companies	6 05 01	Department of Insurance
2558		SR25-6	Principal Evaluation Program	6 05 01	Board of Education
2583		SR25-6	Reinsurance Facility Recoupment	6 06 01	Department of Insurance
2541	R109	SR25-7	Lic Comm Residential Care Facilities	6 13 01	Department of Health and Envir Control
2533	R111	SR25-7	Criminal Justice Information System	6 27 01	Law Enforcement Division
2577	R59	SR25-6	Auth Prescriptions by Nurse Practitioner	7 04 01	LLR: Board of Nursing
2605	R60	SR25-6	Physician Assistants	7 04 01	LLR: Board of Medical Examiners

Sine Die Adjournment June 7, 2001
2002 Revised Expiration Dates

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2581			Continuing Insurance Education	1 15 02	Department of Insurance
2600			Need-based Grants Program	1 22 02	Commission on Higher Education
2601			Palmetto Fellows Scholarship Program	1 22 02	Commission on Higher Education
2569			Types and Levels of Credential Classif	1 27 02	Board of Education
2602			Hunt Units and Wildlife Management	2 04 02	Department of Natural Resources
2609			State Human Resources	2 26 02	Budget and Control Board
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2616			Well Standards	3 10 02	Department of Health and Envir Control
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2620			Percentage Storm or Wind/Hail Deduct	3 26 02	Department of Insurance
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2621			Retail Managers; Finance Managers	4 01 02	LLR: Manufactured Housing Board
2586			Definition of a Limousine	4 13 02	Public Service Commission
2629			Specific Project Stds for Tidelands Coastal	4 21 02	Department of Health and Envir Control
2614			Defin, Permits, Sts for Tidelands Coastal	4 21 02	Department of Health and Envir Control
2626			Licensing Nonpublic Postsecondary Ed Instit	5 01 02	Commission on Higher Education
2610			In Car Camera Videotaping Equipment	5 06 02	Department of Public Safety
2611			Highway Patrol, Wrecker Regulations	5 06 02	Department of Public Safety

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DOC NO.	DATE	SUBJECT	AGENCY
2248	4 14 99	Primary and Substantial Portion (Video Game Machines)	Department of Revenue

REQUEST TO WITHDRAW (120 DAY REVIEW PERIOD TOLLED)

DOC NO.	DATE	SUBJECT	AGENCY
2573	4 24 01	Food Stamp Program	Department of Social Services
2603	5 31 01	End-of-Course Tests	Board of Education
2564	5 31 01	Accreditation Criteria	Board of Education

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DOC NO.	DATE	SUBJECT	AGENCY
2360	1 17 01	LIFE Scholarship	Commission on Higher Education

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DOC NO.	DATE	SUBJECT	AGENCY
2433	1 31 01	Hearing Aids; Augmen Comm Devices	LLR: Speech-Language Path &
2469	1 31 01	Volunteer Pharm Tech Free Med Clinics	LLR: Board of Pharmacy
2193	2 28 01	Video Poker; Def "Single Place" ...	Department of Revenue

4 NOTICES

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL CHAPTER 61

ERRATA

R.61-47, Shellfish, was last amended by Document 2461, effective May 26, 2000. This erratum is being published to correct a typographical error at 61-47.C.2(b)(4)(i). The word "sucking" is corrected to "shucking." This section is corrected to read as follows:

C.2(b)(4)(i). The lid, and side wall or bottom, of all packages of shucked or frozen shucked shellfish with a net weight of sixty-four fluid ounces or more shall legibly display the word "SHUCKED" followed by the actual date of shucking.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL CHAPTER 61

ERRATA

R.61-68, Water Classifications and Standards, was last amended by State Register Document No. 2572 published in the State Register on June 22, 2001. This errata is being published to correct errors as follows:

1. At Appendix, Priority Toxics Pollutants list, #75 is incorrectly spelled "Ideno 1,2,3 - (cd) Pyrene." This listing is corrected to read: "Indeno 1,2,3 - (cd) Pyrene."
2. At Appendix, Non-Priority Pollutants list, #23 on the list is published as "Ether, Cis-1,2-dichloroethylene" and is corrected to read "Cis-1,2-dichloroethylene."
3. At Appendix, Non-Priority Pollutants list, delete #58, published as "1,2,4-trichlorobenzene," since it is published correctly in the Priority Pollutants list as #82.
4. At Appendix, Organoleptic Effects list, #2 is listed as "Monochlorobenzene" and listed elsewhere in the Appendix as "chlorobenzene." Monochlorobenzene and chlorobenzene are two names for the same compound. For consistency throughout the Appendix, #2 is corrected to read "Chlorobenzene."
5. At Appendix, Organoleptic Effects list, #10 is incorrectly spelled "2,4,6-Trichloropehnol." This listing is corrected to read: "2,4,6-Trichlorophenol."

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

In accordance with Section 44-7-200(C), Code of Laws of South Carolina, the public is hereby notified that a Certificate of Need application has been accepted for filing and publication June 22, 2001, for the following project(s). After the application is deemed complete, affected persons will be notified that the review cycle has begun. For further information, please contact Mr. Albert N. Whiteside, Director, Division of Planning and Certification of Need, 2600 Bull St., Columbia, SC 29201 at (803) 737-7200.

Affecting Beaufort County

Establishment of a separately licensed office for the existing licensed agency to serve Beaufort and Jasper Counties in order to meet HCFA regulations.

Winyah Home Health Care of the Low Country, LLC
Hilton Head, South Carolina

Project Cost: \$ 3,000

Affecting Charleston County

Renovation to add 57,000 square feet for outpatient radiation oncology, mammography screening, administrative offices and education and meeting facilities.

Medical University of South Carolina Hospital Authority

Charleston, South Carolina

Project Cost: \$ 28,758,960

Purchase of a 3.0 Tesla Magnetic Resonance Imaging (MRI) unit for a total of 3 MRI units.

Medical University of South Carolina Hospital Authority

Charleston, South Carolina

Project Cost: \$ 4,261,909

Establishment of an ambulatory surgery center with two (2) operating rooms.

Surgery Center of Charleston

Charleston, South Carolina

Project Cost: \$ 724,632

Major renovation and expansion of the hospital to include: upgrade of one Computed Tomography (CT) Scanner and one Linear Accelerator, replacement of one CT Scanner and one Linear Accelerator, and development of an Electrophysiology (EP) Lab, with no change in the current licensed bed capacity of the hospital.

Trident Medical Center

Charleston, SC

Project Cost: \$ 59,830,826

Affecting Florence County

Expansion and relocation of the existing ambulatory surgery center for a total of five (5) operating rooms and one (1) cystoscopy suite.

McLeod Ambulatory Surgery Center

Florence, South Carolina

Project Cost: \$ 5,890,805

Affecting Florence County

Construction and development of a free-standing ambulatory surgery center with four (4) operating rooms, two (2) procedure rooms and pre- and post-operative areas for multispecialty surgical and endoscopic procedures.

Physicians Surgical Center of Florence

Florence, South Carolina

Project Cost: \$ 7,119,360

Affecting Horry County

Purchase of a 1.5 Tesla Magnetic Resonance Imaging (MRI) unit and construction of space in a private physician's office.

Ocean Magnetic Resonance Imaging

Myrtle Beach, South Carolina

Project Cost: \$ 2,911,363

Affecting Jasper County

6 NOTICES

Establishment of a separately licensed office for the existing licensed agency to serve Beaufort and Jasper Counties in order to meet HCFA regulations.

Winyah Home Health Care of the Low Country, LLC

Hilton Head, South Carolina

Project Cost: \$ 3,000

In accordance with S.C. DHEC Regulation 61-15, the public and affected persons are hereby notified that the review cycle has begun for the following project(s) and a proposed decision will be made within 60 days beginning June 22, 2001. "Affected persons" have 30 days from the above date to submit comments or requests for a public hearing to Mr. Albert N. Whiteside, Director, Division of Planning and Certification of Need, 2600 Bull Street, Columbia, S.C. 29201. For further information call (803) 737-7200.

Affecting Charleston County

Construction and renovation of Bon Secours St. Francis Xavier Hospital to accommodate sixty (60) medical/surgical beds transferred from Roper Hospital North, resulting in a total licensed capacity of 201 beds at Bon Secours St. Francis Xavier, and forty-four (44) alcohol and drug abuse beds at Roper Hospital North.

Project Cost: \$18,058,000

Affecting Darlington County

Expansion of the current Surgical Services Department by adding two (2) new operating room suites, holding and PACU areas and waiting/reception space.

Carolina Pines Regional Medical Center

Hartsville, South Carolina

Project Cost: \$ 3,653,397

Affecting Greenville County

Replacement of one (1) of the two (2) existing Computed Tomography (CT) Scanners at the hospital.

St. Francis Hospital, Inc.

Greenville, South Carolina

Project Cost: \$ 881,800

Affecting Kershaw County

Construction of a three story addition and major renovation for the expansion of existing services.

Kershaw County Medical Center

Camden, South Carolina

Project Cost: \$ 15,500,000

Affecting Newberry County

Establishment of a Magnetic Resonance Imaging (MRI) service through the use of a mobile MRI unit.

Newberry County Memorial Hospital

Newberry, South Carolina

Project Cost: \$ 610,000

Affecting Oconee County

Renovation of the first floor of the hospital for the addition of two (2) endoscopy suites for a total of four (4) endoscopy suites; relocation of the pharmacy and relocation of the outpatient rehabilitation area to a medical office building on the campus.

Oconee Memorial Hospital, Inc.

Seneca, South Carolina

Project Cost: \$ 2,203,827

Affecting Orangeburg County

Replacement of the existing GE 1.0 Tesla Magnetic Resonance Imaging (MRI) unit with a 1.5 Tesla MRI unit.

The Regional Medical Center of Orangeburg and Calhoun Counties

Orangeburg, South Carolina

Project Cost: \$ 2,042,975

Affecting York County

Lease of space in Baxter Village for the development of an urgent care center.

Piedmont Healthcare System

Rock Hill, South Carolina

Project Cost: \$2,198,538

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

PUBLIC NOTICE

Section IV of R.61-98, the State Underground Petroleum Environmental Response Bank (SUPERB) Site Rehabilitation and Fund Access Regulation, requires that the Department of Health and Environmental Control evaluate and certify site rehabilitation contractors to perform site rehabilitation of releases from underground storage tanks under the State Underground Petroleum Environmental Response Bank (SUPERB) Act. Pursuant to Section IV.B.1., the Department is required to place a list of those contractors requesting certification on public notice and accept comments from the public for a period of thirty (30) days. If you wish to provide comments regarding the companies and individuals listed below, please submit your comments in writing, no later than July 23, 2001 to:

Contractor Certification Program

South Carolina Department of Health and Environmental Control

Bureau of Underground Storage Tank Management

Attn: Barbara Boyd

2600 Bull Street

Columbia, SC 29201

The following companies and individuals have applied for certification as Underground Storage Tank Site Rehabilitation Contractors:

Class I

Class II

Carolina Technical Services, Inc.

8 NOTICES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

PUBLIC NOTICE

The Department of Health and Human Services (DHHS) hereby gives notice of the availability of the “FFY-2002 Social Services Block Grant (SSBG) Pre-Expenditure Report” to the citizens of South Carolina for review and comment. The report reflects plans of the DHHS/State of South Carolina to expend SSBG funds for the 2002 fiscal year, October 1, 2001 through September 30, 2002.

This notice is given pursuant to the requirements of Title XX, Section 2004 of the Social Security Act (as enacted in the Omnibus Budget Reconciliation Act of 1981 [P.L. 97-35] and codified at 42 U.S.C. 1397c). Comments regarding this notice will be accepted for a period of thirty days from the date it is posted.

Written comments about the FFY-2002 Pre-Expenditure Report may be submitted to the Bureau of Community Services, Department of Health and Human Services, Post Office Box 8206, Columbia, South Carolina 29202-8206. Any written comments submitted may be reviewed by the public at the Department of Health and Human Services, Division of Program Development, 8th floor – room 810, 1801 Main Street, Columbia, South Carolina, Monday through Friday between the hours of 9:00 A.M. and 5:00 P.M.

A copy of the final and complete FFY-2002 report may be obtained through written request to the DHHS address listed above or it may be accessed through the DHHS Internet site on the World Wide Web at <http://www.dhhs.state.sc.us>. Final Versions of the full report will also be on file in the state’s public libraries.

**Department of Health and Human Services
FY 2002 Pre-Expenditure Report**

SERVICE NAME	ADULTS	CHILDREN	TOTAL FUNDS
Adoption Services		\$153,250	\$153,250
Case Management*	\$82,596	\$55,064	\$137,660
Counseling Services	\$298,771	\$264,947	\$563,718
Day Care Adults	\$255,705		\$255,705
Day Care Children		\$3,911,945	\$3,911,945
Education/Training Services	\$341,870		\$341,870
Foster Care Services - Children		\$5,187,211	\$5,187,211
Home Based Services	\$2,955,450	\$985,150	\$3,940,600
Home Delivered Meals	\$997,791		\$997,791
Prevention/Intervention		\$1,453,679	\$1,453,679
Protective Services Adults	\$2,601,334		\$2,601,334
Protective Services Children**		\$6,032,561	\$6,032,561
Special Services for the Disabled	\$78,425		\$78,425
Transportation	\$13,959	\$5,983	\$19,942
Other Services	\$138,992	\$492,789	\$631,781
TOTAL SERVICE DOLLARS	\$7,764,893	\$18,542,579	\$26,307,472
DHHS Administration			\$1,932,308
TOTAL OTHER EXPENDITURES			\$1,932,308
GRAND TOTAL**			\$28,239,780

Note: The SSBG program does not pay more than 8% indirect cost rate for purchase of services and training.

*For purchased services case management from providers other than SCDSS.

** Includes transfer of \$4,248,632 from TANF to SSBG.

10 NOTICES

SERVICES FUNDED IN TOTAL OR IN PART BY SSBG

Adoption Preservation Services are provided to maintain, support and strengthen a family created through adoption.

Adult Protective Services are available to protect incapacitated adults from abuse, neglect and exploitation, and if possible, to help them resume their role as primary protector of themselves.

Child Care and Development provides supervised, planned developmental activities and nutritious meals and snacks to children through 12 years of age or through 18 years of age if the child has special needs. The service is available to parents or caretakers who are working, in school or in training; to children in need of protection; and to children who are handicapped.

Child Protective Services are provided to families whose children have been abused or neglected and also includes temporary emergency placement of children as a service component.

Day Care for Adults is offered to individuals who require hands-on assistance with any two activities of daily living or who may require supervision in a structured environment due to moderate memory or cognitive impairment and who lack other formal or informal resources.

Family Management Counseling includes an array of services to enhance self-sufficiency, knowledge, skills and coping mechanisms provided to individuals or families at risk of entry into a more restrictive living environment or service system.

Foster Care Services include assessment of abused, neglected or abandoned children's needs; case planning and management to assure that children receive proper care in a licensed or approved environment; room and board or medical care; counseling of the child, the child's parents and foster parents; and referral and assistance in obtaining other necessary supportive services.

Flex Funds are made available to DSS caseworkers to enhance their ability to meet the individual needs of children and families in order to prevent child abuse/neglect, out-of-home placements, disruption in foster and adoptive placements, or to facilitate family reunification or adoption. **(Listed within the SSBG Plan under federal definition - Prevention/Intervention Services)**

Home Based Treatment Services are time-limited clinical interventions designed to defuse crises that threaten a child's stability within the home environment. **(Listed in the SSBG Plan under the federal services definition-Prevention/Intervention Services)**

Home Delivered Meals are provided to individuals of any age who are homebound because of a physical or mental disability.

Homemaker Services are offered to adults and children receiving protective services and to individuals who are frail, chronically ill or disabled, and who do not qualify for Medicaid-sponsored skilled or intermediate nursing care. **(Listed in the SSBG Plan under the federal service definition Home Based Services)**

Socialization and Developmental Services are provided to children 17 years of age and under and are designed to enable the child to develop socially, physically and emotionally. **(Listed in the SSBG Plan under federal service definition for Other Services)**

Special Services for Handicapped and Disabled Adults provide habilitative and rehabilitative services to assist individuals in attaining the highest possible level of functioning and independence.

Special Services for the Pregnant Woman are available to expectant mothers who are in need of out-of-home placement to ensure the health and safety of the mother and unborn child, and to help with concerns related to pregnancy. It also includes services to parents of young children to assist them in achieving independence and providing nurturing care for their children.**(Listed in the SSBG Plan under federal service definition for Other Services)**

Training includes the DHHS Training Fund and supports training of SCDSS caseworkers. The DHHS Training Fund is designed to promote quality service provision to individuals and families by making funds for training and conferences available to all SSBG providers.

Transportation Services are provided to elderly or physically or mentally handicapped adults or children who have no available means of transportation to access SSBG services or to such places as the grocery store, doctor's office, pharmacy, or food stamp office.

12 DRAFTING

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL CHAPTER 61

Statutory Authority: Section 38-33-10, *et seq.*

Notice of Drafting:

The Department of Health and Environmental Control (DHEC) proposes to repeal 24 S.C. Code Ann. Regs. 61-10, Operation of Health Maintenance Organizations. Interested persons may submit written comments to Jerry L. Paul, Director, Division of Health Licensing, S.C. Department of Health and Environmental Control, 2600 Bull Street, Columbia, S.C. 29201. To be considered, all comments must be received no later than 5:00 p.m., July 23, 2001, the close of the drafting comment period.

Synopsis:

Changes were made to the SC Code of Laws (Section 38-33-10 *et seq.* and 25A Regs. 69-22) that placed licensing and supervision of Health Maintenance Organizations under the control of the South Carolina Department of Insurance. Due to the fact that DHEC no longer has any role in regulating Health Maintenance Organizations, repeal of Regulation 61-10 is appropriate.

Legislative review of this proposal will be required.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL CHAPTER 61

Statutory Authority: S.C. Code Sections 44-1-50 and 48-1-110

Notice of Drafting:

The Department of Health and Environmental Control proposes to revise Regulation 61-67, Standards for Wastewater Facility Construction. Interested persons are invited to present their views in writing to Jeff deBessonnet, Director, Water Facilities Permitting Division, 2600 Bull St., Columbia, S.C. 29201. To be considered, comments must be received before 5:00 p.m. on July 23, 2001, the close of the drafting comment period.

Synopsis:

The Department will consider revisions including, but not limited to, the use of vacuum sewer systems and criteria for alternative collection system use. The Department will also consider the consistency of administrative and technical review issues in comparison with the drinking water standards (R.61-58). The Department will evaluate changes in pump and haul criteria, service connection and water supply intake definitions, criteria for sewer design related to infiltration and inflow, rules for application submittal requirements and available capacity at treatment plant determinations. The Department will consider other minor changes and issues needed to clarify the existing regulation.

Legislative review will be required.

DEPARTMENT OF REVENUE

CHAPTER 7

Statutory Authority: 1976 Code Section 12-4-320 and 61-2-60

Notice of Drafting:

The South Carolina Department of Revenue is considering repealing SC Regulations 7-34 and 7-49 concerning alcoholic liquor advertising by wholesalers and retailers since the U.S. Supreme Court, in 44 Liquormart v. Rhode Island, 517 U.S. 484 (1996), held unconstitutional a similar Rhode Island statute that prohibited price advertising of alcoholic liquors.

Interested persons may submit written comments to Meredith F. Cleland, South Carolina Department of Revenue, Legislative Services, P.O. Box 125, Columbia, SC 29214. To be considered, comments must be received no later than 5:00 p.m. on August 8, 2001.

Synopsis:

The South Carolina Department of Revenue is considering repealing SC Regulation 7-34 and 7-49 concerning alcoholic liquor advertising by wholesalers and retailers since the U.S. Supreme Court, in 44 Liquormart v. Rhode Island, 517 U.S. 484 (1996), held unconstitutional a similar Rhode Island statute that prohibited price advertising of alcoholic liquors.

DEPARTMENT OF REVENUE

CHAPTER 117

Statutory Authority: 1976 Code Section 12-4-320

Notice of Drafting:

The South Carolina Department of Revenue is considering amending various administrative, license tax, income tax, and property tax regulations to change references to the former tax commission to the Department of Revenue and to correct references to various code sections that have been changed due to recodification of administrative and income tax laws in Title 12.

Interested persons may submit written comments to Meredith F. Cleland, South Carolina Department of Revenue, Legislative Services, P.O. Box 125, Columbia, SC 29214. To be considered, comments must be received no later than 5:00 p.m. on August 8, 2001.

Synopsis:

The South Carolina Department of Revenue is considering amending various administrative, license tax, income tax, and property tax regulations to change references to the former tax commission to the Department of Revenue and to correct references to various code sections that have been changed due to recodification of administrative and income tax laws in Title 12.

14 DRAFTING

SECRETARY OF STATE

CHAPTER 113

Statutory Authority: Senate Bill 498, Ratification No. 128

Notice of Drafting:

The Secretary of State proposes to draft regulations concerning the filing of Uniform Commercial Code financing statements and related filings along with search standards for these filings. Interested persons may submit comments to Mr. Neil Rashley, Deputy Secretary of State, Secretary of State's Office, P.O. Box 11350, Columbia, S.C. 29211. To be considered, comments must be received no later than 5:00 p.m. on July 27, 2001, the close of the drafting comment period.

Synopsis:

The General Assembly passed S. 498 during the 2001 legislative session (R128, ratified June 7, 2001). This bill provides for a major revision of the Uniform Commercial Code, in particular to Article 9 dealing with secured transactions and the Secretary of State's Office. New section 36-9-526 provides that the Secretary of State "shall adopt and publish rules to implement" chapter 5 of that section concerning the filing of financing statements and related documents. Promulgation of these rules will harmonize the Secretary of State's practices with those of other filing offices in other jurisdictions. These rules, while not identical to those of other jurisdictions, will be consistent with chapter 5, with the Model Rules promulgated by the International Association of Corporate Administrators and with other jurisdictions' rules.

The proposed regulations pertain to the delivery of documents to the Secretary of State, filing fees and methods of payment, acceptance and refusal of documents, the UCC information management system, filing and data entry procedures, and search requests and reports.

The Secretary of State does not presently intend to promulgate regulations, as proposed by the Model Rules, concerning electronic filing standards, as the necessary technology is not in place. These issues may be reviewed at a later date.

Legislative review of this proposal will be required.

Document No. 2565
DEPARTMENT OF EDUCATION
 CHAPTER 43
 Statutory Authority: S.C. Code Ann Sections 59-5-60 (1990)

43-57.1. Computing the Experience of Teachers.

Synopsis: Promulgation of the amendment and replacement of Regulation 43-57.1 is recommended by the State Department of Education. The amendments define the length of the school day and allow the use of summer school experience to complete a partial year of experience.

Instructions: Amend and replace in its entirety Regulation 43-57.1, Computing Experience of Teachers, in Chapter 43 of regulations.

Text: R 43-57.1. Computing the Experience of Teachers.

A. In the computation of experience credit, the following conditions will apply.

1. Full-time equivalents (FTEs) of the 190-day school year will be utilized as the basis of computation. The minimum experience to be credited shall be one-tenth (.1) FTE per year; the maximum experience to be credited shall be one (1) FTE per year. A school day is defined as a minimum of seven hours.
2. One year of experience may be credited provided the teacher is employed in a full-time position for a minimum of eight-tenths (.8) of the contract year but in no case fewer than 152 days.
3. Partial-year experience may be utilized to compute full years of experience provided the sum of the partial experience meets the requirement stated in number 1, above.
4. Summer school teaching credit will be calculated at the rate of two (2) days of summer school as the equivalent of one (1) regular school day provided the teacher works one (1) session for four (4) hours per day or at the rate of one (1) regular school day provided the teacher works two (2) sessions for eight (8) hours per day. Summer school teaching credit may be added to partial years of experience.

Fiscal Impact Statement: None

Document No. 2571
DEPARTMENT OF EDUCATION
 CHAPTER 43
 Statutory Authority: S.C. Code Ann Sections 59-5-60 (1990)

43-57.3. Other Experience Acceptable for Credit.

Synopsis: Promulgation of the repeal of Regulation 43-57.3 is recommended by the State Department of Education. The items in Regulation 43-57.3 are subsumed under Regulation 43-57.2, Teaching Experience Acceptable for Credit.

Instructions: Repeal in its entirety Regulation 43-57.3, Other Experience Acceptable for Credit, in Chapter 43 regulations.

Text: R 43-57.3. Other Experience Acceptable for Credit.

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To receive experience credit, employment must meet the requirements for full-time or half-time employment as stated in Regulation 43-57.1 (Computing Credit for Teachers).

1. Serving in a professional education position in a public elementary and/or secondary school system or in a private and/or parochial elementary and/or secondary school provided the applicant had an earned undergraduate degree prior to the period of employment.
2. Serving in a professional education position in a regionally or nationally accredited institution of higher education or one that has teacher education programs approved by the South Carolina State Board of Education.
3. Serving in a professional education position at a United States Office of Education or Regional Office of United States Office of Education.
4. Serving as a teacher's aide provided the applicant has an earned undergraduate degree prior to the period of employment.
5. Experience credit may be earned as a psychologist or counselor in a mental health or other family support program provided the experience was with school age persons.
6. Serving in a professional education position in a city, county, state or federal educational system which supports the primary education program for a school age or adult population. The applicant must provide an official description of the professional duties for which the applicant wishes to receive experience credit. These duties must have been connected to the primary educational program through teaching, education administration, curriculum development, or teacher training.
7. Trade and Industry experience credit will follow current regulations and guidelines issued by the State Board of Education.

Fiscal Impact Statement: None

Document No. 2558

DEPARTMENT OF EDUCATION

CHAPTER 43

Statutory Authority: S.C. Code Ann. Section 59-5-60 (1990) and
S.C. Code Ann. Section 59-24-40 (Supp. 1999)

43-165.1. Principal Evaluation Program

Synopsis:

The Department proposes to repeal and replace in its entirety the Principal Evaluation Program Regulation to reflect amendments in S.C. Code Ann. Section 59-29-40 (Supp.1999). Statewide performance standards and criteria for principal evaluation have been identified. The regulation will provide a framework to ensure appropriate implementation of the Principal Evaluation Program using the standards and criteria as the foundation for all processes used for assisting, developing, and evaluating principals. Areas addressed include purpose, definitions, participation, procedures, maintenance, appeals, training requirements, implementation, and administration of the program. A name change is recommended to be more inclusive of all components in the law. It is recommended that the name "Principal Evaluation Program" be changed to "Program for Assisting, Developing, and Evaluating Principal Performance".

Instructions: Repeal and replace in its entirety the Principal Evaluation Program Regulation 43-165.1, Principal Evaluation Program, in Chapter 43 regulations.

Text:

Regulation 43-165.1. Program for Assisting, Developing, and Evaluating Principal Performance

I. PURPOSE

The State Board of Education, through the State Department of Education, is required to adopt criteria and statewide performance standards that shall serve as a foundation for all processes used for assisting, developing, and evaluating principals employed in the school districts of this state. School districts shall use the standards and procedures adopted by the State Board of Education for the purposes of providing annual feedback and conducting formal evaluations. Any principal whose performance on the evaluation is determined to be unsatisfactory must be formally evaluated the following year. A satisfactory determination on the evaluation is one of several criteria for overall performance evaluation and is not sufficient for reemployment as a principal by a school district.

The State Department of Education shall ensure the implementation of the principal evaluation in the school districts.

The performance evaluation of principals must be performed using the Standards and Criteria for Principal Evaluation adopted by the State Board of Education. Additional standards and criteria may be established by the district and/or by the principal and superintendent in collaboration. As required by the Education Accountability Act of 1998, the principal's annual professional development plan shall be established on the basis of the Board-adopted standards and criteria and the school's renewal plan.

II. DEFINITIONS FOR THE PURPOSES OF THIS EVALUATION PROGRAM

A. **PRINCIPAL:** A principal is the chief administrative head or director of an elementary, middle, or secondary school or of a vocational, technical, special education, or alternative school.
First-year principals are those serving for the first time as building-level principals.
Experienced principals are those principals with one or more years of experience.

B. **EVALUATOR:** The evaluator is the district superintendent or the superintendent's designee.

C. **EVALUATION INSTRUMENT:** The evaluation instrument is a principal evaluation instrument based upon State Board of Education's Standards and Criteria for Principal Evaluation, a copy of which is available from the Leadership Academy at the State Department of Education, or an evaluation instrument adopted by the local school district.

D. **EVALUATION CYCLE:** The evaluation cycle shall be consistent with the school year as defined by law. All principals employed for one hundred forty days or more a year shall be evaluated once every three years.

III. PARTICIPATION

A. FIRST-YEAR PRINCIPALS

(1) First-year principals shall participate in an induction program as provided for in State Board of Education Regulation 43-167, "Principal Induction Program."

(2) The superintendent or superintendent's designee shall provide assistance and feedback to the principal during his or her first year.

(3) The State Department of Education shall provide superintendents or their designees with the appropriate training in the knowledge and skills required to support the first-year principal and to provide feedback consistent

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with the Standards and Criteria for Principal Evaluation. At a minimum, these training programs shall provide the superintendents or their designees with in-depth knowledge of the Board-approved standards and criteria, the knowledge and skills necessary to collect and document information relative to a principal's performance, the knowledge and skills necessary to identify strengths and weaknesses in a principal's performance relative to the standards and criteria, and the knowledge and skills necessary to counsel, coach, and assist a principal during the first year of his or her employment.

(4) The superintendent or his or her designee will observe, collect relevant data, and consult with the first-year principal on a regular and consistent basis.

(5) The superintendent or his or her designee shall provide the first-year principal with written and oral feedback on his or her performance in each standard and criterion.

B. EXPERIENCED PRINCIPALS

(1) The superintendent or his or her designee shall provide feedback to the principal on an annual basis and shall conduct a formal evaluation at least once every three years. The formal evaluation shall address each of the nine standards and accompanying criteria.

(2) The State Department of Education shall provide the appropriate training in the Standards and Criteria for Principal Evaluation.

(3) Districts may use evaluation instruments available from the State Department of Education or any evaluation instrument that meets measures of validity and reliability as determined by the Leadership Academy.

IV. STANDARDS AND CRITERIA

A. STANDARD 1: VISION

A school principal is an educational leader who fosters the success of all students by facilitating the development, communication, implementation, and evaluation of a shared vision of learning that reflects excellence and equity.

Criteria: A school principal

(1) involves stakeholders (e.g., school and district personnel, students, families, and community members) in the development of a broad vision for the school that is compatible with the district's mission and vision;

(2) collaborates with stakeholders to establish goals, develop a plan, and set priorities consistent with the vision of the school;

(3) communicates the school's vision, goals, plans, and priorities to staff, students, parents, and community on a regular basis; and

(4) implements, evaluates, and refines the plan of action for achieving the school's vision.

B. STANDARD 2: INSTRUCTIONAL LEADERSHIP

A school principal is an educational leader who fosters the success of all students by leading the development and alignment of the organizational, instructional, and assessment strategies that enhance teaching and learning.

Criteria: A school principal

(1) sets and communicates high standards for curricular and instructional quality and student achievement;

(2) demonstrates proficiency in analyzing research and assessment data;

(3) ensures the use of data from state and locally mandated assessments and educational research to improve the curriculum, the quality of instruction, and student performance;

(4) observes staff and assists in the implementation of effective teaching and assessment strategies to promote student learning; and

(5) monitors and evaluates the effectiveness of instructional programs to promote the achievement of academic standards.

C. STANDARD 3: EFFECTIVE MANAGEMENT

A school principal is an educational leader who fosters the success of all students by managing the school's organization, its operations, and its resources for a safe, efficient, and effective learning environment.

Criteria: A school principal

- (1) seeks and allocates resources to achieve school and district goals;
- (2) plans and administers budgeting and purchasing according to all relevant local, state, and federal requirements;
- (3) screens, recommends, and assigns staff in a timely manner based on school needs, assessment data, and local, state, and federal requirements;
- (4) manages the supervision and evaluation of staff in accordance with local, state, and federal requirements;
- (5) implements, evaluates, and refines as necessary the procedures for the security and safety of all personnel and students; and
- (6) ensures the maintenance of a clean and aesthetically pleasing school environment.

D. STANDARD 4: CLIMATE

A school principal is an educational leader who fosters the success of all students by advocating, nurturing, and sustaining a positive school climate.

Criteria: A school principal

- (1) initiates and maintains strategies to promote collegiality and collaboration among the staff;
- (2) involves parents, students, and the community in efforts to create and maintain a positive learning environment;
- (3) establishes and supervises programs that promote positive social, emotional, and intellectual growth for all students;
- (4) establishes and enforces standards for appropriate student behavior according to local, state, and federal requirements;
- (5) manages conflict and crisis situations in an effective and timely manner; and
- (6) deals with student misconduct in a prompt and effective manner.

E. STANDARD 5: SCHOOL AND COMMUNITY RELATIONS

A school principal is an educational leader who fosters the success of all students by collaborating effectively with stakeholders.

Criteria: A school principal

- (1) develops an effective and interactive communications plan and public relations program;
- (2) participates in school and community activities;
- (3) involves staff, parents, community, and students in needs assessments, problem solving, and decision making for school improvement;
- (4) responds to diverse community interests and needs;
- (5) creates and sustains a variety of opportunities for parent and community involvement in school activities; and

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(6) collaborates with staff to develop effective strategies for parents and the community to support students' learning.

STANDARD 6: ETHICAL BEHAVIOR

A school principal is an educational leader who fosters the success of all students by demonstrating integrity, fairness, and ethical behavior.

Criteria: A school principal

- (1) works within professional and ethical guidelines to improve student learning and to accomplish school and district goals;
- (2) models respect, understanding, sensitivity, and appreciation for all people; and
- (3) adheres to local, state, and federal requirements.

STANDARD 7: INTERPERSONAL SKILLS

A school principal is an educational leader who fosters the success of all students by interacting effectively with stakeholders and addressing their needs and concerns.

Criteria: A school principal

- (1) demonstrates respect for others;
- (2) elicits and responds to feelings, needs, concerns, and perceptions of others to build mutual understanding;
- (3) communicates effectively with stakeholders to support school and district goals;
- (4) recognizes and effectively uses skills and strategies for problem solving, consensus building, conflict resolution, stress management, and crisis management; and
- (5) uses appropriate oral and written communication skills.

H. STANDARD 8: STAFF DEVELOPMENT

A school principal is an educational leader who fosters the success of all students by collaborating with school and district staff to plan and implement professional development activities that promote the achievement of school and district goals.

Criteria: A school principal

- (1) collaborates with staff to create and implement a plan for a variety of relevant staff development activities that promote the achievement of school goals and staff growth;
- (2) uses data related to the achievement of school goals and staff growth as the basis for evaluating the success of the staff development plan;
- (3) encourages staff to set goals for professional growth; and
- (4) shares effective teaching strategies and uses coaching skills to encourage professional growth.

I. STANDARD 9: PRINCIPAL'S PROFESSIONAL DEVELOPMENT

A school principal is an educational leader who fosters the success of all students by using available resources and opportunities for professional growth.

Criteria: A school principal

- (1) develops and implements an appropriate plan for professional development consistent with school and districts goals;

- (2) establishes and maintains a professional network with other administrators;
- (3) complies with district and state professional development requirements; and
- (4) participates in staff development activities in order to understand the complex role of teaching and effective instructional practices.

V. PROCEDURES

A. Evaluation of each principal shall consist of both formative and summative phases.

(1) The formative phase shall begin with an initial review of the evaluation instrument. Regular conferences shall be held to discuss the principal’s progress and shall include an analysis of the data collected during the year.

(2) The summative phase shall provide for evaluative conclusions to be drawn based on the data collected and the completion of the evaluation instrument. For the summative phase, the evaluator shall complete the selected principal evaluation instrument and discuss with the principal the results for each item and the overall results based on the degree to which the Standards and Criteria for Principal Evaluation are met.

B. After reviewing the overall evaluation, the principal and evaluator shall discuss identified strengths and weaknesses, the school’s renewal plan, and the areas of concentration for improved performance. The principal’s annual professional development plan shall be established on the basis of the Standards and Criteria for Principal Evaluation and the school’s renewal plan.

C. The evaluator and the principal shall sign the evaluation instrument during the summative phase, and a written copy shall be given to the principal. The evaluator shall also maintain a written copy.

D. Each principal has the right to respond in writing to the completed principal evaluation instrument. This written response must be submitted to the evaluator within ten working days of the summative conference.

E. The evaluation data for each principal shall be used to identify the degree to which the standards and criteria are being met.

VI. MAINTENANCE AND CONFIDENTIALITY OF EVALUATION DATA

A. All principal evaluation data shall be maintained by the school district.

B. Each school district shall maintain the confidentiality of the evaluation results of each principal in accordance with the Freedom of Information Act.

APPEAL PROCESS

All appeals shall follow local school district policies and procedures governing the local appeal process.

TRAINING REQUIREMENTS

A. Each school district shall ensure that principals receive awareness training that includes

- (1) the Standards and Criteria for Principal Evaluation,
- (2) the selected principal evaluation instrument, and
- (3) Regulation 43-165.1, “Program for Assisting, Developing, and Evaluating Principal Performance.”

B. Each school district shall ensure that the district superintendent and the superintendent’s designee(s) are trained as evaluators of principals.

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C. Each school district shall designate one individual to be trained as a district coordinator for the Program for Assisting, Developing, and Evaluating Principal Performance. This coordinator shall be responsible for the administration of the evaluation program consistent with this regulation.

D. The State Department of Education shall provide school districts with ongoing technical assistance in the form of training, consultation, and advisement.

IX. PROGRAM IMPLEMENTATION AND ADMINISTRATION

A. The State Department of Education shall ensure that the Program for Assisting, Developing, and Evaluating Principal Performance is appropriately implemented by each school district in accordance with this regulation.

B. Local school districts shall provide annual assurances to the Department that the Program for Assisting, Developing, and Evaluating Principal Performance is being appropriately administered in accordance with this regulation and the law governing the evaluation of principals.

Fiscal Impact Statement: The estimated cost to the state is \$125,000.

Document No. 2559
DEPARTMENT OF EDUCATION
CHAPTER 43

Statutory Authority: S.C. Code Ann. Sections 59-5-60 (1990), 59-39-190 (Supp. 1999), and 59-39-105 (Supp. 1999)

43-259.5. STAR Diploma

Synopsis:

Regulation 43-259.5 details eligibility requirements that graduating students are required to complete in order to earn the Superior Technology or Academic Requirements (STAR) Diploma. In year 2000, the South Carolina General Assembly amended the code by repealing Section 59-39-105, "Superior Technology or Academic Requirements (STAR) Diploma," relating to STAR Diploma requirements and Section 59-39-190, "Regulations," relating to the State Board of Education's authority to promulgate regulations for STAR Diploma implementation.

Instructions: 43-259.5, STAR Diploma, is being repealed in its entirety.

Text:

43-259.5. STAR Diploma

The Superior Scholars for Today and Tomorrow (STAR) Diploma will be awarded to students for academic excellence. To be eligible for a STAR Diploma, a student graduating from an accredited public or nonpublic high school must earn twenty-four Carnegie units of credit as prescribed in Section 59-39-100 of the South Carolina Code of Laws, 1976, as amended and State Board of Education Regulations; meet requirements for either the college preparatory or the technology preparatory program; and earn the equivalent of an overall "B" grade point average.

I. For purposes of this Regulation, the following definitions apply:

A. An "accredited" public high school is a school accredited by the State Board of Education.

B. An "accredited" nonpublic high school is a school accredited by either the Southern Association of Colleges and Schools or the South Carolina Independent Schools Association.

C. A college preparatory program is a program of study which consists of courses recommended for entrance into South Carolina's public colleges and universities.

D. A technology preparation program is a program of study which consists of courses recommended for entrance into post-secondary education and required for the completion of a career major.

II. Student Eligibility:

A. A student must earn 24 Carnegie units of credit as prescribed. (For the 1997-98 and 1998-99 school years only, Section 59-39-105, SC Code of Laws, was amended to require only 22 units and to waive the new computer science unit, the fourth mathematics unit, or both.)

B. A student must complete a college preparatory or technology preparatory program of study.

C. At the completion of the seventh semester of high school enrollment, a student must earn the equivalent of an overall "B" grade point average. The grade point average for a student scheduled to graduate early will be computed at the end of the semester immediately preceding his/her scheduled graduation.

1. Except for Advanced Placement, International Baccalaureate, and Honors courses, a grade point average must be based on a 4.0 scale. The letter grade of A will equate as 4.0; B as 3.0; C as 2.0; and D as 1.0.

2. The grading scale for Advanced Placement, International Baccalaureate, and Honors courses that are defined by private schools or local boards of trustees for fiscal years 1998 and 1999, must be based on a 5.0 scale. The letter grade of A will equate as 5.0; B as 4.0; C as 3.0; and D as 2.0.

SCHOLARSHIP AWARD

The Superior Scholars for Today and Tomorrow (STAR) Scholarship rewards students graduating from an accredited public or nonpublic high school with a scholarship of five hundred (\$500.00) dollars. The scholarship monies must be used to pay tuition and fees at any accredited public or private institution of higher learning in South Carolina within three (3) years after the date of graduation.

I. For the purposes of this Regulation, the following definitions apply:

A. A higher education institution is an institution that awards an academic credential or designation such as associate, bachelor, master or doctor, taken to signify partial or satisfactory completion of the requirements of an academic, occupational, business or other program of study beyond the secondary school level. (Section 59-46-10 of the South Carolina Code of Laws, 1976, as amended.)

B. An "accredited" public or nonpublic institution of higher learning is an institution accredited by the Southern Association of Colleges and Schools or which offers a program that has been approved by the State Board of Education.

II. Student Eligibility:

A. The student received a Superior Scholars for Today and Tomorrow (STAR) diploma.

At the completion of the seventh semester of high school enrollment, the student must attain a composite score of 1100 or higher on the Scholastic Aptitude Test (SAT) or the student must attain a composite score of 24 or higher

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on the American College Test (ACT). This score must be attained during one test session. For a student scheduled to graduate early, this composite score must be attained by the completion of the semester immediately preceding graduation.

Fiscal Impact Statement:

There will be no additional costs incurred by the State and its political subdivisions.

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Document No. 2570
DEPARTMENT OF EDUCATION
CHAPTER 43

Statutory Authority: S.C. Code Ann Sections 59-5-60 (1990)

43-51.3. Student Teachers.

Synopsis: Promulgation of the amendment and replacement of Regulation 43-51.3 is recommended by the State Department of Education to clarify the requirements by providing consistency of language for those individuals seeking a teaching certificate in South Carolina.

Instructions: Amend and replace in its entirety Regulation 43-51.3, Student Teachers in Chapter 43 regulations.

Text: R 43-51.3. Student Teachers.

- A. All persons pursuing undergraduate or graduate programs leading to initial teacher certification must complete the student teaching requirement adopted by the State Board of Education.
- B. A person who has met all requirements for certification except student teaching may request that three years' teaching experience be used in lieu of student teaching for certification purposes under the following conditions:
1. The teaching experience must be at least three full years and earned in a public or private school in grades K–12 or at a postsecondary institution. Combinations of partial year assignments may be used.
 2. The individual must submit a letter or letters of recommendation from the administrative authority of the school or school district where he or she has taught for the specified period, attesting to the successful evaluation of teaching in the certification area.
 3. The individual must submit evidence of successful teaching by providing copies of his or her evaluations.
- C. Trade and industrial certified personnel are not required to complete student teaching.

Fiscal Impact Statement: None

Document No. 2568
DEPARTMENT OF EDUCATION
CHAPTER 43

Statutory Authority: S.C. Code Ann Sections 59-5-60 (1990)

43-57.2. Teaching Experience Acceptable for Credit.

Synopsis: Promulgation of the amendment and replacement of Regulation 43-57.2 is recommended by the State Department of Education. The amendments will merge Regulation 43-57.3, Other Experience with Regulation 43-57.2. These amendments provide clarity for those individuals seeking a teaching certificate in South Carolina.

Instructions: Amend and replace in its entirety Regulation 43-57.2 Teaching Experience Acceptable for Credit, in Chapter 43 of regulations.

Text: R 43-57.2. Teaching Experience Acceptable for Credit.

A. To receive experience credit, the applicant must provide an official description of the professional duties for which he or she wishes to receive the credit. These duties must have been connected to the primary educational program through teaching, education administration, curriculum development, or teacher training. With the exception of trade and industry experience credit (see R. 43-63), employment must meet the requirements for full-time or half-time employment as stated below.

B. For an individual to receive experience credit, he or she must verify full-time or half-time employment in one of the following educational positions:

1. A professional position in a public, private, or parochial elementary or secondary school.
2. A professional position in a regionally or nationally accredited institution of higher education or an institution with teacher education programs approved by the South Carolina State Board of Education.
3. A position as a teacher's aide, provided the applicant had an earned undergraduate degree during the period of employment.
4. A professional education position in a teacher exchange program or a city, county, state, or federal education program for school-aged or adult populations.
5. A professional education or training position in a privately funded education program for school-aged or adult populations.
6. A professional education position in a city, county, state, or federal educational system that supports the primary education program for a school-aged or adult population.

Fiscal Impact Statement: None

Document No. 2457
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
 CHAPTER 61
 Statutory Authority: S.C. Code Sections 44-1-140(11); 1-23-10; -110

R.61-55. Septic Tank Site Evaluation Fees

Synopsis:

R.61-55, *Septic Tank Site Evaluation Fees*, establishes fees for inspection and support activities associated with the septic tank systems and onsite wastewater management. This regulation incorporates a fee increase of the fees previously provided for in annual provisos to the state budget.

Discussion:

Section I addresses the purpose of the regulation.
 Section II provides definitions.
 Section III provides for fees.
 Section IV addresses designation of use of funds and includes an unconstitutionality clause.

Instructions: Add new R.61-55, *Septic Tank Site Evaluation Fees*, to Chapter 61 Regulations.

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Text:

R. 61-55. SEPTIC TANK SITE EVALUATION FEES

SECTION I. PURPOSE

A major factor influencing the health of individuals where public sewer is not available is the proper treatment and disposal of human excreta and other domestic wastes. To this end and to protect the environment from contamination by untreated sewage, the Department of Health and Environmental Control has established and maintained a conscientious program of designing individual sewage treatment and disposal systems, evaluating sites for suitability for individual sewage treatment and disposal systems and approving the installations of such systems. This direct service program is conducted primarily by public health professionals working in county health departments. Funding for the program comes from state appropriations and the fees authorized by this regulation.

SECTION II. DEFINITIONS

The following definitions shall apply in the interpretation and enforcement of this regulation.

A. DEPARTMENT - The South Carolina Department of Health and Environmental Control.

B. HEALTH AUTHORITY - An authorized representative of the South Carolina Department of Health and Environmental Control.

C. INDIVIDUAL SEWAGE TREATMENT AND DISPOSAL SYSTEM - A system designed for the treatment and disposal of sewage by a septic tank and soil absorption trench. The term also includes alternatives to septic tanks and soil absorption trenches when such alternatives are approved by the Health Authority under the provisions of *R.61-56, Individual Sewage Treatment and Disposal Systems*.

D. PERMIT - A written statement issued by the Health Authority permitting the construction of an individual sewage treatment and disposal system under the provisions of *R.61-56, Individual Sewage Treatment and Disposal Systems*.

SECTION III. FEES

The Department shall charge a fee of \$100.00 to evaluate the site of a proposed individual sewage treatment and disposal system. This fee shall be paid prior to the evaluation of any site for which an application for a permit has been made.

SECTION IV. OTHER

A. DESIGNATION OF USE

Funds derived from these fees shall be used only for the provision of services and accompanying expenses associated with Environmental Health programs.

B. UNCONSTITUTIONALITY CLAUSE

Should any chapter, paragraph, sentence, clause, or phrase of this regulation be declared unconstitutional or invalid for any reason, the remainder of this regulation shall not be affected thereby.

Fiscal Impact Statement:

Staff anticipates no new costs imposed on the State or its political subdivisions by this regulation. There will be an increase from \$60 per applicant to \$100 per applicant for site evaluations.

Statement of Need and Reasonableness:

The statement of need and reasonableness was determined by staff analysis pursuant to S.C. Code Section 1-23-115(C)(1)-(3) and (9)-(11):

DESCRIPTION OF REGULATION: Proposed R.61-55, Septic Tank Site Evaluation Fees

Purpose: The purpose of this action is to promulgate R.61-55 to place authorization of septic tank site evaluation fees in a regulation subject to the Administrative Procedures Act and public review and to incorporate a necessary fee increase into the regulation.

Authority: S.C. Code Sections 44-1-140(11); 1-23-10; -110

Plan for Implementing: Upon approval by the S.C. General Assembly and publication in the *State Register*, R.61-55 will be immediately implemented and the annual proviso to the state budget will be struck from the budget.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION REPEAL BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFIT: Septic tank site evaluation fees should be in a regulation subject to the Administrative Procedures Act and public review rather than in a proviso to the state budget. This will provide opportunity for public comment and input into the regulation.

DETERMINATION OF COSTS AND BENEFITS

Cost: There will be no fiscal or economic impact on the State or its political subdivisions. There will be an increase from \$60 per applicant to \$100 per applicant for site evaluations.

Benefit: The public will have an opportunity for input into R. 61-55. The program will be able to continue service to the state's citizens in a timely, effective and efficient manner. The public's health and environment will be protected by the continued vigilance of regulatory oversight of this program.

UNCERTAINTIES OF ESTIMATES:

Regulation 61-55 will not create a burden for the public, the State, and its political subdivisions.

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH:

The public's health and environment will be protected by the continued vigilance of regulatory oversight of septic tank permits and installations.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be possible detrimental effect on the environment and public health because the program will not have the resources to continue regulatory oversight of septic tank permits and installations.

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Document No. 2572
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
CHAPTER 61

Statutory Authority: 1976 Code Section 48-1-10 et seq.

R.61-68. Water Classifications and Standards

Synopsis:

The Department proposes amendment of R.61-68 to clarify, strengthen and improve the existing regulation, and make appropriate revisions of the State's water quality standards in accordance with Section 303(c)(2)(B) of the Federal Clean Water Act. Section 303(c)(2)(B) requires that South Carolina's water quality standards be reviewed and revised, where necessary, at least every three years for the purposes of considering the Environmental Protection Agency's (EPA) most recent numeric and narrative criteria and to comply with recent Federal regulatory revisions and recommendations. The Department has also included several revisions that will clarify and improve the regulation. R.61-68 will be replaced in its entirety because of recodification and stylistic changes made throughout the existing regulation. See also the Statement of Need and Reasonableness herein.

Table of Changes I:

The table below reflects changes made to the regulation by the Department that were submitted to the General Assembly January 16, 2001. See also Table II.

(1): Adoption of federal toxics criteria to reflect the most current final published criteria according to Sections 304(a) and 307(a) of the Clean Water Act.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.E.11	Modified language for clarity and consistency throughout the document.
R.61-68.E.12	Modified language to indicate that all numeric criteria would now be listed in the regulation instead of using references to federal criteria documents. Also includes modified language for consistency throughout the document.
R.61-68.E.12.a.(1)	Modified language for clarity and consistency throughout the document.
R.61-68.E.12.a.(2)	Modified language for clarity and consistency throughout the document.
R.61-68.E.12.a.(4)	Added language to clarify that the most sensitive resident species in tidal waters must be protected. Also modified language for clarity and consistency throughout the document.
R.61-68.E.12.a.(5)	Modified language for clarity and consistency throughout the document. Deleted references to numeric criteria for aquatic life since the numeric criteria are now included in the appendix.
R.61-68.E.12.b.(1)	Added language for use of federal numeric human health criteria for water and organism. Also modified language for clarity and consistency throughout the document.
R.61-68.E.12.c.(1)-(4)	Modified language for clarity and consistency throughout the document.

- R.61-68.E.12.c.(5) Added language to allow the exclusion for the use of federal numeric human health criteria for water and organism when deriving permit effluent limitations. This will allow a determination that no existing or proposed drinking water source will be affected should the Department not utilize the criteria in deriving permit limitations.
- .61-68.E.12.c.(7)-(8) Added language to reflect that an acute effect on human health (where the public health may be jeopardized to the point that an immediate effect is experienced such as an illness associated with swimming and ingesting fecal material through shellfish) is not allowed by the water quality standards. The revised language clarifies this point and states how the permit effluent limitations will be calculated to ensure that human health is protected. Modified language for clarity and consistency throughout the document.
- R.61-68.E.12.d.(1)-(2) Modified language for clarity and consistency throughout the document.
- R.61-68.E.12.d.(3) Added language to allow the Department to use federally-approved methodology for conversion of total metals criteria to dissolved metals for ambient monitoring.
- Appendix The original appendices have been deleted and a new single chart is replacing the previous three. The chart now contains the values for the numeric criteria for the protection of aquatic life along with human health criteria and organoleptic effects. This is the first time that the regulation has included these values for aquatic life numeric criteria since the existing version of the regulation only references the federal documents. There is also an inclusion of the federal human health numeric criteria for water and organism consumption. The existing regulation does not include these values. The changes will make the regulation a better and more convenient source for use by Department staff and the public. Since the Department no longer references the federal criteria documents for aquatic life, the addition of footnotes and three attachments that contain specifics detailing how the numeric criteria are to be used are also necessarily included.

(2): Adoption of numeric criteria for phosphorus, nitrogen, and chlorophyll *a*.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.E.9.a.-e.	Additional language to include numeric criteria for nutrients in order to protect the State's lakes from nutrient over-enrichment. Some language was modified for clarification.

(3): Selection of a more appropriate hardness value.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.E.12.a.(3)	Revised language to reflect a change in the hardness values to be used for calculations for permit effluent limitations and an inclusion of an upper limit for the allowable ambient hardness level. These hardness values were also required by the EPA in order to reflect the most recently revised federal criteria.

(4): Adoption of statewide turbidity standard.

<u>SECTION</u>	<u>REVISION</u>
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R.61-68.G.9.j.	Addition of numeric criteria for turbidity for Trout waters.
R.61-68.G.10.i.	Addition of numeric criteria for turbidity for Freshwaters including one specific for lakes.
R.61-68.G.11.i.	Addition of numeric criteria for turbidity for Shellfish Harvesting waters.
R.61-68.G.12.i.	Addition of numeric criteria for turbidity for Class SA waters.
R.61-68.G.13.i.	Addition of numeric criteria for turbidity for Class SB waters.

(5): Inclusion of language to clarify the components of water quality standards.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.A.1.a.-c.	Additional language to clarify the components of water quality standards.

(6): Inclusion of language to strengthen the existing narrative standards.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.E.3.	Additional language to state that waters of the State cannot be used for waste treatment.
R.61-68.E.12.c.(9)	Additional language to state toxicity testing should be conducted in conformance with federal procedures and when an exception is granted by the Department on the test species, which species should be used.
R.61-68.E.13.a.-b.	Additional language that would allow the Department to require, when determined necessary, additional monitoring to ascertain the bioaccumulative effects of pollutants.
R.61-68.E.14.a.(1)-(2)	Additional language that requires the Department to use a sensitivity factor when using other scientifically defensible published data for a pollutant for which EPA has not developed a national criterion. This will ensure that any value used will be appropriate to protect and maintain a balanced indigenous aquatic community as required by the regulation.
R.61-68.E.15.d.	Additional language to state that toxicity testing should be conducted in conformance with federal procedures and when an exception is granted by the Department on the test species, which species should be used.
R.61-68.F.1.a.-e.	Additional language that better describes narrative biocriteria, their objectives, and how they are assessed for purposes of determining compliance with water quality standards.

(7): Inclusion of a description for the Outstanding National Resource Waters (ONRW) class.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.D.1.a.	Additional language to include the ONRW class.
R.61-68.D.3.	Additional language to include the ONRW class.

R.61-68.G.4.-5. Additional language to include the ONRW class.

(8): Clarification of surface water mixing zone allowances.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.C.10.a.-d.	Additional language was included to restrict the size of the acute and chronic mixing zones and to prohibit their use in certain situations in order to protect aquatic life and human health. Modified language for clarity and consistency throughout the document.
R.61-68.E.10.c.	Modified language to reflect prohibitions on mixing zones for lakes.

(9): Clarification of language dealing with contaminated groundwater.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.H.4.	Additional language to require that responsible parties be liable for remediation. Also modified language for clarity and consistency throughout the document.

(10): Inclusion of a reporting requirement for unauthorized discharges.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.E.4.b.1.-2.	Additional language to require that unauthorized discharges to waters of the State that may cause a violation of a water quality standard be reported to the Department by the responsible party in a timely manner.

(11): Clarification of the applicability of flow conditions.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.C.4.a.-c.	Additional and revised language to clarify the applicable flow requirements for aquatic life and human health numeric criteria. This necessitated an inclusion of language for when other flow regimes are allowed, restricted, or prohibited.

(12): Clarification of existing language to ensure that downstream uses are protected.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.C.7.	Additional language that states downstream uses are protected and maintained.

(13): Review and revision of language of antidegradation.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.D.2.a.-b.	Additional language that includes requirements for an alternatives analysis consistent with existing federal and state regulatory requirements, more specific determinations that the need for lowering of water quality is necessary to important economic and social development, and public participation requirements.

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Clarification that the Department does not have the authority to remove or impair an existing use.

R.61-68.D.4. Added a S.C. Pollution Control Act citation which contains specific requirements applicable to this section of the regulation.

(14): Inclusions of new definitions as needed.

Each of the following definitions were added or amended for clarification or consistency with other federal or state regulations, statutes, or scientific documents. No definitions were added or altered if already defined in the S.C. Pollution Control Act.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.B.2.	Added a definition for 7Q10 flow condition.
R.61-68.B.3.	Added a definition for acute.
R.61-68.B.4.	Added a definition for acute-to-chronic ratio (ACR).
R.61-68.B.6.	Added a definition for annual average flow condition.
R.61-68.B.7.	Added a new definition for aquaculture to be consistent with other state regulation.
R.61-68.B.8.	Amended the definition for aquaculture to aquatic farm.
R.61-68.B.9.	Added a definition for aquatic toxicity test.
R.61-68.B.13.	Added a definition for bioaccumulation.
R.61-68.B.14.	Added a definition for bioaccumulative chemicals of concern.
R.61-68.B.15.	Added a definition for bioavailability.
R.61-68.B.16.	Added a definition for bioconcentration.
R.61-68.B.17.	Added a definition for bioconcentration factor (BCF).
R.61-68.B.18.	Added a definition for biological assessment.
R.61-68.B.19.	Added a definition for biological criteria or biocriteria.
R.61-68.B.20.	Added a definition for biological monitoring or biomonitoring.
R.61-68.B.21.	Added a definition for chlorophyll <i>a</i> .
R.61-68.B.22.	Added a definition for chronic.
R.61-68.B.26.	Added a definition for criterion continuous concentration (CCC).
R.61-68.B.27.	Added a definition for criterion maximum concentration (CMC).
R.61-68.B.30.	Added a definition for ecoregions.

- R.61-68.B.31. Modified definition of ephemeral streams for clarification.
- R.61-68.B.34. Added a definition for fool pool elevation.
- R.61-68.B.36. Added a definition for hydrograph controlled release (HCR).
- R.61-68.B.38. Added a definition for lake.
- R.61-68.B.39. Added a definition for LC₅₀ and deleted the definition for median tolerance limits since they are the same for the purposes of this regulation.
- R.61-68.B.41. Amended the definition for natural conditions to clarify that they do not include conditions attributed to anthropogenic sources.
- R.61-68.B.43. Added a definition for no observed effect concentration (NOEC).
- R.61-68.B.44. Added a definition for nutrients.
- R.61-68.B.45. Added a definition for organoleptic effects.
- R.61-68.B.53. Added a definition for shellfish.
- R.61-68.B.56. Added a definition for tidal conditions.
- R.61-68.Be. Amended the definition for underground source of drinking water to include individual residential wells.
- R.61-68.B.62. Added a definition for whole effluent toxicity (WET).

(15): Stylistic changes which may include corrections for: clarity and readability, grammar, punctuation, typography, codification, references, language style, and overall improvement of the text of the regulation.

The entire regulation includes revisions due to recodification of additional or deleted language from the proposed text changes so that every section, subsection, subitem, and item could be cited correctly.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.A.1.	Additional language for clarification and consistency throughout the document.
R.61-68.A.2.	Modified language for clarification and consistency throughout the document.
R.61-68.C.1.	Additional language for clarification and consistency throughout the document.
R.61-68.C.2.	Additional language for clarification and consistency throughout the document.
R.61-68.C.3.	Modified language for clarification and consistency throughout the document.
R.61-68.C.5.	Additional language for clarification and consistency throughout the document. Also included additional language to clarify that site-specific standards may be developed for intermittent and ephemeral streams.

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- R.61-68.C.8. Additional language for clarification and consistency throughout the document.
- R.61-68.C.11. Additional language for clarification and consistency throughout the document.
- R.61-68.C.11.a. Modified language for clarity and consistency throughout the document.
- R.61-68.C.11.a.3. Modified language for clarity and consistency throughout the document.
- R.61-68.C.12. Additional language for clarification and consistency throughout the document.
- R.61-68.E.4.a. Additional language for clarification and consistency throughout the document.
- R.61-68.E.8. Additional language for consistency throughout the document.
- R.61-68.E.10.a.-c. Additional language for clarification and consistency throughout the document.
- R.61-68.E.12. Additional language for clarification and consistency throughout the document.
- R.61-68.E.12.a.(1)-(5) Additional language for clarification and consistency throughout the document.
- R.61-68.E.12.c.(1)-(6) Additional language for clarification and consistency throughout the document.
- R.61-68.E.12.d.(1)-(2) Additional language for clarification and consistency throughout the document.
- R.61-68.E.12.d.(4) Additional language to clarify how the Department assesses Shellfish Harvesting Waters.
- R.61-68.E.15. Modified language for consistency throughout the document.
- R.61-68.E.15.b. Additional language for clarification and consistency throughout the document.
- R.61-68.G.3. Modified language for clarification and consistency throughout the document.
- R.61-68.G.6.a. Additional language for clarification and consistency throughout the document.
- R.61-68.G.7.a.-b. Correction due to new definitions.
- R.61-68.G.7.c. Correction.
- R.61-68.G.8.a. Additional language for clarification and consistency throughout the document.
- R.61-68.G.8.b. Additional language for clarification and consistency throughout the document.
- R.61-68.G.8.c. Additional language for clarification and consistency throughout the document.
- R.61-68.G.9.c. Correction.
- R.61-68.G.10.a. Correction.
- R.61-68.G.11. Additional language for clarification and consistency throughout the document.
- R.61-68.G.11.c. Correction.

R.61-68.G.12.	Additional language for clarification and consistency throughout the document.
R.61-68.G.12.a.	Correction.
R.61-68.G.12.c.	Correction.
R.61-68.G.13.a.	Correction.
R.61-68.G.13.b.	Correction.
R.61-68.G.13.c.	Correction.

Table of Changes (2):

The table below reflects changes made to the regulation by the Department as recommended by the the House Agriculture, Natural Resources, and Environmental Affairs Committee pursuant to S.C. Code Section 1-23-125(B) of the Administrative Procedures Act.

<u>SECTION</u>	<u>REVISION</u>
R.61-68.A.1.b.	Delete some language which described narrative criteria.
R.61-68.B.14.	Delete definition of Bioaccumulative chemicals of concern (BCCs) that would no longer be used in the regulation.
R.61-68.B.15.-63.	Renumber after deletion of BCCs definition.
R.61-68.C.10.a.	Delete prohibition of mixing zones for BCCs and carcinogens.
R.61-68.C.10.b.	Revise language for prohibition of mixing zones which attract biota to exclude thermal components.
R.61-68.C.10.c.	Delete prohibition of mixing zones for discharges to lakes. Remove and revise language that clarified when mixing zones would be prohibited based on poor mixing conditions. Remove language that clarified when mixing zones would be prohibited for a pollutant when the waterbody was impaired for that pollutant. Revise language that may limit or prohibit mixing zones in significant nursery habitat.
R.61-68.E.9.a.	Revise language to clarify that all sources of nutrients include both point and nonpoint sources.
R.61-68.E.10.c.	Revise language to allow thermal mixing zones in lakes.
R.61-68.E.12.c.(2)	Revise language to allow the use of practical quantitation limits for compliance with permit limitations.
R.61-68.E.12.c.(3)	Revise language to allow the use of practical quantitation limits for compliance with permit limitations.

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- R.61-68.E.12.c.(6) Add language for an exclusion for compliance with the numeric turbidity criteria for NPDES permitted discharges that do not have reasonable potential to cause or contribute to an excursion of the water quality standard for turbidity.
- R.61-68.E.12.c.(8-10) Renumber sections after the addition of the exclusion noted in the previous amendment.
- R.61-68.G.3. Add language to clarify the sections that refer to consideration of natural conditions. Add language for a specified exclusion for compliance with the numeric turbidity criteria for land disturbing activities that are in complete compliance with their permit requirements and do not cause impairment to aquatic life.
- Appendix. Revise 2,3,7,8-TCDD (dioxin) numeric criteria for protection of human health to reflect the State-derived value in lieu of the EPA-derived value.

Text of Regulation

61-68. WATER CLASSIFICATIONS AND STANDARDS

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APPENDIX.	WATER QUALITY CRITERIA FOR PROTECTION OF AQUATIC LIFE, HUMAN HEALTH, AND BASED ON ORGANOLEPTIC DATA

A. PURPOSE AND SCOPE.

1. These regulations, promulgated pursuant to authority in the S. C. Pollution Control Act, Section 48-1-10 *et seq.*, 1976 Code of Laws, establish a system and rules for managing and protecting the quality of South Carolina's surface and ground water. They establish the State's official classified water uses for all waters of the State, establish general rules and specific numeric and narrative criteria for protecting classified and existing water uses, and establish procedures for classifying waters of the State. The water quality standards include the uses of the waters, the numeric and narrative criteria, and the antidegradation rules contained in this regulation.

a. The uses of the waters of the State are defined and described in Sections B, C, E, F, G, and H of this regulation.

b. Numeric criteria for aquatic life and human health are numeric values for specific parameters and pollutants or water quality levels which have been assigned for the protection of the existing and classified uses for each of the classifications in South Carolina and are listed in Section D, E, G, H, and the Appendix. Narrative criteria for aquatic life and human health are general goals and statements of attainable or attained conditions of biological integrity and water quality of the waterbody. These narrative criteria rely upon the use of standardized measures and data analyses to make qualitative determinations of the water quality and use attainment. The Department uses scientifically sound and, where applicable, EPA-approved methods in making these determinations. Narrative criteria are listed in Sections C, D, E, F, G, and H.

c. Antidegradation rules provide a minimum level of protection to all waters of the State and also include provisions and requirements necessary to determine when and if water quality degradation is allowed. Antidegradation rules are described in Section D of this regulation.

2. Waters which meet standards shall be maintained. Waters which do not meet standards shall be improved, wherever attainable, to achieve those standards. However, the Department cannot assure that classified waters shall at all times meet the numeric water quality standards for such uses.

3. Recognizing the technical and economic difficulty in restoring water quality, the Department shall emphasize a preventive approach in protecting waters of the State.

4. It is a goal of the Department to maintain and improve all surface waters to a level to provide for the survival and propagation of a balanced indigenous aquatic community of flora and fauna and to provide for recreation in and on the water. It is also a goal to provide, where appropriate and desirable, for drinking water after conventional treatment, shellfish harvesting, and industrial and agricultural uses.

5. It is a goal of the Department to maintain or restore ground water quality so it is suitable as a drinking water source without any treatment.

B. DEFINITIONS.

1. The definition of any word or phrase employed in this regulation shall be the same as given in the South Carolina Pollution Control Act, 48-1-10, *et seq.*, S.C. Code of Laws, 1976, hereafter referred to as the Act. Words or phrases which are not defined in the Act are defined as follows:

2. 7Q10 means the annual minimum seven day average flow rate that occurs with an average frequency of once in ten years as published or verified by the U. S. Geological Survey (USGS) or an estimate extrapolated from published or verified USGS data.

3. Acute means a stimulus severe enough to rapidly induce an effect; in aquatic toxicity tests, an effect observed in 96 hours or less typically is considered acute. When referring to aquatic toxicology or human health, an acute effect is not always measured in terms of lethality.

4. Acute-to-chronic ratio (ACR) means the ratio of the acute toxicity of an effluent or a toxicant to its chronic toxicity. It is used as a factor for estimating chronic toxicity on the basis of acute toxicity data, or for estimating acute toxicity on the basis of chronic toxicity data.

5. Agricultural means the use of water for stock watering, irrigation, and other farm purposes.

6. Annual average flow means the annual mean flow rate of a stream at a specific point as published or verified by the U. S. Geological Survey (USGS) or an estimated annual mean flow rate extrapolated from published or verified USGS data.

7. Aquaculture means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals.

8. Aquatic farm means the cultivation, production, or marketing of domestic aquatic organisms which are any fish, aquatic invertebrates, or aquatic plants that are spawned, produced, or marketed as a cultivated crop in the waters of the State.

9. Aquatic toxicity test mean laboratory experiments that measure the biological effect (e.g., growth, survival, and reproduction) of effluents or receiving waters on aquatic organisms.

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10. Aquifer means a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of ground water to wells or springs.

11. Balanced indigenous aquatic community means a natural, diverse biotic community characterized by the capacity to sustain itself through cyclic seasonal changes, presence of necessary food chain species and by a lack of domination by pollutant tolerant species.

12. Best management practice (BMP) means a practice or combination of practices that are the most effective, practical ways of controlling or abating pollution from widespread or localized sources.

13. Bioaccumulation means the process by which a compound is taken up and retained by an aquatic organism, both from water and through food.

14. Bioavailability means a measure of the physiochemical access that a toxicant has to the biological processes of an organism. The less the bioavailability of a toxicant, the less its toxic effect on an organism.

15. Bioconcentration means the process by which a compound is absorbed from water through gills or epithelial tissues and is concentrated in the body.

16. Bioconcentration factor (BCF) means the ratio of a substance's concentration in tissue versus its concentration in water, in situations where the food chain is not exposed or represents equilibrium partitioning between water and organisms.

17. Biological assessment means an evaluation of the biological condition of a waterbody using biological surveys and other direct measurements of resident biota in surface waters and sediments.

18. Biological criteria, also known as biocriteria, mean narrative expressions or numeric values of the biological characteristics of aquatic communities based on appropriate reference conditions. Biological criteria serve as an index of aquatic community health.

19. Biological monitoring, also known as biomonitoring, means a description of the living organisms in water quality surveillance used to indicate compliance with water quality standards or permit effluent limits and to document water quality trends. Methods of biological monitoring may include, but are not limited to, toxicity testing such as ambient toxicity testing, whole effluent toxicity testing, and ambient assessment of the resident biological community.

20. Chlorophyll *a* means a photosynthetic pigment present in all types of green plants. It is used as a measure of algal biomass and is an indicator of nutrient enrichment.

21. Chronic means a stimulus that lingers or continues for a relatively long period of time, often one-tenth of the life span or more. Chronic should be considered a relative term depending on the life span of an organism. The measurement of a chronic effect can be reduced growth, reduced reproduction, etc., in addition to lethality.

22. Classified uses means those uses specified in Section G for surface waters and Section H for ground waters, whether or not those uses are being attained.

23. Concentrated aquatic animal production facility means a hatchery, fish farm, or other facility related to aquatic animal production which is not located in waters of the State and is subject to a National Pollutant Discharge Elimination System (NPDES) permit.

24. Conventional treatment as applying to potable water supplies means treatment including at least flocculation, sedimentation, filtration, and disinfection.

25. Criterion continuous concentration (CCC) means the highest instream concentration of a toxicant or an effluent to which the organisms can be exposed to protect against chronic (long-term) effects. EPA derives chronic criteria from longer term (often greater than 28 days) tests that measure survival, growth, reproduction, and in some cases bioconcentration.

26. Criterion maximum concentration (CMC) means the highest instream concentration of a toxicant or an effluent to which the organisms can be exposed for a brief period of time without causing an acute effect. EPA derives acute criteria from 48 to 96 hour tests of lethality or immobilization.

27. Daily average means the average of all samples taken during any 24 hour period.

28. Deleterious substances mean those substances which in sufficient concentrations or levels have a harmful effect on classified or existing water uses.

29. Ecoregions mean areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources and are designed to serve as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components. The EPA has published a document that outlines the Level III ecoregions (please refer to U.S. Environmental Protection Agency, 1999. Level III ecoregions of the continental United States (revision of Omernik, 1987). Corvallis, Oregon, U.S. E.P.A.-National Health and Environmental Effects Research Laboratory, Map M-1.) The following are South Carolina Level III ecoregions: Blue Ridge Mountains, Piedmont, Southeastern Plains, and Middle Atlantic Coastal Plains.

30. Ephemeral streams mean streams that generally have defined natural watercourses that flow only in direct response to rainfall or snowmelt and in which discrete periods of flow persist no more than 29 consecutive days per event.

31. Existing uses means those uses actually being attained in or on the water, on or after November 28, 1975, regardless of the classified uses.

32. Fishing means the taking, harvesting, or catching of finfish or crustaceans for human consumption.

33. Full pool elevation means the maximum lake level attained before water releases over a fixed weir, spillway, or other discharge structure. In larger lakes and reservoirs, the full pool elevation is the maximum level established for management.

34. Groundwater means water below the land surface in a zone of saturation.

35. Hydrograph Controlled Release (HCRs) means the onsite storage or holding of treated wastewater or the use of an alternative discharge option contained in Section D.2.a. of this regulation, during specified critical streamflow conditions and then discharging the treated wastewater to the stream when streamflow is sufficient to assimilate the wastewater.

36. Intermittent streams means streams that generally have defined natural watercourses which do not flow year around, but flow beyond periods of rainfall or snowmelt.

37. Lake means any water of the State that is a freshwater pond, reservoir, impoundment, or similar body of water located wholly or partially within the State.

38. LC₅₀ means the concentration of a toxicant at which lethality occurs to 50 percent of the test organisms during a specified exposure time period.

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39. Mixing zone means:

a. for surface waters, an area where a discharge undergoes initial dilution and is extended to cover the secondary mixing in the ambient waterbody. A mixing zone is an allocated impact zone where water quality criteria can be exceeded as long as acutely toxic conditions are prevented (except as defined within a Zone of initial dilution) and public health and welfare are not endangered.

b. For ground waters, a hydrogeologically controlled three-dimensional flow path in the subsurface which constitutes the pathway for waste constituents to migrate from a source.

40. Natural conditions mean those water quality conditions unaffected by anthropogenic sources of pollution.

41. No Discharge Zone (NDZ) means a waterbody (or a portion of a waterbody) so designated that no discharging Marine Sanitation Devices (MSDs) are allowed on vessels on waterbodies so designated. All vessels located on such designated waterbodies shall be equipped with MSDs which discharge to a holding tank which shall be pumped out at a designated pump-out location or shall discharge legally outside the boundary of the United States.

42. No observed effect concentration (NOEC) means the highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation and determined using hypothesis testing.

43. Nutrients mean an element or chemical essential to life including, but not limited to, nitrogen and phosphorus.

44. Organoleptic effects mean those sensory effects associated with taste and smell.

45. Outstanding recreational or ecological resource waters means waters which are of exceptional recreational or ecological importance or of unusual value. Such waters may include, but are not limited to: waters in national or state parks or wildlife refuges; waters supporting threatened or endangered species; waters under the National Wild and Scenic Rivers Act or South Carolina Scenic Rivers Act; waters known to be significant nursery areas for commercially important species or known to contain significant commercial or public shellfish resources; or waters used for or having significant value for scientific research and study.

46. Prohibited area means an area adjacent to point source discharges or other sources of potential contamination in shellfish growing waters where the gathering of clams, mussels, or oysters is prohibited to protect public health.

47. Primary contact recreation means any activity with the intended purpose of direct water contact by the human body to the point of complete submergence, including but not limited to swimming, water skiing, and skin diving.

48. Propagation means the continuance of species through reproduction and growth in the natural environment, as opposed to the maintenance of species by artificial culture and stocking.

49. Public water system means any public or privately owned waterworks system which provides drinking water for human consumption, except those serving a single private residence or dwelling.

50. Recharge area means an area where an underground source of drinking water is poorly confined, is under water table conditions, and has a downward component of flow from the water table into the underground source of drinking water.

51. Secondary contact recreation means any activity occurring on or near the water which does not have an intended purpose of direct water contact by the human body to the point of complete submergence, including but not limited to fishing, boating, canoeing, and wading.

52. Shellfish mean bivalve mollusks, specifically clams, mussels, or oysters.

53. Shellfish harvesting means taking of bivalve mollusks, specifically clams, mussels, or oysters, for direct marketing or human consumption.

54. Source for drinking water supply means any source of surface water which is used for domestic consumption, or used in connection with the processing of milk, beverages, food or for other purposes which required finished water meeting regulations [40 CFR Part 141 and 40 CFR Part 143] established pursuant to the Safe Drinking Water Act (Public Law 93-523, 95-190) applicable to public water systems.

55. Tidal conditions mean conditions determined by the Department as appropriate for tidally influenced waters of the State to be analogous to the 7Q10 or the annual average flow for flowing waters of the State.

56. Tidal saltwaters means those waters whose elevation is subject to changes due to oceanic tides and which have chloride ion content in excess of 250 milligrams per liter (mg/l) (salinity = 0.48 parts per thousand).

57. Toxic wastes means those wastes or combinations of wastes including disease-causing agents which, after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, may cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), physical deformations, or restrict or impair growth in such organisms or their offspring.

58. Underground source of drinking water (USDW) means an aquifer or its portion:

- a. Which supplies any public water system or individual residential well; or
- b. Which contains a sufficient quantity of ground water to supply a public water system or individual residential well; and,
 - (1) Currently supplies drinking water for human consumption; or
 - (2) Contains water with less than ten thousand milligrams per liter total dissolved solids.

59. Water table means that level below the land surface at which all the voids are filled with water at a pressure equal to atmospheric.

60. Weekly average means the average of all samples taken during any consecutive seven day period.

61. Whole effluent toxicity (WET) means the aggregate toxic effect of an aqueous sample measured directly by an aquatic toxicity test.

62. Zone of initial dilution (ZID) means that minimal area of a mixing zone immediately surrounding the outfall where water quality criteria are not met, provided there is no acute toxicity to drifting organisms and public health and welfare are not endangered.

C. APPLICABILITY OF STANDARDS.

- 1. The water quality standards are applicable to both surface waters and ground waters.

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2. Any exception specified in this regulation is to be applied exclusively to the situation for which it was incorporated and not as a general rule applicable to all situations or waters of the State.

3. Uses in all waters shall be protected, wherever attainable, regardless of flow.

4. Flow requirements, prohibitions, and exceptions.

a. Aquatic life numeric criteria

(1) The applicable critical flow conditions for aquatic life criteria shall be defined as 7Q10 or tidal conditions as determined by the Department. The numeric criteria of this regulation are not applicable to waters of the State when the flow rate is less than 7Q10 except as prescribed below.

(2) The Department shall consider conditions that are comparable to or more stringent than 7Q10 where appropriate to protect classified and existing uses, such as below dams and in tidal situations. Only those situations where the use of 7Q10 flows are determined to be impracticable, inappropriate, or insufficiently protective of aquatic life uses shall be considered as a situation in which the Department may consider other flow conditions.

(3) The Department shall use the applicable critical flow conditions for the protection and maintenance of aquatic life for, but not limited to, the following: permit issuance, wasteload allocations, load allocations, and mixing zones.

b. Human health and organoleptic numeric criteria

(1) The applicable critical flow conditions for human health shall be defined as annual average flow for carcinogens, 7Q10 (or 30Q5 if provided by the applicant) for noncarcinogens, or tidal conditions as determined by the Department. The applicable critical flow conditions for organoleptic criteria shall be defined as annual average flow or tidal conditions as determined by the Department. The numeric criteria of this regulation are not applicable to waters of the State when the flow rate is less than the annual average flow for carcinogens or 7Q10 (or 30Q5 if provided by the applicant) for noncarcinogens, except as prescribed below.

(2) The Department shall consider conditions that are comparable to or more stringent than annual average flow, 7Q10, or 30Q5 (if provided by the applicant) where appropriate to protect the classified and existing uses, such as below dams and in tidal situations. Only those situations where the use of annual average flow, or 7Q10, or 30Q5 (if provided by the applicant) are determined to be impracticable, inappropriate, or insufficiently protective of human health uses shall be considered as a situation in which the Department may consider other flow conditions.

(3) The Department shall use the applicable critical flow conditions for human health and organoleptic effects for, but not limited to, the following: permit issuance, wasteload allocations, load allocations, and mixing zones.

c. As described below, the Department may also consider conditions other than 7Q10 for use with an HCR.

(1) After a complete antidegradation review in compliance with Section D.2., an HCR for oxygen-demanding substances may be permitted by the Department for the following situations:

i. if other flow-related effluent conditions are allowed by federal effluent guidelines as specified in 40 CFR Parts 400-499 (Chapter I, Subchapter N) and when used the numeric criteria shall not be exceeded and all water quality standards are maintained and protected;

ii. for industrial discharges, after application of advanced wastewater treatment, as determined by the Department, for the type of wastewater discharged;

iii. for other discharges, after application of advanced wastewater treatment which will be defined, for this purpose, at or below the following permit effluent limitations of BOD₅ = 10 mg/l, NH₃-N = 1 mg/l, and DO = 6 mg/l.

(2) In cases where an HCR may be allowed, the permit effluent limitations for toxics will not be variable and will be based on the critical flow conditions (chemical-specific or WET).

(3) In cases where an HCR may be allowed, new or proposed expansions of existing permits shall require instream biological assessments and existing permits may require instream biological assessments.

5. Intermittent streams and ephemeral streams shall be considered waters of the State. The water quality standards of the class of the stream to which intermittent and ephemeral streams are tributary shall apply, disregarding any site-specific numeric criteria for the named waterbody. This does not preclude the development of site-specific numeric criteria for intermittent and ephemeral streams.

6. The standards of adjacent waters must be maintained in basins excavated from high ground and constructed solely for berthing vessels. The standards of the adjacent waters must also be maintained with regard to impacts from created marina basins.

7. The existing and classified uses of downstream waters shall be maintained and protected.

8. Where surface waters are not classified by name (unlisted) in R.61-69, Classified Waters, the water quality standards of the class of the stream to which they are tributary shall apply, disregarding any site specific numeric criteria for the named waterbody. In tidal areas where an unlisted tributary flows between two differently classified waterbodies, the more stringent numeric criteria of the classified waters apply to the unlisted tributary, disregarding any site-specific numeric criteria for those waterbodies. This does not preclude the development of site-specific numeric criteria for unlisted tributaries.

9. Because of natural conditions some surface and ground waters may have characteristics outside the standards established by this regulation. Such natural conditions do not constitute a violation of the water quality standards; however, degradation of existing water quality is prohibited unless consistent with Section D.4 of this regulation.

10. A mixing zone for surface waters may be allowed by the Department. All water quality standards of the classification of the surface waters, including affected downstream waters, are applicable unless a mixing zone, setting forth certain conditions, is granted by the Department. When the Department grants a mixing zone, the mixing zone shall not be an area of waste treatment nor shall it interfere with or impair the existing uses of the waterbody. The size of the mixing zone shall be minimized, as determined by the Department, and shall be based upon applicable critical flow conditions. Since mixing zones are allocated impact zones where human health and aquatic life numeric criteria can be exceeded, the Department shall restrict their use. The following prohibitions and restrictions are established in order to support these important uses of the waters of the State.

a. In order to protect human health, mixing zones are not allowed when: they would endanger public health and welfare, any portion of the mixing zone would be in a state-approved source water protection area, the mixing zone would adversely affect shellfish harvesting, or the mixing zone would be for bacteria (e.g. fecal coliform).

b. In order to protect aquatic life, mixing zones are not allowed when: a pollutant, excluding temperature or thermal, in a discharge would attract biota; the mixing zone would result in undesirable aquatic organisms or a

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dominance of nuisance species outside of the mixing zone; there is a reasonable expectation that a discharge would adversely affect a federally-listed endangered or threatened aquatic species, its habitat, or a proposed or designated critical habitat; the mixing zone would not allow safe passage of aquatic organisms when passage would otherwise be unobstructed; or the mixing zone would not allow for the protection and propagation of a balanced indigenous aquatic community in and on the waterbody.

c. In order to protect both human health and aquatic life, mixing zones are not allowed when: a discharge would not be predicted to or does not produce adequate mixing at the point of discharge; or a discharge would be to a waterbody where multiple discharges interact if the combined mixing zone would impair the waterbody outside the mixing zone. The Department may prohibit or limit mixing zones in waters of the State that may be considered a significant estuarine nursery habitat for resident species.

d. The size of the mixing zone shall be kept to a minimum and may be determined on an individual project basis considering biological, chemical, engineering, hydrological, and physical factors.

11. Mixing zones for ground waters may be allowed by the Department. In order to ensure the maintenance and protection of the uses of the waters of the State and in compliance with Section D of this regulation, any mixing zone granted by the Department shall be determined on an individual basis by the Department as prescribed below.

a. The numeric standards for Class GB ground water, Section H.9, are applicable unless a mixing zone solely within the bounds of the property, setting forth certain conditions, is granted by the Department. Such a mixing zone shall be granted upon satisfactory demonstration to the Department that:

(1) Reasonable measures have been taken or binding commitments are made to minimize the addition of contaminants to ground water and/or control the migration of contaminants in ground water;

(2) The ground water in question is confined to a shallow geologic unit which has little or no potential of being an Underground Source of Drinking Water, and discharges or will discharge to surface waters without contravening the surface water standards set forth in this regulation;

(3) The contaminant(s) in question occurs within the bounds of the property, and there is minimum possibility for ground water withdrawals (present or future) to create drawdown such that contaminants would flow off-site; and

(4) The contaminants or combination of contaminants in question are not dangerously toxic, mobile, or persistent.

12. Site-specific numeric criteria for surface waters may be established by the Department to replace the numeric criteria of Sections E, G, and the appendix of this regulation or to add new numeric criteria not contained in this regulation. Establishment of such numeric criteria shall be subject to public participation and administrative procedures for adopting regulations. In addition, such site-specific numeric criteria shall not apply to tributary or downstream waters unless specifically described in the water classification listing R.61-69, Classified Waters.

13. In classifying and adopting standards for the waters of the State, the Department considers:

a. The size, depth, surface area covered, volume, flow direction, rate of flow, stream gradient and temperature of the water;

b. The character of the district bordering such water and its suitability for the uses and with a view to conserving it and encouraging the most appropriate use of the lands bordering on such water for residential, agricultural, industrial, or recreational purposes;

- c. The uses which have been made, are being made, may be made or are desired to be made of such waters for transportation, domestic, and industrial consumption, irrigation, swimming, fishing, fish culture, fire prevention, sewage disposal or other uses;
- d. The present quality of such waters; and
- e. Information, about the four items above, from government agencies, interested groups, and the public.

D. ANTIDegradation Rules.

1. Existing water uses and the level of water quality necessary to protect these existing uses shall be maintained and protected regardless of the water classification and consistent with the policies below.

a. A new activity or expansion of an existing activity shall not be allowed in Class ONRW, Class ORW, or Shellfish Harvesting Waters if it would exclude, through establishment of a prohibited area, an existing shellfish harvesting or culture use. A new activity or expansion of an existing activity which will result in a prohibited area may be allowed in Class SA or Class SB waters when determined to be appropriate by the Department and would not remove or impair an existing use.

b. Existing uses and water quality necessary to protect these uses are presently affected or may be affected by instream modifications or water withdrawals. The stream flows necessary to protect classified and existing uses and the water quality supporting these uses shall be maintained consistent with riparian rights to reasonable use of water.

c. Existing or classified ground water uses and the conditions necessary to protect those uses shall be maintained and protected.

2. Where surface water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the Department finds, after intergovernmental coordination and public participation, that allowing lower water quality is necessary to important economic or social development in the areas where the waters are located. In allowing such lower water quality, water quality adequate to fully protect existing and classified uses shall be maintained. The highest statutory and regulatory requirements for all new and existing point sources shall be achieved and all cost-effective and reasonable best management practices for nonpoint source control shall be achieved within the State's statutory authority and otherwise encouraged. In order to fulfill these goals, the Department shall consider (a) and (b) below when evaluating any proposed expansion or new discharge to waters of the State that will lower water quality to a measurable effect. This includes, but is not limited to, the new or increased loading of any pollutant or pollutant parameter in the effluent regardless of whether the discharge flow changes.

a. An alternatives analysis, conducted by the applicant, must demonstrate to the Department that none of the following applicable alternatives that would minimize or eliminate the lowering of water quality are economically and technologically reasonable:

- (1) water recycle or reuse,
- (2) use of other discharge locations,
- (3) connection to other wastewater treatment facilities,
- (4) use of land application,
- (5) product or raw material substitution,
- (6) any other treatment option or alternative.

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b. After the alternatives analysis is completed, the Department shall evaluate whether a proposed discharge that will result in the lowering of water quality of a waterbody, and for which there are no economically or technologically reasonable alternatives, is necessary for important economic or social development. For this to be accomplished, several economic and social factors must be considered. If an evaluation of the economic and social factors reveals that affordable treatment options that, combined with any alternatives, would prevent the need for the lowering of water quality, the Department shall deny the request. Conformance of the proposed discharge with the applicable 2008 Areawide Water Quality Management Plans may demonstrate importance to economic and social development as well as intergovernmental coordination and public participation. Activities requiring permits or certification by the Department shall provide for public participation through the Department's existing public notification processes. Economic and social factors to be considered may include the following:

- (1) employment (increases, maintenance, or avoidance of reduction),
- (2) increased industrial production,
- (3) improved community tax base,
- (4) improved housing, and/or
- (5) correction of an environmental or public health problem.

3. The water quality of outstanding resource surface waters designated as Class ONRW or Class ORW shall be maintained and protected through application of the standards for these classifications as described in Section G.

4. Certain natural conditions may cause a depression of dissolved oxygen in surface waters while existing and classified uses are still maintained. The Department shall allow a dissolved oxygen depression in these naturally low dissolved oxygen waterbodies as prescribed below pursuant to the Act, Section 48-1-83, et seq., 1976 Code of Laws:

a. Under these conditions the quality of the surface waters shall not be cumulatively lowered more than 0.1 mg/l for dissolved oxygen from point sources and other activities, or

b. Where natural conditions alone create dissolved oxygen concentrations less than 110 percent of the applicable water quality standard established for that waterbody, the minimum acceptable concentration is 90 percent of the natural condition. Under these circumstances, an anthropogenic dissolved oxygen depression greater than 0.1 mg/l shall not be allowed unless it is demonstrated that resident aquatic species shall not be adversely affected. The Department may modify permit conditions to require appropriate instream biological monitoring.

c. The dissolved oxygen concentrations shall not be cumulatively lowered more than the deficit described above utilizing a daily average unless it can be demonstrated that resident aquatic species shall not be adversely affected by an alternate averaging period.

E. GENERAL RULES AND STANDARDS APPLICABLE TO ALL WATERS.

1. The General Assembly of South Carolina in the Act has declared the following policy: "It is declared to be the public policy of the State to maintain reasonable standards of purity of the air and water resources of the State, consistent with the public health, safety and welfare of its citizens, maximum employment, the industrial development of the State, the propagation and protection of terrestrial and marine fauna and flora, and the protection of physical property and other resources. It is further declared that to secure these purposes and the enforcement of the provisions of this Act, the Department of Health and Environmental Control shall have authority to abate, control and prevent pollution."

2. The classes and standards described in Section G and H of this regulation implement the above State policy by protecting the waters of South Carolina. Consistent with the above policy, the Department adopts the following general standards in items 3-15 for all waters of South Carolina.

3. No waters of the State shall be used for the sole or principal purpose of transporting or treating wastes.

4. a. Any discharge into waters of the State must be permitted by the Department and receive a degree of treatment and/or control which shall produce an effluent which is consistent with the Act, the Clean Water Act (P.L. 92-500, 95-217, 97-117, 100-4), this regulation, and related regulations. No permit issued by the Department shall be interpreted as creating any vested right in any person. Additionally, any discharge into waters of the State containing sanitary wastes shall be effectively disinfected as necessary to meet the appropriate standards of this regulation. The Department may require best management practices (BMPs) for control of stormwater runoff as part of the requirements of an NPDES permit, a State construction permit, or a State 401 Water Quality Certification.

b. When not specifically covered by permit reporting requirements, any unauthorized discharge into waters of the State which may cause or contribute to an excursion of a water quality standard must be reported by the responsible party to the Department orally within 24 hours of becoming aware of such conditions. Further, written notification must be provided to the Department (Compliance Assurance Division, Bureau of Water) within five (5) days of becoming aware of such conditions and the written notice must include the following:

(1) A description of the discharge and cause;

(2) The duration of the discharge, including exact dates and times, and if not corrected, the time that the unauthorized discharge is expected to cease, and what steps are being taken to eliminate, minimize, and prevent recurrence of the discharge.

5. All ground waters and surface waters of the State shall at all times, regardless of flow, be free from:

a. Sewage, industrial waste, or other waste that will settle to form sludge deposits that are unsightly, putrescent, or odorous to such degree as to create a nuisance, or interfere with classified water uses or existing water uses;

b. Floating debris, oil, grease, scum, and other floating material attributable to sewage, industrial waste, or other waste in amounts sufficient to be unsightly to such a degree as to create a nuisance or interfere with classified water uses or existing water uses;

c. Sewage, industrial, or other waste which produce taste or odor or change the existing color or physical, chemical, or biological conditions in the receiving waters or aquifers to such a degree as to create a nuisance, or interfere with classified water uses (except classified uses within mixing zones as described in this regulation) or existing water uses; and,

d. High temperature, toxic, corrosive, or deleterious substances attributable to sewage, industrial waste, or other waste in concentrations or combinations which interfere with classified water uses (except classified uses within mixing zones as described in this regulation), existing water uses, or which are harmful to human, animal, plant or aquatic life.

6. Waters where classified uses are not being attained can be reclassified for protection of an attainable use and standards designated for that use where:

a. Natural conditions prevent the attainment of the use; or

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b. Natural, ephemeral, intermittent, low flow conditions, or water levels prevent the attainment of the use;
or

c. Human caused conditions or sources prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

d. Dams, diversions, or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the waterbody to its original condition or to operate such modification in a way that would result in the attainment of the use; or

e. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, preclude attainment of aquatic life protection uses; or

f. Controls more stringent than those required by Sections 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impact.

7. Prior to removing any uses, notice and an opportunity for a public hearing shall be provided.

8. Discharge of fill into waters of the State is not allowed unless the activity is consistent with Department regulations and will result in enhancement of classified uses with no significant degradation to the aquatic ecosystem or water quality.

9. In order to protect and maintain lakes and other waters of the State, consideration needs to be given to the control of nutrients reaching the waters of the State. Therefore, the Department shall control nutrients as prescribed below.

a. Discharges of nutrients from all sources, including point and nonpoint, to waters of the State shall be prohibited or limited if the discharge would result in or if the waters experience growths of microscopic or macroscopic vegetation such that the water quality standards would be violated or the existing or classified uses of the waters would be impaired. Loading of nutrients shall be addressed on an individual basis as necessary to ensure compliance with the narrative and numeric criteria.

b. Numeric nutrient criteria for lakes are based on an ecoregional approach which takes into account the geographic location of the lakes within the State and are listed below. These numeric criteria are applicable to lakes of 40 acres or more. Lakes of less than 40 acres will continue to be protected by the narrative criteria.

(1) for the Blue Ridge Mountains ecoregion of the State, total phosphorus shall not exceed 0.02 mg/l, chlorophyll *a* shall not exceed 10 ug/l, and total nitrogen shall not exceed 0.35 mg/l

(2) for the Piedmont and Southeastern Plains ecoregions of the State, total phosphorus shall not exceed 0.06 mg/l, chlorophyll *a* shall not exceed 40 ug/l, and total nitrogen shall not exceed 1.50 mg/l

(3) for the Middle Atlantic Coastal Plains ecoregion of the State, total phosphorus shall not exceed 0.09 mg/l, chlorophyll *a* shall not exceed 40 ug/l, and total nitrogen shall not exceed 1.50 mg/l.

c. In evaluating the effects of nutrients upon the quality of lakes and other waters of the State, the Department may consider, but not be limited to, such factors as the hydrology and morphometry of the waterbody, the existing and projected trophic state, characteristics of the loadings, and other control mechanisms in order to protect the existing and classified uses of the waters.

d. The Department shall take appropriate action, to include, but not limited to: establishing numeric effluent limitations in permits, establishing Total Maximum Daily Loads, establishing waste load allocations, and

establishing load allocations for nutrients to ensure that the lakes attain and maintain the above narrative and numeric criteria and other applicable water quality standards.

e. The criteria specific to lakes shall be applicable to all portions of the lake. For this purpose, the Department shall define the applicable area to be that area covered when measured at full pool elevation.

10. a. The water temperature of all Freshwaters which are free flowing shall not be increased more than 5°F (2.8°C) above natural temperature conditions and shall not exceed a maximum of 90°F (32.2°C) as a result of the discharge of heated liquids unless a different site-specific temperature standard as provided for in C.12 has been established, a mixing zone as provided in C.10 has been established, or a Section 316(a) determination under the Federal Clean Water Act has been completed.

b. The weekly average water temperature of all Shellfish Harvesting, Class SA and Class SB waters shall not exceed 4°F (2.2°C) above natural conditions during the fall, winter or spring, and shall not exceed 1.5°F (0.8°C) above natural conditions during the summer as a result of the discharge of heated liquids unless a different site-specific temperature standard as provided for in C.12 has been established, a mixing zone as provided for in C.10 has been established, or a Section 316(a) determination under the Federal Clean Water Act has been completed.

c. The weekly average water temperature of all Freshwaters which are lakes shall not be increased more than 5°F (2.8°C) above natural conditions and shall not exceed 90°F (32.2°C) as a result of the discharge or heated liquids unless a different site-specific temperature standard as provided for in C.12. has been established, a mixing zone as provided in C.10 has been established, or a Section 316(a) determination under the Federal Clean Water Act has been completed.

11. Numeric criteria based on organoleptic data (prevention of undesirable taste and odor) are adopted herein. Those substances and their criteria are listed in the appendix. For those substances which have aquatic life and/or human health numeric criteria and organoleptic numeric criteria, the most stringent of the three shall be used for derivation of permit effluent limitations.

12. Numeric criteria for the protection and maintenance of all classes of surface waters are adopted herein and are listed in Sections E, G, and the appendix. The numeric criteria developed and published by EPA are hereby incorporated into this regulation. Footnotes that further describe the application of these numeric criteria are included in the appendix.

a. Application of numeric criteria to protect aquatic life.

(1) The stated CMC value shall be used as an acute toxicity number for calculating permit effluent limitations.

(2) The stated CCC value shall be used as a chronic toxicity number for calculating permit effluent limitations.

(3) If metals concentrations for numeric criteria are hardness-dependent, the CMC and CCC concentrations shall be based on 25 milligrams/liter (mg/l) hardness (as expressed as CaCO₃) if the ambient hardness is less than 25 mg/l. Concentrations of hardness less than 400 mg/l may be based on the actual mixed stream hardness if it is greater than 25 mg/l and less than 400 mg/l and 400 mg/l if the ambient hardness is greater than 400 mg/l.

(4) If separate numeric criteria are given for fresh and salt waters, they shall be applied as appropriate. In transitional tidal and estuarine areas, the Department shall apply the more stringent of the criteria to protect the existing and classified uses of the waters of the State.

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(5) The Department shall review new or revised EPA criteria for adoption by South Carolina when published in final form.

(6) If the State develops site-specific criteria for any substances for which EPA has developed national criteria, the site-specific criteria shall supersede the national criteria.

b. Application of numeric criteria to protect human health.

(1) If separate numeric criteria are given for organism consumption, water and organism consumption (W/O), and drinking water Maximum Contaminant Levels (MCLs), they shall be applied as appropriate. The most stringent of the criteria shall be applied to protect the existing and classified uses of the waters of the State.

(2) The Department shall review new or revised EPA criteria for adoption by South Carolina when published in final form by EPA.

(3) If the State develops site-specific criteria for any substances for which EPA has developed national criteria, the site-specific criteria shall supersede the national criteria.

(4) Adoption of EPA human health criteria does not preclude the Department from considering health effects of other pollutants or from considering new or revised EPA criteria when developing effluent permit conditions.

c. Application of criteria for the derivation of permit effluent limitations.

(1) Numeric criteria for substances listed in Sections E, G, and the appendix shall be used by the Department to derive NPDES permit effluent limitations at the applicable critical flow conditions as determined by the Department unless an exception is provided below.

(2) When the derived permit effluent limitation based on aquatic life numeric criteria is below the practical quantitation limit for a substance, the derived permit effluent limitation shall include an accompanying statement in the permit that the practical quantitation limit using approved analytical methods shall be considered as being in compliance with the limit. Appropriate biological monitoring requirements shall be incorporated into the permit to determine compliance with appropriate water quality standards. Additionally, if naturally occurring instream concentration for a substance is higher than the derived permit effluent limitation, the Department may establish permit effluent limitations at a level higher than the derived limit, but no higher than the natural background concentration. In such cases, the Department may require biological instream monitoring and/or WET testing.

(3) When the derived permit effluent limitation based on human health numeric criteria is below the practical quantitation limit for a substance, the derived permit effluent limitation shall include an accompanying statement in the permit that the practical quantitation limit using approved analytical methods shall be considered as being in compliance with the limit. Additionally, if naturally occurring instream concentration for a substance is higher than the derived permit effluent limitation, the Department may establish permit effluent limitations at a level higher than the derived limit, but no higher than the natural background concentration.

(4) NPDES permit effluent limitations for metals shall normally be expressed on the permits as total recoverable metals, but the Department may utilize a federally-approved methodology to predict the dissolved fraction, partitioning coefficient, or the bioavailable portion of metals in calculating these limits.

(5) Except as provided herein, where application of MCLs or W/O numeric criteria using annual average flow for carcinogens, 7Q10 (or 30Q5 if provided by the applicant) for noncarcinogens, or comparable tidal condition as determined by the Department results in permit effluent limitations more stringent than limitations

derived from other applicable human health (organism consumption only), aquatic life, or organoleptic numeric values; MCLs or W/O shall be used in establishing permit effluent limitations for human health protection. The Department may, after Notice of Intent included in a notice of a proposed NPDES permit in accordance with Regulation 61-9.124.10, determine that drinking water MCLs or W/O shall not apply to discharges to those waterbodies where there is: no potential to affect an existing or proposed drinking water source and no state-approved source water protection area. For purposes of this section, a proposed drinking water source is one for which a complete permit application, including plans and specifications for the intake, is on file with the Department at the time of consideration of an NPDES permit application for a discharge that will affect or has the potential to affect the drinking water source.

(6) Except as provided herein, where the Department may determine that an NPDES permitted discharge will not cause, have reasonable potential to cause, or contribute to an exceedence of the numeric criterion for turbidity under the following conditions:

- i. the facility withdraws its surface intake water containing turbidity from the same body of water into which the discharge is made;
- ii. the facility does not significantly concentrate or contribute additional turbidity to the discharged water;
- iii. the facility does not alter the turbidity through chemical or physical means that would cause adverse water quality impacts to occur.

(7) Site specific permit effluent limitations and alternate criteria less stringent than those derived in accordance with the above requirements may be derived where it is demonstrated that such limits and criteria shall maintain the existing and classified uses, adequate opportunity for public participation in such derivation process has occurred, and the effluent shall not cause criteria for human health to be exceeded. Where a site-specific permit effluent limitation and alternate criterion has been derived, such derivation shall be subject to EPA review as appropriate. Also, at a minimum, opportunity for input in derivation of a site-specific permit effluent limitation and alternate criterion shall be provided via public notice in NPDES permit notices.

(8) In order to protect for the consumption use of shellfish, for SFH waters and other waters with approved shellfish harvesting uses, the stated value of 14/100 ml for fecal coliform shall be used as a monthly average number for calculating permit effluent limitations and the stated value of 43/100ml for fecal coliform shall be used as daily maximum number for calculating permit effluent limitations.

(9) In order to protect recreational uses for all waters of the State, the stated value of 200/100 ml for fecal coliform shall be used as a monthly average number for calculating permit effluent limitations and the stated value of 400/100ml for fecal coliform shall be used as daily maximum number for calculating permit effluent limitations.

(10) All effluent permit limitations which include WET will require that the WET tests be conducted using *Ceriodaphnia dubia* (*C. dubia*), except as stated. If the salinity of a discharge to a saline waterbody is high enough to be toxic to *C. dubia*, *Mysidopsis bahia* (*M. bahia*) will be used. Low salinity discharges to saltwater may be tested using either *C. dubia* or *M. bahia* with salinity adjustment, as determined by the Department. The Department may consider an alternative species if it can be demonstrated that the proposed species meets the requirements of 40 CFR.136.4 and 5. EPA test methods (40 CFR Part 136) for acute and chronic toxicity testing with freshwater organisms or marine and estuarine organisms must be followed. Any modifications to species selection or the methodology used shall be approved by the EPA.

d. Evaluation of ambient water quality

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(1) If the numeric criterion for toxic pollutants is lower than the analytical detection limit, the criterion is not considered violated if the ambient concentration is below the detection limit and the instream indigenous biological community is not adversely impacted.

(2) If the ambient concentration is higher than the numeric criterion for toxic pollutants, the criterion is not considered violated if biological monitoring has demonstrated that the instream indigenous biological community is not adversely impacted.

(3) In order to appropriately evaluate the ambient water quality for the bioavailability of the dissolved portion of hardness dependent metals, the Department may utilize a federally-approved methodology to predict the dissolved fraction or partitioning coefficient in determining compliance with water quality standards established in this regulation.

(4) The assessment of fecal coliform for purposes of evaluating the shellfish harvesting use for South Carolina's Shellfish Management Units is conducted in accordance with provisions of S.C. Regulation 61-47, Shellfish.

13. The Department may require biological or other monitoring in NPDES permits to further ascertain any bioaccumulative effects of pollutants. Such monitoring may include analyses of fish and shellfish, macroinvertebrates, macrophytes, and/or sediments in order to assess the accumulation of pollutants in tissues or sediments that:

a. may cause or have the potential to cause adverse impacts to the balanced indigenous aquatic community, and

b. may cause or have the potential to cause adverse impacts to human health and/or terrestrial flora and fauna.

14. The Department may consider other scientifically defensible published data which are appropriate for use in developing permit limits and evaluating water quality for constituents for which EPA has not developed national criteria or South Carolina has no standards.

a. The Department shall apply a sensitivity factor to aquatic toxicity data unless, in the Department's judgement, the data represent a minimum of three appropriately sensitive species representing three taxonomic groups (plant, macroinvertebrate, and fish).

(1) If only an acute toxicity effect concentration for a number of species for a particular pollutant is given as an LC₅₀, the lowest concentration should be divided by an acute-to-chronic ratio (ACR) of 10 and a sensitivity factor of 3.3, for an acceptable instream concentration in order to protect against chronic toxicity effects.

(2) If a chronic toxicity effect concentration for a number of species for a particular pollutant is given as a no observed effect concentration (NOEC), the lowest concentration should be divided by a sensitivity factor of 3.3 in order to protect against chronic toxicity to the most sensitive species.

b. The Department must notify the permittee that other such data were used in developing permit limits and provide justification for their use.

15. Tests or analytical methods to determine compliance or non-compliance with standards shall be made in accordance with methods and procedures approved by the Department and the EPA). In making any tests or applying analytical methods to determine compliance or non-compliance with water quality standards, representative samples shall be collected in accordance with methods and procedures approved by the Department and the EPA. Consideration of representative sample methods shall include the following:

a. Surface water and ground water samples shall be collected so as to permit a realistic appraisal of quality and actual or potential damage to existing or classified water uses. For ground waters, consideration shall be given to, but shall not be limited to, depth to water table, flow direction, and velocity. For surface waters, time of day, flow, surface area, and depth shall be considered.

b. Biological assessment methods may be employed in appropriate situations to determine abnormal nutrient enrichment, trophic condition, LC₅₀, concentration of toxic substances, acceptable instream concentrations, or acceptable effluent concentrations for maintenance of a balanced indigenous aquatic community.

c. Temporal distribution of samples in tidally influenced waters shall cover the full range of tidal conditions.

d. Ambient toxicity tests used for screening purposes shall be conducted using *Ceriodaphnia dubia* (*C. dubia*), except as stated. If salinity of a waterbody is high enough to be toxic to *C. dubia*, *Mysidopsis bahia* (*M. bahia*) will be used. The Department may consider an alternative species if it can be demonstrated that the proposed species meets the requirements of 40 CFR.136.4 and 5. EPA test methods (40 CFR Part 136) for acute and chronic toxicity testing with freshwater organisms or marine and estuarine organisms must be followed. Any modifications to species selection or the methodology used shall be approved by the EPA.

F. NARRATIVE BIOLOGICAL CRITERIA.

1. Narrative biological criteria are contained in this regulation and are described throughout the sections where applicable. The following are general statements regarding these narrative biological criteria.

a. Narrative biological criteria in Section A.4. describe the goals of the Department to maintain and improve all surface waters to a level that provides for the survival and propagation of a balanced indigenous aquatic community of fauna and flora. These narrative criteria are determined by the Department based on the condition of the waters of the State by measurements of physical, chemical, and biological characteristics of the waters according to their classified uses.

b. Section C.10. describes narrative biological criteria relative to surface water mixing zones and specifies requirements necessary for the protection and propagation of a balanced indigenous aquatic community.

c. Narrative biological criteria shall be consistent with the objective of maintaining and improving all surface waters to a level that provides for the survival and propagation of a balanced indigenous aquatic community of fauna and flora attainable in waters of the State; and in all cases shall protect against degradation of the highest existing or classified uses or biological conditions in compliance with the Antidegradation Rules contained in this regulation. Section D.1.a describes narrative biological criteria relative to activities in Outstanding National Resource Waters, Outstanding Resource Waters and Shellfish Harvesting Waters.

d. In order to determine the biological quality of the waters of the State, it is necessary that the biological component be assessed by comparison to a reference condition(s) based upon similar hydrologic and watershed characteristics that represent the optimum natural condition for that system. Such reference condition(s) or reaches of waterbodies shall be those observed to support the greatest variety and abundance of aquatic life in the region as is expected to be or would be with a minimal amount of disturbance from anthropogenic sources. Impacts from urbanization and agriculture should be minimal and natural vegetation should dominate the land cover. There should also be an appropriate diversity of substrate. Reference condition(s) shall be determined by consistent sampling and reliable measures of selected indicative communities of flora and fauna as established by the Department and may be used in conjunction with acceptable physical, chemical, and microbial water quality

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measurements and records judged to be appropriate for this purpose. Narrative biological criteria relative to activities in all waters are described in Section E.

e. In the Class Descriptions, Designations, and Specific Standards for Surface Waters Section, all water use classifications protect for a balanced indigenous aquatic community of fauna and flora. In addition, Trout Natural and Trout Put, Grow, and Take classifications protect for reproducing trout populations and stocked trout populations, respectively.

G. CLASS DESCRIPTIONS, DESIGNATIONS, AND SPECIFIC STANDARDS FOR SURFACE WATERS.

1. All surface waters of the State, except as discussed in Section C., shall be identified within one of the classes described below. The Department may determine in accordance with Section 312 of the Clean Water Act that for some waterbodies (or portions of waterbodies), the designation of No Discharge Zone (NDZ) for Marine Sanitation Devices (MSDs) shall be enacted with application of the existing classified standards of the waterbody. Those waters classified by name shall be listed in Regulation 61-69 along with the NDZ designation, if applicable.

2. Where a surface water body is tributary to waters of a higher class, the quality of the water in the tributary shall be protected to maintain the standards of the higher classified receiving water.

3. For items not listed in each class, criteria published pursuant to Sections 304(a) and 307(a) of the Federal Clean Water Act or other documents shall be used as guides to determine conditions which protect water uses. Many of these criteria are listed in the appendix to this regulation. For consideration of natural conditions, refer to Sections: C.9., D.4., E.10., E.12.c.(2), E.12.c.(3), F.4.d., G.4., G.6., and G.9. For the following numeric criteria for turbidity (with the exception of Outstanding National Resource Waters, Outstanding Resource Waters, Trout waters, and Shellfish Harvesting Waters), compliance with these turbidity criteria may be considered to be met as long as the waterbody supports a balanced indigenous aquatic community when land management activities employ Best Management Practices (BMPs). For consideration, BMPs must be in full compliance with all specifications governing the proper design, installation, operation and maintenance of such BMPs and all applicable permit conditions and requirements must be met.

4. **Outstanding National Resource Waters (ONRW)** are freshwaters or saltwaters which constitute an outstanding national recreational or ecological resource.

QUALITY STANDARDS FOR OUTSTANDING NATIONAL RESOURCE WATERS

ITEMS

a. Color, dissolved oxygen, fecal coliform, pH, temperature, turbidity, or other parameters.

STANDARDS

Water quality conditions shall be maintained and protected to the extent of the Department's statutory authority. Numeric and narrative criteria for Class ONRW shall be those applicable to the classification of the waterbody immediately prior to reclassification to Class ONRW, including consideration of natural conditions.

5. In order to maintain the existing quality of Class ONRW waters the following additional standards apply:

ITEMS	STANDARDS
a. Discharge from domestic, industrial, or agricultural waste treatment facilities; aquaculture; open water dredged spoil disposal.	None allowed.
b. Stormwater and other nonpoint source runoff including that from agricultural uses or permitted discharge from aquatic farms, concentrated aquatic animal production facilities, and uncontaminated groundwater from mining.	None allowed.
c. Dumping or disposal of garbage, cinders, ashes, oils, sludge, or other refuse	None allowed.
d. Activities or discharges from waste treatment facilities in waters upstream or tributary to ONRW waters.	Allowed if there will be no measurable impact on the downstream ONRW consistent with Antidegradation Rules.

6. **Outstanding Resource Waters (ORW)** are freshwaters or saltwaters which constitute an outstanding recreational or ecological resource or those freshwaters suitable as a source for drinking water supply purposes with treatment levels specified by the Department.

QUALITY STANDARDS FOR OUTSTANDING RESOURCE WATERS

ITEMS	STANDARDS
a. Color, dissolved oxygen, fecal coliform, pH, temperature, turbidity, or other parameters.	Water quality conditions shall be maintained and protected to the extent of the Department's statutory authority. Numeric and narrative criteria for Class ORW shall be those applicable to the classification of the waterbody immediately prior to reclassification to Class ORW, including consideration of natural conditions.

7. In order to maintain the existing quality of Class ORW waters the following additional standards apply:

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ITEMS	STANDARDS
a. Discharge from domestic, industrial, or agricultural waste treatment facilities; aquaculture; open water dredged spoil disposal.	None allowed.
b. Stormwater and other nonpoint source runoff including that from agricultural uses or permitted discharge from aquatic farms, concentrated aquatic animal production facilities, and uncontaminated groundwater from mining.	Allowed if water quality necessary for existing and classified uses shall be maintained and protected consistent with Antidegradation Rules.
c. Dumping or disposal of garbage, cinders, ashes, oils, sludge, or other refuse	None allowed.
d. Activities or discharges from waste treatment facilities in waters upstream or tributary to ORW waters.	Allowed if water quality necessary for existing and classified uses shall be maintained and protected consistent with Antidegradation Rules.

8. **Trout Waters.** The State recognizes three types of trout waters: Natural; Put, Grow, and Take; and Put and Take.

a. **Natural (TN)** are freshwaters suitable for supporting reproducing trout populations and a cold water balanced indigenous aquatic community of fauna and flora. Also suitable for primary and secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with the requirements of the Department. Suitable for fishing and the survival and propagation of a balanced indigenous aquatic community of fauna and flora. Suitable also for industrial and agricultural uses.

b. **Put, Grow, and Take (TPGT)** are freshwaters suitable for supporting growth of stocked trout populations and a balanced indigenous aquatic community of fauna and flora. Also suitable for primary and secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with the requirements of the Department. Suitable for fishing and the survival and propagation of a balanced indigenous aquatic community of fauna and flora. Suitable also for industrial and agricultural uses.

c. **Put and Take (TPT)** are freshwaters suitable for primary and secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with the requirements of the Department. Suitable for fishing and the survival and propagation of a balanced indigenous aquatic community of fauna and flora. Suitable also for industrial and agricultural uses. The standards of Freshwaters classification protect these uses.

9. The standards below protect the uses of Natural and Put, Grow, and Take trout waters.

QUALITY STANDARDS FOR TROUT WATERS

ITEMS	STANDARDS
a. Garbage, cinders, ashes, oils, sludge, or other refuse.	None allowed.
b. Treated wastes, toxic wastes, deleterious substances, colored or other wastes, except those given in a. above.	None alone or in combination with other substances or wastes in sufficient amounts to be injurious to reproducing trout populations in natural waters or stocked populations in put, grow, and take waters or in any manner adversely affect the taste, color, odor, or sanitary condition thereof or impair the waters for any other best usage as determined for the specific waters which are assigned to this class.
c. Toxic pollutants listed in the appendix.	As prescribed in Section E. of this regulation.
d. Stormwater and other nonpoint source runoff including that from agricultural uses or permitted discharge from aquatic farms, concentrated aquatic animal production facilities, and uncontaminated groundwater from mining.	Allowed if water quality necessary for existing and classified uses shall be maintained and protected consistent with Antidegradation Rules.
e. Dissolved oxygen.	Not less than 6 mg/l.
f. Fecal coliform.	Not to exceed a geometric mean of 200/100 ml, based on five consecutive samples during any 30 day period; nor shall more than 10% of the total samples during any 30 day period exceed 400/100ml.
g. pH.	Between 6.0 and 8.0.
h. Temperature.	Not to vary from levels existing under natural conditions, unless determined that some other temperature shall protect the classified uses.
i. Turbidity.	Not to exceed 10 Nephelometric Turbidity Units (NTUs) or 10% above natural conditions, provided existing

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uses are maintained.

10. **Freshwaters (FW)** are freshwaters suitable for primary and secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with the requirements of the Department. Suitable for fishing and the survival and propagation of a balanced indigenous aquatic community of fauna and flora. Suitable also for industrial and agricultural uses.

QUALITY STANDARDS FOR FRESHWATERS

ITEMS	STANDARDS
a. Garbage, cinders, ashes, oils, sludge, or other refuse.	None allowed.
b. Treated wastes, toxic wastes, deleterious substances, colored or other wastes except those given in (a) above.	None alone or in combination with other substances or wastes in sufficient amounts to make the waters unsafe or unsuitable for primary contact recreation or to impair the waters for any other best usage as determined for the specific waters which are assigned to this class.
c. Toxic pollutants listed in the appendix.	As prescribed in Section E of this regulation.
d. Dissolved Oxygen.	Daily average not less than 5.0 mg/l with a low of 4.0 mg/l.
e. Fecal coliform.	Not to exceed a geometric mean of 200/100 ml, based on five consecutive amples during any 30 day period; nor shall more than 10% of the total samples during any 30 day period exceed 400/100 ml.
f. pH.	Between 6.0 and 8.5.
g. Temperature.	As prescribed in E.10. of this regulation.
h. Turbidity *	Not to exceed 50 NTUs provided existing uses are maintained.
* Lakes only	Not to exceed 25 NTUs provided existing uses are maintained.

11. **Shellfish Harvesting Waters* (SFH)** are tidal saltwaters protected for shellfish harvesting and uses listed in Class SA and Class SB. Suitable for primary and secondary contact recreation, crabbing, and fishing.

Also suitable for the survival and propagation of a balanced indigenous aquatic community of marine fauna and flora.

QUALITY STANDARDS FOR SHELLFISH HARVESTING WATERS

ITEMS	STANDARDS
a. Garbage, cinders, ashes, oils, sludge, or other refuse.	None allowed.
b. Treated wastes, toxic wastes, deleterious substances, colored or other wastes except those given in (a) above.	None alone or in combination with other substances or wastes in sufficient amounts to adversely affect the taste, color, odor, or sanitary condition of clams, mussels, or oysters for human consumption; or to impair the waters for any other best usage as determined for the specific waters which are assigned to this class.
c. Toxic pollutants listed in the appendix.	As prescribed in Section E of this regulation.
d. Dissolved oxygen.	Daily average not less than 5.0 mg/l with a low of 4 mg/l.
e. Fecal coliform.	Not to exceed an MPN fecal coliform geometric mean of 14/100 ml; nor shall more than 10% of the samples exceed an MPN of 43/100 ml.
f. pH.	Shall not vary more than 3/10 of a pH unit above or below that of effluent free waters in the same geological area having a similar total salinity, alkalinity and temperature, but not lower than 6.5 or above 8.5.
g. Temperature.	As prescribed in E.10. of this regulation.
h. Turbidity	Not to exceed 25 NTUs provided existing uses are maintained.
i. *The Department may designate prohibited areas where shellfish harvesting for market purposes or human consumption shall not be allowed, consistent with the Antidegradation Rule, Section D.1.a of this regulation.	

12. **Class SA** are tidal saltwaters suitable for primary and secondary contact recreation, crabbing, and fishing, except harvesting of clams, mussels, or oysters for market purposes or human consumption and uses listed in

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Class SB. Also suitable for the survival and propagation of a balanced indigenous aquatic community of marine fauna and flora.

QUALITY STANDARDS FOR CLASS SA WATERS

ITEMS	STANDARDS
a. Garbage, cinders, ashes, oils, sludge, or other refuse.	None allowed.
b. Treated wastes, toxic wastes, deleterious substances, colored, or other wastes except those given in a. above.	None alone or in combination with other substances or wastes in sufficient amounts to make the waters unsafe or unsuitable for primary contact recreation or to impair the waters for any other best usage as determined for the specific waters which are assigned to this class.
c. Toxic pollutants listed in the appendix.	As prescribed in Section E of this regulation.
d. Dissolved Oxygen.	Daily average not less than 5.0 mg/l with a low of 4.0 mg/l
e. Fecal coliform.	Not to exceed a geometric mean of 200/100 ml, based on five consecutive samples during any 30 day period; nor shall more than 10% of the total samples during any 30 day period exceed 400/100 ml.
f. pH. pH unit above or below that of salinity, alkalinity and temperature,	Shall not vary more than one-half of a effluent-free waters in the same geological area having a similar total but not lower than 6.5 or above 8.5.
g. Temperature. regulation.	As prescribed in E.10. of this
h. Turbidity existing uses are maintained.	Not to exceed 25 NTUs provided

13. **Class SB** are tidal saltwaters suitable for primary and secondary contact recreation, crabbing, and fishing, except harvesting of clams, mussels, or oysters for market purposes or human consumption. Also suitable for the survival and propagation of a balanced indigenous aquatic community of marine fauna and flora.

QUALITY STANDARDS FOR CLASS SB WATERS

ITEMS	STANDARDS
a. Garbage, cinders, ashes, oils, sludge, or other refuse.	None allowed.
b. Treated wastes, toxic wastes, deleterious substances, colored, or other wastes except those given in a. above.	None alone or in combination with other substances or wastes in sufficient amounts to be harmful to the survival of marine fauna and flora or the culture or propagation
thereof; to adversely affect the taste,	color, odor, or sanitary condition of
the waters unsafe or unsuitable for	fish for human consumption; to make
usage as determined for the specific	primary contact recreation; or to impair the waters for any other best waters which are assigned to this class.
c. Toxic pollutants listed in the appendix.	As prescribed in Section E of this regulation.
d. Dissolved oxygen.	Not less than 4.0 mg/l.
e. Fecal coliform.	Not to exceed a geometric mean of 200/100 ml based on five consecutive
samples during any 30 day period; nor	shall more than 10% of the total
samples examined during any 30 day	period exceed 400/100 ml.
f. pH.	Shall not vary more than one-half of a
pH unit above or below that of	effluent-free waters in the same
salinity, alkalinity and temperature,	geological area having a similar total but not lower than 6.5 or above 8.5.
g. Temperature.	As prescribed in E.10. of this
regulation.	
h. Turbidity	Not to exceed 25 NTUs provided
existing uses are maintained.	

H. CLASS DESCRIPTIONS AND SPECIFIC STANDARDS FOR GROUND WATERS.

1. All ground waters of the State, except within mixing zones, shall be identified within one of the classes described below.

2. It is the policy of the Department to maintain the quality of ground water consistent with the highest potential uses. Most South Carolina ground water is presently suitable for drinking water without treatment and the State relies heavily upon ground water for drinking water. For this reason, all South Carolina ground water is classified Class GB effective on June 28,1985.

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3. The Department recognizes that Class GB may not be suitable for some ground water. Class GA is established for exceptionally valuable ground water and Class GC is established for ground water with little potential as an underground source of drinking water.

4. In keeping with this policy the Department declares that effective June 28, 1985, all ground waters of the State shall be protected to a quality consistent with the use associated with the classes described herein. Further, the Department may require the owner or operator of a contaminated site to restore the ground water quality to a level that maintains and supports the existing and classified uses (except classified uses within mixing zones, as described in this regulation). For purposes of this section, the term operator means any person in control of, or having responsibility for, the operation of on-site activities or property and owner means a person or a previous person who has assumed legal ownership of a property through the provisions of a contract of sale or other legally binding transfer of ownership. The term owner also means any person who owned, operated, or otherwise controlled activities at such site before the title or control of which was conveyed to a unit of State or local government due to bankruptcy, foreclosure, tax delinquency, abandonment, or similar means. However, nothing in this section shall be construed to supersede specific statutory or regulatory provision that relieves owners or operators of certain contaminated sites from liability for restoration of groundwater, including, without limitation, S.C. Code §44-2-80 (b) and (c). The term does not include a unit of State or local government which acquired ownership or control involuntarily through bankruptcy, tax delinquency, abandonment, or other circumstances in which the government involuntarily acquires title by virtue of its function as sovereign. The exclusion provided under this paragraph shall not apply to any State or local government which has caused or contributed to the release or threatened release of a contaminant from the site, and such a State or local government shall be subject to these provisions in the same manner and to the same extent, both procedurally and substantively, as any nongovernmental entity.

5. A ground water monitoring program approved by the Department may be required for any existing or proposed disposal system or other activities to determine the ground water quality affected by such systems or activities. Such monitoring program may be required through the Department's permitting and certification programs.

6. Those ground waters which are classified Class GA or Class GC after petition and proper administrative procedures other than Class GB shall be described by location and listed in Regulation 61-69.

7. **Class GA** are those ground waters that are highly vulnerable to contamination because of the hydrological characteristics of the areas under which they occur and that are also characterized by either of the following two factors:

a. Irreplaceable, in that no reasonable alternative source of drinking water is available to substantial populations; or

b. Ecologically vital, in that the ground water provides the base flow for a particularly sensitive ecological system that, if polluted, would destroy a unique habitat.

8. The standards below protect these ground waters:

QUALITY STANDARDS FOR CLASS GA GROUND WATERS

ITEMS	STANDARDS
a. Treated wastes, toxic wastes, deleterious substances, or constituents thereof.	None allowed.

9. **Class GB.** All ground waters of the State, unless classified otherwise, which meet the definition of underground sources of drinking water (USDW) as defined in Section B.

QUALITY STANDARDS FOR CLASS GB GROUND WATERS

ITEMS	STANDARDS
a. Inorganic chemicals.	Maximum contaminant levels as set forth in R.61-58, State Primary Drinking Water Regulations.
b. Organic chemicals.	Maximum contaminant levels as set forth in R.61-58, State Primary Drinking Water Regulations.
c. Man-made radionuclides, priority pollutant volatile organic compounds, pesticides, herbicides, polychlorinated biphenyls, any other synthetic organic compounds not specified above, treated wastes, thermal wastes, deleterious substances, colored wastes or other wastes or constituents thereof.	Not to exceed concentrations or amounts such as to interfere with use, actual or intended, as determined by the Department.

10. **Class GC** are those ground waters not considered potential sources of drinking water and of limited beneficial use, i.e., ground waters that exceed a concentration of 10,000 mg/l total dissolved solids or are otherwise contaminated beyond levels that allow cleanup using methods reasonably employed in public water system treatment. These ground waters also must not migrate to Class GA or Class GB ground waters or have a discharge to surface water that could cause degradation.

QUALITY STANDARDS FOR CLASS GC GROUND WATERS

ITEMS	STANDARDS
a. Treated wastes, toxic wastes, deleterious substances, or other constituents thereof.	None which interfere with any existing use of an underground source of drinking water.

I. SEVERABILITY. Should any section, paragraph, or other part of this regulation be declared invalid for any reason, the remainder shall not be affected.

APPENDIX: WATER QUALITY NUMERIC CRITERIA FOR THE PROTECTION OF AQUATIC LIFE AND HUMAN HEALTH

This appendix contains three charts (priority pollutants, nonpriority pollutants, and organoleptic effects) of numeric criteria for the protection of human health and aquatic life. The appendix also contains three attachments which address hardness conversions and application of ammonia criteria. Footnotes specific to each chart follow the chart. General footnotes pertaining to all are at the end of the charts prior to the attachments. Please refer to the text of the regulation for other general information and specifications in applying these numeric criteria.

PRIORITY TOXIC POLLUTANTS

Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source	
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:				
						Water & Organism (Φg/L)	Organism Only (Φg/L)	MCL (Φg/L)		
1	Antimony	7440360				14 B, ee	4300 B, ee	6 ee	57FR60848 SDWA	
2	Arsenic	7440382	340 A, D, K	150 A, D, K	69 A, D, Y	36 A, D, Y	0.018 C, R	0.14 C, R	50 C	65FR31681 57FR60848 SDWA
3	Beryllium	7440417						4 ee	65FR31681 SDWA	
4	Cadmium	7440439	0.95 D, E, K	0.83 D, E, K	43 D, Y	9.3 D, Y	J, ee	J, ee	5 ee	65FR31681 SDWA
5a	Chromium III	16065831	580 D, E, K	28 D, E, K			J, ee	J, ee	100 Total ee	EPA820/B-96-001 65FR31681 SDWA
5b	Chromium VI	18540299	16 D, K	11 D, K	1,100 D, Y	50 D, Y	J, ee	J, ee	100 Total ee	65FR31681 SDWA
6	Copper	7440508	3.8 D, E, K, Z	2.9 D, E, K, Z	5.8 D, Z, cc	3.7 D, Z, cc	1,300 T, ee			65FR31681
7	Lead	7439921	14 D, E, Y	0.54 D, E, Y	220 D, Y	8.5 D, Y				65FR31681
			1.6	0.91	2.1	1.1	0.050	0.051		65FR31681

Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source	
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:				
						Water & Organism (Φg/L)	Organism Only (Φg/L)	MCL (Φg/L)		
8	Mercury	7439976	D, K, dd	D, K, dd	D, bb, dd	D, bb, dd	B, ee	B, ee	2ee	SDWA
9	Nickel	7440020	150 D, E, K	16 D, E, K	75 D, Y	8.3 D, Y	610 B, ee	4, 600 B, ee		65FR31681
10	Selenium	7782492	L, Q, S	5.0 S	300 D, Y, aa	71 D, Y, aa	170 Z, ee	11, 000 ee	50 ee	65FR31681 IRIS 09/01/91 SDWA
11	Silver	7440224	0.37 D, E, G		2.3 D, G					65FR31681
12	Thallium	7440280					1.7 B, ee	6.3 B, ee	2 ee	57FR60848 SDWA
13	Zinc	7440666	37 D, E, K	37 D, E, K	95 D, Y	86 D, Y	9,100 T, ee	69,000 T, ee		65FR31681 IRIS 10/01/92
14	Cyanide	57125	22 K, P	5.2 K, P	1 P, Y	1 P, Y	700 B, ee	220,000 B, H, ee	200 ee	EPA820/B-96-001 57FR60848 SDWA
15	Asbestos	1332214							7 million fibers/L l, ee	57FR60848
16	2, 3, 7, 8-TCDD (Dioxin)	1746016						0.12 ppq C	3.0E-8 C	State Standard SDWA
17	Acrolein	107028					320 ee	780 ee		57FR60848
18	Acrylonitrile	107131					0.059 B, C	0.66 B, C		57FR60848
19	Benzene	71432					1.2 B, C	71 B, C	5 C	65FR31681 SDWA
20	Bromoform	75252					4.3 B, C	360 B, C	100 Total THMs C	65FR31681

Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:			
						Water & Organism (Φg/L)	Organism Only (Φg/L)	MCL (Φg/L)	
									SDWA
21	Carbon Tetrachloride	56235				0.25 B, C	4.4 B, C	5 C	57FR60848 SDWA
22	Chlorobenzene	108907				680 B	21,000 B, H	100	57FR60848 SDWA
23	Chlorodibromomethane	124481				0.41 B, C	34 B, C	100 Total THMs C	65FR31681 SDWA
24	Chloroform	67663				5.7 B, C	470 B, C	100 Total THMs C	65FR31681 SDWA
25	Dichlorobromomethane	75274				0.56 B, C	46 B, C	100 Total THMs C	65FR31681 SDWA
26	1, 2-Dichloroethane	107062				0.38 B, C	99 B, C	5 C	57FR60848 SDWA
27	1, 1-Dichloroethylene	75354				0.057 B, C	3.2 B, C	7 C	57FR60848 SDWA
28	1, 2-Dichloropropane	78875				0.52 B, C	39 B, C	5 C	65FR31681 SDWA
29	1, 3-Dichloropropene	542756				10 B, ee	1,700 B, ee		57FR60848
30	Ethylbenzene	100414				3,100 B, ee	29,000 B, ee	700 ee	65FR31681 SDWA
31	Methyl Bromide	74839				48 B, ee	4000 B, ee		65FR31681
32	Methylene Chloride	75092				4.7 B, C	1600 B, C	5 C	65FR31681 SDWA

Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:			
						Water & Organism (Φg/L)	Organism Only (Φg/L)	MCL (Φg/L)	
33	1, 1, 2, 2-Tetrachloroethane	79345				0.17 B, C	11 B, C		57FR60848
34	Tetrachloroethylene	127184				0.8 C	8.85 C	5 C	57FR60848 SDWA
35	Toluene	108883				6,800 B, ee	200,000 B, ee	1000 ee	65FR31681 SDWA
36	1, 2-Trans-Dichloroethylene	156605				700 B, ee	140,000 B, ee	100 ee	65FR31681 SDWA
37	1, 1, 1-Trichloroethane	71556				J, ee	J, ee	200 ee	65FR31681 SDWA
38	1, 1, 2-Trichloroethane	79005				0.60 B, C	42 B, C	5 C	57FR60848 SDWA
39	Trichloroethylene	79016				2.7 C	81 C	5 C	57FR60848 SDWA
40	Vinyl Chloride	75014				2.0 C	525 C	2 C	57FR60848 SDWA
41	2-Chlorophenol	95578				120 B, T, ee	400 B, T, ee		65FR31681
42	2, 4-Dichlorophenol	120832				93 B, T, ee	790 B, T, ee		57FR60848
43	2, 4-Dimethylphenol	105679				540 B, T, ee	2,300 B, T, ee		65FR31681
44	2-Methyl- 4, 6-Dinitrophenol	534521				13.4 ee	765 ee		57FR60848

Priority Pollutant		CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source
			CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:			
						Water & Organism (Φg/L)	Organism Only (Φg/L)	MCL (Φg/L)		
45	2, 4-Dinitrophenol	51285				70 B, ee	14,000 B, ee		57FR60848	
46	3-Methyl- 4- Chlorophenol	59507				T, ee	T, ee		Gold Book	
47	Pentachlorophenol	87865	19 F, K	15 F, K	13 Y	7.9 Y	0.28 B, C	8.2 B, C, H	1 C	65FR31681 SDWA
48	Phenol	108952				21,000 B, T, ee	4,600,000 B, H, U, ee		65FR31681 57FR60848	
49	2, 4, 6-Trichlorophenol	88062				2.1 B, C, T	6.5 B, C		65FR31681	
50	Acenaphthene	83329				1,200 B, T, ee	2,700 B, U, ee		65FR31681	
51	Anthracene	120127				9,600 B, ee	110,000 B, ee		65FR31681	
52	Benzidine	92875				0.00012 B, C	0.00054 B, C		57FR60848	
53	Benzo (a) Anthracene	56553				0.0044 B, C	0.049 B, C		65FR31681	
54	Benzo (a) Pyrene	50328				0.0044 B, C	0.049 B, C	0.2 C	65FR31681 SDWA	
55	Benzo (b) Fluoranthene	205992				0.0044 B, C	0.049 B, C		65FR31681	
56	Benzo (k) Fluoranthene	207089				0.0044 B, C	0.049 B, C		65FR31681	
57	Bis 2-Chloroethyl Ether	111444				0.031	1.4		57FR60848	

Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:			
						Water & Organism (Φg/L)	Organism Only (Φg/L)	MCL (Φg/L)	
						B, C	B, C		
58	Bis 2-Chloroisopropyl Ether	39638329				1,400 B, ee	170,000 B, ee		65FR31681 57FR60848
59	Bis 2-EthylhexylPhthalate (DEHP)	117817	v	v	v	1.8 B, C	5.9 B, C	6 C	57FR60848 SDWA
60	2-Chloronaphthalene	91587				1,700 B	4,300 B		65FR31681
61	Chrysene	218019				0.0044 B, C	0.049 B, C		65FR31681
62	Dibenzo (a, h) Anthracene	53703				0.0044 B, C	0.049 B, C		65FR31681
63	1, 2-Dichlorobenzene	95501				2,700 B, ee	17,000 B, ee	600 ee	65FR31681 SDWA
64	1, 3-Dichlorobenzene	541731				400 ee	2,600 ee		65FR31681
65	1, 4-Dichlorobenzene	106467				400 ee	2600 ee	75 ee	65FR31681 SDWA
66	3, 3'-Dichlorobenzidine	91941				0.04 B, C	0.077 B, C		57FR60848
67	2, 4-Dinitrotoluene	121142				0.11 C	9.1 C		57FR60848
68	1, 2-Diphenylhydrazine	122667				0.040 B, C	0.54 B, C		57FR60848
69	Fluoranthene	206440				300	370		65FR31681

Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:			
						Water & Organism (Φg/L)	Organism Only (Φg/L)	MCL (Φg/L)	
						B, ee	B, ee		
70	Fluorene	86737				1,300 B, ee	14,000 B, ee		65FR31681
71	Hexachlorobenzene	118741				0.00075 B, C	0.00077 B, C	1 C	65FR31681 SDWA
72	Hexachlorobutadiene	87683				0.44 B, C	50 B, C		57FR60848
73	Hexachlorocyclo- pentadiene	77474				240 B, T, ee	17,000 B, H, U, ee	50 ee	57FR60848 SDWA
74	Hexachloroethane	67721				1.9 B, C	8.9 B, C		57FR60848
75	Ideno 1, 2, 3 - (cd) Pyrene	193395				0.0044 B, C	0.049 B, C		65FR31681
76	Isophorone	78591				36 B, C	2,600 B, C		IRIS 11/01/97
77	Nitrobenzene	98953				17 B, ee	1,900 B, H, U, ee		57FR60848
78	N-Nitrosodimethylamine	62759				0.00069 B, C	8.1 B, C		57FR60848
79	N-Nitrosodi-n- Propylamine	621647				0.005 B, C	B, C		65FR31681
80	N-Nitrosodiphenylamine	86306				5.0 B, C	B, C		57FR60848
81	Pyrene	129000				960 B, ee	11,000 B, ee		65FR31681

Priority Pollutant		CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source
			CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:			
						Water & Organism (Φg/L)	Organism Only (Φg/L)	MCL (Φg/L)		
82	1, 2, 4-Trichlorobenzene	120821				260 ee	940 ee	70 ee	IRIS 11/01/96 SDWA	
83	Aldrin	309002	3.0 G		1.3 G	0.00013 B, C	0.00014 B, C		65FR31681	
84	alpha-BHC	319846				0.0039 B, C	0.013 B, C		65FR31681	
85	beta-BHC	319857				0.014 B, C	0.046 B, C		65FR31681	
86	gamma-BHC (Lindane)	58899	0.95 K		0.16 G	0.019 C	0.063 C	0.2 C	65FR31681 SDWA	
87	Chlordane	57749	2.4 G	0.0043 G, X	0.09 G	0.004 G, X	0.0021 B, C	0.0022 B, C	2 C	65FR31681 IRIS02/07/98 SDWA
88	4, 4'-DDT	50293	1.1 G	0.001 G, X	0.13 G	0.001 G, X	0.00059 B, C	B, C	65FR31681	
89	4, 4'-DDE	72559				0.00059 B, C	0.00059 B, C		65FR31681	
90	4, 4'-DDD	72548				0.00083 B, C	0.00084 B, C		65FR31681	
91	Dieldrin	60571	0.24 K	0.056 K, N	0.71 G	0.0019 G, X	0.00014 B, C	0.00014 B, C	65FR31681	
92	alpha-Endosulfan	959988	0.22 W	0.056 G, W	0.034 G, W	0.0087 G, W	110 B, ee	240 B, ee	65FR31681	
93	beta-Endosulfan	33213659	0.22 G, W	0.056 G, W	0.034 G, W	0.0087 G, W	110 B, ee	240 B, ee	65FR31681	
94	Endosulfan Sulfate	1031078				110	240		65FR31681	

Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/ Source	
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:				
						Water & Organism (Φg/L)	Organism Only (Φg/L)	MCL (Φg/L)		
						B, ee	B, ee			
95	Endrin	72208	0.086 K	0.036 K, N	0.037 G	0.0023 G, X	0.76 B, ee	0.81 B, H, ee	2 ee	65FR31681 SDWA
96	Endrin Aldehyde	7421934					0.76 B, ee	0.81 B, H, ee		65FR31681
97	Heptachlor	76448	0.52 G	0.0038	0.053 G	0.0036 G, X	0.00021 B, C	0.00021 B, C	0.4 C	65FR31681 SDWA
98	Heptachlor Epoxide	1024573	0.52 G, V	0.0038 G, U, X	0.053 G, V	0.0036 G, U, X	0.00010 B, C	0.00011 B, C	0.2 C	65FR31681 SDWA
99	Polychlorinated Biphenyls PCBs:	--		0.014 M, X		0.03 M, X	0.00017 B, C, O	0.00017 B, C, O	0.5 C	65FR31681 63FR16182 SDWA
100	Toxaphene	8001352	0.73	0.0002 X	0.21	0.0002 X	0.00073 B, C	0.00075 B, C	3 C	65FR31681 SDWA

Footnotes:

- A This water quality criterion was derived from data for arsenic (III), but is applied here to total arsenic, which might imply that arsenic (III) and arsenic (V) are equally toxic to aquatic life and that their toxicities are additive. In the arsenic criteria document (EPA 440/5-84-033, January 1985), Species Mean Acute Values are given for both arsenic (III) and arsenic (V) for five species and the ratios of the SMAVs for each species range from 0.6 to 1.7. Chronic values are available for both arsenic (III) and arsenic (V) for one species; for the fathead minnow, the chronic value for arsenic (V) is 0.29 times the chronic value for arsenic (III). No data are known to be available concerning whether the toxicities of the forms of arsenic to aquatic organisms are additive.
- B This criterion has been revised to reflect The Environmental Protection Agency's $q1^*$ or RfD, as contained in the Integrated Risk Information System (IRIS) as of April 8, 1998. The fish tissue bioconcentration factor (BCF) from the 1980 Ambient Water Quality Criteria document was retained in each case.
- C This criterion is based on carcinogenicity of 10^{-6} risk. As prescribed in Section E of this regulation, application of this criterion for permit effluent limitations requires the use annual average flow or comparable tidal condition as determined by the Department
- D Freshwater and saltwater criteria for metals are expressed in terms of total recoverable metals. As allowed in Section E of this regulation, these criteria may be expressed as dissolved metal for the purposes of deriving permit effluent limitations. The dissolved metal water quality criteria value may be calculated by using these 304(a) aquatic life criteria expressed in terms of total recoverable metal, and multiplying it by a conversion factor (CF). The term "Conversion Factor" (CF) represents the conversion factor for converting a metal criterion expressed as the total recoverable fraction in the water column to a criterion expressed as the dissolved fraction in the water column. (Conversion Factors for saltwater CCCs are not currently available. Conversion factors derived for saltwater CMCs have been used for both saltwater CMCs and CCCs). See "Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria, \cong October 1, 1993, by Martha G. Prothro, Acting Assistant Administrator for Water, available from the Water Resource center, USEPA, 401 M St., SW, mail code RC4100, Washington, DC 20460; and 40CFR \cong 131.36(b)(1). Conversion Factors can be found in Attachment 1 - Conversion Factors for Dissolved Metals.

- E The freshwater criterion for this metal is expressed as a function of hardness (mg/L) in the water column. The value given here corresponds to a hardness of 25 mg/L as expressed as CaCO₃. Criteria values for other hardness may be calculated from the following: CMC (dissolved) = exp{m_c [ln(hardness)]+ b_c} (CF), or CCC (dissolved) = exp{m_c [ln(hardness)]+ b_c} (CF) and the parameters specified in Attachment 2 - Parameters for Calculating Freshwater Dissolved Metals Criteria That Are Hardness-Dependent.
- F Freshwater aquatic life values for pentachlorophenol are expressed as a function of pH, and are calculated as follows: CMC = exp(1.005(pH)-4.869); CCC = exp(1.005(pH)-5.134). Values displayed in table correspond to a pH of 7.8.
- G This criterion is based on 304(a) aquatic life criterion issued in 1980, and was issued in one of the following documents: Aldrin/Dieldrin (EPA 440/5-80-019), Chlordane (EPA 440/5-80-027), DDT (EPA 440/5-80-038), Endosulfan (EPA 440/5-80-046), Endrin (EPA 440/5-80-047), Heptachlor (440/5-80-052), Hexachlorocyclohexane (EPA 440/5-80-054), Silver (EPA 440/5-80-071). The Minimum Data Requirements and derivation procedures were different in the 1980 Guidelines than in the 1985 Guidelines. For example, a ACMC≡ derived using the 1980 Guidelines was derived to be used as an instantaneous maximum. If assessment is to be done using an averaging period, the values given should be divided by 2 to obtain a value that is more comparable to a CMC derived using the 1985 Guidelines.
- H No criterion for protection of human health from consumption of aquatic organisms excluding water was presented in the 1980 criteria document or in the *1986 Quality Criteria for Water*. Nevertheless, sufficient information was presented in the 1980 document to allow the calculation of a criterion, even though the results of such a calculation were not shown in the document.
- I This criterion for asbestos is the Maximum Contaminant Level (MCL) developed under the Safe Drinking Water Act (SDWA) and the National Primary Drinking Water Regulation (NPDWR).
- J EPA has not calculated a 304(a) human health criterion for this contaminant. The criterion is the Maximum Contaminant Level developed under the Safe Drinking Water Act (SDWA) and the National Primary Drinking Water Regulation (NPDWR).
- K This criterion is based on a 304(a) aquatic life criterion that was issued in the *1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water*, (EPA-820-B-96-001, September 1996). This value was derived using the GLI Guidelines (60FR15393-15399, March 23, 1995; 40CFR132 Appendix A); the difference between the 1985 Guidelines and the GLI Guidelines are explained on page iv of the 1995 Updates. None of the decisions concerning the derivation of this criterion were affected by any considerations that are specific to the Great Lakes.
- L This appendix contains aquatic life criteria for selenium that are the same as those published in the CTR, with the exception of removal of the acute criterion based on EPA's June 2, 2000 revocation of the value.
- M PCBs are a class of chemicals which include aroclors, 1242, 1254, 1221, 1232, 1248, 1260, and 1016, CAS numbers 53469219, 11097691, 11104282, 11141165, 12672296, 11096825 and 12674112 respectively. The aquatic life criteria apply to this set of PCBs.
- N The derivation of the CCC for this pollutant did not consider exposure through the diet, which is probably important for aquatic life occupying upper trophic levels.
- O This criterion applies to total PCBs, i.e., the sum of all congener or all isomer analyses.
- P This water quality criterion is expressed as Φg free cyanide (as CN)/L.
- Q This value was announced (61FR58444-58449, November 14, 1996) as a proposed GLI 303 (c) aquatic life criterion.
- R This water quality criterion refers to the inorganic form only.
- S This water quality criterion is expressed in terms of total recoverable metal in the water column. It is scientifically acceptable to use the conversion factor of 0.922 that was used in the GLI to convert this to a value that is expressed in terms of dissolved metal.
- T The organoleptic effect criterion is more stringent than the value for priority toxic pollutants.
- U This value was derived from data for heptachlor and the criteria document provides insufficient data to estimate the relative toxicities of heptachlor and heptachlor epoxide.
- V There is a full set of aquatic life toxicity data that show that DEHP is not toxic to aquatic organisms at or below its solubility limit.
- W This value was derived from data for endosulfan and is most appropriately applied to the sum of alpha-endosulfan and beta-endosulfan.
- X This CCC is based on the Final Residue value procedure in the 1985 Guidelines. Since the publication of the Great Lakes Aquatic Life Criteria Guidelines in 1995 (60FR15393-15399, March 23, 1995), the EPA no longer uses the Final Residue value procedure for deriving CCCs for new or revised 304(a) aquatic life criteria.
- Y This water quality criterion is based on a 304(a) aquatic life criterion that was derived using the 1985 Guidelines (*Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses*, PB85-227049, January 1985) and was issued in one of the following criteria documents: Arsenic (EPA 440/5-84-033), Cadmium (EPA 440/5-84-032), Chromium (EPA 440/5-84-029), Copper (EPA 440/5-84-031), Cyanide (EPA 440/5-84-028), Lead (EPA 440/5-84-027), Nickel (EPA 440/5-86-004), Pentachlorophenol (EPA 440/5-86-009), Toxaphene, (EPA 440/5-86-006), Zinc (EPA 440/5-87-003).
- Z When the concentration of dissolved organic carbon is elevated, copper is substantially less toxic and use of Water-Effect Ratios might be appropriate.
- aa The selenium criteria document (EPA 440/5-87-006, September 1987) provides that if selenium is as toxic to saltwater fishes in the field as it is to freshwater fishes in the field, the status of the fish community should be monitored whenever the concentration of selenium exceeds 5.0 Φg/L in salt water because the saltwater CCC does not take into account uptake via the food chain.
- bb This water quality criterion was derived on page 43 of the mercury criteria document (EPA 440/5-84-026, January 1985). The saltwater CCC of 0.025 ug/L given on page 23 of the criteria document is based on the Final Residue value procedure in the 1985 Guidelines. Since the publication of the Great Lakes Aquatic Life criteria Guidelines in 1995 (60FR15393-15399, March 23, 1995), the EPA no longer uses the Final Residue value procedure for deriving CCCs for new or revised 304(a) aquatic life criteria.
- cc This water quality criterion was derived in *Ambient Water Quality Criteria Saltwater Copper Addendum* (Draft, April 14, 1995) and was promulgated in the Interim Final National Toxics Rule (60FR22228-22237, May 4, 1995).
- dd This water quality criterion was derived from data for inorganic mercury (II), but is applied here to total mercury. If a substantial portion of the mercury in the water column is methylmercury, this criterion will probably be under protective. In addition, even though inorganic mercury is converted to methylmercury and methylmercury bioaccumulates to a great extent, this criterion does not account for uptake via the food chain because sufficient data were not available when the criterion was derived.

ee This criterion is a noncarcinogen. As prescribed in Section E of this regulation, application of this criterion for determining permit effluent limitations requires the use of 7Q10 or 30Q5 (if provided by the applicant), or comparable tidal condition as determined by the Department.

NON PRIORITY POLLUTANTS

Non Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/Source	
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:		MCL (Φg/L)		
						Water & Organism (Φg/L)	Organism Only (Φg/L)			
1	Alachlor	--						2 M	SDWA	
2	Ammonia	7664417	CRITERIA ARE pH AND TEMPERATURE DEPENDENT - SEE DOCUMENT FOR DETAILS C							EPA822-R99-014 EPA440/5-88-004
3	Aesthetic Qualities	--	NARRATIVE STATEMENT AND NUMERIC CRITERIA - SEE TEXT							Gold Book
4	Atrazine	--						3 M	SDWA	
5	Bacteria	--	FOR PRIMARY CONTACT RECREATION AND SHELLFISH USES -- SEE TEXT							Gold Book
6	Barium	7440393					1000 A, L	2000 L	Gold Book	
7	Carbofuran	1563662						40 L	SDWA	
8	Chlorine	7782505	19 L	11 L	13 L	7.5 L			Gold Book	
9	Chlorophenoxy Herbicide 2, 4, 5, -TP	93721					10 A, L	50 L	Gold Book SDWA	
10	Chlorophenoxy Herbicide 2, 4-D	94757					100 A, L	70 L	Gold Book SDWA	
11	Chlorophyll <i>a</i>	--	NARRATIVE STATEMENT AND NUMERIC CRITERIA - SEE TEXT							State Standard
12	Chloropyrifos	2921882	0.083	0.041	0.011	0.0056			Gold Book	

Non Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/Source
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:		MCL (Φg/L)	
						Water & Organism (Φg/L)	Organism Only (Φg/L)		
		F, L	F, L	F, L	F, L				
13	Color	--	NARRATIVE STATEMENT - SEE TEXT						State Standard
14	Dalapon	75990						200 L	SDWA
15	Demeton	8065483		0.1 E, L		0.1 E, L			Gold Book
16	1, 2-Dibromo-3-chloropropane (DBCP)	96128						0.2 M	SDWA
17	Di(2-ethylhexyl) adipate	103231						400 L	SDWA
18	Dinoseb	88857						7 L	SDWA
19	Dinitrophenols	25550587					70 L	14,000 L	Gold Book
20	Diquat	85007						20 L	SDWA
21	Endothall	145733						100 L	SDWA
22	Ether, Bis Chloromethyl	542881					0.00013 D, L	0.00078 D, L	IRIS 01/01/91
23	Ether, Cis-1, 2-dichloroethylene	156592						70 L	SDWA
24	Ethylene dibromide	--						0.05 M	SDWA
25	Fluoride	7681494						4000 L	SDWA

Non Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/Source	
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:		MCL (Φg/L)		
						Water & Organism (Φg/L)	Organism Only (Φg/L)			
26	Glyphosate	1071836						700 L	SDWA	
27	Guthion	86500	0.01 E, L		0.01 E, L				Gold Book	
28	Hexachlorocyclo-hexane-Technical	319868				0.0123 L	0.0414 L		Gold Book	
29	Iron	7439896	1000 E, L			300 A, L			Gold Book	
30	Malathion	121755	0.1 E, G, L		0.1 E, G, L				Gold Book	
31	Manganese	7439965				50 A, L	100 A, L		Gold Book	
32	Methoxychlor	72435	0.03 E, G, L		0.03 E, G, L	100 A, L		40 L	Gold Book SDWA	
33	Mirex	2385855	0.001 E, G, L		0.001 E, G, L				Gold Book	
34	Nitrates	14797558						10,000 L	SDWA	
35	Nitrites	14797650						1000 L	SDWA	
36	Nitrogen, Total	--	NARRATIVE STATEMENT AND NUMERIC CRITERIA - SEE TEXT							State Standard
37	Nitrosamines	--				0.0008 L	1.24 L		Gold Book	
38	Nitrosodibutylamine, N	924163					0.0064 A, L		Gold Book	

Non Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/Source	
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:		MCL (Φg/L)		
						Water & Organism (Φg/L)	Organism Only (Φg/L)			
39	Nitrosodiethylamine, N	55185				0.0008 A, L			Gold Book	
40	Nitrosopyrrolidine, N	930552				0.016 L			Gold Book	
41	Oil and Grease	--	NARRATIVE STATEMENT - SEE TEXT							Gold Book
42	Oxamyl	23135220						200 L	SDWA	
43	Oxygen, Dissolved	7782447	WARMWATER, COLDWATER, AND EXCEPTIONS FOR NATURAL CONDITIONS - SEE TEXT K							Gold Book State Standard
44	Parathion	56382	0.065 H, L	0.013 H, L					Gold Book	
45	Pentachlorobenzene	608935				3.5 E	4.1 E		IRIS 03/01/88	
46	pH	--	SEE TEXT I							Gold Book State Standard
47	Phosphorus, Total		NARRATIVE STATEMENT AND NUMERIC CRITERIA - SEE TEXT							State Standard
48	Picloram	1918021						500 L	SDWA	
49	Salinity	--	NARRATIVE STATEMENT - SEE TEXT							Gold Book
50	Simazine	122349						4 L	SDWA	
51	Solids Suspended and Turbidity	--	NARRATIVE STATEMENT AND NUMERIC CRITERIA - SEE TEXT							Gold Book State Standard
52	Styrene	100425						100	SDWA	

Non Priority Pollutant	CAS Number	Freshwater Aquatic Life		Saltwater Aquatic Life		Human Health			FR Cite/Source
		CMC (Φg/L)	CCC (Φg/L)	CMC (Φg/L)	CCC (Φg/L)	For Consumption of:		MCL (Φg/L)	
						Water & Organism (Φg/L)	Organism Only (Φg/L)		
								L	
53	Sulfide-Hydrogen Sulfide	7783064	2.0 E, G, L		2.0 E, G, L				Gold Book
54	Tainting Substances	--	NARRATIVE STATEMENT - SEE TEXT						Gold Book
55	Temperature	--	SPECIES DEPENDENT CRITERIA - SEE TEXT J						Red Book
56	1, 2, 4, 5-Tetrachlorobenzene	95943					2.3 E	2.9 E	IRIS03/01/91
57	Tributyltin (TBT)	688733	0.46 L	0.063 L	0.38 L	0.001 L			62FR42554
58	1, 2, 4-Trichlorobenzene	120821						70 L	SDWA
59	2, 4, 5-Trichlorophenol	95954						2, 600 B, D	IRIS 03/01/88
60	Xylenes, Total	--						10, 000 L	SDWA
61	Beta particles and photon emitters	--						4 Millirems/yr	SDWA
62	Gross alpha particle activity	--						15 picocuries per liter (pCi/l)	SDWA
63	Radium 226 and Radium 228 (combined)	--						5 pCi/l	SDWA

Footnotes:

- A This human health criterion is the same as originally published in the Red Book which predates the 1980 methodology and did not utilize the fish ingestion BCF approach. This same criterion value is now published in the Gold Book.
- B The organoleptic effect criterion is more stringent than the value presented in the non priority pollutants table.
- C According to the procedures described in the *Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses*, except possibly where a very sensitive species is important at a site, freshwater aquatic life should be protected if both conditions specified in Attachment 3 - Calculation of Freshwater Ammonia Criterion are satisfied.
- D This criterion has been revised to reflect The Environmental Protection Agency's q_1^* or RfD, as contained in the Integrated Risk Information System (IRIS) as of April 8, 1998. The fish tissue bioconcentration factor (BCF) used to derive the original criterion was retained in each case.
- E The derivation of this value is presented in the Red Book (EPA 440/9-76-023, July, 1976).
- F This value is based on a 304(a) aquatic life criterion that was derived using the 1985 Guidelines (*Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses*, PB85-227049, January 1985) and was issued in the following criteria document: Chloropyrifos (EPA 440/5-86-005).
- G This CCC is based on the Final Residue Value procedure in the 1985 Guidelines. Since the publication of the Great Lakes Aquatic Life Criteria Guidelines in 1995 (60 FR 15393-15399, March 23, 1995), the EPA no longer uses the Final Residue Value procedure for deriving CCCs for new or revised 304(a) aquatic life criteria.
- H This value is based on a 304(a) aquatic life criterion that was issued in the *1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water* (EPA-820-B-96-001). This value was derived using the GLI Guidelines (60FR15393-15399, March 23, 1995; 40CFR132 Appendix A); the differences between the 1985 Guidelines and the GLI Guidelines are explained on page iv of the 1995 Updates. No decision concerning this criterion was affected by any considerations that are specific to the Great Lakes.
- I South Carolina has established some site-specific standards for pH. These site-specific standards are listed in S.C. Regulation 61-69, Classified Waters.
- J U.S. EPA, 1976, Quality Criteria for Water 1976.
- K South Carolina has established numeric criteria in Section G for waters of the State based on the protection of warmwater and coldwater species. For the exception to be used for waters of the State that do not meet the numeric criteria established for the waterbody due to natural conditions, South Carolina has specified the allowable deficit in Section D.4. and used the following document as a source. U.S. EPA, 1986, Ambient Water Quality Criteria for Dissolved Oxygen, EPA 440/5-86-003, National Technical Information Service, Springfield, VA. South Carolina has established some site-specific standards for DO. These site-specific standards are listed in S.C. Regulation 61-69, Classified Waters.
- L This criterion is a noncarcinogen. As prescribed in Section E of this regulation, application of this criterion for determining permit effluent limitations requires the use of 7Q10 or 30Q5 (if provided by the applicant), or comparable tidal condition as determined by the Department
- M This criterion is based on an added carcinogenicity risk. As prescribed in Section E of this regulation, application of this criterion for permit effluent limitations requires the use annual average flow or comparable tidal condition as determined by the Department.

ORGANOLEPTIC EFFECTS

Pollutant		CAS Number	Organoleptic Effect Criteria (Φg/L)	FR Cite/Source
1	Acenaphthene	83329	20	Gold Book
2	Monochlorobenzene	108907	20	Gold Book
3	3-Chlorophenol	--	0.1	Gold Book
4	4-Chlorophenol	106489	0.1	Gold Book
5	2, 3-Dichlorophenol	--	0.04	Gold Book
6	2, 5-Dichlorophenol	--	0.5	Gold Book
7	2, 6-Dichlorophenol	--	0.2	Gold Book
8	3, 4-Dichlorophenol	--	0.3	Gold Book
9	2, 4, 5-Trichlorophenol	95954	1	Gold Book
10	2, 4, 6-Trichlorophenol	88062	2	Gold Book
11	2, 3, 4, 6-Tetrachlorophenol	--	1	Gold Book
12	2-Methyl-4-Chlorophenol	--	1800	Gold Book
13	3-Methyl-4-Chlorophenol	59507	3000	Gold Book
14	3-Methyl-6-Chlorophenol	--	20	Gold Book
15	2-Chlorophenol	95578	0.1	Gold Book
16	Copper	7440508	1000	Gold Book
17	2, 4-Dichlorophenol	120832	0.3	Gold Book
18	2, 4-Dimethylphenol	105679	400	Gold Book
19	Hexachlorocyclopentadiene	77474	1	Gold Book

Pollutant		CAS Number	Organoleptic Effect Criteria (Φ g/L)	FR Cite/Source
20	Nitrobenzene	98953	30	Gold Book
21	Pentachlorophenol	87865	30	Gold Book
22	Phenol	108952	300	Gold Book
23	Zinc	7440666	5000	45 FR79341

Footnote:

1. These criteria are based on organoleptic (taste and odor) effects. Because of variations in chemical nomenclature systems, this listing of pollutants does not duplicate the listing in Appendix A of 40 CFR Part 423. Also listed are the chemical Abstracts Service (CAS) registry numbers, which provide a unique identification for each chemical.

WATER QUALITY CRITERIA ADDITIONAL NOTES

1. Criteria Maximum Concentration and Criterion Continuous Concentration

The Criteria Maximum Concentration (CMC) is an estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The Criterion Continuous Concentration (CCC) is an estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed indefinitely without resulting in an unacceptable effect. The CMC and CCC are just two of the six parts of a aquatic life criterion; the other four parts are the acute averaging period, chronic averaging period, acute frequency of allowed exceedence, and chronic frequency of allowed exceedence.

2. Criteria for Priority Pollutants, Non Priority Pollutants and Organoleptic Effects

This appendix lists all priority toxic pollutants and some non priority toxic pollutants, and both human health effect and organoleptic effect criteria issued pursuant to CWA 304(a), the SDWA, and the NPDWR. Blank spaces indicate that EPA has no CWA 304(a) criteria recommendations. Because of variations in chemical nomenclature systems, this listing of toxic pollutants does not duplicate the listing in Appendix A of 40 CFR Part 423.

3. Human Health Risk

The human health criteria for the priority and non priority pollutants are based on carcinogenicity of 10^{-6} risk.

4. Water Quality Criteria published pursuant to Section 304(a) or Section 303(c) of the CWA

Many of the values in the appendix were published in the California Toxics Rule. Although such values were published pursuant to Section 303(c) of the CWA, they represent the EPA's most recent calculation of water quality criteria.

5. Calculation of Dissolved Metals Criteria

The 304(a) criteria for metals are shown as total recoverable metals. As allowed in Section E of this regulation, these criteria may be expressed as dissolved metals. Dissolved metals criteria may be calculated in one of two ways (please refer to Attachments). For freshwater metals criteria that are hardness-dependent, the dissolved metal criteria may be calculated using a hardness of 25 mg/l as expressed as CaCO_3 . Saltwater and freshwater metals criteria that are not hardness-dependent are calculated by multiplying the total recoverable criteria before rounding by the appropriate conversion factors. The final metals criteria in the table are rounded to two significant figures. Information regarding the calculation of hardness dependent conversion factors are included in the footnotes.

6. Chemical Abstract Services Number

The Chemical Abstract Services number (CAS) for each pollutant is provided (where available).

7. Gold Book Reference

The Gold Book reference listed in the appendix refers to the May 1, 1986 EPA publication EPA 440/5-86-001.

8. Federal Register Reference

The FR listed in the appendix refers to the appropriate *Federal Register* listing, and source refers to the origin of the value. Many of the numeric values contained in this appendix have been modified, revised, or altered and therefore, the source as listed may not be the same as it appears in this table. Also, South Carolina may have selected to use a different value or may have promulgated a different value in its previous iterations of this regulation, so differences from these sources should be expected.

9. Maximum Contaminant Levels

The appendix includes Maximum Contaminant Levels (MCLs) developed under the Safe Drinking Water Act (SDWA) and the National Primary Drinking Water Regulation (NPDWR).

10. Organoleptic Effects

The appendix contains 304(a) criteria for pollutants with toxicity-based criteria as well as non-toxicity based criteria. The basis for the non-toxicity based criteria are organoleptic effects (e.g., taste and odor) which would make water and edible aquatic life unpalatable but not toxic to humans. The table includes criteria for organoleptic effects for 23

pollutants. Pollutants with organoleptic effect criteria more stringent than the criteria based on toxicity (e.g., included in both the priority and non-priority pollutant tables) are footnoted as such.

11. Category Criteria

In the 1980 criteria documents, certain water quality criteria were published for categories of pollutants rather than for individual pollutants within that category. Subsequently, in a series of separate actions, the EPA derived criteria for specific pollutants within a category. Therefore, in this appendix South Carolina is replacing criteria representing categories with individual pollutant criteria (e.g., 1, 3-dichlorobenzene, 1, 4-dichlorobenzene and 1, 2-dichlorobenzene).

12. Specific Chemical Calculations

A. Selenium

(1) Human Health

In the 1980 Selenium document, a criterion for the protection of human health from consumption of water and organisms was calculated based on a BCF of 6.0 l/kg and a maximum water-related contribution of 35 Φ g Se/day. Subsequently, the EPA Office of Health and Environmental Assessment issued an errata notice (February 23, 1982), revising the BCF for selenium to 4.8 L/kg. In 1988, EPA issued an addendum (ECAO-CIN-668) revising the human health criteria for selenium. Later in the final National Toxic Rule (NTR, 57 FR 60848), EPA withdrew previously published selenium human health criteria, pending EPA review of new epidemiological data.

This appendix includes human health criteria for selenium, calculated using a BCF of 4.8 L/kg along with the current IRIS RfD of 0.005 mg/kg/day. South Carolina included these water quality criteria in the appendix because the data necessary for calculating a criteria in accordance with EPA's 1980 human health methodology are available.

(2) Aquatic Life

This appendix contains aquatic life criteria for selenium that are the same as those published in the CTR, with the exception of removal of the acute criterion based on EPA's June 2, 2000 revocation of the value.

B. 1, 2, 4-Trichlorobenzene and Zinc

Human health criteria for 1, 2, 4-trichlorobenzene and zinc have not been previously published. Sufficient information is now available for calculating water quality criteria for the protection of human health from the consumption of aquatic organisms and the consumption of aquatic organisms and water for both these compounds.

C. Chromium (III)

The aquatic life water quality criteria for chromium (III) included in the appendix are based on the values presented in the document titled: *1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water*.

D. Ether, Bis (Chloromethyl), Pentachlorobenzene, Tetrachlorobenzene 1, 2, 4, 5-, Trichlorophenol

Human health criteria for these pollutants were last published in EPA's *Quality Criteria for Water 1986* or AGold Book. Some of these criteria were calculated using Acceptable Daily Intake (ADIs) rather than RfDs. Updated q1*s and RfDs are now available in IRIS for ether, bis (chloromethyl), pentachlorobenzene, tetrachlorobenzene 1, 2, 4, 5-, and trichlorophenol, and were used to revise the water quality criteria for these compounds. The water quality criteria for ether, bis (chloromethyl) were revised using an updated q1*, while criteria for pentachlorobenzene, and tetrachlorobenzene 1, 2, 4, 5-, and trichlorophenol were derived using an updated RfD value.

E. PCBs

In this appendix, South Carolina is publishing aquatic life and human health criteria based on total PCBs rather than individual arochlors. These criteria replace the previous criteria for the seven individual arochlors.

Attachment 1 - Conversion Factors for Dissolved Metals

Metal	Conversion Factor freshwater CMC	Conversion Factor freshwater CCC	Conversion Factor saltwater CMC	Conversion Factor saltwater CCC
Arsenic	1.000	1.000	1.000	1.000
Cadmium	$1.136672 - [(\ln \text{hardness})(0.041838)]$	$1.101672 - [(\ln \text{hardness})(0.041838)]$	0.994	0.994
Chromium III	0.316	0.860	--	--
Chromium VI	0.982	0.962	0.993	0.993
Copper	0.960	0.960	0.83	0.83
Lead	$1.46203 - [(\ln \text{hardness})(0.145712)]$	$1.46203 - [(\ln \text{hardness})(0.145712)]$	0.951	0.951
Mercury	0.85	0.85	0.85	0.85
Nickel	0.998	0.997	0.990	0.990
Selenium	--	--	0.998	0.998
Silver	0.85	--	0.85	--
Zinc	0.978	0.986	0.946	0.946

Attachment 2 - Parameters for Calculating Freshwater Dissolved Metals Criteria That Are Hardness-Dependent

Chemical	m _A	b _A	m _C	b _C	Freshwater Conversion Factors (CF)	
					Acute	Chronic
Cadmium	1.128	-3.6867	0.7852	-2.715	$1.136672 - [\ln(\text{hardness})(0.041838)]$	$1.101672 - [\ln(\text{hardness})(0.041838)]$
Chromium III	0.8190	3.7256	0.8190	0.6848	0.316	0.860
Copper	0.9422	-1.700	0.8545	-1.702	0.960	0.960
Lead	1.273	-1.460	1.273	-4.705	$1.46203 - [\ln(\text{hardness})(0.145712)]$	$1.46203 - [\ln(\text{hardness})(0.145712)]$
Nickel	0.8460	2.255	0.8460	0.0584	0.998	0.997
Silver	1.72	-6.52	--	--	0.85	--
Zinc	0.8473	0.884	0.8473	0.884	0.978	0.986

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Attachment 3 - Calculation of Freshwater Ammonia Criterion

1. The one-hour average concentration of total ammonia nitrogen (in mg N/L) does not exceed, more than once every three years on the average, the CMC calculated using the following equation:

$$\text{CMC} = \frac{0.275}{1 + 10^{7.204 - \text{pH}}} + \frac{39.0}{1 + 10^{\text{pH} - 7.204}}$$

In situations where salmonids are absent, the CMC may be calculated using the following equation:

$$\text{CMC} = \frac{0.411}{1 + 10^{7.204 - \text{pH}}} + \frac{58.4}{1 + 10^{\text{pH} - 7.204}}$$

2. The thirty-day average concentration of total ammonia nitrogen (in mg N/L) does not exceed, more than once every three years on the average, the CCC calculated using the following equations:

When fish early life stages (ELS) are present:

$$\text{CCC} = \square \frac{0.0577}{1 + 10^{7.688 - \text{pH}}} + \frac{2.487}{1 + 10^{\text{pH} - 7.688}} \square \times \min(2.85, 1.45 \times 10^{0.028 \times (25 - T)})$$

When fish early life stages are absent:

$$\text{CCC} = \square \frac{0.0577}{1 + 10^{7.688 - \text{pH}}} + \frac{2.487}{1 + 10^{\text{pH} - 7.688}} \square \times 1.45 \times 10^{0.028 \times (25 - \max(T, 7))}$$

and the highest four-day average within the 30-day period does not exceed 2.5 times the CCC.

In the absence of information substantiating that ELS are absent, the ELS present equation will be used.

Preliminary Fiscal Impact Statement:

No costs to the State or significant cost to its political subdivisions as a whole should be incurred by these amendments. See Statement of Need and Reasonableness.

Statement of Need and Reasonableness:

The statement of need and reasonableness was determined by staff analysis pursuant to S.C. Code Section 1-23-115(C)(1)-(3) and (9)-(11):

DESCRIPTION OF REGULATION: Amendment of Regulation 61-68, Water Classifications and Standards.

Purpose: Proposed amendment of R.61-68 will clarify, strengthen, and improve the overall quality of the existing regulation and make appropriate revisions of the state's water quality standards in accordance with Section 303(c)(2)(B) of the Federal Clean Water Act.

Legal Authority: S.C. Code Sections 48-1-40, 48-1-60, and 48-1-80, implementing the Clean Water Act.

Plan for Implementation: The proposed amendment would be incorporated within R.61-68 upon approval of the General Assembly and publication in the State Register. The proposed amendment will be implemented in the same manner in which the present regulation is implemented.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFIT: This amendment is required to comply with Federal requirements of Section 303(c)(2)(B) of the Clean Water Act.

- **The adoption of federal toxics criteria to reflect the most current final published criteria according to Sections 304(a) and 307(a) of the Clean Water Act.**

The proposed changes to R.61-68 relating to human health and aquatic life criteria are reasonable because the stated criteria in the amendment are based on sound scientific principles and are required in order to comply with the goals of Section 101(a)(2) and 303(c) of the Clean Water Act for protection and maintenance of the uses of the waters of the State. These changes include using a more protective cancer risk level of one in one million (10^{-6}) in place of the existing risk level of one in one hundred thousand (10^{-5}) in order to ensure protection for all populations within South Carolina.

- **The adoption of numeric criteria for phosphorus, nitrogen, and chlorophyll *a*.**

In an effort to resolve issues with the assessment of the narrative standard for nutrients, the Department believes that numeric criteria for specific parameters associated with over-enrichment for nutrients should be adopted. The Department used EPA's document "Nutrient Criteria Technical Guidance Manual: Lakes and Reservoirs (EPA 822-D-99-001 April, 1999)" in conjunction with the Department's extensive database of nutrient data to develop the proposed numeric criteria for phosphorus, nitrogen, and chlorophyll *a* for lakes. The Department affirms that these proposed numeric values are representative of South Carolina waters and are appropriate and necessary. While understanding that the Department's intent through this regulation is the important goal of protecting and maintaining a balanced aquatic community for lakes in the State from the impacts caused by nutrient over-enrichment and since the Department has incurred significant amounts of staff time and valuable resources in defending its use of the narrative nutrient standard for monitoring and permitting through litigious suits; the Department affirms that the proposed numeric criteria are reasonable in order to resolve these issues.

- **Selection of a more appropriate hardness value.**

In the mid-1980's, the EPA published numeric criteria for several metals under Section 304(a) and 307(a) of the CWA. Published criteria documents on some of these metals indicated variability for aquatic life toxicity with an associated hardness (as CaCO_4) level. The criteria data indicated that the relationship was shown to be inversely proportional in that as the hardness levels decrease, the toxicity associated with the metal increases. In 1992, the EPA published the National Toxics Rule (NTR) in the *Federal Register* in its promulgation of numeric criteria for some States and Territories. Contained in this ruling was a review by the EPA of its numeric criteria for these metals. Specifically noticed was the range of hardness values for data that the EPA had considered when deriving the numeric criteria. This range was from 25 mg/l to 400 mg/l for hardness (in previous publications, the criteria hardness values began at 50 mg/l).

R.61-68 presently states that the Department will use a hardness value of 50 mg/l as its lowest value for use with the aquatic life criteria and allows for a higher value to be determined based on the characteristics of the waterbody. Due to the fact that the majority of ambient values for hardness in waters of the State are less than 25 mg/l, the Department proposes to lower the hardness value included in the regulation to 25 mg/l and include an upper limitation of 400 mg/l for consistency with the federal aquatic life criteria range of data. This will provide better protection for resident aquatic communities due to the ambient hardness levels found in South Carolina.

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- **Adoption of a statewide turbidity standard.**

The CWA's objectives include the protection and restoration of the physical integrity of our nation's waters. Physical criteria is a concept that takes into account the physical attributes of the aquatic environment, such as the quality of habitat and hydrologic balance. Impairments of the waters have been determined to be a result of turbidity, silt, and sediment deposition into waters from the eroded material from the stream bed and stream banks that are scoured out during elevated wet weather peak discharges and extended hydroperiods. This can lead to eutrophication, increased turbidity, decreased light penetration, submerged aquatic vegetation loss, spawning bed smothering, and shellfish habitat damage. A recent EPA document noted that scientific experts agree that overall physical habitat loss is the single biggest factor in the loss of aquatic species and that physical habitat parameters are important and often overlooked parameters that influence and at some sites control whether or not an aquatic life use is or will be attained.

While the EPA clearly recognizes the importance of physical criteria, they have not recommended a specific criterion for turbidity. Presently the water quality standards include a turbidity standard for the protection of trout waters of the State. It was determined that habitat loss was especially crucial to these species for propagation and well-being. While the turbidity standard included in the regulation for trout waters is appropriate, the Department was concerned that the criterion may be overly conservative for all waters of the State. Trout waters are often clear. Many of the waters of the State are often more turbid due to natural, not anthropogenic, effects. Therefore a single value for turbidity seems inappropriate and hence why the Department is proposing different values for different types of waters of the State. In order to protect our valuable water resources from habitat loss and impairment, the Department affirms that the proposed numeric values for turbidity are necessary and reasonable.

- **Inclusion of language to clarify the components of water quality standards.**

To convey the concepts of the water quality standards, the Department believes it is important to state their components in straightforward language that the public will understand. All of these components of the water quality standards are contained in the many sections of the regulation, but no where does it simply state that these items are themselves water quality standards. This deficiency in the regulation has led to some miscommunication between Department staff, the regulated community, and other interested parties. It is our intent to remedy this situation by necessarily revising the water quality standards regulation to include additional language that states the various components of water quality standards and their purpose.

- **Inclusion of language to strengthen the existing narrative standards.**

Narrative criteria allow the Department to control and abate water pollution for items for which no numeric criteria exist and fulfill the intent of the CWA Section 101(a)(3) prohibition of the discharge of toxic pollutants in toxic amounts. These narrative standards encompass the thousands of pollutants for which no numeric criteria exist. Narrative standards also provide protection from the synergistic and additive effects of these pollutants. Biological criteria, or biocriteria, must be reflected through the narrative standards contained in R.61-68. It is reasonable for the Department to strengthen those narrative standards of the water quality standards regulation so that they may fulfill the goals of the Act.

EPA regulations require that narrative criteria be implemented through the NPDES permit limits. More specifically, when the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion, the permit must, under most circumstances, contain effluent limits for whole effluent toxicity and under some circumstances must contain effluent limits for specific pollutants that are based on an interpretation of the State's narrative criterion.

- **Inclusion of a description for Outstanding National Resource Waters (ONRWs).**

Federal antidegradation policy contained in 40 CFR 131.12 requires that States include in their water quality standards a level of protection for Outstanding National Resource Waters (ONRWs). These waters are determined to be of such outstanding ecological or recreational value to the Nation that they require the “highest” level of protection that the water quality standards can provide. In order to protect these special waters, the prohibition of any permanent permitted discharge of any kind is required.

South Carolina has incorporated these requirements into our water quality standards. Section D of the regulation states, “The water quality of outstanding resource surface waters designated as Class ORW shall be maintained and protected through the application of the standards for Class ORW as described in Section G.4 and 5. The Department may determine, through the classification process, that some Class ORW waters are nationally significant. Upon such determination, all activities described in Section G.4 and 5 shall be prohibited.”

As described in the existing antidegradation rules, any waterbody classified as an ONRW would no longer allow certain activities. Since the current regulation already contains the class ONRW, the Department believes including the class description in the regulation would clarify that this classification exists. Therefore, the Department is proposing to include Class ONRW and its specific standards in Section G of the regulation.

- **Clarification of surface water mixing zone allowances by including specific delineations and requirements.**

Some concerns have been expressed by both the regulated community and environmental groups over the lack of specificity in the State’s mixing zone policy. These groups have stated that they believe this lack of specificity may result in subjective and inconsistent implementation of water quality standards from site-to-site. Still a certain amount of flexibility is essential when dealing with complex water quality problems on a waterbody, watershed, or basin scale. Explicit requirements for mixing zones need to be addressed in the water quality standards regulation while still providing flexibility so that the Department may be able to use the mixing zone allowance to address all of the multiple, differing, and complex situations that arise in permit development and issuance for the waters of the State.

The present mixing zone language in R.61-68 goes a long way to providing a basis for mixing zone allowances and at the same time, establishing requirements for the protection of the waters of the State. All of the statements expressed in the existing language are essential to this goal. Therefore, the Department does not intend to remove any of the requirements presently stated in the regulation. Rather, we intend to clarify the statements and to add specific requirements dealing with the dynamics of individual mixing zones. This is not an easy task due to the fact that it would be impossible to enumerate every instance and situation where mixing occurs in the waters of the State. Therefore, the Department proposes that it is appropriate to deal with the issue through statements about the broader categories of both water quality and pollutants and specifically noting when a prohibition or limitation occurs. We believe that leaving the language as general statements will allow enough flexibility to include case-by-case considerations for specific size delineations and mixing zone limitations. The Department is also proposing additional restrictions for the use of mixing zones in an effort to protect aquatic life and human health. The Department affirms that the additional language is both necessary and reasonable in order to resolve concerns related to the allowance and application of mixing zones.

- **Clarification of language dealing with contaminated ground water.**

Ground waters of the State are intended to be protected and do have water quality criteria to protect and maintain them as drinking water sources. Due to some past situations where the responsibility of remediation of contaminated ground water has become an issue, the Department is proposing additional

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language that requires that responsible parties be held accountable for remediation of the contaminated ground water.

- **Inclusion of a reporting requirement for unauthorized discharges to waters of the State.**

Included in the existing regulation is the requirement that all discharges be permitted by the Department. Section 48-1-100 of the PCA establishes this authority of the Department. Section 48-1-90 of the PCA states that it is unlawful for any person, directly or indirectly, to discharge wastes into waters of the State except as provided by a permitted discharge authorized by the Department. It is clear from these statements that the goal of the PCA is to ensure that discharges to waters of the State be regulated.

Several of the Department's regulations (e.g., R.61-9, Water Pollution Control Permits) contain language that requires a permittee to report noncompliance which may endanger the public health or the environment. The Department believes it is important that not only permittees be required to report such discharges, but that responsible party(ies) report any illegal discharges to the Department. It is only through notification and thus knowledge of possible violations to the water quality standards that the Department can ensure the protection of the public health and the welfare of the environment.

Because of this concern, the Department is proposing the inclusion of a reporting requirement in the water quality standards regulation for unauthorized discharges to waters of the State. We believe the language proposed is consistent with the reporting requirements contained in other Departmental regulations. Unauthorized discharges may, in fact, cause violations of established water quality standards. Without knowledge of unauthorized pollution, the Department's ability to provide the public with assurances that those standards are being attained and protected is impeded.

- **Clarification of the applicability of flow conditions.**

To ensure the protection of the existing and classified uses of the waters of the State, it is important that the Department specify the flow conditions that will be used when applying the State's water quality numeric criteria. Since water quality standards maintain the waters of the State for the propagation and protection of terrestrial and aquatic fauna and flora and also protect the public health, safety and welfare, the Department specifies which flow conditions are applicable for both aquatic life and human health numeric criteria.

Water quality criteria to protect aquatic life consist of three components: magnitude, duration, and frequency. Magnitude refers to the acceptable concentration of a pollutant. Duration is the period of time (averaging period) over which the ambient concentration is averaged for comparison with criteria concentrations. Frequency is how often the criteria can be exceeded to allow the aquatic community sufficient time to recover from excursions of aquatic life criteria and to thrive after recovery. The numeric aquatic life criteria are expressed as short-term (acute) and long-term (chronic) concentrations in order that the criteria more accurately reflect toxicological and practical realities. The combination of these two criteria provides protection of aquatic life and its uses. Recommended averaging periods are kept relatively short because excursions higher than the average can kill or cause substantial damage in short periods. The frequency limitations specify that both the acute and chronic criteria may be exceeded once in a three-year period on average. In order to approximate each of these components of the numeric criteria, water quality standards have prescribed flow requirements that enable the Department to issue permits in such a way as to address these requirements. The recommended once in a three-year period coupled with the 4-day chronic averaging period used for the chronic criteria approximately corresponds to the historically used criterion concentrations that occurs in a once-in-a-ten year seven-day-average low flow (7Q10).

Human health water quality numeric criteria are scientifically-derived values developed to protect human health. Regulation 61-68 has contained numeric organoleptic criteria since 1991. Organoleptic criteria are developed to ensure the aesthetic qualities of the waters of the State that are important for both public and

private concerns and uses. While the regulation specifies the flow conditions appropriate for protection of the classified and existing uses for aquatic life criteria and also for other human health criteria, organoleptic criteria were not mentioned per se. Also, the Department evaluated other flow conditions to be used in order to protect the public health and welfare and found that some specific language for the application of the numeric criteria was needed. Therefore, the Department is proposing additional language to specify the flow conditions to be used in applying numeric criteria for the protection of human health and organoleptic effects.

Another issue addressed by these revisions is the use of Hydrograph Controlled Releases (HCRs). HCRs mean the onsite storage or holding of treated wastewater or the use of an alternative discharge option of this regulation, during specified critical streamflow conditions and then discharging the treated wastewater to the stream when streamflow is sufficient to assimilate the wastewater. While R.61-68 allows other flow conditions to be used by the Department in very specific situations, it does not specifically address this type of discharge. As the requests for these types of discharges have increased, the Department realized that specific applicable flow conditions for HCRs should be included in the standards regulation to ensure the protection of the overall health and well-being of the waterbody. With the understanding that the flow conditions established in the regulation are included in order to ensure that the waters of the State are protected, the Department believes there are specific instances where the standards do not allow the use of HCRs. We also believe that there are situations where an HCR may be appropriate for use in order to meet the water quality standards when no other option is available, provided that the antidegradation rules are properly reviewed and implemented. Therefore, recognizing the increase in instances where these types of discharges have been requested and finding that the regulation does not specifically address this important issue, the Department is proposing necessary language to reflect the appropriate flow conditions to be used when applying the numeric criteria and additional language to specify the restrictions of the use of HCRs.

- **Clarification of existing language to ensure that downstream uses of waters of the State are protected.**

From the earliest versions of both state and federal laws and regulations, it is clear that all uses of the waters of the State must be protected and maintained. Consistent with this goal is the intent of water quality standards to protect and maintain the existing and classified uses of waters downstream from point and nonpoint sources of pollution. The federal water quality standards regulation contains this important provision and 40 CFR 130.10 (b) states: "In designating uses of a water body and the appropriate criteria for those uses, the State shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters." This federal regulation clearly provides the requirement that State water quality standards must contain provisions for the protection of downstream uses. In a previous version of the water quality standards regulation, the language stated that "water quality must be maintained at a level which will not cause a contravention of the higher standards of the downstream body." While in its present version, R. 61-68 does contain several narrative statements that convey this important provision of water quality standards, it lacks a specific section that clearly states this intent. The Department affirms that including a restatement of this requirement of water quality standards will clarify the intent of the State's water quality standards and their goal for the protection and maintenance of downstream uses.

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- **Review and revision of language for antidegradation.**

Present federal regulation requires that State water quality standards contain an antidegradation policy. This policy requires the establishment of three levels of protection that provide for the maintenance of a level of water quality that will: 1) protect and support existing and classified uses, 2) where water quality is better than that necessary to support the existing and classified uses then that water quality is also maintained and protected unless, through a public process, some lowering of water quality is deemed to be necessary to allow important economic or social development to occur, and 3) identify water bodies of nationally exceptional recreational or ecological significance (Outstanding National Resource Waters or ONRWs) and maintain and protect water quality in such water bodies. The same regulation also requires that States have an implementation procedure for their antidegradation policy.

While the Department has prepared the State's implementation procedures for its antidegradation policy as required under federal regulation 40 CFR 131.12(a) and while the implementation procedures are based on the State's antidegradation rules in R.61-68, many of the details of implementation are not specifically contained in the water quality standards. The Department is proposing to include specific language under the antidegradation rules that address alternatives analysis and public participation in the process of allowing a lowering of water quality based on important economic and social development. We believe the additional language will resolve some misunderstandings regarding the existing antidegradation standards and is both necessary and reasonable.

- **Inclusion of new definitions.**

R.61-68 contains definitions for terms used in the regulation that are not defined in the PCA and may not be readily available to the public or may have specific meaning within the context of the regulation. This section is necessary and vital in that it provides clarity to the intent of the regulation. The Department believes it is important to provide definitions for terms that may have other meanings in another context or may be termed differently when addressing the complex issues contained in the regulation. Therefore, several new definitions have been proposed for inclusion in the revisions to the water quality standards regulation.

- **Stylistic changes which include corrections for: clarity and readability, grammar, punctuation, typography, codification, references, language style, and overall improvement of the text of the regulation.**

DETERMINATION OF COSTS AND BENEFITS: Existing staff and resources will be utilized to implement this amendment to the regulation. No additional cost will be incurred by the State if the revisions are implemented and therefore, no additional state funding is being requested. However, due to recent litigation defending the Department's narrative water quality standards (specifically with regard to nutrients and toxicity issues), the Department has incurred an estimated additional cost of \$100,000 in staff time and resources for these purposes. Since litigation is not only a costly, but lengthy process and even though the Department anticipates that ultimately the court decisions will support the narrative water quality standards; we believe it is necessary and beneficial that we propose amendment to the regulation to either adopt numeric criteria where applicable or to provide more specific narrative statements that will address these concerns. It is our hope that this will alleviate potential future litigation costs by making the appropriate revisions in this public forum and through this public process. If the amendment is not implemented, the Department does anticipate that further litigation costs will be incurred in the settlement of these same issues and therefore, additional state funding may be necessary.

In reviewing the potential for significant economic impact of the proposed amendment, the Department specifically evaluated situations in which costs would most likely be incurred by the regulated community. These estimates addressed the specific revisions by issue after determining those of greatest potential impact. The

Department found that the overall impact to the State's political subdivisions or the regulated community as a whole was not likely to be significant in that the existing narrative standards would have incurred similar cost or the fact that the design standards required under the amendment will be substantially consistent with the current guidelines and review guidelines utilized by the Department. Further, much of the proposed amendment, for which an estimated cost may be incurred by the regulated community at the time of permit issuance, are essential and necessary to protect and maintain the existing uses supported by the water quality standards and are therefore, beyond the scope of cost analysis in that they provide the minimum level of protection for aquatic life and human health as required by the Federal CWA.

UNCERTAINTIES OF ESTIMATES: Minimal to moderate.

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: Implementation of this amendment will not compromise the protection of the environment or the health and safety of the citizenry of the State. The amendment will promote and protect aquatic life and human health by the regulation of pollutants into waters of the State.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: Failure by the Department to incorporate appropriately protective water quality standards in the regulation that is the basis for issuance of National Pollutant Discharge Elimination System (NPDES) permits, stormwater permits, wasteload and load allocations, groundwater remediation plans, and multiple other program areas will lead to contamination of the waters of the State with detrimental effects on the health of flora and fauna found in the State as well as the citizens of South Carolina.

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Document No. 2552
DEPARTMENT OF INSURANCE
Chapter 69

Statutory Authority: 1976 Code Sections 38-3-110(2), 1-23-110 et seq., 38-47-10, et seq.

69-1. Adjustment of Claims Under Unusual Circumstances.

Synopsis:

The regulation clarifies what determines an unusual circumstance or catastrophe in the event of a specific, infrequent and sudden natural or manmade disaster or phenomenon.

Instructions: Amend regulation 69-1, Adjustment of Claims Under Unusual Circumstances, by adding Sections Three and Four. The last sentence in Section Two will be struck and moved to create Section Four.

Text:

R.69-1. Adjustment of Claims Under Unusual Circumstances.

1. Licensed Adjusters in South Carolina are authorized to adjust claims for unlicensed companies under the following circumstances:

(a) Where the insured has an accident in South Carolina but is not a resident, being in a status of a transient.

(b) Where the insured is a new resident in the State and has an unexpired policy of an unlicensed company purchased before he moved into the State.

2. The law provides the conditions under which a Non-Resident Adjuster may be licensed. In the event of a catastrophe where there are insufficient Licensed Adjusters in South Carolina to handle claims expeditiously, Non-Resident Adjusters will be permitted to enter the State to handle the adjustments arising out of the catastrophe without being required to be licensed in South Carolina, provided that the Adjuster exhibits evidence of an Adjuster's License in his home state and remains in the State only for the period that is necessary to assist in the adjustments.

3. An unusual circumstance or catastrophe exists when, due to a specific, infrequent, and sudden natural or manmade disaster or phenomenon, there have arisen losses to property in South Carolina that are covered by insurance, and the losses are so numerous and severe that resolution of claims related to such covered property losses will not occur expeditiously without the authorization of emergency adjusters by the Department due to the magnitude of the catastrophic damage.

4. The Department will determine and announce when an emergency or catastrophe exists and also will determine and announce the expiration of the period of emergency or catastrophe.

Fiscal Impact Statement: No additional state funding is requested.

Document No. 2582
DEPARTMENT OF INSURANCE
CHAPTER 69

Statutory Authority: 1976 Code Sections 38-3-110(2), et seq., 1-23-110, et seq., 38-90-10 et seq.

69-60. Captive Insurance Companies

Synopsis: The regulation provides additional structure to the regulatory framework established with the passage of 2000 S.C. Act 331, Captive Insurance Companies.

Instructions: Add new R.69-60, Captive Insurance Companies, to Chapter 69 regulations.

Text:

R. 69-60. Captive Insurance Companies.

Section 1. Purpose and Authority.

The purpose of this regulation is to set forth the financial and reporting requirements which the director or his designee deems necessary for the regulation of captive insurance companies, as authorized by the South Carolina Code of Laws. Reference hereinunder to “company” shall mean captive insurance company or companies, unless otherwise specified.

Section 2. Annual Reporting Requirements.

An association captive insurance company doing business in this State shall annually submit to the director or his designee a report of its financial condition, verified by oath of two of its executive officers. The report shall be that required by S.C. Code Ann. Section 38-13-80.

A pure or industrial insured captive insurance company doing business in this State shall annually submit to the director or his designee a report of its financial condition, verified by oath of two of its executive officers. The report shall be that prescribed by the director or his designee as “Captive Annual Statement: Pure or Industrial Insured”.

Section 3. Annual Audit.

All companies shall have an annual audit by an independent certified public accountant, authorized by the director or his designee, and shall file such audited financial report with the director or his designee on or before June 30 for the year ending December 31 immediately preceding.

The annual audit report shall be considered part of the company’s annual report of financial condition except with respect to the date by which it must be filed with the director or his designee.

The annual audit shall consist of the following:

(A) Opinion of Independent Certified Public Accountant

Financial statements furnished pursuant to this section shall be examined by independent certified public accountants in accordance with generally accepted auditing standards as determined by the American Institute of Certified Public Accountants.

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The opinion of the independent certified public accountant shall cover all years presented.

The opinion shall be addressed to the company on stationery of the accountant showing the address of issuance, shall bear original manual signatures and shall be dated.

(B) Report of Evaluation of Internal Controls

This report shall include an evaluation of the internal controls of the company relating to the methods and procedures used in the securing of assets and the reliability of the financial records, including but not limited to, such controls as the system of authorization and approval and the separation of duties.

The review shall be conducted in accordance with generally accepted auditing standards and the report shall be filed with the director or his designee.

(C) Accountant's Letter

The accountant shall furnish the company, for inclusion in the filing of the audited annual report, a letter stating:

(a) That he is independent with respect to the company and conforms to the standards of his profession as contained in the Code of Professional Ethics and pronouncements of the American Institute of Certified Public Accountants and pronouncements of the Financial Accounting Standards Board.

(b) The general background and experience of the staff engaged in audit including the experience in auditing captives or other insurance companies.

(c) That the accountant understands that the audited annual report and his opinions thereon will be filed in compliance with this regulation with the Department.

(d) That the accountant consents to the requirements of Section 6 of this regulation and that the accountant consents and agrees to make available for review by the director or his designee, or his appointed agent, the work papers as defined in Section 6.

(e) That the accountant is properly licensed by an appropriate state licensing authority and that he is a member in good standing in the American Institute of Certified Public Accountants.

(D) Financial Statements

Statements required shall be as follows:

(a) Balance sheet,

(b) Statement of gain or loss from operations,

(c) Statement of changes in financial position,

(d) Statement of changes in capital paid up, gross paid in and contributed surplus and unassigned funds (surplus), and

(e) Notes to financial statements.

The notes to financial statements shall be those required by generally accepted accounting principles, and shall include:

(1) A reconciliation of differences, if any, between the audited financial report and the statement or form filed with the director or his designee.

(2) A summary of ownership and relationship of the company and all affiliated corporations or companies insured by the captive.

(3) A narrative explanation of all material transactions and balances with the company.

(E) Certification of Loss Reserves and Loss Expense Reserves

The annual audit shall include an opinion as to the adequacy of the company's loss reserves and loss expense reserves.

The individual who certifies as to the adequacy of reserves shall be approved by the director or his designee and shall be a Fellow of the Casualty Actuarial Society, a member in good standing of the American Academy of Actuaries, or an individual who has demonstrated his competence in loss reserve evaluation to the director or his designee.

Certification shall be in such form as the director or his designee deems appropriate.

Section 4. Designation of Independent Certified Public Accountant.

Companies, after becoming subject to this regulation, shall within ninety days report to the director or his designee in writing, the name and address of the independent certified public accountant retained to conduct the annual audit set forth in this regulation.

Section 5. Notification of Adverse Financial Condition.

A company shall require the certified public accountant to immediately notify in writing an officer and all members of the Board of Directors of the company of any determination by the independent certified public accountant that the company has materially misstated its financial condition in its report to the director or his designee as required in S.C. Code Ann. Section 38-90-70. The company shall furnish such notification to the director or his designee within five working days of receipt thereof.

Section 6. Availability and Maintenance of Working Papers of the Independent Certified Public Accountant.

Each company shall require the independent certified public accountant to make available for review by the director or his designee, or his appointed agent, the work papers prepared in the conduct of the audit of the company. The company shall require that the accountant retain the audit work papers for a period of not less than five years after the period reported upon.

The aforementioned review by the director or his designee shall be considered investigations and all working papers obtained during the course of such investigations shall be confidential. The company shall require that the independent certified public accountant provide photocopies of any of the working papers which the Department considers relevant. Such working papers may be retained by the Department.

“Work Papers” as referred to in this section include, but are not necessarily limited to, schedules, analyses, reconciliations, abstracts, memoranda, narratives, flow charts, copies of company records or other documents prepared or obtained by the accountant and his employees in the conduct of their examination of the company.

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Section 7. Deposit Requirement.

Whenever the director or his designee deems that the financial condition of the company warrants additional security, he may require a company to deposit with the Department cash or securities which satisfy the requirements of S.C. Code Ann. Section 38-9-80 or, alternatively, to furnish the director or his designee a clean irrevocable letter of credit issued by a bank chartered by the State of South Carolina or a member bank of the Federal Reserve System and approved by the director or his designee.

The company may receive interest or dividends from said deposit or exchange the deposits for others of equal value with the approval of the director or his designee.

If such company discontinues business, the director or his designee shall return such deposit only after being satisfied that all obligations of the company have been discharged.

Section 8. Organizational Examination.

In addition to the processing of the application, an organizational investigation or examination may be performed before an applicant is licensed. Such investigation or examination shall consist of a general survey of the company's corporate records, including charter, bylaws and minute books; verification of capital and surplus; verification of principal place of business; determination of assets and liabilities; and a review of such other factors as the director or his designee deems necessary.

Section 9. Reinsurance.

Any captive insurance company authorized to do business in this State may take credit for reserves on risks ceded to a reinsurer subject to the following limitations:

(A) No credit shall be allowed for reinsurance where the reinsurance contract does not result in the complete transfer of the risk or liability to the reinsurer.

(B) No credit shall be allowed, as an asset or a deduction from liability, to any ceding insurer for reinsurance unless the reinsurance is payable by the assuming insurer on the basis of the liability of the ceding insurer under the contract reinsured without diminution because of the insolvency of the ceding insurer.

Reinsurance under this section shall be effected through a written agreement of reinsurance setting forth the terms, provisions and conditions governing such reinsurance.

The director or his designee in his discretion may require that complete copies of all reinsurance treaties and contracts be filed and/or approved by him.

Section 10. Insurance Managers and Intermediaries.

No person shall, in or from within this State, act as an insurance manager, broker, agent, salesman, or reinsurance intermediary for captive business without the authorization of the director or his designee. Application for such authorization must be on a form prescribed by the director or his designee.

Section 11. Directors.

Every company shall report to the director or his designee within thirty days after any change in its executive officers or directors, including in its report a statement of the business and professional affiliations of any new executive officer or director.

No director, officer, or employee of a company shall, except on behalf of the company, accept, or be the beneficiary of, any fee, brokerage, gift, or other emolument because of any investment, loan, deposit, purchase, sale, payment or exchange made by or for the company, but such person may receive reasonable compensation for necessary services rendered to the company in his or her usual private, professional or business capacity.

Any profit or gain received by or on behalf of any person in violation of this section shall inure to and be recoverable by the company.

Section 12. Conflict of Interest.

Each company chartered in this State is required to adopt a conflict of interest statement for officers, directors and key employees. Such statement shall disclose that the individual has no outside commitments, personal or otherwise, that would divert him from his duty to further the interests of the company he represents but this shall not preclude such person from being a director or officer in more than one insurance company.

Each officer, director, and key employee shall file such disclosure with the Board of Directors yearly.

Section 13. Rescission of Captive License.

The director or his designee may, subject to the provisions of this section, by order rescind the license of the company:

(A) if the company has not commenced business according to its plan of operation within two years of being licensed; or

(B) if the company ceases to carry on insurance business in or from within South Carolina; or

(C) at the request of the company; or

(D) for any reason provided in S.C. Code Ann. Section 38-90-90.

Before the director or his designee rescinds the license of a company under (A) or (B) of this section, the director or his designee shall give the company notice in writing of the grounds on which he proposes to cancel the license, and shall afford the company an opportunity to make objection in writing within the period of thirty days after receipt of notice. The director or his designee shall take into consideration any objection received by him within that period and, if he decides to cancel the license, cause the order of cancellation to be served on the company.

Section 14. Acquisition of Control of or Merger with Domestic Company.

No person other than the issuer shall make a tender offer for or a request or invitation for tenders of, or enter into any agreement to exchange securities for, seek to acquire, or acquire in the open market or otherwise, any voting security of a domestic company if, after the consummation thereof, such person would, directly or indirectly (or by conversion or by exercise of any right to acquire) be in control of such company; and no person shall enter into an agreement to merge with or otherwise to acquire control of a domestic company without the prior written approval of the director or his designee. In considering any application for acquisition of control or merger with a domestic company, the director or his designee shall consider all of the facts and circumstances surrounding the application as well as the criteria for establishment of a company set out in this chapter.

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Section 15. Change of Business.

Any change in the nature of the captive business from that stated in the company's plan of operation filed with the director or his designee upon application requires prior approval from the director or his designee.

Any change in any other information filed with the application must be filed with the director or his designee but does not require prior approval.

Fiscal Impact Statement: No additional state funding is requested.

Resubmitted April 4, 2001

Document No. 2583
DEPARTMENT OF INSURANCE
CHAPTER 69

Statutory Authority: 1976 Code Sections 38-3-110 et seq., 1-23-110 et seq., 38-77-530

69-63. South Carolina Reinsurance Facility Recoupment

Synopsis:

The purpose of this regulation is to establish a method of surcharge and provide a schedule for recoupment of losses remaining in the South Carolina Reinsurance Facility on March 1, 2002, or any losses accruing after March 1, 2002, as required by Section 38-77-530 of the South Carolina Code of Laws.

Instructions: Add new R.69-63, South Carolina Reinsurance Facility Recoupment, to Chapter 69 regulations.

Text:

R. 69-63. South Carolina Reinsurance Facility Recoupment

A. Purpose

The purpose of this regulation is provided by South Carolina Code of Laws Section 38-77-530 that states in part:

“Beginning on March 1, 2002 and continuing thereafter, every insured or policyholder who does not have any insurance merit rating points pursuant to the Uniform Merit Rating Plan in effect upon the effective date of this act must not be surcharged for the recoupment of any facility assessments or losses; therefore, a clean or nonpointed risk shall no longer pay any form of recoupment seeking to recoup facility losses. Any surcharge as provided above during the period of March 1, 1999 through February 28, 2002 must be displayed as a part of the applicable premium charge for liability insurance coverage. However, beginning on March 1, 2002 every insured or policyholder who does have insurance merit rating points pursuant to the Uniform Merit Rating Plan in effect upon the effective date of this act shall be surcharged for the recoupment of any facility assessments or losses; therefore, these pointed risks shall be the only persons in the State of South Carolina who shall pay any recoupment fee for facility losses or assessments remaining in the facility on March 1, 2002 or any losses accruing in the facility after March 1, 2002. Furthermore, the director of the Department of Insurance shall promulgate a plan by regulation to recoup any losses remaining in the facility on March 1, 2002 or any losses accruing after March 1, 2002 only from those insureds or policyholders having insurance merit rating points as provided above. This plan shall include, but is not limited to, a schedule of recoupment and method of surcharge method whether a fixed fee, a percentage basis, or otherwise consider appropriate by the director.”

B. Basis of Recoupment

Beginning on March 1, 2002 and continuing thereafter, a premium surcharge of 10% of liability premium shall be made on all drivers having points on March 1, 1999 on the basis of the merit rating plan in effect on March 1, 1999, as determined by convictions contained in the motor vehicle records.

C. Schedule of Recoupment

(1) Beginning on March 1, 2003 and each year thereafter, the director shall evaluate the funds collected by this surcharge and compare this amount with the projected runoff. The director may reduce the percentage surcharge from 10% to a lower amount or eliminate the surcharge completely by issuing a notice 120 days in advance to insurers that the director is considering reducing the percentage surcharge. The notice must include a 30 day period to allow comments from insurers. After the 30 day period has expired, the director may lower the surcharge by order.

(2) The director shall not lower the percentage surcharge unless the amount of recoupment projected to be recovered in the next fiscal year of the Reinsurance Facility is greater than the projected total remaining runoff of the South Carolina Reinsurance Facility. The collection of recoupment under this regulation must continue until the runoff obligations of the South Carolina Reinsurance Facility have been funded completely.

Fiscal Impact Statement: No additional state funding is requested.

Document No. 2580
DEPARTMENT OF INSURANCE
 CHAPTER 69

Statutory Authority: 1976 Code Sections 38-3-110(2), 1-23-110, et seq., 38-78-110.

69-61. Service Contracts

Synopsis: The regulation establishes rules and standards for service contracts marketed in the state of South Carolina.

Instructions: Add new R.69-61, Service Contracts, to Chapter 69 regulations.

Text:

R. 69-61. Service Contracts.

I. Purpose and Scope.

A. This regulation establishes rules and standards to regulate service contracts marketed in the state of South Carolina. This regulation does not apply to:

1. warranties;
2. maintenance agreements;
3. commercial transactions;
4. warranties, service contracts, or maintenance agreements offered by public utilities on their transmission devices to the extent they are regulated by the Public Service Commission or the Department of Health and Environmental Control;

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5. service contracts sold or offered for sale to persons other than consumers;

B. Except for the registration requirements in Section 38-78-30(C), providers and related service contract sellers, administrators, and other persons marketing, selling, or offering to sell service contracts are exempt from state licensing requirements.

C. Motor vehicle manufacturer's service contracts on the motor vehicle manufacturer's products shall comply with Sections 38-78-50 (A) and (D), to (N), 38-78-60, and 38-78-100 of the South Carolina Code.

II. Definitions.

The terms defined in Section 38-78-20 of the South Carolina Code have those same meanings when used in this regulation.

III. Registration and Financial Security Requirements.

A. Each provider of service contracts sold in this State shall file a registration with the Director on a form prescribed by the Director. Each provider shall pay to the department a non-refundable fee of two hundred dollars annually. Service contracts registration expires annually on September 30.

B. Each provider shall be responsible for insuring all service contracts under a reimbursement insurance policy issued by an insurer authorized to transact insurance business in this State or issued pursuant to Section 38-45-110 of the South Carolina Code.

C. As an alternative to subsection "B" above, a provider may:

1. Maintain a funded reserve account for its obligations under its service contracts issued and outstanding in this State which is subject to examination and review by the director and must amount to at least forty percent of gross consideration received, less claims paid, on the sale of the service contract for all in-force contracts; and

2. Place in trust with the director a financial security deposit having a value of not less than five percent of the gross consideration received, less claims paid, on the sale of the service contract for all service contracts issued and in force, but not less than twenty-five thousand dollars, consisting of one of the following:

a. a surety bond issued by an authorized surety;

b. securities of the type eligible for deposit by authorized insurers in this State;

c. cash (cashier check only); or

d. an irrevocable letter of credit issued by a qualified financial institution as defined by Section 38-9-220 of the South Carolina Code.

D. As an additional alternative to subsections "B" and "C" above, a provider may maintain, or its parent company maintain, a net worth or stockholder's equity of one hundred million dollars.

1. In electing this option, the provider must, upon request, provide the Director with a copy of the provider's, or the provider's parent company's, most recent Form 10-K or Form 20-F filed with the Securities and Exchange Commission (SEC) within the last calendar year. If the provider's parent company's Form 10-K, Form 20-F or audited financial statements are filed to meet the provider's financial stability requirement, then the parent company shall agree to guarantee the obligations of the provider relating to service contracts sold by the provider in this State.

2. If the provider or its parent company does not file with the SEC, the provider must, upon request, provide the Director with a copy of the provider's or the provider's parent company's audited financial statements which show a net worth of the provider or its parent company of at least one hundred million dollars.

IV. Reimbursement Insurance Policies.

A. Reimbursement insurance policies insuring service contracts issued, sold, or offered for sale in this State shall conspicuously state that the insurer that issued the policy shall either reimburse or pay on behalf of the provider any covered sums the provider is legally obligated to pay or, in the event of the provider's nonperformance, shall provide the service which the provider is legally obligated to perform according to the provider's contractual obligations under the service contracts issued or sold by the provider.

B. In the event a covered service is not provided by the service contract provider within sixty days of proof of loss by the service contract holder, the contract holder is entitled to apply directly to the reimbursement insurance company.

C. Service contracts insured under a reimbursement insurance policy pursuant to Section 38-78-30 (D)(1) of the South Carolina Code shall contain a statement in substantially the following form: "Obligations of the provider under this service contract are insured under a service contract reimbursement insurance policy." The service contract shall also conspicuously state the name and address of the insurer.

D. Service contracts not insured under a reimbursement insurance policy pursuant to Section 38-78-30(D)(1) of the South Carolina Code shall contain a statement in substantially the following form: "Obligations of the provider under this service contract are backed by the full faith and credit of the provider." A claim against the provider shall also include a claim for return of the unearned provider fee. The service contract shall also conspicuously state the name and address of the provider.

E. Insurers issuing reimbursement insurance to providers are deemed to have received the premiums for such insurance upon the payment of provider fees by consumers for service contracts issued by such insured providers. Insurers which issued a reimbursement insurance policy may seek indemnification or subrogation against a provider if the issuer pays, or is obligated to pay, the service contract holder sums that the provider was obligated to pay pursuant to the provisions of the service contract or under a contractual agreement.

V. General Provider Operation Requirements.

A. A provider may, but is not required to, appoint an administrator or other designee to be responsible for any or all of the administration of service contracts and compliance with this chapter.

B. A service contract must not be issued, sold, or offered for sale in this State unless the provider or its designee has:

1. provided a receipt for, or other written evidence of, the purchase of the service contract to the contract holder and

2. provided a copy of the service contract to the service contract holder within a reasonable period of time from the date of purchase.

VI. Record Maintenance.

A. A provider shall maintain accurate accounts, books, and records concerning transactions regulated under this chapter which shall include:

1. copies of each type of service contract issued;

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2. the name and address of each service contract holder to the extent that the name and address have been furnished by the service contract holder;

3. a list of the locations where service contracts are marketed, sold or offered for sale; and

4. recorded claims files which shall contain at least the dates and description of claims related to the service contracts.

B. Except as provided in of Section VI(C) of this regulation, the provider shall retain all records required to be maintained for at least one year after the specified period of coverage has expired. The records may be, but are not required to be, maintained on a computer disk or other record keeping technology. If records are maintained in other than hard copy, the records must be capable of duplication to legible hard copy at the request of the Director.

C. A provider discontinuing business in this State shall maintain its records until it furnishes the director satisfactory proof that it has discharged all obligations to contract holders in this State.

D. Upon request of the Director, the provider shall make available all accounts, books and records concerning service contracts sold by the provider which are necessary to enable the director to reasonably determine compliance or noncompliance with the law.

VII. Required Disclosures.

A. Service contracts marketed, issued, sold, offered for sale, made, proposed to be made, or administered in this State shall be written, printed or typed in clear, understandable language that is easy to read and shall disclose the requirements in this section as applicable.

B. Service contracts shall identify any administrator, if different from the providers, the provider obligated to perform the service under the contract, the service contract seller, and the service contract holder to the extent that the name of the service contract holder has been furnished by the service contract holder. The identities of such parties are not required to be preprinted on the service contract and may be added to the service contract at the time of sale.

C. Service contracts shall conspicuously state the total purchase price and the terms under which the service contract is sold. The purchase price is not required to be preprinted on the service contract and may be negotiated at the time of sale with the service contract holder.

VIII. Voiding of Contracts.

A. Service contracts shall require the provider to permit the service contract holder to return the service contract within twenty days of the date the service contract was mailed to the service contract holder or within ten days of delivery if the service contract is delivered to the service contract holder at the time of sale or within a longer time period permitted under the service contract. Upon return of the service contract to the provider within the applicable time period, if no claim has been made under the service contract prior to its return to the provider, the service contract is void and the provider shall refund to the service contract holder, or credit the account of the service contract holder, with the full purchase price of the service contract. The right to void the service contract is not transferable and shall apply only to the original service contract purchaser. A ten percent penalty per month shall be added to a refund that is not paid or credited within forty-five days after return of the service contract to the provider.

B. If the provider cancels the service contract, the provider shall mail a written notice to the contract holder at the last known address of the service contract holder contained in the records of the provider at least fifteen days

prior to cancellation by the provider. Prior notice is not required if the reason for cancellation is nonpayment of the provider fee, a material misrepresentation by the service contract holder to the provider, or a substantial breach of duties by the service contract holder relating to the covered product or its use. The notice shall state the effective date of the cancellation and the reason for the cancellation.

C. An insurer that issued a reimbursement insurance policy may not terminate the policy until a notice of termination in accordance with Chapter 75, Title 38, of the South Carolina Code has been mailed or delivered to the Director. The termination of a reimbursement insurance policy does not reduce the issuer's responsibility for service contracts issued by providers before the date of the termination.

IX. Limitation on Provider Name.

No provider licensed after October 1, 2000, may use in its name the words "insurance," "casualty," "guaranty," "surety," "mutual," or any other words descriptive of the insurance, casualty, guaranty, or surety business or a name deceptively similar to the name or description of any insurance or surety corporation or any other provider. A previously licensed provider that uses the prohibited language in its name shall conspicuously include in its service contracts a statement in substantially the following form: "This agreement is not an insurance contract".

X. Prohibited Acts.

A. A provider or its representative in its service contracts or literature may not make, permit, or cause to be made any false or misleading statement, or deliberately omit any material statement that would be considered misleading if omitted, in connection with the sale, offer to sell, or advertisement of a service contract.

B. A person such as a bank, savings and loan association, lending institution, manufacturer, or seller of any product shall not require the purchase of a service contract as a condition of a loan or a condition for the sale of any property.

XI. Enforcement.

A. The Director may examine at any time each provider, administrator, insurer, or other person as to compliance with the requirements of Chapter 78, Article 38 of the South Carolina Code and the quality of services offered. The organization being examined under this Section shall pay the charges incurred in the examination, including the expenses of the Director and the expenses and compensation of his examiners and assistants.

B. The Director may take action, which is necessary or appropriate to enforce the provisions of this chapter and the Director's regulations and orders and to protect service contract holders in this State.

1. If a service contract provider violates a provision of this chapter, the Director may:

- a. order the service contract provider to cease and desist from committing the violation;
- b. issue an order prohibiting a service contract provider from selling or offering for sale service contracts;
- c. issue an order imposing a civil penalty; or
- d. any combination of these.

2. A person aggrieved by an order issued under this section may request a hearing before the Director. The hearing request must be filed with the Director within twenty days of the date the Director's order is effective. Pending the hearing and the decision by the Director, the director shall suspend the effective date of the order. At the hearing, the burden is on the Director to show why the order issued pursuant to this section is justified. If the

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Director upholds the issuance of the order, the person may file an appeal with the Administrative Law Judge Division.

C. The Director may bring an action under the Administrative Law Judge Division or in circuit court for an injunction or other appropriate relief to enjoin threatened or existing violations of this regulation or of the Director's orders. An action filed under this section may also seek restitution on behalf of persons aggrieved by a violation of this regulation or orders of the Director.

D. A person in violation of this regulation or an order of the Director may be assessed a civil penalty not to exceed one thousand dollars per violation and no more than ten thousand dollars in the aggregate for all violations of a similar nature; provided, however, that if a person is found by a court of competent jurisdiction to have been in willful violation of this chapter or an order or regulation of the director, then such person is subject to a penalty of one thousand dollars per violation with no aggregate limit.

E. For purposes of this section, violations of a similar nature, which are considered technical and unintentional by the Department of Insurance lacking the requisite willful intent, are subject to the ten thousand dollar aggregate penalty limit and are defined as a violation which consists of the same or similar course of conduct, action, or practice, irrespective of the number of times the act, conduct, or practice which is determined to be a violation of this chapter occurred.

Fiscal Impact Statement: No additional state funding is requested.

Resubmitted March 1, 2001

Document No. 2595
DEPARTMENT OF LABOR, LICENSING AND REGULATION
BOARD OF REGISTRATION FOR
PROFESSIONAL ENGINEERS AND LAND SURVEYORS
CHAPTER 49

Statutory Authority: 1976 Code Section 40-22-60, as amended by 2000 Act 311

Synopsis:

The Board of Registration for Professional Engineers and Land Surveyors has drafted regulations to be consistent with the recently enacted Practice Act. The regulations include new provisions for licensure and qualifications for additional categories and disciplines of land surveying, and provides for the practice in this State by engineers and engineering firms located in foreign countries, as well as revisions of current regulations codified at South Carolina Code of Regulations Chapter 49.

Instructions: Amend current regulations, by repealing current Articles 1 and 2 of Chapter 49 and replacing them with new regulations as it appears in the text below. Further amend current regulations by amending Article 6 as it appears in the text below.

Text:

Article 1. General Provisions.

SECTION 49-100. DEFINITIONS.

SECTION 49-101. BOARD RULES OF ORDER/PROCEDURES AND SEAL OF BOARD.

SECTION 49-102. USE OF FORMS/APPLICATIONS.

SECTION 49-103. FEES.

SECTION 49-104. EXAMINATIONS.

SECTION 49-105. LICENSE EXPIRATION, RENEWAL AND REINSTATEMENT – INDIVIDUALS.

SECTION 49-106. LICENSE EXPIRATION, RENEWAL AND REINSTATEMENT – FIRMS.

49-100. Definitions.

A. Definitions found in Section 40-22-20 of the Code of Laws of South Carolina apply to this Chapter.

B. The following definitions are terms used in this Chapter in addition to those included in Section 40-22-20 of the Code of Laws of South Carolina:

- (1) "CEAB" means the Canadian Engineering Accreditation Board.
- (2) "Comity Registration" means the courteous recognition and extension of the practice license privileges in this State to engineers and surveyors licensed in other states. To be eligible for comity consideration, one must have been licensed in the other state by meeting qualifications comparable to those required by this State at the time of licensure in the other state.
- (3) "Dual License Holder" means a person who is licensed as an engineer and a land surveyor.
- (4) "Engineering Service Provider" means a licensed or registered engineer legally practicing the profession of engineering.
- (5) "FEEEP" means the Foreign Engineering Education Evaluation Program.
- (6) "Firm" as used in this Chapter means those organizations for which a Certificate of Authorization is required.
- (7) "Foreign Jurisdiction" means a foreign nation or political subdivision thereof.
- (8) "Foreign Practitioner" means an engineer legally practicing the profession of engineering in a foreign jurisdiction.
- (9) "Model Law Engineer" refers to a person who meets the following criteria:
 - (a) Graduation from an engineering program accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET).
 - (b) Four years of qualifying experience after graduation.
 - (c) Passing of a NCEES Fundamentals of Engineering Examination (FE).
 - (d) Passing of a NCEES Principles and Practice of Engineering Examination (PE).
 - (e) Status in good standing as a registrant in the NCEES Records Program, and
 - (f) A record clear on any license violations or sanctions by an engineering board.
- (10) "NCEES" means the National Council of Examiners for Engineering and Surveying.
- (11) "Practice in this State" means those professional services offered or provided in this State, or the work product of which is intended for construction in this State.
- (12) "Recognized Registration Authority" means the body recognized by this Board as having legal authority to credentialize and register engineering service providers in a particular jurisdiction.
- (13) "USCIEP" means the United States Council for International Engineering Practice, an organization formed in part by NCEES and ABET to address matters involving the international cross-border practice of engineering.
- (14) "Washington Accord" refers to an international agreement providing for the mutual recognition of engineering education program accreditation by and between EAC/ABET and engineering education accrediting bodies of other nations holding membership in the Washington Accord. For a current list of international bodies holding membership in the Washington Accord, one may contact the Accreditation Board for Engineering and Technology.

49-101. Board Rules of Order/Procedures and Seal of Board.

A. Rules of Order/Procedures. All proceedings of the Board shall be governed by provisions set forth in the Administrative Procedures Act.

B. Description of Seal of Board. The seal of the Board shall be circular in form and 1 7/8 inches in diameter. Concentric with the outside of the Seal there shall be a circle 1 1/4 inches in diameter, within which there shall be a replica of the device used on the Seal of the State of South Carolina, and in the annular space between the circle and the outside of the Seal there shall appear the words "State Board of Registration for Professional Engineers and Land Surveyors." All official papers, registration certificates, and other formal documents of the Board shall bear the imprint of this Seal.

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49-102. Use of Forms/Applications.

A. Forms.

(1) All applications for engineering and land surveying licensure and certificate of authorization shall be made on a form provided by the Board, and no applications made otherwise will be accepted.

(2) All applications shall be subscribed to and sworn to before a Notary Public or other persons legally authorized to administer oaths.

(3) Applications not completed in accordance with the applicable printed instructions will be returned to the applicant. Withholding information, misrepresentation, or untrue statements will be cause for denial of application.

(4) An applicant registered in one or more states seeking South Carolina licensure by comity will be required to complete all sections of the application form. If a properly executed NCEES Record is provided with certified copies verifying applicant's education, qualifications, experience, examinations taken, responses from references and registration in other states, the applicant will be required to complete only those sections of the South Carolina application form dealing with general information, education, registration in other state and the affidavit.

B. Documentation.

(1) All information given on an application form must be documented. The applicant is required to provide the names and current mailing addresses of five references having personal knowledge of applicant's character and professional reputation, and of employers or supervisors who can verify applicant's work experience. The Board will send a verification form to each reference provided by the applicant; however, it will be the applicant's responsibility to see that references return the forms promptly to the Board office.

(a) Engineering. At least three of the five character references shall be professional engineers currently practicing within the scope of their profession.

(b) Land Surveying. At least three of the character references shall be from professional land surveyors, "GIS" professionals, mappers, photogrammetric surveyors or professional engineers currently practicing within the scope of their profession.

(2) Official transcripts are required showing subjects and grades of all scholastic work which the applicant wishes to claim, degree issued and date of issuance. It is the responsibility of the applicant to see that such a record is sent from the institution directly to the Board office. A failure to provide such transcript directly from the institution, whether foreign or domestic, may be grounds for rejection of the application.

49-103. Fees.

A. The Board will charge fees sufficient to cover expenses for the following:

- (1) Application Fee, Individual License: not to exceed \$200.
- (2) Application Fee, Certificate of Authorization: not to exceed \$300.
- (3) Examination Fee: not to exceed \$150.
- (4) Certificate Fee: not to exceed \$35 for individuals or \$50 for firms.
- (5) Biennial Renewal Fee, Individual: not to exceed \$200.
- (6) Biennial Renewal Fee, Firm: not to exceed \$400.
- (7) Temporary Permits: not to exceed \$200 for individuals and \$300 for firms.
- (8) Roster: the actual cost -not to exceed \$100.

B. No fee, or any part thereof, paid by any applicant for application, examination and/or registration will be refunded once an application has been accepted by the Board for processing. Refunds will not be made in the event of failure by an applicant to take the required examination, or to pass the required examination.

49-104. Examinations – General.

A. Classifications – Engineering Examinations.

- (1) NCEES Fundamentals of Engineering (FE).
- (2) NCEES Principles and Practice of Engineering (PE).
- (3) NCEES Special Structural Engineering Examinations.

B. Classifications – Land Surveying Examinations.

- (1) NCEES Fundamentals of Land Surveying (FLS).
- (2) NCEES Principles and Practice of Land Surveying (PLS).

- (3) S.C. State Specific Land Surveying Examination (State-LS).
- (4) TIER B Land Surveying (State-TIER B LS).
- (5) S.C. Board Rules and Regulations.
- (6) Principles and Practice of Photogrammetric Surveying.
- (7) Principles and Practice of GIS Surveying.

C. Examination for Record Purposes.

(1) Any engineer registered by this Board may take for record purposes one or more of the listed engineering examinations upon payment of a fee as established by the Board.

(2) Any land surveyor registered by this Board may take for record purposes one or more of the listed land surveying examinations upon payment of a fee as established by the Board.

(3) Failure to pass an examination will not affect current registration.

D. Review and Rescoring of Examinations.

(1) Review. An applicant who has failed to make a passing score on a written examination may request permission to review his examination. The applicant will be allowed to review those examination items scored as an incorrect answer subject, however, to the rules and restrictions established by the NCEES and this Board.

(2) Rescoring. An applicant failing an examination may, upon request and payment of the prescribed fee set by this Board, have one or more items rescored by the scoring authority. If as a result of the rescoring, the applicant's total score changes from a failing grade to a passing grade, the rescoring fee will be refunded.

E. Re-Examination.

(1) An applicant failing an examination may be allowed to retake it at the next administration subject to those exceptions below, upon request and payment of the examination fee.

(2) An applicant who has failed the same topical examination two times shall provide evidence satisfactory to the Board that steps have been taken in preparation for a third examination on the same topical subject.

(3) An application update will be required of any applicant who has failed the same topical examination three times. The applicant may be required to wait a period of two years after the date of the last failed examination before reapplying. The applicant must also provide documentation that additional study satisfactory to the Board was taken in preparation for further examination on the same topical subject.

F. Examination Not Sole Determinant of Qualifications.

Examinations shall not be considered the sole determinant of an applicant's qualifications to practice engineering or land surveying. In its evaluation of an engineering applicant, the Board must also consider such factors as the depth and breadth of one's education and experience as those factors relate to the application of sound engineering judgement and assessment of issues affecting safety, health and welfare of the general public. Similar considerations must also apply to the evaluation of a land surveying applicant.

49-105. License Expiration, Renewal and Reinstatement – Individuals.

A. Expiration and Renewal.

(1) The privilege to practice in any category or tier as a registered professional engineer or land surveyor in South Carolina expires each biennial year, effective 2002, on June 30 unless the license is renewed. Every Registered Professional Engineer and Land Surveyor who elects to continue the practice of his profession shall biennially by the end of the month of June pay to the Board a fee for renewal of his license.

(2) Renewal notices will be mailed to the licensee's address on record with this Board in May each biennial year; however, it is the licensee's responsibility to renew his license prior to the official expiration date of June 30.

(3) The Board will assess a late renewal penalty against those persons who do not renew their registration within the first month following expiration of the license. The penalty will be assessed for the month thereafter at twenty percent (20%) of the biennial renewal fee and for the following month at an additional twenty percent (20%) of the biennial renewal fee. A licensee will have a maximum grace period of three months following the renewal date to pay the fee and late penalty for renewal.

(4) Any practice in South Carolina as a professional engineer or professional land surveyor beyond the grace period stipulated herein is a violation of the law.

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(5) The biennial renewal fee is set each renewal period. Therefore, no advance renewal fees will be accepted.

(6) As a condition of renewal of license a professional engineer must demonstrate continuing professional competency in engineering and a professional land surveyor must demonstrate continuing professional competency in land surveying as outlined in Article 6 of this Chapter. A professional engineer or professional land surveyor who has been continuously licensed in this State since January 1, 1969 will be exempted from requirements for demonstration of continuing professional competency.

B. Reinstatement.

(1) A licensee whose renewal fees are not more than one year in arrears and who can truthfully certify that he or she has not been engaged in the practice of engineering or land surveying in South Carolina during the period the certificate was not in a current status, barring any other irregularities, shall be reinstated and retain the original registration number upon payment of the renewal fees and penalties. A licensee whose renewal fees are more than one year in arrears may be required to take and pass examinations as required by the Board.

(2) Those persons who cannot certify that they have refrained from practicing their profession in this State during the period in which their license was not valid will be required to file a new application accompanied by the required application fee. An applicant may be required to take or retake and pass examinations as required by the Board.

(3) Any person reinstating an expired registration will be required to meet the continuing professional competency requirements outlined in Article 6 of this Chapter and subsection (A) (6) above.

49-106. License Expiration, Renewal and Reinstatement – Firms.

A. Expiration and Renewal.

(1) Certificates of Authorization must be renewed biennially to remain in effect. Unless renewed a Certificate of Authorization shall expire on March 31 of each biennial year, effective March 31, 2000. A firm whose certificate has expired may not offer or engage in engineering or land surveying services until the Certificate of Authorization has been renewed or until a new certificate has been issued.

(2) Every firm holding a Certificate of Authorization will be mailed, to its address on record with this Board, a renewal form not less than thirty days before the expiration date. The renewal form shall be completed and returned with the renewal fee. Notwithstanding the above, it is the firm's responsibility to renew its Certificate of Authorization prior to the official biennial expiration date of March 31.

(3) The completed renewal form signed and sworn to by the applicant must be filed with the Board office on or before March 31 of each biennial year.

B. Reinstatement.

(1) A Certificate of Authorization will become invalid upon a failure to renew by April 1 of the biennial renewal year. The Certificate may be reinstated by the Board at any time during the following three months on payment of the biennial renewal fee plus late penalty. The penalties are computed in the same manner as prescribed for individual licensees who fail to renew.

(2) In the case of failure to reinstate within three months from the date of expiration, the Certificate of Authorization will be reissued only upon submittal of a new application, accompanied by the application fee, and approval by the Board.

C. Resident Professional Requirement.

(1) A Certificate of Authorization (COA) is automatically suspended when the firm fails to comply with the resident professional requirement as provided for in Section 40-22-250 of the Practice Act.

(2) Practice by a firm on an expired or suspended COA is a violation of Section 40-22-260(C) of the Practice Act.

ARTICLE 2. REQUIREMENTS FOR LICENSURE.

49-200. Professional Engineer Licensure Requirements.

49-201. Professional Land Surveyor Licensure Requirements.

49-202. Classifications and Scopes of Authority: Engineers and Surveyors.

49-203. Licensure by Comity.

- 49-204. Engineering Registration of Foreign (Non-US) Practitioners and COA's for Foreign (Non-US) Firms.
- 49-205. Firm Registration.
- 49-206. Temporary Permits: Engineers; Engineering and Land Surveying Firms.
- 49-207. Seals: Individuals and Firms.
- 49-200. Professional Engineer Licensure Requirements.
- A. Education Requirements.
- (1) General.
- (a) An applicant must meet the educational requirements prescribed by statute at the time the application is filed in this State.
- (b) An applicant's education must be approved by the Board as qualifying before the application can be considered for further processing.
- (2) Education – Unrestricted License (Category A).
- (a) The minimum educational requirement for applicants requesting licensure as a Category A professional engineer shall be graduation from an engineering program accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET), which includes the following:
1. Four-year engineering degree accredited by EAC/ABET. An applicant in this category must have four years of qualifying engineering experience, as described in the section R.49-200B below, after graduation; or
 2. Master of Engineering or Master of Science in Engineering accredited by EAC/ABET, which will be accepted as the basic degree requirement. An applicant in this category must have four years of qualifying experience, as described in the section R.49-200B below, after the approved graduate degree.
- (b) The Board will recognize graduation from an engineering program accredited by a foreign accreditation board (FEEEP) recognized by ABET as having accreditation criteria substantially the same as that established by EAC/ABET. An applicant in this category must have four years of qualifying experience, as described in the section R.49-200B below, after the approved degree. Engineering degree programs in this category include the following:
1. Four-year engineering degree accredited by the Canadian Engineering Accreditation Board (CEAB).
 2. Four-year engineering degree from an accredited program in other countries listed in the ABET published "Washington Accord" document.
- (c) For educational programs, other than those described in the items (a) and (b) above, courses taken for credit and appearing on official college or university transcripts must be evaluated by a Board approved Education Consultant or FEEEP. The purpose of such evaluations shall be to determine whether or not the curriculum presented by the applicant complies substantially with accreditation criteria of EAC/ABET. Programs determined by the Board, based upon the evaluations, to be substantially equivalent to those accredited by EAC/ABET will be considered as qualifying education. The following programs in this section will be accepted for evaluation:
1. Four-year engineering degree from a non-EAC/ABET accredited program from a college or university in the United States and its jurisdictions.
 - a. For transcripts submitted for evaluation by the Education Consultant, an applicant shall have the academic institution furnish the Board such supporting documentation as necessary for a proper and sufficient evaluation.
 - b. An applicant in this category must have eight years of qualifying experience, as described in the section R.49-200B below, obtained after the approved degree.
 2. Master of Engineering or Master of Science in Engineering, not accredited by EAC/ABET, or a PhD. in engineering, with a Board approved non-EAC/ABET undergraduate degree, provided that the school or institution granting the graduate degree also offers an EAC/ABET baccalaureate engineering program in the same field of study. Education must be evaluated by a Board approved Education Consultant. An applicant in this category must have four years of qualifying experience, as described in the section R.49-200B below, after the date of the graduate degree. However, if the undergraduate degree should not be approved by the Board, the applicant must have eight years of qualifying experience after the date of the graduate degree.

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3. Master of Engineering or Master of Science in Engineering degree not accredited by EAC/ABET, with a non-approved undergraduate degree such as mathematics, biology, engineering technology, etc. from an institution of the United States or its jurisdictions when offered as meeting education requirements for licensure, if certification can be made by the institution granting the degree that deficiencies in an undergraduate degree in the same field of study, have been made up before entering or during the graduate program.

a. Such certification must be made by the Engineering Dean or Department Head and will also require evaluation by the Board Education Consultant.

b. The applicant must have eight years of qualifying experience, as described in the section R.49-200B below, obtained after the approved graduate degree.

4. Four-year engineering degree from a foreign country institution of higher education approved by the Board.

a. The applicant will be required to have the curriculum transcript submitted to and evaluated by a Board approved Education Consultant or the Foreign Engineering Education Evaluation Program (FEEEP) administered by the National Council of Examiners for Engineering and Surveying (NCEES).

b. The applicant must have eight years of qualifying experience, as described in the section R.49-200B below, obtained after the approved degree.

(3) Education – Restricted License (Category B).

(a) The minimum educational requirement for applicants requesting licensure as a Category B associate professional engineer shall be graduation from a four-year engineering technology program accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

(b) An engineering technology degree shall not be considered to be an engineering degree, nor shall it be considered as equivalent to an engineering degree.

(c) Category B associate professional engineers may apply for licensure as a Category A professional engineer (unrestricted license) provided the requisite supplemental education is acquired to qualify under one or more of the provisions as described in subsection A(2) above.

B. Experience Requirements.

(1) General.

(a) An applicant must have the qualifying experience required by the Board at the time an application is filed. Experience cannot be anticipated. Experience gained prior to actual graduation will not be accepted as qualifying experience.

(b) Qualifying experience must be progressive and of an increasing standard of quality and responsibility after graduation. Where guidelines for qualifying experience are published by NCEES, such guidelines may be used by the Board to evaluate experience of the applicant.

(2) Engineering Experience – Unrestricted License (Category A).

(a) Successful completion of a Master's degree in a Board approved engineering curriculum may be accepted as one year of equivalent engineering experience credit. The completion of a PhD. in a Board approved engineering curriculum may be accepted as two years of equivalent experience credit. However, in no case will more than two years of equivalent engineering experience credit be given for post baccalaureate education.

(b) For teaching experience to be considered by the Board, the engineer applicant must have taught in an engineering curriculum accredited by EAC/ABET and must have been employed in the grade of assistant professor or higher.

(c) Experience should be gained by working under the supervision of a registered professional engineer. If the experience was not gained under the direct supervision of a registered professional engineer, then the indirect supervision should be explained with clarification of the degree of supervision received.

(d) A combined certificate for engineer and land surveyor registration will require a minimum of six years of experience of which at least two years must be land surveying and at least four years must be engineering. Effective July 1, 2004, an applicant in this category must have a minimum of eight years of experience, of which at least four years must be land surveying and at least four years, must be engineering.

(e) Military experience, to be creditable, must have been spent in engineering and of a character substantially equivalent to that required in the civilian section for like work.

(f) For sales experience, to be creditable, it must be demonstrated conclusively that engineering principles and engineering knowledge were actually employed. The mere selection of data or equipment from company catalogue or a similar publication will not be considered qualifying engineering experience.

(g) The applicant should have meaningful design experience under the supervision of a registered professional engineer in designing components or processes that meet a public need. This experience should include exposure to the formation of design problem statements and specifications, consideration of alternative solutions, feasibility considerations, analytical calculations and detailed systems descriptions.

(h) Experience in construction supervision, in order to be qualifying, must include a demonstrated use of engineering computational and problem-solving skills in assuring compliance with specifications and designs.

(i) The Board will not accept the mere execution as a contractor of work designed by a registered professional engineer, or the supervision of the construction documents, or similar non-engineering tasks as qualifying engineering experience.

(j) Industrial experience leading to registration as a registered professional engineer should be directed toward the identification and solution of practice problems in the applicant's area of engineering specialization. This experience should include engineering analysis of existing physical systems and the design of new ones.

(3) Engineering Experience – Restricted License (Category B).

(a) Qualifying experience must be progressive and exhibit an increasing standard of advancement in the application of technological principles.

(b) Experience must be gained by working under the supervision of a legally practicing engineer or on engineering assignments which exhibit an increasing standard of assigned responsibility.

(c) Industrial experience leading to registration as an associate professional engineer should be directed toward the identification and solution of practical problems in the applicant's area of technological specialization of engineering principles.

(d) Work as laboratory or field technicians where such work is merely the conduct of routine explorations or data acquisition activities shall not be considered as qualifying. In order to be qualifying, the experience should show a demonstrated and satisfactory use of basic engineering computational and problem-solving skills.

(e) Category B associate professional engineers may apply for an unrestricted Category A professional engineer license provided the supplemental education as described in the subsection A(2) above, and the experience requirements as described in the subsection B(2) above are acquired.

C. Examination Requirements.

(1) Engineer-in-Training (EIT).

(a) An applicant applying for certification as an engineer-in-training must take and pass one of the written examinations on the Fundamentals of Engineering (FE), prepared and graded by the NCEES.

(b) An applicant for certification as EIT must also meet the education and experience requirements as outlined in the subsections R.49-200A and B above prior to admittance to the examinations.

(2) Category A Professional Engineer (unrestricted license).

(a) An applicant applying for registration as a Category A professional engineer must have taken and passed the FE examination and must also take and pass one of the discipline specific written examinations on the Principles and Practice of Engineering (PE), prepared and graded by the NCEES.

(b) The Board may, at its discretion, exempt an applicant applying for the unrestricted license from taking the FE examination. These exemptions include the following:

1. An applicant who has earned a doctorate degree in engineering in which the undergraduate degree in the same field of study is accredited by EAC/ABET, and is otherwise qualified under the provisions of the South Carolina Code of Laws at the time the application is received.

2. An applicant with more than fifteen years of acceptable experience after date of accredited degree or who has been licensed in another jurisdiction not less than 12 years, and is otherwise qualified under the provisions of Section 40-22-60 of the Practice Act, at the time the application is received.

(3) Category B Associate Professional Engineer (restricted license).

(a) An applicant applying for registration as a Category B associate professional engineer must take and pass the FE and PE examinations, prepared and graded by the NCEES. The Board will not consider requests for exemptions to the FE examination for an applicant in this category.

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(b) An applicant in this category (restricted license) must also meet the education requirements as outlined in the subsection R.49-200A(3) and experience requirements as outlined in the subsection R.49-200B(3) of this Chapter prior to admittance to the examinations.

49-201. Professional Land Surveyor Licensure Requirements.

A. TIER A Professional Land Boundary Surveyor.

(1) Education Requirements – Land Boundary Surveyor.

(a) Education must be evaluated by an Education Consultant and approved by the Board before an application can be considered for further processing.

(b) In addition to one of the following degrees, an applicant must have completed courses satisfactory to the Board in surveying and mapping of not less than twelve semester hours or the equivalent in quarter hours:

1. Four-year land surveying degree from a program accredited by the Related Accreditation Commission (RAC) of the Accreditation Board for Engineering and Technology (ABET).

2. Four-year civil engineering technology degree from a program accredited by the Technology Accreditation Commission (TAC) of ABET.

3. Four-year engineering or related bachelor of science degree, or equivalent degree, approved by the Board.

4. Two-year associate engineering technology degree from a program accredited by TAC/ABET. Effective July 1, 2010, this degree will not be recognized as meeting the education requirements for registration as a professional land surveyor.

(2) Experience Requirements – Land Boundary Surveyor.

(a) Land Surveyor-in-Training (LSIT).

1. An applicant for certification as a land surveyor-in-training who meets the four-year education requirements in the subsection A(1) above must have one year of progressive practical experience as described in the item A(2)(c) below.

2. An applicant who meets the two-year education requirements as described in the subsection A(1) above must have three years of progressive practical experience as described in the item A(2)(c) below. Effective July 1, 2010 this provision will be void.

(b) Land Boundary Surveyor.

1. An applicant applying for licensure as a land boundary surveyor who meets the four-year education requirements as described in the subsection A(1) above must have two years of progressive practical experience as described in the item A(2)(c) below. Effective July 1, 2004 an applicant in this category must have four years of qualifying experience.

2. An applicant applying for licensure as a land boundary surveyor who meets the two-year education requirements as described in the subsection A(1) above must have four years of progressive practical experience as described in the item A(2)(c) below. Effective July 1, 2010 this provision will be void.

(c) Qualifying Experience and Documentation.

1. Experience must be obtained under the supervision of a registered professional land surveyor and must be of a character satisfactory to the Board.

2. Qualifying experience approved by the Board is experience beyond elementary level activities such as chaining, rodman, and bush cutting duties. In order for work to be considered as qualifying experience, an advanced level of responsibility must have been placed on the applicant. Responsibility should involve mature judgement and expertise gained in such job assignments as instrument man, assistant crew chief or crew chief. Work claimed as qualifying experience should demonstrate a sound working knowledge of surveying with respect to research (records and field), instrumentation, note-keeping, calculations and mapping.

3. An experience record in boundary and route surveying, topographical surveying, construction surveying, control/geodetic surveying, and rights-of-way delineation is beneficial to the applicant in the Board's evaluation of the application. Recognizing that boundary surveys are the types of surveys which more critically affect the public welfare, experience in boundary surveys should constitute a significant portion of the applicant's experience record and will be given more weight by the Board in considering an applicant's qualifications for licensure.

4. An applicant must submit copies of three different maps and plats of land surveys on which he has worked. The documents must be signed by the professional land surveyor who supervised the work and

contain a statement describing that part of the work done by the applicant. Submitted plats and maps must meet the requirements of the Minimum Standards Manual for the Practice of Land Surveying in South Carolina, Chapter 49, Article 5, of the Code of Regulations, in effect at the time of licensure.

5. An applicant must submit five references as to the applicant's character and quality of work, three or more must be registered land surveyors having personal knowledge of the applicant's qualifications.

(3) Examination Requirements – Land Boundary Surveyor.

(a) An applicant applying for certification as land surveyor-in-training must take and pass a written examination on the Fundamentals of Land Surveying (FLS), prepared and graded by the NCEES.

(b) An applicant applying for licensure as a TIER A land boundary surveyor must have taken and passed the FLS written examination and must take and pass the Principles and Practice of Land Surveying (PLS), prepared and graded by the NCEES, and a South Carolina State Specific Land Surveying examination.

(4) A person licensed as a professional land boundary surveyor may practice as a professional photogrammetric surveyor only by meeting the requirements as described in the section R.49-201C of this Chapter, and may practice as a professional GIS surveyor only by meeting the requirements as described in the section R.49-201D of this Chapter.

B. TIER A Professional Land Boundary Surveyor – Provisions for Geodetic Surveying.

(1) The practice of geodetic surveying is classified under land boundary surveying. Between July 1, 2001 and June 30, 2004, a person who has been practicing geodetic surveying and does not have land boundary surveying experience will qualify to apply on or after July 1, 2001 for licensure as a TIER A land boundary surveyor, restricted to the geodetic surveying area of expertise, by meeting the following requirements.

(a) Education Requirement – Geodetic Surveying.

1. Graduation from a school or college of two or more years, approved by the Board; or
 2. A baccalaureate degree in surveying, geodesy, or a related field of study approved by the Board, which may be substituted for two of the four years of required experience, provided applicant has at least two years of professional or supervisory level experience; or

3. A Master's degree in surveying, geodesy, or a related field of study approved by the Board, which may be substituted for three years of experience, provided applicant has at least one year of experience at the professional or supervisory level.

(b) Experience Requirement – Geodetic Surveying.

1. Four years of experience in geodetic surveys conducted in the United States, two of which shall have been at the professional or supervisory level.

2. An applicant must submit at least one geodetic project which includes

- a. Detailed report of project planning.
- b. How national network was utilized.
- c. Datum and units (SI or English).
- d. Equipment used.
- e. Observational schedules.
- f. Field procedures.
- g. Adjustment report including narrative description.
- h. Problems encountered and how they were resolved.
- i. Coordinate listing.
- j. Statement of accuracy.
- k. Software used.
- l. Final geographically referenced project sketch.
- m. Project specifications.
- n. Certification as to the applicant's personal involvement.
- o. Names of other professionals involved in the project.
- p. Name, address and telephone number of references to verify this information.

3. An applicant must submit five references as to the applicant's character and quality of work, three of which shall be recognized professionals in the field of geodetic surveying.

(c) Examination Requirement – Geodetic Surveying.

An applicant must take and pass a special examination based on the Board's rules and regulations as referred to in the subsection R.49-104B(5) of this Chapter.

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(2) Time Limitation – Enforcement.

(a) To meet the provisions outlined in the subsection (B)(1) above, an application must be filed with the Board prior to July 1, 2004.

(b) Enforcement of the license requirement for geodetic surveyors will be effective July 1, 2004.

(c) After July 1, 2004 geodetic surveyors applying for licensure must meet all the requirements for land boundary surveyors as outlined in the subsection R.49-201A of this Chapter.

C. TIER A Professional Photogrammetric Surveyor.

(1) Between July 1, 2001 and June 30, 2004, any person practicing photogrammetry shall, upon application, be licensed to practice in the discipline of TIER A Professional Photogrammetric Surveying, provided the applicant meets all of the following requirements:

(a) Education Requirement. – Photogrammetric Surveyor.

1. Certified proof of graduation from high school or high school equivalency; or
2. Graduation from a school or college of two or more years beyond high school approved by the Board; or
3. A baccalaureate degree in surveying, photogrammetry or a related field of study approved by the Board, which may be substituted for two of the four years of required experience for a baccalaureate degree, provided the applicant has at least two years of professional or supervisory level experience; or
4. A master's degree in surveying, photogrammetry or a related degree approved by the Board, which may be substituted for three years of required experience for a baccalaureate degree, provided the applicant has at least one year of experience at the professional or supervisory level.

(b) Experience Requirement – Photogrammetric Surveyor.

1. The applicant with high school or equivalency education must have at least seven years of experience in photogrammetry prior to application, two or more of which shall have been in responsible charge of photogrammetric mapping projects meeting National Map Accuracy Standards.

2. The applicant with a minimum of a two-year degree as described in the item C(1)(a)2 above must have at least four years of experience in photogrammetry prior to application, two of which shall have been in responsible charge of photogrammetric mapping projects meeting National Map Accuracy Standards.

3. The applicant must submit proof of employment in responsible charge of at least one project as a photogrammetrist to include reports detailing methods, procedures, amount of applicant's personal involvement. The applicant must submit the name, address and telephone number of references to verify this information

4. The applicant must submit a map which includes:

- a. Date of photography or original data acquisition.
- b. Scale of Photography.
- c. Date of document or data set compilation.
- d. North Arrow, Map Legend, and Contour Interval, as applicable.
- e. A coordinate system for horizontal and vertical denoting SI or English units.
- f. A list or note showing the control points used for the project.
- g. A statement of accuracy.
- h. For topographic maps or data sets, contours in areas obscured by manmade or natural features shall be uniquely identified or enclosed by a polygon clearly identifying the obscured area.
- i. A vicinity map depicting the project location.
- j. Company name, address and telephone number.
- k. The name of the client for whom the project was conducted.

(c) Examination Requirement – Photogrammetric Surveyor.

An applicant must take and pass a special examination based on the Board's rules and regulations as referred to in the subsection R.49-104B(5) of this Chapter.

(2) Time Limitation – Enforcement.

(a) To meet the provisions as outlined in the subsection B(1) above, an application must be filed with the Board prior to July 1, 2004.

(b) Enforcement of the license requirements for photogrammetric surveyors will be effective July 1, 2004.

(3) After June 30, 2004, any person applying for licensure as a photogrammetric surveyor must meet the following requirements:

(a) Education Requirement – Photogrammetric Surveyor.

1. Education must be evaluated by an Education Consultant and approved by the Board before an application can be considered for further processing.

2. In addition to one of the following degrees, an applicant must submit proof of satisfactorily completing not less than 12 semester hours, or the equivalent in quarter hours, of course work specific to the discipline of photogrammetric surveying, satisfactory to the Board:

a. Four-year engineering or bachelor of science degree in a related field from a program accredited by the Related Accreditation Commission (RAC) or the Accreditation Board for Engineering and Technology (ABET).

b. Four-year civil engineering technology degree from a program accredited by the Technology Accreditation Commission (TAC) of ABET.

c. Four-year related bachelor of science degree, or equivalent degree, approved by the Board.

d. Two-year associate degree approved by the Board. Effective July 1, 2010, this degree will not be recognized as meeting the education requirements for registration as a photogrammetric surveyor.

(b) Experience Requirement – Photogrammetric Surveyor.

1. Photogrammetric Surveyor-in-Training.

a. An applicant applying for certification as a photogrammetric surveyor-in-training who meets the four-year education requirements in the item C(1)(a)3. above must have one year of progressive practical experience as described in the item C(3)(b)3 below.

b. An applicant who meets the two-year education requirements in the item C(1)(a)2 above must have three years of progressive practical experience as described in the item C(3)(b)3 below. Effective July 1, 2010, this provision will be void.

2. Photogrammetric Surveyor.

a. An applicant applying for licensure as a photogrammetric surveyor who meets the four-year education requirements in the item C(1)(a)3 above must have four years of progressive practical experience as described in the item C(3)(b)3 below.

b. An applicant applying for licensure as a photogrammetric surveyor who meets the two-year education requirements as described in the item C(1)(a)2 above must have four years of progressive practical experience as described in the item C(3)(b)3 below. Effective July 1, 2010 this provision will be void.

3. Qualifying Experience and Documentation.

a. Experience must be obtained under supervision of a licensed photogrammetric surveyor or a recognized professional in the field of photogrammetry and must be of a character satisfactory to the Board.

b. Qualifying experience approved by the Board is experience beyond elementary level activities. In order for work to be considered as qualifying experience, an advanced level of responsibility must have been placed on the applicant. Work claimed as qualifying experience should demonstrate a sound working knowledge of photogrammetry.

c. At least two years of the required experience must have been at the professional level in responsible charge of photogrammetric mapping projects meeting National Mapping Accuracy Standards.

d. The applicant must submit proof of employment in responsible charge of at least one project as a photogrammetrist. Maps and documents satisfactory to the Board detailing methods, procedures, amount of applicant's personal involvement must be submitted to document this project. These maps and documents must be signed by the professional who supervised the work and contain a statement describing the part or the work done by the applicant. The applicant must submit the name, address and telephone number of references to verify this information.

e. An applicant must submit five references as to the applicant's character and quality of work, three or more must be licensed land surveyors or practicing professionals in the field of photogrammetry, having personal knowledge of the applicant's photogrammetric surveying experience.

(c) Examination Requirements – Photogrammetric Surveyor.

1. An applicant applying for certification as a photogrammetric surveyor-in-training must take and pass a written examination on the Fundamentals of Land Surveying (FLS), prepared and graded by the NCEES.

2. An applicant applying for licensure as a photogrammetric surveyor must have taken and passed the FLS examination and must take and pass an examination on the principles and practice of photogrammetry

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and an examination on the Board's rules and regulations as referred to in the section R.49-104B(5) of this Chapter.

(4) A person licensed as a professional photogrammetric surveyor may practice as a professional land boundary surveyor only by meeting the requirements of the section R.49-201A of this Chapter, and may practice as a professional GIS surveyor only by meeting the requirements of the section R.49-201D of this Chapter.

D. TIER A Professional Geographic Information System (GIS) Surveyor.

(1) Between July 1, 2001 and June 30, 2004, any person presently practicing GIS surveying shall, upon application, be licensed to practice in the discipline of TIER A geographic information system surveying, provided the applicant meets the following requirements:

(a) Education Requirement – GIS Surveyor.

1. Graduation from a school or college of two or more years, approved by the Board; or
2. A baccalaureate degree in surveying, geography, or a related field of study, approved by the Board, which may be substituted for two of the four years of required experience, provided the applicant has at least two years of professional or supervisory level experience; or
3. A Master's degree in surveying, geography, or a related field of study, approved by the Board, which may be substituted for three years of experience, provided the applicant has at least two years of professional or supervisory level experience.

(b) Experience Requirement – GIS Surveyor.

1. Four years of experience in the profession, two or more of which shall have been in responsible charge of GIS projects.
2. The applicant must submit proof of employment in responsible charge of at least one GIS project to include reports detailing methods, procedures, and amount of applicant's personal involvement. The applicant must submit the name, address and telephone number of references to verify this information.
3. The applicant must submit one GIS project and a map and related project information to include:
 - a. Source and date of original data.
 - b. Data creation procedures.
 - c. Date of map publication.
 - d. North arrow, map scale and map legend.
 - e. Information on coordinate system and datum used.
 - f. Software used.
 - g. Equipment used.
 - h. Statement of data accuracy.
 - i. Certification of applicant's personal involvement in project.
 - j. Database structure.
 - k. Project metadata.
 - l. Appropriate contact information for references to verify this information.

(c) Examination Requirement – GIS Surveyor.

An applicant must take and pass a special examination based on the Board's rules and regulations as referred to in the subsection R.49-104B(5) of this Chapter.

(2) Time Limitation – Enforcement.

(a) To meet the provisions outlined in the subsection D(1) above, an application must be filed with the Board prior to July 1, 2004.

(b) Enforcement of the licensure requirement for GIS Surveyors will be effective July 1, 2004.

(3) After June 30, 2004, any person applying for licensure as a geographic information system (GIS) surveyor must meet the following requirements:

(a) Education Requirement – GIS Surveyor.

1. Education must be evaluated by an Education Consultant and approved by the Board before an application can be considered for further processing.
2. In addition to one of the following degrees, an applicant must also submit evidence of completion of discipline specific courses of not less than 12 semester hours or the equivalent in quarter hours satisfactory to the Board.
 - a. Four-year Bachelor of Science degree in a related field from a program accredited by the Related Accreditation Commission (RAC) of the Accreditation Board for Engineering and Technology (ABET).

- b. Four-year civil engineering technology degree from a program accredited by the Technology Accreditation Commission (TAC) of ABET.
- c. Four-year related Bachelor of Science degree, or equivalent degree, approved by the Board.
- d. Two-year Associate Degree approved by the Board. Effective July 1, 2010, this degree will not be recognized as meeting the education requirements for registration as a Geographic Information System Surveyor.

(b) Experience Requirements – GIS Surveyor.

- 1. Geographic Information System Surveyor-in-Training.
 - a. An applicant applying for certification as geographic information system surveyor-in-training who meets the four-year education requirements as described in the item D(3)(a) above must have one year of progressive practical experience as described in the item D(3)(b)3 below.
 - b. An applicant who meets the two-year education requirements in the item D(3)(a) above must have three years of progressive practical experience as described in the item D(3)(b)3 below. Effective July 1, 2010 this provision will be void.
- 2. Geographic Information System Surveyor.
 - a. An applicant applying for licensure as a geographic information system surveyor who meets the four-year education requirements in the item D(3)(a) above must have four years of progressive practical experience as described in the item D(3)(b)3 below.
 - b. An applicant applying for licensure as a geographic information system surveyor who meets the two-year education requirements in the item D(3)(a) above must have four years of progressive practical experience as described in the item D(3)(b)3 below. Effective July 1, 2010 this provision will be void.
 - c. An applicant applying for licensure as a geographic information system surveyor who holds a master's degree in surveying, geography, or a related field of study approved by the Board must have three years of practical experience as described in the item D(3)(b)3 below.
- 3. Qualifying Experience and Documentation.
 - a. Experience must be obtained under supervision of a licensed geographic information system surveyor or a recognized professional in the field of GIS and must be of a character satisfactory to the Board.
 - b. Qualifying experience approved by the Board is experience beyond elementary level activities. In order for work to be considered as qualifying experience, an advanced level of responsibility must have been placed on the applicant. Work claimed as qualifying experience should demonstrate a sound working knowledge of GIS.
 - c. At least two years of the required experience must have been at the professional level in responsible charge of geographic information system mapping projects.
 - d. The applicant must submit proof of employment in responsible charge of at least one project as a GIS Surveyor. Maps and documents, satisfactory to the Board, detailing methods, procedures, amount of applicant's personal involvement must be submitted to document this project. The map and related project information submitted must include the project information described in the item D(1)(b)3 of this Chapter.
 - e. Maps and documents must be signed by the professional who supervised the work and contain a statement describing the part or the work done by the applicant. The applicant must submit appropriate contact information including the name, address and telephone number of references to verify this information.
 - f. An applicant must submit five references as to the applicant's character and quality of work, three or more must be licensed land surveyors or practicing professionals in the field of GIS having personal knowledge of the applicant's GIS surveying experience.

(c) Examination Requirements – GIS Surveyor.

- 1. An applicant applying for certification as geographic information system surveyor-in-training must take and pass the written examinations on the Fundamentals of Land Surveying (FLS), prepared and graded by the NCEES.
- 2. An applicant applying for licensure as a geographic information system surveyor after June 30, 2004 must have taken and passed the FLS examination described in the item C(3)(a) above and must take and pass an examination on the principles and practice of geographic information systems and pass an examination on the Board's rules and regulations as referred to in the section R.49-104B(5) of this Chapter.

E. TIER B Professional Land Surveyor.

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(1) An applicant shall be licensed as a TIER A Land Boundary Surveyor prior to submitting an application for licensure or registration as a TIER B Land Surveyor.

(2) Effective July 1, 2001, an applicant must meet the following requirements of education, experience and examinations.

(a) Education – TIER B Land Surveyor.

1. Graduation from a school or college of four or more years with a Bachelor of Science degree including in the curriculum not less than fifteen semester hours or the equivalent in quarter hours of surveying, mapping, hydraulics, and hydrology courses satisfactory to the Board; or,

2. A Bachelor of Engineering Technology degree in an ABET Commission accredited curriculum of land surveying or engineering technology, including in the curriculum not less than twelve semester hours or the equivalent in quarter hours of surveying, mapping, hydraulics, and hydrology courses satisfactory to the Board.

(b) Experience – TIER B Land Surveyor.

1. A specific record of two or more years of progressive practical experience performed under a practicing registered land surveyor. Effective July 1, 2004, an applicant must have four years of qualifying experience performed under a practicing registered land surveyor.

2. Experience must be of a character satisfactory to the Board as described in the Scopes of Authority, R.49-202D of this Chapter.

(c) Examinations – TIER B Land Surveyor.

1. An applicant must have taken and passed the written examinations required for licensure as a TIER A Land Boundary Surveyor which include the FLS and PLS examinations, prepared and graded by the NCEES, and the State Specific Land Surveying Examination.

2. An applicant must also take and pass a special written examination pertaining to the practice of TIER B land surveying in the State which includes the design of storm drainage systems and preparation of sedimentation and erosion control plans associated with the development of residential subdivisions.

(3) A TIER B land surveyor may practice as a professional photogrammetric surveyor only by meeting the requirements of the section R.49-201C of this Chapter, and may practice as a professional GIS surveyor only by meeting the requirements of the section R.49-201D of this Chapter.

49-202. Classifications and Scopes of Authority: Engineers and Surveyors.

A. Category A Professional Engineer.

(1) A professional engineer who by reason of his special knowledge of the mathematical and physical sciences and the principles and methods of engineering analysis and design, acquired by professional education and practice experience, is qualified to practice engineering as defined in Section 40-22-22 of the Practice Act, all as attested by his legal license and registration as a professional engineer in this State, is classified as a Category A license holder.

(2) The Category A professional engineer license holder is entitled to the unrestricted practice of engineering as described in Section 40-22-22 of the Practice Act.

B. Category B Associate Professional Engineer.

(1) An associate professional engineer is qualified to practice within the profession of engineering in the restricted manner defined in the Code and as attested by his recognition and registration as an associate professional engineer in this State is classified as a Category B license holder.

(2) The practice of Category B associate professional engineers is subject to certain restrictions:

(a) An associate professional engineer must not assume direct responsibility, direct supervisory control or responsible charge for engineering work as an independent practitioner, or for engineering work provided by or through a “private practice organization” as defined by statute.

(b) Work by a Category B associate professional engineer employed by a “private practice organization” must be under the direct responsibility, supervisory control, and responsible charge of a Category A professional engineer.

(c) Where documents are required to be submitted to building officials and other authorities having jurisdiction for government review, approval or permitting, and where such documents are required to be submitted under the signature or seal of a Professional Engineer, the documents must be prepared by or under the responsible charge of and submitted only by a Category A professional engineer.

(d) A Category B associate professional engineer shall not, by title, verbal claim, sign, advertisement, letterhead, card or in any other way, represent himself to be a Professional Engineer.

(3) A Category B associate professional engineer may apply for an unrestricted Category A professional engineer license provided the requisite supplemental education is acquired to qualify under one or more of the provisions as described in the section R.49-200 of this Chapter.

C. TIER A Land Surveyor.

(1) The practice of TIER A land surveying consists of three separate disciplines: (a) land boundary surveying, (b) photogrammetry, and (c) geographic information systems (GIS). A land surveyor may be licensed in one or more of the disciplines and practice is restricted to only the discipline or disciplines for which the land surveyor is licensed.

(2) The scopes of authority for the individual disciplines of TIER A land surveying are identified as follows:

(a) Professional Land Boundary Surveyor (PLS).

1. Locates, relocates, establishes, re-establishes, lays out or retraces any property line or boundary of any tract of land or any road, right-of-way, easement, alignment, or elevation of any fixed works embraced within the practice of land surveying, or makes any survey for the subdivisions of land;

2. Determines, by use of principles of land surveying, the position for any survey monument or reference point; or sets, resets, or replaces such monument or reference; determines the topographic configuration or contour of the earth's surface with terrestrial or extraterrestrial measurements; conducts hydrographic surveys;

3. Conducts geodetic surveying which includes surveying for determination of geographic position in an international three-dimensional coordinate system, where the curvature of the earth must be taken into account when determining directions and distances; geodetic surveying includes the use of terrestrial measurements of angles and distances, as well as measured ranges to artificial satellites;

4. Creates graphical representations of the data related to items C(2)(a)1.2.3 above.

5. Performs work of a professional photogrammetric surveyor as described in the item C(2)(b) below or as a GIS surveyor as described in the item C(2)(c) below only after obtaining a license in those categories.

(b) Professional Photogrammetric Surveyor (PPS).

1. Determines the configuration or contour of the earth's surface or the position of fixed objects thereon by applying the principles of mathematics on remotely sensed data, such as photogrammetry.

2. Creates graphical representations of data relating to the item (b)1 above.

3. Performs work of a land boundary surveyor as described in the item C(2)(a) above or as a geographic information systems (GIS) surveyor as described in the item C(2)(c) below only after obtaining a license in those categories.

(c) Professional Geographic Information System Surveyor (GIS).

1. Creates, prepares, or modifies electronic or computerized data including land information systems and geographic information systems relative to the performance of the activities described in subsections (a) and (b) above.

2. Creates digital spatial data based on integration, interpretations, transformations, and/or the manipulation of primary data sources that affects the health, welfare, or safety of the public.

3. Performs work of a land boundary surveyor as described in subsection C(2)(a) above or as a photogrammetric surveyor as described in the item C(2)(b) above only after obtaining a license in those categories.

(3) The practice of TIER A land surveying does not include the use of GIS or LIS to create maps pursuant to Section 40-22-290 of the Practice Act, analyze data, or create reports.

D. TIER B Professional Land Surveyor.

(1) Persons registered as both Professional Land Surveyor and Professional Engineer are classified as TIER B Professional Land Surveyors.

(2) The practice of TIER B land surveying as described by Section 40-22-20(24) of the Practice Act, and regulated by the Board shall include the authority, within the limits set by these regulations, to practice the design of storm drainage systems and the preparation of sedimentation and erosion control plans associated with the development of residential subdivisions. Included within this practice of TIER B land surveying is the design of stormwater detention or retention facilities incidental to the surveyor's design of storm drainage systems;

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provided, however, that these facilities are not lakes, ponds or similar impoundments intended to contain water at all times.

(a) As used in this section, the term “residential subdivision” means property developed for single family residences and other type projects where individual lots are established for each residential unit. The density of these projects shall be limited to two lots or units per acre. Apartment projects and projects for developments of commercial or industrial properties are not included within the scope of authority.

(b) Where reference has been made to “lakes, ponds or similar impoundments intended to contain water at all times,” such reference is not intended to limit a TIER B Land Surveyor’s authority to prepare calculations pertaining to the hydrology or hydraulics of these impoundments. It is expected, however, that such impoundments will require a more detailed analysis and design with respect to soil mechanics. Consequently design of impoundments intended to contain water at all times should be based upon appropriate geotechnical evaluations conducted under the direction of a licensed engineer experienced in such matters. The geotechnical investigations and report should, as a minimum, evaluate site conditions and provide recommendations for materials and methods of construction of the impoundment.

(3) The practice of TIER B land surveying shall not include the design of drainage structures, drainage systems, or other drainage features which are not incidental to the development of a residential subdivision. Projects, which are purely drainage in nature or where a subdivision of a parcel of land into small parcels is not involved, shall not fall within the scope of practice authorized for TIER B land surveyors. The design of such features as water systems, sanitary sewer systems, surcharged storm drainage systems or pumping stations which may also be incidental to the project are not included in this practice. The exclusion from the scope of authority of the design of “surcharged storm drainage systems” is not intended to apply to submerged outlet pipes routinely used in detention and retention basins.

(4) The practice of TIER B land surveying is further limited to the use of predesigned structures, which are approved by the county or municipal governmental agency having jurisdiction. Where standard design structures cannot be used because of extra loading, extreme depth or unusually large size, the structure shall be designed by a licensed engineer. “Predesigned Structure” is intended to cover two situations:

(a) As used in this section, the standard design for catch basins, junction boxes, and headwalls that are specified by local governments will be considered “predesigned”.

(b) As used in this section, precast basins, junction boxes, and headwalls produced by concrete companies are considered as “predesigned” and may be used where allowed by the local authority.

(5) In exercising powers of a TIER B Land Surveyor, the surveyor shall undertake to perform only those assignments for which he is authorized by the statute and these regulations and for which he is qualified by education or experience in the specific technical area of TIER B land surveying involved.

49-203. Licensure by Comity.

A. Professional Engineer.

(1) An application will not be accepted for licensure by comity from an applicant who is not appropriately licensed in the state in which the applicant resides or is employed unless there are extenuating circumstances satisfactory to the Board.

(2) A Model Law Engineer applicant, as described in the section R.49-100B(9) of this Chapter and meeting the requirements of the subsection A(1) above, may be licensed as a Category A Professional Engineer by making application on the prescribed form and having the NCEES Council Record sent to the Board. To be considered, the Council Record must be submitted directly to the Board by NCEES. Upon receipt of the proper documents and payment of the fee established by the Board, a Model Law Engineer applicant may be licensed as a Category A Professional Engineer without further review.

(3) Any applicant holding a valid license to practice engineering issued by a proper authority of a jurisdiction or possession of the United States, based on requirements not less than those specified by the applicable licensure act in effect in the State of South Carolina at the time such other license was issued, may, upon receipt of the proper documents and payment of the fee established by the Board, be considered for licensure in the appropriate category designation without further written examination.

(4) An applicant for comity consideration as a Category B Associate Professional Engineer must be a resident of the State of South Carolina or regularly employed at a business operation located within the State.

B. Professional Land Surveyor.

(1) An application will not be accepted for registration by comity from an applicant who is not appropriately registered in the state in which the applicant resides or is employed unless there are extenuating circumstances satisfactory to the Board.

(2) An application will not be accepted for registration by comity unless the applicant meets the requirements for education, experience and examination as prescribed by the statutes, and the rules and regulations of this Board in effect at the time of filing said application.

(3) An applicant registered in another state may be required to take such examinations as the Board deems necessary to establish that his qualifications meet the requirements of the statutes, rules and regulations of the Board. The applicant shall in all cases be required to pass a written examination including questions of laws, procedures and practices pertaining to the practice of land surveying in this State.

(4) An application will not be accepted for registration by comity as a TIER B Land Surveyor until the applicant first obtains registration as a TIER A Land surveyor. An applicant in this category will be required to pass the eight-hour written examination for a TIER B Land Surveyor in addition to meeting the education and experience requirements as established by the statutes and the rules and regulations of the Board.

49-204. Engineering Registration of Foreign (Non-US) Practitioners and COA's for Foreign (Non-US) Firms.

A. General Provisions.

(1) Applicability. The provisions of this section apply only to engineering service providers from foreign jurisdictions who make application to this State for registration as a Category A Professional Engineer.

(2) Citizenship and Residency. An applicant must be a citizen and resident of the foreign jurisdiction from which application is made.

(3) Character and Reputation. An applicant must be of good character and reputation.

(4) Immigration Requirements. A license to practice professional engineering issued by this Board must not be construed to exempt an engineering service provider from any immigration requirement of the United States government.

B. License to Practice Professional Engineering.

(1) Comity Registration. An applicant who qualifies under the comity registration provisions may be licensed by the Board.

(2) Mutual Recognition Agreements. Provided the recognized registration authority in the foreign jurisdiction from which application originates is a signatory to, and is in good standing under, a mutual recognition agreement executed by the USCIEP, and approved by this Board, an applicant meeting the minimum qualifications prescribed by the agreement and the requirements of this section may be licensed by the Board.

(3) Competency Assessment. An applicant must satisfactorily demonstrate to the satisfaction of the Board a reasonable knowledge and understanding of local regulations, technical codes, ethical standards and relevant legal provisions governing the application of engineering knowledges, principles and practices in the United States. Passing one or more of the Principles and Practice of Engineering (PE) examinations prepared by the NCEES shall be deemed by the Board to be an acceptable demonstration of these competency assessment standards.

(4) Compliance with Jurisdictional Laws. Registrants, by applying for and receiving a license to practice by this Board, shall be deemed to be knowledgeable of, and subject to, such additional laws, rules, regulations and ordinances, whether federal, state or local, as may be applicable to their services as a professional engineer.

(5) Jurisdiction of South Carolina Court. By accepting a license to practice under this subsection, an applicant agrees to accept the jurisdiction of the Courts of the State of South Carolina and the application of the laws of the State of South Carolina to work performed within the scope of this license.

C. Certificate of Authorization.

No registrant or employer thereof shall be exempt from requirements under the statute to obtain a certificate of authorization where the practice of engineering in this State is offered or provided through a firm.

49-205. Firm Registration.

A. Requirements.

(1) Each firm engaged in the practice of engineering or land surveying in South Carolina must have a Certificate of Authorization issued by the South Carolina State Board of Registration for Professional Engineers and Land Surveyors before undertaking such work. Before a Certificate of Authorization may be issued to an

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out-of-state business corporation, the corporation shall be approved by the South Carolina Secretary of State to transact business in the State. A copy of the corporate documents issued by the Secretary of State shall be filed with the Board office as part of the initial application for a Certificate of Authorization.

(2) Each firm continuing to engage in the practice of engineering or land surveying in this State shall register with the Board prior to the first day of April of each biennial renewal year. Upon payment of the biennial fee and the submission of information required on the Board renewal form, a renewal certificate will be issued.

(3) No firm shall engage in the practice of engineering or land surveying within South Carolina unless one or more persons in full authority and responsible charge of such work be licensed to practice in South Carolina. Persons in full authority and responsible charge shall mean regularly employed persons in unrestricted, unchecked, and unqualified command of, and legally accountable for the actions of such practice. Failure to maintain on file in the office of the Board at all times the name, registration certificate number and written evidence of authority of the individual in full authority and responsible charge within the subject corporation, professional corporation, partnership or firm shall constitute a violation of these regulations, punishable by sanction up to and including revocation of the Certificate of Authorization and right to practice in South Carolina by the organization.

(4) For the purpose of this regulation, a sole proprietorship is one in which the ownership is held by a single individual who is duly licensed to practice engineering and/or land surveying in this State, where there is no stock ownership in the firm, and where the practice name is identical to that in which the individual registration is held. A registered engineer or land surveyor, practicing in his own name as a sole proprietorship is exempt from this section of the regulations. For multiple firms practicing engineering or land surveying as a joint venture for one or more projects in this State, a Certificate of Authorization will be required for each firm practicing within the joint venture.

(5) Failure to notify the Board within thirty (30) days of changes affecting any of the above prescribed information shall be grounds for sanctions up to and including revocation of the organization's Certificate of Authorization. An engineer or land surveyor on file with the Board as being in full authority and responsible charge shall notify the Board of any change in his employment. With respect to affirmations made under this section, failure to file a written notice to the Board within thirty (30) days of any change which removes a person from a position of responsible charge shall constitute a violation of these regulations, punishable by a fine of not less than \$200 nor more than \$500, and/or by sanctions up to and including revocation of the Certificate of Authorization to practice in South Carolina, or both, at the discretion of the Board.

B. Issuance.

(1) If the requirements of Section 40-22-250 of the Practice Act are met, the Board shall issue a certificate of authorization to a firm.

(2) The certificate of authorization must be renewed biennially, effective March 31, 2002.

49-206. Temporary Permits: Engineers; Engineering and Land Surveying Firms.

A. The Board may grant to a professional engineer holding a valid certificate to practice professional engineering in another state a temporary permit to engage in professional engineering work on one specific project in this State for a period not exceeding one year.

(1) A professional engineer applying for a temporary permit to practice in this State must meet the qualifications specified in the Practice Act for registration as a Category A Professional Engineer.

(2) No right to practice engineering in this State shall accrue to an engineer holding a temporary permit with respect to any work not set forth in the permit.

(3) Verification of education and registration will be required before issuance of a temporary permit to practice professional engineering in this State.

(4) A temporary permit to practice engineering in this State must be applied for and granted prior to the assumption of responsible charge for the engineering services to be furnished under the permit.

B. The Board may grant a Temporary Certificate of Authorization to an out-of-state corporation, professional corporation, partnership or firm desiring to engage in professional engineering work on one specific project in this State for a period not exceeding one year if one or more of the principal officers of said organization has obtained a license or a temporary permit to practice as a Professional Engineer in this State.

C. Applicants seeking a temporary permit to practice engineering and/or seeking a Temporary Certificate of Authorization shall make application in writing on the prescribed forms and pay the required fees.

D. Only one temporary permit will be issued during a three-year period to an individual. Only one Temporary Certificate of Authorization will be issued during a three-year period to a firm. For any other work, an applicant will be required to file an application, as appropriate, for registration as a Professional Engineer and/or an application for a Certificate of Authorization.

E. Written notification from the permit holder will be required at the time of completion of the project. For projects extending beyond the twelve month permit period, an application for registration by comity (in the case of individuals) and an application for a Certificate of Authorization (in the case of firms) must be submitted in sufficient time to avoid a lapse in the privilege to practice in this State.

F. While practicing under a temporary permit or a Temporary Certificate of Authorization in South Carolina, the holders thereof shall affix to all plans and documents for use in South Carolina, the seals or stamps required in the state of residence or employment with a notation "Practicing in the State of SC Under Temporary Permit No." (in the case of individuals) and "Practicing in the State of SC Under Temporary Certificate of Authorization No." (in the case of firms).

G. The Board cannot grant a Land Surveyor a temporary permit for the practice of land surveying. No individual may legally practice land surveying in this State without first being duly licensed as a Professional Land Surveyor in the State of South Carolina.

49-207. Seals: Individuals and Firms.

A. Description of Licensee's Seal.

(1) The seal of engineers and land surveyors licensed by the Board shall be 1 9/16 inches in diameter and similar to that prescribed for the Board. In the center there shall appear the registration number of the licensee along with the words:

- (a) "Registered Professional Engineer", for Category A engineers licensed prior to July 1, 2001.
- (b) "Licensed Professional Engineer", for Category A engineers licensed after July 1, 2001.
- (c) "Associate Professional Engineer—Restricted License", for Category B engineers.
- (d) "Professional Engineer and Land Surveyor", for Category A engineers holding dual registration.
- (e) "Professional Land Surveyor", for TIER A land boundary surveyors.
- (f) "Professional Photogrammetric Surveyor", for photogrammetric surveyors.
- (g) "Professional GIS Surveyor", for geographic information systems surveyors.
- (h) "Professional Land Surveyor—TIER B", for TIER B land surveyors.

(2) Rubber stamps or computer generated seals, identical in size, design and content with the approved impression seals may be used by the registrant where the use of an impression seal is not specifically required.

B. Description of Firm's Seal.

(1) The seal evidencing issuance of a Certificate of Authorization by this Board shall be 1 9/16 inches in diameter and similar to that prescribed for the Board. In the center there shall appear the name of the certificate holder and the assigned Certificate of Authorization number. In the space between the circle and the outside of the Seal there shall appear the words "South Carolina" and the words "Certificate of Authorization".

(2) Rubber stamps, impression seals, or computer generated seals, identical in size, design and content with the approved impression seals may be used by the organization.

C. Seal on Documents.

(1) The seal and signature of a licensee on a document constitutes a certification that the document was prepared by the licensee or under his direct supervision, and in the case of prototypical documents, that the licensee has reviewed the document in sufficient depth to fully coordinate and assume responsibility for plans prepared by another licensee.

(2) When sealing documents is required by statute, other authority or contract, each sheet of plans, drawings, documents, specifications and reports for engineering practice and of maps, plats, charts and reports for land surveying practice shall be sealed and signed by the licensee or permit holder preparing them, or in responsible charge of their preparation. The signature and date when the document was prepared must be affixed under or across the face and beyond the circumference of the seal but in a manner that does not obliterate or render illegible the licensee's name and number. Where the engineering or land surveying practice is provided through a firm such documents shall also carry the seal evidencing registration of the Certificate of Authorization.

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(3) Where more than one sheet is bound together in one volume, the licensee or permit holder, who prepared said volume, or under whose direction and control said volume was prepared, may seal, date and sign only the title or index sheet, provided that the signed sheet clearly identifies all of the other sheets comprising the bound volume, and provided that any of the other sheets which were prepared by, or under the direction and control of, another licensee or permit holder, be sealed, dated and signed by said other licensee or permit holder. This provision, however, shall not apply to design drawings and construction plans prepared by or under the responsible charge of a licensee. Such documents shall carry the required seals, date and licensee's signature on each sheet.

(4) Additions, deletions or other revisions to sealed documents shall not be made, unless such changes are sealed, dated and signed by the licensee who made the revisions or under whose directions and control said revisions were made.

ARTICLE 3. RULES OF PROFESSIONAL CONDUCT.

No changes.

ARTICLE 4. MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA.

No changes.

ARTICLE 5. AGREEMENTS AND UNDERSTANDINGS WITH OTHER BOARDS.

No changes.

ARTICLE 6. CONTINUING PROFESSIONAL COMPETENCY.

49-600.	Purpose.	
49-601.	Definitions.	No changes.
49-602.	Requirements.	
49-603.	Units of Credit.	No changes.
49-604.	Determination of Credit.	No changes.
49-605.	Record Keeping.	No changes.
49-606.	Exemptions.	No changes.
49-607.	Reinstatements.	No changes.
49-608.	Comity Out of Jurisdiction Resident.	No changes.
49-609.	Dual License Holders.	No changes.
49-601.	Reporting Forms.	No changes.

49-600. Purpose.

A. No changes.

B. Each licensee shall meet the continuing professional competency requirements of these regulations as a condition for biennial registration renewal of license, effective July 1, 2002. Engineers and Land Surveyors continuously licensed by this Board prior to January 1, 1969 will be exempt from continuing education requirements, effective July 1, 2001.

49-601. No changes.

49-602. Requirements.

A. Every licensee is required to obtain 15 PDH units each year. Effective July 1, 2002, each licensee is required to obtain 30 PDH units each biennial renewal period.

B. If a licensee exceeds the requirements in any renewal period, a maximum of 15 PDH units may be carried forward into the subsequent renewal period. Effective July 1, 2002, a licensee may carry forward 15 PDH units into the subsequent biennial renewal period.

C. No changes.

Fiscal Impact Statement: There will be no additional cost incurred by the State or any political subdivision.

Document No. 2605
DEPARTMENT OF LABOR, LICENSING AND REGULATION
BOARD OF MEDICAL EXAMINERS
Chapter 81
Statutory Authority: 1976 Code Sections 40-47-20; 40-1-70

Synopsis:

The Board of Medical Examiners is repealing Regulation 81-100 as it is no longer necessary due to the passage of the Physician Assistants Practice Act, effective June 6, 2000.

Instructions: Amend current regulations, by repealing regulation 81-100.

Text:

81-100. Repealed.

Fiscal Impact Statement: There will be no additional cost incurred by the State or any political subdivision.

Document No. 2577
DEPARTMENT OF LABOR, LICENSING AND REGULATION
STATE BOARD OF NURSING
Chapter 91
Statutory Authority: 1976 Code Sections 40-33-10(g); 40-33-220(11); 40-33-270

Synopsis:

The State Board of Nursing is drafting a regulation that would allow nurse practitioners with prescriptive authority to provide drug samples to patients when acting within the scope and standards of their practice.

Instructions: Amend current regulation 91-6(k), by adding the paragraph of text as shown below.

Text:

91-6(k). Standards for Authorized Prescriptions by the Nurse Practitioner with Prescriptive Authority.

6. The nurse practitioner or clinical nurse specialist who holds prescriptive authority may request, receive, and sign for professional samples, except for controlled substances in Schedules II through IV, and may distribute professional samples to patients as listed in the approved written protocols, subject to federal and state regulations.

Fiscal Impact Statement: There will be no cost incurred by the State or any of its political subdivisions.

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Document No. 2563

DEPARTMENT OF REVENUE

CHAPTER 117

Statutory Authority: 1976 Code Section 12-4-320

Regulation: 117-80.5. To provide a definition of facility for purposes of Chapter 6 of Title 12.

Synopsis:

The term “facility” is used a number of places in Chapter 6 of Title 12. For example, in order to qualify for the South Carolina jobs tax credit contained in Code Section 12-6-3360, a taxpayer must operate a manufacturing, tourism, processing, warehousing, distribution, research and development, corporate office, or qualifying service related “facility”. While the statute defines each of the different types of facilities it does not provide a definition as to what qualifies as a “facility”. Similarly, the South Carolina headquarters credit, references “facility” in its definition of corporate headquarters”.

The regulation provides that generally each separate location of a taxpayer’s operations is a single facility. However, if a taxpayer conducts more than one activity at a single location, each separate activity conducted at the location will be treated as a separate facility if the activities each have their own separate dedicated staff and personnel, the employment for an activity is significant when compared to the total employment at the location and separate reports concerning profit and loss, employees and other matters, can be separately prepared for each of the activities. It is irrelevant whether separate reports are actually prepared for each separate activity. If separate reports can be prepared, this last criteria will be met.

Instructions: Add New Regulation

Text:

117-80.5. A “facility” is generally a single physical location, where a taxpayer’s business is conducted or where its services or industrial operations are performed. Where two or more distinct and separate economic activities are performed at a single physical location, each separate economic activity will be treated as a separate facility when: (1) each activity has its own separate and dedicated personnel; (2) separate reports can be prepared on the numbers of employees, their wages and salaries, sales, or receipts and expenses; (3) and employment and output are significant as to the activity. For purposes of item (2) above, it is irrelevant if separate reports are actually prepared, so long as separate reports can be prepared, this criteria is met.

Impact Statement:

The impact of this regulation will be determined by the clarification of the definition of “facility” which may result in taxpayers qualifying for benefits in Title 12. The revenue impact should be negligible.

Document 2561
DEPARTMENT OF REVENUE
 CHAPTER 117
 Statutory Authority: 1976 Code Section 12-4-320

Regulation: 117-124.22. To provide a definition of facility for purposes of Chapter 37 of Title 12.

Synopsis:

The term “facility” is used several times in Chapter 37 of Title 12. For example, several of the property tax exemptions contained in Code Section 12-37-220 require a taxpayer’s location qualify as a certain type of “facility”. The statute does not define the term “facility”.

The regulation provides that generally each separate location of a taxpayer’s operations is a single facility. However, if a taxpayer conducts more than one activity at a single location, each separate activity conducted at the location will be treated as a separate facility if the activities each have their own separate dedicated staff and personnel, the employment for an activity is significant when compared to the total employment at the location and separate reports concerning profit and loss, employees and other matters, can be separately prepared for each of the activities. It is irrelevant whether separate reports are actually prepared for each separate activity. If separate reports can be prepared, this last criteria will be met.

Instructions: Add New Regulation

Text:

117-124.22. A “facility” is generally a single physical location, where a taxpayer’s business is conducted or where its services or industrial operations are performed. Where two or more distinct and separate economic activities are performed at a single physical location, each separate economic activity will be treated as a separate facility when: (1) each activity has its own separate and dedicated personnel; (2) separate reports can be prepared on the numbers of employees, their wages and salaries, sales, or receipts and expenses; (3) and employment and output are significant as to the activity. For purposes of item (2) above, it is irrelevant if separate reports are actually prepared, so long as separate reports can be prepared, this criteria is met.

Impact Statement:

The impact of this regulation will be determined by the clarification of the definition of “facility” which may result in taxpayers qualifying for benefits in Title 12. The revenue impact should be negligible.

Document No. 2562
DEPARTMENT OF REVENUE
 CHAPTER 117
 Statutory Authority: 1976 Code Section 12-4-320

Regulation: 117-160.5. To provide a definition of facility for purposes of Chapter 36 of Title 12.

Synopsis:

The term “facility” is used in Chapter 36 of Title 12. For example, in order to qualify for the \$300 sales tax cap on the sale of research and development machinery which is contained in South Carolina Code Section

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12-36-2110(D), the machinery must be located in a separate facility devoted exclusively to research and development. The statute does not define the term “facility.”

The regulation provides that generally each separate location of a taxpayer’s operations is a single facility. However, if a taxpayer conducts more than one activity at a single location, each separate activity conducted at the location will be treated as a separate facility if the activities each have their own separate dedicated staff and personnel, the employment for an activity is significant when compared to the total employment at the location and separate reports concerning profit and loss, employees and other matters, can be separately prepared for each of the activities. It is irrelevant whether separate reports are actually prepared for each separate activity. If separate reports can be prepared, this last criteria will be met.

Instructions: Add New Regulation

Text:

117-160.5. A “facility” is generally a single physical location, where a taxpayer’s business is conducted or where its services or industrial operations are performed. Where two or more distinct and separate economic activities are performed at a single physical location, each separate economic activity will be treated as a separate facility when: (1) each activity has its own separate and dedicated personnel; (2) separate reports can be prepared on the numbers of employees, their wages and salaries, sales, or receipts and expenses; (3) and employment and output are significant as to the activity. For purposes of item (2) above, it is irrelevant if separate reports are actually prepared, so long as separate reports can be prepared, this criteria is met.

Impact Statement:

The impact of this regulation will be determined by the clarification of the definition of “facility” which may result in taxpayers qualifying for benefits in Title 12. The revenue impact should be negligible.

Document No. 2523
DEPARTMENT OF REVENUE
CHAPTER 117
Statutory Authority: 1976 Code Section 12-4-320

Regulation 117-174.257

Synopsis:

The purpose of this proposal is to make the regulation consistent with the sales and use tax statute. Sales of hearing aids are now exempt per Code Section 12-36-2120(38), but the regulation says they are not. In addition, this proposal makes the regulation consistent with the language in Code Section 12-36-2120(28). The regulation was last amended effective 7/1/81. Since that date, Section 12-36-2120(28) has changed substantially. This proposal also removes language pertaining to the definitions for “medicine” and “prosthetic devices,” without changing the definition.

Instructions: Amend Regulation to read:

Text:

117-174.257 Prescription Medicines, Prosthetic Devices and Hearing Aids

Code Section 12-36-2120(28) exempts from the sales and use taxes:

- (a) medicines and prosthetic devices sold by prescription, prescription medicines and therapeutic radiopharmaceuticals used in the treatment of cancer, lymphoma, leukemia, or related diseases, including prescription medicines used to relieve the effects of any such treatment, and free samples of prescription medicine distributed by its manufacturer and any use of these free samples;
- (b) hypodermic needles, insulin, alcohol swabs, blood sugar testing strips, monolet lancets, dextrometer supplies, blood glucose meters, and other similar diabetic supplies sold to diabetics under the authorization and direction of a physician;
- (c) medicine donated by its manufacturer to a public institution of higher education for research or for the treatment of indigent patients; and
- (d) dental prosthetic devices.

To assist in the administration of this exemption, the Department has adopted definitions for the terms “medicine” and “prosthetic devices” as follows:

“Medicine” - a substance or preparation used in treating disease.

“Prosthetic Device” - an artificial device to replace a missing part of the body.

The sale of prescription lenses that replace a missing part of the eye are exempted from the tax, as for example eyeglasses prescribed for a person whose natural lenses have been surgically removed.

Eyeglasses, contact lens, hearing aids and orthopedic appliances, such as braces, wheelchairs and orthopedic custom-made shoes, do not come within the exemption at Code Section 12-36-2120(28). However, sales of hearing aids are exempt pursuant to Code Section 12-36-2120(38).

Hypodermic needles, insulin, alcohol swabs, blood sugar testing strips, monolet lancets, dextrometer supplies, blood glucose meters, and other similar diabetic supplies sold to diabetics are only exempt if sold pursuant to the written authorization and direction of a physician.

Fiscal Impact Statement:

There will be no impact on state or local political subdivisions expenditures in complying with this proposed legislation.

Document No. 2597
WORKERS' COMPENSATION COMMISSION
CHAPTER 67
Statutory Authority: 1976 Code Section 42-3-30

67-612. Admission of Expert's Report as Evidence.

Synopsis:

The proposed amendment will facilitate and improve the procedure for filing Administrative Procedures Act (APA) submissions.

Instructions: R.67-612 is amended as follows:

Item A is amended.

Item B is amended.

Items B(1), B(2), B(3), and B(4) are added.

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Item C is amended.
Item D is amended.
Items D(1) and D(2) are deleted.
Item E is amended.
Item F is amended.
Items F(1), F(2), and F(3) are deleted.
Item G is amended.
Item G(1) is amended.
Items G(1)(a), G(1)(b), G(1)(c), G(1)(d), and G(1)(e) are deleted.
Item G(2) is amended.
Items G(3), G(3)(a), G(3)(b), and G(3)(c) are deleted.
Items G(4), G(4)(a), and G(4)(b) are deleted.
Item H is amended.
Items H(1), and H(2) are deleted.
Items I, J, J(1), and J(2) are added.

Text:

67-612. Admission of Expert's Report as Evidence.

A. This regulation does not apply to the Form 14A filed according to R. 67-1301, nor shall this regulation be construed to limit a party's right to call a witness (lay or expert) or present evidence (lay or expert) in the form of a deposition.

B. A written expert's report to be admitted as evidence at the hearing must be provided to the opposing party as follows:

(1) The moving party must provide the report to the opposing party at least fifteen days before the scheduled hearing.

(2) The non-moving party must provide to the moving party any report not provided by the moving party at least ten days before the scheduled hearing.

(3) Where both parties file hearing requests the first party to file shall be considered the moving party.

(4) The carrier shall be deemed the moving party in all hearings scheduled pursuant to a request under R. 67-504C.

C. Proof of notice as required under this section shall be filed with the Commission at the time such reports are provided to a party.

D. Any report submitted to the opposing party in accord with B(1) or B(2) above shall be submitted as an APA exhibit at the hearing unless withdrawn with the consent of the other party, and the non-moving party shall submit only reports not submitted by the moving party. The actual report shall not be filed with the Commission prior to the hearing.

E. Failure to provide reports and notices as required under this section may result in the exclusion of such reports from the evidence of the case. This paragraph shall not be construed to limit the discretionary authority of a Hearing Commissioner to accept reports, depositions or other evidence at the conclusion of the scheduled hearing pursuant to subsection J below.

F. If the parties consent to the admission of a report, then the Hearing Commissioner shall receive such report into evidence without regard as to whether the parties have complied with this section.

G. The following rules in this subsection shall govern the format in which Administrative Procedures Act (APA) exhibits are submitted into evidence. Each APA or set of APA's shall have:

(1) An index sheet listing the APA number, name of the provider, dates of service and number of pages in the APA, with the records from each medical provider identified in groups, as APA #1, APA #2; etc. The reports of each expert shall be arranged in either chronological or reverse chronological order.

(2) A consecutive number beginning with the first page of APA #1 and continuing through the final page of the last APA submitted.

H. Counsel for all other parties appearing at the hearing shall be given the opportunity to review the APA exhibits as prepared in accordance with this regulation and to supplement the record with any properly noticed APA exhibits which may have been omitted from the Claimant's and Defendants' single sets.

I. By complying with this regulation, the parties do not waive any evidentiary objections to the introduction of a particular exhibit. Such objections may include, but are not limited to relevancy, materiality, qualification of the expert, timeliness, privilege, hearsay or authenticity as may relate to the document in controversy.

J. All available evidence and testimony shall be presented at the scheduled hearing or a party must move for an adjournment according to R.67-613.

(1) The Commissioner may adjourn the hearing, and testimony of a necessary witness unable to appear at the scheduled hearing may be presented by deposition or at a hearing reconvened at a later date.

(2) The Commissioner may order the party moving for adjournment to take the de bene esse deposition of the expert. The Commissioner may order the party moving for adjournment to pay hearing costs if it is necessary to reconvene.

Fiscal Impact Statement:

The South Carolina Workers' Compensation Commission estimates there will be no additional costs incurred by the State and its political subdivisions to comply with these proposed regulations.