

SOUTH CAROLINA STATE REGISTER DISCLAIMER

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SOUTH CAROLINA STATE REGISTER

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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.

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

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 the 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.

2006 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	1/13	2/10	3/10	4/14	5/12	6/9	7/14	8/11	9/8	10/13	11/10	12/8
Publishing Date	1/27	2/24	3/24	4/28	5/26	6/23	7/28	8/25	9/22	10/27	11/24	12/22

REPRODUCING OFFICIAL DOCUMENTS

Documents appearing in the *State Register* are prepared and printed at public expense. Media services are encouraged to give wide publicity to documents printed in the *State Register*.

PUBLIC INSPECTION OF DOCUMENTS

Documents filed with the Office of the State Register are 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.

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 refiled for one additional ninety-day period.

SUBSCRIPTIONS

Subscriptions to the *South Carolina State Register* are available electronically through the South Carolina Legislature Online website at www.scstatehouse.net via an access code, or in a printed format. Subscriptions run

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The history, status, and full text of these regulations are available on the
South Carolina General Assembly Home Page: www.scstatehouse.net

DOC NO.	RAT FINAL NO. ISSUE	SUBJECT	EXP. DATE	AGENCY
3002		Shellfish	1/12/07	Department of Health and Envir Control
3047		Milk Producers Tax Credit	1/15/07	Department of Agriculture
2927		The Practice of Selling and Fitting Hearing Aids	1/31/07	Department of Health and Envir Control
3057		Retail Licenses And Partnerships	2/01/07	Department of Revenue
3056		End-of-Course Tests	2/01/07	Department of Education
3059		Highway Advertising Control	3/06/07	Department of Transportation
3042		Practice and Procedures	3/20/07	Public Service Commission
3061		Termination of the SCAAIP Joint Underwriting Association	3/21/07	Department of Insurance
3052		Telecommunications Utilities	4/09/07	Public Service Commission
3055		Public Swimming Pools	5/09/07	Department of Health and Envir Control

Committee Requested Withdrawal:

3021	Penalties Noncompliance Regulated Child Care Settings	Department of Social Services
3022	Licensing of Residential Group Care Organ for Children	Department of Social Services

Permanently Withdrawn: None

Resolution Introduced to Disapprove

2 NOTICES

**SOUTH CAROLINA BUDGET AND CONTROL BOARD,
OFFICE OF RESEARCH AND STATISTICS,
OFFICE OF ECONOMIC RESEARCH**

NOTICE

Section 6-1-50, Act Number 388 of 2006, as amended, requires that beginning November 15, 2006, and annually thereafter,

“counties and municipalities receiving revenues from state aid, currently known as Aid to Subdivisions, shall submit annually to the State Budget and Control Board, Office of Research and Statistics, Economic Research Section, a financial report detailing their sources of revenues, expenditures by category, indebtedness, and other information as the State Budget and Control Board, Office of Research and Statistics, Economic Research Section, shall determine the content and format of the annual financial report. The financial report for the most recently completed fiscal year must be submitted to the State Budget and Control Board, Office of Research and Statistics, Economic Research Section, by November fifteenth of each year.”

In accordance with this provision, the Office of Economic Research proposes to implement the following annual forms for financial reporting by municipalities and counties. Please note that the form submission deadline date for this year has been extended to February 1, 2007.

Comments are encouraged on the following items:

- availability and ease of retrieving the information requested
- format of the form in correspondence with annual financial reports
- timing of the form deadline date with audit completion dates

Comments may be submitted to Kelli Husman, Office of Research and Statistics, Rembert C. Dennis Building, Room 451, 1000 Assembly Street, Columbia, SC 29201-3117, at (803)734-4641. Comments must be received no later than November 27, 2006.

State of South Carolina
2005-2006 Annual County Financial Report

County:**Coordinating****Agency:** SC Budget and Control Board, Office of Research and Statistics, Office of Economic Research

Instructions: Please provide county data for fiscal year ended on or before June 30, 2006. Please refer to the attached instructions for details on completing the form. All figures should be rounded to the nearest dollar.

When completed, please return to:

Attn: Kelli Husman
Office of Research and Statistics
Rembert C. Dennis Building, Ste. 442
1000 Assembly Street
Columbia, SC 29201-3117
Telephone: (803) 734-4641
khusman@drss.state.sc.us

DUE DATE: February 1, 2007

Note: Data supplied in this report is required by law under State Law 6-1-50.
Failure to submit this report shall result in the withholding of ten percent of the county's current-year state aid.

PART ONE: REVENUES

Please note: Certain county property tax and state shared tax items (total real & personal property taxes, delinquent property taxes collected, penalties & interest on taxes, reimbursements for homestead exemption, manufacturers' depreciation reimbursement, fee in lieu of taxes, property taxes for technical schools and special purpose districts, merchants' inventory tax) are collected by the Comptroller General's office. Therefore, these items should not be reported on this form. Also, please do not report local options sales tax as it is collected by the Treasurer's office.

Property Tax Revenues	
Total Owner Occupied *	
Total School Operating (all districts) *	
Total School Taxes on Owner Occupied *	
Agricultural (Private)	
Agricultural (Corporate)	
Commercial/Rental	
Manufacturing	
Utility	
Business Personal	
Joint Industrial Park	
Motor Carrier	
Motor Vehicle Tax	
Other Personal Property	

* Do not include State tax relief

State of South Carolina
2005-2006 Annual County Financial Report

PART ONE: REVENUES (continued)

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Local Options Revenues	
Local Hospitality Tax	
Local Accommodations Tax	
Other Local Options - Capital Projects	
Other Local Options - Transportation	

Licenses & Permits Revenues	
Utility Franchise Fees (gas, electric, cable, telecom)	
Business Licenses (include electric, cable, telecom)	
Building, Electrical, Plumbing Permits	
Documentary Stamp Tax (exclude state collection) +	
Marriage Licenses	
Mobile Home Licenses	
Other Licenses & Permits Revenues	

+ Applies to all counties

Utility Sales Revenues (Gross Receipts)	
Water System	
Sewage System	

Proprietary Revenues (Gross Receipts)	
Public Transportation	
Airport	

Service Revenues (Gross Receipts)	
Development Impact Fees	
Emergency Medical Services	
Fire Protection	
Hospital	
Housing & Urban Renewal	
Library	
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Parking Facilities (meter/garage fees and fines)	
Recreation	
Refuse Collection & Landfill	
Other Service Revenues	

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Law Enforcement & Court Charges <i>(total)</i>	
Fines kept by the county	
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State of South Carolina
2005-2006 Annual County Financial Report

PART ONE: REVENUES (continued)

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Sale of Real Property & Fixed Assets	
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Local Government Fund	
Statewide Accommodations Tax +	
Fire Department Premium Tax	
Direct Appropriations + **	
Solid Waste Tire Fees +	
Health Department - Vital Record Fees	
Tourism Infrastructure Admissions Tax	
Alcoholic Beverage License Fee	

Intergovernmental Revenues - State Grants	
Airport Grants	
Alcohol & Drug Abuse Grants	
Arts Commission Grants	
Disaster/Emergency Relief Grants	
Division of Local Government (SC B&CB) Grants	
Emergency Medical Services (EMS) Grants	
Health & Human Services Grants (no JTPA)	
Highways & Public Transportation Grants	
Library Aid Grants	
Public Service Authority Grants	
Recreational Grants	
Sheriff Department Grants	
Child Support Incentive/Enforcement Grants	
Social Service Grants (i.e. Summer Feeding Program)	
Solicitor's Fund	
Travel & Tourism Grants	
Veterans Affairs Grants	
Voter Registration/Election Commission Grants	
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State of South Carolina
2005-2006 Annual County Financial Report

PART ONE: REVENUES (continued)

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Correction Facility Grants	
Health & Hospital Grants	
Housing & Urban Development Grants	
Human Services Grants (JTPA)	
Library Grants	
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Other Federal Grant Revenues	

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Contracts for Service Provision – Specify	
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Public Safety (Police & Fire)	
Code Enforcement (Building & Zoning)	
Environment & Housing	
Health & Human Services	
Public Works (Streets, Sanitation, Stormwater)	
Recreation (including Arts and Cultural activities)	
General Fund Debt Service/Interest on Debt	
All Other General Expenditures	

Utility/Land & Facilities Expenditures	
Water Systems	
Sewage Systems	
Utility Systems Debt Service/Interest on Debt	
Purchase of Land & Facilities/Construction	

Proprietary Expenditures	
Airport	
Public Transportation	
Proprietary Debt Service/Interest on Debt	

State of South Carolina
2005-2006 Annual County Financial Report

PART TWO: EXPENDITURES (continued)

Personnel Expenditures	Gross Salaries (inc. fringe benefits)	Number of Employees
General Government Administration		
Police		
Fire		
Public Safety (if Police & Fire combined)		
Environment & Housing		
Health & Human Services		
Public Works (Streets, Sanitation, Stormwater)		
Recreation (including Arts and Cultural activities)		
Water Systems		
Sewage Systems		
Airport		
Public Transportation		
Other Personnel		

ANNUAL COUNTY FINANCIAL REPORT INSTRUCTIONS (2006)**PART ONE: REVENUES****Property Taxes Revenues**

Please note: Certain county property tax and state shared tax items (total real & personal property taxes, delinquent property taxes collected, penalties & interest on taxes, reimbursements for homestead exemptions, manufacturers' depreciation reimbursement, fee in lieu of taxes, property taxes for technical schools and special purpose districts, merchants inventory tax) are collected by the Comptroller General's office. Therefore, these items need not be reported on this form. Also, please do not report local options sales tax as it is collected by the Treasurer's office.

In this section, report only those taxes and fees collected for county purposes. Do not include taxes collected by the county for municipalities, school districts, or special districts.

- **Total Owner Occupied** - Report revenues from the collection of county taxes on owner occupied property (4% assessment) for the most recently completed fiscal year. Do not include any state tax relief.
- **Total School Operating** - Report revenues from the collection of all school operating taxes levied on real and personal property for the most recently completed fiscal year. Do not include any state tax relief.
- **Total School Taxes for Owner Occupied** - report only revenues from the collection of school operating taxes levied on owner occupied property (4% assessment) for the most recently completed fiscal year. Do not include any state tax relief.
- **Agricultural (Private)** – Report revenues from the collection of county taxes on private agricultural real property (4% assessment) for the most recently completed fiscal year.

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- **Agricultural (Corporate)** – Report revenues from the collection of county taxes on corporate agricultural real property (6% assessment) for the most recently completed fiscal year.
- **Commercial/Rental** – Report revenues from the collection of county taxes on all other real property assessed at 6% for the most recently completed fiscal year.
- **Manufacturing** - Report revenues from the collection of county property taxes on real and personal property owned by or leased to manufacturers (10.5% assessment) for the most recently completed fiscal year.
- **Utility** - Report revenues from the collection of county taxes on real and personal property owned by or leased to utilities (10.5% assessment) for the most recently completed fiscal year.
- **Business Personal** – Report revenues from the collection of county taxes on personal property owned by or leased to business establishments (10.5% assessment) for the most recently completed fiscal year.
- **Joint Industrial Park** – Report revenues from the collection of the county's portion of taxes collected on the real property of any multi-county industrial parks.
- **Motor Carrier** – Report revenues from the collection of county taxes on real and personal property owned by or leased to companies primarily engaged in transportation for hire of persons or property and used by the company in the conduct of such businesses (9.5% assessment) for the most recently completed fiscal year.
- **Motor Vehicle Tax Only** - report only revenues from the collection of county motor vehicle taxes for the most recently completed fiscal year.
- **Other Personal Property** - Report revenues from the collection of county taxes on all other personal property (i.e. recreational vehicles, boats, aircraft) for the most recently completed fiscal year.

Local Options Revenues

- **Local Hospitality Tax** - Report revenues from the local hospitality tax for the most recently completed fiscal year. The local hospitality tax is a tax on the sale of prepared meals and beverages sold in establishments or a tax on the sale of prepared meals and beverages sold in establishments licensed for on premises consumption of alcoholic beverages, beer, or wine.
- **Local Accommodations Tax** - Report revenues from the local accommodations tax for the most recently completed fiscal year.
- **Other Local Options – Capital Projects** – Report revenues from any capital project taxes collected in the most recently completed fiscal year.
- **Other Local Options – Transportation** – Report revenues from any transportation taxes collected in the most recently completed fiscal year.

Licenses and Permits Revenues

- **Utility Franchise Fees** - Report total revenues resulting from any county utility franchise fees paid for the most recently completed fiscal year, including gas, electric, cable and telecommunications.
- **Business Licenses** - Report total revenues collected for all county business licenses for the most recently completed fiscal year. This item should also include revenues collected from telecommunication (Telecommunications Act of 1999), cable, and electric business licenses.

- **Building, Electrical, Plumbing Permits** - Report total revenues from county building, electrical, mechanical, gas, HVAC, and plumbing permits for the most recently completed fiscal year.
- **Documentary Stamp Tax** – Report total revenues collected for documentary stamp tax in the county for the most recently completed fiscal year. *Do not include state collection. This item applies to all counties.*
- **Marriage Licenses** – Report total revenues collected for marriage licenses in the county for the most recently completed fiscal year.
- **Mobile Home Licenses** – Report total revenues collected for mobile home licenses in the county for the most recently completed fiscal year.
- **Other Licenses & Permits** – Report total fees collected from any other licensing or permitting activity in the county for the most recently completed fiscal year. (i.e. yard sale permits, recreational event permits)

Utility Sales Revenues (Gross Receipts)

When completing this section, do not subtract any kind of operating expenses from total revenues. Each item is intended to reflect gross revenues.

- **Water Systems** - Report all revenues received from the sale of water services to public and private users for the most recently completed fiscal year. *Include any revenues that may be generated from sales of services outside the county. Please include any deposits, tap fees, sales of water systems and equipment (i.e. water meters).*
- **Sewage Systems** – Report all revenues received from the sale of sewage service to public or private users for the most recently completed fiscal year. *Include any revenues that may be generated from sale of services outside the county. Please include any deposits, tap fees, sales of sewage systems and equipment.*

Proprietary Revenues (Gross Receipts)

When completing this section, do not subtract any kind of operating expenses from total revenues. Each item is intended to reflect gross revenues.

- **Public Transportation** - Report all revenues received from the operation of any county transportation systems (i.e. buses) for the most recently completed fiscal year.
- **Airport** - Report all revenues from the operation of any county airport for the most recently completed fiscal year.

Service Revenues (Gross Receipts)

When completing this section, do not subtract any kind of operating expenses from total revenues. Each item is intended to reflect gross revenues.

- **Development Impact Fees** - Report all revenues from development impact fees collected by the county for the most recently completed fiscal year. *Do not report water or sewer tap fees as development impact fees. Tap fees should be reported as revenue from the operation of the water/sewage systems.*
- **Emergency Medical Services** - Report all revenues from the operation of county emergency medical services (EMS). *Do not subtract the cost of operating emergency medical vehicles or equipment. Sum*

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all patient care and transportation fees collected from emergency medical service and report the total in this item.

- **Fire Protection** - Report all revenues from county fire protection services. Include safety inspections done by county fire departments. *Do not include payments by other local governments for fire protection.*
- **Hospital** – Report all revenues from the operation of any county hospitals. *Do not subtract costs of hospital operation from the total.* Sum patient payments, revenues from laboratory facilities, and any other revenue generated from the operation of a county hospital. *Do not report revenues from emergency medical service (EMS) operations in this item.*
- **Housing & Urban Renewal** - Report all revenues from the operation of county housing or urban renewal projects for the most recently completed fiscal year. *Do not subtract maintenance or any other cost associated with the operation of a county housing project from total revenues.*
- **Library** – Report all revenues generated by library charges for the most recently completed fiscal year. Include fees for copying materials.
- **Motor Vehicle Fees** – Report all motor vehicle fees for the latest fiscal year.
- **Parking Facilities** - Report all county parking facilities charges for the most recently completed fiscal year. This item should include all revenues from any county parking garages, garage services, parking meters and parking violations.
- **Recreation** - Report all revenues from any county recreation facility for the most recently completed fiscal year. Include tennis court revenues, swimming pool revenues, rental fees for picnic shelters, golf course revenues, and entrance fees at county parks. *Do not subtract any maintenance costs from the total.*
- **Refuse Collection & Landfill** - Report all refuse and landfill revenues from the most recently completed fiscal year. Include service charges for refuse collection and tipping fees for any county landfill.
- **Other Service Revenues** - Report other service revenues collected by the county that are not included in any of the preceding items.

Fines & Forfeitures Revenues

- **Law Enforcement & County Court Charges** - Report all law enforcement and legal charges for the most recently completed fiscal year. This item should include court charges, probate judge fees, clerk of court fees, family court fees, magistrate fines and recorder fees, and fees for police accident report charges. *Do not report revenues from parking violations in this item.* This item should be a total of three subcategories: fines kept by the county, assessments sent to the State, and Victims' Rights Assessments.
- **Other Fines & Forfeitures** - Report other fines and forfeitures collected by the county that are not included in any of the preceding items

Miscellaneous Revenues

- **Interest Income** - Report the interest earnings on county investments that accrued during the most recently completed fiscal year. Include both short term interest earnings such as those on savings accounts as well as long term earnings on instruments such as federal securities and savings bonds.
- **Sales of Real Property & Fixed Assets** - Report proceeds from the sale of real property and fixed assets. *Do not include proceeds from the sale of bonds, notes and investments.*
- **Rents, Royalties, and Special Assessments** - Report revenues from rents, royalties and special assessments.
- **Other Miscellaneous Revenues** - Report other revenues which do not fit any of the other categories described above.

Intergovernmental Revenues – State-Shared Taxes

Report the county revenue that derives from state aid to political subdivisions in the following six items. These payments are made quarterly. Therefore, the most recently completed fiscal year should reflect four quarters of state shared tax revenue.

- **Local Government Fund** – Report the county’s revenue from the Local Government Fund for the most recently completed fiscal year. This state shared revenue amount replaces the funds which counties previously received from the alcoholic liquors tax, bank tax, beer & wine tax, income tax, brokers premium tax, and motor transport tax.
- **Statewide Accommodations Tax** - Report the county's revenue from the state accommodations tax for the most recently completed fiscal year. *This item applies to all counties.*
- **Fire Department Premium Tax** - Report the county’s revenues from the fire department premium tax for the most recently completed fiscal year.
- **Direct Appropriations** - Report the county’s revenues from the state to the county through direct appropriations. *This includes tax forms and supplies, and salary supplements. This applies to all counties.*
- **Solid Waste Tire Fees** – Report the county’s revenues from the solid waste tire fees. *This applies to all counties.*
- **Health Department - Vital Record Fees** – Report the revenue received by the county from the state vital record fees. Include payments for birth certificates and/or payment for copies of vital records for the most recently completed year.
- **Tourism Infrastructure Admissions Tax** (SC Code of Laws 12-21-6530) - Report the revenue received by the county from the state for the tourism infrastructure admissions tax for the most recently completed fiscal year.
- **Alcoholic Beverage License Fees** – Report the revenue received by the county from the state for the alcoholic beverage licenses fee for the most recently completed fiscal year.

Intergovernmental Revenues – State Grants

Report the full grant totals received by the county from the State of South Carolina during the most recently completed fiscal year. Grants from the State of South Carolina may be difficult to discern. Some grants awarded to counties have joint participation by the state and federal governments (i.e., a \$1 million hospital

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grant may be comprised of \$500,000 of federal money and \$500,000 of state money). If you determine that to be the case, report the portion of the grant coming from the State of South Carolina in this section and the amount coming from the Federal government in the following section entitled "Intergovernmental Revenues – Federal Sources". *It is important that only state grants be reported in this section.* If you have difficulty determining the source of grant funds, contact your regional council of governments for assistance.

Do not include any matching funds and exclude any grant administration costs paid from county funds.

Intergovernmental Revenues – Federal Grants

Report the full total of grants received by the county from the federal government during the most recently completed fiscal year. These grants may include, but are not limited to: Community Development Block grants, Department of Justice grants (DARE and/or narcotics enforcement), Federal Emergency Management Assistance (FEMA) grants, correction facility grants, health & hospital grants, housing or urban development grants, human services grants (Job Training Partnership Act (JTPA)), library grants, National Forest Fund, and any other grants received from the federal government.

It is often difficult to know with certainty the source of grants funds for the reasons stated in the above section, "Intergovernmental Revenues – State Grants". If you have difficulty determining the source of grant funds, contact your regional council of governments for assistance.

Do not include any matching funds and exclude any grant administration costs paid from county or state funds.

Intergovernmental Revenues – Other Local Governments

- **Highway Reimbursement** – Report any payments from other local governments (county or municipal) for their participation in highway, road, or street construction and/or maintenance. *State and federal monies for highways and streets should not appear in this item.* Report only the payments received during the most recently completed fiscal year.
- **Housing & Urban Development** – Report any payments from other local governments (county or municipal) for their participation in a county housing or urban development program. State and federal monies for public housing should not appear in this item. Report only the payments received during the most recently completed fiscal year.
- **Contracts for Service Provision – Fire Protection** - Report any payments which the county received from another county, municipality, or special purpose district for the provision of fire protection services. Report revenues received only for the most recently completed fiscal year, regardless of the terms or duration of the contract.
- **Contracts for Service Provision – Specify** - Describe any contract the county may have with another county, municipality, or special purpose district for the provision of a service and report the revenue to the county for that contract in these items. Report revenues received only for the most recently completed fiscal year regardless of the terms or duration of the contract. For example, if the county is under contract to provide garbage pickup for a short time to a nearby special purpose district and the contract is paid in a lump sum, report the full contract amount if it was paid during the most recently completed fiscal year.
- **Payment in lieu of taxes** - Report any amounts paid by local governments in-lieu of county property taxes (e.g., payments from a housing authority). Report only those payments that have been received during the most recently completed fiscal year.
- **Other** - Report any other payments received from another local government for any purpose not included in the previous items of this section. Specify the purpose for which payments were received.

PART TWO: EXPENDITURES

Expenditures should include current operations, capital purchases, and intergovernmental expenditures.

Current operations are the day-to-day operating expenses for the different components of county government. ***This does not include personnel costs (wages/salaries). Personnel expenditures are to be reported separately.*** Some typical operating expenses would include rent, utility bills, travel, training, motor fuels, maintenance costs, paper, computer disks, routine office supplies, service contracts for office equipment, and other contractual agreements, such as leases. Contractual agreements would also include contracts for services with law firms, engineers, architects, accounting firms, and other service contracts. Small item purchases such as pencil sharpeners, paper cutters, and reference books should also be considered current operating expenses although they may be used for many years. *Record only those items purchased during the most recently completed fiscal year.*

Capital purchases – include items that will be used for several budget years. Common examples are office furniture, computers, typewriters, copier machines (bought, not leased), vehicles (bought, not leased), and heavy machinery (bought, not leased). *Do not include the purchase of real property or new construction in this section. Only those expenses incurred during the most recently completed fiscal year should be recorded.*

Intergovernmental expenditures – include payments to other governments, between counties, between a county and a municipality, or a county and a special purpose district. Payments for fire protection services, road maintenance, hospitals, etc., made to another government should be reported. Record only those payments made during the most recently completed fiscal year.

Some types of expenditures may not be applicable to your county. On the other hand, your county may have expenditures that are not listed. When an expenditure is not applicable to your county, leave that item blank. If your county has an expenditure that is not listed, look for a category that might reasonably encompass that activity.

Because each county has a different operating structure, placement of expenditures will vary to some degree. However, if care is taken to place expenditure amounts in the most appropriate categories for your county structure, the presentation of the data will accurately reflect the kinds of expenditures that take place in the county.

General Expenditures

- **General Government Administration** - Report total current operation, capital purchase, and intergovernmental expenses for the following items:

Central Administration – (ex. county council, county administrator, legislative delegation and registrar of mesne conveyance)

County Buildings – (ex. maintenance, janitorial and operating expenditures for county buildings)

Economic Development – expenditures related to county economic development activities

Financial Administration – (ex. Auditor, treasurer, tax collector, tax assessor, finance director, and other finance related activities)

Judicial & Legal - (ex. county attorneys, county court administration, magistrates, clerk of court, law library, and other judicial activities)

Planning & Zoning – expenditures related to county planning and zoning activities.

Engineering - expenditures for a separate county engineering department which provides engineering services to

other county activities such as streets or utilities

Registration & Elections - expenditures related to voter registration and elections

Other Support services – expenditures related to other county activities which primarily serve to support county service delivery functions. This includes such activities as personnel administration, a county vehicle maintenance division, purchasing department, county printing operations, data processing, etc.

- **Public Safety** - Report total current operation, capital purchase, and intergovernmental expenditures for the following items:

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- Animal protection
 - Emergency preparedness
 - Coroner's Office
 - Correction, including jails, probation and parole
 - Fire protection
 - Law enforcement
 - Parking meters
 - Victims' rights
 - Other public safety
- **Environment & Housing** - Report total current operation, capital purchase, and intergovernmental expenditures related to the following items:
 - Environmental protection/natural resources
 - Housing & community development
 - **Health & Human Services** – Report total current operation, capital purchase, and intergovernmental expenditures related to the following items:
 - Alcohol/Drug Abuse services
 - Emergency Medical Services
 - Hospitals
 - Health Department
 - Mental Health
 - Mental Retardation
 - Payment to Indigent Care
 - Public Welfare
 - Veterans' Affairs
 - **Code Enforcement** - Report total current operation, capital purchase, and intergovernmental expenditures related to the enforcement of building and zoning codes, including building inspection
 - **Public Works** – Report total current operation, capital purchase, and intergovernmental expenditures related to the following items:
 - Streets and highways, including sidewalks, lights, etc.
 - County parking facilities, garages, parking lots
 - Refuse collection and disposal
 - Stormwater/drainage
 - **Recreation** - Report total current operation, capital purchase, and intergovernmental expenditures related to the following items:
 - Library
 - Parks & Recreation, including museums, theater, bands, marinas, etc.
 - Tourism
 - **General Fund Debt Service/Interest on Debt** – Report total current operation and intergovernmental expenditures related to General Fund debt service.
 - **Other General Expenditures** - Report total other general current operation, capital purchase, and intergovernmental expenditures not listed in the preceding items.

UTILITY/LAND & FACILITIES EXPENDITURES

- **Public Utility Systems** - Report total current operation, capital purchase, and intergovernmental expenditures for the following items:
 - Water system
 - Sewer system
 - Electric systems

- Natural gas systems
- **Utility Systems Debt Service/Interest on Debt** - Report total current operation and intergovernmental expenditures related to Utility Systems debt service.
- **Purchase of Land and Facilities/Construction** – When real property is purchased and/or construction takes place for a county function, those expenditures should be reported under this category. Facility construction may take place either at a new site or different facility or at an existing site or facility. If an existing county building has been expanded to create a meeting room, it is considered to be facility construction. *New carpet and furniture for that meeting room is not part of facility construction costs and should be reported as a capital purchase expenditure.* All major renovations such as a new roof should be considered facility construction. Only those expenses incurred during the most recently completed fiscal year should be recorded.

PROPRIETARY EXPENDITURES

- **Airport** - Report total current operation, capital purchase, and intergovernmental expenditures for the operation of any county airports
- **Public Transportation** - Report total current operation, capital purchase, and intergovernmental expenditures for the operation of all county public transportation
- **Proprietary Debt Service/Interest on Debt** - Report total current operation and intergovernmental expenditures related to debt service of county proprietary operations (i.e. airports, public transportation)

PERSONNEL EXPENDITURES

There are two components to the personnel section: annual gross salaries and wages and number of employees in full-time equivalents as of June 30, 2006.

Report all gross wages, gross salaries, and fringe benefits paid to county employees during the most recently completed fiscal year. Report the actual amount paid, not the authorized salary of the positions, whether vacant or filled. If the employee's salary is divided between two categories, report the actual annual expenditures for the employee in each category. Bonuses and other forms of compensation (e.g. payment per fire call) should also be reported. Include per item amounts or salaries paid to board, commission, or council members.

Report the number of employees employed by the county as of June 30, 2006. Even though some county employees may divide their time between two or more kinds of municipal functions or may be employed only part time, the total you enter should reflect the best approximation of full-time equivalent positions. A full-time equivalent position is the number of hours a full-time person works in a regular work week. For example, if a full-time person works 40 hours in a regular work week, two employees who each work half-time (20 hours per week each) would equal one full-time equivalent position. If one of your law enforcement officers is also responsible for animal control, estimate the portion of his/her time spent on each function. If you believe the time is equally divided between the two functions, report on half-time (.5) equivalent in each category. If you believe he/she devotes more than half his/her time to one function, report the employee as a full-time equivalent in that function.

Do not include as employees people with whom the county contracts for specific services, but who are not carried as county personnel. For example, many counties keep attorneys on retainer for legal assistance. The payment to that attorney, in private practice with the county client, should be shown as a "General Government Administration" expenditure. Do not include volunteers, other than fire fighters, in the number of full-time equivalent positions. Do not include City Council members, election, zoning or other boards and commissions as county employees.

State of South Carolina
2005-2006 Annual Municipal Financial Report

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Municipality:

Coordinating

Agency: SC Budget and Control Board, Office of Research and Statistics, Office of Economic Research

Instructions: Please provide county data for fiscal year ended on or before
June 30, 2006. Please refer to the attached instructions for details on
completing the form. All figures should be rounded to the nearest dollar.
When completed, please return to:

Attn: Kelli Husman
Office of Research and Statistics
Rembert C. Dennis Building, Ste. 442
1000 Assembly Street
Columbia, SC 29201-3117
Telephone: (803) 734-4641
khusman@drss.state.sc.us

**Please include a copy of the correlating annual financial audit report along with the
completed form.** If the audit report is not finalized by the due date of this document, please send it
under separate cover.

DUE DATE: February 1, 2007

Note: *Data supplied in this report is required by law under State Law 6-1-50.
Failure to submit this report shall results in the withholding of ten percent of
the county's current-year state aid.*

PART ONE: REVENUES

Property Tax Revenues	
Real Property Taxes*	
Personal Property Taxes (include Motor Vehicle Tax)	
Motor Vehicle Tax Only	
Delinquent Property Taxes Collected	
Penalties & Interest on Taxes	
Reimbursements on Homestead Exemptions	
Manufacturers' Depreciation Reimbursement	
Tax Increment Financing District (TIF)	
Municipal Improvement District	
Fees in Lieu of Property Taxes	
* exclude homestead exemptions	
Licenses & Permits Revenues	
Utility Franchise Fees (gas, electric, cable, telecom)	
Business Licenses (including telecommunications**)	
Permits (Building, Electrical, Mechanical, Gas, Plumbing, HVAC)	
Other License & Permit Revenues	

** Revenues collected under the Telecommunications Act of 1999

State of South Carolina
2005-2006 Annual Municipal Financial Report

PART ONE: REVENUES (continued)

Intergovernmental Revenues – State-Shared Taxes	
Local Government Fund	
Statewide Accommodations Tax	
Merchants' Inventory Tax	
Motor Carrier Property Tax +	
Tourism Infrastructure Admissions Tax ++	
Alcoholic Beverage Licenses/Permits	

+ State Law 12-37-2810 ++ State Law 12-21-6530

Intergovernmental Revenues – State Grants	
Airport Grants	
Alcohol & Drug Abuse Grants	
Arts Commission Grants	
Disaster/Emergency Relief Grants	
Division of Local Government (SC B&CB) Grants	
Emergency Medical Service (EMS) Grants	
Health & Human Services Grants (no JTPA)	
Highways & Public Transportation Grants	
Public Safety/Victims' Assistance Grants	
Recreation & Tourism Grants	
Social Services (i.e. Summer Feeding Program)	
Other State Grants (Specify)	
Other State Grants (Specify)	

Intergovernmental Revenues – Federal Grants	
Community Development Block Grants	
Department of Justice Grants (i.e. narcotics, DARE)	
Economic Development Administration (EDA)	
Environmental Protection Agency (EPA)	
Federal Emergency Management Assistance (FEMA)	
Housing Grants	
Other Federal Grants	

Intergovernmental Revenues – Other Local Governments	
Highway Reimbursement	
Housing & Urban Development	
Contracts for Service Provision – Fire Protection	
Contracts for Service Provision – Specify	
Contracts for Service Provisions – Specify	
Payment in Lieu of taxes	
Other - Specify	

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PART ONE: REVENUES (continued)

Local Options Revenues	
Local Option Sales Tax	
Local Hospitality Tax	
Local Accommodations Tax	
Other Local Options – Capital Projects	
Other Local Options - Transportation	

Utility Sales Revenues (Gross Receipts)	
Electrical Power System	
Natural Gas System	
Water System	
Sewage System	

Proprietary Revenues (Gross Receipts)	
Public Transportation	
Airport	

Service Revenues (Gross Receipts)	
Development Impact Fees	
Emergency Medical Services	
Fire Protection	
Housing & Urban Renewal	
Parking Facilities (meter/garage fees and fines)	
Recreation	
Refuse Collection & Landfill	
Stormwater Fees	
Other Service Revenues	

Fines and Forfeitures Revenues	
Law Enforcement & Municipal Court Charges (total)	
Fines kept by the municipality	
Assessment sent to the State	
Victims' Rights Assessments	
Other Fines and Forfeitures Revenue	

Miscellaneous Revenues	
Interest Income	
Sale of Real Property & Fixed Assets	
Rents, Royalties, and Special Assessments	
Other Miscellaneous Revenues	

State of South Carolina 2005-2006 Annual Municipal Financial Report
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PART TWO: EXPENDITURES

General Expenditures	
General Government Administration	
Public Safety (Police & Fire)	
Code Enforcement (Building & Zoning)	
Environment & Housing	
Health & Human Services	
Public Works (Streets, Sanitation, Stormwater)	
Recreation (including Arts and Cultural activities)	
General Fund Debt Service/Interest on Debt	
Other General Expenditures	

Utility/Land & Facilities Expenditures	
Water System	
Sewage System	
Electric System	
Natural Gas System	
Utility Systems Debt Service/Interest on Debt	
Purchase of Land & Facilities/Construction	

Proprietary Expenditures	
Airport	
Public Transportation	
Proprietary Debt Service/Interest on Debt	

Personnel Expenditures	Gross Salaries & Wages (including fringe benefits)	Number of Employees
General Government Administration		
Police		
Fire		
Public Safety (if Police & Fire combined)		
Code Enforcement		
Environment & Housing		
Health & Human Services		
Public Works (Streets, Sanitation, Stormwater)		
Recreation (including Arts & Cultural activities)		
Water System		
Sewage System		
Electric System		
Natural Gas System		
Airport		
Public Transportation		
Other Personnel		

ANNUAL MUNICIPAL FINANCIAL REPORT INSTRUCTIONS (2006)**PART ONE: REVENUES****Property Taxes Revenues**

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In this section, report only those taxes and fees collected for municipal purposes. If the municipality collects taxes for any other political subdivisions such as school districts or special districts, those funds should *not* be reported on this form. Do not include the state reimbursement of merchants' inventory tax in this section. (see *Intergovernmental Revenues – State Shared Taxes*)

- **Real Property Taxes** - Report revenues from the collection of municipal taxes on real property, including residential, commercial, and mobile homes, for the most recently completed fiscal year. *Do not include the reimbursement from the state for the homestead exemption.*
- **Personal Property Taxes** - Report revenues from the collection of municipal taxes on personal property, including cars, trucks, motorcycles, recreational vehicles, boats, aircraft and business furniture, fixtures and equipment for the most recently completed fiscal year.
- **Motor Vehicle Taxes Only** - report only revenues from the collection of motor vehicle taxes for the most recently completed fiscal year.
- **Delinquent Property Taxes Collected** – Report the collected amount of delinquent municipal property taxes on real and personal property collected for the most recently completed fiscal year *Do not include late penalties and interest on those delinquent taxes.*
- **Penalties & Interest on Taxes** - Report penalties imposed on late taxes and interest paid on late taxes, both real and personal property, for the most recently completed fiscal year.
- **Reimbursements for Homestead Exemptions** - Report the amount of reimbursement paid to the municipality by the state for the exemption of municipal property taxes under the homestead exemption for the most recently completed fiscal year.
- **Manufacturers' Depreciation Reimbursement** - Report the amount of reimbursement paid to the municipality by the state for the manufacturer's reimbursement program for the most recently completed fiscal year.
- **Tax Increment Financing Districts (TIF)** – Report the collection of municipal taxes on tax increment financing district properties for the most recently completed fiscal year.
- **Municipal Improvement Districts** – Report the collection of municipal taxes on municipal improvement district properties for the most recently completed fiscal year.
- **Fee-in-Lieu of Property Taxes** – Report in-lieu payments collected from businesses toward municipal property taxes during the most recently completed fiscal year. *Do not report in-lieu payments from other governmental entities (i.e. housing authority) in this section. Payments in-lieu of taxes from other governments should be reported in "Intergovernmental Revenues – Other Local Governments"*

Licenses and Permits Revenues

- **Utility Franchise Fees** - Report total revenues resulting from any utility franchise fees paid for the most recently completed fiscal year, including gas, electric, cable and telecommunications.
- **Business Licenses** - Report total revenues collected for all business licenses in the municipality for the most recently completed fiscal year. This item should also include revenues collected from telecommunication (Telecommunications Act of 1999), cable, and electric business licenses.
- **Permits** - Report total revenues from building, electrical, mechanical, gas, HVAC, and plumbing permits for the most recently completed fiscal year.

- **Other License & Permit Revenues** – Report total fees collected from any other licensing or permitting activity in the municipality for the most recently completed fiscal year. (Examples include yard sale permits and recreational event permits)

Intergovernmental Revenues – State-Shared Taxes

Report the municipal revenue that derives from state aid to political subdivisions in the following six items. These payments are made quarterly. Therefore, the most recently completed fiscal year should reflect four quarters of state shared tax revenue. Because municipal fiscal years vary from jurisdiction, this information cannot be taken directly from state records.

- **Local Government Fund** – Report the municipality's revenue from the Local Government Fund for the most recently completed fiscal year. This state shared revenue amount replaces the funds which municipalities previously received from the alcoholic liquors tax, bank tax, beer & wine tax, income tax, brokers premium tax, and motor transport tax.
- **Statewide Accommodations Tax** - Report the municipality's revenue from the state accommodations tax for the most recently completed fiscal year.
- **Merchants' Inventory Tax** – Report the municipality's revenue from the state reimbursement of foregone merchants' inventory tax for the most recently completed fiscal year.
- **Motor Carrier Property Tax** (SC Code of Laws 12-37-2810) - Report the municipality's revenue from the state for the motor carrier property tax for the most recently completed fiscal year.
- **Tourism Infrastructure Admissions Tax** (SC Code of Laws 12-21-6530) - Report the municipality's revenue from the state for the tourism infrastructure admissions tax for the most recently completed fiscal year.
- **Alcoholic Beverage License Fees** – Report the municipality's revenue from the state for the alcoholic beverage licenses fee for the most recently completed fiscal year.

Intergovernmental Revenues – State Grants

Report the full grant totals received by the municipality from the State of South Carolina during the most recently completed fiscal year. Grants from the State of South Carolina may be difficult to discern. Some grants awarded to municipalities have joint participation by the state and federal governments (i.e., a \$1 million hospital grant may be comprised of \$500,000 of federal money and \$500,000 of state money). If you determine that to be the case, report the portion of the grant coming from the State of South Carolina in this section and the amount coming from the Federal government in the following section entitled "Intergovernmental Revenues – Federal Sources". *It is important that only state grants be reported in this section.* If you have difficulty determining the source of grant funds, contact your regional council of governments for assistance.

Do not include any matching funds and exclude any grant administration costs paid from municipal funds.

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Intergovernmental Revenues – Federal Grants

Report the full grant totals received by the municipality from the federal government during the most recently completed fiscal year. These grants may include, but are not limited to: Community Development Block grants, Department of Justice grants (DARE and/or narcotics enforcement), Economic Development Administration (EDA) grants, Federal Emergency Management Assistance (FEMA) grants, housing or urban development grants, human services grants (Job Training Partnership Act (JTPA)), and any other grants received from the federal government. It is often difficult to know with certainty the source of grants funds for the reasons stated in the above section, "Intergovernmental Revenues – State Grants". If you have difficulty determining the source of grant funds, contact your regional council of governments for assistance.

Do not include any matching funds and exclude any grant administration costs paid from municipal or state funds.

Intergovernmental Revenues – Other Local Governments

- **Highway Reimbursement** – Report any payments from other local governments (municipal or county) for their participation in highway, road, or street construction and/or maintenance. State and federal monies for highways and streets should not appear in this item. Report only the payments received during the most recently completed fiscal year.
- **Housing & Urban Development** – Report any payments from other local governments (municipal or county) for their participation in a municipal housing or urban development program. State and federal monies for public housing should not appear in this item. Report only the payments received during the most recently completed fiscal year.
- **Contracts for Service Provision – Fire Protection** - Report any payments which the municipality receives from another municipality, county, or special purpose district for the provision of fire protection services. Report revenues received only for the most recently completed fiscal year, regardless of the terms or duration of the contract.
- **Contracts for Service Provision – Specify** - Describe any contract the municipality may have with another municipality, county, or special purpose district for the provision of a service and report the revenue to the municipality for that contract in these items. Report revenues received only for the most recently completed fiscal year regardless of the terms or duration of the contract. For example, if your municipality is paid a monthly fee to provide fire protection to several small towns, report the total fees collected during the most recently completed fiscal year. If the municipality is under contract to provide garbage pickup for a short time to a nearby special purpose district and the contract is paid in a lump sum, report the full contract amount if it was paid during the most recently completed fiscal year.
- **Payment in lieu of taxes** - Report any amounts paid by local governments in-lieu of municipal property taxes (e.g., payments from a housing authority). Report only those payments that have been received during the most recently completed fiscal year.
- **Other** - Report any other payments received from another local government for any purpose not included in the previous items of this section. Specify the purpose for which payments were received.

Local Options Revenues

- **Local Options Sales Tax** - Report revenues from the local option sales tax for the most recently completed fiscal year.
- **Local Hospitality Tax** - Report revenues from the local hospitality tax for the most recently completed fiscal year. The local hospitality tax is a tax on the sale of prepared meals and beverages sold in

establishments or a tax on the sale of prepared meals and beverages sold in establishments licensed for on premises consumption of alcoholic beverages, beer, or wine.

- **Local Accommodations Tax** - Report revenues from the local accommodations tax for the most recently completed fiscal year.
- **Other Local Options – Capital Projects** – Report revenues from any capital project taxes collected in the most recently completed fiscal year.
- **Other Local Options – Transportation** – Report revenues from any transportation taxes collected in the most recently completed fiscal year.

Utility Sales Revenues (Gross Receipts)

When completing this section, do not subtract any kind of operating expenses from total revenues. Each item is intended to reflect gross revenues.

- **Electrical Power Systems** - Report all revenues received from the sale of electrical power to public and private users for the most recently completed fiscal year. *Include any revenues that may be generated from sale of services outside the corporate limits. Please include any deposits, tap fees, sales of water systems and equipment (i.e. water meters).*
- **Gas Systems** - Report all revenues received from the sale of natural gas to public and private users for the most recently completed fiscal year. *Include any revenues that may be generated from sale of services outside the corporate limits.*
- **Water Systems** - Report all revenues received from the sale of water services to public and private users for the most recently completed fiscal year. *Include any revenues that may be generated from sale of services outside the corporate limits. Please include any deposits, tap fees, sales of water systems and equipment (i.e. water meters).*
- **Sewage Systems** – Report all revenues received from the sale of sewage service to public or private users for the most recently completed fiscal year. *Include any revenues that may be generated from sale of services outside the corporate limits. Please include any deposits, tap fees, sales of sewage systems and equipment.*

Proprietary Revenues (Gross Receipts)

When completing this section, do not subtract any kind of operating expenses from total revenues. Each item is intended to reflect gross revenues.

- **Public Transportation** - Report all revenues received from the operation of any municipal transportation system (i.e., buses) for the most recently completed fiscal year.
- **Airport** - Report all revenues from the operation of any municipal airport. *Do not subtract the cost of operating the airport.*

Service Revenues (Gross Receipts)

When completing this section, do not subtract any kind of operating expenses from total revenues. Each item is intended to reflect gross revenues.

- **Development Impact Fees** - Report all revenues from development impact fees collected by the city for the most recently completed fiscal year. *Do not report water or sewer tap fees as development impact fees. Tap fees should be reported as revenue from the operation of the water/sewer system.*

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- **Emergency Medical Services** - Report all revenues from the operation of a municipal emergency medical service (EMS). *Do not subtract the cost of operating emergency medical vehicles or equipment.* Sum all patient care and transportation fees collected from emergency medical service and report the total in this item.
- **Fire Protection** - Report all revenues from municipal fire protection services. Include safety inspections done by the municipal fire department. *Do not include payments by other local governments for fire protection.*
- **Housing & Urban Renewal** - Report all revenues from the operation of municipal housing or urban renewal projects for the most recently completed fiscal year. *Do not subtract maintenance or any other cost associated with the operation of a municipal housing project from total revenues.*
- **Parking Facilities** - Report all parking facilities charges for the most recently completed fiscal year. This item should include all revenues from any municipal parking garage, garage services, parking meters and revenues from parking violations.

Service Revenues (Gross Receipts) (continued)

- **Recreation** - Report all revenues from any municipal recreation facility for the most recently completed fiscal year. Include tennis court revenues, swimming pool revenues, rental fees for picnic shelters, golf course revenues, and entrance fees at municipal parks. *Do not subtract any maintenance costs from the total.*
- **Refuse Collection & Landfill** - Report all refuse and landfill revenues from the most recently completed fiscal year. Include service charges for refuse collection and tipping fees for any municipal landfill.
- **Stormwater Fees** – Report all revenues from stormwater fees for the most recently completed fiscal year.
- **Other Service Revenues** - Report other service revenues collected by the municipality that are not included in any of the preceding items.

Fines & Forfeitures Revenues

- **Law Enforcement & Municipal Court Charges** - Report all law enforcement and legal charges for the most recently completed fiscal year. This item should include municipal court revenues, magistrate fines and recorder fees, and fees for police accident report charges. *Do not report revenues from parking violations in this item.* This item should be a total of three subcategories: fines kept by the municipality, assessments sent to the State, and Victims' Rights Assessments.
- **Other Fines & Forfeitures** - Report other fines and forfeitures collected by the municipality that are not included in any of the preceding items

Miscellaneous Revenues

- **Interest Income** - Report the interest earnings on municipal investments that accrued during the most recently completed fiscal year. Include both short term interest earnings such as those on savings accounts as well as long term earnings on instruments such as federal securities and savings bonds.
- **Sales of Real Property & Fixed Assets** - Report proceeds from the sale of real property and fixed assets. *Do not include proceeds from the sale of bonds, notes and investments.*
- **Rents, Royalties, and Special Assessments** - Report revenues from rents, royalties and special assessments.

- **Other Miscellaneous Revenues** - Report other revenues which do not fit any of the other categories described above.

PART TWO: EXPENDITURES

Expenditures should include current operations, capital purchases, and intergovernmental expenditures.

Current operations are the day-to-day operating expenses for the different components of municipal government. ***This does not include personnel costs (wages/salaries). Personnel expenditures are to be reported separately.*** Some typical operating expenses would include rent, utility bills, travel, training, motor fuels, maintenance costs, paper, computer disks, office supplies, service contracts for office equipment, and other contractual agreements, such as leases. Contractual agreements would also include contracts for services with law firms, engineers, architects, accounting firms, and other service contracts. Small item purchases such as pencil sharpeners, paper cutters, and reference books should also be considered current operating expenses although they may be used for many years. *Record only those items purchased during the most recently completed fiscal year.*

Capital purchases – include items that will be used for several budget years. Common examples are office furniture, computers, typewriters, copier machines (bought, not leased), vehicles (bought, not leased), and heavy machinery (bought, not leased). *Do not include the purchase of real property or new construction in this section. Only those expenses incurred during the most recently completed fiscal year should be recorded.*

Intergovernmental expenditures – include payments to other governments, between cities, between a municipality and a county, or a municipality and a special purpose district. Payments for fire protection services, road maintenance, hospitals, etc., made to another government should be reported. Record only those payments made during the most recently completed fiscal year.

Some types of expenditures may not be applicable to your municipality. On the other hand, your municipality may have expenditures that are not listed. When an expenditure is not applicable to your municipality, leave that item blank. If your municipality has an expenditure that is not listed, look for a category that might reasonably encompass that activity.

Because each municipality has a different operating structure, placement of expenditures will vary to some degree. However, if care is taken to place expenditure amounts in the most appropriate categories for your municipal structure, the presentation of the data will accurately reflect the kinds of expenditures that take place in the municipality.

GENERAL EXPENDITURES

- **General Government Administration** - Report total current operation, capital purchase, and intergovernmental expenses for the following:

Central Administration – (ex. City council, city administrator, city clerk)

Municipal Buildings – (ex. maintenance, janitorial and operating expenditures for municipal buildings)

Economic Development – expenditures related to economic development activities

Financial Administration – (ex. finance director and other finance related activities)

Judicial & Legal - (ex. municipal attorneys, court administration, magistrates, law library, and other judicial activities)

Planning & Zoning – expenditures related to municipal planning and zoning

Engineering - expenditures for a separate municipal engineering department which provides engineering services to other municipal activities

Registration & Elections - expenditures related to voter registration and elections

Other Support services – expenditures related to other municipal activities which primarily serve to support municipal service delivery functions. This includes such activities as personnel administration, a

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municipal vehicle maintenance division, purchasing department, municipal printing operations, data processing, etc.

- **Public Safety** - Report total current operation, capital purchase, and intergovernmental expenditures for the following items:
 - Animal protection
 - Emergency preparedness
 - Correction, including jails, probation, and parole
 - Fire protection
 - Law enforcement
 - Parking meters
 - Victims' rights
 - Other public safety
- **Code Enforcement** - Report total current operation, capital purchase, and intergovernmental expenditures related to the enforcement of building and zoning codes, including building inspection
- **Environment & Housing** - Report total current operation, capital purchase, and intergovernmental expenditures related to the following items:
 - Environmental protection/natural resources
 - Housing & community development
- **Health & Human Services** - Report total current operation, capital purchase, and intergovernmental expenditures related to the following items:
 - Alcohol & drug abuse
 - Emergency Medical Services (EMS)
 - Other health services
- **Public Works** - Report total current operation, capital purchase, and intergovernmental expenditures related to the following items:
 - Streets and highways, including sidewalks, lights, etc.
 - Parking facilities, garages, parking lots
 - Refuse collection and disposal
 - Stormwater/drainage
- **Recreation** - Report total current operation, capital purchase, and intergovernmental expenditures related to the following items:
 - Library
 - Parks & Recreation, including museums, theater, bands, marinas, etc.
 - Tourism
- **General Fund Debt Service/Interest on Debt** - Report total current operation and intergovernmental expenditures related to General Fund debt service.
- **Other General Expenditures** - Report total other general current operation, capital purchase, and intergovernmental expenditures not listed in the preceding items.

UTILITY/LAND & FACILITIES EXPENDITURES

- **Public Utility Systems** - Report total current operation, capital purchase, and intergovernmental expenditures for the following items:
 - Water systems
 - Sewage systems
 - Electric systems

- Natural gas systems
- **Utility Systems Debt Service/Interest on Debt** - Report total current operation and intergovernmental expenditures related to Utility Systems debt service.
- **Purchase of Land and Facilities/Construction** - When real property is purchased and/or construction takes place for a municipal function, those expenditures should be reported under this category. Facility construction may take place either at a new site or different facility or at an existing site or facility. If an existing county building has been expanded to create a meeting room, it is considered to be facility construction. *New carpet and furniture for that meeting room is not part of facility construction costs and should be reported as a capital purchase expenditure.* All major renovations such as a new roof should be considered facility construction. Only those expenses incurred during the most recently completed fiscal year should be recorded.

PROPRIETARY EXPENDITURES

- **Airport** - Report total current operation, capital purchase, and intergovernmental expenditures for the operation of any municipal airports
- **Public Transportation** - Report total current operation, capital purchase, and intergovernmental expenditures for the operation of all municipal public transportation.
- **Proprietary Debt Service/Interest on Debt** - Report total current operation and intergovernmental expenditures related to debt service of municipal proprietary operations (i.e. airports, public transportation)

PERSONNEL EXPENDITURES

There are two components to the personnel section: annual gross salaries and wages and number of employees in full-time equivalents as of June 30, 2006.

Report all gross wages, gross salaries, and fringe benefits paid to municipal employees during the most recently completed fiscal year. Report the actual amount paid, not the authorized salary of the positions, whether vacant or filled. If the employee's salary is divided between two categories, report the actual annual expenditures for the employee in each category. Bonuses and other forms of compensation (e.g. payment per fire call) should also be reported. Include per item amounts or salaries paid to board, commission, or council members.

Report the number of employees employed by the municipality as of June 30, 2006. Even though some municipal employees may divide their time between two or more kinds of municipal functions or may be employed only part time, the total you enter should reflect the best approximation of full-time equivalent positions. A full-time equivalent position is the number of hours a full-time person works in a regular work week. For example, if a full-time person works 40 hours in a regular work week, two employees who each work half-time (20 hours per week each) would equal one full-time equivalent position. If one of your law enforcement officers is also responsible for animal control, estimate the portion of his/her time spent on each function. If you believe the time is equally divided between the two functions, report on half-time (.5) equivalent in each category. If you believe he/she devotes more than half his/her time to one function, report the employee as a full-time equivalent in that function.

Do not include as employees people with whom the municipality contracts for specific services, but who are not carried as municipal personnel. For example, many municipalities keep attorneys on retainer for legal assistance. The payment to that attorney, in private practice with the municipality client, should be shown under "General Government Administration" expenditure. Do not include volunteers, other than fire fighters, in the number of full-time equivalent positions. Do not include City Council members, election, zoning or other boards and commissions as municipal employees.

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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 October 27, 2006, 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) 545-4200.

Affecting Lexington County

Exchange of ten (10) substance abuse beds for ten (10) psychiatric beds from Palmetto Health Alliance d/b/a Palmetto Health Baptist resulting in a bed complement of seventeen (17) substance abuse beds and eighty-one (81) psychiatric beds, which includes the thirty-two (32) not yet licensed psychiatric acute care beds as approved by CON SC-06-42.

Three Rivers Behavioral Health
West Columbia, South Carolina
Project Cost: \$20,000

Affecting Richland County

Exchange of ten (10) psychiatric beds for ten (10) substance abuse beds from Three Rivers Behavioral Health resulting in a bed complement of ten (10) substance abuse beds and ninety-four (94) psychiatric beds at Palmetto Health Alliance d/b/a Palmetto Health Baptist.

Palmetto Health Alliance d/b/a Palmetto Health Baptist
Columbia, South Carolina
Project Cost: \$0

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 October 27, 2006. "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) 545-4200.

Affecting Berkeley and Charleston Counties

Replacement of an eight (8) slice Computed Tomography (CT) scanner with a sixty-four (64) slice CT scanner at Trident Medical Center and transfer of the 8-slice CT scanner to Moncks Corner Medical Center.

Trident Medical Center
Charleston, South Carolina
Project Cost: \$2,201,767

Affecting Greenville County

Radiology expansion to include the purchase of two (2) 64-slice Computed Tomography (CT) scanners, one (1) Precedence/Spect CT scanner and Special Procedures Room equipment.

Greenville Memorial Hospital
Greenville, South Carolina
Project Cost: \$10,829,206

Affecting Lancaster County

Renovation for the purchase and installation of a 64-slice Computed Tomography (CT) scanner.
Springs Memorial Hospital
Lancaster, South Carolina
Project Cost: \$1,544,707

Affecting Spartanburg County

Renovation and expansion of the laboratory and sterile processing departments, relocation of the surgical suites into existing shelled space above the Emergency Center to include the purchase of a daVinci Surgical Robot, and the relocation of the pre- and post-operative area to the existing surgical area.
Spartanburg Regional Medical Center
Spartanburg, South Carolina
Project Cost: \$40,750,216

Affecting York County

Expansion of the endoscopy suite to include the addition of two (2) endoscopy rooms for a total of six (6) endoscopy rooms.
Piedmont Medical Center
Rock Hill, South Carolina
Project Cost: \$2,486,461

PUBLIC NOTICE

The South Carolina State Health Planning Committee will hold public hearings on the Draft 2007 South Carolina Health Plan at the following times and locations:

Monday, December 4, 2006, 11:00 a.m. until 12:00 noon, second floor conference room of the Heritage Building, 1777 St. Julian Place, Columbia, South Carolina;

Tuesday, December 5, 2006, 11:00 a.m. until 12:00 noon, Florence Health Department Auditorium, 145 East Cheves Street, Florence, South Carolina;

Wednesday, December 6, 2006, 11:00 a.m. until 12:00 noon, City of North Charleston Council Chambers, 4900 LaCross Road, North Charleston, South Carolina;

Thursday, December 7, 2006, 11:00 a.m. until 12:00 noon, Spartanburg County Council Chambers, 366 North Church Street, Spartanburg, South Carolina.

The State Health Planning Committee is soliciting comments on the Draft 2007 South Carolina Health Plan and prefers to receive these comments in writing so all members of the State Health Planning Committee can review them. The Committee is also soliciting criteria to be used for the construction of new hospitals.

Written comments will be received through Friday, December 8, 2006. The Plan is available for public review at the South Carolina Department of Health and Environmental Control, 1777 St. Julian Place, Suite 201, Columbia, SC, the State Library, 1500 Senate Street, Columbia, SC and all State Depository Libraries.

Comments on the Draft Plan may be presented at the public hearings or submitted to the S.C. State Health Planning Committee, S.C. Department of Health and Environmental Control, Division of Planning and Certification of Need, 2600 Bull St., Columbia, SC 29201 through December 8, 2006. The FAX number is 803-545-4579. For additional information, call (803) 545-4200.

30 NOTICES

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Notice of General Public Interest
Public Notice #06-528-GP-N
October 27, 2006

The South Carolina Department of Health and Environmental Control (DHEC), Bureau of Air Quality, does hereby give notice of authorization being granted to the following sources who have requested coverage under General Conditional Major Operating Permit (GCMP-02) "Fuel Combustion Operations." This general permit was previously open for a thirty (30) day public comment period on December 20, 2005, with final issuance on April 1, 2006. Pursuant to South Carolina Regulation 61-62.1, Section II G(7)(a)&(b), DHEC may now grant coverage to any qualified source seeking to operate under the terms and conditions of this general permit. The authorization of each facility's coverage shall be a final permit action for purposes of administrative review.

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and Regulation 61-62.1 "Air Pollution Control Regulations and Standards," the following sources are hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of these sources in accordance with the plans, specifications, and other information submitted by each facility in its General Conditional Major Permit application. Any facility operating under this permit seeks to limit its potential to emit below the thresholds which define a major source by complying with the federally enforceable conditions contained in the permit. Permit coverage is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on said permit.

Interested persons may review the final general permit, materials submitted by the applicant, and any written comments received, during normal business hours, at the following location: SC DHEC, Bureau of Air Quality, 2600 Bull Street, Columbia, South Carolina, 29201 at (803) 898-4123.

This notice is given pursuant to the requirements of South Carolina Regulation 61-62.1, Section II G(7)(c). Comments and questions concerning any of the following individual facility's coverage under this permit should be directed to: Ms. Rhonda B. Thompson, P.E. Director, Engineering Services Division, Bureau of Air Quality, SC DHEC, 2600 Bull Street, Columbia, South Carolina, 29201 at (803) 898-4123.

Greenwood County

Self Regional Healthcare
1325 Spring Street
Greenwood, South Carolina
(Permit No. GCM02-1240-0028)

Lexington County

Lexington Medical Center
2720 Sunset Boulevard (Highway 378)
West Columbia, South Carolina
(Permit No. GCM02-1560-0055)

Marlboro County

SOPAKCO, Inc.
320 South Broad Street
Bennettsville, South Carolina

(Permit No. GCM02-1680-0104)

Pickens County

Easley Combined Utilities
150 Utility Street (Building #5)
Easley, South Carolina
(Permit No. GCM02-1880-0051)

Richland County

Palmetto Health Baptist Medical Center
Taylor at Marion Streets
Columbia, South Carolina
(Permit No. GCM02-1900-0044)

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Notice of General Public Interest
Public Notice #06-527-GP-N
October 27, 2006

The South Carolina Department of Health and Environmental Control (DHEC), Bureau of Air Quality, does hereby give notice of authorization being granted to the following sources who have requested coverage under General Conditional Major Operating Permit (GCMP-01) "Textile Greige Operations." This general permit was previously open for a thirty (30) day public comment period on December 20, 2005, with final issuance on April 1, 2006. Pursuant to South Carolina Regulation 61-62.1, Section II G(7)(a)&(b), DHEC may now grant coverage to any qualified source seeking to operate under the terms and conditions of this general permit. The authorization of each facility's coverage shall be a final permit action for purposes of administrative review.

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and Regulation 61-62.1 "Air Pollution Control Regulations and Standards," the following sources are hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of these sources in accordance with the plans, specifications, and other information submitted by each facility in its General Conditional Major Permit application. Any facility operating under this permit seeks to limit its potential to emit below the thresholds which define a major source by complying with the federally enforceable conditions contained in the permit. Permit coverage is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on said permit.

Interested persons may review the final general permit, materials submitted by the applicant, and any written comments received, during normal business hours, at the following location: SC DHEC, Bureau of Air Quality, 2600 Bull Street, Columbia, South Carolina, 29201 at (803) 898-4123.

This notice is given pursuant to the requirements of South Carolina Regulation 61-62.1, Section II G(7)(c). Comments and questions concerning any of the following individual facility's coverage under this permit should be directed to: Ms. Rhonda B. Thompson, P.E., Director, Engineering Services Division, Bureau of Air Quality, SC DHEC, 2600 Bull Street, Columbia, South Carolina, 29201 at (803) 898-4123.

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Kershaw County

Kendall Company (Wateree Plant)
90 East Hampton Street
Camden, South Carolina
(Permit No. GCM01-1380-0001)

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.

Class I Contractors perform work involving the collection and interpretation of investigative data; the evaluation of risk; and/or the design and implementation of corrective action plans. Class I applicants must satisfy registration requirements for a Professional Engineer or Geologist in South Carolina. Class II Contractors perform work involving routine investigative activities (e.g., soil or ground water sampling, well installation, aquifer testing) where said activities do not require interpretation of the data and are performed in accordance with established regulatory or industry standards.

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/or individuals listed below, please submit your comments in writing, no later than November 10, 2006 to:

Contractor Certification Program
South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management - Underground Storage Tank Program
Attn: Michelle Dennison
2600 Bull Street
Columbia, SC 29201

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

Class I

Class II.

Delta Environmental Consultants, Inc.
Attn: Andrew Harrison
7818 Shrader Rd
Richmond, VA 23294

**DEPARTMENT OF LABOR, LICENSING AND REGULATION
BUILDING CODES COUNCIL**

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 6-9-40 of the 1976 Code of Laws of South Carolina, as amended, the South Carolina Building Codes Council intends to adopt the following building codes for use in the state of South Carolina:

2006 Edition of the International Building Code;
2006 Edition of the International Residential Code;
2006 Edition of the International Fire Code;
2006 Edition of the International Plumbing Code;
2006 Edition of the International Mechanical Code;
2006 Edition of the International Fuel Gas Code;
2006 Edition of the International Energy Conservation Code.
2006 Edition of the International Property Maintenance Code;
2006 Edition of the International Existing Building Code.

The Council specifically requests comments concerning sections of the proposed editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted on or before December 1, 2006 to Gary F. Wiggins, Administrator, Post Office Box 11329, Columbia, SC 29211-1329.

**DEPARTMENT OF LABOR, LICENSING AND REGULATION
OFFICE OF STATE FIRE MARSHAL**

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 1-34-30 of the 1976 Code of Laws of South Carolina, as amended, the Department of Labor, Licensing and Regulation, Office of State Fire Marshal intends to adopt the latest edition of the following nationally recognized code.

1. National Fire Protection Association 407, Standard for Aircraft Fueling Servicing, 2007 Edition
2. The original promulgating authority for this code is:
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269
3. This code is referenced by:
South Carolina of Law, Section 23-9-60

The Office of State Fire Marshal specifically requests comments concerning sections of these editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted to Michael Platt at 141 Monticello Trail, Columbia, SC 29203, by FAX at 803-896-9806, or by e-mail to plattm@llr.sc.gov.

If no comments are received within sixty (60) days of publication of this notice, the Office of State Fire Marshal will promulgate this latest edition without amendment.

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DEPARTMENT OF LABOR, LICENSING AND REGULATION OFFICE OF STATE FIRE MARSHAL

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 1-34-30 of the 1976 Code of Laws of South Carolina, as amended, the Department of Labor, Licensing and Regulation, Office of State Fire Marshal intends to adopt the latest edition of the following nationally recognized code.

1. National Fire Protection Association 10, Standard for Portable Fire Extinguishers, 2007 Edition
2. The original promulgating authority for this code is:
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269
3. This code is reference by:
South Carolina Code of Laws Section 23-9-45
South Carolina Rules and Regulations 71-8307.3(A)(3)

The Office of State Fire Marshal specifically requests comments concerning sections of these editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted to Michael Platt at 141 Monticello Trail, Columbia, SC 29203, by FAX at 803-896-9806, or by e-mail to plattm@llr.sc.gov.

If no comments are received within sixty (60) days of publication of this notice, the Office of State Fire Marshal will promulgate this latest edition without amendment.

DEPARTMENT OF LABOR, LICENSING AND REGULATION OFFICE OF STATE FIRE MARSHAL

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 1-34-30 of the 1976 Code of Laws of South Carolina, as amended, the Department of Labor, Licensing and Regulation, Office of State Fire Marshal intends to adopt the latest edition of the following nationally recognized code.

1. National Fire Protection Association 13D, Standard for the Installation of Sprinkler Systems in One- and two-Family Dwellings and Manufactured Homes, 2007 Edition
2. The original promulgating authority for this code is:
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269
3. This code is referenced by:
South Carolina Code of Law, Section 40-10-240(A)

The Office of State Fire Marshal specifically requests comments concerning sections of these editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted to Michael Platt at 141 Monticello Trail, Columbia, SC 29203, by FAX at 803-896-9806, or by e-mail to plattm@llr.sc.gov.

If no comments are received within sixty (60) days of publication of this notice, the Office of State Fire Marshal will promulgate this latest edition without amendment.

**DEPARTMENT OF LABOR, LICENSING AND REGULATION
OFFICE OF STATE FIRE MARSHAL**

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 1-34-30 of the 1976 Code of Laws of South Carolina, as amended, the Department of Labor, Licensing and Regulation, Office of State Fire Marshal intends to adopt the latest edition of the following nationally recognized code.

1. National Fire Protection Association 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height, 2007 Edition
2. The original promulgating authority for this code is:
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269
3. This code is referenced by:
South Carolina Code of Law, Section 40-10-240(A)

The Office of State Fire Marshal specifically requests comments concerning sections of these editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted to Michael Platt at 141 Monticello Trail, Columbia, SC 29203, by FAX at 803-896-9806, or by e-mail to plattm@llr.sc.gov.

If no comments are received within sixty (60) days of publication of this notice, the Office of State Fire Marshal will promulgate this latest edition without amendment.

**DEPARTMENT OF LABOR, LICENSING AND REGULATION
OFFICE OF STATE FIRE MARSHAL**

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 1-34-30 of the 1976 Code of Laws of South Carolina, as amended, the Department of Labor, Licensing and Regulation, Office of State Fire Marshal intends to adopt the latest edition of the following nationally recognized code.

1. National Fire Protection Association 13, Standard for the Installation of Sprinkler Systems, 2007 Edition
2. The original promulgating authority for this code is:
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269
3. This code is referenced by:
South Carolina Code of Law, Section 40-10-240(A)

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The Office of State Fire Marshal specifically requests comments concerning sections of these editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted to Michael Platt at 141 Monticello Trail, Columbia, SC 29203, by FAX at 803-896-9806, or by e-mail to plattm@llr.sc.gov.

If no comments are received within sixty (60) days of publication of this notice, the Office of State Fire Marshal will promulgate this latest edition without amendment.

DEPARTMENT OF LABOR, LICENSING AND REGULATION OFFICE OF STATE FIRE MARSHAL

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 1-34-30 of the 1976 Code of Laws of South Carolina, as amended, the Department of Labor, Licensing and Regulation, Office of State Fire Marshal intends to adopt the latest edition of the following nationally recognized code.

1. National Fire Protection Association 14, Standard for the Installation of Standpipe and Hose Systems, 2007 Edition
2. The original promulgating authority for this code is:
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269
3. This code is referenced by:
South Carolina Code of Law, Section 40-10-240(A)

The Office of State Fire Marshal specifically requests comments concerning sections of these editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted to Michael Platt at 141 Monticello Trail, Columbia, SC 29203, by FAX at 803-896-9806, or by e-mail to plattm@llr.sc.gov.

If no comments are received within sixty (60) days of publication of this notice, the Office of State Fire Marshal will promulgate this latest edition without amendment.

DEPARTMENT OF LABOR, LICENSING AND REGULATION OFFICE OF STATE FIRE MARSHAL

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 1-34-30 of the 1976 Code of Laws of South Carolina, as amended, the Department of Labor, Licensing and Regulation, Office of State Fire Marshal intends to adopt the latest edition of the following nationally recognized code.

1. National Fire Protection Association 20, Standard for the Installation of Stationary Pumps for Fire Protection, 2007 Edition
2. The original promulgating authority for this code is:
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269

3. This code is referenced by:
South Carolina Code of Laws Section 40-10-240(A)

The Office of State Fire Marshal specifically requests comments concerning sections of these editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted to Michael Platt at 141 Monticello Trail, Columbia, SC 29203, by FAX at 803-896-9806, or by e-mail to plattm@llr.sc.gov.

If no comments are received within sixty (60) days of publication of this notice, the Office of State Fire Marshal will promulgate this latest edition without amendment.

**DEPARTMENT OF LABOR, LICENSING AND REGULATION
OFFICE OF STATE FIRE MARSHAL**

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 1-34-30 of the 1976 Code of Laws of South Carolina, as amended, the Department of Labor, Licensing and Regulation, Office of State Fire Marshal intends to adopt the latest edition of the following nationally recognized code.

1. National Fire Protection Association 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances, 2007 Edition
2. The original promulgating authority for this code is:
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269
3. This code is referenced by:
South Carolina Code of Laws Section 40-10-240(A)

The Office of State Fire Marshal specifically requests comments concerning sections of these editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted to Michael Platt at 141 Monticello Trail, Columbia, SC 29203, by FAX at 803-896-9806, or by e-mail to plattm@llr.sc.gov.

If no comments are received within sixty (60) days of publication of this notice, the Office of State Fire Marshal will promulgate this latest edition without amendment.

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DEPARTMENT OF LABOR, LICENSING AND REGULATION OFFICE OF STATE FIRE MARSHAL

NOTICE OF GENERAL PUBLIC INTEREST

Notice is hereby given that, in accordance with Section 1-34-30 of the 1976 Code of Laws of South Carolina, as amended, the Department of Labor, Licensing and Regulation, Office of State Fire Marshal intends to adopt the latest edition of the following nationally recognized code.

1. National Fire Protection Association 72, National Fire Alarm Code, 2002 Edition
2. The original promulgating authority for this code is:
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269
3. This code is referenced by:
South Carolina Code of Laws, Section 23-9-60
South Carolina Rules and Regulations 71-8300.11(A)(1)
South Carolina Rules and Regulations 71-8308.4(A)
South Carolina Rules and Regulations 71-8309.4(A)

The Office of State Fire Marshal specifically requests comments concerning sections of these editions, which may be unsuitable for enforcement in South Carolina. Written comments may be submitted to Michael Platt at 141 Monticello Trail, Columbia, SC 29203, by FAX at 803-896-9806, or by e-mail to plattm@llr.sc.gov.

If no comments are received within sixty (60) days of publication of this notice, the Office of State Fire Marshal will promulgate this latest edition without amendment.

DEPARTMENT OF LABOR, LICENSING AND REGULATION

NOTICE OF PUBLIC HEARING

OCCUPATIONAL SAFETY AND HEALTH STANDARDS

The South Carolina Department of Labor, Licensing, and Regulation (LLR) does hereby give notice under Section 41-15-220, S.C. Code of Laws, 1976, as amended, that a public hearing will be held on December 6, 2006 at 10:00 a.m. at the S.C. Department of LLR, 1st floor, room 108, 110 Centerview Drive, Columbia, S.C., at which time interested persons will be given the opportunity to appear and present views on the occupational safety and health standards being considered for adoption, which are as follows:

In Subarticle 6 (General Industry and Shipyard Employment):

Revisions to 1910.23, 1910.28, 1910.95, 1910.134, 1910.178, 1910.266, 1910.441, 1910.1000, 1910.1001, 1910.1017, 1910.1018, 1910.1020, 1910.1025, 1910.1027, 1910.1028, 1910.1029, 1910.1030, 1910.1043, 1910.1045, 1910.1047, 1910.1048, 1910.1050, 1910.1051, 1910.1052, 1910.1450, 1915.1000, 1915.1001

In Subarticle 7 (Construction):

Revisions to 1926.55, 1926.60, 1926.62, 1926.754, 1926.1001, 1926.1002, 1926.1003, 1926.1092, 1926.1101, 1926.1127

Any omissions or corrections to the occupational safety and health standards being considered for adoption published in the FEDERAL REGISTER prior to this hearing may be presented at this hearing. These revisions are necessary to comply with federal law and copies of them can be obtained or reviewed at the S.C. Department of LLR during normal business hours by contacting the Occupational Safety and Health Administration office at (803) 896-7682.

Persons desiring to speak at the hearing shall file with the Director of LLR a notice of intention to appear and the approximate amount of time required for her/his presentation on the particular matter no later than November 27, 2006. Any person who wishes to express her/his views, but is unable or does not desire to appear and testify at the hearing, should submit those views to the undersigned in writing on or before November 27, 2006.

Adrienne Riggins Youmans
Director
SC Department of LLR
Post Office Box 11329
Columbia, SC 29211-1329

40 DRAFTING

CLEMSON UNIVERSITY
CHAPTER 27
Statutory Authority S. C. Code Section 47-4-30

Notice of Drafting:

The State Livestock-Poultry Health Commission is considering amending Regulations 27-1010 (2) (b) Interstate Movement of Certain Animals due to an error made in omitting certain text. Interested persons should submit their views in writing to Dr. Boyd Parr, Clemson LPHD, P.O. Box 102406, Columbia, SC 29224-2406. To be considered comments should be received no later than December 1, 2006, the close of the drafting comment period.

Synopsis:

The proposed amendment must be added in order for the State of South Carolina to be in compliance with CFR 79.6, Consistent State Status for Scrapie. Maintaining State Status for Scrapie will allow South Carolina sheep producers to move their animals in intrastate commerce without additional restrictions which apply to animals from non-consistent states.

The amendments and regulation will require legislative action.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
CHAPTER 61

Statutory Authority:

Section 13-7-10 *et seq.*, Atomic Energy and Radiation Control Act; Section 44-1-10 *et seq.*, DHEC Enabling Act; Section 44-2-10 *et seq.*, State Underground Petroleum Environmental Response Bank Act; Section 44-55-10 *et seq.*, Safe Drinking Water Act; Section 44-55-50 *et seq.*, State Recreational Waters Act; Section 44-56-10 *et seq.*, Hazardous Waste Management Act; Section 44-93-10 *et seq.*, Infectious Waste Management Act; Section 44-96-10 *et seq.*, Solid Waste Policy and Management Act; Section 48-1-10 *et seq.*, Pollution Control Act, Section 8-2-10 *et seq.*, Environmental Protection Fund Act, Section 48-3-10 *et seq.*, Pollution Control Facilities; Section 48-5-10 *et seq.*, Water Quality Revolving Fund Authority Act, Section 48-14-10 *et seq.*, Stormwater Management and Sediment Reduction Act; Section 48-18-10, *et seq.*, Erosion and Sediment Reduction Act; Section 48-20-10 *et seq.*, S.C. Mining Act; Section 48-39-10, *et seq.*, Coastal Zone Management Act.

Notice of Drafting:

The Department of Health and Environmental Control proposes to amend the S.C. Code of Regulations by adding a new Chapter 61 regulation. Interested persons may submit their views by writing to Mr. Marvin Murray at 2600 Bull Street, Columbia, South Carolina, 29201. To be considered, written comments must be received no later than 5:00 p.m. on November 28, 2006, the close of the drafting comment period.

Synopsis:

The purpose of the proposed regulation is to implement the United States Environmental Protection Agency's (EPA) new Cross Media Electronic Reporting Rule (CROMERR) as published in the October 13, 2005, issue of the *Federal Register* (70 FR 59848 – 59889), which became effective January 11, 2006. EPA finalized CROMERR to establish the framework for federal acceptability of electronic reports from regulated entities in order to satisfy specific document submission requirements from EPA regulations. Since states are delegated or authorized to implement certain federal programs, states must seek EPA approval to accept electronic documents for environmental programs that EPA has delegated, authorized, or approved states to administer in accordance with CROMERR. **CROMERR does not require that any document or report be submitted**

electronically and it does not require that states receive electronic documents or reports. CROMERR establishes electronic reporting as an acceptable regulatory alternative, and establishes requirements to assure that electronic documents are as legally enforceable as their paper counterparts. Where states intend to receive documents or reports electronically, CROMERR specifies criteria for their acceptable submission, in order to ensure federal enforceability. The new regulation will implement CROMERR for all the Department's authorized programs and will minimize the need to revise specific program regulations.

This regulation will require legislative review.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

CHAPTER 30

Statutory Authority: S.C. Code Ann. Sections 48-39-10 *et seq.* (Supp. 2004)
and Act 387 (2006)

Notice of Drafting:

The Department of Health and Environmental Control proposes to amend the Department's Coastal Division Regulations 30-1 through 30-18 related to permitting in the critical areas of the coastal zone. Interested persons should submit their views in writing to: Ms. Elizabeth B. von Kolnitz, Office of Ocean and Coastal Resource Management, S.C. Department of Health and Environmental Control, 1362 McMillan Avenue, Suite 400, Charleston, S.C., 29405. To be considered, comments should be received no later than November 28, 2006, the close of the initial drafting comment period.

Synopsis:

The Department proposes to amend Regulation 30-1, *Definitions*, and Regulation 30-12, *Specific Project Standards for Tidelands and Coastal Waters*, to specify the Department's policies regarding construction of docks and piers. This proposed amendment would provide clearly defined terms and specific standards to be utilized in the evaluation of permit applications for docks and piers.

Additionally, the Department intends to amend Regulations 30-1 through 30-18 to correct technical errors in language and codification for the overall improvement of the regulations. The appeals procedure will also be revised to concur with Act 387 (2006).

Legislative review will be required.

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

CHAPTER 61

Statutory Authority: S.C. 1976 Code Sections 13-7-10, 13-7-40
and 13-7-45 *et seq.* and Supplement

Notice of Drafting:

The Department of Health and Environmental Control proposes to substantially revise R.61-106, *Tanning Facilities*. Interested persons may submit their comments in writing to Mr. Aaron A. Gantt, Director, Bureau of Radiological Health, 2600 Bull Street, Columbia, South Carolina 29201. To be considered, written comments must be received no later than 5:00 p.m. on November 27, 2006, the close of the drafting comment period.

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Synopsis:

The Proposed revisions of R.61-106 will be based on House Bill 3833 that was enacted into law June 9, 2006, as Act 355, and codified at S.C. Code Ann. Section 13-7-45. Specific areas the Department seeks to address in the regulations include redefining the registration requirements and Civil Penalty schedule. The overall changes to the regulations will substantially reduce the regulatory burden to the tanning industry. In addition, the Department intends to make language changes that will result in clarifying many sections of the regulations by making them more specific, better organized, and the intent of regulation more clear.

Including the proposed amendments stated above, the public and regulated community is invited to recommend additional issues for consideration.

The proposed revisions will require legislative review.

DEPARTMENT OF INSURANCE CHAPTER 69

Statutory Authority: 1976 Code Sections 38-3-110, 1-23-10, 38-73-540 *et seq.*

Notice of Drafting:

The South Carolina Department of Insurance proposes to promulgate a regulation to repeal regulation 69-55 proposing a procedure for establishing rates for the assigned risk plan. This regulation is no longer necessary as rates for the voluntary and assigned risk markets will be synchronized. Interested persons should submit their views in writing to: Gwendolyn Fuller McGriff, Deputy Director and General Counsel, South Carolina Department of Insurance, Post Office Box 100105, Columbia, South Carolina 29202-3105.

Synopsis:

South Carolina law requires that the rates used in the workers' compensation assigned risk plan be self-sustaining. *See* S.C. Code Ann. §38-73-540 (2002). As the loss costs for the workers' compensation voluntary market (voluntary loss costs) serve as the basis for the rates in the assigned risk market, any approved revision to the current voluntary loss cost level would necessitate a similar change in the current assigned risk rate level. For this reason, the South Carolina Department of Insurance issued an order establishing a process that synchronized rate or rule changes in the voluntary and assigned risk workers' compensation insurance markets. The synchronization procedure was approved by the Administrative Law Court in *Consumer Advocate for the State of South Carolina v South Carolina Department of Insurance*, Docket No. 05-ALJ-09-0406-CC. Under this process, changes to loss costs in the voluntary market would automatically flow into the assigned risk market making the process set forth in regulation 69-55 no longer necessary.

The proposed regulation will require legislative review.

DEPARTMENT OF INSURANCE CHAPTER 69

Statutory Authority: 1976 Code Sections 38-3-110, 1-23-10, 38-79-10 *et seq.*

Notice of Drafting:

The South Carolina Department of Insurance proposes to promulgate a regulation to repeal regulation 69-21 which required the filing of medical malpractice claims with the chief insurance commissioners. Section 38-79-10 required medical malpractice claims to be filed with the Department of Insurance. This statute was

repealed by the South Carolina General Assembly in 1998. Interested persons should submit their views in writing to: Gwendolyn Fuller McGriff, Deputy Director and General Counsel, South Carolina Department of Insurance, Post Office Box 100105, Columbia, South Carolina 29202-3105.

Synopsis:

Regulation 69-21 was promulgated to implement the requirements of section 38-79-10. Section 38-79-10 required insurers to file medical malpractice claims with the chief insurance commissioner on a form approved by the commissioner. Section 38-79-10 was repealed in 1998. Insurers are no longer required to report medical malpractice claims to the South Carolina Department of Insurance. Consequently, the regulation implementing this statutory provision is no longer necessary.

The proposed regulation will require legislative review.

DEPARTMENT OF LABOR, LICENSING AND REGULATION
BOARD OF DENTISTRY
CHAPTER 39

Statutory Authority: 1976 Code Sections 40-1-40, 40-15-40, and 40-15-172

Notice of Drafting:

The Board of Dentistry is proposing to add new Regulation 39-18 to implement Section 40-15-172 of the 1976 Code of Laws of South Carolina, as amended (Act 378 of 2006) regarding requirements of mobile dental facilities and portable dental operations. Written comments may be submitted to Rion Alvey, Board Administrator, at 110 Centerview Drive, 3rd Floor, Columbia, South Carolina, 29211-1329.

Synopsis:

The purpose of the new Regulation is to implement Section 40-15-172 of the 1976 Code of Laws of South Carolina, as amended (Act 378 of 2006) regarding requirements of mobile dental facilities and portable dental operations by defining terms, establishing fees, and providing for the issuance and renewal of registration.

DEPARTMENT OF MOTOR VEHICLES

Chapter 90

Statutory Authority: 1976 Code Section 56-23-100

Notice of Drafting:

The Department of Motor Vehicles proposes to draft new regulations previously promulgated in Chapter 38, Article 3, Subarticle 7, to revise the regulation specifications for Driver Training Schools. Interested persons may submit comments to Mr. John Caldwell, S.C. Department of Motor Vehicles, P.O. Box 1498, Blythewood, S.C. 29016. To be considered, comments must be received no later than 5:00 p.m. on November 27, 2007, the close of the drafting comment period.

Synopsis:

The General Assembly amended Sections 56-23-10, 56-23-40, 56-23-60, 56-23-70, 56-23-80 and 56-23-85. The amendments include the issuance of a license to an instructor for classroom only or behind the wheel training only, requires a ten thousand dollar (\$10,000) surety bond, requires records be made available at a permanent location in South Carolina for review and increases the temporary instructor fee to twenty dollars.

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Private secondary school instructors are also exempt from fees for an instructor permit. The Department of Motor Vehicles must promulgate regulations to provide for the above changes.

Legislative review of this proposal will be required.

DEPARTMENT OF MOTOR VEHICLES
Chapter 90
Statutory Authority: 1976 Code Section 56-23-100

Notice of Drafting:

The Department of Motor Vehicles proposes to draft new regulations previously promulgated in Chapter 38, Article 3, Subarticle 9, to revise the regulation specifications for Truck Driver Training Schools. Interested persons may submit comments to Mr. John Caldwell, S.C. Department of Motor Vehicles, P.O. Box 1498, Blythewood, S.C. 29016. To be considered, comments must be received no later than 5:00 p.m. on November 27, 2007, the close of the drafting comment period.

Synopsis:

The proposed regulations will include an additional Truck Driver Training Course. The course shall give instruction for a Class B License or Straight Truck/Passenger Bus instruction. Regulations have been expanded to increase the insurance liability requirements used by a school for behind the wheel instruction. A surety bond in the amount of ten thousand dollars (\$10,000) will also be required. A cancellation and refund policy will allow a student for a full refund if certain criteria are met. At least one motor vehicle used in a truck driver training school must be a tractor-trailer combination unit for class of training, which is offered for a Class A Commercial Driver's License or a straight truck or bus meeting definition of other commercial vehicles to carry out the instructional program of the school.

Requirements for application of a Truck Driver Training School Instructor includes the following proposed changes; each applicant must provide the Department with a certified SLED criminal background check, all classroom only instructors must be properly licensed to give classroom instruction and if during the current year of certification, the instructors driving privileges are suspended cancelled or revoked for any reason, the instructors certification is also considered to be suspended, cancelled or revoked. The proposed regulations will also make restrictions in advertising for Truck Driver Training School. The Department of Motor Vehicles must promulgate regulations to provide for the above changes.

Legislative review of this proposal will be required.

Document No. 3091
BUDGET AND CONTROL BOARD
 CHAPTER 19

Statutory Authority: 1976 Code Section 11-35-10 et seq.

19-445. South Carolina Procurement Regulations

Preamble:

The Consolidated Procurement Code, which was amended in 2006, authorizes the State Budget and Control Board to promulgate regulations governing the procurement, management, control, and disposal of any and all supplies, services, information technology, and construction to be procured by the State and any other regulations relating to implementation of Title 11, Chapter 35. (Sections 11-36-60 & -540(1)) These regulations are proposed to clarify and improve the procedures used in procurement.

Notice of Drafting for the proposed amendments was published in the State Register on August 25, 2006.

Section by Section Discussion

Section 2000. State Procurement Regulations.

Technical revisions were made to subsections A and B to reflect organizational changes in the Board, specifically the removal of procurement from General Services Division / Office of General Services and the removal of the Information Technology Management Office (ITMO) from the Procurement Services Division. Technical revisions were made to subsection B to uniformly reference all applicable defined terms (supplies, services, information technology, or construction) rather than undefined terms (goods or equipment). Technical revisions were made to subsection C to clarify that, where authority is granted to both the chief procurement officer and an agency head, the agency head is authorized to act only below the agency's level of Board granted certification – except for emergency and sole source procurements. A technical revision was made to subsection C to explain that the terms "procuring agency" and "purchasing agency" are used interchangeably. Subsection D was added to require state employees to report improper or illegal procurement related conduct to a chief procurement officer. Subsection E was added to address the effective date of certain regulations, allowing agencies until the September following approval of these regulations to prepare for implementation. Certain regulations apply only to solicitations issued after the effective date.

Section 2005. Approval of Internal Procurement Procedures Manual.

Without change, subsection A required agencies to develop internal procurement procedures and submit them to the Materials Management Office (MMO). As changed, subsection A requires that agencies also maintain such procedures and submit revisions to MMO. Item A(1) requires internal agency operational procedures to explain how vendors can identify employees with authority and to reflect applicable procedures adopted by the chief procurement officers. Subsection B emphasizes existing requirement for agencies to maintain contracting records sufficient to allow the audits required by law, including Section 11-35-1230.

Section 2010. Disclosure of Procurement Information.

During the procurement process, improper disclosure of procurement information prior to award fundamentally threatens the integrity of the procurement process. In contrast, public access is essential to maintain public confidence in the procurement system. 2006 Act No. 376 modified the award protest period by shortening the protest period from fifteen to ten days. (Protests, however, may be amended no later than fifteen days after the date award or notification of intent to award is posted.) The shortened time frame heightens the need for actual bidders to have timely access to those procurement records necessary to exercise their statutory right to protest. To improve timely access, subsection A requires agencies to provide such access to the procurement file within ten days of receiving a request for such documents from an actual bidder. This subsection does not impact or limit any other obligation the state may have to release documents. Subsection B provides that, during the bidding process, the release of procurement information should be managed by the

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procurement officer responsible for the procurement activity. Subsection C allows the responsible procurement officer to control the release of information regarding the source selection and evaluation processes. This language was partially adapted from FAR 15.306(e)(5) and 2.101. Subsection D preserves the state's negotiating position by restricting personnel involved in an RFP from releasing, prior to an intent to award, the identity and number of offers. For example, if an offeror knows, prior to negotiations with an agency, that its proposal was the only one received in response to an RFP, the offeror has a very strong negotiating position against the agency. Similarly, if an industry is dominated by three vendors and one of the three elect not to submit an offer, the relative positions of the remaining two – particularly regarding negotiations – is significantly different if the two vendors know the third did not participate. Accordingly, this subsection limits the release of this information until after negotiations are complete and an intent to award has been posted. The language is adapted from 48 C.F.R. 415.207. Subsection E requires the procurement officer to obtain – in writing – the agreement of all evaluators to maintain the confidentiality of vendor trade secrets and the integrity of the procurement process by not independently releasing such information. Subsection F provides that, when an agency invites a non-state employee to assist it with an evaluation, that person's review of the evaluation does not constitute public disclosure of the vendor's proposal. Subsection G allows agencies to execute contracts that include confidentiality provisions, as long as those agreements are consistent with the Freedom of Information Act. For example, if a software company provides proprietary trade secret information regarding its software, the state may contractually agree not to release that information to any third party – but only if the information is already exempt from release under FOIA.

Section 2015. Ratification.

Despite the harsh results, contracts entered into in violation of public procurement laws are void under South Carolina law. While fundamentally necessary, the results can be harsh for both vendors and agencies alike because their legal relationships become very ambiguous – which can lead to unnecessary litigation and expense. A regulation allowing the ratification of unauthorized procurements allows vendors and agencies to avoid some of these harsh results. However, in order to work, such a regulation must be clear with regard to each party's rights and responsibilities when an unauthorized procurement is discovered. The current regulation falls short. The revisions limit the authority of agencies to ratify their own unauthorized procurements (by requiring Chief Procurement Officer (CPO) approval), require a better written explanation regarding the unauthorized activity, and require an explanation regarding why the state will terminate or ratify the unauthorized procurement. The revised regulation also addresses how the state will deal fairly with a vendor whose contract is terminated. Much of the proposed language is adapted from sections 9-203.01.3 & .02 of the American Bar Association's 2002 Model Procurement Regulation

Section 2020. Certification.

2006 Act No. 376 increased the base statutory procurement authority of agencies to \$50,000. Subsection A is amended to reflect this change. In addition, subsection A is amended to reflect that, as provided in item (2), MMO looks at more than an agency's internal procedures manual when an increase in certification is requested. Technical changes were made to subsection A in order to uniformly reference all applicable defined terms (supplies, services, information technology, or construction) rather than undefined terms (goods or equipment). Item A(2) was revised to require that MMO's certification reviews must result in a report that addresses every aspect of a governmental body's internal procurement operation. Item A(3) was revised to require that the report outlined in item (2) must be submitted to the Board when a certification request is made. Item A(4) was added to require that the offices of the Board's three chief procurement officers must be audited at least every five years by MMO's audit team using the same criteria as are applied to agencies. A technical change was made to item B(1) to reflect organizational changes in the Board, specifically the removal of ITMO from MMO. Item B(2) was added to provide that an agency's continued certification may be tied to a requirement that the agency maintain a sufficient number of adequately trained procurement staff.

Section 2022. Temporary Suspension of Authority; Audit.

A. Under code section 11-35-1210(2), authorizations granted by the board to a governmental body pursuant to Section 11-35-1210 (i.e., certifications) are subject to the governmental body's adherence to the provisions of the code and the regulations. Likewise, Section 11-35-1240(B) provides that "[v]iolation of these provisions

is grounds for loss of or reduction in authority delegated by either the board or this code.” Accordingly, subsection A allows a chief procurement officer to temporarily suspend an agency's procurement authority, or some portion of it, if the CPO becomes aware of serious problems at the agency that would justify such an action.

B. Agency audits are conducted every few years, usually in conjunction with a request for recertification by the Board. Such audits, while very useful, may be untimely in the event a more urgent problem arises. Section 11-35-540(4) provides that "the board shall have the power to audit and monitor the implementation of its regulations and the requirements of this code." Accordingly, this regulation authorizes a chief procurement officer to audit a governmental body regarding a specific transaction.

Section 2025. Authority to Contract for Certain Professional Services.

The first un-codified paragraph of Section 2025 is deleted because 2006 Act No. 376 (S.572) deleted Section 11-35-1270. Subsections D and E are revised to reflect the long standing inapplicability of the competitive processes to the engagement of legal services and auditors.

Section 2030. Competitive Sealed Bidding The Invitation for Bids.

(4) 2006 Act No. 376 (S.572) amended Section 11-35-410(E). The revision to subsection (4) is made to conform with that statutory amendment.

(5) The law requires that bidders have a reasonable time to prepare their bids, with a minimum of seven days. The revision provides that the seven day period does not begin until the solicitation has been publicly advertised.

Section 2040. The Official State Government Publication.

Technical change to subsection A to reflect organizational changes in the Board, specifically the removal of procurement from General Services Division / Office of General Services.

Section 2042. Pre-Bid Conferences.

The state routinely conducts conferences with interested vendors prior to opening. This new section instructs agencies to give bidders adequate time to participate and react to such conferences, and prevents the communications at such conferences from binding anyone unless it is published as a solicitation amendment. Adapted from the 2002 Model Procurement Regulation 3-202.06.

Section 2045. Receipt and Safeguarding of Bids.

A sentence is stricken because it unnecessarily duplicates requirements appearing in R.19-445.2065(D) and R.19-445.2097(D).

Section 2050. Bid Opening.

All changes are technical only, to reflect existing practice, to offer clarification, or to reflect the use of terms defined by the code.

Section 2055. Bid Acceptance and Bid Evaluation.

[Remains the same.]

Section 2060. Telegraphic Bids.

The revisions update the existing regulation to accommodate the increased use of electronic communications. Adapted from Model Procurement Regulation 3-202.03.2.

Section 2065. Rejection of Bids.

Revision to item B(1) reflects existing practice and is offered for clarification only. (*See Protest of Blue Cross Blue Shield*, Procurement Review Panel Case No. 1996-3). Revision to item B(1)(c) is made to have code apply uniformly to IT transactions. Revision to item D reflects existing practice and is offered for clarification only.

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Section 2070. Rejection of Individual Bids.

D. The rules regarding an agency's waiver of minor defects in a bid ("minor informalities") are set forth in Section 11-35-1520(13) and Regulation 19-445.2070. The language added to subsection D(2) is intended to provide additional guidance regarding the minor informality rule. The text is adapted from Official Comment No. 5 to the ABA's 2000 Model Procurement Code § 3-202(6). This change is not intended to allow agencies to waive a vendor's failure to be responsive on an essential requirement.

F. This technical change reflects current industry terminology.

G. The original text of this subsection is deleted because it is inconsistent with the statutory provision governing the same topic. Compare with code section 11-35-1520(13)(c). Former subsection paragraph H has been re-designated as paragraph G. The changes to old paragraph H reflect existing practice and are offered for clarification only.

Section 2075. All or None Qualifications.

[Remains the same.]

Section 2077. Bid Samples and Descriptive Literature.

Invitations for bids usually do not request bid samples or descriptive literature. Nevertheless, such material – particularly descriptive literature – is often submitted by vendors. Unfortunately, such gratuitous material can inadvertently cause a vendor's bid to be non-responsive. In keeping with the Model Procurement Code, this regulation is amended to provide that bid samples and descriptive literature will not be considered in determining responsiveness unless the state requested that such material be provided. Adapted from Model Procurement Regulation 3-202.03.3.

Section 2080. Clarifications with Bidders.

The Procurement Code provides very limited opportunity for the state to clarify ambiguities in the context of sealed bidding. This regulation is revised to insure that such clarification is available only if the bidder is obviously responsive. It also provides that the procurement officer's decision on responsiveness is not entitled to any deference. This section does not apply to competitive sealed proposals.

Section 2085. Correction or Withdrawal of Bids; Cancellation of Awards.

The withdrawal of bids after bids have been opened and prices exposed creates the potential for improper manipulation of the bidding process. For the sake of integrity, subsection A is amended to require that someone above the level of procurement officer approve bid withdrawals in writing. Subsection B is amended to provide that the procurement officer's decision on bid mistakes is not entitled to any deference on appeal.

Subsection C is revised to reflect standing agency practice, to resolve internal inconsistencies in the existing language, and to reflect some analysis in certain decisions of the Procurement Review Panel. See *Protest of Blue Cross Blue Shield*, Case No. 1996-3, and *Protest of Analytical Automation Specialists, Inc.*, Case No. 1999-1, and *Protest of B&D Marine and Industrial Boilers, Inc.*, Case No. 2000-12. C.(1) Technical Change: Item C(1) is revised to make sure code consistently applies uniformly to IT transactions. Item C(7) reflects need to use terms defined by the code.

Section 2090. Award.

In order to provide business with effective notice, subsection B requires that the intended date for issuance of the award must be specified in the solicitation. The revision dovetails with changes made in 2006 Act No. 376. Former subsection C is deleted as redundant, since the applicable requirements appear in Section 11-35-1520(10).

Section 2095. Competitive Sealed Proposals.

Subsection C: By adding a reference to Regulation 19-445.2050(B), this regulation applies the same rules to RFPs that govern IFBs when the bid opening is postponed.

Item C(1): As long required for bids, proposals should be held secure until opening, they should be available only on a "need to know" basis, they should be tabulated, and the tabulation should be certified by those conducting the opening. These changes effect these goals. Consistent with the statute, which makes the

tabulation available only after award, the regulation provides that the identity of proposals must not be revealed during opening. This approach parallels the Model Procurement Code. Revealing the number and identity of all offerors at opening seriously undermines the state's negotiating position. For example, an offeror will be less willing to negotiate when it learns that it has no competition (no one else submitted), its strongest competition did not submit, or competition is weak (only two offers were submitted, when many potential offerors are active in the relevant market). The new language was, to some extent, adapted from 2002 Model Procurement Regulation 3-203.12.

Item C(2): 2006 Act No. 376 amended Section 11-35-410(E). This change dovetails with that statutory amendment.

Subsection D: Revision reflects existing practice and is offered for clarification only. The deleted language was redundant. The statute provides clear instructions regarding evaluations of RFPs.

Subsection E: The Procurement Code provides very limited opportunity for the state to clarify ambiguities in the context of sealed bidding. Subsection E reflects that, at a minimum and in addition to any other available authority, such clarifications may also be conducted in a competitive sealed proposal.

Subsection F applies only to construction, as reflected by the reference to Sections 11-35-3020 and 11-35-3010; accordingly, the references to supplies and services are deleted.

Subsection G, which was formerly part of subsection F, is separated from the provisions above which regard only construction. The last sentence was added to require oversight by the state engineer's office of construction acquired using RFPs.

Subsection H was formerly designated subsection G. New item (1) applies new Regulation 19-445.2042 to RFPs. Please see comments to that regulation. Item (2) is the same as former item H(1). Former item (2) was deleted because the rejection of all proposals is covered by new paragraph 2097. Former item (3) was deleted because rejection of individual proposals is covered by new paragraph 2095(J). Items (3), (4), and (5) did not change.

Subsection I. In the context of public bidding, the integrity of the procurement process is undermined by allowing improper communications after opening and prior to award. At a minimum, such communications should not be used to allow bidders to decide whether or not they are responsive after prices have been exposed. This concern is reflected in the new text added to Regulation 19-445.2080. As that text makes clear, the limited authority to seek clarifications from a bidder cannot be used unless the bidder is obviously responsive.

In contrast, the integrity of the procurement process is not undermined by controlled post-opening, pre-award communications in a competitive sealed proposal. In contrast to bids, price is not revealed when RFPs are opened and the scope of work for each offeror may not be identical – often each offeror has the opportunity to present a unique solution to the state's problem. In recognition of this difference, the code has long authorized negotiations and other communications. Despite these differences, South Carolina has traditionally applied relatively strict limits to pre-negotiation communications. Unable to address concerns with an offeror's proposal prior to ranking, the state has unnecessarily lost many otherwise solid proposals by applying strict rules of responsiveness and strict limits on communications – limits that are not necessary to preserve the integrity and fairness of the competitive sealed proposal process.

Adapted in part from the 2002 Model Procurement Regulation (R3-203.13.3 & 3-203.14), this new subsection I is intended to address this problem in two ways, by expressly allowing the state to exchange information with offerors after opening and by providing offerors a reasonable opportunity to submit any cost or price, technical, or other revisions to their proposals – if and when they are invited to do so. The changes are made in hopes that the state can better obtain greater value for the taxpayer by rejecting fewer proposals than in the past and by having a better understand of those proposals evaluated. Notwithstanding the foregoing, it should be remembered that important limits were carefully sculpted into the text of the regulation because these new provisions are *not* intended to allow either unrestricted free flowing communications between the procurement officer and actual offerors or unlimited post-opening proposal revisions. In addition, this authority will only be exercised when deemed appropriate by the responsible procurement officer. This authority is extended only to procurement officers individually approved by a CPO.

J. The changes made in subsection J dovetail with the changes made to subsection I above. In competitive sealed bidding, competition is solely on price. Accordingly, it is critical that every bidder be asked to provide, and that every bidder agrees to provide, the exact same supply or service. It is critical that bids be facially

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"responsive" on every point, unless the defect is truly a "minor informality" - as defined by statute. Such rigidity is necessary to insure the integrity of our public bidding process. In contrast, offerors responding to a request for proposals are not evaluated solely on price. Moreover, participating vendors are not competing for the same scope of work. The definition of the state's problem is the same for all, but the details of how to solve that problem differ depending on each vendor's recommended solution. RFPs seek to tap the creativity of the market place, rather than detailing exactly what the vendor must do. In this context, rigid rules of responsiveness - so essential to bidding - are a major impediment. Despite these differences, South Carolina has - more often than not - applied relatively strict rules of responsiveness to RFPs. Applying these rules, the state has unnecessarily lost many otherwise solid proposals. These proposals are rejected unnecessarily because - unlike bidding - their rejection is not necessary to preserve the integrity of the process.

Adapted from the 2002 Model Procurement Regulations (R. 3-301.03.3(b)), this new subsection J takes the place of R. 19-445.2070 - which continues to apply to bids. This new subsection recognizes the flexibility added by subsection I and eliminates the laundry list of reasons that proposals must be rejected. In substitute, it provides that the state need reject only those proposals that ultimately fail to meet the essential requirements of the state (those that are non-responsive). Hopefully this change, when combined with subsection I, will allow the State to obtain greater value for the taxpayer *without compromising integrity and fairness*.

Section 2097. Rejection of Proposals.

Regulation 19-445.2065 governs when solicitations can be canceled prior to award. Drafted for competitive sealed bidding, former regulation 19-445.2095 applied regulation 19-445.2065 to competitive sealed proposals. This new regulation merely takes existing regulation 19-445.2065 and redrafts it for RFPs. For example, regulation 19-445.2065 requires award be made to the lowest responsible and responsive bidder - which is inapplicable to RFPs. Accordingly, this paragraph focuses on the highest ranked responsible offeror.

Section 2100. Small Purchases and Other Simplified Purchasing Procedures.

A. 2006 Act No. 376 increased the small purchase limit to \$50,000. Subsection A is amended to reflect that change. To parallel R. 19-445.2030, subsection A is also amended to apply a minimum bid time to small purchases above the \$10,000 advertising threshold. Given the addition of new code section 11-35-4210(1)(d) by 2006 Act No. 376, former item (2) was deleted as superfluous. Item B(1) was changed to insure that Blanket Purchase Agreements are not used for recurring known needs for which an agency should conduct an independent procurement. Several technical changes are made to make sure the code consistently applies uniformly to IT transactions. Subsection D is changed to reflect the absence of a standard state purchase order form.

Section 2105. Sole Source Procurements.

Subsection C is amended to use an appropriate defined phrase and to require substantive written determinations.

Section 2110. Emergency Procurements.

Several technical changes are made to insure that the code consistently applies uniformly to IT transactions and to use a defined phrase rather than undefined terms. Former subsection G was re-designated subsection F. Former subsection F is deleted as unnecessary; an agency can conduct an emergency procurement if, and only if, it meets the statutory criteria for conducting an emergency.

Section 2115. Information Technology Procurements.

Technical changes were made to reflect organizational changes in the Board, specifically the removal of procurement from General Services Division / Office of General Services. Subsection C was added to expressly declare existing statutory authority in a specific context - software licensing. For vendors and agencies alike, considerable resources are needed to address the numerous legal issues involved in licensing software to public entities on a volume basis. This regulation acknowledges ITMO's authority to negotiate binding software licensing agreements for all governmental bodies.

Section 2120. Cost or Pricing Data.

Virtually unchanged since the Procurement Code was adopted in 1981, Section 11-35-1830 requires – under limited circumstances – that contractors provide certain cost or pricing data on contracts that do not otherwise involve adequate price competition, e.g., post-award change orders. Adapted from the federal Truth-in-Negotiations Act, Section 11-35-1830 calls for implementing regulations that explain when and how this provision applies. The proposed regulations, which are adapted from the 2000 Model Procurement Regulations (R3-403.1 & .02), provide that explanation. Subsection A defines several terms used in Section 11-35-1830. In sum, these definitions identify those circumstances (which constitute the majority of all procurements) for which no cost or pricing data need be submitted. Subsection B sets certain dollar thresholds. Even in circumstances in which contractors would otherwise be required to submit cost or pricing data, this subsection establishes dollar thresholds below which such information is not required. At the federal level, cost or pricing data is not required for sole source contracts or change orders with a value less than \$500,000. This regulation adopts those thresholds for SC. Subsection C allows the agency head to waive the requirement for cost or pricing data. Subsection D provides that an offeror may be disqualified if, contrary to the statute, the offeror refuses to supply cost or pricing data.

Section 2125. Responsibility of Bidders and Offerors.

Revision reflects long standing practice and is offered for clarification only. Much of the text of new subsection E is adapted from FAR 9.104-2.

Section 2130. Prequalification of Supplies and Suppliers.

[Remains the same.]

19-445.2132. Prequalification for a Single Solicitation.

This new regulation was drafted to insure that a pre-qualification process is used only as appropriate. Subsection A provides that pre-qualification must not be unduly restrictive, is not – in a competitive bid – intended to limit bidders capable of performing the work, and must be pre-justified in writing by the CPO or agency head. Section B simply applies the bid opening rules to the pre-qualification opening process.

Section 2135. Conditions for Use of Multi term Contracts.

A. This regulation sets certain pre-conditions for the use of multi-term contracts. A review of these conditions reflects that, conceptually, these conditions only apply when the resulting contract will bind the state and contractor for more than one year. Historically, the multi-term pre-conditions have been applied to any contract with optional renewal years, even though a firm contract obligation only extended for one year – usually with options to renew (or not renew) and bilateral cancellation clauses. The revisions to subsection A are suggested to address this issue. The last paragraph of subsection A is deleted because it simply repeats the underlying statute. In subsection C, change is made to make sure the code consistently applies uniformly to IT transactions. In item D(1), the substance of the first deleted sentence has been moved to new subsection G below. The changes to the second sentence require that a multi-term determination must be made before the solicitation is issued. The change to item D(3) requires substantive written determinations. Item E(7) is amended to correct a previously defective cross reference. Subsection G, which was previously found in subsection D, simply reflects that solicitations for a contract with a total potential duration (including any option years) in excess of five years must be pre-approved. If the contract will extend beyond 5 years, the solicitation must be approved by a CPO. Above 7 years, Board approval is required.

Section 2137. Food Service Contracts.

Change reflects existing practice and is offered for clarification only. Formerly, this section was codified as 2135G.

Section 2140. Specifications.

Technical change made to make sure code consistently applies uniformly to IT transactions.

Section 2145. Construction, Architect Engineer, Construction Management, and Land Surveying Services.

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Existing item A(4) requires that the State Engineer approve the project delivery approach. The last sentence excuses such approval for projects valued below ten million dollars, if the agency uses competitive sealed bidding to acquire a fixed price construction contract and the project delivery method is traditional design-bid-build. Subsection B is changed to dovetail with the statutory requirements of Section 29-6-250(2). Subsection F is changed to reflect organizational changes in the Board, specifically the removal of procurement from General Services Division / Office of General Services. Subsection G harmonizes statute and regulation. 2006 Act No. 376.

Section 2150. Surplus Property Management.

Item D(3) is changed to reflect ITMO's authority under the procurement code.

Item I(2) is changed to use terms defined by the code.

Section 2152. Leases, Lease/Payment, Installment Purchase, and Rental of Personal Property.

Item B(1) was revised to accommodate inflation. A technical change was made to reflect organizational changes in the Board, specifically the removal of procurement from General Services Division / Office of General Services.

Item B(2) was revised to reflect organizational changes in the Board, specifically the removal of ITMO from MMO.

Section 2155. Intergovernmental Relations.

Technical Change: Change reflects organizational changes in the Board, specifically the removal of ITMO from MMO. Remaining change reflects existing practice and is offered for clarification only.

Section 2160. Assistance to Minority Businesses.

Item A(4)(a) was amended to cross reference 49 CFR Part 26. Determining who controls a company is important in identifying if the minority applicant actually has ultimate control of the company. 49 CFR Part 26 provides very clear guidelines on how to evaluate the application documents submitted to identify which owner, partner or board member has ultimate control and whether or not the company meets the requirements for certification as minority-owned business. If the partner, owner or board member with ultimate control is not a minority or woman, then the business is not eligible for certification. Federal certification programs and many state programs use 49 CFR as their guide for determining eligibility. Change requested by OSMBA.

Item A(5) was changed to clarify that certification is only available to for-profit businesses. Black's Law Dictionary defines "business" as "[a] commercial enterprise carried on for profit; a particular occupation or employment habitually engaged in for livelihood or gain." OSMBA has received applications from non-profit organizations, which are not a 'for-profit business' and therefore ineligible for certification.) Change requested by OSMBA.

Item B(1) was changed to clarify that out of state vendors are not eligible for certification. In Section 11-35-5210, "Statement of policy and its implementation", the code states that "[t]he General Assembly believes that it is in the state's best interest to assist minority-owned businesses to develop fully as a part of the state's policies and programs which are designed to promote balanced economic and community growth throughout the State." The MBE program was created to strengthen and preserve South Carolina's small and minority owned businesses, not businesses from other states without a South Carolina office. Change requested by OSMBA.

Item B(2) was changed to establish an expiration for certification, because neither the Code nor the regulations establish an expiration point/term limit of a certificate nor address that firms can re-apply for certification upon the expiration of the certificate. Change requested by OSMBA.

Item C(2) changed to allow people outside of OSMBA to sit on the certification board. Current language does not state that the certification board can include other individuals selected by the Director, in addition to 3 employees of the agency OSMBA is located. Change requested by OSMBA.

Item D changed to address that eligible businesses must be legally able to conduct business in South Carolina. Change requested by OSMBA.

19-445.2165. Gifts.

State law appears to provide very few limitations on the acceptance of gifts by the state. (The State Ethics Act does not address gifts to governmental entities.) Despite this vacuum, gifts to the government can create significant ethical problems in the context of government contracting. This regulation is a modest step in addressing this concern. Subsection A expresses a general policy – without specific restrictions - that agencies should not accept or solicit a gift, directly or indirectly, from a business if the governmental body has reason to believe the business has or is seeking to obtain contractual or other business or financial relationships with the governmental body. Taking a similar approach, subsection B cautions agencies to exercise care to insure that gifts do not provide one vendor with an undue competitive advantage on subsequent procurements.

19-445.2180 Assignment, Novation, and Change of Name.

In large measure, this new regulation reflects existing practice and is offered for clarification only. The text of this regulation is adapted from the ABA's 2002 Model Procurement Regulation 3-105. Essentially, assignments are allowed with proper approval. Consistent with the UCC, assignments of monies are freely allowed. Novations are allowed for successors in interest, as long as the state's interest is protected. Name changes are a routinely allowed contract administration issue.

19-445.2200. Administrative Review Protective Orders.

The proposals submitted by some vendors include trade secrets or other confidential business information. In an effort to balance the needs of vendors to protect such information and the needs of other vendors to pursue their protests, this regulation allows the CPO's to release protected business information under a protective order. This proposed regulation does not allow a CPO to (a) prohibit a public body from releasing information which the public body must release under applicable law, or (b) require the release of any public record that a public body is prohibited from releasing by law.

19-445.3000 School District Procurement Codes; Model

In large measure, this proposed regulation reflects long standing agency practice regarding Section 11-35-70, but provides some clarification to the law and some much needed guidance. Key points include the following: (1) A district's code must be similar to the law in effect at the time it is adopted or modified. Every district need not modify its code as soon as a state law changes, but it may not modify its code without updating it to reflect then current law. (2) Substantially similar does not mean identical. A district code should largely mirror state law, but it should also accommodate the differing context of school districts. (3) To provide guidance to the covered school districts, MMO may - in consultation with the school districts and the State Department of Education - publish a model school district code, including instructions on how to customize the model to the school's circumstances. (4) Properly adopted school district codes have the effect of law, just like the state procurement laws.

Notice of Public Hearing and Opportunity for Public Comment:

Should a hearing be requested pursuant to Section 1-23-110(A)(3) of the S.C. Code, as amended, such hearing will be held on November 30, 2006 at 10:00 AM in the Governor's Conference Room, Wade Hampton Building, State House Grounds, Columbia, South Carolina. Persons desiring to make oral comment at the hearing are asked to provide written copies of their presentation for the record. If a request pursuant to Section 1-23-110(A)(3) is not received before November 28, 2006, the hearing will be canceled.

Written comments, requests for the text of the proposed amendments or any other information, and requests for a public hearing should be submitted to Materials Management Office, Attn: Keith McCook, 1201 Main Street, Suite 600, Columbia, S.C. 29201 or to regulations@mmo.state.sc.us before November 28, 2006. Copies of the text of the proposed amendments for public notice and comment are available at <http://www.ogs.state.sc.us/webfiles/gc/Documents/ProposedRegs.pdf>.

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Preliminary Fiscal Impact Statement:

No additional state funding is requested. The State Budget and Control Board estimates that no additional costs will be incurred by the State and its political subdivisions in complying with the proposed revisions to Regulation 19-445.

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION: South Carolina Procurement Regulations

Purpose: These regulations are proposed to clarify and improve the procedures used in procurement.

Legal Authority: Title 11, Chapter 35 of the South Carolina Code of Laws

Plan for Implementation: The proposed amendments would be incorporated within R.19-445 upon publication in the State Register as a final regulation. The proposed amendments will be implemented in the same manner in which the existing regulation is implemented. As part of its routine training program, the State Budget and Control Board will offer training classes to inform government procurement officials regarding the impact of the proposed regulations.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

As reflected in Section 11-35-20, the Consolidated Procurement Code was enacted to consolidate, clarify, and modernize the law governing procurement in this State and to permit the continued development of explicit and thoroughly considered procurement policies and practices. These regulations are designed to achieve those purposes and policies, consistent with the experience gained since the last revisions to the regulations. In addition, the Consolidated Procurement Code was recently amended by enactment of 2006 Act No. 376. Lastly, the Board has undergone internal organizational changes since the regulations were last amended. Accordingly, the State Budget and Control Board determined that the proposed amendments to the state's procurement regulations are needed and reasonable.

DETERMINATION OF COSTS AND BENEFITS:

There will be no increased cost to the State or its political subdivisions, nor will the proposed amendments result in any increased cost to the business community. The proposed amendments will benefit covered governmental entities by reducing paperwork, clarifying ambiguities in the law, enhancing the integrity of the process, improving efficiency, and allowing sound procurement practices that enable government to acquire better value for the taxpayer's dollars. The Department believes that the proposed amendments will foster greater public confidence in the procurement system and benefit the business community by creating greater clarity and uniformity in procurement rules and by reducing the risks associated with government contracting.

UNCERTAINTIES OF ESTIMATES:

There are no uncertainties of estimates relative to the costs to the State or its political subdivisions

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH:

The proposed regulations have no effect on the environment or on public health.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED:

There will be no detrimental effect on the environment or public health if the regulations are not implemented.

Statement of Rationale:

As originally enacted in 1981, the Consolidated Procurement Code was largely adapted from the American Bar Associations Model Procurement Code for State and Local Governments and the accompanying model regulations. In 2000, the ABA adopted a revised model, the 2000 Model Procurement Code. In 2002, the ABA adopted updates to the accompanying model regulations. In 2006, the General Assembly amended the Consolidated Procurement Code with 2006 Act No. 376. Since the regulations were last amended, the Board has undergone internal organizational changes. Lastly, the Consolidated Procurement Code expressly contemplates the continued development of explicit and thoroughly considered procurement policies and practices. The proposed changes are needed to accommodate these developments, to address this goal, and to further consolidate, clarify, and modernize the law governing procurement in this State. S.C. Code Section 11-35-20(d).

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

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Statutory Authority: S.C. Code Ann. § 59-5-60 (2004), 20 U.S.C. § 6301 *et seq.* (2002) [No Child Left Behind Act of 2001], and S.C. Code Ann. § 59-59-10 *et seq.* (Supp. 2005)

43-205, Administrative and Professional Personnel Qualifications, Duties, and Workloads

Preamble:

The State Board of Education is proposing amendments to Regulation 43-205, Administrative and Professional Personnel Qualifications, Duties, and Workloads. The amendments include provisions of the Education and Economic Development Act of 2005 (EEDA), S.C. Code Ann. § 59-59-10 *et seq.* (Supp. 2005).

The notice of drafting was published in the *State Register* on June 23, 2006.

Section-by-Section Discussion

Section II(A)(3) Reference to the 2006 deadline for teachers of core academic subjects to *become* “highly qualified” eliminated (all teachers must now meet the “highly qualified” requirements).

Section II(B)(1) Nomenclature updated.

Section II(B)(4) Disability nomenclature updated.

Section II(B)(4)(b) Section added. Cross-categorical self-contained classes meeting the specified ratios now allowed without special application and approval.

Section III(A)(3) Reference to the 2006 deadline for teachers of core academic subjects to *become* “highly qualified” eliminated (all teachers must now meet the “highly qualified” requirements).

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Section III(A)(5) Section added. Qualifications for career specialists included for grades six through eight as a result of the EEDA.

Section III(B)(1)(c) Section added. Services that a career specialists may provide for grades six through eight as a result of the EEDA specified.

Section III(B)(1)(d) Section added. Impact of EEDA-projected funding for guidance services.

Section III(B)(4) Disability nomenclature updated.

Section III(B)(4)(b) Section added. Cross-categorical self-contained classes meeting the specified ratios now allowed without special application and approval.

Section IV(A)(3) Reference to the 2006 deadline for teachers of core academic subjects to *become* “highly qualified” eliminated (all teachers must now meet the “highly qualified” requirements).

Section IV(A)(6) Qualifications for a career specialist updated as specified in the EEDA.

Section IV(B)(1)(c) Section added. Services that a career specialists may provide for grades nine through twelve as a result of the EEDA specified.

Section IV(B)(1)(d) Section added. Impact of EEDA-projected funding for guidance services.

Section IV(B)(4) Disability nomenclature updated.

Section IV(B)(4)(b) Section added. Cross-categorical self-contained classes meeting the specified ratios now allowed without special application and approval.

Notice of Public Hearing and Opportunity for Public Comment:

Interested persons may submit comments to Lucinda Saylor, Deputy Superintendent, Division of Curriculum Services and Assessment, State Department of Education, 1429 Senate Street, Room 805, Rutledge Building, Columbia, South Carolina 29201. To be considered, comments must be received no later than 5:00 p.m., on November 27, 2006, the close of the drafting comment period.

Interested members of the public and regulated community are invited to make oral or written comments on the proposed regulation at the public hearing to be held by the State Board of Education during its meeting on December 13, 2006, at 10:00 a.m. at the Rutledge Building, State Department of Education, Columbia, South Carolina. Persons desiring to make oral comments at the hearing are asked to limit their statements to five minutes and are asked to provide, as a courtesy, written copies of their presentation for the record.

Preliminary Fiscal Impact Statement: There will be no cost to the state or its political subdivision.

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION: R 43-205, Administrative and Professional Personnel Qualifications, Duties, and Workloads.

Purpose: R 43-205 is being amended to include provisions of the EEDA.

Legal Authority: S.C. Code Ann. § 59-5-60 (2004), 20 U.S.C. § 6301 *et seq.* (2002) [No Child Left Behind Act of 2001], and S.C. Code Ann. § 59-59-10 *et seq.* (Supp. 2005)

Plans for Implementation: The proposed amendments will be posted on the State Department of Education's Web site for review and comments. The amendments will take effect upon approval by the General Assembly and publication in the *State Register*. The State Department of Education will distribute copies of the approved regulation to school district personnel.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: Regulation 43-205 is being amended to include provisions of the EEDA.

DETERMINATION OF COSTS AND BENEFITS: None

UNCERTAINTIES OF ESTIMATES: None

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: The proposed amendments of the regulation will have no effect on the environment and public health.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effects on the environment and public health if these amendments are not implemented.

Statement of Rationale:

A statement of the rationale for these amendments to R 43-205 is available from the office of the Deputy Superintendent, Division of Curriculum Services and Assessment, State Department of Education, 1429 Senate Street, Room 805, Rutledge Building, Columbia, South Carolina 29201.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

Document No. 3089

STATE BOARD OF EDUCATION

CHAPTER 43

Statutory Authority: S.C. Code Ann. §§ 59-5-60 (2004), 59-5-65 (2004 and Supp. 2005), and 59-59-10, *et seq.* (Supp. 2005)

43-274.1. At-Risk Students

Preamble: This regulation addresses the requirement of the Education and Economic Development Act of 2005 that a separate regulation be written for at-risk students. The regulation defines at-risk students and outlines specific objective criteria for districts to use in the identification of students at-risk for being poorly prepared for the next level of study or for dropping out of school. The criterion includes diagnostic assessments to identify strengths and weaknesses in the core academic areas. The State Department of Education in collaboration with school districts will ensure that students are being properly identified and provided timely, appropriate guidance, and assistance and to ensure that no group is disproportionately represented. The regulation refers to an implementation document to be provided by the State Department of Education that will include evidence based model programs for at-risk students designed to ensure that students have an opportunity to graduate with a state high school diploma. The document will include an evaluation of model programs in place in each high school to ensure the programs are providing students an opportunity to graduate with a state high school diploma.

The Notice of Drafting was published in the *State Register* on August 25, 2006

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Section-by-Section Discussion

Section I. Defines at-risk students.

Section II. Provides districts examples of at-risk student indicators, predictors, and barriers.

Section III. Gives districts information about selecting evidence-based models, initiatives, and programs that address at-risk students.

Section IV. Provides parameters for identifying appropriate evidence-based models, initiatives, and programs that address at-risk students.

Section V. Requires that each school district evaluate its selection of at-risk models, initiatives, and programs. This section provides evaluation criteria to aid the district in developing its evaluation process.

Section VI. Provides school districts with information regarding the annual reporting of the effectiveness of models, initiatives, and programs addressing the needs of at-risk students.

Notice of Public Hearing and Opportunity for Public Comment:

Interested members of the public and regulated community are invited to make oral or written comments on the proposed regulation at a public hearing to be conducted by the State Board of Education at its meeting on December 13, 2006, at 10:00 a.m. at the Rutledge Building, State Department of Education, Columbia, South Carolina. Persons desiring to make oral comments at the hearing are asked to limit their statements to five minutes or less and as a courtesy are asked to provide written copies of their presentation for the record.

Interested persons are also provided an opportunity to submit written comments on the proposed amendments by writing to James R. Couch, Director, Office of Career and Technology Education, Division of District and Community Services, 1429 Senate Street, Room 912, Rutledge Building, Columbia, South Carolina 29201 or e-mail jcouch@ed.sc.gov. Comments must be received no later than 5:00 p.m. on November 27, 2006. Comments received by the deadline shall be submitted to the Board in a summary of public comments and department responses for consideration at the public hearing.

Preliminary Fiscal Impact Statement: The initial funding request from the Legislature is \$4.5 million. Additional funding requests will follow during the implementation process in order to meet the needs of the South Carolina high schools.

Statement of Need and Reasonableness: This Statement of Need and Reasonableness was determined by staff analysis pursuant to S.C. Code Ann. Section 1-23-115(C)(1) through (3) and (9) through (11).

DESCRIPTION OF REGULATION: R 43-274.1, At-Risk Students

Purpose: The purpose of R 43-274.1 is to provide requirements and guidance to districts for implementing § 59-59-150 of the South Carolina Education and Economic Development Act (EEDA) of 2005 relating specifically to at-risk students.

Legal Authority: S. C. Code Ann. §§ 59-5-60 (2004), 59-5-65 (2004 and Supp. 2005), and 59-59-10, *et seq.* (Supp. 2005)

Plan for Implementation: The EEDA Guidelines have been disseminated to the school districts. Pilot models were established during 2005-06 and continue through 2006-07. The proposed new regulation will be posted on the State Department of Education's Web site for review and comment. The new regulation will take effect upon approval by the General Assembly and publication in the *State Register*.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: The results of implementation of this regulation should bring an increased focus on the needs of at-risk students and a reduction in the number of drop-outs in the state. An implementation guide will be provided to school districts.

DETERMINATION OF COSTS AND BENEFITS: The determination of costs is directly related to evidence-based models, initiatives, and programs.

UNCERTAINTIES OF ESTIMATES: There are no uncertainties of estimates.

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: This regulation will have no effect on the environment or public health.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effect on the environment or public health if this regulation is not implemented.

Statement of Rationale: A copy of the Statement of Rationale is available in the Office of Career and Technology, 1429 Senate Street, Rutledge Building, Room 607, Columbia, South Carolina 29201.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

Document No. 3090
STATE BOARD OF EDUCATION
CHAPTER 43

Statutory Authority: S.C. Code Ann. §§ 59-5-60 (2004) and 59-40-10, *et seq.* (2004),
2006 S.C. Acts 274 (to be codified at S.C. Code Ann. § 59-40-10 *et seq.* (Supp. 2006))

43-600. Charter School Appeals

Preamble:

This regulation needs to be amended to provide a procedure for the State Board of Education to hear appeals from the decisions of the newly created South Carolina Public Charter School District by charter applicants and local school districts. The notice of drafting was published in the *State Register* on June 23, 2006.

Section-by-Section Discussion

Throughout the regulation: The word “local” was removed from the statement “local school board of trustees” so that the statement would include the South Carolina Public Charter School District.

Section I(G): The timeline for hearing appeals by the State Board was changed from “thirty days” to “forty-five” days, in compliance with the changes in the law.

Section IV: This section is new. The law provides that a local school district can appeal the decision of the South Carolina Public Charter School District under certain circumstances. The process for that appeal needs to be addressed in this regulation. This section will allow the State Board of Education to hear those cases on a *de novo* basis.

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Notice of Public Hearing and Opportunity for Public Comment:

Interested members of the public and regulated community are invited to make oral or written comments on the proposed regulation at a public hearing to be conducted by the State Board of Education at its meeting on December 13, 2006, at 10:00 a.m. at the Rutledge Building, State Department of Education, Columbia, South Carolina. Persons desiring to make oral comments at the hearing are asked to limit their statements to five minutes or less, and as a courtesy are asked to provide written copies of their presentation for the record.

Interested persons are also provided an opportunity to submit written comments on the proposed amendments by writing to Shelly Bezanson Kelly, Esquire, Deputy General Counsel, Office of General Counsel, 1429 Senate Street, Room 1015, Rutledge Building, Columbia, South Carolina 29201 or e-mail skelly@ed.sc.gov. Comments submitted by November 27, 2006, at 5:00 p.m., shall be submitted to the Board in a summary of public comments and Department responses for consideration at the public hearing.

Preliminary Fiscal Impact Statement: None

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION: R 43-600, Charter Schools Regulation

Purpose: Regulation 43-600, Charter Schools Regulation, is being amended.

Legal Authority: S.C. Code Ann. § 59-40-10, *et seq.* (2004) and 2006 S.C. Acts 274.

Plan for Implementation: The proposed amendments will be posted on the State Department of Education's Web site for review and comment. The amendments will take effect upon approval by the General Assembly and publication in the *State Register*.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: The amendments to this regulation are needed to address the process for handling appeals from the newly formed South Carolina Public Charter School District to the State Board of Education and to create a procedure for local school districts to appeal the decisions regarding the charters issued by the Charter School District, as required by law.

DETERMINATION OF COSTS AND BENEFITS: None

UNCERTAINTIES OF ESTIMATES: None

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: This regulation does not have any effect on the environment or public health.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effect on the environment or public health if this regulation is not implemented.

Statement of Rationale:

2006 S.C. Acts 274 created the South Carolina Public Charter School District. This regulation addresses the procedures for appeals under the Charter School Act. The amendments are necessary to address the process that one goes through in appealing the decision of the Public Charter School District and also adds a process for a local school district to appeal a decision of the Public Charter School District.

A copy of the statement of rationale may be obtained by contacting Shelly Bezanson Kelly, Esquire, Deputy General Counsel, Office of General Counsel, 1429 Senate Street, Room 1015, Rutledge Building, Columbia, South Carolina 29201 or e-mail skelly@ed.sc.gov.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

Document No. 3088
STATE BOARD OF EDUCATION
 CHAPTER 43

Statutory Authority: S.C. Code Ann. Sections 59-5-60 (2004), 59-5-65 (2004), 59-29-10 et seq. (2004)(Supp. 2005), 59-39-10 et seq. (2004)(Supp. 2005), 59-53-1810 (2004), 59-59-10 et seq. (Supp. 2005)

43-234. Defined Program, Grades 9–12

Preamble:

The State Board of Education proposes these amendments to Regulation 43-234, Defined Program, Grades 9–12. R 43-234 is being amended to include provisions of the Education and Economic Development Act of 2005 (EEDA) and the recommendations of the High School Redesign Commission (HSRC).

The notice of drafting was published in the State Register on June 23, 2006.

Section-by-Section Discussion

Title	Defined Program, Grades 9–12. Narrative reworded in alignment with the EEDA.
Section I	Content reorganization moved all of Section III, “Graduation Requirements,” to Section I, “Requirements for Earning a South Carolina High School Diploma.”
Section I(A)	Content reorganization moved Section III(A)(1) to Section I(A). (No changes were made in the 24-unit requirement for a diploma.) Statutory requirement for computer literacy, formerly in Section III(A)(2), was eliminated as a result of the repeal of the School-to-Work Transition Act. Reference to the one-half-unit Keyboarding course, also formerly in Section III(A)(2), was moved to Section II(J). Foreign language requirements for entry into a postsecondary institution, formerly Section III(A)(3), was moved to Section V(C)(7).
Section I(B)	Content reorganization moved Section III(A)(4) to Section I(B). The required examination in American history is clarified as being a classroom test and not the end-of-course exam in social studies.
Section I(C)	Content reorganization moved Section I(A)(5) to Section I(C), with these additions: the date for the phase-in of a science course in which an end-of-course examination is administered is specified; the alternative course sequence for accelerated students was specified.

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- Section I(D) Content reorganization moved Section III(A)(5) to Section I(D). Reworded.
- Section I(E) Content reorganization moved Section III(A)(6) to Section I(E). Reworded.
- Section III(B) “Special Education Minimum Curriculum Requirements,” eliminated in its entirety (those requirements are now antiquated or have been superseded).
- Section II Content reorganization moved Section I(F) to Section II, “Provisions for Schools in the Awarding of High School Credit.”
- Section II(A) Content reorganization moved Section I(F)(1) to Section II(A). Reworded.
- Section II(B) Content reorganization moved Section I(F)(2) to Section II(B). Reworded.
- Section II(C) Section added to specify that the awarding of credit for courses in a proficiency-based system approved by the SDE is now allowed (a proficiency-based system would not require 120 hours of instruction).
- Section II(D) Section added to specify that the awarding of credit for gateway courses is contingent upon the student’s taking the course approved by the school.
- Section II(E) Section added to specify that the districtwide and schoolwide administration of summer programs for credit courses is now allowed.
- Section II(F) Content reorganization combined Section I(F)(3) and Section I(H) as Section II(F). Reworded to specify requirement for prior course approval (new wording eliminates the need to address online courses and correspondence courses separately).
- Section II(G) Content reorganization moved Section I(F)(4) to Section II(G). Reworded.
- Section II(H) Content reorganization moved portions of Section I(E) to Section II(H). (Commingling students with disabilities is no longer considered an innovative approach.)
- Section II(I) Section added. Course components required for the PE diploma-credit unit are specified.
- Section II(J) Content reorganization moved the Keyboarding reference in Section III(A)(2) to Section II(J). Reworded.
- Section II(K) Section added. (The American Sign Language course is allowed to satisfy the foreign language unit requirement for a diploma, beginning in 2008.)
- Section II(L) Section added to specify that schools may award credit for dual credit courses under the district’s dual credit arrangement.
- Content reorganization moved Section I(F)(5) to Section IV, “Transfer Students.”
- Section III Content reorganization moved all of Section I(G) to Section III, “Dual Credit Arrangement,” which was edited in its entirety. Section III(B) was changed to

allow a three-semester-hour college course to transfer as one unit of credit (rather than one-half unit).

Section IV Content reorganization moved Section I(F)(5) to Section IV, which defines a transfer student and allows transfer credit to be applied toward a diploma. (SBE Regulation 43-273 addresses the transfer process.)

Section V Content reorganization moved Section I, “Curriculum, Grades 9–12,” to Section V, “Instructional Program.” New introduction adds EEDA direction for the instructional program.

Section V(A) Content reorganization moved Section I(A)(1) to Section V(A), which specifies required and recommended courses under specific subject areas. (The courses Communication for the Workplace 3 and 4 were eliminated from the list. The course Earth Science is no longer required but recommended.)

Section V(B) New section on career clusters.

Section V(C) Content reorganization merged Section I(A)(2)–(8) and Section I(B) into Section V(C)(1)–(10). (The subsections were reworded and are alphabetized by subject.)

Section VI Content reorganization added Section VI, “Other Program Requirements,” which now includes three subsections formerly in Section I (“Guidance Program,” “Library/Media Program,” and “Length of School Day”) as well as the entirety of Section II, “Class Size, Grades 9–12.”

Section VI(A) Content reorganization moved Section I(C)(1) to Section VI(A), “Guidance Program.” (The comprehensive guidance program remains a requirement. Identifying grade-specific standards and referencing individual graduation plans are necessitated by the EEDA.)

Section I(C)(2)–(3), which related to the School-to-Work Act, was deleted.

Section VI(B) Content reorganization moved Section I(D) to Section VI(B). Reworded.

Content reorganization moved portions of Section I(E), “Innovative Approaches,” to Section II(H)(1)–(3).

Section VI(C) Content reorganization moved Section I(I) to Section VI(C). Subsections 2 and 3 in Section I(I) were deleted. Remaining sections were reworded.

Section VI(D) Reworded.

Section VI(E) Content reorganization moved Section VI to Section VI(E). (The list of specific regulations was eliminated in favor of identifying the location of all SBE regulations.)

Section VII Section added so that all reporting requirements are stated in a single place.
Section VII(A) Content reorganization moved Section IV to Section VII(A). Section retitled “High School Completers.” Reworded.

Section VII(B) Content reorganization moved Section V to Section VII(B). Reworded.

Subsection originally titled “Additional State Board of Education Regulations” moved to Section VI(E), “Additional Regulatory Requirements.”

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- Section VII(C) Content reorganization moved Section VII to Section VII(C). Reworded. New student demographic categories were added.
- Section VII(D) Section added to enable the SDE to carry out data collection mandates.
- Section VIII Reworded. Statutory requirements for makeup days added.

Notice of Public Hearing and Opportunity for Public Comment:

Interested persons may submit comments to Lucinda Saylor, Deputy Superintendent, Division of Curriculum Services and Assessment, State Department of Education, 1429 Senate Street, Room 805, Rutledge Building, Columbia, South Carolina 29201. To be considered, comments must be received no later than 5:00 p.m., on November 27, 2006, the close of the drafting comment period.

Interested members of the public and regulated community are invited to make oral or written comments on the proposed regulation at the public hearing to be held by the State Board of Education during its meeting on December 13, 2006, at 9:30 a.m. at the Rutledge Building, State Department of Education, Columbia, South Carolina. Persons desiring to make oral comments at the hearing are asked to limit their statements to five minutes and are asked to provide, as a courtesy, written copies of their presentation for the record.

Preliminary Fiscal Impact Statement: There will be no cost to the state or its political subdivisions.

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION: R 43-234, Defined Program, Grades 9–12.

Purpose: R 43-234 is being amended to include provisions of the EEDA and the recommendations of the HSRC.

Legal Authority: S.C. Code Ann. Sections 59-5-60 (2004), 59-5-65 (2004), 59-29-10 et seq. (2004)(Supp. 2005), 59-39-10 et seq. (2004)(Supp. 2005), 59-53-1810 (2004), 59-59-10 et seq. (Supp. 2005)

Plans for Implementation: The proposed amendments will be posted on the State Department of Education's Web site for review and comments. The amendments will take effect upon approval by the General Assembly and publication in the State Register. The State Department of Education will distribute copies of the approved regulation to school district personnel.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: Regulation 43-234 is being amended to include provisions of the EEDA and the recommendations of the HSRC.

DETERMINATION OF COSTS AND BENEFITS: None

UNCERTAINTIES OF ESTIMATES: None

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH: The proposed amendments of the regulation will have no effect on the environment and public health.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effect on the environment and public health if these amendments are not implemented.

Statement of Rationale:

A statement of the rationale for these amendments to R 43-234 is available from the office of the Deputy Superintendent, Division of Curriculum Services and Assessment, State Department of Education, 1429 Senate Street, Room 805, Rutledge Building, Columbia, South Carolina 29201.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

Document No. 3083

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**CHAPTER 61**

Statutory Authority: S.C. Code Section 48-1-10 *et seq.*

Regulation 61-62, *Air Pollution Control Regulations and Standards*, and the South Carolina State Implementation Plan

Preamble:

On March 10, 2005, and March 15, 2005, the United States Environmental Protection Agency (EPA) finalized two rules known as the “Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule),” (also referred to as CAIR) and the “Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units,” (also referred to as CAMR), respectively.

CAIR was published in the *Federal Register* on May 12, 2005 [70 FR 25162]. This rule affects 28 states and the District of Columbia. In CAIR, the EPA found that South Carolina is one of the 28 states that contributes significantly to nonattainment of the National Ambient Air Quality Standards (NAAQS) for fine particles (PM_{2.5}) and/or 8-hour ozone in downwind states. The EPA is requiring these states to revise their State Implementation Plans (SIPs) to reduce emissions of sulfur dioxide (SO₂) and/or nitrogen oxides (NO_x). Sulfur dioxide is a precursor to PM_{2.5} formation, and NO_x is a precursor to both PM_{2.5} and ozone formation. The EPA has determined that electric generating units (EGUs) in South Carolina contribute to nonattainment of PM_{2.5} and 8-hour ozone in downwind states.

CAMR was published in the *Federal Register* on May 18, 2005 [70 FR 28606]. This rule establishes standards of performance for mercury for new and existing coal-fired electric utility steam generating units, as defined in Clean Air Act (CAA) section 111(d). This amendment to the CAA establishes a mechanism by which mercury emissions from new and existing coal-fired Utility Units are capped at specified, nation-wide levels. States must adopt standards of performance for mercury emissions reductions by submitting an implementation plan, referred to as a “111(d) Plan” which requires a state rulemaking action followed by submittal to the EPA for review and approval.

EPA coordinated the concurrent release of CAMR with CAIR because a “co-benefit” of implementing the mechanisms for controlling SO₂ and NO_x emissions as required by CAIR is the reduction of mercury emissions. Coordinating the development of CAMR with CAIR allows states to take advantage of the mercury emissions reductions that can be achieved by the air pollution controls designed and installed to reduce SO₂ and NO_x.

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The EPA has established a schedule for states to submit their SIP and 111(d) Plan. South Carolina must submit its SIP under CAIR to EPA by September 11, 2006, and the 111(d) Plan under CAMR to EPA by November 17, 2006. Due to our lengthy regulation development process, the Department has informed the EPA that our SIP and 111(d) plan will not be submitted to them by their deadlines. The EPA has already finalized a Federal Implementation Plan (FIP) for states not meeting the CAIR deadline. However, the EPA has assured the Department that it will withdraw its FIP when the Department finalizes and submits its SIP and 111(d) Plan to them.

The proposed amendments to Regulation 61-62, *Air Pollution Control Regulations and Standards*, are necessary to comply with Federal rules. The Department has used its discretion to make the Clean Air Mercury Rule more stringent than the Federal rule by potentially retiring unused mercury allowances instead of providing them to affected utilities. Therefore, legislative review will be required.

A Notice of Drafting for these proposed changes was published in the *State Register* on July 22, 2005. A second Notice of Drafting extending the drafting comment period was published in the *State Register* on February 24, 2006.

Discussion of Proposed Revisions

R.61-62.60, South Carolina Designated Facility Plan And New Source Performance Standards

SECTION CITATION:	EXPLANATION OF CHANGE
R. 61-62.60, Subpart Da	R. 61-62.60, Subpart Da, has been amended to incorporate by reference Federal amendments.
R. 61-62.60, Subpart HHHH	All sections except 60.4140, 60.4141, and 60.4142 have been incorporated by referencing the Federal Clean Air Mercury Rule.
R. 61-62.60.4102	A definition for "utility" has been added.
R. 61-62.60.4140(a)	The table in the Federal rule indicating the South Carolina Trading Budget has been modified to a text format to include only South Carolina's annual budget.
R. 61-62.60.4140(c)	This section has been added to explain the "Public Health Set-aside."
R. 61-62.60.4140(c)(5)	This paragraph creates the possibility of a mercury study funded by the sale of allowances from the Public Health Set-aside.
R. 61-62.60.4141	This section has been revised to reflect the timing for a four-year allocation period and the dates for submission of the allocations to the Administrator.
R. 61-62.60.4142	This section has been revised to explain how allowances will be allocated and what information will be used to calculate allocations.

Regulation 61-62.72, Acid Rain

SECTION CITATION:	EXPLANATION OF CHANGE
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R. 61-62.72 The format of this section has been revised to incorporate the Federal rules by reference. It also includes the revisions in subparts A and B that are a result of the Federal Clean Air Interstate Rule.

R.61-62.96, Nitrogen Oxides (NO_x) Budget Trading Program General Provisions

SECTION CITATION:	EXPLANATION OF CHANGE
Title	The title has been changed to “NITROGEN OXIDES (NO _x) AND SULFUR DIOXIDE (SO ₂) BUDGET TRADING PROGRAM GENERAL PROVISIONS” to reflect the addition of the SO ₂ trading program into 61-62.96.
R. 61-62.96	Subparts A through I of section 96 are being repealed and replaced by subparts AA through IIII. All subparts except subpart EE and subpart EEEE have been incorporated by referencing the Federal Clean Air Interstate Rule.
R. 61-62.96.140	The table in the Federal Clean Air Interstate Rule indicating the South Carolina NO _x Trading Budget has been modified to a text format to include only South Carolina’s annual budget.
R. 61-62.96.141(a)	The paragraph has been revised to reflect the timing in which the Department must submit initial CAIR NO _x allowance allocations to the EPA for specific control periods.
R. 61-62.96.141(b)	The paragraph has been revised to reflect the timing in which the Department must submit subsequent CAIR NO _x allowance allocations to the EPA, along with the control periods covered by the submission.
R. 61-62.96.142(a)	The methodology for the determination of allowances was modified to utilize the most current heat input data available, to establish the years from which the heat input data are to be used to determine allowances, and to revise the heat input adjustments from three categories to two categories.
R. 61-62.96.142(b) and (c)	The new unit set-aside amount was reduced from 5 percent to 3 percent for each control period, starting in 2009.
R. 61-62.96.143(a)	The table in the Federal Clean Air Interstate Rule indicating the South Carolina NO _x compliance supplement pool has been modified to a text format to include only South Carolina’s annual budget.
Title	The title “CAIR SO ₂ Trading Program” has been added before Subpart AAA.
R. 61-62.96 Subparts AAA – III	The section has been added to address the CAIR SO ₂ Trading Program General Provisions. This language incorporates the Federal Clean Air Interstate Rule by reference.

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- Title The title “CAIR NO_x Ozone Season Trading Program” has been added before Subpart AAAA.
- R. 61-62.96.302(42) A definition of “electric generating unit” or “EGU” has been added.
- R. 61-62.96.302(59) A definition of “non-electric generating unit” or “non-EGU” has been added.
- R. 61-62.96.304(a)(1)(ii) This paragraph was added to include non-electric generating units currently subjected to the NO_x SIP Call. The NO_x SIP Call trading program will be discontinued upon the initiation of the NO_x trading program for CAIR.
- R. 61-62.96.340(a) The NO_x Ozone Season Trading Budget in EPA’s model rule was revised to include only the budget for South Carolina.
- R. 61-62.96.340(b) This paragraph was added to include the NO_x Ozone Season Trading Budget from the NO_x SIP Call for non-EGUs.
- R. 61-62.96.341(a)(1) The paragraph has been revised to reflect the timing in which the Department must submit initial CAIR NO_x allowance allocations to the EPA for specific control periods.
- R. 61-62.96.341(a)(2) The paragraph has been revised to reflect the timing in which the Department must submit subsequent CAIR NO_x allowance allocations to the EPA, along with the control periods covered by the submission.
- R. 61-62.96.341(b) The paragraph has been added to address the timing in which the Department must submit CAIR NO_x allowance allocations for non-EGUs.
- R. 61-62.96.342(a)(1) The methodology for the determination of allowances was modified to utilize the most current heat input data available, to establish the years from which the heat input data are to be used to determine allowances, and to revise the heat input adjustments based on fuel types from three categories to two categories.
- R. 61-62.96.342(a)(2) A statement indicating that the Department would obtain the heat input data from the EPA’s Clean Air Markets Division was added. The sections stating that the heat input would be obtained from data reported to the Department and addressing an alternate method for calculating heat input were deleted.
- R. 61-62.96.342(b), (c) and (d) The new source set-aside amount was reduced from 5 percent to 3 percent for each control period, starting in 2009.
- R. 61-62.96.342(e) This section was added to address the incorporation of non-EGUs into the CAIR NO_x Ozone Season trading program. It explains how allowances will be determined and establishes a new source set-aside for non-EGUs.

Notice of Staff Informational Forum:

Staff of the Department of Health and Environmental Control invite interested members of the public to attend a staff-conducted informational forum to be held on November 27, 2006 at 10:00 a.m. in room number 2395 at the Department of Health and Environmental Control, 77 Business Center, 101 Business Park Boulevard, Columbia, SC. The purpose of the forum is to receive comments from interested persons on the proposed amendments to Regulation 61-62, *Air Pollution Control Regulations and Standards*.

Interested persons are also provided an opportunity to submit written comments to L. Nelson Roberts, Jr. at the South Carolina Department of Health and Environmental Control, Bureau of Air Quality, 2600 Bull Street, Columbia, SC 29201. To be considered, comments must be received no later than 5:00 p.m. on November 27, 2006. Comments received shall be submitted to the Board in a Summary of Public Comments and Department Responses.

Copies of the proposed regulation for public notice and comment may be obtained by contacting L. Nelson Roberts, Jr. at the South Carolina Department of Health and Environmental Control, Bureau of Air Quality, 2600 Bull Street, Columbia, SC 29201, or by calling (803) 898-4122.

Notice of Public Hearing and Opportunity for Public Comment Pursuant to S.C. Code Sections 1-23-110 and 1-23-111:

Interested members of the public and regulated community are invited to comment on the proposed amendments to Regulation 61-62, *Air Pollution Control Regulations and Standards* at a public hearing to be conducted by the Board of Health and Environmental Control at its regularly scheduled meeting on January 11, 2007. The public hearing is to be held in room 3420 (Board Room) of the Commissioner’s Suite, third floor, Aycock Building of the Department of Health and Environmental Control, 2600 Bull Street, Columbia, SC. The Board meeting commences at 10:00 a.m. at which time the Board will consider items on its agenda in the order presented. The order of presentation for public hearings will be noted in the Board’s agenda to be published by the Department twenty-four hours in advance of the meeting. Persons desiring to make oral comments at the hearing are asked to limit their statements to five minutes or less, and as a courtesy are asked to provide written copies of their presentation for the record.

Preliminary Fiscal Impact Statement:

Existing staff and resources will be utilized to implement these amendments.

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:

Purpose: On March 10, 2005, and March 15, 2005, the United States Environmental Protection Agency (EPA) finalized two rules known as the “Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule),” (also referred to as CAIR) and the “Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units,” (also referred to as CAMR), respectively.

CAIR was published in the *Federal Register* on May 12, 2005 [70 FR 25162]. This rule affects 28 states and the District of Columbia. In CAIR, the EPA found that South Carolina is one of the 28 states that

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contributes significantly to nonattainment of the National Ambient Air Quality Standards (NAAQS) for fine particles (PM_{2.5}) and/or 8-hour ozone in downwind states. The EPA is requiring these states to revise their SIPs to reduce emissions of sulfur dioxide (SO₂) and/or nitrogen oxides (NO_x). Sulfur dioxide is a precursor to PM_{2.5} formation, and NO_x is a precursor to both PM_{2.5} and ozone formation. The EPA has determined that electric generating units (EGUs) in South Carolina contribute to nonattainment of PM_{2.5} and 8-hour ozone in downwind states.

CAMR was published in the *Federal Register* on May 18, 2005 [70 FR 28606]. In accordance with Section 111 of the Clean Air Act, this rule establishes standards of performance for mercury for new and existing coal-fired EGUs that states must adopt and requires EPA review and approval. CAMR establishes a cap and trade program for mercury emissions from new and existing coal-fired EGUs that states can adopt as a means of complying with the Federal requirements. If a state fails to submit a satisfactory plan, referred to as a 111(d) Plan, EPA has the authority to prescribe a plan for the state.

EPA coordinated the concurrent release of CAMR with CAIR because a “co-benefit” of implementing the mechanisms for controlling SO₂ and NO_x emissions as required by CAIR is the reduction of mercury emissions. Coordinating the development of CAMR with CAIR allows states to take advantage of the mercury emissions reductions that can be achieved by the air pollution controls designed and installed to reduce SO₂ and NO_x.

The EPA has established a schedule for states to submit their SIP and 111(d) Plan. South Carolina must submit its SIP under CAIR to EPA by September 11, 2006, and the 111(d) Plan under CAMR to EPA by November 17, 2006. Due to our lengthy regulation development process, the Department has informed the EPA that our SIP and 111(d) plan will not be submitted to them by their deadlines. The EPA has already finalized a Federal Implementation Plan (FIP) and 111(d) Plan for states not meeting the deadline. However, the EPA has assured the Department that it will withdraw its FIP and 111(d) Plan when the Department finalizes and submits its SIP and 111(d) Plan to them.

Legal Authority: The legal authority for Regulation 61-62 is Section 48-1-10 et seq., S.C. Code of Laws.

Plan for Implementation: The proposed amendments will take effect upon approval by the Board of Health and Environmental Control and the General Assembly, and publication in the *State Register*. The proposed amendments will be implemented by providing the regulated community with copies of the regulation.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

The proposed regulation is needed and is reasonable because it fulfills the Department’s obligation to submit revisions to the State Implementation Plan (SIP) incorporating the finalized CAIR published by EPA on May 12, 2005, and to submit a 111(d) plan incorporating the finalized CAMR published by EPA on May 18, 2005. Most of EPA’s finalized rules were incorporated; however, the Department is exercising its discretion by proposing options to the model rule that have been negotiated with stakeholders and are therefore better suited to South Carolina’s needs.

DETERMINATION OF COSTS AND BENEFITS:

These revisions are being made to comply with a Federal mandate. The Department has worked with stakeholders to determine the best approach to implementing these regulations. For example, the Federal CAIR proposes an allowance reallocation schedule every five years, with the initial heat input at the beginning of the rule implementation used in the determination of allowances received. To be more responsive to changes in the market, the Department and the affected regulated community agreed on a four-year allocation schedule that utilizes the most current heat input data to determine the allowances received. This allows new

facilities to enter into the programs more quickly, provides time for the regulated community to be responsive to changes, and considers changes in the regulated community's need for the allowances.

The Federal CAMR provides for a budget of mercury allowances that are distributed to coal-fired utilities in the State free of charge. These allowances can be sold or traded to other utilities participating in the EPA's cap-and-trade program, or they can be used by the utility to which they were given. Because South Carolina was allocated more allowances than historical data indicate that our utilities need and sixty water bodies in our State have fish consumption advisories because of mercury pollution, we have proposed establishing a "Public Health Set-aside" whereby twenty (20) percent of the allowances provided to each utility will be held in a special account. Each utility will have access to those allowances during the calendar year in which they were assigned. Any remaining unused allowances at the end of a calendar year would be held in the account until 2018. In 2018 and thereafter, the allocation of mercury allowances for each utility is further reduced. The allowances for each utility that have accumulated in the Public Health Set-aside account will be made available to the utility if emissions exceed the reduced allocations for the calendar years 2018, 2019, 2020, and 2021. At the end of the 2021 control period, any unused allowances in the utility's Public Health Set-aside account will be permanently retired.

The Department estimates that approximately 11.2% of the allowances in the State mercury budget for the 2010 through 2017 control periods will be retired. These are allowances that the regulated utilities would have received under the Federal CAMR. Since the mercury allowances are currently valued at approximately \$2000.00 per allowance, this will result in a cost to the regulated utilities above and beyond the Federal CAMR. The estimated allowances to be retired represents approximately \$33,556,480.00 in money that could either be saved by the utilities by not having to buy allowances to meet compliance or by selling the extra allowances they do not need to generate revenue. While this seems like a great deal of money, the allowances considered in determining this amount are to be allocated and used over a period of time of twelve years or more. Considering this, the value of the allowances expected to be retired represents approximately \$2,800,000.00 each year. In addition, the nitrous oxide and sulfur dioxide emissions control equipment installed at coal-fired utilities as a requirement of CAIR also remove a significant amount of mercury. This co-benefit will result in fewer mercury allowances being needed by the utilities, and the Department expects many of the units with control technology to use significantly less mercury allowances than the Department allocates. These mercury allowances can be banked by the utilities for future use or sold to generate revenue.

While the rule to comply with the Federal CAMR that is being proposed by the Department will result in increased costs to the utilities, the Department believes that the benefits outweigh the costs. Mercury in South Carolina's waterways continues to be a major concern. Currently, sixty water bodies in the State have mercury fish consumption advisories. An advisory suggests a safe limit, or amount, of fish from the water body that a person can consume without suffering any harmful effects. When mercury enters the water, it can be changed to methylmercury by bacteria, which are consumed by larger organisms. The methylmercury accumulates and its concentration increases as it moves up the food chain. Eventually, the larger fish which are caught and eaten by humans contain large amounts of methylmercury. Methylmercury can cause harmful effects in all people, but unborn and young children are most susceptible because the methylmercury affects the development of the nervous system and the brain. It can cause learning and motor skill disabilities.

UNCERTAINTIES OF ESTIMATES:

There are no uncertainties of estimates relative to the costs to the State or its political subdivisions. Refer to the above paragraph for cost estimates for the regulated community. Existing staff and resources will be utilized to implement these amendments.

EFFECT ON ENVIRONMENT AND PUBLIC HEALTH:

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The proposed revisions are designed to significantly reduce the emissions of nitrous oxides, sulfur dioxides, and mercury. Nitrous oxides contribute to the formation of ozone and particulate matter, and sulfur dioxide contributes to the formation of particulate matter. Airborne mercury falls to the earth and (ends up) in bodies of water, where it can be converted into methylmercury. Methylmercury is consumed by fish, which are eaten by people. All of the pollutants (nitrous oxides, sulfur dioxide, and mercury) have been shown to have detrimental effects on the health of humans. The significant reductions in the emissions of these pollutants will protect the health of the residents of South Carolina.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATIONS ARE NOT IMPLEMENTED:

EPA has determined that the pollutants addressed by these rules cause an overwhelming detrimental effect on the health of humans. Ozone and particulate matter causes respiratory problems and illnesses, while mercury causes neurological disorders and has a greater affect on unborn babies and children. The EPA and the State believe that the environment and public health will benefit from implementing these rules to reduce the emissions of these pollutants.

STATEMENT OF RATIONALE:

These revisions are being promulgated in order to comply with a Federal mandate requiring states to lower emissions of nitrous oxides, sulfur dioxide, and mercury. Scientific studies have shown that nitrous oxides are a precursor to ozone and particulate matter, while sulfur dioxide is a precursor to particulate matter, and that these pollutants have serious negative health consequences to the public. These include lung damage, aggravated asthma, and even death. The pathway of mercury from the combustion of coal to our waterways, to fish, and finally to humans has been well documented. When humans consume fish containing methylmercury, the methylmercury is almost completely absorbed into the bloodstream and distributed to all tissues, including the brain. In pregnant women, the methylmercury can be passed to the developing fetus, where it can negatively affect brain development. In young children, it can cause problems with verbal memory, language skills, motor function, attention span, and visual-spatial abilities. The experience and professional judgment of the Department's staff were relied upon in developing the regulation. The Department is proposing some additional requirements that go beyond the scope of the Federal CAMR. This will result in an increased cost to the regulated community beyond that proposed in the Federal CAMR; however, the Department believes the public health benefits achieved by the further reduction of mercury emissions to the environment outweigh the increased costs to the regulated community.

In 2006, fish advisories for mercury were issued for sixty water bodies in the State. These advisories were issued because samples of fish tissue taken from these water bodies repeatedly showed elevated levels of methylmercury that could be harmful if consumed in quantities that exceed the amount recommended by the advisory. Decreasing emissions of mercury from coal-fired utilities in South Carolina should reduce the amount of mercury that affects the waterways of the State and should reduce the number of fish consumption advisories issued.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

Document No. 3084
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
CHAPTER 61

Statutory Authority: S.C. Code Sections 44-1-180; 1-23-10; -110

R.61-55. Septic Tank Site Evaluation Fees

Preamble:

Fees for septic tank site evaluations were initiated in the mid-1980's to supplement state appropriations; the fees were never intended to replace appropriated funds. These fees were set at an initial fee rate of \$40.00 per applicant; they were increased to \$60.00 per applicant in 1987. They were increased to \$100 in 1999. There have been no subsequent fee increases; nor have there been subsequent appropriations to this activity.

Septic tank permits issued have increased from an annual average of 18,000 in 1987 to an annual average of 24,500 for the past 5 years. There has been no increase in staff during this same period. While response times for septic tank permit applications fluctuate throughout the year, the average response time has increased three-fold during this same period. Budget reductions, escalating operating costs, increased personnel costs, and increased demand for services have diminished the program's ability to continue to function at current levels. Additional funding is needed to continue operation of the program in a timely, effective, and efficient manner. Proposed R.61-55, *Septic Tank Site Evaluation Fees*, incorporates a fee increase from \$100.00 to \$150.00. A Notice of Drafting was published in the *State Register* on August 25, 2006. See Statement of Need and Reasonableness herein.

Notice of Staff Informational Forum:

Staff of the Department of Health and Environmental Control invite interested members of the public and regulated community to attend a staff-conducted informational forum to be held on November 21, 2006, at 10:00 a.m. at Peeples Auditorium of the South Carolina Department of Health and Environmental Control, 2600 Bull Street, Columbia, South Carolina. The purpose of the forum is to answer questions, clarify issues and receive comments from interested persons on the proposed regulation. Comments received shall be considered by staff in formulating the final staff proposal for R.61-55 for submission to the Board of Health and Environmental Control for the Board public hearing scheduled for December 14, 2006, pursuant to S.C. Code Section 1-23-110 and -111 as noticed below.

Interested persons are also provided an opportunity to submit written comments to the staff forum by writing to Mr. H. Michael Longshore, Division of General Sanitation, Bureau of Environmental Health, S. C. Department of Health and Environmental Control, 2600 Bull St., Columbia, S.C. 29201. Written comments must be received by 4:00 p.m. on November 28, 2006. Comments received for the forum and comment period by the deadline shall be submitted in a Summary of Public Comments and Department Responses for the Board's consideration at the public hearing.

Copies of the text of the proposed regulation may be obtained by contacting Mr. Longshore at the above address.

Notice of Public Hearing and Opportunity for Public comment Pursuant to S.C. Code Sections 1-23-110 and 1-23-111

Interested members of the public and regulated community are invited to make oral or written comments on the proposed regulation at a public hearing to be conducted by the Board of Health and Environmental Control at its regularly-scheduled meeting on December 14, 2006. The public hearing will be held in the Board Room of the Commissioner's Suite, Third Floor, Aycock Building of the Department of Health and Environmental

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Control at 2600 Bull Street, Columbia, S.C., The Board meeting commences at 10:00 a.m. at which time the Board will consider items on its agenda in the order presented. The Board's agenda will be published by the Department ten days in advance of the meeting. Persons desiring to make oral comments at the hearing are asked to limit their statements to five minutes and, as a courtesy, are asked to provide written comments of their presentations for the record.

Interested persons are also provided an opportunity to submit written comments on the proposed regulation revision for public comment by writing to Mr. H. Michael Longshore, General Sanitation Branch, Division of Environmental Health, S. C. Department of Health and Environmental Control, 2600 Bull St., Columbia, S.C. 29201. Written comments must be received no later than 4:00 p.m. on November 28, 2006. Comments received by the deadline date shall be considered by staff in formulating the final proposed repeal for public hearing on December 14, 2006, as noticed above. Comments received by the deadline will be submitted in a Summary of Public Comments and Department Responses for the Board's consideration at the public hearing.

Copies of the final proposed regulation for public hearing before the DHEC Board may be obtained by contacting Mr. Longshore at the above address.

Preliminary Fiscal Impact Statement:

The Department estimates there will be no new costs imposed on the State or its political subdivisions by this regulation. There will be an increase from \$100 per applicant to \$150 per applicant for site evaluations.

Preliminary Fiscal Impact Statement:

The Department estimates there will be no new costs imposed on the State or its political subdivisions by this regulation. There will be an increase from \$100 per applicant to \$150 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: R.61-55, Septic Tank Site Evaluation Fees

Purpose: The purpose of this action is revise R.61-55 to incorporate a necessary fee increase into the regulation.

Authority: South Carolina Code Section 44-1-180

Plan for Implementing: Upon approval by the Board of Health and Environmental Control and the S.C. General Assembly, and publication in the *State Register*, revised R.61-55 will be immediately implemented.

DETERMINATION OF NEED AND REASONABLENESS OF THE PROPOSED REGULATION REVISION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFIT: Escalating operational costs and the lack of additional appropriated funds have rendered this \$100 fee inadequate for the program to continue functioning in a responsive and timely manner. This proposed regulation revision incorporates a fee increase to cover the increased cost of providing this service. This will provide opportunity for public comment and input into the proposed regulation revision.

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 \$100 per applicant to \$150 per applicant for site evaluations.

Benefit: The public will have an opportunity for input into the revision of 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 in a timely, effective and efficient manner.

STATEMENT OF RATIONALE: The determination to revise this regulation was in response to the need for additional resources to operate this program in a timely, effective and efficient manner.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

Document No. 3092
DEPARTMENT OF LABOR, LICENSING AND REGULATION
BOARD OF ACCOUNTANCY
CHAPTER 1

Statutory Authority: 1976 Code Sections 40-1-70 and 40-2-70

Preamble:

The Board of Accountancy is proposing to repeal existing Regulations 1-01 through 1-21 and add new Regulations 1-01 through 1-12 to incorporate changes made by 2004 Act 289 in the requirements for licensure of Certified Public Accountants and Accounting Practitioners and in the requirements for registration of Accounting Firms.

Section by Section Discussion:

The following is a section by section discussion of the amendments proposed by the Board of Accountancy.

Regulation 1-01. General requirements for licensure as a CPA.

This regulation clarifies the relationship between completing qualifying education and beginning qualifying experience.

Regulation 1-02. Examinations.

This regulation establishes a procedure for requesting accommodations for the taking of the examination. Additionally, this regulation provides for the Board to designate an acceptable ethics examination.

Regulation 1-03. Practice Privileges.

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This regulation outlines the qualifications for registering individuals and firms from another state.

Regulation 1-04. Reciprocity.

This regulation establishes a simplified procedure for certified public accountants licensed and in good standing in another jurisdiction to be licensed in South Carolina.

Regulation 1-05. Firm registration.

This regulation establishes standards for the resident manager of a registered firm.

Regulation 1-06. Reinstatement.

This regulation establishes standards for demonstrating a period of supervised work to establish continued competency after a license has been inactive more than three years.

Regulation 1-07. Return of Certificate.

This regulation requires that a licensee who has allowed a license to lapse must return the certificate to the Board.

Regulation 1-08. Continuing Professional Education.

This regulation sets standards for a variety of Continuing Professional Education programs, including distance-learning programs, determined to be acceptable for demonstration of continuing competency as a condition for renewal of licensure.

Regulation 1-09. Peer Review.

This regulation sets standards for mandatory peer review. Peer review provides assurance to the public that firms are adhering to professional standards in the delivery of professional services.

Regulation 1-10. Professional standards.

This regulation requires licensees to adhere to the professional and ethical standards established by the American Institute of Certified Public Accountants.

Regulation 1-11. Application for licensure as an Accounting Practitioner.

This regulation clarifies the acceptable education and examination for licensure.

Regulation 1-12. Safeguarding client files when a licensee is incapacitated, disappears, or dies.

This regulation is modeled on Lawyer Discipline Rule 31 and designed to protect the public interest in unusual circumstances where client records might otherwise be lost and client interests might otherwise be jeopardized.

Notice of Public Hearing and Opportunity for Public Comment:

Should a hearing be requested pursuant to Section 1-23-110(b) of the 1976 Code of Laws of South Carolina, as amended, such hearing will be conducted at the Administrative Law Court at 10:00 a.m. on December 18, 2006. Written comments may be directed to Doris Cubitt, CPA, Administrator, Board of Accountancy, Department of Labor, Licensing and Regulation, Post Office Box 11329, Columbia, South Carolina 29211-1329, no later than 5:00 p.m., December 4, 2006.

Preliminary Fiscal Impact Statement:

There will be no additional cost incurred by the State or any political subdivision from implementation of these regulations.

Statement of Need and Reasonableness:

DESCRIPTION OF REGULATION:

Purpose: To amend the regulations governing accountancy to conform to 2004 Act 289 and to current federal regulations.

Legal Authority: Statutory Authority: 1976 Code Sections 40-1-70 and 40-2-70.

Plan for Implementation: Administratively, the Board will see that these provisions are implemented by informing the applicants through written and oral communications. In association with the South Carolina Association of Certified Public Accountants, the Board will sponsor regional information sessions on the proposed peer review program. The Board will post the answers to frequently asked questions at www.llr.state.sc.us/pol/accountancy.

DETERMINATION OF NEED AND REASONABLENESS BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

These regulations need to be amended in order to avoid conflicts with 2004 Act 289 and to improve the portability of South Carolina licenses for Certified Public Accountants.

DETERMINATION OF COSTS AND BENEFITS:

There will be no additional cost incurred by the State or its political subdivisions.

UNCERTAINTIES OF ESTIMATES:

There are no uncertainties of estimates concerning these regulations.

EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH:

There will be no direct detrimental effect on the environment and public health.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED:

There will be no direct detrimental effect on the environment and public health of this State if the regulations are not implemented in this State.

Statement of Rationale:

The state regulations for accountancy are amended to incorporate changes made by 2004 Act 289 in the requirements for licensure of Certified Public Accountants and Accounting Practitioners and in the requirements for registration of Accounting Firms. All existing Regulations 1-01 to 1-21 are repealed and the following regulations are promulgated to take their place.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

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Document No. 3085

DEPARTMENT OF NATURAL RESOURCES

CHAPTER 123

Statutory Authority: S.C. Code Sections 50-15-30, 50-15-40, 50-15-50 and 50-15-70

Preamble:

The South Carolina Department of Natural Resources is proposing to amend the existing regulation that sets the composition of the Non-Game and Endangered Species list for South Carolina. The following is a section-by-section summary of the proposed changes and additions:

These proposed regulatory changes amend Chapter 123 Sections 150, 150.2, 151.1 and 151.2.

In Section 123-150 the Eastern Indigo Snake is deleted from the list and the name of the Zigzag Salamander is changed to Webster's Salamander.

In Section 123-150.2 the Southern Hognose Snake is added to the state list of Non-game Wildlife in Need of Management.

In Section 123-151.1 the reporting time for Spotted Turtle permits is changed from 1 year to 5 years.

In Section 123-151.2 Regulations governing the take, possession and disposition of Southern Hognose Snakes are provided.

Notice of Public Hearing and Opportunity for Public Comment:

Should a hearing be requested pursuant to Section 1-23-110(b) of the 1976 Code, as amended, such hearing will be conducted at 1000 Assembly Street on December 15, 2006, at 10:00 am in room 335, third floor, Rembert C. Dennis Building. Written comments may be directed to Breck Carmichael, Deputy Director, Wildlife & Freshwater Fisheries Division, Department of Natural Resources, Post Office Box 167, Columbia, SC 29202.

Fiscal Impact Statement:

This amendment of Regulation 123-150 will not result in any fiscal impact to the state or the department.

Statement of Rational:

Rationale for the formulation of these regulations is based on over 30 years of experience by SCDNR in managing the state's Non-Game wildlife and its Endangered Species. The department draws upon expertise in these matters from within the agency and from experts outside the agency. Research and survey documents are on file with the Wildlife Section of SCDNR, 1000 Assembly Street, Columbia.

Statement of Need and Reasonableness:

The statement of need and reasonableness was determined based on staff analysis pursuant to S.C. Code Sections 1-23-115(C) (1) through (3) and (9) through (11).

1. DESCRIPTION OF THE REGULATION:

Purpose: These regulations amend Chapter 123 Sections 150, 150.2, 151.1 and 151.2 to clarify and update taxonomic and conservation status changes and address management needs for selected species.

Legal Authority: Under Sections 50-15-30, 50-15-40, 50-15-50 and 50-15-70 of the S.C. Code of Laws, the Department of Natural Resources has jurisdiction over establishment of a list of Non-Game Wildlife and Endangered Species in South Carolina, changes to these lists as deemed necessary, and management of these species as deemed necessary.

Plan for Implementation: Once the regulation has been approved by the General Assembly, the public will be notified through news releases and other Department media outlets and publications.

2. DETERMINATION OF NEED AND REASONABLENESS OF THE REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

The conservation status of wildlife species in South Carolina may change as a result of habitat loss and other environmental or cultural factors. The taxonomic status of wildlife species in South Carolina may change as a result of current research. As such the department is obligated to track and assess these changes and reflect them in proposed regulatory changes. The benefit of such actions to the state is an updated list of Non-Game wildlife and Endangered species that is reflective of current conservation and taxonomic status changes.

3. DETERMINATION OF COSTS AND BENEFITS:

Implementation of the proposed regulation will not require any additional costs to the state.

9. UNCERTAINTIES OF ESTIMATES:

Staff does not anticipate any increased costs with the promulgation of this regulation. Accordingly, no costs estimates and the uncertainties associated with them are provided.

10. EFFECT ON ENVIRONMENT AND PUBLIC HEALTH:

The promulgation of this regulation will not have any impacts on public health. Environmental impacts will be positive since the proposed regulation will result in improved conservation and management for the affected species.

11. DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED:

No detrimental impact on public health or the environment will occur if this proposed regulation is not implemented. Failure to implement this regulation will prevent positive benefits to public through conservation of species.

Summary of Preliminary Assessment Report:

The proposed regulation does not require an assessment report.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

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Document No. 3086
DEPARTMENT OF NATURAL RESOURCES
CHAPTER 123

Statutory Authority: 1976 Code Sections 50-1-200, 50-1-210, 50-3-100, 50-11-10, 50-11-65, 50-11-105, 50-11-310, 50-11-335, 50-11-350, 50-11-390, 50-11-430, 50-11-500, 50-11-520, 50-11-530, 50-11-854 and 50-11-2200.

Preamble:

The South Carolina Department of Natural Resources is proposing to amend the existing regulations which sets seasons, bag limits and methods of hunting and taking of wildlife. The following is a section by section summary of the proposed changes and additions:

- (L) Santee Delta WMA – adds special hog hunts with dogs.
 - (N) Bear Island WMA – establishes computer draw hunts for deer to reduce overcrowding and improve the quality of hunts.
 - (R) Santee Coastal Reserve WMA – adds additional hog hunts with dogs.
 - (V) Sand Hills State Forest WMA - allows the use of individual antlerless deer tags on days not designated as either-sex.
 - (AA) Little Pee Dee River Complex WMA – adds special hog hunts with dogs.
 - (EE) St. Helena Sound Heritage Preserve WMA – eliminates the special permit required for hunting.
 - (JJ) Longleaf Pine – allows the use of individual antlerless deer tags on days not designated as either-sex.
 - (QQ) Oak Lea WMA – requires a data card for hunting access.
 - (VV) Bonneau Ferry WMA – clarifies general access restrictions.
- 10.8 – adds access restrictions for impoundments on Bonneau Ferrry WMA.
- 10.16 – deletes Oak Lea WMA as a Category II waterfowl area.

Notice of Public Hearing and Opportunity for Public Comment:

Should a hearing be requested pursuant to Section 1-23-110(b) of the 1976 Code, as amended, such hearing will be conducted at 1000 Assembly Street on January 24, 2006, at 10:00 am in room 335, third floor, Rembert C. Dennis Building. Written comments may be directed to Breck Carmichael, Deputy Director, Wildlife & Freshwater Fisheries Division, Department of Natural Resources, Post Office Box 167, Columbia, SC 29202.

Fiscal Impact Statement:

This amendment of Regulation 123-40 will result in increased public hunting opportunities, which should generate additional State revenue through license sales. In addition, the local economy should benefit from sales of hunting supplies, food and overnight accommodations. Sales taxes on these items will also directly benefit government.

Statement of Rational:

Rationale for the formulation of these regulations is based on over 60 years of experience by SCDNR in establishing public hunting areas. New areas are evaluated on location, size, current wildlife presence, access and recreation use potential. Contractual agreements with the landowners provide guidelines for the use and management of the property. Wildlife Management Area agreements are on file with the Wildlife Section of the Department of Natural Resources, Room 267, Dennis Building, 1000 Assembly Street, Columbia.

Statement of Need and Reasonableness:

The statement of need and reasonableness was determined based on staff analysis pursuant to S.C. Code Sections 1-23-115(C) (1) through (3) and (9) through (11).

1. DESCRIPTION OF THE REGULATION:

Purpose: These regulations amend Chapter 123-40 in order to set seasons, bag limits and methods of hunting and taking of wildlife on existing and additional Wildlife Management Areas.

Legal Authority: Under Sections 50-11-2200 and 50-11-2210 of the S.C. Code of Laws, the Department of Natural Resources has jurisdiction over all Wildlife Management Areas to establish open and closed seasons, bag limits, and methods of taking wildlife; special use restrictions related to hunting and methods for taking wildlife on Department-owned Wildlife Management Areas.

Plan for Implementation: Once the regulation has been approved by the General Assembly, the Department will incorporate all regulations in the annual Rules and Regulations Brochure. The public will be notified through this publication and through news releases and other Department media outlets and publications.

2. DETERMINATION OF NEED AND REASONABLENESS OF THE REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

Periodically additional lands are made available to the public through the Wildlife Management Area Program. Since existing regulations only apply to specific wildlife management areas, new regulations must be filed to establish seasons, bag limits and methods of hunting and taking of wildlife on these new WMAs as well as expanding use opportunities on existing WMAs.

3. DETERMINATION OF COSTS AND BENEFITS:

Implementation of the proposed regulation will not require any additional costs to the state or to the sporting community. There are no significant new costs imposed by the addition of new WMAs since the funding of leasing WMAs is provided through the existing WMA permit program. Clarification of existing regulations under appropriate authority will improve enforcement ability and therefore reduce staff time in handling prosecution of offenses. This amendment of Regulation 123-40 will result in increased public hunting opportunities that should generate additional State revenue through license sales. In addition, the local economy should benefit from sales of hunting supplies, food and overnight accommodations. Sales taxes on these items will also directly benefit government.

9. UNCERTAINTIES OF ESTIMATES:

Staff does not anticipate any increased costs with the promulgation of this regulation. Accordingly, no costs estimates and the uncertainties associated with them are provided.

10. EFFECT ON ENVIRONMENT AND PUBLIC HEALTH:

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The promulgation of this regulation will not have any impacts on public health. Environmental impacts will be positive since the proposed regulation will result in additional opportunity for outdoor recreation for South Carolina's sportsmen therefore and increased awareness and commitment for natural resources.

11. DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED:

No detrimental impact on public health or the environment will occur if this proposed regulation is not implemented. Failure to implement this regulation will prevent positive benefits to public.

Summary of Preliminary Assessment Report:

The proposed regulation does not require an assessment report.

Text:

The full text of this regulation is available on the South Carolina General Assembly Home Page: <http://www.scstatehouse.net/regnsrch.htm>. Full text may also be obtained from the promulgating agency.

Filed: September 13, 2006, 1:33 pm

Document No. 3081
CLEMSON UNIVERSITY
LIVESTOCK-POULTRY HEALTH COMMISSION
CHAPTER 27
Statutory Authority, Chapter 4, Title 47,1976 Code

Emergency Situation:

27-1020 Intrastate Movement of Certain Animals

Due to an error in 27-1020 (2) (b) of text being left out, the regulation is not in compliance with CFR79.6, Consistent State Status for Scrapie. Maintaining State Status for Scrapie will allow South Carolina sheep producers to move their animals in interstate commerce without additional restrictions which apply to animals from non-consistent states, therefore we are asking for an emergency regulation until we can get 27-1020 (2) (b) amended.

Text:

2. Official identification is required upon change of ownership of all sheep and goats of any age not in slaughter channels and any sheep over 18 months of age as evidenced by eruption of the second incisor such that the animal may be traced to its flock of birth; provided however:

a. Commercial goats in intrastate commerce that have not been in contact with sheep are exempt from this identification requirement. If there is a case of scrapie in a commercial goat in South Carolina that originated in South Carolina and cannot be attributed to exposure to infected sheep, or if there is an exposed commercial goat herd in South Carolina, then this exemption is automatically revoked upon publication in the State Register that such disease has been detected. The Director shall proceed expeditiously to publish such notice, but in no case shall such notice be published more than 90 days after detection of such disease.

b. Commercial whitefaced sheep or commercial hair sheep under 18 months of age in intrastate commerce are exempt from this identification requirement. If there is a case of scrapie in the exempted class that originated in South Carolina, then this exemption is automatically revoked upon publication in the State Register that such disease has been detected. The Director shall proceed expeditiously to publish such notice, but in no case shall such notice be published more than 90 days after detection of such disease.

Filed: September 27, 2006, 10:35 am

Document No. 3082
DEPARTMENT OF NATURAL RESOURCES
CHAPTER 123
Statutory Authority: 1976 Code Section 50-1-220, 50-11-2200 and 50-11-2210

Emergency Situation:

This amended regulation sets seasons, bag limits and methods of hunting and taking of wildlife on Wildlife Management Areas. Amendments are needed to allow a special deer herd reduction hunt on Croft State Natural Area. Because the hunts begin on September 27 it is necessary to file these regulations as emergency so they take effect immediately.

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123-40 Hunt Units and Wildlife Management Area Regulations

1.2 (X) Croft State Natural Area WMA

Archery Only Deer Hunts	September 27-28 September 21-22	3 Deer Per Day, either-sex Max. 1 antlered buck per day
Archery-Crossbow Deer Hunts	October 11-12 October 25-26 November 8-9	3 Deer Per Day, either-sex Max. 1 antlered buck per day

Hunt Procedure/ Special Rules and Regulations

1. All hunters are required to check-in and obtain a daily permit at the checkpoint at the Shop near the main gate each day of the hunt period. On or prior to opening day of each hunt period, all hunters must report to the checkpoint to check-in and present their hunting license for a daily permit. The check point will be open on the day of the hunt approximately 2 hours before official sunrise and the day before each hunt period from 3:00 pm to 8:00 pm.
2. All hunters must leave their hunt area immediately after dark and must report to the checkpoint to checkout no later than one hour after official sunset. Those persons needing to return to the hunt area to look for a wounded deer or to retrieve a dead deer must notify PRT or DNR personnel at that time.
3. Portable stands may be placed one day prior to your scheduled hunt and must be removed no later than one day following each hunt period. Screw-in steps must be removed and no permanent spikes or nails are allowed.
4. Only archery equipment will be permitted during September hunt. Crossbows will not be allowed during the September hunt unless a person has an upper limb disability and has complied with all legal requirements (Section 50-11-565) to utilize a crossbow or persons 62 years old or older. Archery equipment or crossbows will be permitted during the October and November hunts. Hunters are allowed to carry only one type of equipment at a time.
5. Hunters must wear either a hat, coat or vest of international orange during all hunts except while occupying an elevated stand more than six feet above the surface level.
6. The use of a trail dog on a leash will be allowed for the recovery of wounded deer from 11:00 am to 3:00 pm and after dark. You must notify PRT or DNR before a dog is utilized.
7. Hunters will not be allowed to use ATV's.
8. The daily bag limit is 3 deer per day including no more than one antlered buck.
9. Field dressing of deer is allowed in the woods but entrails should not be left closer than 200 yards from any road, trail or facility. Hunters should not attempt to dig in the ground to bury entrails because of safety concerns regarding buried ordnance (See safety requirements sheet). Field dressing of deer will not be allowed at the check station near the Shop.
10. All harvested deer must be promptly brought to the deer check station at the Shop near the main gate.

Statement of Need and Reasonableness:

Periodically additional lands are made available to the public through the Wildlife Management Area Program. Since existing regulations only apply to specific wildlife management areas, new regulations must be filed to establish seasons, bag limits and methods of hunting and taking of wildlife on these new WMAs as well as expanding use opportunities on existing WMAs. Amendments are needed to allow a special deer herd reduction hunt on Croft State Park. Because the hunts begin on September 27, it is necessary to file these regulations as emergency so they take effect immediately.

Fiscal Impact Statement:

This amendment of Regulation 123.40 will result in increased public hunting opportunities which should generate additional State revenue through license sales. In addition, the local economy should benefit from sales of hunting supplies, food and overnight accommodations. Sales taxes on these items will also directly benefit government.

86 FINAL REGULATIONS

Document No. 3067

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

CHAPTER 61

Statutory Authority: S.C. Code Ann. Sections 13-7-10 *et seq.* (1976 & Supp. 2005); 13-7-40.

R.61-63 Radioactive Materials (Title A)

Synopsis:

The Department has amended R.61-63 to maintain conformity with federal requirements for Financial Assurance for Material Licensees as found in 10 CFR 30, 40, and 70 and the Transportation Safety Standards as found in 10 CFR 71. These amendments will ensure compliance with federal standards as required by Section 274 of the Atomic Energy Act of 1954. The transportation regulations will be incorporated by reference into R.61-63.

These rules were published in the Federal Register between October 3, 2003 and January 26, 2004, at 68 FR 57327 on October 3, 2003, and 69 FR 3698 on January 26, 2004. The Final Rule and corrections are reflected in 10 CFR Part 71 as revised January 1, 2006.

These amendments are not more stringent than the federal equivalent, and legislative review will not be required, nor is a preliminary assessment report or fiscal impact statement required.

Discussion of Revisions:

SECTION CHANGE

- 1.15.3. 1-4 Replace paragraph requiring decommissioning funding plan
- 1.15.4 Replace paragraph determining which submission depending on sections
- 1.15.4.1 Change RHA number from 1.15.10 to 1.15.11
- 1.15.4.2 Delete reference to Table 1 and replace with reference to RHA 1.15.10; delete all references to methods described in RHA 1.15.11 (three times) and change to methods described in 1.15.12;
- 1.15.5 Delete last phrase: "...the criteria set forth in this section" and replace with RHA 1.15.12
- 1.15.6 Replace paragraph regarding certification requirements for financial assurance
- 1.15.7 Replace paragraph regarding details of certification
- 1.15.8 Replace paragraph regarding details of certification
- 1.15.9 (i)-(iii) Replace paragraph 1.15.9 lead in and (i)-(iii) with one paragraph 1.15.9 describing financial assurance requirements for waste collectors and processors
- 1.15.10 Replace paragraph and insert Table 1 (i)-(iii) with details of required amounts of financial assurance for decommissioning
- 1.15.11.1-4 Replace with paragraph 1.15.11 detailing requirements for determining decommissioning funding plan
- 1.15.12.1-4 Replace with paragraph lead in and .1-4 details methods of financial assurance
- 1.15.13.1-4 Add paragraphs on details for record keeping

Part II Transportation of Radioactive Material

- 2.22.1 Remove "...the U.S. Department of Transportation" and replace with the words: "the Nuclear Regulatory Commission contained in Title 10 CFR Part 71 as revised January 1, 2006" Include express incorporation by reference for application of 10 CFR Part 71 with a listing of exceptions in Part 71 that are under NRC authority and are not delegated to the states..

Instructions: Amend R. 61-63 pursuant to each instruction included with the text as follows:

Text of Amendments:

The following sections are added, deleted, or amended. All other sections remain.

Replace Section 1.15.3 to read:

1.15.3 Notwithstanding the requirements of RHA 1.15.1 and 1.15.2 above, each applicant for a specific license of the types described in RHA 1.15.3.1 through 1.15.3.4 shall submit a decommissioning funding plan as described in RHA 1.15.11.

Add Section 1.15.3. 1-4 to read:

1.15.3.1 Authorizing the possession and use of unsealed byproduct material of half-life greater than 120 days and in quantities exceeding 105 times the applicable quantities set forth in Appendix C, RHA 3.54 or when a combination of isotopes is involved if R divided by 105 is greater than 1 (unity rule), where R is defined here as the sum of the ratios of the quantity of each isotope to the applicable value in Appendix C, RHA 3.54.

1.15.3.2 Authorizing the possession and use of sealed sources or plated foils of half-life greater than 120 days and in quantities exceeding 1012 times the applicable quantities set forth in Appendix C, RHA 3.54 (or when a combination of isotopes is involved if R , as defined in RHA 1.15.3.1, divided by 1012 is greater than 1).

1.15.3.3 Authorizing the possession and use of more than 100 millicuries of source material in a readily dispersible form.

1.15.3.4 Authorizing the possession of unsealed special nuclear material in quantities exceeding 105 times the applicable quantities set forth in Appendix C, RHA 3.54 or when a combination of isotopes is involved if R divided by 105 is greater than 1 (unity rule), where R is the sum of the ratios of the quantity of each isotope to the applicable value in Appendix C, RHA 3.54.

Replace Section 1.15.4 to read:

1.15.4 Each applicant for a specific license as described in 1.15.3 and in quantities specified in RHA 1.15.10 of this section shall either---

Revise Section 1.15.4.1 to read:

1.15.4.1 Submit a decommissioning funding plan as described in RHA 1.15.11 of this section; or

Revise Section 1.15.4.2 to read:

1.15.4.2 Submit a certification that financial assurance for decommissioning has been provided in the amount prescribed by RHA 1.15.10 of this section using one of the methods described in RHA 1.15.12 of this section. For an applicant, this certification may state that the appropriate assurance will be obtained after the application has been approved and the license issued but prior to the receipt of licensed material. If the applicant defers execution of the financial instrument until after the license has been issued, a signed original of the financial instrument obtained to satisfy the requirements of RHA 1.15.12 must be submitted to the Department before receipt of licensed material. If the applicant does not defer execution of financial instrument, the applicant shall submit to the Department, as part of the certification, a signed original of the financial instrument obtained to satisfy the requirements of RHA 1.15.12.

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Revise Section 1.15.5 to read:

1.15.5 Each holder of a specific license issued on or after the effective date of these regulations, which is of a type described in RHA 1.15.3 or 1.15.4 of this section, shall provide financial assurance for decommissioning in accordance with RHA 1.15.12.

Replace Section 1.15.6 to read:

1.15.6 Each holder of a specific license of a type described in RHA 1.15.3 of this section shall submit a decommissioning funding plan as described in RHA 1.15.11 or a certification of financial assurance for decommissioning in an amount at least equal to \$1,125,000 in accordance with the criteria set forth in this section. If the licensee submits the certification of financial assurance rather than a decommissioning funding plan, the licensee shall include a decommissioning funding plan in any application for license renewal.

Replace Section 1.15.7 to read:

1.15.7 Each holder of a specific license of a type described in RHA 1.15.4 shall submit a decommissioning funding plan as described in RHA 1.15.11 or a certification of financial assurance for decommissioning in accordance with RHA 1.15.12.

Replace Section 1.15.8 to read:

1.15.8 Any licensee who has submitted an application for renewal of license in accordance with RHA 2.12 shall provide financial assurance for decommissioning in accordance with RHA 1.15.3 and RHA 1.15.4.

Replace Section 1.15.9 and 1.15.9. (I)-(iii) to read:

1.15.9 Waste collectors and waste processors, as defined in RHA 3.2, must provide financial assurance in an amount based on a decommissioning funding plan as described in RHA 1.15.11. The decommissioning funding plan must include the cost of disposal of the maximum amount (curies) of radioactive material permitted by license, and the cost of disposal of the maximum quantity, by volume, of radioactive material which could be present at the licensee's facility at any time, in addition to the cost to remediate the licensee's site to meet the license termination criteria of RHA 2.11. The decommissioning funding plan must be submitted by June 30, 2007.

Replace Section 1.15.10 to read:

TABLE I

1.15.10 Required Amounts of Financial Assurance for Decommissioning by Quantity of Material. Licensees required to submit the \$1,125,000 must do so by June 30, 2007. Licensees required to submit \$113,000 or \$225,000 amount must do so by June 30, 2007. Licensees having possession limits exceeding the upper bounds of this table must base financial assurance on a decommissioning funding plan.

<p>(i) <u>greater than 10^4 but less than or equal to 10^5 times the applicable quantities of Appendix C, RHA 3.54 in unsealed form. (For a combination of isotopes, if R, as defined in RHA 1.15.3.1, divided by 10^4 is greater than 1 but R divided by 10^5 is less than or equal to 1)</u></p>	<p>\$1,125,000</p>
<p>(ii) <u>greater than 10^3 but less than or equal to 10^4 times the applicable quantities of Appendix C, RHA 3.54 in unsealed form. (For a combination of isotopes, if R, as defined in RHA 1.15.3.1, divided by 10^3 is greater than 1 but R divided by 10^4 is less than or equal to 1.)</u></p>	<p>\$225,000</p>
<p>(iii) <u>greater than 10^{10} times the applicable quantities of Appendix C, RHA 3.54 in sealed sources or plated foils. (For a combination of isotopes, if R, as defined in RHA 1.15.3.1, divided by 10^{10} is greater than 1, but R divided by 10^{12} is less than or equal to 1.)</u></p>	<p>\$113,000</p>

Replace Section 1.15.11 and 1.15.11.1-4 to read:

1.15.11 Each decommissioning funding plan must contain a cost estimate for decommissioning and a description of the method of assuring funds for decommissioning from RHA 1.15.12, including means of adjusting cost estimates and associated funding levels periodically over the life of the facility. Cost estimates must be adjusted at intervals not to exceed 3 years. The decommissioning funding plan must also contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning and a signed original of the financial instrument obtained to satisfy the requirements of RHA 1.15.12.

Replace Section 1.15.12 and 1.15.12. 1-4 to read:

1.15.12 Financial assurance for decommissioning must be provided by one or more of the following methods:

1.15.12.1 Prepayment. Prepayment is the deposit prior to the start of the operation into an account segregated from licensee assets and outside the licensee’s administrative control of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.

1.15.12.2 A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid should the licensee default. A surety method may be in the form of a surety bond, letter of credit, or line of credit. A parent company guarantee of funds for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in RHA 1.17, Appendix A to this part. A parent company guarantee may not be used in combination with other financial methods to satisfy the requirements of this section. A guarantee of funds by the applicant or licensee for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in Appendix B of this part. A guarantee by the applicant or licensee may not be used in combination with any other financial methods to satisfy the requirements of this section or in any situation where the applicant or licensee has a parent company holding majority control of the voting stock of the company. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions:

(i) The surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless 90 days or more prior to the renewal date, the issuer notifies the Department, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance must also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the Department within 30 days after receipt of notification of cancellation.

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(ii) The surety method or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the Department. An acceptable trustee includes an appropriate State or Federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.

(iii) The surety method or insurance must remain in effect until the Department has terminated the license.

1.15.12.3 An external sinking fund in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds periodically in an account segregated from licensee assets and outside the licensee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities. The surety or insurance provisions must be stated in RHA 1.15.12.2 of this section.

1.15.12.4 In the case of Federal, State or local government licensees, a statement of intent containing a cost estimate for decommissioning or an amount backed on the Table in RHA 1.15.10 of this section, and indicating that funds for decommissioning will be obtained when necessary.

Add new Sections 1.15.13 and 1.15.13.1-4 to read:

1.15.13 Each person licensed under this part or Parts II, IV or V of these regulations shall keep records of information important to the decommissioning of a facility in an identified location until the site is released for unrestricted use. Before licensed activities are transferred or assigned in accordance with RHA 2.10.2, licensees shall transfer all records described in this paragraph to the new licensee. In this case, the new licensee will be responsible for maintaining these records until the license is terminated. If records important to the decommissioning of a facility are kept for other purposes, reference to these records and their locations may be used. Information the Department considers important to decommissioning consists of:

1.15.13.1 Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations.

1.15.13.2 As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored, and of locations of possible inaccessible contamination such as buried pipes, which may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations.

1.15.13.3 Except for areas containing sealed sources (provided the sources have not leaked or not contamination remains after any leak), or where licensed material has been used in a device or component and is intact (for example depleted uranium used only for shielding or as penetrators in unused munitions), or byproduct materials having only half-lives of less than 65 days, a list contained in a single document and updated every 2 years of the following:

1.15.13.3.1 All areas designated and formerly designated restricted areas as defined RHA 1.2;

1.15.13.3.2 All areas outside of restricted areas that required documentation under RHA 1.15;

1.15.13.3.3 All areas outside of restricted areas where current and previous wastes have been buried as documented under RHA 3.41; and

1.15.13.3.4 All areas outside of restricted areas, which contain material such that, if the license expired, the licensee would be required to either decontaminate the area to unrestricted levels or apply for approval for disposal under RHA 3.28.

1.15.13.4 Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.

Revise Section 2.22.1 to read:

Part I LICENSING OF RADIOACTIVE MATERIAL

RHA 2.22 TRANSPORTATION OF RADIOACTIVE MATERIAL

2.22.1 The transportation of radioactive material shall be in accordance with the requirements in 10 CFR Part 71 as revised January 1, 2006, which is incorporated by reference, with the exception of the following sections: 71.2, 71.6, 71.14(b), 71.19, 71.24, 71.31, 71.33, 71.35, 71.37, 71.38, 71.39, 71.41, 71.43, 71.45, 71.51, 71.52, 71.53, 71.55, 71.59, 71.61, 71.63, 71.64, 71.65, 71.71, 71.73, 71.74, 71.75, 71.77, 71.99 and 71.100. The provisions of this section apply to the transportation of radioactive material, or delivery of radioactive material to a carrier for transportation, regardless of whether or not the carrier is also subject to the rules and regulations of the Nuclear Regulatory Commission contained in Title 10 CFR Part 71 and other agencies of the United States having jurisdiction.

Statement of Need and Reasonableness:

This Statement of Need and Reasonableness complies with S.C. Code Ann. Section 1-23-115(c)(1)-(3) and (9)-(11).

DESCRIPTION OF REGULATION: Amendment of R.61-63 Radioactive Materials (Title A)

Purpose: The Nuclear Regulatory Commissioner (USNRC) promulgates amendments to 10 CFR 30, 40, 70, and 71 throughout each calendar year. Recent amendments include requirements for Financial Assurance for Material Licenses and Transportation Safety Standards. These rules have been published in the Federal Register between October 3, 2003 and January 26, 2004, at 68 FR 57327 on October 3, 2003, and 69 FR 3698 on January 26, 2004. The Final Rule and corrections are reflected in 10 CFR Part 71 as revised January 1, 2006.

This amendment of R.61-63 adopts these federal regulations to maintain conformity with federal requirements for Financial Assurance for Material Licensees as found in 10 CFR 30, 40, and 70 and Transportation Safety Standards as found in 10 CFR 71 and ensure compliance with federal standards as required by Section 274 of the Atomic Energy Act of 1954. The Transportation Safety Requirements are incorporated by reference.

Legal Authority: S.C. Code Ann. Sections 13-7-10 et seq. (1976 & Supp. 2005); 13-7-40.

Plan for Implementation: Upon final approval by the Board of Health and Environmental Control and publication in the State Register as a final regulation, amended regulations will be provided to the regulated community at cost through the Department's Freedom of Information Office.

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DETERMINATION OF NEED AND REASONABLENESS OF THE REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: Adoption of the proposed amendments of R.61-63 enables compliance with recent federal regulations and standards. See Purpose and Synopsis above.

DETERMINATION OF COSTS AND BENEFITS This regulatory amendment is exempt from the requirements of a Preliminary Fiscal Impact Statement or a Preliminary Assessment Report because the proposed changes are necessary to maintain compliance with federal regulations. There are no known additional costs to the state and its political subdivisions. Licensees must provide financial assurance as set forth in the regulations.

UNCERTAINTIES OF ESTIMATES: There are no known uncertainties.

EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH: This amendment will provide the updates to the financial assurances and recordkeeping for decommissioning requirements for radioactive materials licensees and the transportation safety standards for radioactive materials. The adoption of these regulations will ensure an effective regulatory program for radioactive material users under state jurisdiction and protection of the public and workers from unnecessary exposure to ionizing radiation. These changes will provide the updates to the transportation safety standards for radioactive materials.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: The State's authority to implement federal requirements, which are believed to be beneficial to the public health and environment, would be compromised if these amendments were not adopted in South Carolina.

Document No. 3070

**DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
CHAPTER 61**

Statutory Authority: 1976 Code Section 44-55-10 *et seq.*

R. 61-58. State Primary Drinking Water Regulations

Synopsis:

This amendment of the State Primary Drinking Water Regulations includes requirements promulgated under the National Primary Drinking Water Regulations: Stage 2 Disinfectants and Disinfection Byproducts Rule. The proposed regulation revision will amend the State Primary Drinking Water Regulations to comply with requirements of 40 CFR Parts 141 and 142. The final Stage 2 Disinfectants and Disinfection Byproducts Rule was published in the January 4, 2006 Federal Register.

In addition, this amendment revises the State Primary Drinking Water Regulation to include requirements promulgated under the National Primary Drinking Water Regulations: Long Term 2 Enhanced Surface Water Treatment Rule. The regulation revision will amend the State Primary Drinking Water Regulations to comply with requirements of 40 CFR Parts 141 and 142. The final Long Term 2 Enhanced Surface Water Treatment Rule was published in the January 5, 2006 Federal Register

In addition, this amendment revises the State Primary Drinking Water Regulation to include requirements promulgated under the National Primary Drinking Water Regulations: Minor Corrections and Clarification to Drinking Water Regulations; National Primary Drinking Water Regulations for Lead and Copper. The regulation revision will amend the State Primary Drinking Water Regulations to comply with requirements of 40 CFR Parts 141 and 142. Minor Corrections and Clarification to Drinking Water Regulations; National Primary Drinking Water Regulations for Lead and Copper was published in the June 29, 2004 Federal Register.

These amendments of R.61-58 comply with federal law and are exempt from legislative review. These regulatory amendments are exempt from the requirement for a Preliminary Fiscal Impact Statement or a Preliminary Assessment Report because each change is necessary to maintain compatibility and consistency with federal law and regulations.

Section-by-Section Discussion of Revisions

<u>SECTION</u>	<u>CHANGE</u>
R.61-58.A	Revised introductory paragraph to include new sections being added in this revision.
R.61-58 .B	Fifteen (15) new definitions are added and three (3) are revised in alphabetical/numerical order.
R.61-58.5.I(3)(b)(iv)	Revised to add clarifying language.
R.61-58.5.I(3)(e)	Revised to add clarifying language.
R.61-58.5.I(3)(f)	Revised to correct a reference.
R.61-58.5.K(3)(a)	Detection limit for Uranium is added.
R.61-58.5.L	Section is deleted and reserved, as it no longer applies.
R.61-58.5.M	Section is deleted and reserved, as it no longer applies.
R.61-58.5.P(1)	Revised to remove TTHM and HAA5 requirements.
R.61-58.5.P(1)(b)	Revised to delete language that no longer applies and identify best available technology.
R.61-58.5.P(2)	Added to establish TTHM and HAA5 requirements.
R.61-58.6.D(2)(a)	Revised to change record retention requirements.
R.61-58.6.D(2)(f)	Added to establish retention requirements for monitoring plans.
R.61-58.6.E(11)	Added to establish special public notice requirements for Long Term 2 Enhanced Surface Water Treatment Rule.
R.61-58.10.E(1)(d)	Revised to change compliance date.
R.61-58.10.E(4)	Revised to change compliance date.
R.61-58.10.H(1)(d)	Revised to change a compliance date.
R.61-58.10.I(1)(c)	Revised to change a compliance date.
R.61-58.10.I(4)(b)	Revised to allow the Department to approve a more representative TTHM and HAA5 data set.

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- R.61-58.10.I(4)(e) Revised to add clarifying language and correct typographical error.
- R.61-58.10.I(7)(d)(b) Revised to delete outdated language.
- R.61-58.10.I(7)(d)(c) Revised to correct typographical error.
- R.61-58.10.K Added to establish requirements of the Long Term 2 Enhanced Surface Water Treatment Rule.
- R.61-58.12.C(4)(d)(iv)(B) Revised to include additional reporting requirements for Stage 2 Disinfection Byproducts Rule.
- R.61-58.12.C(4)(d)(iv)(C) Revised to include additional reporting requirements for Stage 2 Disinfection Byproducts Rule.
- R.61-58.13.B(5) Revised to add clarifying language.
- R.61-58.13.C(1)(e) Revised to delete text that no longer applies.
- R.61-58.13.C(2)(a)(i)(C) Revised to add clarifying language.
- R.61-58.13.C(2)(a)(ii)(C) Revised to add clarifying language.
- R.61-58.13.C(2)(a)(iv)(C) Revised to add clarifying language.
- R.61-58.13.C(2)(a)(vi) Added to establish reduced monitoring requirements for source water TOC.
- R.61-58.13.C(2)(c)(ii)(A) Revised to end existing reduced monitoring criteria for bromate on March 31, 2009.
- R.61-58.13.C(2)(c)(ii)(B) Establish new reduced monitoring criteria for bromate beginning on April 1, 2009.
- R.61-58.13.D(3)(b)(i) Revised to correct two references.
- R.61-58.13.D(3)(b)(ii) Revised to correct two references.
- R.61-58.13.D(4) Revised to correct reference.
- R.61-58.13.F(1)(b)(ii) Revised to specify analytical requirements for magnesium hardness and correct typographical error.
- R.61-58.14 Added to establish requirements of the Initial Distribution System Evaluation.
- R.61-58.15 Added to establish Stage 2 Disinfection Byproducts Requirements.
- Appendix A. I Revised to correct typographical error.
- Appendix A. I.A(8) Revised to correct reference.
- Appendix A. I.A(10) Revised to correct reference.
- Appendix A. I.B(2) Revised to change endnote.

- Appendix A. I.B(11) Revised to change endnote.
- Appendix A. I.B(12) Revised to change endnote.
- Appendix A. I.G(1) Revised to add reference to new regulations.
- Appendix A. I.G(2) Revised to add reference to new regulations.
- Appendix A. endnote 1 Deleted incorrect language and corrected a typographical error.
- Appendix A. endnote 14 Revised to establish compliance date.
- Appendix A. endnote 22 Added endnote to specify tier violation for Long Term 2 Enhanced Surface Water Treatment Rule.
- Appendix B G(77) Revised to change endnote.
- Appendix B H(80) Revised to change reference.
- Appendix B endnote 4 Revised to change date.
- Appendix B endnote 8 Revised to change two dates.
- Appendix B endnote 18 Revised to add clarifying language and clarify compliance dates.
- Appendix B endnote 19 Revised to clarify compliance dates for Stage 2 Disinfection Byproducts Rule.

Instructions: Amend R.61-58 pursuant to each individual instruction provided below with the text of the amendments.

Text of Proposed Amendments:

Replace R.61-58.A to read:

A. Regulations 61-58 through 61-58.15 are promulgated pursuant to S.C. Code Sections 44-55-10 et seq. and are collectively known as the State Primary Drinking Water Regulations. The Department finds the standards and procedures prescribed are necessary to maintain reasonable standards of purity of the drinking water of the State consistent with the public health, safety, and welfare of its citizens.

At R.61-58.B, Definitions, replace the definition of “GAC10” to read:

“GAC10” means granular activated carbon filter beds with an empty-bed contact time of 10 minutes based on average daily flow and a carbon reactivation frequency of every 180 days, except that the reactivation frequency for GAC10 used as a best available technology for compliance with R.61-58.5.P(2)(b) MCLs shall be 120 days.

At R.61-58.B, Definitions, replace the definition of “Presedimentation” to read:

“Presedimentation” is a preliminary treatment process used to remove gravel, sand and other particulate material from the source water through settling before the water enters the primary clarification and filtration processes in a treatment plant. May be with or without chemical addition.

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At R.61-58.B, Definitions, replace the definition of “Uncovered finished water storage facility” to read:

“Uncovered finished water storage facility” is a tank, reservoir, or other facility used to store water that will undergo no further treatment to reduce microbial pathogens except residual disinfection and is directly open to the atmosphere.

At R.61-58.B, add fifteen new definitions in alpha-numeric order to read:

“Bag filters” are pressure-driven separation devices that remove particulate matter larger than 1 micrometer using an engineered porous filtration media. They are typically constructed of a non-rigid, fabric filtration media housed in a pressure vessel in which the direction of flow is from the inside of the bag to outside.

“Bank filtration” is a water treatment process that uses a well to recover surface water that has naturally infiltrated into ground water through a river bed or bank(s). Infiltration is typically enhanced by the hydraulic gradient imposed by a nearby pumping water supply or other well(s).

“Cartridge filters” are pressure-driven separation devices that remove particulate matter larger than 1 micrometer using an engineered porous filtration media. They are typically constructed as rigid or semi-rigid, self-supporting filter elements housed in pressure vessels in which flow is from the outside of the cartridge to the inside.

“Combined distribution system” is the interconnected distribution system consisting of the distribution systems of wholesale systems and of the consecutive systems that receive finished water.

“Consecutive system” is a public water system that receives some or all of its finished water from one or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

“Dual sample set” is a set of two samples collected at the same time and same location, with one sample analyzed for TTHM and the other sample analyzed for HAA5. Dual sample sets are collected for the purposes of conducting an IDSE under subpart U of this part and determining compliance with the TTHM and HAA5 MCLs under subpart V of this part.

“Finished water” is water that is introduced into the distribution system of a public water system and is intended for distribution and consumption without further treatment, except as treatment necessary to maintain water quality in the distribution system (e.g., booster disinfection, addition of corrosion control chemicals).

“Flowing stream” is a course of running water flowing in a definite channel.

“GAC20” means granular activated carbon filter beds with an empty-bed contact time of 20 minutes based on average daily flow and a carbon reactivation frequency of every 240 days.

“Lake/reservoir” refers to a natural or man made basin or hollow on the Earth's surface in which water collects or is stored that may or may not have a current or single direction of flow.

“Locational running annual average (LRAA)” is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

“Membrane filtration” is a pressure or vacuum driven separation process in which particulate matter larger than 1 micrometer is rejected by an engineered barrier, primarily through a size-exclusion mechanism, and which has a measurable removal efficiency of a target organism that can be verified through the application of

a direct integrity test. This definition includes the common membrane technologies of microfiltration, ultrafiltration, nanofiltration, and reverse osmosis.

“Plant intake refers” to the works or structures at the head of a conduit through which water is diverted from a source (e.g., river or lake) into the treatment plant.

“Two-stage lime softening” is a process in which chemical addition and hardness precipitation occur in each of two distinct unit clarification processes in series prior to filtration.

“Wholesale system” is a public water system that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another public water system. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

Replace R.61-58.5.I(3)(b)(iv) to read:

(iv) If the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity at a sampling point has a running annual average (computed quarterly) less than or equal to 15 pCi/L (screening level), the Department may reduce the frequency of monitoring at that sampling point to every three (3) years. Systems must collect all samples required in paragraph (2)(a) of this section during the reduced monitoring period.

Replace R.61-58.5.I(3)(e) and (f) to read:

(e) If the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity exceeds the appropriate screening level, an analysis of the sample must be performed to identify the major radioactive constituents present in the sample and the appropriate doses must be calculated and summed to determine compliance with Section H(4)(a) above, using the formula in Section H(4)(b) above. Doses must also be calculated and combined for measured levels of tritium and strontium to determine compliance.

(f) Systems must monitor monthly at the sampling point(s) which exceed the maximum contaminant level in Section H(4)(1) above, beginning the month after the exceedance occurs. Systems must continue monthly monitoring until the system has established, by a rolling average of three (3) monthly samples, that the MCL is being met. Systems who establish that the MCL is being met must return to quarterly monitoring until they meet the requirements set forth in paragraphs (3)(a)(i) or (3)(b)(iv) of this section.

Replace R.61-58.5.K(3)(a) to read:

(a) To determine compliance with Section H(2), (3), and (5) above, the detection limit shall not exceed the concentrations in Table B to this paragraph.

TABLE B: DETECTION LIMITS FOR GROSS ALPHA PARTICLE ACTIVITY, RADIUM 226, RADIUM 228, AND URANIUM

Contaminant	Detection limit
Gross alpha particle activity	3 pCi/L.
Radium 226	1 pCi/L.
Radium 228	1 pCi/L.
Uranium	1 microgram/L

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Replace R.61-58.5.L and M

58.5.L. Reserve

58.5.M. Reserve

Replace R.61-58.5.P(1) to read:

(1) Bromate and Chlorite

The maximum contaminant levels (MCLs) for bromate and chlorite are as follows:

Disinfection Byproduct	MCL (mg/L)
Bromate	0.010
Chlorite	1.0

(a) Compliance Dates.

Community water systems and non-transient non-community water systems that use a surface water source or a ground water source under the influence of surface water serving 10,000 or more persons must comply with this section beginning January 1, 2002. Community water systems and non-community non-transient water systems that use a surface water source or a ground water source under the influence of surface water serving fewer than 10,000 persons and community water systems and non-community non-transient water systems using only ground water not under the direct influence of surface water must comply with this section beginning January 1, 2004.

(b) Best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for bromate and chlorite identified in this section are specified in 40 CFR 141.64 (a)(2).

Revise R.61-58.5.P(2) to read:

(2) TTHM and HAA5.

(a) Stage 1 DBP Rule Running Annual Average (RAA) compliance.

The maximum contaminant levels (MCLs) for TTHM and HAA5 are as follows:

Disinfection Byproduct	MCL (mg/L)
Total Trihalomethanes (TTHM)	0.080
Haloacetic Acids (five) (HAA5)	0.060

(i) Compliance dates. Subpart H systems serving 10,000 or more persons must comply with this paragraph (2)(a) beginning January 1, 2002. Subpart H systems serving fewer than 10,000 persons and systems using only ground water not under the direct influence of surface water must comply with this paragraph (2)(a) beginning January 1, 2004. All systems must comply with these MCLs until the date specified for Stage 2 DBP Rule compliance in R.61-58.15.B(2).

(ii) Best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for TTHM and HAA5 identified in this section are specified in 40 CFR 141.64 (b)(1)(ii).

(b) Stage 2 DBP Rule Locational Running Annual Average (LRAA) compliance.

The maximum contaminant levels (MCLs) for TTHM and HAA5 are as follows:

Disinfection Byproduct	MCL (mg/L)
Total Trihalomethanes (TTHM)	0.080
Haloacetic Acids (five) (HAA5)	0.060

(i) Compliance dates. The MCLs for TTHM and HAA5 must be complied with as a locational running annual average at each monitoring location beginning the date specified in R.61-58.15.B(2).

(ii) Best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for TTHM and HAA5 identified in this section are specified in 40 CFR 141.64 (b)(2)(ii), and 40 CFR 141.64 (b)(2)(iii).

Replace R.61-58.6.D(2)(a); subitems D(2)(a)(i), D(2)(a)(ii), D(2)(a)(iii), and D(2)(a)(iv) remain the same:

(a) Records of microbiological analyses and turbidity analyses made pursuant to the State Primary Drinking Water Regulation: R.61-58 shall be kept for not less than five (5) years. Records of chemical analyses made pursuant to State Primary Drinking Water Regulation: R.61-58 shall be kept for not less than ten years. Actual laboratory reports may be kept, or data may be transferred to tabular summaries, provided that the following information is included:

Add new R.61-58.6.D(2)(f) to read:

(f) Copies of monitoring plans developed pursuant to the State Primary Drinking Water Regulation: R.61-58 shall be kept for the same period of time as the records of analyses taken under the plan are required to be kept under paragraph (a) of this section, except as specified elsewhere in this regulation.

Add new R.61-58.6.E(11) to read:

(11) Special notice for repeated failure to conduct monitoring of the source water for Cryptosporidium and for failure to determine bin classification or mean Cryptosporidium level

(a) Special notice for repeated failure to monitor.

The owner or operator of a community or non-community water system that is required to monitor source water under R.61-58.10.K(2) must notify persons served by the water system that monitoring has not been completed as specified no later than 30 days after the system has failed to collect any 3 months of monitoring as specified in R.61-58.10.K(2)(c). The notice must be repeated as specified in R.61-58.6.E(3)(b).

(b) Special notice for failure to determine bin classification or mean Cryptosporidium level.

The owner or operator of a community or non-community water system that is required to determine a bin classification under R.61-58.10.K(11), or to determine mean Cryptosporidium level under R.61-58.10.K(13), must notify persons served by the water system that the determination has not been made as required, no later than 30 days after the system has failed to report the determination as specified in R.61-58.10.K(11)(e) or R.61-58.10.K(13)(a), respectively. The notice must be repeated as specified in R.61-58.6.E(3)(b). The notice is not required if the system is complying with a Department-approved schedule to address the violation.

(c) Form and manner of the special notice.

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The form and manner of the public notice must follow the requirements for a Tier 2 public notice prescribed in R.61-58.6.E(3)(c). The public notice must be presented as required in R.61-58.6.E(5)(c).

(d) Mandatory language that must be contained in the special notice.

The notice must contain the following language, including the language necessary to fill in the blanks.

(i) The special notice for repeated failure to conduct monitoring must contain the following language: "We are required to monitor the source of your drinking water for *Cryptosporidium*. Results of the monitoring are to be used to determine whether water treatment at the (treatment plant name) is sufficient to adequately remove *Cryptosporidium* from your drinking water. We are required to complete this monitoring and make this determination by (required bin determination date). We (did not monitor or test) or (did not complete all monitoring or testing) on schedule and, therefore, we may not be able to determine by the required date what treatment modifications, if any, must be made to ensure adequate *Cryptosporidium* removal. Missing this deadline may, in turn, jeopardize our ability to have the required treatment modifications, if any, completed by the deadline required, (date). For more information, please call (name of water system contact) of (name of water system) at (phone number)".

(ii) The special notice for failure to determine bin classification or mean *Cryptosporidium* level must contain the following language: "We are required to monitor the source of your drinking water for *Cryptosporidium* in order to determine by (date) whether water treatment at the (treatment plant name) is sufficient to adequately remove *Cryptosporidium* from your drinking water. We have not made this determination by the required date. Our failure to do this may jeopardize our ability to have the required treatment modifications, if any, completed by the required deadline of (date). For more information, please call (name of water system contact) of (name of water system) at (phone number)".

(iii) Each special notice must also include a description of what the system is doing to correct the violation and when the system expects to return to compliance or resolve the situation.

Replace R.61-58.10.E(1)(d) to read:

(d) Beginning January 1, 2005, systems serving fewer than 10,000 people must meet the turbidity requirements in Section I(6) below.

Replace R.61-58.10.E(4) to read:

(4) Other filtration technologies.

A public water system may use a filtration technology not listed in paragraphs (1) through (3) of this section if it demonstrates to the Department, using pilot plant studies or other means, that the alternative filtration technology, in combination with disinfection treatment that meets the requirements of Section D(2), above, consistently achieves 99.9 percent removal and/or inactivation of *Giardia lamblia* cysts and 99.99 percent removal and/or inactivation of viruses. For a system that makes this demonstration, the requirements of paragraph (2) of this section apply. Beginning January 1, 2002, systems serving at least 10,000 people must meet the requirements for other filtration technologies in R.61-58.10.H(4)(b). Beginning January 1, 2005, systems serving fewer than 10,000 people must meet the requirements for other filtration technologies in Section I(6) below.

Replace R.61-58.H(1)(d) to read:

(d) Systems with a surface water source or a ground water source under the direct influence of surface water that did not conduct optional monitoring under Section H(3) because they served fewer than 10,000

persons when such monitoring was required, but served at least 10,000 persons prior to January 1, 2005 must comply with Section H. These systems must also consult with the Department to establish a disinfection benchmark. A system that decides to make a significant change to its disinfection practice, as described in Section H(3)(c)(i) must consult with the Department prior to making such change.

Replace R.61-58.10.I(1)(c) to read:

(c) *When must my system comply with these requirements?* You must comply with these requirements in this regulation beginning January 1, 2005 except where otherwise noted.

Replace R.61-58.10.I(4)(b) to read:

(b) *What criteria must the Department use to determine that a profile is unnecessary?* The Department may only determine that a system's profile is unnecessary if a system's TTHM and HAA5 levels are below 0.064 mg/L and 0.048 mg/L, respectively. To determine these levels, TTHM and HAA5 samples must be collected after January 1, 1998, during the month with the warmest water temperature, and at the point of maximum residence time in your distribution system. The Department may approve a more representative TTHM and HAA5 data set to determine these levels.

Replace R.61-58.10.I(4)(e) to read:

(e) *How does my system use this data to calculate an inactivation ratio?* Use the tables in R-61.58.10.F(1)(c)(v) to determine the appropriate CT_{99,9} value. Calculate the total inactivation ratio as follows, and multiply the value by 3.0 to determine log inactivation of *Giardia lamblia*:

If your system * * *	Your system must determine * * *
(a) Uses only one point of disinfectant application	(1) One inactivation ratio (CT _{calc} /CT _{99,9}) before or at the first customer during peak hourly flow or (2) Successive CT _{calc} /CT _{99,9} values, representing sequential inactivation ratios, between the point of disinfectant application and a point before or at the first customer during peak hourly flow. Under this alternative, your system must calculate the total inactivation ratio by determining (CT _{calc} /CT _{99,9}) for each sequence and then adding the (CT _{calc} /CT _{99,9}) values together to determine (ΣCT _{calc} /CT _{99,9}).
(b) Uses more than one point of disinfectant application before the first customer	The (CT _{calc} /CT _{99,9}) value of each disinfection segment immediately prior to the next point of disinfectant application, or for the final segment, before or at the first customer, during peak hourly flow using the procedure specified in paragraph (a)(2) of this section.

Replace R.61-58.10.I(d) to read:

(d) What follow-up action is my system required to take based on continuous turbidity monitoring? Follow-up action is required according to the following tables:

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If * * *	Your system must * * *
(a) The turbidity of an individual filter (or the turbidity of combined filter effluent (CFE) for systems with 2 filters that monitor CFE in lieu of individual filters) exceeds 1.0 NTU in two consecutive recordings 15 minutes apart.	Report to the Department by the 10th of the following month and include the filter number(s), corresponding date(s), turbidity value(s) which exceeded 1.0 NTU, and the cause (if known) for the exceedance(s).

If a system was required to report to the Department * * *	Your system must * * *
(b) For three months in a row and turbidity exceeded 1.0 NTU in two consecutive recordings 15 minutes apart at the same filter (or CFE for systems with 2 filters that monitor CFE in lieu of individual filters).	Conduct a self-assessment of the filter(s) within 14 days of the day the filter exceeded 1.0 NTU in two consecutive measurements for the third straight month unless a CPE as specified in paragraph (c) of this section was required. Systems with 2 filters that monitor CFE in lieu of individual filters must conduct a self-assessment on both filters. The self-assessment must consist of at least the following components: assessment of filter performance; development of a filter profile; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report.
(c) For two months in a row and turbidity exceeded 2.0 NTU in 2 consecutive recordings 15 minutes apart at the same filter (or CFE for systems with 2 filters that monitor CFE in lieu of individual filters).	Arrange to have a comprehensive performance evaluation (CPE) conducted by the Department or a third party approved by the Department not later than 60 days following the day the filter exceeded 2.0 NTU in two consecutive measurements for the second straight month. If a CPE has been completed by the Department or a third party approved by the Department within the 12 prior months or the system and the Department are jointly participating in an ongoing Comprehensive Technical Assistance (CTA) project at the system, a new CPE is not required. If conducted, a CPE must be completed and submitted to the Department no later than 120 days following the day the filter exceeded 2.0 NTU in two consecutive measurements for the second straight month.

Replace R.61-58.10.I(8)(a) to read:

(a) *What does this section require that my system report to the Department?* This section requires your system to report several items to the Department. The following table describes the items which must be

reported and the frequency of reporting. Your system is required to report the information described in the following table, if it is subject to the specific requirement shown in the first column.

Corresponding requirement	Description of information to report	Frequency
<p>(a) Combined Filter Effluent Requirements. (paragraphs (6)(a) through (d) of this section).</p>	<p>(1) The total number of filtered water turbidity measurements taken during the month.</p> <p>(2) The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to your system's required 95th percentile limit.</p> <p>(3) The date and value of any turbidity measurements taken during the month which exceed the maximum turbidity value for your filtration system.</p>	<p>By the 10th of the following month.</p> <p>By the 10th of the following month.</p> <p>By the 10th of the following month</p>
<p>(b) Individual Turbidity Requirements. (paragraph (7)(a) through (e) of this section).</p>	<p>(1) That your system conducted individual filter turbidity monitoring during the month.</p> <p>(2) The filter number(s), corresponding date(s), and the turbidity value(s) which exceeded 1.0 NTU during the month, and cause (if known) for the exceedance(s), but only if 2 consecutive measurements exceeded 1.0 NTU.</p> <p>(3) If a self-assessment is required, the date that it was triggered and the date that it was completed.</p> <p>(4) If a CPE is required, that the CPE is required and the date that it was triggered.</p> <p>(5) Copy of completed CPE report.....</p>	<p>By the 10th of the following month.</p> <p>By the 10th of the following month.</p> <p>By the 10th of the following month (or 14 days after the self-assessment was triggered only if the self-assessment was triggered during the last four days of the month)</p> <p>By the 10th of the following month.</p> <p>Within 120 days after the CPE was triggered.</p>
<p>(c) Disinfection Profiling..... (paragraphs (4)(a) through (g) of this section)</p>	<p>(1) Results of optional monitoring which show TTHM levels 0.064 mg/L and HAA5 levels 0.048 mg/L (Only if your system wishes to forgo profiling) or that your system has begun disinfection profiling.</p>	<p>(i) For systems serving 500-9,999 by July 1, 2003;</p> <p>(ii) For systems serving fewer than 500 by January 1, 2004.</p>

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<p>(d) Disinfection Benchmarking (paragraph (5)(a) through (e) of this section)</p>	<p>(1) A description of the proposed change in disinfection, your system's disinfection profile for <i>Giardia lamblia</i> (and, if necessary, viruses) and disinfection benchmark, and an analysis of how the proposed change will affect the current levels of disinfection.</p>	<p>Anytime your system is considering a significant change to its disinfection practice.</p>
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Add new R.61-58.10.K to read:

K. Enhanced Treatment for Cryptosporidium (Long Term 2 Surface Water Treatment Rule)

(1) General Requirements

(a) The requirements of R.61-58.10.K are National Primary Drinking Water Regulations that establish or extend treatment technique requirements in lieu of maximum contaminant levels for Cryptosporidium. These requirements are in addition to requirements for filtration and disinfection in R.61-58.10 A through I.

(b) Applicability.

The requirements of R.61-58.10.K apply to all subpart H systems.

(i) Wholesale systems, as defined in R.61-58.B , must comply with the requirements of R.61-58.10.K based on the population of the largest system in the combined distribution system.

(ii) The requirements of R.61-58.10.K for filtered systems apply to systems required by State Primary Drinking Water Regulations to provide filtration treatment, whether or not the system is currently operating a filtration system.

(iii) The requirements of R.61-58.10.K for unfiltered systems apply only to unfiltered systems that timely met and continue to meet the filtration avoidance criteria in R.61-58.10.A through I, as applicable.

(c) Requirements.

Systems subject to R.61-58.10.K must comply with the following requirements:

(i) Systems must conduct an initial and a second round of source water monitoring for each plant that treats a surface water or ground water under direct influence (GWUDI) source. This monitoring may include sampling for Cryptosporidium, E. coli, and turbidity as described in R.61-58.10.K(2) through R.61-58.10.K(7), to determine what level, if any, of additional Cryptosporidium treatment they must provide.

(ii) Systems that plan to make a significant change to their disinfection practice must develop disinfection profiles and calculate disinfection benchmarks, as described in R.61-58.10.K(9) and (10).

(iii) Filtered systems must determine their Cryptosporidium treatment bin classification as described in R.61-58.10.K(11) and provide additional treatment for Cryptosporidium, if required, as described in R.61-58.10.K(12). All unfiltered systems must provide treatment for Cryptosporidium as described in R.61-58.10.K(13). Filtered and unfiltered systems must implement Cryptosporidium treatment according to the schedule in R.61-58.10.K(14).

(iv) Systems with uncovered finished water storage facilities must comply with the requirements to cover the storage facility or treat the discharge from the storage facility as described in R.61-58.10.K(15).

(v) Systems required to provide additional treatment for *Cryptosporidium* must implement microbial toolbox options that are designed and operated as described in R.61-58.10.K(16) through R.61-58.10.K(21).

(vi) Systems must comply with the applicable recordkeeping and reporting requirements described in R.61-58.10.K(22) through R.61-58.10.K(23).

(vii) Systems must address significant deficiencies identified in sanitary surveys performed by EPA as described in R.61-58.10.K(24).

(2) Source Water Monitoring.

(a) Initial Source Monitoring.

Systems must conduct the following monitoring on the schedule in R.61-58.10.K(2)(c) unless they meet the monitoring exemption criteria in R.61-58.10.K(2)(d).

(i) Filtered systems serving at least 10,000 people must sample their source water for *Cryptosporidium*, *E. coli*, and turbidity at least monthly for 24 months.

(ii) Unfiltered systems serving at least 10,000 people must sample their source water for *Cryptosporidium* at least monthly for 24 months.

(iii) *E. coli* Monitoring for Filtered Systems Serving Fewer Than 10,000 People.

(A) Filtered systems serving fewer than 10,000 people must sample their source water for *E. coli* at least once every two weeks for 12 months.

(B) A filtered system serving fewer than 10,000 people may avoid *E. coli* monitoring if the system notifies the Department that it will monitor for *Cryptosporidium* as described in R.61-58.10.K(2)(a)(4). The system must notify the Department no later than 3 months prior to the date the system is otherwise required to start *E. coli* monitoring under R.61-58.10.K(2)(c).

(iv) Filtered systems serving fewer than 10,000 people must sample their source water for *Cryptosporidium* at least twice per month for 12 months or at least monthly for 24 months if they meet one of the following criteria in (A) through (D) below, based on monitoring conducted under R.61-58.10.K(2)(a)(iii).

(A) For systems using lake/reservoir sources, the annual mean *E. coli* concentration is greater than 10 *E. coli* per 100 mL.

(B) For systems using flowing stream sources, the annual mean *E. coli* concentration is greater than 50 *E. coli* per 100 mL.

(C) The system does not conduct *E. coli* monitoring as described in R.61-58.10.K(2)(a)(iii).

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(D) Systems using a GWUDI source must comply with the requirements of R.61-58.10.K(2)(a)(iv) based on the E. coli level that applies to the nearest surface water body. If no surface water body is nearby, the system must comply based on the requirements that apply to systems using lake or reservoir sources.

(v) For filtered systems serving fewer than 10,000 people, the Department may approve monitoring for an indicator other than E. coli under R.61-58.10.K(2)(a)(iii). The Department also may approve an alternative to the E. coli concentration in paragraph R.61-58.10.K(2)(a)(iv)(A), (B) or (D) to trigger Cryptosporidium monitoring. This approval by the Department must be in writing and will include the basis for the Department's determination that the alternative indicator and/or trigger level will provide a more accurate identification of whether a system will exceed the Bin 1 Cryptosporidium level in R.61-58.10.K(11).

(vi) Unfiltered systems serving fewer than 10,000 people must sample their source water for Cryptosporidium at least twice per month for 12 months or at least monthly for 24 months.

(vii) Systems may sample more frequently than required under this section if the sampling frequency is evenly spaced throughout the monitoring period.

(b) Second round of source water monitoring.

Systems must conduct a second round of source water monitoring that meets the requirements for monitoring parameters, frequency, and duration described in R.61-58.10.K(2)(a), unless they meet the monitoring exemption criteria in R.61-58.10.K(2)(d). Systems must conduct this monitoring on the schedule in R.61-58.10.K(2)(c).

(c) Monitoring Schedule

Systems must begin the monitoring required in R.61-58.10.K(2)(a) and (b) no later than the month beginning with the date listed in R.61-58.10.K(2)(c)(i) through (v).

(i) Systems that serve at least 100,000 people must begin the first round of source water monitoring no later than the month beginning October 1, 2006, and must begin the second round of source water monitoring no later than the month beginning April 1, 2015.

(ii) Systems that serve from 50,000 to 99,999 people must begin the first round of source water monitoring no later than the month beginning April 1, 2007, and must begin the second round of source water monitoring no later than the month beginning October 1, 2015.

(iii) Systems that serve from 10,000 to 49,999 people must begin the first round of source water monitoring no later than the month beginning April 1, 2008, and must begin the second round of source water monitoring no later than the month beginning October 1, 2016.

(iv) Systems that serve fewer than 10,000 people and monitor for E. coli (applies only to filtered systems) must begin the first round of source water monitoring no later than the month beginning October 1, 2008, and must begin the second round of source water monitoring no later than the month beginning October 1, 2017.

(v) Systems that serve fewer than 10,000 people and monitor for Cryptosporidium must begin the first round of source water monitoring no later than the month beginning April 1, 2010, and must begin the second round of source water monitoring no later than the month beginning April 1, 2019. (Applies to filtered systems that meet the conditions of R.61-58.10.K(2)(a)(iv) and unfiltered systems).

(d) Monitoring Avoidance.

(i) Filtered systems are not required to conduct source water monitoring under R.61-58.10.K if the system will provide a total of at least 5.5-log of treatment for *Cryptosporidium*, equivalent to meeting the treatment requirements of Bin 4 in R.61-58.10.K(12).

(ii) Unfiltered systems are not required to conduct source water monitoring under R.61-58.10.K if the system will provide a total of at least 3-log *Cryptosporidium* inactivation, equivalent to meeting the treatment requirements for unfiltered systems with a mean *Cryptosporidium* concentration of greater than 0.01 oocysts per L in R.61-58.10.K(13).

(iii) If a system chooses to provide the level of treatment in R.61-58.10.K(2)(d)(1) or (2), as applicable, rather than start source water monitoring, the system must notify the Department in writing no later than the date the system is otherwise required to submit a sampling schedule for monitoring under R.61-58.10.K(3). Alternatively, a system may choose to stop sampling at any point after it has initiated monitoring if it notifies the Department in writing that it will provide this level of treatment. Systems must install and operate technologies to provide this level of treatment by the applicable treatment compliance date in R.61-58.10.K(14).

(e) Plants Operating Only Part of the Year.

Systems with subpart H plants that operate for only part of the year must conduct source water monitoring in accordance with R.61-58.10.K with the following modifications:

(i) Systems must sample their source water only during the months that the plant operates unless the Department specifies another monitoring period based on plant operating practices.

(ii) Systems with plants that operate less than six months per year and that monitor for *Cryptosporidium* must collect at least six *Cryptosporidium* samples per year during each of two years of monitoring. Samples must be evenly spaced throughout the period the plant operates.

(f) New Sources.

(i) A system that begins using a new source of surface water or ground water under the direct influence of surface water after the system is required to begin monitoring under R.61-58.10.K(2)(c) must monitor the new source on a schedule approved by the Department. Source water monitoring must meet the requirements of R.61-58.10.K. The system must also meet the bin classification and *Cryptosporidium* treatment requirements of R.61-58.10.K(11) and R.61-58.10.K(12) or R.61-58.10.K(13), as applicable, for the new source on a schedule approved by the Department.

(ii) The requirements of R.61-58.10.K(2)(f) apply to subpart H systems that begin operation after the monitoring start date applicable to the system's size under R.61-58.10.K(2)(c).

(iii) The system must begin a second round of source water monitoring no later than 6 years following initial bin classification under R.61-58.10.K(11) or determination of the mean *Cryptosporidium* level under R.61-58.10.K(13), as applicable.

(g) Failure to collect any source water sample required under R.61-58.10.K(2) in accordance with the sampling schedule, sampling location, analytical method, approved laboratory, and reporting requirements of R.61-58.10.K(3) through R.61-58.10.K(7) is a monitoring violation.

(h) Grandfathering Monitoring Data.

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Systems may use (grandfather) monitoring data collected prior to the applicable monitoring start date in R.61-58.10.K(2)(c) to meet the initial source water monitoring requirements in R.61-58.10.K(2)(a). Grandfathered data may substitute for an equivalent number of months at the end of the monitoring period. All data submitted under this paragraph must meet the requirements in R.61-58.10.K(8).

(3) Sampling Schedules.

(a) Systems required to conduct source water monitoring under R.61-58.10.K(2) must submit a sampling schedule that specifies the calendar dates when the system will collect each required sample.

(i) Systems must submit sampling schedules no later than 3 months prior to the applicable date listed in R.61-58.10.K(2)(c) for each round of required monitoring.

(ii) Electronic Submittal of Sample Schedules for Systems Serving at Least 10,000 People.

(A) Systems serving at least 10,000 people must submit their sampling schedule for the initial round of source water monitoring under R.61-58.10.K(2)(a) to EPA electronically.

(B) If a system is unable to submit the sampling schedule electronically, the system may use an alternative approach for submitting the sampling schedule that EPA approves.

(iii) Systems serving fewer than 10,000 people must submit their sampling schedules for the initial round of source water monitoring under R.61-58.10.K(2)(a) to the Department.

(iv) Systems must submit sampling schedules for the second round of source water monitoring under R.61-58.10.K(2)(b) to the Department.

(v) If EPA or the Department does not respond to a system regarding its sampling schedule, the system must sample according to the submitted schedule.

(b) Systems must collect samples within two days before or two days after the dates indicated in their sampling schedule (i.e., within a five-day period around the schedule date) unless one of the conditions of R.61-58.10.K(3)(b)(i) or (ii) applies.

(i) If an extreme condition or situation exists that may pose danger to the sample collector, or that cannot be avoided and causes the system to be unable to sample in the scheduled five-day period, the system must sample as close to the scheduled date as is feasible unless the Department approves an alternative sampling date. The system must submit an explanation for the delayed sampling date to the Department at the same time the sample is shipped to the laboratory.

(ii) Replacement Samples.

(A) If a system is unable to report a valid analytical result for a scheduled sampling date due to equipment failure, loss of or damage to the sample, failure to comply with the analytical method requirements, including the quality control requirements in R.61-58.10.K(5), or the failure of an approved laboratory to analyze the sample, then the system must collect a replacement sample.

(B) The system must collect the replacement sample not later than 21 days after receiving information that an analytical result cannot be reported for the scheduled date unless the system demonstrates that collecting a replacement sample within this time frame is not feasible or the Department approves an alternative resampling date. The system must submit an explanation for the delayed sampling date to the Department at the same time the sample is shipped to the laboratory.

(c) Systems that fail to meet the criteria of R.61-58.10.K(3)(b) for any source water sample required under R.61-58.10.K(2) must revise their sampling schedules to add dates for collecting all missed samples. Systems must submit the revised schedule to the Department for approval prior to when the system begins collecting the missed samples.

(4) Sampling Locations.

(a) Systems required to conduct source water monitoring under R.61-58.K(2) must collect samples for each plant that treats a surface water or a GWUDI source. Where multiple plants draw water from the same influent, such as the same pipe or intake, the Department may approve one set of monitoring results to be used to satisfy the requirements of R.61-58.10.K(2) for all plants.

(b) Sampling Prior to Chemical Treatment.

(i) Systems must collect source water samples prior to chemical treatment, such as coagulants, oxidants and disinfectants, unless the system meets the condition of R.61-58.10.K(4)(b)(ii).

(ii) The Department may approve a system to collect a source water sample after chemical treatment if the Department determines that collecting a sample prior to chemical treatment is not feasible for the system and that the chemical treatment is unlikely to have a significant adverse effect on the analysis of the sample.

(c) Systems that recycle filter backwash water must collect source water samples prior to the point of filter backwash water addition.

(d) Bank Filtration.

(i) Systems that receive *Cryptosporidium* treatment credit for bank filtration under R.61-58.10.H(4)(b) or R.61-58.10.I(6)(c), as applicable, must collect source water samples in the source water prior to bank filtration.

(ii) Systems that use bank filtration as pretreatment to a filtration plant must collect source water samples from the well (i.e., after bank filtration). Use of bank filtration during monitoring must be consistent with routine operational practice. Systems collecting samples after a bank filtration process may not receive treatment credit for the bank filtration under R.61-58.10.K(18)(c).

(e) Multiple Sources.

Systems with plants that use multiple water sources, including multiple surface water sources and blended surface water and ground water sources, must collect samples as specified in R.61-58.10.K(4)(e)(i) or (ii). The use of multiple sources during monitoring must be consistent with routine operational practice.

(i) If a sampling tap is available where the sources are combined prior to treatment, systems must collect samples from the tap.

(ii) If a sampling tap where the sources are combined prior to treatment is not available, systems must collect samples at each source near the intake on the same day and must follow either R.61-58.10.K(4)(e)(ii)(A) or (B) for sample analysis.

(A) Systems may composite samples from each source into one sample prior to analysis. The volume of sample from each source must be weighted according to the proportion of flow from each source in the total plant flow at the time the sample is collected.

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(B) Systems may analyze samples from each source separately and calculate a weighted average of the analysis results for each sampling date. The weighted average must be calculated by multiplying the analysis result for each source by the fraction that each source contributed to total plant flow at the time the sample was collected and then summing these values.

(f) Additional Requirements.

Systems must submit a description of their sampling location(s) to the Department at the same time as the sampling schedule required under R.61-58.10.K(3). This description must address the position of the sampling location in relation to the system's water source(s) and treatment processes, including pretreatment, points of chemical treatment, and filter backwash recycle. If the Department does not respond to a system regarding sampling location(s), the system must sample at the submitted location(s).

(5) Analytical Methods.

(a) Cryptosporidium. Systems must analyze for Cryptosporidium using EPA-approved methods listed in 40 CFR 141.704.

(i) Systems must analyze at least a 10 L sample or a packed pellet volume of at least 2 mL. Systems unable to process a 10 L sample must analyze as much sample volume as can be filtered by two filters approved by EPA, up to a packed pellet volume of at least 2 mL.

(ii)(A) Matrix spike (MS) samples, must be spiked and filtered by a laboratory approved for Cryptosporidium analysis under R.61-58.10.K(6).

(B) If the volume of the matrix spike sample is greater than 10 L, the system may filter all but 10 L of the matrix spike sample in the field, and ship the filtered sample and the remaining 10 L of source water to the laboratory. In this case, the laboratory must spike the remaining 10 L of water and filter it through the filter used to collect the balance of the sample in the field.

(iii) Flow cytometer-counted spiking suspensions must be used for matrix spike samples and ongoing precision and recovery (OPR) samples.

(b) E. coli. Systems must use methods for enumeration of E. coli in source water approved in 40 CFR 136.3(a).

(i) The time from sample collection to initiation of analysis may not exceed 30 hours unless the system meets the condition of R.61-58.10.K(5)(b)(ii).

(ii) The Department may approve on a case-by-case basis the holding of an E. coli sample for up to 48 hours between sample collection and initiation of analysis if the Department determines that analyzing an E. coli sample within 30 hours is not feasible. E. coli samples held between 30 to 48 hours must be analyzed by the Colilert reagent version of Standard Methods 9223B as listed in 40 CFR 136.3(a).

(iii) Samples must be maintained between 0 degrees Celsius and 10 degrees Celsius during storage and transit to the laboratory.

(c) Turbidity. Systems must use methods for turbidity measurement approved in 40 CFR 141.74(a)(1).

(6) Approved Laboratories

(a) *Cryptosporidium*. Systems must have *Cryptosporidium* samples analyzed by a laboratory that is approved under EPA's Laboratory Quality Assurance Evaluation Program for Analysis of *Cryptosporidium* in Water or a laboratory that has been certified for *Cryptosporidium* analysis by the Department's laboratory certification program.

(b) *E. coli*. *E. coli* analyses for compliance with R.61-58.10.K must be performed by a certified laboratory.

(c) Turbidity. Measurements of turbidity must be made by a party approved by the Department.

(7) Reporting Source Water Monitoring Results.

(a) Systems must report results from the source water monitoring required under R.61-58.10.K(2) no later than 10 days after the end of the first month following the month when the sample is collected.

(b) Electronic Reporting for Systems Serving at Least 10,000 People.

(i) All systems serving at least 10,000 people must report the results from the initial source water monitoring required under R.61-58.10.K(2)(a) to EPA electronically.

(ii) If a system serving at least 10,000 people is unable to report monitoring results electronically, the system may use an alternative approach for reporting monitoring results that EPA approves.

(c) Systems serving fewer than 10,000 people must report results from the initial source water monitoring required under R.61-58.10.K(2)(a) to the Department.

(d) All systems must report results from the second round of source water monitoring required under R.61-58.10.K(2)(b) to the Department.

(e) Systems must report the applicable information in R.61-58.10.K(7)(e)(i) and (ii) for the source water monitoring required under R.61-58.10.K(2).

(i) Systems must report the following data elements for *Cryptosporidium* analysis: PWS ID, Facility ID, Sample collection date, Sample type (field or matrix spike), Sample volume filtered (to nearest one quarter of a L), Whether or not 100 percent of the filtered volume was examined, and the Number of oocysts counted.

(A) For matrix spike samples, systems must also report the sample volume spiked and estimated number of oocysts spiked. These data are not required for field samples.

(B) For samples in which less than 10 L is filtered or less than 100 percent of the sample volume is examined, systems must also report the number of filters used and the packed pellet volume.

(C) For samples in which less than 100 percent of sample volume is examined, systems must also report the volume of resuspended concentrate and volume of this resuspension processed through immunomagnetic separation.

(ii) Systems must report the following data elements for each *E. coli* analysis: PWS ID, Facility ID, Sample collection date, Analytical method number, Method type, Source type (flowing stream, lake or reservoir, GWUDI), *E. coli* per 100 mL, and Turbidity. Systems serving fewer than 10,000 people that are not required to monitor for turbidity under R.61-58.10.K(2) are not required to report turbidity with their *E. coli* results.

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(8) Grandfathering Previously Collected Data.

(a) Sample Requirements.

(i) Systems may comply with the initial source water monitoring requirements of R.61-58.10.K(2)(a) by grandfathering sample results collected before the system is required to begin monitoring (i.e., previously collected data). To be grandfathered, the sample results and analysis must meet the criteria in R.61-58.10.K(8) and be approved by the Department.

(ii) A filtered system may grandfather *Cryptosporidium* samples to meet the requirements of R.61-58.10.K(2)(a) when the system does not have corresponding *E. coli* and turbidity samples. A system that grandfathers *Cryptosporidium* samples without *E. coli* and turbidity samples is not required to collect *E. coli* and turbidity samples when the system completes the requirements for *Cryptosporidium* monitoring under R.61-58.10.K(2)(a).

(b) *E. coli* sample analysis. The analysis of *E. coli* samples must meet the analytical method and approved laboratory requirements of R.61-58.10.K(5) and R.61-58.10.K(6).

(c) *Cryptosporidium* sample analysis. *Cryptosporidium* samples must be analyzed as outlined in 40 CFR 141.707(c).

(d) Sampling Location. The sampling location must meet the conditions in R.61-58.10.K(4).

(e) Sampling Frequency.

Cryptosporidium samples must have been collected no less frequently than each calendar month on a regular schedule, beginning no earlier than January 1999. Sample collection intervals may vary for the conditions specified in R.61-58.10.K(3)(b)(i) and (ii) if the system provides documentation of the condition when reporting monitoring results.

(i) The Department may approve grandfathering of previously collected data where there are time gaps in the sampling frequency if the system conducts Department-specified additional monitoring to ensure that the data used to comply with R.61-58.10.K(2)(a) are seasonally representative and unbiased.

(ii) Systems may grandfather previously collected data where the sampling frequency within each month varied. If the *Cryptosporidium* sampling frequency varied, systems must follow the monthly averaging procedure in R.61-58.10.K(11)(b)(v) or R.61-58.10.K(13)(a)(iii), as applicable, when calculating the bin classification for filtered systems or the mean *Cryptosporidium* concentration for unfiltered systems.

(f) Reporting Monitoring Results for Grandfathering.

Systems that request to grandfather previously collected monitoring results must report the following information specified in R.61-58.10.K(8)(f)(i) and (ii) by the applicable dates listed. Systems serving at least 10,000 people must report this information to EPA unless the Department approves reporting directly to the Department rather than EPA. Systems serving fewer than 10,000 people must report this information to the Department.

(i) Systems must report that they intend to submit previously collected monitoring results for grandfathering. This report must specify the number of previously collected results the system will submit, the dates of the first and last sample, and whether a system will conduct additional source water monitoring to meet the requirements of R.61-58.10.K(2)(a). Systems must report this information no later than the date the sampling schedule found in R.61-58.10.K(3) is required.

(ii) Systems must report previously collected monitoring results for grandfathering, along with the associated documentation listed in R.61-58.10.K(8)(f)(ii)(A) through (D) , no later than two months after the applicable date listed in R.61-58.10.K(2)(c).

(A) For each sample result, systems must report the applicable data elements in R.61-58.10.K(7).

(B) Systems must certify that the reported monitoring results include all results that the system generated during the time period beginning with the first reported result and ending with the final reported result. This applies to samples that were collected from the sampling location specified for source water monitoring, not spiked, and analyzed using the laboratory's routine process for the analytical methods.

(C) Systems must certify that the samples were representative of a plant's source water(s) and the source water(s) have not changed. Systems must report a description of the sampling location(s), which must address the position of the sampling location in relation to the system's water source(s) and treatment processes, including points of chemical addition and filter backwash recycle.

(D) For *Cryptosporidium* samples, the laboratory or laboratories that analyzed the samples must provide a letter certifying that the quality control criteria specified in the methods listed in 40 CFR 141.707 were met for each sample batch associated with the reported results. Alternatively, the laboratory may provide bench sheets and sample examination report forms for each field, matrix spike, IPR, OPR, and method blank sample associated with the reported results.

(g) If the Department determines that a previously collected data set submitted for grandfathering was generated during source water conditions that were not normal for the system, such as a drought, the Department may disapprove the data. Alternatively, the Department may approve the previously collected data if the system reports additional source water monitoring data, as determined by the Department, to ensure that the data set used under R.61-58.10.K(11) or R.61-58.10.K(13) represents average source water conditions for the system.

(h) If a system submits previously collected data that fully meet the number of samples required for initial source water monitoring under R.61-58.10.K(2)(a) and some of the data are rejected due to not meeting the requirements of R.61-58.10.K(8), systems must conduct additional monitoring to replace rejected data on a schedule the Department approves. Systems are not required to begin this additional monitoring until two months after notification that data have been rejected and additional monitoring is necessary.

(9) Requirements When Making a Significant Change in Disinfection Practice.

(a) Following the completion of initial source water monitoring under R.61-58.10.K(2)(a), a system that plans to make a significant change to its disinfection practice, as defined in R.61-58.10.K(9)(b), must develop a disinfection profile and calculate a disinfection benchmark for *Giardia lamblia* and viruses as described in R.61-58.10.K(10). Prior to changing the disinfection practice, the system must notify the Department and must include in this notice the information listed in R.61-58.10.K(9)(a)(i) through (iii).

(i) A completed disinfection profile and disinfection benchmark for *Giardia lamblia* and viruses as described in R.61-58.10.K(10).

(ii) A description of the proposed change in disinfection practice.

(iii) An analysis of how the proposed change will affect the current level of disinfection.

(b) Significant changes to disinfection practice are defined as follows:

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- (i) Changes to the point of disinfection;
 - (ii) Changes to the disinfectant(s) used in the treatment plant;
 - (iii) Changes to the disinfection process; or
 - (iv) Any other modification identified by the Department as a significant change to disinfection practice.
- (10) Developing the Disinfection Profile and Benchmark.

(a) Systems required to develop disinfection profiles under R.61-58.10.K(9) must follow the requirements of R.61-58.10.K(10). Systems must monitor at least weekly for a period of 12 consecutive months to determine the total log inactivation for *Giardia lamblia* and viruses. If systems monitor more frequently, the monitoring frequency must be evenly spaced. Systems that operate for fewer than 12 months per year must monitor weekly during the period of operation. Systems must determine log inactivation for *Giardia lamblia* through the entire plant, based on CT_{99.9} values in Tables 1.1 through 1.6, 2.1 and 3.1 of R.61-58.10.F as applicable. Systems must determine log inactivation for viruses through the entire treatment plant based on a protocol approved by the Department.

(b) Systems with a single point of disinfectant application prior to the entrance to the distribution system must conduct the monitoring in R.61-58.10(K)(10)(b)(i) through (iv). Systems with more than one point of disinfectant application must conduct the monitoring in R.61-58.10(K)(10)(b)(i) through (iv) for each disinfection segment. Systems must monitor the parameters necessary to determine the total inactivation ratio, using analytical methods in 40 CFR 141.74(a).

(i) For systems using a disinfectant other than UV, the temperature of the disinfected water must be measured at each residual concentration sampling point during peak hourly flow or at an alternative location approved by the Department.

(ii) For systems using chlorine, the pH of the disinfected water must be measured at each chlorine residual sampling point during peak hourly flow or at an alternative location approved by the Department.

(iii) The disinfectant contact time(s) (t) must be determined during peak hourly flow.

(iv) The residual disinfectant concentration(s) (C) of the water before or at the first customer and prior to each additional point of disinfectant application must be measured during peak hourly flow.

(c) In lieu of conducting new monitoring under R.61-58.10(K)(10)(b), systems may elect to meet the requirements of R.61-58.10(K)(10)(c)(i) or (ii).

(i) Systems that have at least one year of existing data that are substantially equivalent to data collected under the provisions of R.61-58.10(K)(10)(b) may use these data to develop disinfection profiles if the system has neither made a significant change to its treatment practice nor changed sources since the data were collected. Systems may develop disinfection profiles using up to three years of existing data.

(ii) Systems may use disinfection profile(s) developed under R.61-58.10.H or R.61-58.10.I in lieu of developing a new profile if the system has neither made a significant change to its treatment practice nor changed sources since the profile was developed. Systems that have not developed a virus profile under R.61-58.10.H or R.61-58.10.I must develop a virus profile using the same monitoring data on which the *Giardia lamblia* profile is based.

(d) Systems must calculate the total inactivation ratio for *Giardia lamblia* as specified in R.61-58.10(K)(10)(d)(i) through (iii).

(i) Systems using only one point of disinfectant application may determine the total inactivation ratio for the disinfection segment based on either of the methods in R.61-58.10(K)(10)(d)(i)(A) or (B).

(A) Determine one inactivation ratio ($CT_{calc}/CT_{99.9}$) before or at the first customer during peak hourly flow.

(B) Determine successive $CT_{calc}/CT_{99.9}$ values, representing sequential inactivation ratios, between the point of disinfectant application and a point before or at the first customer during peak hourly flow. The system must calculate the total inactivation ratio by determining ($CT_{calc}/CT_{99.9}$) for each sequence and then adding the ($CT_{calc}/CT_{99.9}$) values together to determine the sum of $CT_{calc}/CT_{99.9}$.

(ii) Systems using more than one point of disinfectant application before the first customer must determine the CT value of each disinfection segment immediately prior to the next point of disinfectant application, or for the final segment, before or at the first customer, during peak hourly flow. The ($CT_{calc}/CT_{99.9}$) value of each segment and the sum of $CT_{calc}/CT_{99.9}$ must be calculated using the method in R.61-58.10.K(10)(d)(i)(B).

(iii) The system must determine the total logs of inactivation by multiplying the value calculated in R.61-58.10.K(10)(d)(i) or (ii) by 3.0.

(iv) Systems must calculate the log of inactivation for viruses using a protocol approved by the Department.

(e) Systems must use the procedures specified in R.61-58.10.K(10)(e)(i) and (ii) to calculate a disinfection benchmark.

(i) For each year of profiling data collected and calculated under R.61-58.10.K(10)(a) through (d), systems must determine the lowest mean monthly level of both *Giardia lamblia* and virus inactivation. Systems must determine the mean *Giardia lamblia* and virus inactivation for each calendar month for each year of profiling data by dividing the sum of daily or weekly *Giardia lamblia* and virus log inactivation by the number of values calculated for that month.

(ii) The disinfection benchmark is the lowest monthly mean value (for systems with one year of profiling data) or the mean of the lowest monthly mean values (for systems with more than one year of profiling data) of *Giardia lamblia* and virus log inactivation in each year of profiling data.

(11) Bin Classification for Filtered Systems.

(a) Following completion of the initial round of source water monitoring required under R.61-58.10.K(2)(a), filtered systems must calculate an initial *Cryptosporidium* bin concentration for each plant for which monitoring was required. Calculation of the bin concentration must use the *Cryptosporidium* results reported under R.61-58.10.K(2)(a) and must follow the procedures in R.61-58.10.K(11)(b)(i) through (v).

(b) *Cryptosporidium* bin concentrations. Bin concentration is the *cryptosporidium* concentration(s) used to determine bin classification

(i) For systems that collect a total of at least 48 samples, the bin concentration is equal to the arithmetic mean of all sample concentrations.

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(ii) For systems that collect a total of at least 24 samples, but not more than 47 samples, the bin concentration is equal to the highest arithmetic mean of all sample concentrations in any 12 consecutive months during which *Cryptosporidium* samples were collected.

(iii) For systems that serve fewer than 10,000 people and monitor for *Cryptosporidium* for only one year (i.e., collect 24 samples in 12 months), the bin concentration is equal to the arithmetic mean of all sample concentrations.

(iv) For systems with plants operating only part of the year that monitor fewer than 12 months per year under R.61-58.10.K(2)(e), the bin concentration is equal to the highest arithmetic mean of all sample concentrations during any year of *Cryptosporidium* monitoring.

(v) If the monthly *Cryptosporidium* sampling frequency varies, systems must first calculate a monthly average for each month of monitoring. Systems must then use these monthly average concentrations, rather than individual sample concentrations, in the applicable calculation for bin classification in R.61-58.10.K(11)(b)(i) through (iv).

(c) Filtered systems that are required to monitor under R.61-58.10.K(2) must determine their initial bin classification from the Bin Classification Table that follows and using the *Cryptosporidium* bin concentration calculated under R.61-58.10.K(11)(a) and (b). The bin classification for filtered systems that serve fewer than 10,000 people and are not required to monitor under R.61-58.10.K(2)(a)(iv) is Bin 1.

Bin Classification Table For Filtered Systems

Cryptosporidium Concentration	Bin Classification
Less than 0.075 oocysts per L	Bin 1
0.075 to less than 1.0 oocysts per L	Bin 2
1.0 to less than 3.0 oocysts per L	Bin 3
Greater than or equal to 3.0 oocysts per L	Bin 4

(d) Following completion of the second round of source water monitoring required under R.61-58.10.K(2)(b), filtered systems must recalculate their *Cryptosporidium* bin concentration using the *Cryptosporidium* results reported under R.61-58.10.K(2)(b) and following the procedures in R.61-58.10.K(11)(b)(i) through (iv). Systems must then redetermine their bin classification using this bin concentration and the table in R.61-58.10.K(11)(c).

(e) Reporting Bin Classifications to the Department.

(i) Filtered systems must report their initial bin classification under R.61-58.10.K(11)(c) to the Department for approval no later than 6 months after the system is required to complete initial source water monitoring based on the schedule in R.61-58.10.K(2)(c).

(ii) Systems must report their bin classification under R.61-58.10.K(11)(d) to the Department for approval no later than 6 months after the system is required to complete the second round of source water monitoring based on the schedule in R.61-58.10.K(2)(c).

(iii) The bin classification report to the Department must include a summary of source water monitoring data and the calculation procedure used to determine bin classification.

(f) Failure to comply with the conditions of R.61-58.10.K(11)(e) is a violation of the treatment technique requirement.

(12) Filtered System Additional *Cryptosporidium* Treatment Requirements.

(a) Filtered systems must provide the level of additional treatment for *Cryptosporidium* specified in this paragraph (12)(a) based on their bin classification as determined under R.61-58.10.K(11) and according to the schedule in R.61-58.10.K(14).

Bin Classifications According to Treatment Type¹

Bin Classification	Conventional Filtration (includes softening)	Direct Filtration	Slow sand or diatomaceous earth filtration	Alternative filtration technologies
Bin 1	No additional treatment	No additional treatment	No additional treatment	No additional treatment
Bin 2	1-log treatment	1.5-log treatment	1-log treatment	See note 2
Bin 3	2-log treatment	2.5-log treatment	2-log treatment	See note 3
Bin 4	2.5-log treatment	3-log treatment	2.5-log treatment	See note 4

Notes:

1. The treatment requirements are valid provided that the water system is in full compliance with R.61-58.10.H & R.61-58.10.I
2. As determined by the Department such that the total *Cryptosporidium* removal and inactivation is at least 4.0-log.
3. As determined by the Department such that the total *Cryptosporidium* removal and inactivation is at least 5.0-log.
4. As determined by the Department such that the total *Cryptosporidium* removal and inactivation is at least 5.5-log.

(b) *Cryptosporidium* Treatment Requirements.

(i) Filtered systems must use one or more of the treatment and management options listed in R.61-58.10.K(16), termed the microbial toolbox, to comply with the additional *Cryptosporidium* treatment required in R.61-58.10.K(12)(a).

(ii) Systems classified in Bin 3 and Bin 4 must achieve at least 1-log of the additional *Cryptosporidium* treatment required under R.61-58.10.K(12)(a) of this section using either one or a combination of the following: bag filters, bank filtration, cartridge filters, chlorine dioxide, membranes, ozone, or UV, as described in R.61-58.10.K(17) through (21).

(c) Failure by a system in any month to achieve treatment credit by meeting criteria in R.61-58.10.K(17) through (21) for microbial toolbox options that is at least equal to the level of treatment required in R.61-58.10.K(12)(a) is a violation of the treatment technique requirement.

(d) If the Department determines during a sanitary survey or an equivalent source water assessment that after a system completed the monitoring conducted under R.61-58.10.K(2)(a) or (b), significant changes occurred in the system's watershed that could lead to increased contamination of the source water by *Cryptosporidium*, the system must take actions specified by the Department to address the contamination. These actions may include additional source water monitoring and/or implementing microbial toolbox options listed in R.61-58.10.K(16).

(13) Unfiltered system *Cryptosporidium* Treatment Requirements.

(a) Determination of Mean *Cryptosporidium* Level.

(i) Following completion of the initial source water monitoring required under R.61-58.10.K(2)(a), unfiltered systems must calculate the arithmetic mean of all *Cryptosporidium* sample concentrations reported

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under R.61-58.10.K(2)(a). Systems must report this value to the Department for approval no later than 6 months after the month the system is required to complete initial source water monitoring based on the schedule in R.61-58.10.K(2)(c).

(ii) Following completion of the second round of source water monitoring required under R.61-58.10.K(2)(b), unfiltered systems must calculate the arithmetic mean of all *Cryptosporidium* sample concentrations reported under R.61-58.10.K(2)(b). Systems must report this value to the Department for approval no later than 6 months after the month the system is required to complete the second round of source water monitoring based on the schedule in R.61-58.10.K(2)(c).

(iii) If the monthly *Cryptosporidium* sampling frequency varies, systems must first calculate a monthly average for each month of monitoring. Systems must then use these monthly average concentrations, rather than individual sample concentrations, in the calculation of the mean *Cryptosporidium* level in R.61-58.10.K(13)(a)(i) or (ii).

(iv) The report to the Department of the mean *Cryptosporidium* levels calculated under R.61-58.10.K(13)(a)(i) and (ii) must include a summary of the source water monitoring data used for the calculation.

(v) Failure to comply with the conditions of R.61-58.10.K(13)(a) is a violation of the treatment technique requirement.

(b) *Cryptosporidium* Inactivation Requirements.

Unfiltered systems must provide the level of inactivation for *Cryptosporidium* specified in this paragraph (b), based on their mean *Cryptosporidium* levels as determined under R.61-58.10.K(13)(a) and according to the schedule in R.61-58.10.K(14).

(i) Unfiltered systems with a mean *Cryptosporidium* level of 0.01 oocysts per L or less must provide at least 2-log *Cryptosporidium* inactivation.

(ii) Unfiltered systems with a mean *Cryptosporidium* level of greater than 0.01 oocysts per L must provide at least 3-log *Cryptosporidium* inactivation.

(c) Inactivation Treatment Technology Requirements.

Unfiltered systems must use chlorine dioxide, ozone, or UV as described in R.61-58.10.K(21) to meet the *Cryptosporidium* inactivation requirements of R.61-58.10.K(13).

(i) Systems that use chlorine dioxide or ozone and fail to achieve the *Cryptosporidium* inactivation required in R.61-58.10.K(13)(b) on more than one day in the calendar month are in violation of the treatment technique requirement.

(ii) Systems that use UV light and fail to achieve the *Cryptosporidium* inactivation required in R.61-58.10.K(13)(b) by meeting the criteria in R.61-58.10.K(21)(d)(iii)(B) are in violation of the treatment technique requirement.

(d) Use of Two Disinfectants.

Unfiltered systems must meet the combined *Cryptosporidium* inactivation requirements of R.61-58.10.K(13) and *Giardia lamblia* and virus inactivation requirements of R.61-58.10.D(1) using a minimum of two disinfectants, and each of two disinfectants must separately achieve the total inactivation required for either *Cryptosporidium*, *Giardia lamblia*, or viruses.

(14) Schedule for compliance with Cryptosporidium Treatment Requirements.

(a) Following initial bin classification under R.61-58.10.K(11)(c), filtered systems must provide the level of treatment for Cryptosporidium required under R.61-58.10.K(12) according to the schedule in R.61-58.10.K(14)(c).

(b) Following initial determination of the mean Cryptosporidium level under R.61-58.10.K(13)(a)(i), unfiltered systems must provide the level of treatment for Cryptosporidium required under R.61-58.10.K(13) according to the schedule in R.61-58.10(K)(14)(c).

(c) Cryptosporidium treatment compliance dates.

(i) Systems that serve at least 100,000 people must comply with Cryptosporidium treatment requirements no later than April 1, 2012.

(ii) Systems that serve from 50,000 to 99,999 people must comply with Cryptosporidium treatment requirements no later than October 1, 2012.

(iii) Systems that serve from 10,000 to 49,999 people must comply with Cryptosporidium treatment requirements no later than October 1, 2013.

(iv) Systems that serve fewer than 10,000 people must comply with Cryptosporidium treatment requirements no later than October 1, 2014.

(v) The Department may grant an additional two years for complying with the treatment technique requirements for systems making capital improvements.

(d) If the bin classification for a filtered system changes following the second round of source water monitoring, as determined under R.61-58.10.K(11)(d), the system must provide the level of treatment for Cryptosporidium required under R.61-58.10.K(12) on a schedule the Department approves.

(e) If the mean Cryptosporidium level for an unfiltered system changes following the second round of monitoring, as determined under R.61-58.10.K(13)(a)(ii), and if the system must provide a different level of Cryptosporidium treatment under R.61-58.10.K(13) due to this change, the system must meet this treatment requirement on a schedule the Department approves.

(15) Requirements for uncovered finished water storage facilities.

(a) Systems using uncovered finished water storage facilities must comply with the conditions of R.61-58.10.K(15).

(b) Systems must notify the Department of the use of each uncovered finished water storage facility no later than April 1, 2008.

(c) Systems must meet the conditions of R.61-58.10.K(15)(c)(i) or (ii) for each uncovered finished water storage facility or be in compliance with a Department-approved schedule to meet these conditions no later than April 1, 2009.

(i) Systems must cover any uncovered finished water storage facility.

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(ii) Systems must treat the discharge from the uncovered finished water storage facility to the distribution system to achieve inactivation and/or removal of at least 4-log virus, 3-log *Giardia lamblia*, and 2-log *Cryptosporidium* using a protocol approved by the Department.

(d) Failure to comply with the requirements of R.61-58.10.K(15) is a violation of the treatment technique requirement.

(16) Microbial toolbox options for meeting *Cryptosporidium* treatment requirements.

(a) *Cryptosporidium* Treatment Credits.

(i) Systems may receive the treatment credits listed in R.61-58.10.K(16)(b) by meeting the conditions for microbial toolbox options described in R.61-58.10.K(17) through (21). Systems apply these treatment credits to meet the treatment requirements in R.61-58.10(K)(12) or R.61-58.10(K)(13), as applicable.

(ii) Unfiltered systems are eligible for treatment credits for the microbial toolbox options described in R.61-58.10.K(21) only.

(b) Microbial Toolbox Summary Treatment Credits and Criteria

(i) Source Protection and Management Toolbox Options

(A) Watershed control program: 0.5-log credit may be given for Department-approved programs that include the required elements, annual program status report to the Department, and regular watershed surveys. Unfiltered systems are not eligible for this credit. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(17)(a).

(B) Alternative source or intake management: No prescribed credit is given. Systems may conduct simultaneous monitoring for treatment bin classification at alternative intake locations or under alternative intake management strategies. Specific criteria for this credit are detailed in R.61-58.10.K(17)(b).

(ii) Pre Filtration Toolbox Options

(A) Presedimentation basin with coagulation: 0.5-log credit may be given during any month that presedimentation basins achieve a monthly mean reduction of 0.5-log or greater in turbidity or alternative Department-approved performance criteria. To be eligible, basins must be operated continuously with coagulant addition and all plant flow must pass through the basins. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(18)(a).

(B) Two-stage lime softening: 0.5-log credit for two-stage softening may be given where chemical addition and hardness precipitation occur in both stages. All plant flow must pass through both stages. Single stage softening is credited as equivalent to conventional treatment. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(18)(b).

(C) Bank filtration: 0.5-log credit may be given for a 25-foot setback; 1.0-log credit may be given for a 50-foot setback. The aquifer must be unconsolidated sand consisting of at least 10 percent fines. The average turbidity in the wells must be less than 1 NTU. Systems using wells followed by filtration when conducting source water monitoring must sample the well to determine bin classification and are not eligible for additional credit. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(18)(c).

(iii) Treatment Performance Toolbox Options

(A) Combined filter performance: 0.5-log credit may be given for combined filter effluent turbidity less than or equal to 0.15 NTU in at least 95 percent of measurements each month. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(19)(a).

(B) Individual filter performance: 0.5-log credit (in addition to 0.5-log combined filter performance credit) may be given if individual filter effluent turbidity is less than or equal to 0.15 NTU in at least 95 percent of samples each month in each filter and is never greater than 0.3 NTU in two consecutive measurements in any filter. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(19)(b).

(C) Demonstration of performance: Credit may be given to unit processes or treatment trains based on a demonstration to the Department with a Department-approved protocol. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(19)(c).

(iv) Additional Filtration Toolbox Options

(A) Bag or cartridge filters (individual filters): Up to 2-log credit may be given based on the removal efficiency demonstrated during challenge testing with a 1.0-log factor of safety. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(20)(a).

(B) Bag or cartridge filters (in series): Up to 2.5-log credit may be given based on the removal efficiency demonstrated during challenge testing with a 0.5-log factor of safety. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(20)(a).

(C) Membrane filtration: The log credit that may be given is equal to the removal efficiency demonstrated in challenge testing for a specific device if supported by direct integrity testing. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(20)(b).

(D) Second stage filtration: 0.5-log credit may be given for a second separate granular media filtration stage if the treatment train includes coagulation prior to the first filter. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(20)(c).

(E) Slow sand filters: 2.5-log credit may be given if it is a secondary filtration step. 3.0-log credit may be given if it is a primary filtration process. Neither option can include chlorination before the filters. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(20)(d).

(v) Inactivation Toolbox Options

(A) Chlorine dioxide: Log credit given is based on the measured CT in relation to the CT table. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(21)(b).

(B) Ozone: Log credit given is based on the measured CT in relation to the CT table. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(21)(b).

(C) UV: Log credit given is based on validated UV dose in relation to UV dose table. Reactor validation testing is required to establish UV dose and associated operating conditions. Specific criteria for obtaining and maintaining this credit are detailed in R.61-58.10.K(21)(d).

(17) Source Toolbox Components.

(a) Watershed Control Program.

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Systems receive 0.5-log *Cryptosporidium* treatment credit for implementing a watershed control program that meets the following requirements:

(i) Systems that intend to apply for the watershed control program credit must notify the Department of this intent no later than two years prior to the treatment compliance date applicable to the system in R.61-58.10.K(14).

(ii) Systems must submit to the Department a proposed watershed control plan no later than one year before the applicable treatment compliance date in R.61-58.10.K(14). The Department must approve the watershed control plan for the system to receive treatment credit. The watershed control plan must include the elements in R.61-58.10.K(17)(a)(ii)(A) through (D).

(A) Identification of an "area of influence" outside of which the likelihood of *Cryptosporidium* or fecal contamination affecting the treatment plant intake is not significant. This is the area to be evaluated in future watershed surveys under R.61-58.10.K(17)(a)(v)(B).

(B) Identification of both potential and actual sources of *Cryptosporidium* contamination and an assessment of the relative impact of these sources on the system's source water quality.

(C) An analysis of the effectiveness and feasibility of control measures that could reduce *Cryptosporidium* loading from sources of contamination to the system's source water.

(D) A statement of goals and specific actions the system will undertake to reduce source water *Cryptosporidium* levels. The plan must explain how the actions are expected to contribute to specific goals, identify watershed partners and their roles, identify resource requirements and commitments, and include a schedule for plan implementation with deadlines for completing specific actions identified in the plan.

(iii) Systems with existing watershed control programs (i.e., programs in place on January 5, 2006) are eligible to seek this credit. Their watershed control plans must meet the criteria in R.61-58.10.K(17)(a)(ii) and must specify ongoing and future actions that will reduce source water *Cryptosporidium* levels.

(iv) If the Department does not respond to a system regarding approval of a watershed control plan submitted under R.61-58.10.K(17) and the system meets the other requirements of R.61-58.10.K(17), the watershed control program will be considered approved and 0.5 log *Cryptosporidium* treatment credit will be awarded unless and until the Department subsequently withdraws such approval.

(v) Systems must complete the actions in R.61-58.10.K(17)(a)(v)(A) through (C) to maintain the 0.5-log credit.

(A) Submit an annual watershed control program status report to the Department. The annual watershed control program status report must describe the system's implementation of the approved plan and assess the adequacy of the plan to meet its goals. It must explain how the system is addressing any shortcomings in plan implementation, including those previously identified by the Department or as the result of the watershed survey conducted under R.61-58.10.K(17)(a)(v)(B). The report must also describe any significant changes that have occurred in the watershed since the last watershed sanitary survey. If a system determines during implementation that making a significant change to its approved watershed control program is necessary, the system must notify the Department prior to making any such changes. If any change is likely to reduce the level of source water protection, the system must also list in its notification the actions the system will take to mitigate this effect.

(B) Undergo a watershed sanitary survey every three years for community water systems and every five years for non-community water systems and submit the survey report to the Department. The survey must be conducted according to Department guidelines and by persons approved by the Department.

(1) The watershed sanitary survey must meet the following criteria: encompass the region identified in the Department-approved watershed control plan as the area of influence; assess the implementation of actions to reduce source water *Cryptosporidium* levels; and identify any significant new sources of *Cryptosporidium*.

(2) If the Department determines that significant changes may have occurred in the watershed since the previous watershed sanitary survey, systems must undergo another watershed sanitary survey by a date the Department requires, which may be earlier than the regular date in R.61-58.10.K(17)(a)(v)(B).

(C) The system must make the watershed control plan, annual status reports, and watershed sanitary survey reports available to the public upon request. These documents must be in a plain language style and include criteria by which to evaluate the success of the program in achieving plan goals. The Department may approve systems to withhold from the public portions of the annual status report, watershed control plan, and watershed sanitary survey based on water supply security considerations.

(vi) If the Department determines that a system is not carrying out the approved watershed control plan, the Department may withdraw the watershed control program treatment credit.

(b) Alternative Source.

(i) A system may conduct source water monitoring that reflects a different intake location (either in the same source or for an alternate source) or a different procedure for the timing or level of withdrawal from the source (alternative source monitoring). If the Department approves, a system may determine its bin classification under R.61-58.10.K(11) based on the alternative source monitoring results.

(ii) If systems conduct alternative source monitoring under R.61-58.10.K(17)(b)(i), systems must also monitor their current plant intake concurrently as described in R.61-58.10.K(2).

(iii) Alternative source monitoring under R.61-58.10.K(17)(b)(i) must meet the requirements for source monitoring to determine bin classification, as described in R.61-58.10.K(2) through (7). Systems must report the alternative source monitoring results to the Department, along with supporting information documenting the operating conditions under which the samples were collected.

(iv) If a system determines its bin classification under R.61-58.10.K(11) using alternative source monitoring results that reflect a different intake location or a different procedure for managing the timing or level of withdrawal from the source, the system must relocate the intake or permanently adopt the withdrawal procedure, as applicable, no later than the applicable treatment compliance date in R.61-58.10.K(14).

(18) Pre-filtration Treatment Toolbox Components.

(a) Presedimentation.

Systems receive 0.5-log *Cryptosporidium* treatment credit for a presedimentation basin during any month the process meets the criteria in R.61-58.10.K(18)(a).

(i) The presedimentation basin must be in continuous operation and must treat the entire plant flow taken from a surface water or GWUDI source.

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(ii) The system must continuously add a coagulant to the presedimentation basin.

(iii) The presedimentation basin must achieve the performance criteria in R.61-58.10.K(18)(iii)(A) or (B).

(A) The system must demonstrate at least 0.5-log mean reduction of influent turbidity. This reduction must be determined using daily turbidity measurements in the presedimentation process influent and effluent and must be calculated as follows: $\log_{10}(\text{monthly mean of daily influent turbidity}) - \log_{10}(\text{monthly mean of daily effluent turbidity})$.

(B) The system must comply with Department-approved performance criteria that demonstrate at least 0.5-log mean removal of micron-sized particulate material through the presedimentation process.

(b) Two-stage Lime Softening.

Systems receive an additional 0.5-log Cryptosporidium treatment credit for a two-stage lime softening plant if chemical addition and hardness precipitation occur in two separate and sequential softening stages prior to filtration. Both softening stages must treat the entire plant flow taken from a surface water or GWUDI source.

(c) Bank Filtration.

Systems receive Cryptosporidium treatment credit for bank filtration that serves as pretreatment to a filtration plant by meeting the criteria in R.61-58.10.K(18)(c). Systems using bank filtration when they begin source water monitoring under R.61-58.10.K(2)(a) must collect samples as described in R.61-58.10.K(4)(d) and are not eligible for this credit.

(i) Wells with a ground water flow path of at least 25 feet receive 0.5-log treatment credit; wells with a ground water flow path of at least 50 feet receive 1.0-log treatment credit. The ground water flow path must be determined as specified in R.61-58.10.K(18)(c)(iv).

(ii) Only wells in granular aquifers are eligible for treatment credit. Granular aquifers are those comprised of sand, clay, silt, rock fragments, pebbles or larger particles, and minor cement. A system must characterize the aquifer at the well site to determine aquifer properties. Systems must extract a core from the aquifer and demonstrate that in at least 90 percent of the core length, grains less than 1.0 mm in diameter constitute at least 10 percent of the core material.

(iii) Only horizontal and vertical wells are eligible for treatment credit.

(iv) For vertical wells, the ground water flow path is the measured distance from the edge of the surface water body under high flow conditions (determined by the 100 year floodplain elevation boundary or by the floodway, as defined in Federal Emergency Management Agency flood hazard maps) to the well screen. For horizontal wells, the ground water flow path is the measured distance from the bed of the river under normal flow conditions to the closest horizontal well lateral screen.

(v) Systems must monitor each wellhead for turbidity at least once every four hours while the bank filtration process is in operation. If monthly average turbidity levels, based on daily maximum values in the well, exceed 1 NTU, the system must report this result to the Department and conduct an assessment within 30 days to determine the cause of the high turbidity levels in the well. If the Department determines that microbial removal has been compromised, the Department may revoke treatment credit until the system implements corrective actions approved by the Department to remediate the problem.

(vi) Springs and infiltration galleries are not eligible for treatment credit under R.61-58.10.K(18), but are eligible for credit under R.61-58.10.K(19)(c).

(vii) Bank Filtration Demonstration of Performance.

The Department may approve *Cryptosporidium* treatment credit for bank filtration based on a demonstration of performance study that meets the criteria in this paragraph. This treatment credit may be greater than 1.0-log and may be awarded to bank filtration that does not meet the criteria in R.61-58.10.K(18)(c)(i) through (v).

(A) The study must follow a Department-approved protocol and must involve the collection of data on the removal of *Cryptosporidium* or a surrogate for *Cryptosporidium* and related hydrogeologic and water quality parameters during the full range of operating conditions.

(B) The study must include sampling both from the production well(s) and from monitoring wells that are screened and located along the shortest flow path between the surface water source and the production well(s).

(19) Treatment Performance Toolbox Components.

(a) Combined Filter Performance.

Systems using conventional filtration treatment or direct filtration treatment may receive an additional 0.5-log *Cryptosporidium* treatment credit during any month the system meets the criteria in this paragraph. Combined filter effluent (CFE) turbidity must be less than or equal to 0.15 NTU in at least 95 percent of the measurements. Turbidity must be measured as described in 40 CFR 141.74(a) and (c).

(b) Individual Filter Performance.

Systems using conventional filtration treatment or direct filtration treatment may receive 0.5-log *Cryptosporidium* treatment credit, which can be in addition to the 0.5-log credit under R.61-58.10.K(19)(a), during any month the system meets the criteria in this paragraph (b). Compliance with these criteria must be based on individual filter turbidity monitoring as described in R.61-58.10.H(5) or R.61-58.10.I(7), as applicable.

(i) The filtered water turbidity for each individual filter must be less than or equal to 0.15 NTU in at least 95 percent of the measurements recorded each month.

(ii) No individual filter may have a measured turbidity greater than 0.3 NTU in two consecutive measurements taken 15 minutes apart.

(iii) Any system that has received treatment credit for individual filter performance and fails to meet the requirements of R.61-58.10.K(19)(b)(i) or (ii) during any month does not receive a treatment technique violation under R.61-58.10.K(12)(c) if the Department determines the following:

(A) The failure was due to unusual and short-term circumstances that could not reasonably be prevented through optimizing treatment plant design, operation, and maintenance.

(B) The system has experienced no more than two such failures in any calendar year.

(c) Demonstration of Performance.

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The Department may approve *Cryptosporidium* treatment credit for drinking water treatment processes based on a demonstration of performance study that meets the criteria in this paragraph (c). This treatment credit may be greater than or less than the prescribed treatment credits in R.61-58.10.K(12) or R.61-58.10.K(18) through (21) and may be awarded to treatment processes that do not meet the criteria for the prescribed credits.

(i) Systems cannot receive the prescribed treatment credit for any toolbox option in R.61-58.10.K(18) through R.61-58.10.K(21) if that toolbox option is included in a demonstration of performance study for which treatment credit is awarded under this paragraph.

(ii) The demonstration of performance study must follow a Department-approved protocol and must demonstrate the level of *Cryptosporidium* reduction the treatment process will achieve under the full range of expected operating conditions for the system.

(iii) Approval by the Department must be in writing and may include monitoring and treatment performance criteria that the system must demonstrate and report on an ongoing basis to remain eligible for the treatment credit. The Department may designate such criteria where necessary to verify that the conditions under which the demonstration of performance credit was approved are maintained during routine operation.

(20) Additional Filtration Toolbox Components.

(a) Bag and Cartridge Filters.

With Department approval, systems may receive *Cryptosporidium* treatment credit of up to 2.0-log for individual bag or cartridge filters and up to 2.5-log for bag or cartridge filters operated in series by meeting the criteria in R.61-58.10.K(20)(a)(i) through (x). To be eligible for this credit, systems must report the results of challenge testing that meets the requirements of R.61-58.10.K(20)(a)(ii) through (ix) to the Department. The filters must treat the entire plant flow taken from a subpart H source.

(i) The *Cryptosporidium* treatment credit awarded to bag or cartridge filters must be based on the removal efficiency demonstrated during challenge testing that is conducted according to the criteria in R.61-58.10.K(20)(a)(ii) through (ix). A factor of safety equal to 1-log for individual bag or cartridge filters and 0.5-log for bag or cartridge filters in series must be applied to challenge testing results to determine removal credit. Systems may use results from challenge testing conducted prior to January 5, 2006 if the prior testing was consistent with the criteria specified in R.61-58.10.K(20)(a)(ii) through (ix).

(ii) Challenge testing must be performed on full-scale bag or cartridge filters, and the associated filter housing or pressure vessel, that are identical in material and construction to the filters and housings the system will use for removal of *Cryptosporidium*. Bag or cartridge filters must be challenge tested in the same configuration that the system will use, either as individual filters or as a series configuration of filters.

(iii) Challenge testing must be conducted using *Cryptosporidium* or a surrogate that is removed no more efficiently than *Cryptosporidium*. The microorganism or surrogate used during challenge testing is referred to as the challenge particulate. The concentration of the challenge particulate must be determined using a method capable of discreetly quantifying the specific microorganism or surrogate used in the test; gross measurements such as turbidity may not be used.

(iv) The maximum feed water concentration that can be used during a challenge test must be based on the detection limit of the challenge particulate in the filtrate (i.e., filtrate detection limit) and must be calculated using the following equation:

$$\text{Maximum Feed Concentration} = 10,000 \times (\text{Filtrate Detection Limit})$$

(v) Challenge testing must be conducted at the maximum design flow rate for the filter as specified by the manufacturer.

(vi) Each filter evaluated must be tested for a duration sufficient to reach 100 percent of the terminal pressure drop. This maximum pressure drop is the pressure drop under which the filter may be used to comply with the requirements of R.61-58.10(K).

(vii) Removal efficiency of a filter must be determined from the results of the challenge test and expressed in terms of log removal values using the following equation:

$$\text{LRV} = \text{LOG}_{10}(\text{C}_f) - \text{LOG}_{10}(\text{C}_p)$$

Where: LRV = log removal value demonstrated during challenge testing; C_f = the feed concentration measured during the challenge test; and C_p = the filtrate concentration measured during the challenge test. In applying this equation, the same units must be used for the feed and filtrate concentrations. If the challenge particulate is not detected in the filtrate, then the term C_p must be set equal to the detection limit.

(viii) Each filter tested must be challenged with the challenge particulate during three periods over the filtration cycle: within two hours of start-up of a new filter; when the pressure drop is between 45 and 55 percent of the terminal pressure drop; and at the end of the cycle after the pressure drop has reached 100 percent of the terminal pressure drop. A log removal value must be calculated for each of these challenge periods for each filter tested. The log removal value for the filter must be assigned the value of the minimum log removal value observed during the three challenge periods for that filter.

(ix) If fewer than 20 filters are tested, the overall removal efficiency for the filter product line must be set equal to the lowest filter log removal value among the filters tested. If 20 or more filters are tested, the overall removal efficiency for the filter product line must be set equal to the 10th percentile of the set of filter log removal values for the various filters tested. The percentile is defined by $(i/(n+1))$ where i is the rank of n individual data points ordered lowest to highest. If necessary, the 10th percentile may be calculated using linear interpolation.

(x) If a previously tested filter is modified in a manner that could change the removal efficiency of the filter product line, challenge testing to demonstrate the removal efficiency of the modified filter must be conducted and submitted to the Department.

(b) Membrane Filtration.

(i) Systems may receive Cryptosporidium treatment credit for membrane filtration that meets the criteria of this paragraph (b). Membrane cartridge filters that meet the definition of membrane filtration in R.61-58.B are eligible for this credit. The level of treatment credit a system receives is equal to the lower of the values determined under R.61-58.10.K(20)(b)(i)(A) and (B).

(A) The removal efficiency demonstrated during challenge testing conducted under the conditions in R.61-58.10.K(20)(b)(ii).

(B) The maximum removal efficiency that can be verified through direct integrity testing used with the membrane filtration process under the conditions in R.61-58.10.K(20)(b)(iii).

(ii) Challenge Testing. The membrane used by the system must undergo challenge testing to evaluate removal efficiency, and the system must report the results of challenge testing to the Department. Challenge testing must be conducted according to the criteria in R.61-58.10.K(20)(b)(ii)(A) through (G). Systems may

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use data from challenge testing conducted prior to January 5, 2006 if the prior testing was consistent with the criteria in R.61-58.10.K(20)(b)(ii)(A) through (G).

(A) Challenge testing must be conducted on either a full-scale membrane module, identical in material and construction to the membrane modules used in the system's treatment facility, or a smaller-scale membrane module, identical in material and similar in construction to the full-scale module. A module is defined as the smallest component of a membrane unit in which a specific membrane surface area is housed in a device with a filtrate outlet structure.

(B) Challenge testing must be conducted using *Cryptosporidium* oocysts or a surrogate that is removed no more efficiently than *Cryptosporidium* oocysts. The organism or surrogate used during challenge testing is referred to as the challenge particulate. The concentration of the challenge particulate, in both the feed and filtrate water, must be determined using a method capable of discretely quantifying the specific challenge particulate used in the test; gross measurements such as turbidity may not be used.

(C) The maximum feed water concentration that can be used during a challenge test is based on the detection limit of the challenge particulate in the filtrate and must be determined according to the following equation:

$$\text{Maximum Feed Concentration} = 3,160,000 \times (\text{Filtrate Detection Limit})$$

(D) Challenge testing must be conducted under representative hydraulic conditions at the maximum design flux and maximum design process recovery specified by the manufacturer for the membrane module. Flux is defined as the throughput of a pressure driven membrane process expressed as flow per unit of membrane area. Recovery is defined as the volumetric percent of feed water that is converted to filtrate over the course of an operating cycle uninterrupted by events such as chemical cleaning or a solids removal process (i.e., backwashing).

(E) Removal efficiency of a membrane module must be calculated from the challenge test results and expressed as a log removal value according to the following equation:

$$\text{LRV} = \text{LOG}_{10}(C_f) - \text{LOG}_{10}(C_p)$$

Where: LRV = log removal value demonstrated during the challenge test; C_f = the feed concentration measured during the challenge test; and C_p = the filtrate concentration measured during the challenge test. Equivalent units must be used for the feed and filtrate concentrations. If the challenge particulate is not detected in the filtrate, the term C_p is set equal to the detection limit for the purpose of calculating the log removal value. A log removal value must be calculated for each membrane module evaluated during the challenge test.

(F) The removal efficiency of a membrane filtration process demonstrated during challenge testing must be expressed as a log removal value. If fewer than 20 modules are tested, then the challenge test log removal value is equal to the lowest of the representative log removal values among the modules tested. If 20 or more modules are tested, then the challenge test log removal value is equal to the 10th percentile of the representative log removal values among the modules tested. The percentile is defined by $(i/(n+1))$ where i is the rank of n individual data points ordered lowest to highest. If necessary, the 10th percentile may be calculated using linear interpolation.

(G) The challenge test must establish a quality control release value for a non-destructive performance test that demonstrates the *Cryptosporidium* removal capability of the membrane filtration module. This performance test must be applied to each production membrane module used by the system that was not directly challenge tested in order to verify *Cryptosporidium* removal capability. Production modules

that do not meet the established quality control release value are not eligible for the treatment credit demonstrated during the challenge test.

(H) If a previously tested membrane is modified in a manner that could change the removal efficiency of the membrane or the applicability of the non-destructive performance test and associated quality control release value, additional challenge testing to demonstrate a new removal efficiency and quality control release value must be conducted and submitted to the Department.

(iii) Direct integrity testing. Systems must conduct direct integrity testing in a manner that demonstrates a removal efficiency equal to or greater than the removal credit awarded to the membrane filtration process and meets the requirements described in R.61-58.10.K(20)(b)(iii)(A) through (F). A direct integrity test is defined as a physical test applied to a membrane unit in order to identify and isolate integrity breaches (i.e., one or more leaks that could result in contamination of the filtrate).

(A) The direct integrity test must be independently applied to each membrane unit in service. A membrane unit is defined as a group of membrane modules that share common valving that allows the unit to be isolated from the rest of the system for the purpose of integrity testing or other maintenance.

(B) The direct integrity method must have a resolution of 3 micrometers or less, where resolution is defined as the size of the smallest integrity breach that contributes to a response from the direct integrity test.

(C) The direct integrity test must have a sensitivity sufficient to verify the log treatment credit awarded to the membrane filtration process by the Department, where sensitivity is defined as the maximum log removal value that can be reliably verified by a direct integrity test. Sensitivity must be determined using the approach in either R.61-58.10.K(20)(b)(iii)(C)(1) or (2) as applicable to the type of direct integrity test the system uses.

(1) For direct integrity tests that use an applied pressure or vacuum, the direct integrity test sensitivity must be calculated according to the following equation:

$$LRV_{DIT} = \text{LOG}_{10} (Q_p / (\text{VCF} \times Q_{\text{breach}}))$$

Where: LRV_{DIT} = the sensitivity of the direct integrity test; Q_p = total design filtrate flow from the membrane unit; Q_{breach} = flow of water from an integrity breach associated with the smallest integrity test response that can be reliably measured, and VCF = volumetric concentration factor. The volumetric concentration factor is the ratio of the suspended solids concentration on the high pressure side of the membrane relative to that in the feed water.

(2) For direct integrity tests that use a particulate or molecular marker, the direct integrity test sensitivity must be calculated according to the following equation:

$$LRV_{DIT} = \text{LOG}_{10}(C_f) - \text{LOG}_{10}(C_p)$$

Where: LRV_{DIT} = the sensitivity of the direct integrity test; C_f = the typical feed concentration of the marker used in the test; and C_p = the filtrate concentration of the marker from an integral membrane unit.

(D) Systems must establish a control limit within the sensitivity limits of the direct integrity test that is indicative of an integral membrane unit capable of meeting the removal credit awarded by the Department.

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(E) If the result of a direct integrity test exceeds the control limit established under R.61-58.10.K(20)(b)(iii)(D), the system must remove the membrane unit from service. Systems must conduct a direct integrity test to verify any repairs, and may return the membrane unit to service only if the direct integrity test is within the established control limit.

(F) Systems must conduct direct integrity testing on each membrane unit at a frequency of not less than once each day that the membrane unit is in operation. The Department may approve less frequent testing, based on demonstrated process reliability, the use of multiple barriers effective for *Cryptosporidium*, or reliable process safeguards.

(iv) Indirect integrity monitoring. Systems must conduct continuous indirect integrity monitoring on each membrane unit according to the criteria in R.61-58.10.K(20)(b)(iv)(A) through (E). Indirect integrity monitoring is defined as monitoring some aspect of filtrate water quality that is indicative of the removal of particulate matter. A system that implements continuous direct integrity testing of membrane units in accordance with the criteria in R.61-58.10.K(20)(b)(iii)(A) through (E) is not subject to the requirements for continuous indirect integrity monitoring. Systems must submit a monthly report to the Department summarizing all continuous indirect integrity monitoring results triggering direct integrity testing and the corrective action that was taken in each case.

(A) Unless the Department approves an alternative parameter, continuous indirect integrity monitoring must include continuous filtrate turbidity monitoring.

(B) Continuous monitoring must be conducted at a frequency of no less than once every 15 minutes.

(C) Continuous monitoring must be separately conducted on each membrane unit.

(D) If indirect integrity monitoring includes turbidity and if the filtrate turbidity readings are above 0.15 NTU for a period greater than 15 minutes (i.e., two consecutive 15-minute readings above 0.15 NTU), direct integrity testing must immediately be performed on the associated membrane unit as specified in R.61-58.10.K(20)(b)(iii)(A) through (E).

(E) If indirect integrity monitoring includes a Department-approved alternative parameter and if the alternative parameter exceeds a Department-approved control limit for a period greater than 15 minutes, direct integrity testing must immediately be performed on the associated membrane units as specified in R.61-58.10.K(20)(b)(iii)(A) through (E).

(c) Second stage filtration. With Department approval, systems may receive 0.5-log *Cryptosporidium* treatment credit for a separate second stage of filtration that consists of sand, dual media, GAC, or other fine grain media following granular media filtration. To receive this credit, the first stage of filtration must be preceded by a coagulation step and both filtration stages must treat the entire plant flow taken from a surface water or GWUDI source. A cap, such as GAC, on a single stage of filtration is not eligible for this credit. The Department must approve the treatment credit based on an assessment of the design characteristics of the filtration process.

(d) Slow Sand Filtration (as Secondary Filter).

With Department approval, systems may receive 2.5-log *Cryptosporidium* treatment credit for a slow sand filtration process that follows a separate stage of filtration if both filtration stages treat entire plant flow taken from a surface water or GWUDI source and no disinfectant residual is present in the influent water to the slow sand filtration process. The Department must approve the treatment credit based on an assessment of the design characteristics of the filtration process. This paragraph does not apply to treatment credit awarded to slow sand filtration used as a primary filtration process.

(21) Inactivation Toolbox Components.

(a) Calculation of CT Values.

(i) CT is the product of the disinfectant contact time (T, in minutes) and disinfectant concentration (C, in milligrams per liter). Systems with treatment credit for chlorine dioxide or ozone under R.61-58.10.K(21)(b) or (c) must calculate CT at least once each day, with both C and T measured during peak hourly flow as specified in R.61-58.10.F(1) and (2).

(ii) Systems with several disinfection segments in sequence may calculate CT for each segment, where a disinfection segment is defined as a treatment unit process with a measurable disinfectant residual level and a liquid volume. Under this approach, systems must add the Cryptosporidium CT values in each segment to determine the total CT for the treatment plant.

(b) CT values for Chlorine Dioxide and Ozone.

(i) Systems may receive the Cryptosporidium treatment credit listed in the following table by meeting the corresponding chlorine dioxide CT value for the applicable water temperature, as described in R.61-58.10.K(21)(a).

CT Values (mg-min/L) for Cryptosporidium Inactivation by Chlorine Dioxide

Log Credit	Water Temperature (degrees C)										
	Less than or equal to 0.5	1	2	3	5	7	10	15	20	25	30
0.25	159	153	140	128	107	90	69	45	29	19	12
0.5	319	305	279	256	214	180	138	89	58	38	24
1.0	637	610	558	511	429	360	277	179	116	75	49
1.5	956	915	838	767	643	539	415	268	174	113	73
2.0	1275	1220	1117	1023	858	719	553	357	232	150	98
2.5	1594	1525	1396	1278	1072	899	691	447	289	188	122
3.0	1912	1830	1675	1534	1286	1079	830	536	347	226	147

Note: Systems may use this equation to determine log credit between the indicated values: $\text{Log credit} = (0.001506 \times (1.09116)^{\text{Temp}}) \times \text{CT}$.

(ii) Systems may receive the Cryptosporidium treatment credit listed in the following table by meeting the corresponding ozone CT values for the applicable water temperature, as described in R.61-58.10.K(21)(a).

CT Values (mg-min/L) for Cryptosporidium Inactivation by Ozone

Log Credit	Water Temperature (degrees C)										
	Less than or equal to 0.5	1	2	3	5	7	10	15	20	25	30
0.25	6	5.8	5.2	4.8	4.0	3.3	2.5	1.6	1.0	0.6	.39
0.5	12	12	10	9.5	7.9	6.5	4.9	3.1	2.0	1.2	.78
1.0	24	23	21	19	16	13	9.9	6.2	3.9	2.5	1.6
1.5	36	35	31	29	24	20	15	9.3	5.9	3.7	2.4
2.0	48	46	42	38	32	26	20	12	7.8	4.9	3.1
2.5	60	58	52	48	40	33	25	16	9.8	6.2	3.9
3.0	72	69	63	57	47	39	30	19	12	7.4	4.7

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Systems may use this equation to determine log credit between the indicated values: $\text{Log credit} = (0.0397 \times (1.09757)^{\text{Temp}}) \times \text{CT}$

(c) Site-Specific Study.

The Department may approve alternative chlorine dioxide or ozone CT values to those listed in R.61-58.10.K(21)(b) on a site-specific basis. The Department must base this approval on a site-specific study a system conducts that follows a Department-approved protocol.

(d) Ultraviolet Light.

Systems may receive *Cryptosporidium*, *Giardia lamblia*, and virus treatment credits for ultraviolet (UV) light reactors by achieving the corresponding UV dose values shown in R.61-58.10.K(21)(d)(i). Systems must validate and monitor UV reactors as described in R.61-58.10.K(21)(d)(ii) and (iii) to demonstrate that they are achieving a particular UV dose value for treatment credit.

(i) UV Dose Table.

The treatment credits listed in this table are for UV light at a wavelength of 254 nanometers as produced by a low-pressure mercury vapor lamp. To receive treatment credit for other lamp types, systems must demonstrate an equivalent germicidal dose through reactor validation testing, as described in R.61-58.10.K(21)(d)(ii). The UV dose values in this table are applicable only to post-filter applications of UV in filtered systems and to unfiltered systems.

UV Dose Table for *Cryptosporidium*, *Giardia lamblia*, and Virus Inactivation Credit

Log Credit	<i>Cryptosporidium</i> UV dose (mJ/cm ²)	<i>Giardia lamblia</i> UV dose (mJ/cm ²)	Virus UV dose (mJ/cm ²)
0.5	1.6	1.5	39
1.0	2.5	2.1	58
1.5	3.9	3.0	79
2.0	5.8	5.2	100
2.5	8.5	7.7	121
3.0	12	11	143
3.5	15	15	163
4.0	22	22	186

(ii) Reactor Validation Testing.

Systems must use UV reactors that have undergone validation testing to determine the operating conditions under which the reactor delivers the UV dose required in R.61-58.10.K(21)(d)(i) (i.e., validated operating conditions). These operating conditions must include flow rate, UV intensity as measured by a UV sensor, and UV lamp status.

(A) When determining validated operating conditions, systems must account for the following factors: UV absorbance of the water; lamp fouling and aging; measurement uncertainty of on-line sensors; UV dose distributions arising from the velocity profiles through the reactor; failure of UV lamps or other critical system components; and inlet and outlet piping or channel configurations of the UV reactor.

(B) Validation testing must include full scale testing of a reactor that conforms uniformly to the UV reactors used by the system. In addition, the validation testing must include inactivation information on a test microorganism whose dose response characteristics have been quantified with a low-pressure mercury vapor lamp.

(C) The Department may approve an alternative approach to validation testing.

(iii) Reactor Monitoring.

(A) Systems must monitor their UV reactors to determine if the reactors are operating within validated conditions, as determined under R.61-58.10.K(21)(d)(ii). This monitoring must include UV intensity as measured by a UV sensor, flow rate, lamp status, and other parameters the Department designates based on UV reactor operation. Systems must verify the calibration of UV sensors and must recalibrate sensors in accordance with a protocol the Department approves.

(B) To receive treatment credit for UV light, systems must treat at least 95 percent of the water delivered to the public during each month by UV reactors operating within validated conditions for the required UV dose, as described in R.61-58.10.K(21)(d)(i) and (ii). Systems must demonstrate compliance with this condition by the monitoring required under R.61-58.10.K(21)(d)(iii)(A).

(22) Reporting Requirements.

(a) Systems must report sampling schedules under R.61-58.10.K(3) and source water monitoring results under R.61-58.10.K(7) unless they notify the Department that they will not conduct source water monitoring due to meeting the criteria of R.61-58.10.K(2)(d).

(b) Systems must report the use of uncovered finished water storage facilities to the Department as described in R.61-58.10.K(15).

(c) Filtered systems must report their Cryptosporidium bin classification as described in R.61-58.10.K(11).

(d) Unfiltered systems must report their mean source water Cryptosporidium level as described in R.61-58.10.K(13).

(e) Systems must report disinfection profiles and benchmarks to the Department as described in R.61-58.10.K(9) through (10) prior to making a significant change in disinfection practice.

(f) Systems must report to the Department in accordance with R.61-58.10.K(22)(f)(i) through (xv) for any microbial toolbox options used to comply with treatment requirements under R.61-58.10.K(12) or (13). Alternatively, the Department may approve a system to certify operation within required parameters for treatment credit rather than reporting monthly operational data for toolbox options.

(i) Watershed Control Program

Systems must submit the following information:

(A) A notice of intention to develop a new program or continue an existing watershed control program should be submitted no later than two years before the applicable treatment compliance date in R.61-58.10.K(14).

(B) A watershed control plan should be submitted no later than one year before the applicable treatment compliance date in R.61-58.10.K(14).

(C) An annual status report for the watershed control program must be submitted every 12 months beginning one year after the applicable treatment compliance date in R.61-58.10.K(14).

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(D) A watershed sanitary survey report must be submitted for community systems every three years beginning three years after the applicable treatment compliance date in R.61-58.10.K(14). For non-community water systems, the watershed sanitary survey report must be submitted every five years beginning five years after the applicable treatment compliance date in R.61-58.10.K(14).

(ii) Alternative source or intake management: Systems must submit verification that the system has relocated the intake or adopted the intake withdrawal procedure reflected in the monitoring results. The verification must be sent no later than the applicable compliance date in R.61-58.10.K(14).

(iii) Presedimentation: A monthly report must be submitted within 10 days following the month in which the monitoring was conducted that contains verification of continuous basin operation, treatment of 100 percent of the flow, continuous addition of a coagulant, and at least 0.5-log mean reduction of influent turbidity or compliance with alternative Department-approved performance criteria beginning on the applicable treatment compliance date in R.61-58.K(14).

(iv) Two-stage lime softening: A monthly report must be submitted that contains verification that chemical addition and hardness precipitation occurred in two separate and sequential softening stages prior to filtration and verification that both stages treated 100 percent of the plant flow. The monthly report must be submitted within 10 days following the month in which the monitoring was conducted, beginning on the applicable treatment compliance date in R.61-58.K(14).

(v) Bank Filtration:

(A) Systems must submit information that demonstrates that the aquifer is unconsolidated and predominantly sandy and that the setback distances of at least 25 ft for 0.5-log removal or 50 ft for 1.0-log removal are met. This information must be submitted no later than the applicable treatment compliance date in R.61-58.10.K(14).

(B) If the monthly average of daily maximum turbidity is greater than 1 NTU then the system must report the result and submit an assessment of the cause within 30 days following the month in which the monitoring was conducted beginning on the applicable treatment compliance date in R.61-58.10.K(14).

(vi) Combined filter performance: Systems must submit monthly verification of their combined filter effluent levels within 10 days following the month in which the monitoring was conducted beginning on the applicable treatment compliance date in R.61-58.10.K(14). The report must verify that the combined filter effluent turbidity levels were less than or equal to 0.15 NTU in at least 95 percent of the 4 hour combined filter effluent measurements taken each month.

(vii) Individual filter performance: Systems must submit a report within 10 days following the month in which the monitoring was conducted beginning on the applicable treatment compliance date in R.61-58.10.K(14). The report must verify that the individual filter effluent turbidity levels were less than or equal to 0.15 in at least 95 percent of samples each month in each filter, and that no individual filter turbidity was greater than 0.3 NTU in two consecutive readings 15 minutes apart.

(viii) Demonstration of Performance.

(A) Systems must submit the results from testing following a Department-approved protocol no later than the applicable treatment compliance date in R.61-58.10.K(14).

(B) As required by the Department, systems must submit monthly verification of operation within conditions of Department approval for demonstration of performance credit. This verification must be submitted within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R.61-58.10.K(14).

(ix) Bag Filters and Cartridge Filters:

(A) Systems must submit information that demonstrates that the process meets the definition of bag or cartridge filtration and that the removal efficiency established through challenge testing meets the criteria in R.61-58.10.K(20). This information must be submitted no later than the applicable treatment compliance date in R.61-58.10.K(14).

(B) Systems must submit monthly verification that 100 percent of the plant flow was filtered. The monthly verification must be submitted within 10 days following the month in which monitoring was conducted, beginning on the applicable treatment compliance date in R.61-58.10.K(14).

(x) Membrane Filtration:

(A) Systems must submit results of verification testing demonstrating that the removal efficiency established through challenge testing meets the requirements in R.61-58.10.K(20), the type of integrity test method, and the associated test parameters (resolution, sensitivity, test frequency, control limits, and associated baseline). This information must be submitted no later than the applicable treatment compliance date in R.61-58.10.K(14).

(B) Systems must submit a monthly report that summarizes all direct integrity tests above the control limit, and, if applicable, any turbidity or alternative Department-approved indirect integrity monitoring results triggering direct integrity testing and the corrective action that was taken. This report must be submitted within 10 days following the month that testing was conducted, beginning on the applicable treatment compliance date in R.61-58.10.K(14).

(xi) Second stage filtration: Systems must submit monthly verification that 100 percent of the flow was filtered through both stages and that the first stage was preceded by coagulation. This verification must be submitted within 10 days following the month that monitoring was conducted, beginning on the applicable treatment compliance date in R.61-58.10.K(14).

(xii) Slow sand filtration (as secondary filter): Systems must submit monthly verification that both a slow sand filter and a preceding separate stage of filtration treated 100 percent of the flow from a subpart H source. This verification must be submitted within 10 days following the month that monitoring was conducted, beginning on the applicable treatment compliance date in R.61-58.10.K(14).

(xiii) Chlorine dioxide: Systems must submit a summary of CT values for each day as described in R.61-58.10.K(21). This summary must be submitted within 10 days following the month that monitoring was conducted, beginning on the applicable treatment compliance date in R.61-58.10.K(14).

(xiv) Ozone: Systems must submit a summary of CT values for each day as described in R.61-58.10.K(21). This summary must be submitted within 10 days following the month that monitoring was conducted, beginning on the applicable treatment compliance date in R.61-58.10.K(14).

(xv) UV:

(A) Systems must submit validation test results demonstrating that the operating conditions achieved the required UV dose. This information must be submitted no later than the applicable treatment compliance date in R.61-58.10.K(14).

(B) Systems must submit a monthly report summarizing the percentage of water entering the distribution system that was not treated by UV reactors operating within validated conditions for the required

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dose as specified in R.61-58.10.K(22)(d). This report must be submitted within 10 days following the month that monitoring was conducted, beginning on the applicable treatment compliance date in R.61-58.10.K(14).

(23) Recordkeeping Requirements.

(a) Systems must keep results from the initial round of source water monitoring under R.61-58.10.K(2)(a) and the second round of source water monitoring under R.61-58.10.K(2)(b) until 3 years after bin classification under R.61-58.10.K(11) for filtered systems or determination of the mean *Cryptosporidium* level under R.61-58.10.K(11) for unfiltered systems for the particular round of monitoring.

(b) Systems must keep any notification to the Department that they will not conduct source water monitoring due to meeting the criteria of R.61-58.10.K(2)(d) for 3 years.

(c) Systems must keep the results of treatment monitoring associated with microbial toolbox options under R.61-58.10.K(17) through (21) and with uncovered finished water reservoirs under R.61-58.10.K(15), as applicable, for 3 years.

(24) Requirements to Respond to Significant Deficiencies Identified in Sanitary Surveys Performed by EPA.

(a) A sanitary survey is an onsite review of the water source (identifying sources of contamination by using results of source water assessments where available), facilities, equipment, operation, maintenance, and monitoring compliance of a PWS to evaluate the adequacy of the PWS, its sources and operations, and the distribution of safe drinking water.

(b) For the purposes of this section, a significant deficiency includes a defect in design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that EPA determines to be causing, or has the potential for causing the introduction of contamination into the water delivered to consumers.

(c) For sanitary surveys performed by EPA, systems must respond in writing to significant deficiencies identified in sanitary survey reports no later than 45 days after receipt of the report, indicating how and on what schedule the system will address significant deficiencies noted in the survey.

(d) Systems must correct significant deficiencies identified in sanitary survey reports according to the schedule approved by EPA, or if there is no approved schedule, according to the schedule reported under R.61-58.10.K(24)(c) if such deficiencies are within the control of the system.

Replace R.61-58.12.C(4)(d)(iv)(B) to read:

(B) When compliance with the MCL is determined by calculating a running annual average of all samples taken at a monitoring location: the highest average of any of the monitoring locations and the range of all monitoring locations expressed in the same units as the MCL. For the MCLs for TTHM and HAA5 in R.61-58.5.P(2)(b), systems must include the highest locational running annual average for TTHM and HAA5 and the range of individual sample results for all monitoring locations expressed in the same units as the MCL. If more than one location exceeds the TTHM or HAA5 MCL, the system must include the locational running annual averages for all locations that exceed the MCL.

Replace R.61-58.12.C(4)(d)(iv)(C) to read:

(C) When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all samples at all monitoring locations: the average and range of detection expressed in the same units as the MCL. The system is required to include individual sample results for the IDSE conducted under R.61-58.14 when determining the range of TTHM and HAA5 results to be reported in the annual consumer confidence report for the calendar year that the IDSE samples were taken.

Replace R.61-58.13.B(5) to read:

(5) Analytical Methods - Analyses used to determine compliance under this regulation shall be conducted using EPA-approved methods and adhering to EPA approved procedures and minimum reporting levels listed in 40 CFR 141.131.

Replace R.61-58.13.C(1)(e) to read:

(e) Systems may use only data collected under the provisions of this regulation to qualify for reduced monitoring.

Replace R.61-58.13.C(2)(a)(i)(C) to read:

(C) Systems on a reduced monitoring schedule may remain on that reduced schedule as long as the average of all samples taken in the year (for systems which must monitor quarterly) or the result of the sample (for systems which must monitor no more frequently than annually) is no more than 0.060 mg/L and 0.045 mg/L for TTHMs and HAA5, respectively. Systems that do not meet these levels must resume monitoring at the frequency identified in paragraph (2)(a)(i)(A) of this section in the quarter immediately following the monitoring period in which the system exceeds 0.060 mg/L and 0.045 mg/L for TTHMs and HAA5, respectively.

Replace introductory paragraph at R.61-58.13.C(2)(a)(ii): sub items (A), (B) and (D) remain the same:

(ii) CWSs and NTNCWSs that use a surface water source or a ground water source under the influence of surface water which serve from 500 to 9,999 persons must collect samples as follows:

Replace R.61-58.13.C(2)(a)(ii)(C) to read:

(C) Systems on a reduced monitoring schedule may remain on that reduced schedule as long as the average of all samples taken in the year (for systems which must monitor quarterly) or the result of the sample (for systems which must monitor no more frequently than annually) is no more than 0.060 mg/L and 0.045 mg/L for TTHMs and HAA5, respectively. Systems that do not meet these levels must resume monitoring at the frequency identified in paragraph (2)(a)(ii)(A) of this section in the quarter immediately following the monitoring period in which the system exceeds 0.060 mg/L and 0.045 mg/L for TTHMs and HAA5, respectively.

Replace R.61-58.13.C(2)(a)(iv) to read:

(C) Systems on a reduced monitoring schedule may remain on that reduced schedule as long as the average of all samples taken in the year (for systems which must monitor quarterly) or the result of the sample (for systems which must monitor no more frequently than annually) is no more than 0.060 mg/L and 0.045 mg/L for TTHMs and HAA5, respectively. Systems that do not meet these levels must resume monitoring at the frequency identified in paragraph (2)(a)(iv)(A) of this section in the quarter immediately following the monitoring period in which the system exceeds 0.060 mg/L and 0.045 mg/L for TTHMs and HAA5, respectively.

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Add R.61-58.13.C(2)(a)(vi) to read:

- (vi) Monitoring requirements for source water TOC.

In order to qualify for reduced monitoring for TTHM and HAA5 under paragraph C(2)(a)(i)(B) or C(2)(a)(ii)(B) of this section, Subpart H systems not monitoring under the provisions of paragraph C(4) of this section must take monthly TOC samples every 30 days at a location prior to any treatment, beginning April 1, 2008 or earlier, if specified by the Department. In addition to meeting other criteria for reduced monitoring in paragraph C(2)(a)(i)(B) or C(2)(a)(ii)(B) of this section, the source water TOC running annual average must be less than or equal to 4.0 mg/L (based on the most recent four quarters of monitoring) on a continuing basis at each treatment plant to reduce or remain on reduced monitoring for TTHM and HAA5. Once qualified for reduced monitoring for TTHM and HAA5 under paragraph C(2)(a)(i)(B) or C(2)(a)(ii)(B) of this section, a system may reduce source water TOC monitoring to quarterly TOC samples taken every 90 days at a location prior to any treatment.

Replace R.61-58.13.C(2)(c)(ii) to read:

- (ii) Reduced Monitoring

Add R.61-58.13.C(2)(c)(ii)(A) to read:

(A) Until March 31, 2009, systems required to analyze for bromate may reduce monitoring from monthly to once per quarter, if the system demonstrates that the average source water bromide concentration is less than 0.05 mg/L based upon representative monthly bromide measurements for one year. The system may remain on reduced bromate monitoring until the running annual average source water bromide concentration, computed quarterly, is equal to or greater than 0.05 mg/L based upon representative monthly measurements. If the running annual average source water bromide concentration is greater than or equal to 0.05 mg/L, the system must resume routine monitoring required by paragraph (2)(c)(i) of this section in the following month.

Add R.61-58.13.C(2)(c)(ii)(B) to read:

(B) Beginning April 1, 2009, systems may no longer use the provisions of paragraph (C)(2)(c)(ii)(A) of this section to qualify for reduced monitoring. A system required to analyze for bromate may reduce monitoring from monthly to quarterly, if the system's running annual average bromate concentration is less than or equal to 0.0025 mg/L based on monthly bromate measurements under paragraph (b)(3)(i) of this section for the most recent four quarters, with samples analyzed using analytical methods identified in 40 CFR 141.132 (b)(3)(ii)(B). If a system has qualified for reduced bromate monitoring under paragraph (C)(2)(c)(ii)(A) of this section, that system may remain on reduced monitoring as long as the running annual average of quarterly bromate samples less than or equal to 0.0025 mg/L based on samples analyzed using analytical methods identified in 40 CFR 141.132 (b)(3)(ii)(B). If the running annual average bromate concentration is greater than 0.0025 mg/L, the system must resume routine monitoring required by paragraph (C)(2)(i) of this section.

Replace R.61-58.13.D(3)(b)(i) to read:

(i) Acute Violations - Compliance must be based on consecutive daily samples collected by the system under Section C(3)(b) above. If any daily sample taken at the entrance to the distribution system exceeds the MRDL, and on the following day one (or more) of the three (3) samples taken in the distribution system exceed the MRDL, the system is in violation of the MRDL and must take immediate corrective action to lower the level of chlorine dioxide below the MRDL and must notify the public pursuant to the procedures

for acute health risks in R.61-58.6.E in addition to reporting to the Department pursuant to Section E(3) below. Failure to take samples in the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system will also be considered an MRDL violation and the system must notify the public of the violation in accordance with the provisions for acute violations under R.61-58.6.E in addition to reporting to the Department pursuant to Section E(3) below.

Replace 61-58.13.D(3)(b)(ii) to read:

(ii) Non-acute Violations - Compliance must be based on consecutive daily samples collected by the system under Section C(3)(b) above. If any two (2) consecutive daily samples taken at the entrance to the distribution system exceed the MRDL and all distribution system samples taken are below the MRDL, the system is in violation of the MRDL and must take corrective action to lower the level of chlorine dioxide below the MRDL at the point of sampling and will notify the public pursuant to the procedures for Non-acute health risks in R.61-58.6.E in addition to reporting to the Department pursuant to Section E(3) below. Failure to monitor at the entrance to the distribution system the day following an exceedance of the chlorine dioxide MRDL at the entrance to the distribution system is also an MRDL violation and the system must notify the public of the violation in accordance with the provisions for Non-acute violations under R.61-58.6.E in addition to reporting to the Department pursuant to Section E(3) below.

Replace 61-58.13.D(4) to read:

(4) Disinfection Byproduct Precursors - Compliance must be determined as specified by Section F(3) below. Systems may begin monitoring to determine whether Step 1 TOC removals can be met twelve (12) months prior to the compliance date for the system. This monitoring is not required and failure to monitor during this period is not a violation. However, any system that does not monitor during this period, and then determines in the first twelve (12) months after the compliance date that it is not able to meet the Step 1 requirements in Section F(2)(b) below and must therefore apply for alternate minimum TOC removal (Step 2) requirements, is not eligible for retroactive approval of alternate minimum TOC removal (Step 2) requirements as allowed pursuant to Section F(2)(c) below and is in violation. Systems may apply for alternate minimum TOC removal (Step 2) requirements any time after the compliance date. For systems required to meet Step 1 TOC removals, if the value calculated under Section F(3)(a)(iv) below, is less than 1.00, the system is in violation of the treatment technique requirements and must notify the public pursuant to R.61-58.6.E, in addition to reporting to the Department pursuant to Section E(3) below.

Replace R.61-58.13.F(1)(b)(ii) to read:

(ii) Softening that results in removing at least 10 mg/L of magnesium hardness (as CaCO₃), measured monthly according to 40 CFR 141.131(d)(6) and calculated quarterly as an running annual average.

Add R.61-58.14 to read:

61-58.14 INITIAL DISTRIBUTION SYSTEM EVALUATIONS

A. Applicability.

This part R.61-58.14 applies to community water systems that use a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light. This part also applies to non-transient non-community water systems that serve at least 10,000 people and use a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

B. General Requirements.

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(1) The requirements of this part R.61-58.14 constitute national primary drinking water regulations. The regulations in this part establish monitoring and other requirements for identifying compliance monitoring locations specified in R.61-58.15 for determining compliance with maximum contaminant levels for total trihalomethanes (TTHM) and haloacetic acids (five)(HAA5). Public water systems must use an Initial Distribution System Evaluation (IDSE) to determine locations with representative high TTHM and HAA5 concentrations throughout their distribution system. IDSEs are used in conjunction with, but separate from, R.61-58.13 compliance monitoring, to identify and select R.61-58.15 compliance monitoring locations.

(2) Schedule – Systems subject to this part must comply with the requirements of this part on the following schedule:

(a) For systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve 100,000 people or greater:

(i) The standard monitoring plan or system specific study or 40/30 certification must be submitted to the Department by October 1, 2006.

(ii) The standard monitoring or system specific study must be completed by September 30, 2008.

(iii) The IDSE report must be submitted to the Department by January 1, 2009.

(iv) If, within 12 months after the date identified in paragraph 2(a)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date identified in paragraph (2)(a)(ii) of this section.

(v) If, within 3 months after the date identified in paragraph 2(b)(iii) of this section, the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

(b) For systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve between 50,000 and 99,999 people:

(i) The standard monitoring plan or system specific study or a 40/30 certification must be submitted to the Department by April 1, 2007.

(ii) The standard monitoring or system specific study must be completed by March 31, 2009.

(iii) The IDSE report must be submitted to the Department by July 1, 2009.

(iv) If, within 12 months after the date identified in paragraph 2(b)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date identified in paragraph (2)(b)(ii) of this section.

(v) If, within 3 months after the date identified in paragraph 2(c)(iii) of this section, the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the

submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

(c) For systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve between 10,000 and 49,999 people:

(i) The standard monitoring plan or system specific study or 40/30 certification must be submitted to the Department by October 1, 2007.

(ii) The standard monitoring or system specific study must be completed by September 30, 2009.

(iii) The IDSE report must be submitted to the Department by January 1, 2010.

(iv) If, within 12 months after the date identified in paragraph 2(c)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date identified in paragraph (2)(c)(ii) of this section.

(v) If, within 9 months after the date identified in paragraph 2(d)(iii) of this section, the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

(d) For systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve less than 10,000 people:

(i) The standard monitoring plan or system specific study or 40/30 certification must be submitted to the Department by April 1, 2008 or a very small system waiver must be granted by the Department by April 1, 2008.

(ii) The standard monitoring or system specific study must be completed by March 31, 2010.

(iii) The IDSE report must be submitted to the Department by July 1, 2010.

(iv) If, within 12 months after the date identified in paragraph 2(d)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date identified in paragraph (2)(d)(ii) of this section.

(v) If, within 3 months after the date identified in paragraph 2(e)(iii) of this section, the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

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(e) For systems that are part of a combined distribution system

(i) The standard monitoring plan or system specific study or 40/30 certification must be submitted to the Department at the same time as the system in the combined distribution system with the earliest compliance date.

(ii) The standard monitoring or system specific study must be completed at the same time as the system in the combined distribution system with the earliest compliance date.

(iii) The IDSE report must be submitted to the Department at the same time as the system in the combined distribution system with the earliest compliance date.

(iv) If, within 12 months after the date which is determined by the criteria specified in paragraph 2(e)(i) of this section, the Department does not approve the submitted plan or notify the system that it has not yet completed its review, the submitted plan may be considered approved and the system must complete standard monitoring or a system specific study no later than the date which is determined by the criteria specified in paragraph 2(e)(ii) of this section.

(v) If, within 3 months after the date identified in paragraph 2(a)(iii) of this section, the Department does not approve the submitted IDSE report or notify the system that it has not yet completed its review, the submitted report may be considered approved and the system must implement the IDSE recommended monitoring in accordance with R.61-58.15.

(vi) If a system chooses to submit a 40/30 certification, it must be in accordance with R.61-58.14.E.

(3) For the purpose of the schedule in this section, the Department may determine that the combined distribution system does not include certain consecutive systems based on factors such as receiving water from a wholesale system only on an emergency basis or receiving only a small percentage and small volume of water from a wholesale system. The Department may also determine that the combined distribution system does not include certain wholesale systems based on factors such as delivering water to a consecutive system only on an emergency basis or delivering only a small percentage and small volume of water to a consecutive system.

(4) Systems must conduct standard monitoring that meets the requirements in R.61-58.14.C, or a system specific study that meets the requirements in R.61-58.14.D, or certify to the Department that the system meets 40/30 certification criteria under R.61-58.14.E, or qualify for a very small system waiver under R.61-58.14.F.

(a) Systems must have taken the full complement of TTHM and HAA5 compliance samples required under R.61-58.13 during the period specified in R.61-58.14.E(1) to meet the 40/30 certification criteria in R.61-58.14.E. The system must have taken TTHM and HAA5 samples under R.61-58.13 to be eligible for the very small system waiver in R.61-58.14.F.

(b) Systems that have not taken the required samples must conduct standard monitoring that meets the requirements in R.61-58.14.C, or a system specific study that meets the requirements in R.61-58.14.D.

(5) All analyses used to determine compliance with the requirements in R.61-58.14 must be conducted using only the analytical methods specified in 40 CFR 141.131, or otherwise approved by EPA for monitoring under 40 CFR 141 subpart U.

(6) IDSE results will not be used for the purpose of determining compliance with MCLs in R.61-58.5.P.

C. Standard Monitoring

(1) Standard Monitoring Plan.

For systems that choose to conduct standard monitoring, the standard monitoring plan must comply with paragraphs (1)(a) through (1)(d) of this section. The standard monitoring plan must be prepared and submitted to the Department according to the schedule in section B of this part.

(a) The standard monitoring plan must include a schematic of the system's distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating locations and dates of all projected standard monitoring, and all projected R.61-58.13 compliance monitoring.

(b) The standard monitoring plan must include justification of standard monitoring location selection and a summary of data relied upon to justify standard monitoring location selection.

(c) The standard monitoring plan must specify the population served and system type (subpart H or ground water).

(d) The system must retain a complete copy of the standard monitoring plan submitted under this section C, including any Department modification of the standard monitoring plan, for as long as the system is required to retain the IDSE report under R.61-58.14.C(3)(d).

(2) Standard Monitoring.

(a) Systems conducting standard monitoring must monitor as indicated in this paragraph (2)(a). Systems must collect dual sample sets at each monitoring location. One sample in the dual sample set must be analyzed for TTHM. The other sample in the dual sample set must be analyzed for HAA5. Systems must collect one monitoring period during the peak historical month for TTHM levels or HAA5 levels or the month of warmest water temperature. Systems must review available compliance, study, or operational data to determine the peak historical month for TTHM or HAA5 levels or warmest water temperature.

(i) Consecutive systems receiving water from a Subpart H source and serving less than 500 people must collect two (2) dual sample sets taken during the peak historical month for TTHM or HAA5 levels or the during the month of warmest water temperature at the following locations:

(A) One (1) dual sample set near the entry point to the distribution system.

(B) One (1) dual sample set at a high TTHM location.

(ii) Non-consecutive systems utilizing a Subpart H source and serving less than 500 people must collect two (2) dual sample sets taken during the peak historical month for TTHM or HAA5 levels or the during the month of warmest water temperature at the following locations:

(A) One (1) dual sample set at a high TTHM location.

(B) One (1) dual sample set at a high HAA5 location.

(iii) Consecutive systems receiving water from a Subpart H source and serving between 500 and 3,300 people must collect two (2) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set near the entry point to the distribution system.

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(B) One (1) dual sample set at a high TTHM location.

(iv) Non-consecutive systems utilizing a Subpart H source and serving between 500 and 3,300 people must collect two (2) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set at a high TTHM location.

(B) One (1) dual sample set at a high HAA5 location.

(v) Consecutive systems receiving water from a Subpart H source or non-consecutive systems utilizing a Subpart H source and serving between 3,301 and 9,999 people must collect four (4) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set at the average residence time.

(B) Two (2) dual sample sets at high TTHM locations.

(C) One (1) dual sample set at a high HAA5 location.

(vi) Consecutive systems receiving water from a Subpart H source or non-consecutive systems utilizing a Subpart H source and serving between 10,000 and 49,999 people must collect eight (8) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

(A) One (1) dual sample set near the entry point to the distribution system.

(B) Two (2) dual sample sets at average residence time.

(C) Three (3) dual sample sets at high TTHM locations.

(D) Two (2) dual sample sets at high HAA5 locations.

(vii) Consecutive systems receiving water from a Subpart H source or non-consecutive systems utilizing a Subpart H source and serving between 50,000 and 249,999 people must collect sixteen (16) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

(A) Three (3) dual sample sets near entry points to the distribution system.

(B) Four (4) dual sample sets at average residence time.

(C) Five (5) dual sample sets at high TTHM locations.

(D) Four (4) dual sample sets at high HAA5 locations.

(viii) Consecutive systems receiving water from a Subpart H source or non-consecutive systems utilizing a Subpart H source and serving between 250,000 and 999,999 people must collect twenty-four (24) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

(A) Four (4) dual sample sets near entry points to the distribution system.

(B) Six (6) dual sample sets at average residence time.

- (C) Eight (8) dual sample sets at high TTHM locations.
- (D) Six (6) dual sample sets at high HAA5 locations.

(ix) Consecutive systems receiving water from a Subpart H source or non-consecutive systems utilizing a Subpart H source and serving between 1,000,000 and 4,999,999 people must collect thirty-two (32) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

- (A) Six (6) dual sample sets near entry points to the distribution system.
- (B) Eight (8) dual sample sets at average residence time.
- (C) Ten (10) dual sample sets at high TTHM locations.
- (D) Eight (8) dual sample sets at high HAA5 locations.

(x) Consecutive systems receiving water from a Subpart H source or non-consecutive systems utilizing a Subpart H source and serving 5,000,000 or more people must collect forty (40) dual sample sets every 60 days for six (6) consecutive monitoring periods at the following locations:

- (A) Eight (8) dual sample sets near entry points to the distribution system.
- (B) Ten (10) dual sample sets at average residence time.
- (C) Twelve (12) dual sample sets at high TTHM locations.
- (D) Ten (10) dual sample sets at high HAA5 locations.

(xi) Consecutive systems receiving water from a ground water source and serving less than 500 people must collect two (2) dual sample sets taken during the peak historical month for TTHM or HAA5 levels or the during the month of warmest water temperature at the following locations:

- (A) One (1) dual sample set near the entry point to the distribution system.
- (B) One (1) dual sample set at a high TTHM location.

(xii) Non-consecutive systems utilizing a ground water source and serving less than 500 people must collect two (2) dual sample sets taken during the peak historical month for TTHM or HAA5 levels or the during the month of warmest water temperature at the following locations:

- (A) One (1) dual sample set at a high TTHM location.
- (B) One (1) dual sample set at a high HAA5 location.

(xiii) Consecutive systems receiving water from a ground water source or non-consecutive systems utilizing a ground water source and serving between 500 and 9,999 people must collect two (2) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

- (A) One (1) dual sample set at a high TTHM location.
- (B) One (1) dual sample set at a high HAA5 location.

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(xiv) Consecutive systems receiving water from a ground water source or non-consecutive systems utilizing a ground water source and serving between 10,000 and 99,999 people must collect six (6) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

- (A) One (1) dual sample set near the entry point to the distribution system.
- (B) One (1) dual sample set at average residence time.
- (C) Two (2) dual sample sets at high TTHM locations.
- (D) Two (2) dual sample sets at high HAA5 locations.

(xv) Consecutive systems receiving water from a ground water source or non-consecutive systems utilizing a ground water source and serving between 100,000 and 499,999 people must collect eight (8) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

- (A) One (1) dual sample set near the entry point to the distribution system.
- (B) One (1) dual sample set at average residence time.
- (C) Three (3) dual sample sets at high TTHM locations.
- (D) Three (3) dual sample sets at high HAA5 locations.

(xvi) Consecutive systems receiving water from a ground water source or non-consecutive systems utilizing a ground water source and serving 500,000 or more people must collect twelve (12) dual sample sets every 90 days for four (4) consecutive monitoring periods at the following locations:

- (A) Two (2) dual sample sets near entry points to the distribution system.
- (B) Two (2) dual sample sets at average residence time.
- (C) Four (4) dual sample sets at high TTHM locations.
- (D) Four (4) dual sample sets at high HAA5 locations.

(b) Samples must be taken at locations other than the existing monitoring locations utilized for compliance with R.61-58.13. Monitoring locations must be distributed throughout the distribution system.

(c) If the number of entry points to the distribution system is fewer than the specified number of entry point monitoring locations, excess entry point samples must be replaced equally at high TTHM and HAA5 locations. If there is an odd extra location number, the system must take a sample at a high TTHM location. If the number of entry points to the distribution system is more than the specified number of entry point monitoring locations, the system must take samples at entry points to the distribution system having the highest annual water flows.

(d) Monitoring under this section C may not be reduced.

(3) IDSE Report

The IDSE report must include the elements required in paragraphs (3)(a) through (3)(d) of this section C. The system must submit their IDSE report to the Department according to the schedule in R61-58.14.B(2).

(a) The IDSE report must include all TTHM and HAA5 analytical results from R.61-58.13 compliance monitoring and all standard monitoring conducted during the period of the IDSE as individual analytical results and LRAAs presented in a tabular or spreadsheet format acceptable to the Department. If changed from the standard monitoring plan submitted under paragraph (1) of this section C, the report must also include a schematic of the distribution system, the population served, and system type (subpart H or ground water).

(b) The IDSE report must include an explanation of any deviations from the approved standard monitoring plan.

(c) The IDSE report must recommend and justify compliance monitoring locations for compliance with R.61-58.15 and timing based on the protocol in R.61-58.14.G.

(d) Systems must retain a complete copy of the IDSE report submitted under this section for 10 years after the date that the report is submitted. If the Department modifies the monitoring requirements for compliance with R.51-58.15 that is recommended in the IDSE report or if the Department approves alternative monitoring locations, systems must keep a copy of the Department's notification on file for 10 years after the date of the Department's notification. Systems must make the IDSE report and any Department notification available for review by the Department or the public.

D. System Specific Studies

(1) System Specific Study Plan. For systems that choose to conduct a system specific study, the system specific study plan must be based on either existing monitoring results as required under paragraph (1)(a) of this section or modeling as required under paragraph (1)(b) of this section. The system specific study plan must be prepared and submitted to the Department according to the schedule in section B of this part.

(a) Existing monitoring results. Systems may comply by submitting monitoring results collected before they are required to begin monitoring under section B of this part. The monitoring results and analysis must meet the criteria in paragraphs (1)(a)(i) and (1)(a)(ii) of this section.

(i) Minimum requirements.

(A) TTHM and HAA5 results must be based on samples collected and analyzed in accordance with 40 CFR 141.131. Samples must be collected no earlier than five years prior to the study plan submission date.

(B) The monitoring locations and frequency must meet the conditions identified in this paragraph (1)(a)(i)(B). Each location must be sampled once during the peak historical month for TTHM levels or HAA5 levels or the month of warmest water temperature for every 12 months of data submitted for that location. Monitoring results must include all R.61-58.13 compliance monitoring results plus additional monitoring results as necessary to meet minimum sample requirements.

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System Type	Population size category	Number of monitoring locations	Number of TTHM samples	Number of HAA5 samples
Subpart H	Less than 500	3	3	3
Subpart H	500 – 3,300	3	9	9
Subpart H	3,301 – 9,999	6	36	36
Subpart H	10,000 – 49,999	12	72	72
Subpart H	50,000 – 249,999	24	144	144
Subpart H	250,000 – 999,999	36	216	216
Subpart H	1,000,000 – 4,999,999	48	288	288
Subpart H	5,000,000 or greater	60	360	360
Ground Water	Less than 500	3	3	3
Ground Water	500 – 9,999	3	9	9
Ground Water	10,000 – 99,999	12	48	48
Ground Water	100,000 – 499,999	18	72	72
Ground Water	500,000 or greater	24	96	96

(ii) Reporting monitoring results. The information in this paragraph (1)(a)(ii) must be reported.

(A) Systems must report previously collected monitoring results and certify that the reported monitoring results include all compliance and non-compliance results generated during the time period beginning with the first reported result and ending with the most recent results of samples taken for compliance with R.61-58.13.

(B) Systems must certify that the samples were representative of the entire distribution system and that treatment, and distribution system have not changed significantly since the samples were collected.

(C) The system specific study monitoring plan must include a schematic of the distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating the locations and dates of all completed or planned system specific study monitoring.

(D) The system specific study plan must specify the population served and system type (subpart H or ground water).

(E) The system must retain a complete copy of the specific study plan submitted under this paragraph (1)(a), including any EPA or Department modification of the system specific study plan, for as long as they are required to retain the IDSE report under paragraph 2(g) of this section.

(F) If previously collected data that fully meet the number of samples required under paragraph (1)(a)(i)(B) of this section is submitted by the system and the Department rejects some of the data, the system must either conduct additional monitoring to replace rejected data on a schedule the Department approves or conduct standard monitoring under section R.61-58.14.C.

(b) Modeling. Systems may comply through analysis of an extended period simulation hydraulic model. The extended period simulation hydraulic model and analysis must meet the criteria in this paragraph (1)(b).

(i) Minimum requirements.

(A) The model must simulate 24-hour variation in demand and show a consistently repeating 24-hour pattern of residence time.

(B) The model must represent the criteria listed in paragraphs (1)(b)(i)(B)(1) through (1)(b)(i)(B)(9) of this section.

(1) 75% of pipe volume;

(2) 50% of pipe length;

(3) All pressure zones;

(4) All 12-inch diameter and larger pipes;

(5) All 8-inch and larger pipes that connect pressure zones, influence zones from different sources, storage facilities, major demand areas, pumps, and control valves, or are known or expected to be significant conveyors of water;

(6) All 6-inch and larger pipes that connect remote areas of a distribution system to the main portion of the system;

(7) All storage facilities with standard operations represented in the model;

(8) All active pump stations with controls represented in the model; and

(9) All active control valves.

(C) The model must be calibrated, or have calibration plans, for the current configuration of the distribution system during the period of high TTHM formation potential. All storage facilities must be evaluated as part of the calibration process. All required calibration must be completed no later than 12 months after plan submission.

(ii) Reporting modeling. The system specific study plan must include the information in this paragraph (1)(b)(ii).

(A) Tabular or spreadsheet data demonstrating that the model meets requirements in paragraph (1)(b)(i)(B) of this section.

(B) A description of all calibration activities undertaken, and if calibration is complete, a graph of predicted tank levels versus measured tank levels for the storage facility with the highest residence time in each pressure zone, and a time series graph of the residence time at the longest residence time storage facility in the distribution system showing the predictions for the entire simulation period (i.e., from time zero until the time it takes to for the model to reach a consistently repeating pattern of residence time).

(C) Model output showing preliminary 24-hour average residence time predictions throughout the distribution system.

(D) Timing and number of samples representative of the distribution system planned for at least one monitoring period of TTHM and HAA5 dual sample monitoring at a number of locations no less than would be required for the system under standard monitoring in section R.61-58.14.C during the historical month of high TTHM. These samples must be taken at locations other than existing R.61-58.13 compliance monitoring locations.

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(E) Description of how all requirements will be completed no later than 12 months after the system submits their system specific study plan.

(F) Schematic of the distribution system (including distribution system entry points and their sources, and storage facilities), with notes indicating the locations and dates of all completed system specific study monitoring (if calibration is complete) and all R.61-58.13 compliance monitoring.

(G) Population served and system type (subpart H or ground water).

(H) Systems must retain a complete copy of their system specific study plan submitted under this paragraph (1)(b), including any EPA or Department modification of their system specific study plan, for as long as they are required to retain their IDSE report under paragraph (2)(g) of this section.

(iii) Systems that submit a model that does not fully meet the requirements under paragraph (1)(b) of this section, must correct the deficiencies and respond to EPA's or the Department's inquiries concerning the model. If the system fails to correct deficiencies or respond to inquiries to the Department's satisfaction, the system must conduct standard monitoring under R.61-58.14.C

(2) IDSE report.

The IDSE report must include the elements required in paragraphs (2)(a) through (2)(f) of this section. Systems must submit their IDSE report according to the schedule in R.61-58.14.B(2).

(a) The IDSE report must include all TTHM and HAA5 analytical results from R.61-58.13 compliance monitoring and all system specific study monitoring conducted during the period of the system specific study presented in a tabular or spreadsheet format acceptable to the Department. If changed from the system specific study plan submitted under paragraph (1) of this section, the IDSE report must also include a schematic of the distribution system, the population served, and system type (subpart H or ground water).

(b) If the system used the modeling provision under paragraph (1)(b) of this section, they must include final information for the elements described in paragraph (1)(b)(ii) of this section, and a 24-hour time series graph of residence time for each R.61-58.15 compliance monitoring location selected.

(c) The IDSE report must recommend and justify R.61-58.15 compliance monitoring locations and timing based on the protocol in R.61-58.14.G

(d) The IDSE report must include an explanation of any deviations from the system's approved system specific study plan.

(e) The IDSE report must include the basis (analytical and modeling results) and justification used to select the recommended R.61-58.15 monitoring locations.

(f) Systems may submit their IDSE report in lieu of a system specific study plan on the schedule identified in R.61-58.14.B(2) for submission of the system specific study plan if the system believes that it has the necessary information by the time that the system specific study plan is due. If the system elects this approach, their IDSE report must also include all information required under paragraph (1) of this section.

(g) Systems must retain a complete copy of the IDSE report submitted under this section for 10 years after the date that the IDSE report is submitted. If the Department modifies the monitoring requirements for compliance with R.51-58.15 that are recommended in the IDSE report or if the Department approves alternative monitoring locations, water systems must keep a copy of the Department's notification on file for

10 years after the date of the Department's notification. Systems must make the IDSE report and any Department notification available for review by the Department or the public.

E. 40/30 Certification

(1) Eligibility

Systems are eligible for 40/30 certification if they had no TTHM or HAA5 monitoring violations under R.61-58.13 and no individual sample exceeded 0.040 mg/L for TTHM or 0.030 mg/L for HAA5 during an eight consecutive calendar quarter period beginning no earlier than the date specified in this paragraph (1).

(a) If 40/30 certification is due October 1, 2006, then eligibility for 40/30 certification is based on eight consecutive calendar quarters of results of monitoring for compliance with R.61-58.13 beginning no earlier than January 2004.

(b) If 40/30 certification is due April 1, 2007, then eligibility for 40/30 certification is based on eight consecutive calendar quarters of results of monitoring for compliance with R.61-58.13 beginning no earlier than January 2004.

(c) If 40/30 certification is due October 1, 2007, then eligibility for 40/30 certification is based on eight consecutive calendar quarters of results of monitoring for compliance with R.61-58.13 beginning no earlier than January 2005.

(d) If 40/30 certification is due April 1, 2008, then eligibility for 40/30 certification is based on eight consecutive calendar quarters of results of monitoring for compliance with R.61-58.13 beginning no earlier than January 2005.

(e) If a system is on reduced monitoring under R.61-58.13 and was not required to monitor during the specified monitoring period, eligibility is based on compliance samples taken during the 12 months preceding the specified period.

(2) 40/30 Certification

(a) Systems applying for 40/30 certification must certify to the Department that every individual compliance sample taken under R.61-58.13 during the periods specified in paragraph (1) of this section were less than or equal to 0.040 mg/L for TTHM and less than or equal to 0.030 mg/L for HAA5, and that no TTHM or HAA5 monitoring violations were incurred during the period specified in paragraph (1) of this section.

(b) The Department may require that systems applying for 40/30 certification submit compliance monitoring results, distribution system schematics, and/or recommended R.61-58.15 compliance monitoring locations in addition to their certification. If the system fails to submit the requested information, the Department may require standard monitoring under R.61-58.14.C or a system specific study under R.61-58.14.D

(c) The Department may still require standard monitoring under R.61-58.14.C or a system specific study under R.61-58.14.D even if a system meets the criteria in paragraph (1) of this section.

(d) Systems must retain a complete copy of the 40/30 certification submitted under this section for 10 years after the date that the certification is submitted. Systems must make the certification, all data upon which the certification is based, and any Department notification available for review by the Department or the public.

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F. Very Small System Waivers

(1) If a system serves fewer than 500 people and has taken TTHM and HAA5 samples under R.61-58.13, the system is not required to comply with this part R.61-58.14 unless the Department notifies the system that it must conduct standard monitoring under R.61-58.14.C or a system specific study under R.61-58.14.D.

(2) If a system has not taken TTHM and HAA5 samples under R.61-58.14 or if the Department notifies the system that they must comply with the part R.61-58.14, the system must conduct standard monitoring under R.61-58.14.C or a system specific study under R.61-58.14.D.

G. Stage 2 Disinfection Byproducts Rule Compliance Monitoring Location Recommendations.

(1) The IDSE report must include recommendations and justification for where and during what month(s) TTHM and HAA5 monitoring for compliance with requirements of R.61-58.15 should be conducted. Recommendations must be based on the criteria in paragraphs (2) through (5) of this section.

(2) Systems must select the number of monitoring locations specified in the table in this paragraph (2). These recommended locations will be used as R.61-58.15 (Stage 2 Disinfection Byproducts Requirements) routine compliance monitoring locations, unless the Department requires different or additional locations. Monitoring locations should be distributed throughout the distribution system to the extent possible.

Source Water Type	Population size category	Monitoring frequency	Total monitoring locations per monitoring period	Highest TTHM monitoring locations	Highest HAA5 monitoring locations	Existing R.61-58.13 compliance monitoring locations
Subpart H	Less than 500	per year	2	1	1	-
Subpart H	500 – 3,300	per quarter	2	1	1	-
Subpart H	3,301 – 9,999	per quarter	2	1	1	-
Subpart H	10,000 – 49,999	per quarter	4	2	1	1
Subpart H	50,000 – 249,999	per quarter	8	3	3	2
Subpart H	250,000 – 999,999	per quarter	12	5	4	3
Subpart H	1,000,000 – 4,999,999	per quarter	16	6	6	4
Subpart H	5,000,000 or greater	per quarter	20	8	7	5
Ground Water	Less than 500	per quarter	2	1	1	-
Ground Water	500 – 9,999	per quarter	2	1	1	-
Ground Water	10,000 – 99,999	per quarter	4	2	1	1
Ground Water	100,000 – 499,999	per quarter	6	3	2	1
Ground Water	500,000 or greater	per quarter	8	3	3	2

(a) All systems must monitor during the month of highest disinfection byproduct (DBP) concentrations.

(b) Systems on quarterly monitoring must take dual sample sets every 90 days at each monitoring location, except for subpart H systems serving 500- 3,300. Systems on annual monitoring and subpart H systems serving 500-3,300 are required to take individual TTHM and HAA5 samples (instead of a dual sample set) at the locations with the highest TTHM and HAA5 concentrations, respectively. Only one location with a dual sample set per monitoring period is needed if highest TTHM and HAA5 concentrations occur at the same location, and month, if monitored annually.

(3) Systems must recommend R.61-58.15 compliance monitoring locations based on standard monitoring results, system specific study results, and R.61-58.13 compliance monitoring results. Systems must follow the protocol in paragraphs (3)(a) through (3)(h) of this section. If required to monitor at more than eight locations, a system must repeat the protocol as necessary. If a system does not have existing R.61-58.13 compliance monitoring results or if they do not have enough existing R.61-58.13 compliance monitoring results, they must repeat the protocol, skipping the provisions of paragraphs (3)(c) and (3)(g) of this section as necessary, until the required total number of monitoring locations have been identified.

(a) Location with the highest TTHM LRAA not previously selected as an R.61-58.15 monitoring location.

(b) Location with the highest HAA5 LRAA not previously selected as an R.61-58.15 monitoring location.

(c) Existing R.61-58.13 average residence time compliance monitoring location (maximum residence time compliance monitoring location for ground water systems) with the highest HAA5 LRAA not previously selected as an R.61-58.15 monitoring location.

(d) Location with the highest TTHM LRAA not previously selected as an R.61-58.15 monitoring location.

(e) Location with the highest TTHM LRAA not previously selected as an R.61-58.15 monitoring location.

(f) Location with the highest HAA5 LRAA not previously selected as an R.61-58.15 monitoring location.

(g) Existing R.61-58.13 average residence time compliance monitoring location (maximum residence time compliance monitoring location for ground water systems) with the highest TTHM LRAA not previously selected as a R.61-58.15 monitoring location.

(h) Location with the highest HAA5 LRAA not previously selected as an R.61-58.15 monitoring location.

(4) A system may recommend locations other than those specified in paragraph (3) of this section if they include a rationale for selecting other locations. If the Department approves the alternate locations, the system must monitor at these locations to determine compliance under R.61-58.15.

(5) The recommended schedule must include R.61-58.15 monitoring during the peak historical month for TTHM and HAA5 concentration, unless the Department approves another month. Once the peak historical month has been identified, and if the system is required to conduct routine monitoring at least quarterly, the system must schedule R.61-58.15 compliance monitoring at a regular frequency of every 90 days or fewer.

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Add R.61-58.15 to read:

61-58.15 STAGE 2 DISINFECTION BYPRODUCTS REQUIREMENTS

A. Applicability.

This part R.61-58.15 applies to community water systems and non-transient non-community water systems that uses a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

B. General Requirements.

(1) The requirements of this part R.61-58.15 constitute national primary drinking water regulations. The regulations in this part establish monitoring and other requirements for achieving compliance with maximum contaminant levels based on locational running annual averages (LRAA) for total trihalomethanes (TTHM) and haloacetic acids (five)(HAA5), and for achieving compliance with maximum residual disinfectant levels for chlorine and chloramine for certain consecutive systems.

(2) Schedule – Systems subject to this part R.61-58.15 must comply with the requirements of this part on the following schedule:

(a) Systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve 100,000 people or greater must comply with this part R.61-58.15 by April 1, 2012.

(b) Systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve between 50,000 and 99,999 people must comply with this part R.61-58.15 by October 1, 2012.

(c) Systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve between 10,000 and 49,999 people must comply with this part R.61-58.15 by October 1, 2013.

(d) Systems that are not part of a combined distribution system and systems that serve the largest population in the combined distribution system and serve less than 10,000 must comply with this part R.61-58.15 by October 1, 2013 if no *Cryptosporidium* monitoring is required under R.61-58.10.K(2)(a)(iv), or by October 1, 2014 if *Cryptosporidium* monitoring is required under R.61-58.10.K(2)(a)(iv).

(e) Systems that are part of a combined distribution system must comply with this part R.61-58.15 at the same time as the system with the earliest compliance date in the combined distribution system.

(f) The Department may grant systems up to an additional 24 months from the specified date for compliance with MCLs and operational evaluation levels if capital improvements are required to comply with an MCL.

(g) Systems monitoring frequency is specified in R.61-58.15.C(1)(b)

(i) If systems are required to conduct quarterly monitoring, then they must begin monitoring in the first full calendar quarter that includes the compliance date in this paragraph (2).

(ii) If systems are required to conduct monitoring at a frequency that is less than quarterly, then they must begin monitoring in the calendar month recommended in the IDSE report prepared under R.61-58.14.C

or R.61-58.14.D or the calendar month identified in the monitoring plan developed under R.61-58.15.D no later than 12 months after the compliance date in this paragraph (2).

(h) If systems are required to conduct quarterly monitoring, then they must make compliance calculations at the end of the fourth calendar quarter that follows the compliance date and at the end of each subsequent quarter (or earlier if the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters). If systems are required to conduct monitoring at a frequency that is less than quarterly, then they must make compliance calculations beginning with the first compliance sample taken after the compliance date.

(i) Reserved.

(j) For the purpose of the schedule in this paragraph (2), the Department may determine that the combined distribution system does not include certain consecutive systems based on factors such as receiving water from a wholesale system only on an emergency basis or receiving only a small percentage and small volume of water from a wholesale system. The Department may also determine that the combined distribution system does not include certain wholesale systems based on factors such as delivering water to a consecutive system only on an emergency basis or delivering only a small percentage and small volume of water to a consecutive system.

(3) Monitoring and compliance.

(a) In order for systems that are required to monitor quarterly to comply with MCLs in R.61-58.5.P(2)(b), they must calculate LRAAs for TTHM and HAA5 using monitoring results collected under this part R.61-58.15 and determine that each LRAA does not exceed the MCL. If the system fails to complete four consecutive quarters of monitoring, they must calculate compliance with the MCL based on the average of the available data from the most recent four quarters. If the system takes more than one sample per quarter at a monitoring location, they must average all samples taken in the quarter at that location to determine a quarterly average to be used in the LRAA calculation.

(b) In order for systems required to monitor yearly or less frequently to determine compliance with MCLs in R.61-58.5.P(2)(b), they must determine that each sample taken is less than the MCL. If any sample exceeds the MCL, the system must comply with the requirements of section R.61-58.15.G. If no sample exceeds the MCL, the sample result for each monitoring location is considered the LRAA for that monitoring location.

(4) Systems are in violation of the monitoring requirements for each quarter that a monitoring result would be used in calculating an LRAA if they fail to monitor.

C. Routine Monitoring

(1) Monitoring

(a) If a system submitted an IDSE report, they must begin monitoring at the locations and months recommended in the IDSE report submitted under section R.61-58.14.G following the schedule in R.61-58.15.B(2), unless the Department requires other locations or additional locations after its review. If the system submitted a 40/30 certification under section R.61-58.14.E or they qualified for a very small system waiver under section R.61-58.14.F or they are a non-transient non-community water system serving less than 10,000 people, they must monitor at the location(s) and dates identified in their monitoring plan in R.61-58.13.C(6), updated as required by section R.61-58.15.D.

(b) Systems must monitor at no fewer than the number of locations identified in this paragraph (1)(b).

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Source water type	Population size category	Monitoring frequency	Distribution system monitoring locations per monitoring period
Subpart H	Less than 500	per year	2
Subpart H	500 – 3,300	per quarter	2
Subpart H	3,301 – 9,999	per quarter	2
Subpart H	10,000 – 49,999	per quarter	4
Subpart H	50,000 – 249,999	per quarter	8
Subpart H	250,000 – 999,999	per quarter	12
Subpart H	1,000,000 – 4,999,999	per quarter	16
Subpart H	5,000,000 or greater	per quarter	20
Ground water	Less than 500	per year	2
Ground water	500 – 9,999	per year	2
Ground water	10,000 – 99,999	per quarter	4
Ground water	100,000 – 499,999	per quarter	6
Ground water	500,000 or greater	per quarter	8

(i) All systems must monitor during month of highest DBP concentrations.

(ii) Systems on quarterly monitoring must take dual sample sets every 90 days at each monitoring location, except for subpart H systems serving 500-3,300. Systems on annual monitoring and subpart H systems serving 500-3,300 are required to take individual TTHM and HAA5 samples (instead of a dual sample set) at the locations with the highest TTHM and HAA5 concentrations, respectively. Only one location with a dual sample set per monitoring period is needed if highest TTHM and HAA5 concentrations occur at the same location (and month, if monitored annually).

(c) Undisinfected systems that begin using a disinfectant other than UV light after the dates in R.61-58.14 for complying with the Initial Distribution System Evaluation requirements must consult with the Department to identify compliance monitoring locations for this part R.61-58.15. The systems must then develop a monitoring plan under R.61-58.15.D that includes those monitoring locations.

(2) Analytical Methods – Analyses used to determine compliance with this part R.61-58.15 must be conducted using an approved method listed in 40 CFR 141.131 for TTHM and HAA5 analyses.

(3) Certified Laboratory - Analyses under this part R.61-58.15 for disinfection byproducts must be conducted by a certified laboratory.

D. Stage 2 DBP Monitoring Plans.

(1) Monitoring Plan Development.

(a) Systems must develop and implement a monitoring plan to be kept on file for Department and public review. The monitoring plan must contain the elements in paragraphs (1)(a)(i) through (1)(a)(iv) of this section and be complete no later than the date the system conducts initial monitoring under this part R.61-58.15.

- (i) Monitoring locations;
- (ii) Monitoring dates;
- (iii) Compliance calculation procedures; and.

(iv) Monitoring plans for any other systems in the combined distribution system if the Department has reduced monitoring requirements under the authority granted in 40 CFR 142.16(m).

(b) For systems that were not required to submit an IDSE report under either section R.61-58.14.C or section 61-58.14.D, and do not have sufficient R.61-58.13 monitoring locations to identify the required number of R.61-58.15 compliance monitoring locations indicated in R.61-58.14.G(2), they must identify additional locations by alternating selection of locations representing high TTHM levels and high HAA5 levels until the required number of compliance monitoring locations have been identified. Systems must also provide the rationale for identifying the locations as having high levels of TTHM or HAA5. If a system has more R.61-58.13 monitoring locations than required for R.61-58.15 compliance monitoring in R.61-58.14.G(2), they must identify which locations they will use for R.61-58.15 compliance monitoring by alternating selection of locations representing high TTHM levels and high HAA5 levels until the required number of R.61-58.15 compliance monitoring locations have been identified.

(2) Subpart H systems serving > 3,300 people must submit a copy of the monitoring plan required under this section to the Department prior to the date the system begins initial monitoring under this part R.61-58.15, unless the IDSE report submitted under R.61-58.14 contains all the information required by this section.

(3) Systems may revise their monitoring plan to reflect changes in treatment, distribution system operations and layout (including new service areas), or other factors that may affect TTHM or HAA5 formation, or for Department approved reasons, after consultation with the Department regarding the need for changes and the appropriateness of changes. If a system changes monitoring locations, they must replace existing compliance monitoring locations that have the lowest LRAA with new locations that reflect the current distribution system locations with expected high TTHM or HAA5 levels. The Department may also require modifications in the monitoring plan. Subpart H systems serving > 3,300 people, must submit a copy of their modified monitoring plan to the Department prior to the date they are required to comply with the revised monitoring plan.

E. Reduced Monitoring

(1) Systems may reduce monitoring to the level specified in this paragraph (1) any time the LRAA is less than or equal to 0.040 mg/L for TTHM and less than or equal to 0.030 mg/L for HAA5 at all monitoring locations. Only data collected under the provisions of R.61-58.15 or R.61-58.13 may be used to qualify for reduced monitoring. In addition, the source water annual average TOC level, before any treatment, must be less than or equal to 4.0 mg/L at each treatment plant treating surface water or ground water under the direct influence of surface water, based on monitoring conducted under either R.61-58.13.C(2)(a)(vi) or R.61-58.13.C(4). Systems on reduced monitoring under this section that are required to monitor quarterly must take dual sample sets every 90 days.

(a) Subpart H systems serving less than 500 people may not reduce monitoring.

(b) Subpart H systems serving between 500 and 3,300 people and meeting the criteria in this paragraph (1) may reduce monitoring to one (1) TTHM sample per year taken at the location and during the quarter with the highest TTHM single measurement, and one (1) HAA5 sample per year taken at the location and during the quarter with the highest HAA5 single measurement. One (1) dual sample set per year may be taken if the highest TTHM and HAA5 measurements occurred at the same location during the same quarter.

(c) Subpart H systems serving between 3,301 and 9,999 people and meeting the criteria in this paragraph (1) may reduce monitoring to one (1) dual sample set per year taken at the location and during the quarter with the highest TTHM single measurement, and one (1) dual sample set per year taken at the location and during the quarter with the highest HAA5 single measurement.

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(d) Subpart H systems serving between 10,000 and 49,999 people and meeting the criteria in this paragraph (1) may reduce monitoring to two (2) dual sample sets per quarter taken at the locations with the highest TTHM and HAA5 LRAAs.

(e) Subpart H systems serving between 50,000 and 249,999 people and meeting the criteria in this paragraph (1) may reduce monitoring to four (4) dual sample sets per quarter taken at the locations with the two highest TTHM and two highest HAA5 LRAAs.

(f) Subpart H systems serving between 250,000 and 999,999 people and meeting the criteria in this paragraph (1) may reduce monitoring to six (6) dual sample sets per quarter taken at the locations with the three highest TTHM and three highest HAA5 LRAAs.

(g) Subpart H systems serving between 1,000,000 and 4,999,999 people and meeting the criteria in this paragraph (1) may reduce monitoring to eight (8) dual sample sets per quarter taken at the locations with the four highest TTHM and four highest HAA5 LRAAs.

(h) Subpart H systems serving 5,000,000 or more people and meeting the criteria in this paragraph (1) may reduce monitoring to ten (10) dual sample sets per quarter taken at the locations with the five highest TTHM and five highest HAA5 LRAAs.

(i) Ground water systems serving less than 500 people and meeting the criteria in this paragraph (1) may reduce monitoring to one (1) TTHM sample every third year taken at the location and during the quarter with the highest TTHM single measurement, and one (1) HAA5 sample every third year taken at the location and during the quarter with the highest HAA5 single measurement. One (1) dual sample set every third year may be taken if the highest TTHM and HAA5 measurements occurred at the same location during the same quarter.

(j) Ground water systems serving between 500 and 9,999 people and meeting the criteria in this paragraph (1) may reduce monitoring to one (1) TTHM sample per year taken at the location and during the quarter with the highest TTHM single measurement, and one (1) HAA5 sample per year taken at the location and during the quarter with the highest HAA5 single measurement. One (1) dual sample set per year may be taken if the highest TTHM and HAA5 measurements occurred at the same location during the same quarter.

(k) Ground water systems serving between 10,000 and 99,999 people and meeting the criteria in this paragraph (1) may reduce monitoring to one (1) dual sample set per year taken at the location and during the quarter with the highest TTHM single measurement and one (1) dual sample set per year taken at the location and during the quarter with the highest HAA5 single measurement.

(l) Ground water systems serving between 100,000 and 499,999 people and meeting the criteria in this paragraph (1) may reduce monitoring to two (2) dual sample sets per quarter taken at the locations with the highest TTHM and HAA5 LRAAs.

(m) Ground water systems serving 500,000 or more people and meeting the criteria in this paragraph (1) may reduce monitoring to four (4) dual sample sets per quarter taken at the locations with the two highest TTHM and two highest HAA5 LRAAs.

(2) Systems on reduced monitoring may remain on reduced monitoring as long as the TTHM LRAA is less than or equal to 0.040 mg/L and the HAA5 LRAA is less than or equal to 0.030 mg/L at each monitoring location (for systems with quarterly reduced monitoring) or each TTHM sample is less than or equal to 0.060 mg/L and each HAA5 sample is less than or equal to 0.045 mg/L (for systems with annual or less frequent monitoring). In addition, the source water annual average TOC level, before any treatment, must be less than or equal to 4.0 mg/L at each treatment plant treating surface water or ground water under the direct influence of surface water, based on monitoring conducted under either R.61-58.13.C(2)(a)(vi) or R.61-58.13.C(4).

(3) If the LRAA based on quarterly monitoring at any monitoring location exceeds either 0.040 mg/L for TTHM or 0.030 mg/L for HAA5 or if the annual (or less frequent) sample at any location exceeds either 0.060 mg/L for TTHM or 0.045 mg/L for HAA5, or if the source water annual average TOC level, before any treatment, is greater than 4.0 mg/L at any treatment plant treating surface water or ground water under the direct influence of surface water, the system must resume routine monitoring under R.61-58.15.C or begin increased monitoring if R.61-58.15.G applies.

(4) Systems may be returned to routine monitoring at the Department's discretion.

F. Additional Requirements for Consecutive Systems.

A consecutive system that does not add a disinfectant but delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light, must comply with analytical and monitoring requirements for chlorine and chloramines in R.61-58.13.B and R.61-58.13.C(3)(a) and the compliance requirements in R.61-58.13.D(3)(a) beginning April 1, 2009, unless required earlier by the Department, and report monitoring results under R.61-58.13.E(3).

G. Conditions Requiring Increased Monitoring

(1) If a system is required to monitor at a particular location annually or less frequently than annually under R.61-58.15.C or R.61-58.15.E, they must increase monitoring to dual sample sets once per quarter (taken every 90 days) at all locations if a TTHM sample is greater than 0.080 mg/L or a HAA5 sample is greater than 0.060 mg/L at any location.

(2) A system is in violation of the MCL when the LRAA exceeds the R.61-58.15 MCLs in R.61-58.5.P, calculated based on four consecutive quarters of monitoring (or the LRAA calculated based on fewer than four quarters of data if the MCL would be exceeded regardless of the monitoring results of subsequent quarters). A system is in violation of the monitoring requirements for each quarter that a monitoring result would be used in calculating an LRAA if they fail to monitor.

(3) A system may return to routine monitoring once they have conducted increased monitoring for at least four consecutive quarters and the LRAA for every monitoring location is less than or equal to 0.060 mg/L for TTHM and less than or equal to 0.045 mg/L for HAA5.

H. Operational Evaluation Levels.

(1) A system has exceeded the operational evaluation level at any monitoring location where the sum of the two previous quarters' TTHM results plus twice the current quarter's TTHM result, divided by 4 to determine an average, exceeds 0.080 mg/L, or where the sum of the two previous quarters' HAA5 results plus twice the current quarter's HAA5 result, divided by 4 to determine an average, exceeds 0.060 mg/L.

(2) Operational Evaluations

(a) If a system exceeds the operational evaluation level, they must conduct an operational evaluation and submit a written report of the evaluation to the Department no later than 90 days after being notified of the analytical result that causes them to exceed the operational evaluation level. The written report must be made available to the public upon request.

(b) The operational evaluation must include an examination of system treatment and distribution operational practices, including storage tank operations, excess storage capacity, distribution system flushing, changes in sources or source water quality, and treatment changes or problems that may contribute to TTHM and HAA5 formation and what steps could be considered to minimize future exceedences.

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(i) A system may request and the Department may allow them to limit the scope of their evaluation if they are able to identify the cause of the operational evaluation level exceedance.

(ii) A request to limit the scope of the evaluation does not extend the schedule in paragraph (2)(a) of this section for submitting the written report. The Department must approve this limited scope of evaluation in writing and the system must keep that approval with the completed report.

I. Requirements for Remaining on Reduced TTHM and HAA5 Monitoring Based on R.61-58.13 Results.

A system on reduced monitoring under R.61-58.13 may remain on reduced monitoring after the dates identified in R.61-58.15.B for compliance with this subpart only if they qualify for a 40/30 certification under R.61-58.14.E or have received a very small system waiver under R.61-58.14.F, plus they meet the reduced monitoring criteria in R.61-58.15.E(1), and they do not change or add monitoring locations from those used for compliance monitoring under R.61-58.13. If the system's monitoring locations under this part R.61-58.15 differ from the monitoring locations under R.61-58.13, the system may not remain on reduced monitoring after the dates identified R.61-58.15.B for compliance with this part R.61-58.15.

J. Requirements for Remaining on Increased TTHM and HAA5 Monitoring Based on R.61-58.13 Results.

If a system was on increased monitoring under R.61-58.13.C(2)(a), they must remain on increased monitoring until they qualify for a return to routine monitoring under R.61-58.15.G(3). The system must conduct increased monitoring under R.61-58.15.G at the monitoring locations in the monitoring plan developed under R.61-58.15.D beginning at the date identified in R.61-58.15.B for compliance with this part and remain on increased monitoring until they qualify for a return to routine monitoring under R.61-58.15.G(3).

K. Reporting and Recordkeeping Requirements.

(1) Reporting

(a) Systems must report the following information for each monitoring location to the Department within 10 days of the end of any quarter in which monitoring is required:

(i) Number of samples taken during the last quarter.

(ii) Date and results of each sample taken during the last quarter.

(iii) Arithmetic average of quarterly results for the last four quarters for each monitoring location (LRAA), beginning at the end of the fourth calendar quarter that follows the compliance date and at the end of each subsequent quarter. If the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters, the system must report this information to the Department as part of the first report due following the compliance date or anytime thereafter that this determination is made. If a system is required to conduct monitoring at a frequency that is less than quarterly, they must make compliance calculations beginning with the first compliance sample taken after the compliance date, unless they are required to conduct increased monitoring under R.61-58.15.G.

(iv) Whether, based on R.61-58.5.P(2)(b) and this part R.61-58.15, the MCL was violated at any monitoring location.

(v) Any operational evaluation levels that were exceeded during the quarter and, if so, the location and date, and the calculated TTHM and HAA5 levels.

(b) Subpart H systems seeking to qualify for or remain on reduced TTHM/HAA5 monitoring, must report the following source water TOC information for each treatment plant that treats surface water or ground water under the direct influence of surface water to the Department within 10 days of the end of any quarter in which monitoring is required:

- (i) The number of source water TOC samples taken each month during last quarter.
- (ii) The date and result of each sample taken during last quarter.
- (iii) The quarterly average of monthly samples taken during last quarter or the result of the quarterly sample.
- (iv) The running annual average (RAA) of quarterly averages from the past four quarters.
- (v) Whether the RAA exceeded 4.0 mg/L.

(c) The Department may choose to perform calculations and determine whether the MCL was exceeded or the system is eligible for reduced monitoring in lieu of having the system report that information.

(2) Recordkeeping.

Systems must retain any R.61-58.15 monitoring plans and monitoring results as required by R.61-58.6.D.

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Replace R.61-58 Appendix A to read:

APPENDIX A TO 61-58.6: VIOLATIONS AND OTHER SITUATIONS REQUIRING PUBLIC NOTICE¹

CONTAMINANT	MCL/MRDL/TT/VIOLATIONS ²		MONITORING & TESTING PROCEDURE VIOLATIONS	
	TIER PUBLIC NOTICE REQUIRED	OF CITATION	TIER PUBLIC NOTICE REQUIRED	OF CITATION
I. Violations of the State Primary Drinking Water Regulations (SPDWR): ³				
A. Microbiological Contaminants				
1. Total coliform	2	61-58.5.F(1)	3	61-58.5.G(1) - (5)
2. Fecal coliform/E. coli	1	61-58.5.F(2)	⁴ 1, 3	61-58.5.G(5)
3. Turbidity MCL	2	61-58.10.E, H, & I	3	61-58.10.F
4. Turbidity MCL (average of 2 days samples greater than 5 NTU)	⁵ 2, 1	61-58.10.C, E, H & I	3	61-58.10.F
5. Turbidity (for TT violations resulting from a single exceedance of maximum allowable turbidity level)	⁶ 2, 1	61-58.10.C(i)(b) 61-58.10.C(3)(b) 61-58.10.F(2)(b), 61-58.10.E(1)(b), 61-58.10.E(2)(b), 61-58.10.E(3)(b), 61-58.10.E(4), 61-58.10.H(4)(a)(ii), 61-58.10.H(4)(b), 61-58.10.I(6)(b)	3	61-58.10.F 61-58.10.F(3) 61-58.10.H 61-58.10.I(7)(a) (i)-(iii) & (b)
6. Surface Water Treatment Rule violations, other than violations resulting from single exceedance of max. allowable turbidity level (TT).	2	61-58.10.B - E		61-58.10
7. Interim Enhanced Surface Water Treatment Rule violations, other than violations resulting from single exceedance of max. turbidity level (TT)	⁷ 2	61-58.10.B - E 61-58.10.I(1)-(7)	3	61-58.10.H(3), (5) 61-58.10.I(4) & (5) 61-58.10.I(7)
8. Filter Backwash Recycling Rule violations	2	61-58.10.J(3)	3	61-58.10.J(2) & (4)
9. Long Term 1 Enhanced Surface Water Treatment Rule Violations.	2	61-58.10.I(1)-(7)	3	61-58.10.I(4) & (5) 61-58.10.I(7)

10. LT2ESWTR violations	2	61-58.10.K(11) – (21)	²² 2,3	61-58.10.K(2) – (6) & 61-58.10.K(9) – (10)
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B. Inorganic Chemicals (IOCs)

1. Antimony	2	61-58.5.B(2)	3	61-58.5.C(7), (9)
2. Arsenic	2	⁸ 61-58.5.B(2)	3	¹¹ 61-58.5.C(7)
3. Asbestos (fibers >10µm)	2	61-58.5.B(2)	3	61-58.5.C(7), (8)
4. Barium	2	61-58.5.B(2)	3	61-58.5.C(7), (9)
5. Beryllium	2	61-58.5.B(2)	3	61-58.5.C(7), (9)
6. Cadmium	2	61-58.5.B(2)	3	61-58.5.C(7), (9)
7. Chromium (total)	2	61-58.5.B(2)	3	61-58.5.C(7), (9)
8. Cyanide	2	61-58.5.B(2)	3	61-58.5.C(7), (9)
9. Fluoride	2	61-58.5.B(2)	3	61-58.5.C(7), (9)
10. Mercury (inorganic)	2	61-58.5.B(2)	3	61-58.5.C(7), (9)
11. Nitrate	1	61-58.5.B(2)	¹² 1, 3	61-58.5.C(7), (10)
12. Nitrite	1	61-58.5.B(2)	¹² 1, 3	61-58.5.C(12), 61-58.5.C (7), (10), 61-58.5.C(12)
13. Total Nitrate and Nitrite	1	61-58.5.B(2)	3	61-58.5.C(7)
14. Selenium	2	61-58.5.B(2)	3	61-58.5.C(7), (9)
15. Thallium	2	61-58.5.B(2)	3	61-58.5.C(7), (9)

C. Lead and Copper Rule (Action Level for lead is 0.015 mg/L, for copper is 1.3 mg/L)

1. Lead and Copper Rule (TT)	2	61-58.11.B - G	3	61-58.11.H - K
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D. Synthetic Organic Chemicals (SOCs)

1. 2,4-D	2	61-58.5.D	3	61-58.5.E(7)
2. 2,4,5-TP (Silvex)	2	61-58.5.D	3	61-58.5.E(7)
3. Alachlor	2	61-58.5.D	3	61-58.5.E(7)
4. Atrazine	2	61-58.5.D	3	61-58.5.E(7)
5. Benzo(a)pyrene (PAHs)	2	61-58.5.D	3	61-58.5.E(7)
6. Carbofuran	2	61-58.5.D	3	61-58.5.E(7)
7. Chlordane	2	61-58.5.D	3	61-58.5.E(7)
8. Dalapon	2	61-58.5.D	3	61-58.5.E(7)
9. Di (2-ethylhexyl) adipate	2	61-58.5.D	3	61-58.5.E(7)

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10. Di (2-ethylhexyl) phthalate	2	61-58.5.D	3	61-58.5.E(7)
11. Dibromochloropropane	2	61-58.5.D	3	61-58.5.E(7)
12. Dinoseb	2	61-58.5.D	3	61-58.5.E(7)
13. Dioxin (2,3,7,8-TCDD)	2	61-58.5.D	3	61-58.5.E(7)
14. Diquat	2	61-58.5.D	3	61-58.5.E(7)
15. Endothall	2	61-58.5.D	3	61-58.5.E(7)
16. Endrin	2	61-58.5.D	3	61-58.5.E(7)
17. Ethylene dibromide	2	61-58.5.D	3	61-58.5.E(7)
18. Glyphosate	2	61-58.5.D	3	61-58.5.E(7)
19. Heptachlor	2	61-58.5.D	3	61-58.5.E(7)
20. Heptachlor epoxide	2	61-58.5.D	3	61-58.5.E(7)
21. Hexachlorobenzene	2	61-58.5.D	3	61-58.5.E(7)
22. Hexachlorocyclo-pentadiene	2	61-58.5.D	3	61-58.5.E(7)
23. Lindane	2	61-58.5.D	3	61-58.5.E(7)
24. Methoxychlor	2	61-58.5.D	3	61-58.5.E(7)
25. Oxamyl (Vydate)	2	61-58.5.D	3	61-58.5.E(7)
26. Pentachlorophenol	2	61-58.5.D	3	61-58.5.E(7)
27. Picloram	2	61-58.5.D	3	61-58.5.E(7)
28. Polychlorinated biphenyls (PCBs)	2	61-58.5.D	3	61-58.5.E(7)
29. Simazine	2	61-58.5.D	3	61-58.5.E(7)
30. Toxaphene	2	61-58.5.D	3	61-58.5.E(7)

E. Volatile Organic Chemicals (VOCs)

1. Benzene	2	61-58.5.N	3	61-58.5.O
2. Carbon tetrachloride	2	61-58.5.N	3	61-58.5.O
3. Chlorobenzene (monochlorobenzene)	2	61-58.5.N	3	61-58.5.O
4. o-Dichlorobenzene	2	61-58.5.N	3	61-58.5.O
5. p-Dichlorobenzene	2	61-58.5.N	3	61-58.5.O
6. 1,2-Dichloroethane	2	61-58.5.N	3	61-58.5.O
7. 1,1-Dichloroethylene	2	61-58.5.N	3	61-58.5.O
8. cis-1,2-Dichloroethylene	2	61-58.5.N	3	61-58.5.O
9. trans-1,2-Dichloroethylene	2	61-58.5.N	3	61-58.5.O
10. Dichloromethane	2	61-58.5.N	3	61-58.5.O
11. 1,2-Dichloropropane	2	61-58.5.N	3	61-58.5.O
12. Ethylbenzene	2	61-58.5.N	3	61-58.5.O
13. Styrene	2	61-58.5.N	3	61-58.5.O
14. Tetrachloroethylene	2	61-58.5.N	3	61-58.5.O
15. Toluene	2	61-58.5.N	3	61-58.5.O
16. 1,2,4-Trichlorobenzene	2	61-58.5.N	3	61-58.5.O
17. 1,1,1-Trichloroethane	2	61-58.5.N	3	61-58.5.O
18. 1,1,2-Trichloroethane	2	61-58.5.N	3	61-58.5.O
19. Trichloroethylene	2	61-58.5.N	3	61-58.5.O
20. Vinyl chloride	2	61-58.5.N	3	61-58.5.O
21. Xylenes (total)	2	61-58.5.N	3	61-58.5.O

F. Radioactive Contaminants

1. Beta/photon emitters	2	61-58.5.H(4)	3	61-58.5.K(1), 61-58.5.I.(3)
2. Alpha emitters	2	61-58.5.H(3)	3	61-58.5.K(1),

3. Combined radium (226 & 228)	2	61-58.5.H(2)	3	61-58.5.I(2) 61-58.5.K(1), 61-58.5.I2)
4. Uranium	¹¹ 2	61-58.5.H(5)	¹² 3	61-58.5.K(1), 61-58.5.I(2)

G. Disinfection Byproducts (DBPs), Byproduct Precursors, Disinfectant Residuals. Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA sets standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs) and haloacetic acids (HAAs).¹³

1. Total trihalomethanes (TTHMs)	2	¹⁴ 61-58.5.L, 61-58.5.P	3	61-58.5.M 61-58.13.C(1), (2) 61-58.14, 61- 58.15
2. Haloacetic Acids (HAA5)	2	61-58.5.P	3	61-58.13.C(1), (2) 61-58.14, 61- 58.15
3. Bromate	2	61-58.5.P	3	61-58.13.C(1), (2)
4. Chlorite	2	61-58.5.P	3	61-58.13.C(1), (2)
5. Chlorine (MRDL)	2	61-58.5.Q	3	61-58.13.C(1), (3)
6. Chloramine (MRDL)	2	61-58.5.Q	3	61-58.13.C(1), (3)
7. Chlorine dioxide (MRDL) where any 2 consecutive daily samples at entrance to distribution system only are above MRDL	2	61-58.5.Q, 61-58.13.D	2 ¹⁵ , 3	61-58.13.C(1), (3), 61- 58.13.C(3)(b)
8. Chlorine dioxide (MRDL), where sample(s) in distribution system the next day are also above MRDL	¹⁶ 1	61-58.5.Q, 61-58.13.D(3)	1	61-58.13.C(1), (3), 61- 58.13.D(3)(b)
9. Control of DBP precursors-- TOC (TT)	2	61-58.10.F(1), (2)	3	61-58.13.C(1), (4)
10. Bench marking and disinfection profiling.	N/A	N/A	3	61-58.10.G(3) 61-58.10.H(3) 61-58.10.I(4) & (5)
11. Development of monitoring plan	N/A	N/A	3	61-58.13.C(6)

H. Other Treatment Techniques

1. Acrylamide (TT)	2	61-58.5.AA	N/A	N/A
2. Epichlorohydrin (TT)	2	61-58.5.AA	N/A	N/A

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II. Unregulated Contaminant Monitoring:¹⁷

A. Unregulated contaminants	N/A	N/A	3	61-58.5.T
B. Nickel	N/A	N/A	3	61-58.5.C(9), (17)

III. Public Notification for Variances and Exemptions:

A. Operation under a variance or exemption	3	¹⁸ 61-58.9	N/A	N/A
B. Violation of conditions of a variance or exemption	2	¹⁹ 61-58.9	N/A	N/A

IV. Other Situations Requiring Public Notification:

A. Fluoride secondary maximum contaminant level (SMCL) exceedance	3	61-58.5.R	N/A	N/A
B. Exceedance of nitrate MCL for non-community systems, as allowed by Department	1	61-58.5.B(3)	N/A	N/A
C. Availability of unregulated contaminant monitoring data	3	61-58.5.T	N/A	N/A
D. Waterborne disease outbreak	1	61-58.B(156) 61-58.10.C(3)(b)(ii)	N/A	N/A
E. Other waterborne emergency ²⁰	1	N/A	N/A	N/A
F. Other situations as determined by the Department	²¹ 1, 2, 3	N/A	N/A	N/A

Appendix A to R.61-58.6 - Endnotes

¹ Violations and other situations not listed in this table (e.g., failure to prepare Consumer Confidence Reports), do not require notice, unless otherwise determined by the Department. The Department may, at its option, also require a more stringent public notice tier (e.g., Tier 1 instead of Tier 2 or Tier 2 instead of Tier 3) for specific violations and situations listed in this Appendix, as authorized under R.61-58.6.E(2)(a) and (3)(a).

² MCL--Maximum contaminant level, MRDL--Maximum residual disinfectant level, TT--Treatment technique

³ The term Violations of State Primary Drinking Water Regulations (SPDWR) is used here to include violations of MCL, MRDL, treatment technique, monitoring, and testing procedure requirements.

⁴ Failure to test for fecal coliform or E. coli is a Tier 1 violation if testing is not done after any repeat sample tests positive for coliform. All other total coliform monitoring and testing procedure violations are Tier 3.

⁵ Systems that violate the turbidity MCL of 5 NTU based on an average of measurements over two consecutive days must consult with the Department within 24 hours after learning of the violation. Based on this consultation, the Department may subsequently decide to elevate the violation to Tier 1. If a system is unable to make contact with the Department in the 24-hour period, the violation is automatically elevated to Tier 1.

⁶ Systems with treatment technique violations involving a single exceedance of a maximum turbidity limit under the Surface Water Treatment Rule (SWTR) Interim Enhanced Surface Water Treatment Rule (IESWTR), or the Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR) are required to consult with the Department within 24 hours after learning of the violation. Based on this consultation, the

Department may subsequently decide to elevate the violation to Tier 1. If a system is unable to make contact with the Department in the 24-hour period, the violation is automatically elevated to Tier 1.

⁷ Most of the requirements of the Interim Enhanced Surface Water Treatment Rule, R.61-58.10.B - C become effective January 1, 2002 for surface water systems and ground water systems under the direct influence of surface water serving at least 10,000 persons. However, R.61-58.10.H(3) has some requirements that become effective as early as April 16, 1999. The Surface Water Treatment Rule remains in effect for systems serving at least 10,000 persons even after 2002; the Interim Enhanced Surface Water Treatment Rule adds additional requirements and does not in many cases supercede the SWTR.

⁸ The arsenic MCL citations are effective January 23, 2006. Until then the citations are R.61-58.5(B)(2).

⁹ The arsenic Tier 3 violations MCL citations are effective January 23, 2006. Until then, the citations are R.61-58.C(7).

¹⁰ Failure to take a confirmation sample within 24 hours for nitrate or nitrite after an initial sample exceeds the MCL is a Tier 1 violation. Other monitoring violations for nitrate are Tier 3.

¹¹ The uranium MCL, Tier 2 violation citations are effective December 8, 2003 for all community water systems.

¹² The uranium Tier 3 violation citations are effective December 8, 2000 for all community water systems.

¹³ Community and non-transient non-community surface water systems and ground water systems under the direct influence of surface water serving 10,000 must comply with new DBP MCLs, disinfectant MRDLs, and related monitoring requirements beginning January 1, 2002. All other community and non-transient non-community systems must meet the MCLs and MRDLs beginning January 1, 2004. Transient non-community surface water systems and ground water systems under the direct influence of surface water serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2002. Transient non-community surface water systems and ground water systems under the direct influence of surface water serving fewer than 10,000 persons and using only ground water not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2004.

¹⁴ R.61-58.5.L, and R.61-58.13.C(1) – (2) apply until R.61-58.14 and R.61-58.15 take effect under the schedule in R.61-58.14.

¹⁵ Failure to monitor for chlorine dioxide at the entrance to the distribution system the day after exceeding the MRDL at the entrance to the distribution system is a Tier 2 violation.

¹⁶ If any daily sample taken at the entrance to the distribution system exceeds the MRDL for chlorine dioxide and one or more samples taken in the distribution system the next day exceed the MRDL, Tier 1 notification is required. Failure to take the required samples in the distribution system after the MRDL is exceeded at the entry point also triggers Tier 1 notification.

¹⁷ Some water systems must monitor for certain unregulated contaminants listed in R.61-58.5.T

¹⁸ This citation refers to R.61-58.9 require that "a schedule prescribedfor a public water system granted a variance [or exemption] shall require compliance by the system . . ."

¹⁹ In addition to R.61-58.9 specifies the items and schedule milestones that must be included in a variance for small systems.

²⁰ Other waterborne emergencies require a Tier 1 public notice under R.61-58.6.E(2)(a) for situations that do not meet the definition of a waterborne disease outbreak given in R.61-58.B(156) but that still have the potential to have serious adverse effects on health as a result of short-term exposure. These could include outbreaks not related to treatment deficiencies, as well as situations that have the potential to cause outbreaks, such as failures or significant interruption in water treatment processes, natural disasters that disrupt the water supply or distribution system, chemical spills, or unexpected loading of possible pathogens into the source water.

²¹ The Department may place other situations in any tier they believe appropriate, based on threat to public health.

²² Failure to collect three or more samples for Cryptosporidium analysis is a Tier 2 violation requiring special notice as specified in R.61-58.6.E(11). All other monitoring and testing procedure violations are Tier 3.

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Replace R.61-58 Appendix B to read:

APPENDIX B TO R.61-58.6: STANDARD HEALTH EFFECTS LANGUAGE FOR PUBLIC NOTIFICATION

Contaminant	MCLG ¹ mg/L	MCL ² mg/L	Standard health effects language for public notification
State Primary Drinking Water Regulations (SPDWR):			
A. Microbiological Contaminants:			
1a. Total coliform	Zero	See footnote ³	Coliforms are bacteria that are naturally present in the and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
1b. Fecal coliform/E. coli	Zero	Zero	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants young children, some of the elderly, and people with severely compromised immune systems.
2a. Turbidity (MCL) ⁴	None	1 NTU ⁵ /5 NTU	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial microbial growth. Turbidity may indicate presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
2b. Turbidity (SWTR TT) ⁶	None	TT ⁷	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
2c. Turbidity (IESWTR TT)	None	TT	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

B. Surface Water Treatment Rule (SWTR), Interim Enhanced Surface Water Treatment Rule (IESWTR), Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR) and Filter Backwash Recycling Rule (FBRR) violations:

3.	<i>Giardia lamblia</i>	Zero	TT ¹⁰	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
	(SWTR/IESWTR/LT1ESWTR)			
4.	Viruses			
	(SWTR/IESWTR/LT1ESWTR)			
5.	Heterotrophic plate count (HPC) bacteria	9		
	(SWTR/IESWTR/LT1ESWTR).			
6.	<i>Legionella</i>			
	(SWTR/IESWTR/LT1ESWTR).			
7.	<i>Cryptosporidium</i>			
	(IESWTR/FBRR/LT1ESWTR).			

C. Inorganic Chemicals (IOCs):

8.	Antimony	0.006	0.006	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis. Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
9.	Arsenic ¹¹	Zero	0.010	
10.	Asbestos (10 µm)	7 MFL ¹²	7 MFL	
11.	Barium	2	2	
12.	Beryllium	0.004	0.004	
13.	Cadmium	0.005	0.005	
14.	Chromium (total)	0.1	0.1	
15.	Cyanide	0.2	0.2	

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16. Fluoride	4.0	4.0	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
17. Mercury (inorganic)	0.002	0.002	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
18. Nitrate	10	10	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
19. Nitrite	1	1	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
20. Total Nitrate and Nitrite	10	10	Infants below the age of six months who drink water containing nitrate and nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
21. Selenium	0.05	0.05	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
22. Thallium	0.0005	0.002	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

D. Lead and Copper Rule:

23. Lead	Zero	TT ¹³	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
24. Copper	1.3	TT ¹⁴	Copper is an essential nutrient, but some

people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

E. Synthetic Organic Chemicals (SOCs):

25. 2,4-D	0.07	0.07	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with kidneys, liver, or adrenal glands.
26. 2,4,5-TP (Silvex)	0.05	0.05	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
27. Alachlor	Zero	0.002	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
28. Atrazine	0.003	0.003	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
29. Benzo(a)pyrene (PAHs)	Zero	0.0002	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.
30. Carbofuran	0.04	0.04	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.
31. Chlordane	Zero	0.002	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
32. Dalapon	0.2	0.2	Some people who drink water containing dalapon well in excess of the MCL over many years could minor kidney changes.
33. Di (2-ethylhexyl) adipate	0.4	0.4	Some people who drink water containing di(2-ethylhexyl) adipate well in excess of the MCL over many years could experience toxic effects such as weight loss, liver enlargement or possible reproductive difficulties.
34. Di (2-ethylhexyl) phthalate	Zero	0.006	Some people who drink water containing di(2-ethylhexyl) phthalate well in excess of the MCL many years may have problems with

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35. Dibromochloropropane (DBCP)	Zero	0.0002	their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer. Some people who drink water containing DBCP in of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
36. Dinoseb	0.007	0.007	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
37. Dioxin (2,3,7,8-TCDD).	Zero	3×10^{-8}	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
38. Diquat	0.02	0.02	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
39. Endothall	0.1	0.1	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
40. Endrin	0.002	0.002	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
41. Ethylene dibromide	Zero	0.00005	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
42. Glyphosate	0.7	0.7	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
43. Heptachlor	Zero	0.0004	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.
44. Heptachlor epoxide	Zero	0.0002	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.
45. Hexachlorobenzene	Zero	0.001	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
46. Hexachlorocyclo pentadiene	0.05	0.05	Some people who drink water containing Hexachlorocyclo-pentadiene well in excess of the MCL over many years could experience

47. Lindane	0.0002	0.0002	problems with their kidneys or stomach. Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.
48. Methoxychlor	0.04	0.04	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
49. Oxamyl (Vydate)	0.2	0.2	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
50. Pentachlorophenol	Zero	0.001	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.
51. Picloram	0.5	0.5	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.
52. Polychlorinated biphenyls (PCBs).	Zero	0.0005	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
53. Simazine	0.004	0.004	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
54. Toxaphene	Zero	0.003	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.

F. Volatile Organic Chemicals (VOCs):

55. Benzene	Zero	0.005	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
56. Carbon tetrachloride	Zero	0.005	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
57. Chlorobenzene (monochlorobenzene)	0.1	0.1	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with

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58. o-Dichlorobenzene	0.6	0.6	their liver or kidneys. Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
59. p-Dichlorobenzene	0.075	0.075	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
60. 1,2-Dichloroethane	Zero	0.005	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
61. 1,1-Dichloroethylene	0.007	0.007	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
62. cis-1,2-Dichloroethylene	0.07	0.07	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
63. trans-1,2-Dichloroethylene	0.1	0.1	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
64. Dichloromethane	Zero	0.005	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
65. 1,2-Dichloropropane	Zero	0.005	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
66. Ethylbenzene	0.7	0.7	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
67. Styrene	0.1	0.1	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
68. Tetrachloroethylene	Zero	0.005	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
69. Toluene	1	1	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
70. 1,2,4-Trichlorobenzene	0.07	0.07	Some people who drink water containing

71. 1,1,1-Trichloroethane	0.2	0.2	1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands. Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
72. 1,1,2-Trichloroethane	0.003	0.005	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
73. Trichloroethylene	Zero	0.005	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
74. Vinyl chloride	Zero	0.002	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
75. Xylenes (total)	10	10	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

G. Radioactive Contaminants:

76. Beta/photon emitters	Zero	4 mrem/yr ¹⁵	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
77. Alpha emitters	Zero	15 pCi/L ¹⁷	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
78. Combined radium (226 & 228)	Zero	5 pCi/L	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
79. Uranium ¹⁷	Zero	30µg/L	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

H. Disinfection Byproducts (DBPs), Byproduct Precursors, and Disinfectant Residuals: Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). EPA sets standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs) and haloacetic acids (HAAs):¹⁸

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80. Total trihalomethanes (TTHMs)	N/A	0.08017 ^{19, 20}	Some people who drink water containing trihalomethanes excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.
81. Haloacetic Acids (HAA)	N/A	0.060 ²¹	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
82. Bromate	Zero	0.010	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
83. Chlorite	0.08	1.0	Some infants and young children who drinking water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
84. Chlorine	4 (MRDLG) ²²	4.0 (MRDL) ²³	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
85. Chloramines	4 (MRDLG)	4.0 (MRDL)	Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.
86a. Chlorine dioxide, where any 2 consecutive daily samples taken at the entrance to the distribution system are above the MRDL.	0.8 (MRDLG)	0.8 (MRDL)	Some infants and young children who drink water containing chlorine dioxide in excess of a the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine ioxide in excess of the MRDL. Some people may experience anemia. <i>Add for public notification only:</i> The chlorine dioxide violations reported today are the result of exceedances at the treatment facility only not within the distribution system which delivers water to consumers. Continued compliance with chlorine dioxide levels within the distribution system minimizes the potential risk of these violations to consumers.
86b. Chlorine dioxide, where one or more water distribution system are above the MRDL	0.8 (MRDLG)	0.8 (MRDL)	Some infants and young children who drink containing chlorine dioxide in excess of the MRDL could experience nervous effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.

Add for public notification only: The chlorine dioxide violations reported today include exceedances of the EPA standard within the distribution system which delivers water to consumers. Violations of the chlorine dioxide standard within the distribution system may harm human health based on short-term exposures. Certain groups, including fetuses, infants, and young children, may be especially susceptible to nervous system effects from excessive chlorine dioxide exposure.

87. Control of DBP precursors (DBP) None TT

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by-products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these by-products in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

I. Other Treatment Techniques:

88. Acrylamide Zero TT

Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.

89. Epichlorohydrin Zero TT

Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.

Appendix B to R.61-58.6 - endnotes

¹. MCLG - Maximum contaminant level goal

². MCL - Maximum contaminant level

³. For water systems analyzing at least 40 samples per month, no more than 5.0 percent of the monthly samples may be positive for total coliforms. For systems analyzing fewer than 40 samples per month, no more than one sample per month may be positive for total coliforms.

⁴. There are various regulations that set turbidity standards for different types of systems, including the 1989 Surface Water Treatment Rule, the 1998 Interim Enhanced Surface Water Treatment Rule, and the 2002 Long Term 1 Enhanced Surface Water Treatment Rule. The MCL for the monthly turbidity average is 1 NTU; the MCL for the 2-day average is 5 NTU for systems that are required to filter but have not yet installed filtration.

⁵. NTU - Nephelometric turbidity unit

⁶. There are various regulations that set turbidity standards for different types of systems, including the 1989 Surface Water Treatment Rule (SWTR), the 1998 Interim Enhanced Surface Water Treatment Rule (IESWTR), and the 2001 Long Term 1 Enhanced Surface Water Treatment Rule. Systems subject to the Surface Water Treatment Rule (both filtered and unfiltered) may not exceed 5 NTU. In addition, in filtered systems, 95 percent of samples each month must not exceed 0.5 NTU in systems using conventional or direct filtration and must not exceed 1 NTU in systems using slow sand or diatomaceous earth filtration or other filtration technologies approved by the Department.

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⁷ TT - Treatment technique

⁸ There are various regulations that set turbidity standards for different types of systems, including the 1989 Surface Water Treatment Rule (SWTR), the 1998 Interim Enhanced Surface Water Treatment Rule (IESWTR), and the 2002 Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR). For systems subject to the IESWTR (systems serving at least 10,000 people, using surface water or ground water under the direct influence of surface water), that use conventional filtration or direct filtration, after January 1, 2002, the turbidity level of a system's combined filter effluent may not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of a system's combined filter effluent must not exceed 1 NTU at any time. Systems subject to the IESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration must meet turbidity limits set by the Department. For systems subject to the LT1ESWTR (systems serving fewer than 10,000 people, using surface water or ground water under the direct influence of surface water) that use conventional filtration or direct filtration, after January 1, 2005 the turbidity level of a system's combined filter effluent may not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of a system's combined filter effluent must not exceed 1 NTU at any time. Systems subject to the LT1ESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration must meet turbidity limits set by the Department.

⁹ The bacteria detected by heterotrophic plate count (HPC) are not necessarily harmful. HPC is simply an alternative method of determining disinfectant residual levels. The number of such bacteria is an indicator of whether there is enough disinfectant in the distribution system.

¹⁰ SWTR, IESWTR, and LT1ESWTR treatment technique violations that involve turbidity exceedances may use the health effects language for turbidity instead.

¹¹ These arsenic values are effective January 23, 2006. Until then, the MCL is 0.05 mg/L and there is no MCLG.

¹² Millions fibers per liter.

¹³ Action Level = 0.015 mg/L

¹⁴ Action Level = 1.3 mg/L

¹⁵ Millirems per years

¹⁶ Picocuries per liter

¹⁷ The uranium MCL is effective December 8, 2003 for all community water systems.

¹⁸ Surface water systems and ground water systems under the direct influence of surface water are regulated under R.61-58.10. Community and non-transient non-community systems serving greater than, or equal to 10,000 must comply with R.61-58.13 DBP MCLs and disinfectant maximum residual disinfectant levels (MRDLs) beginning January 1, 2002. All other community and non-transient non-community systems must comply with R-61.58.13 DBP MCLs and MRDLs beginning January 1, 2004. Transient non-community surface water systems and ground water systems under the direct influence of surface water serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning January 1, 2002. All other transient non-community systems that use chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL beginning on January 1, 2004.

¹⁹ Community and non-transient non-community systems that must comply with R.61-58.14 TTHM and HAA5 MCLs of 0.080 mg/L and 0.060 mg/L, respectively (with compliance calculated as a locational running annual average) on the schedule in R.61-58.15.

²⁰ The MCL for total trihalomethanes is the sum of the concentrations of the individual trihalomethanes.

²¹ The MCL for haloacetic acids is the sum of the concentrations of the individual haloacetic acids.

²² MRDLG--Maximum residual disinfectant level goal.

²³ MRDL--Maximum residual disinfectant level.

Statement of Need and Reasonableness:

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

DESCRIPTION OF REGULATION: Amendment to Regulation 61-58, State Primary Drinking Water Regulations

Purpose: This amendment revises the State Primary Drinking Water Regulations to include requirements promulgated under the National Primary Drinking Water Regulations: Stage 2 Disinfectants and Disinfection Byproducts Rule. The regulation revision amends the State Primary Drinking Water Regulations to comply with requirements of 40 CFR Parts 141 and 142. The final Stage 2 Disinfectants and Disinfection Byproducts Rule was published in the January 4, 2006 Federal Register.

In addition, this amendment revises the State Primary Drinking Water Regulations to include requirements promulgated under the National Primary Drinking Water Regulations: Long Term 2 Enhanced Surface Water Treatment Rule. The regulation revision will amend the State Primary Drinking Water Regulations to comply with requirements of 40 CFR Parts 141 and 142. The final Long Term 2 Enhanced Surface Water Treatment Rule was published in the January 5, 2006 Federal Register

In addition, the amendment revises the State Primary Drinking Water Regulations to include requirements promulgated under the National Primary Drinking Water Regulations: Minor Corrections and Clarification to Drinking Water Regulations; National Primary Drinking Water Regulations for Lead and Copper. The regulation revision will amend the State Primary Drinking Water Regulations to comply with requirements of 40 CFR Parts 141 and 142. Minor Corrections and Clarification to Drinking Water Regulations; National Primary Drinking Water Regulations for Lead and Copper was published in the June 29, 2004 Federal Register.

These regulations will comply with federal law and are exempt from legislative review.

Legal Authority: The State Primary Drinking Water Regulations are authorized by S.C. Code Ann. 44-55-10 et. seq., State Safe Drinking Water Act.

Plan for Implementation: These amendments will be incorporated within R.61-58 upon approval of the S.C. Board of Health and Environmental Control and publication in the State Register as a final regulation. The proposed amendments will be implemented in the same manner in which the existing regulation is implemented.

DETERMINATION OF NEED AND REASONABLENESS OF THE REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS:

The adoption of these regulations allows the Department to continue being the primacy agency for the implementation of the Safe Drinking Water Act and the National Primary Drinking Water Regulations in the state. This action is mandated by the 1996 amendments to the Federal Safe Drinking Water Act. The proposed regulations will comply with 40 CFR Parts 141 and 142.

DETERMINATION OF COSTS AND BENEFITS: These regulatory amendments are exempt from the requirement for a Preliminary Fiscal Impact Statement or a Preliminary Assessment Report because each change is necessary to maintain compatibility and consistency with federal law and regulations.

The Stage 2 DBPR will result in increased costs to public water systems for improved treatment to reduce public exposure to potentially harmful disinfection by-products and additional monitoring. This rule will apply to all public water systems, which add a primary or residual disinfectant other than ultraviolet light or deliver water that has been treated with a primary or residual disinfectant other than ultraviolet light. EPA has estimated that the total national annualized present value costs to water systems for implementing the Stage 2 DBPR is approximately \$79 million per year. This estimate includes annualized to utilities (\$ 77 million/year), and annualized costs to States and Tribal governments (\$ 2 million/year). EPA's estimated

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national benefit resulting from this rule varied greatly due to the inability on the part of EPA to establish a direct causal link between elevated disinfection byproducts and some adverse health outcomes.

The LT2ESWTR will result in increased costs to public water systems by requiring improved cryptosporidium removal, monitoring, and disinfection benchmarking for some systems. The rule will only apply to surface water systems or groundwater systems under the influence of surface water. EPA has estimated that the total national annualized present value costs for implementing the LT2ESWTR is between \$93 million and \$150 million. This estimate includes costs to utilities (\$92 million - \$149 million and costs to states (approximately \$1 million). EPA has estimated the annual present value of the mean benefit of the LT2ESWTR ranging from \$131 million to \$2.8 billion.

Costs incurred by public water systems or the state due to minor changes in unregulated contaminant monitoring and Consumer Confidence Reports will be minimal.

UNCERTAINTIES OF ESTIMATES: Considerable

EFFECT ON ENVIRONMENT AND HEALTH: There will be no effect on the environment. The amendments will promote public health through improved drinking water quality.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: There will be no detrimental effect on the environment if the amendments are not implemented. However, there could be an adverse impact on public health if the amendments are not implemented.

Document No. 3068

DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL CHAPTER 61

Statutory Authority: S.C. Code Ann. Sections 13-7-10 *et seq.*; (1976 & Supp. 2005); 13-7-40

R. 61-83 Transportation of Radioactive Waste Into or Within South Carolina

Synopsis:

The Department has amended R.61-83 to maintain conformity with the federal requirements for Transportation Safety Standards as found in 10 CFR 71. These amendments will ensure compliance with federal standards as required by Section 274 of the Atomic Energy Act of 1954. This amendment will incorporate the transportation regulations by reference at section 61-83.

These rules were published in the Federal Register on January 26, 2004, at 69 FR 3698. Corrections to the Final Rule were published in the Federal Register on February 10, 2004 at 69 FR 6139 and September 29, 2004 at 69 FR 58038. The Final Rule and corrections are reflected in 10 CFR Part 71 as revised January 1, 2006.

This amendment is not more stringent than the federal equivalent and will not require legislative review, nor is a preliminary assessment report or a fiscal impact statement required.

Discussion of Revisions:

SECTION

CHANGE

61-83 1.2	Remove reference to 49 CFR Parts 171-179, 49 CFR Parts 386-399 and replace with reference to the Nuclear Regulatory Commission Title 10 CFR Part 71 as revised January
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1, 2006. Include a listing of exceptions in Part 71 that are under NRC authority and are not delegated to the states.

Instructions: Amend R.61-83 pursuant to each instruction included with the text as follows:

Section 61-83.1.2 is amended to read:

61-83 1.2 All persons subject to the provisions of this regulation shall comply with all applicable provisions of the Nuclear Regulatory Commission Title 10 CFR Part 71 as revised January 1, 2006, (with the exception of sections 71.2, 71.6, 71.14(b), 71.19, 71.24, 71.31, 71.33, 71.35, 71.37, 71.38, 71.39, 71.41, 71.43, 71.45, 71.51, 71.52, 71.53, 71.55, 71.59, 71.61, 71.63, 71.64, 71.65, 71.71, 71.73, 71.74, 71.75, 71.77, 71.99 and 71.100), Regulation 61-83 of the 1976 Code of Laws of South Carolina, and any disposal facility radioactive material license requirements regarding the packaging, transportation, disposal, storage or delivery of radioactive materials.

Statement of Need and Reasonableness:

This Statement of Need and Reasonableness complies with S.C. Code Ann. Sections 1-23-115(c)(1)-(3) and (9)-(11).

DESCRIPTION OF REGULATION: Amendment of R.61-83, Transportation of Radioactive Waste Into or Within South Carolina

Purpose: The federal equivalent to R.61-83 is amended periodically. The State is required to adopt certain federal amendments within three years of the effective date of changes in United States Nuclear Regulatory Commission (USNRC) regulations to maintain authorization by the USNRC for the State Radioactive Waste Management Program.

This amendment of R.61-83 adopts these federal regulations to maintain conformity with federal requirements for Transportation Safety Standards as found in 10 CFR 71 and ensures compliance with federal standards as required by Section 274 of the Atomic Energy Act of 1954. The Transportation Safety Requirements are incorporated by reference.

Legal Authority: S.C. Code Ann. Sections 13-7-10 *et seq.*; (1976 & Supp. 2005); 13-7-40, Title 10 Part 71 of the Code of Federal Regulations.

Plan for Implementation: Upon final approval by the Board of Health and Environmental Control and publication in the State Register as a final regulation, amended regulations will be provided to the regulated community at cost through the Department's Freedom of Information Office.

DETERMINATION OF NEED AND REASONABLENESS OF THE REGULATION BASED ON ALL FACTORS HEREIN AND EXPECTED BENEFITS: Adoption of the proposed amendments of R.61-83 enables compliance with recent federal regulations and standards. See purpose and Synopsis above.

DETERMINATION OF COSTS AND BENEFITS This regulatory amendment is exempt from the requirements of a Preliminary Fiscal Impact Statement or a Preliminary Assessment Report because the proposed changes are necessary to maintain compliance with federal regulations. The USNRC certifies that this rule will not have a significant economic impact on a substantial number of small entities.

UNCERTAINTIES OF ESTIMATES: No known uncertainties

EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH: The adoption of these regulations will ensure an effective regulatory program for radioactive material users under state jurisdiction and protection of the

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public and workers from unnecessary exposure to ionizing radiation. These changes will provide the updates to the transportation safety standards for radioactive materials.

DETRIMENTAL EFFECT ON THE ENVIRONMENT AND PUBLIC HEALTH IF THE REGULATION IS NOT IMPLEMENTED: The State's authority to implement federal requirements, which are believed to be beneficial to the public health and environment, would be compromised if these amendments were not adopted in South Carolina.