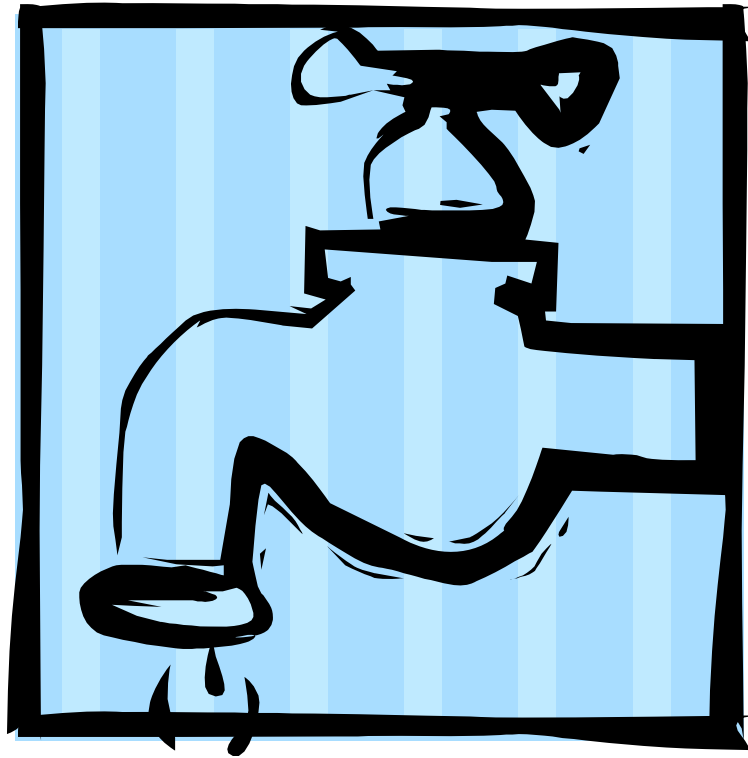


# Bureau of Water

South Carolina Department of Health and Environmental Control

## **SOUTH CAROLINA PUBLIC WATER SYSTEM COMPLIANCE REPORT:**

Calendar Year 2008



June 2009



South Carolina Department of Health  
and Environmental Control

**South Carolina Department of Health and Environmental Control:**

***South Carolina Public Water System Annual Compliance Report  
for Calendar Year 2008***

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The 1996 Safe Drinking Water Act Amendments require all primacy states to compile and submit annual compliance reports to the U.S. Environmental Protection Agency (USEPA). This is the **twelfth** annual report submitted under these amendments and covers calendar year **2008**.

Of the State of South Carolina's one-thousand four-hundred ninety-four [**1,494**] federally-defined public water systems (PWS), over **99%** were considered to be in significant compliance with drinking water regulatory requirements in calendar year **2008**. Of the less than **1%** of systems [or **two [2]** systems] that were considered to be in significant noncompliance (SNC): one [**1**] system is under a Consent Order; and one [**1**] has its source no longer in operation and has returned to compliance (RTCd).

There were one-hundred sixty-nine [**169**] systems that incurred a total of two-hundred sixty-eight [**268**] violations during **2008**. Of the one-hundred sixty-nine [**169**] systems that incurred violations, one-hundred twenty-four [**124**], or approximately **73%**, of the systems incurred only a single violation during the year. Sixty-two [**62**] systems had Maximum Contaminant Level (MCL) violations for bacteriological contamination. Fifty-two [**52**] of the sixty-two [**62**] systems that had MCL violations or approximately **84%**, were one-time occurrences.

South Carolina is achieving an overall **99%** compliance rate for bacteriological monitoring and reporting requirements. With such high rates of monitoring compliance, it is expected that more occurrences of minor bacteriological contamination would be identified. Many times these MCL violations can be attributed to work being performed on distribution lines or on wells and are not indicative of the quality of the source itself. In further reviewing the bacteriological data for this report, it was clear that the majority of the violations were seen in groundwater [*i.e.*, well] systems. Another trend noted was that most of the systems are considered small PWSs that collect one [**1**] routine sample per month or quarter. All systems, regardless of size, are required to complete additional sampling and make public notification in response to such MCL violations. The South Carolina Department of Health and Environmental Control's (SCDHEC) Bureau of Water evaluates the results of the bacteriological analyses to identify persistent water quality problems.

Of the remaining systems with MCL violations for contaminants other than bacteria, one [**1**] system exceeded the MCL for Haloacetic Acid (HAA5); four [**4**] systems exceeded for Total Trihalomethanes (TTM); three [**3**] system exceeded for Fluoride; two [**2**] systems exceeded for Uranium; eleven [**11**] systems exceeded for Radium 226/228; and two [**2**] exceeded for Gross Alpha activity.

the regulatory oversight and enforcement of South Carolina's public drinking water program. This primacy was obtained shortly following the adoption of the 1974 *Safe Drinking Water Act* by the U.S. Congress.

As the primacy agency, SCDHEC is responsible for ensuring that all Public Water Systems (PWSs) monitor for contaminants and report these results according to both state and federal regulatory requirements. In addition, SCDHEC is responsible for certifying that these results are within regulatory limits and that the public is informed of any MCL exceedances. [Note: Refer to page 5 for definitions].

A major part of maintaining this primacy designation is verifying that PWSs are completing all requirements in an appropriate manner and, if not, taking timely and appropriate enforcement action to correct the problems. A state's primacy status is reviewed each time a new federal rule is adopted. In periods between these major reviews, the USEPA conducts annual evaluations to ensure that the State is effectively and appropriately overseeing the program.

The *1996 Amendments to the Safe Drinking Water Act* included a provision for an annual report by the States. The basis, requirements, and applicability of this provision are found in Section 1414[c][3][A][i-ii]. This section reads, in general, as follows:

*IN GENERAL - Not later than January 1, 1998, and annually thereafter, each State that has primary enforcement responsibility under Section 1413 shall prepare, make readily available to the public, and submit to the Administrator an annual report on violations of National Primary Drinking Water Regulations by public water systems in the State, including violations with respect to [I] maximum contaminant levels, [II] treatment requirements, [III] variances and exemptions, and [IV] monitoring requirements determined to be significant by the Administrator after consultation with the States [emphasis added].*

*DISTRIBUTION - The State shall publish and distribute summaries of the report and indicate where the full report is available for review.*

This report for calendar year **2008** has been prepared to meet this requirement and to serve as information to the citizens of South Carolina regarding drinking water supplies. As further required by this provision of the 1996 Amendments, the **thirteenth** report covering calendar year **2009** will be submitted to the USEPA no later than **July 1, 2010**.

**June 2009**

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The data sets used for this report are taken largely from the USEPA database, the Safe Drinking Water Information System [SDWIS/State], to which primacy States are required to submit quarterly updates regarding PWS inventory statistics, the incidence of MCL exceedances, major monitoring and treatment technique violations, and enforcement actions taken against those systems

with violations. To ensure the accuracy of these data, SCDHEC has cross-referenced all information in the State-maintained database with the information in SDWIS/State, corrected any discrepancies, and reported the actual number and type of violations.

One of the public right-to-know provisions of the 1996 Amendments deals with Consumer Confidence Reports (CCR). All Community PWSs are required to complete a report to their consumers detailing specific information to include the source of their water, the types of treatment used, and details regarding any violations or contaminant detections in the water during the previous calendar year. The first CCR covered calendar year 1998 and earlier. Each subsequent report is due by July 1st of each year and will cover the most recent data available to the PWS.

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**GENERAL INFORMATION ON SC PUBLIC WATER SYSTEMS**

For the purposes of this report, all water systems addressed will be those that meet the federal definition of a PWS. This definition specifies that such systems are those that provide water via piping or other constructed conveyances for human consumption to **at least fifteen [15] service**

**connections [taps] or to an average of at least twenty-five [25] people for at least sixty [60] days each year** [emphasis added]. These systems are divided into three classifications: **Community [C]** water systems serve approximately the same year-round population [e.g., towns and cities]; **Non-transient non-community [P]** water systems serve at least twenty-five [25] of the same people for at least six [6] months of the year [e.g., schools and industries]; and, **Transient non-community [N]** water systems serve mobile populations [e.g., rest stops, parks, and campgrounds].

At the time of this report, South Carolina had one-thousand four-hundred ninety-four [1494] federally-defined PWSs. Categorized by type, there are six-hundred fourteen [614] Type C systems, one-hundred thirty-eight [138] Type P systems and seven-hundred forty-two [742] Type N systems. Currently, approximately three-million five-hundred thousand [3,500,000] residents of South Carolina are being provided their drinking water from Type C water systems.

There are two [2] types of source water classifications for these systems: **ground water and surface water**. Ground water systems are those systems depending on wells to provide their drinking water supply; while surface water systems are those systems that depend on lakes, rivers, and streams for their drinking water supply. Currently, four-hundred thirty-eight [438] of the State's Type C water systems [more than 71% of the total number] are classified as groundwater systems; however, approximately 3.0 million people in the State [approximately 86% of the total population served by Type C systems] actually receive their drinking water from surface water systems, even though there are fewer surface water systems in South Carolina.

Not included in this report are **State-defined PWSs**. These are the systems that do not meet the Federal definition of a PWS, but serve more than a single-family dwelling. SCDHEC regulates these systems and provides monitoring services that are protective of public health concerns, but monitoring for these systems is not as comprehensive as that required for Federal systems.

In 1994, the *State Safe Drinking Water Act* was amended to add a fee provision. This provision allowed SCDHEC to charge a fee to PWSs that includes providing monitoring services. Upon the enactment of this legislation, SCDHEC began conducting most of the monitoring required for public water systems. This means that SCDHEC is charged with scheduling, ensuring proper sample collection, and analytical testing for all of the water systems. The only compliance monitoring not currently done by SCDHEC is the routine bacteriological compliance monitoring for the Type C and P systems.

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### **INFORMATION ON VIOLATIONS, COMPLIANCE, AND ENFORCEMENT**

This report identifies specific categories of violations. These include the following:

1. **Maximum Contaminant Level (MCL)** - Violations that occur when national limits set by the USEPA on contaminants seen in drinking water are exceeded. They are

designed to ensure the water is safe for human consumption;

2. **Treatment Technique (TT)** - Violations that occur when special limits set by the USEPA under some regulations in lieu of MCLs are exceeded. They are designed to control unacceptable levels of certain contaminants such as viruses, bacteria and turbidity; and,
3. **Significant Monitoring (M/R)** - Violations that occur when no samples are taken or no results are reported during a specific compliance period. In the case of surface water systems that must adhere to the *Surface Water Treatment Rule*, a significant or major monitoring violation occurs when fewer than 10% of the required samples are taken or no results are reported during a compliance period.

There were one-hundred sixty-nine [169] systems that incurred a total of two-hundred sixty-eight [268] violations during 2008. Of the one-hundred sixty-nine [169] systems that incurred violations, one-hundred twenty-four [124], or approximately 73%, of the systems incurred only a single violation during the year. Sixty-two [62] systems had Maximum Contaminant Level (MCL) violations for bacteriological contamination. Fifty-two [52] of the sixty-two [62] systems that had bacteriological MCL violations, or approximately 84%, were one-time occurrences.

Two [2] systems were considered to be in significant noncompliance (SNC): one [1] system is under a Consent Order; and one [1] is the source of their exceedance is no longer in operation which has returned the system to compliance (RTCd). [Figure 1]

While actions taken against SNC systems are a component of our Enforcement program, they do not encompass the entire effort. Another crucial part of the enforcement process is the issuance of formal Notices of Violation [NOV] when a violation occurs. The issuance of these NOV's also requires that public notice be made and informs the water system that further enforcement action may be taken should additional violations occur. During 2008, one-hundred four [104] systems of the one-hundred sixty-nine [169] systems, or approximately 62%, returned to compliance after the issuance of a NOV.

Public Water System Enforcement Actions  
Significant Non-Compliance (SNC)  
Systems for  
Calendar Year 2008



- No Longer in Operation - 1 System
- Consent Orders (CO) - 1 System

When PWSs continue to incur violations they are referred to the Drinking Water Enforcement Section so that appropriate action can be taken to remedy the situation and return the systems to compliance. SCDHEC issued Orders to fifteen [15] PWSs, or approximately 8.7%, of the one-hundred sixty-nine [169] PWSs incurring violations in 2008. One-hundred four [104] PWSs, or approximately 61.6% have returned to compliance. Eleven [11] or approximately 7.6% are either no longer in operation, reduced to State defined PWS or the source with contamination is

no longer in operation. The remaining thirty-nine [39] PWSs, or approximately **22.1%** have had warning letters sent, but have not had a significant number of violations which would require them to be referred to Enforcement for action. **[Figure 2]**

The overall strategy in the Drinking Water Enforcement Program is to take the appropriate enforcement action to bring about compliance prior to a system reaching the point of SNC or, of course, any time a public health or environmental threat exists. As a result of this effort, we are seeing that more and more PWSs respond immediately and pro-actively upon notification of initial violations, as is illustrated by the information presented in the previous paragraph.

In addition to a strong enforcement program, SCDHEC implements a comprehensive sanitary survey program. This program consists of an inspection of the entire water system whereby the inspector looks for operational and maintenance deficiencies that are in violation of regulatory requirements or may cause problems within the water system. This is an excellent way to judge how each water system in the State is performing, allowing us to find and correct deficiencies before a violation occurs, and to offer the system hands-on technical assistance.

Another way SCDHEC is able to identify and help correct deficiencies is through the bacteriological oversight monitoring program. SCDHEC collects samples from **all** water PWSs in the State on a regular basis. By doing this, SCDHEC can often identify bacteriological contaminants in a water system that may have gone undetected without this additional monitoring. This way the water system can take immediate action to alleviate any potential health effects to its consumers.

In conjunction with the State's water PWSs, SCDHEC is developing and implementing well head and source water protection programs. These programs are designed to help the PWSs locate potential contamination sources that may impact the water source and begin protecting against those now, rather than waiting until contamination appears at the consumer's tap. This effort, too, will go a long way in protecting both our ground and surface waters.

**FIGURE 2**

**Public Water System Enforcement  
Actions  
All Systems with Violations for  
Calendar Year 2008**



- Returned to Compliance (RTC) - 104 Systems
- Consent/Administrative Orders - 15 Systems
- No Longer In Operation/State System - 11 Systems
- Warning Letters (NOV) - 39 Systems

In late 1998 and early 1999, SCDHEC began issuing Water System Operating Permits to all existing PWSs. These operating permits are the mechanisms by which the capacity development approach is being implemented. Capacity development [formerly known as >viability=] is designed to focus on a water system's ability to meet the technical, managerial, and financial responsibilities of complying with applicable laws and regulations. Each operating permit requires the submission of a business plan whenever a system receives an overall unsatisfactory rating on an SCDHEC sanitary survey inspection. This unsatisfactory rating may also be the trigger for an enforcement action, if one is not already underway with the system. Using the capacity development and enforcement tools in tandem will enable SCDHEC to ensure that a PWS is indeed viable and in turn, ensure that the system will be able to maintain compliance with current and future regulatory requirements.

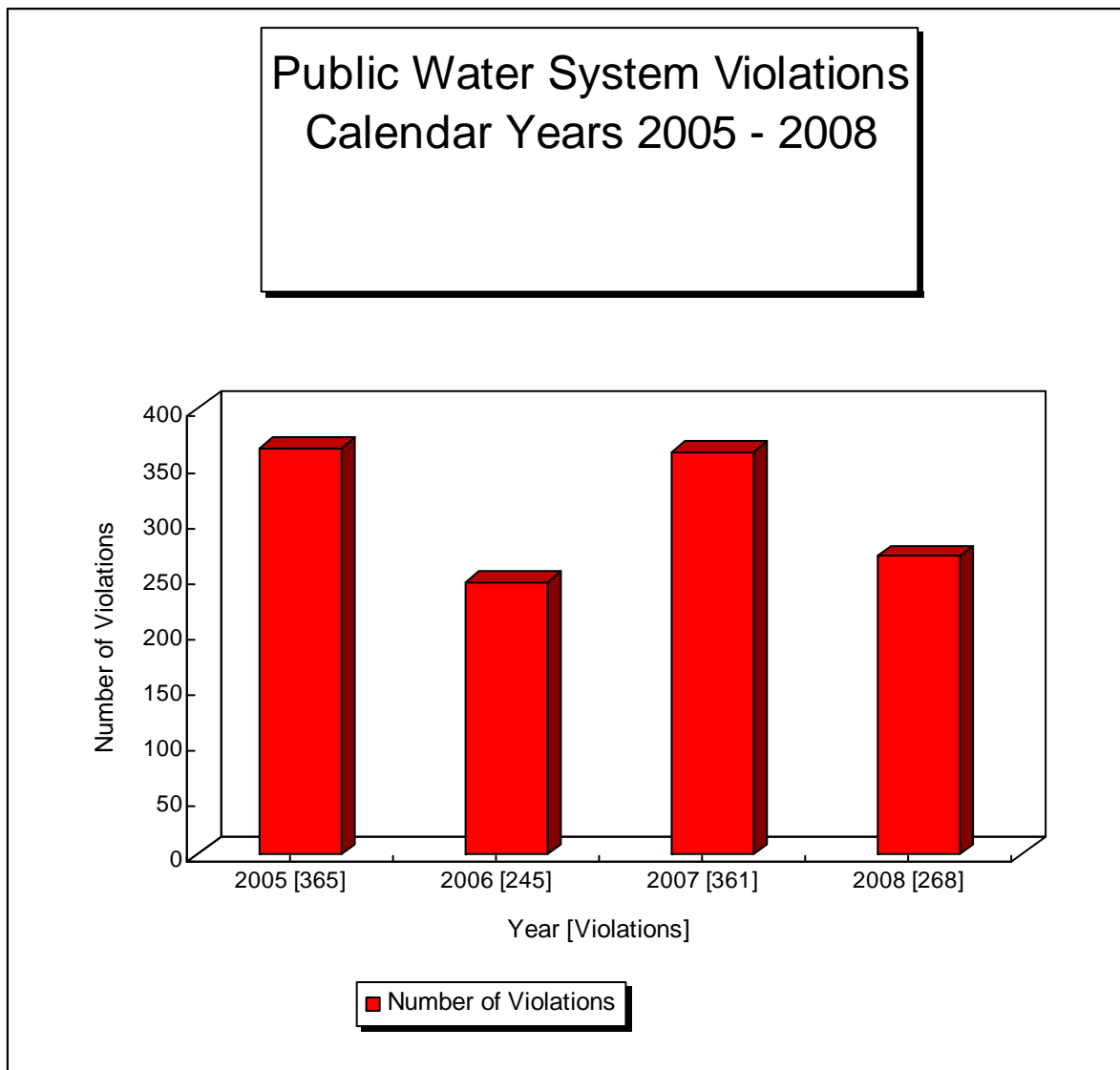
**Appendix B** contains a list of those PWSs that incurred an MCL violation during **2008**. The number and type of violations for calendar year **2008** are available in **Appendix A**.

The State had a total of one-hundred sixty-nine [**169**] PWSs with a two-hundred sixty-eight [**268**] violations. [**Figure 3.1**] One-hundred fifty-three [**153**] of the violations were for water quality. While five [**5**] were treatment technique violation and the remaining one-hundred ten [**110**] were monitoring/reporting violations. [**Figure 3.2**] There was a total of one-hundred thirty-seven [**137**] violations for bacteriological; seventy-nine [**79**] chemical (including radionuclides); thirty-one [**31**] lead and copper; five [**5**] surface water treatment rule (SWTR), and sixteen [**16**] for Consumer Confidence Report. [**Figure 3.3**]

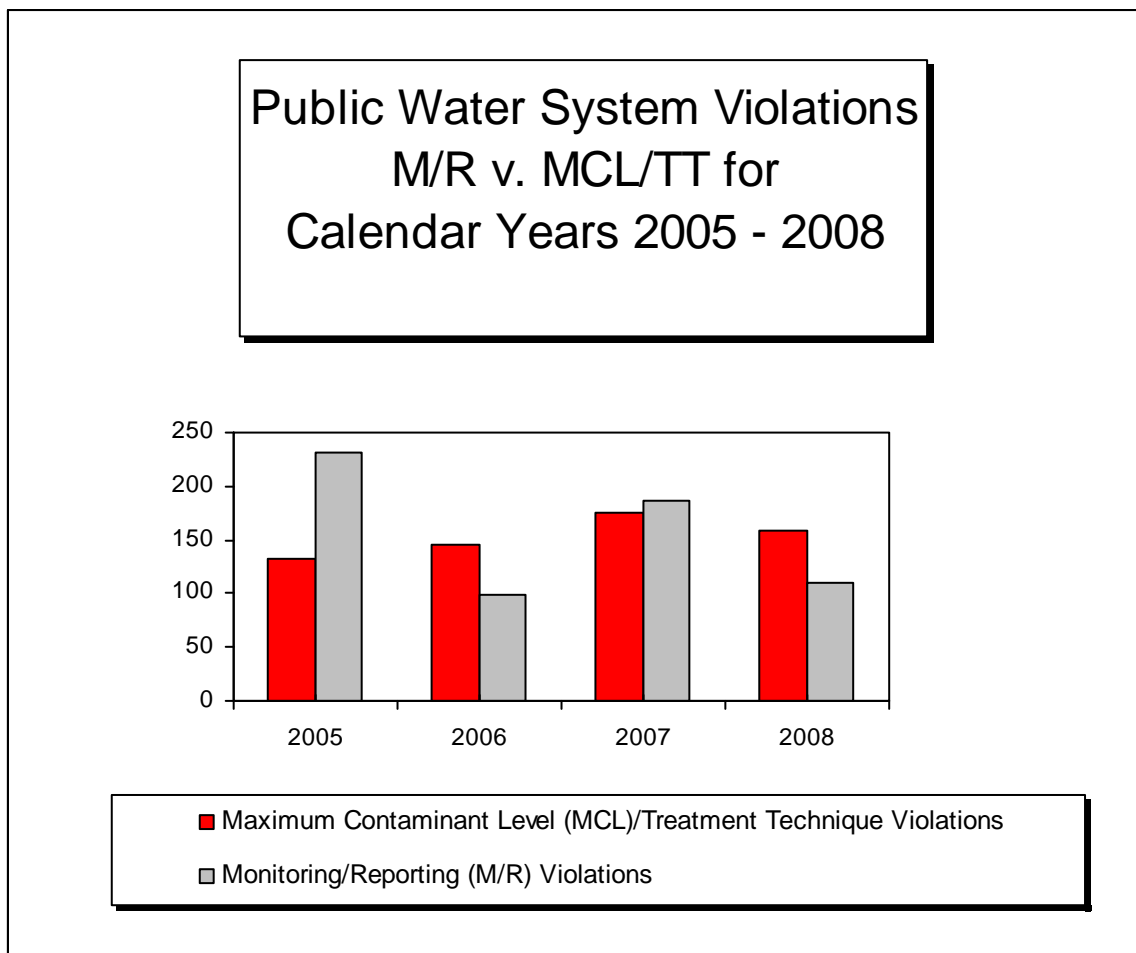
## SNC DEFINITIONS

<b>Chemical/Radiological Rule</b>	<ol style="list-style-type: none"> <li>1. 01 MCL - One or more MCL</li> <li>2. 02 MCL - One or more MCL</li> <li>3. 03 M/R - Two consecutive major M/R</li> </ol>
<b>Lead and Copper Rule</b>	<ol style="list-style-type: none"> <li>1. 51 - Initial Tap Monitoring - One initial tap</li> <li>2. CCT/SOWT - One OCCT/SOWT plus 1 or more exceedance</li> <li>3. PE – One PE plus one or more sample exceedance</li> </ol>
<b>SWTR</b>	<ol style="list-style-type: none"> <li>1. Failure to filter after notification of need – 1 or more</li> <li>2. Unfiltered Major M/R - 3 or more major M/R</li> <li>3. Unfiltered Combined Major and/or Minor M/R 5 or more major and/or minor M/R</li> <li>4. Filtered TT - 3 or more TT</li> <li>5. Filtered TT + Major M/R - 3 or more TT plus major M/R</li> <li>6. Filtered TT + Major &amp; Minor M/R - 5 or more TT plus major and/or minor M/R</li> </ol>
<b>TCR - Monthly or more frequent</b>	<ol style="list-style-type: none"> <li>1. MCL - Four or more acute/monthly MCL violations</li> <li>2. MCL/Major Repeat - 4 or more major repeat M/R violations or 4 or more combined major repeat M/R and MCLs</li> <li>3. MCL/Major M/R - 6 or more combined major repeat M/R major routine M/R, and/or MCL violations</li> <li>4. MCL/Major &amp; Minor M/R - 10 or more combined major repeat M/R, major routine M/R, and or MCL</li> </ol>
<b>Quarterly</b>	<ol style="list-style-type: none"> <li>1. MCL - 3 or more acute/monthly MCL</li> <li>2. MCL/Major Repeat - 3 or more major repeat M/R, OR 3 or more combined major repeat M/R and MCL</li> <li>3. MCL/Major M/R - 3 or more combined major repeat M/R and/or MCL violations</li> </ol>
<b>Annual</b>	<ol style="list-style-type: none"> <li>1. MCL - Two or more acute/monthly MCL</li> <li>2. MCL/Major Repeat - 2 or more major repeat M/R OR 2 or more combined major repeat M/R and MCL</li> <li>3. MCL/Major M/R - Two or more combined major repeat M/R, major routine M/R, and/or MCL violations.</li> </ol>
<b>Turbidity Rule</b>	<ol style="list-style-type: none"> <li>1. MCL</li> <li>2. MCL/Major M/R</li> <li>3. MCL/Major and Minor M/R</li> </ol>
<b>IE&amp;LT1 SWTR</b>	<p>Filtered - 6 or more TT 6 or more TT, major M/R 10 or more TT, major/minot M/R</p> <p>Disinfection Profiling Uncovered Reservoir</p>
<b>Stage 1 DBP Monthly or more frequent</b>	<p>4 or more MCL 6 or more MCL and/or 8 major M/R 10 or more MCL and/or major/minor M/R</p>
<b>Quarterly</b>	<p>2 or more MCL, MRDL, TT and/or major M/R 3 or more MCL, MRDL, TT and or major/minor M/R</p>
<b>Yearly or less</b>	Fails to collect or report all required samples
<b>Chlorine Dioxide Consumer Confidence Reporting</b>	<p>Four non-acute or 1 acute Complete Failure to Report</p>

**FIGURE 3.1**

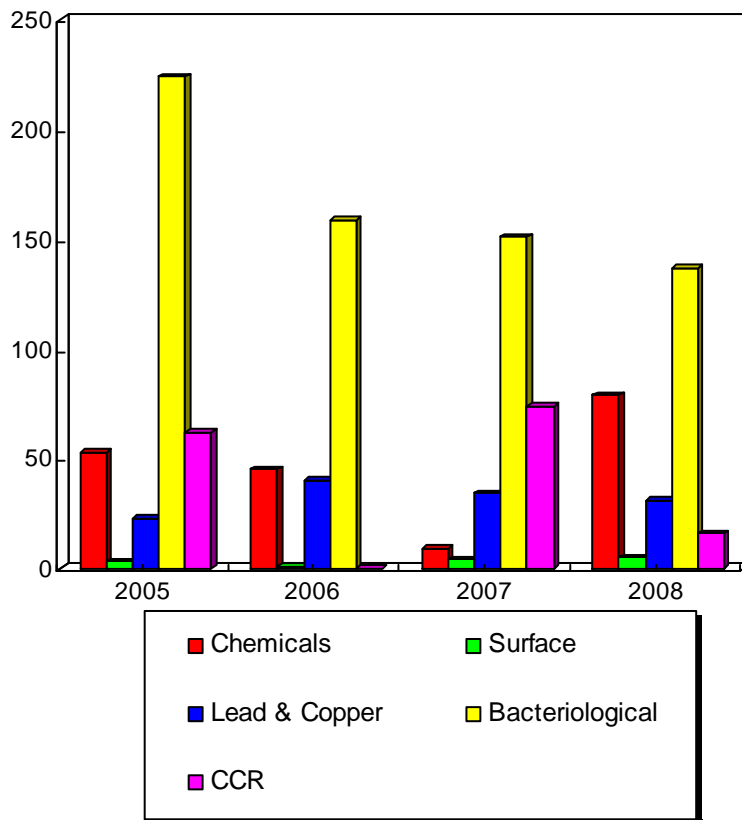


**FIGURE 3.2**



**FIGURE 3.3**

**Public Water System Violations  
By Violation Category for  
Calendar Years 2005 - 2008**



## **INFORMATION ON VARIANCES AND EXEMPTIONS**

Variations and exemptions to specific requirements of the *Safe Drinking Water Act Amendments of 1996* may be granted under certain circumstances. If, due to the characteristics of the water sources available, a PWS cannot meet an MCL, SCDHEC, as a primacy agency can grant a variance to that system for a specific regulatory requirement on the condition that the system install the best available technology, treatment technique, or means deemed available provided that SCDHEC finds that such a variance will not result in an unreasonable risk to health. At the time the variance is granted, SCDHEC must give the PWS a schedule whereby it must achieve compliance with the MCL. Small PWSs [those serving 3,300 or fewer consumers] may be granted variances if they cannot afford [must be demonstrated to the standards of the USEPA] to comply with certain MCLs [excluding bacteriological requirements] by means of treatment, alternative water source, or consolidation. These PWSs must, however, install and operate an approved small system variance technology. As previously stated, this small system variance must also ensure adequate protection of human health and must be reviewed at least once every five (5) years for continued variance eligibility.

SCDHEC may also exempt a PWS from complying with an MCL, treatment technique or both if its non-compliance results from extenuating circumstances [*e.g.*, financial hardship, system already in operation on the date of promulgation of the regulations, or new system with no other reasonable source of drinking water]. Exemptions must also be protective of human health and must require that the PWS come into compliance as soon as is practically possible but not later than three (3) years after the applicable regulatory compliance date.

**During calendar year 2008, SCDHEC did not grant any variances or exemptions from applicable MCL or treatment technique requirements.**

## CONCLUSIONS

This report is designed to provide the consumers in the State of South Carolina information useful in assessing the quality of their drinking water and the success of SCDHEC's compliance and enforcement activities. It is hoped that by disseminating this information, consumers will become more aware of their individual water providers and water quality. Consumers should feel free to ask questions of their PWS or of SCDHEC.

**Appendix A** provides a detailed presentation of the type and number of violations that occurred during calendar year **2008**. In addition, **Appendix B** gives a complete list of PWSs that incurred water quality violations during the same time period. When reviewing the information in these Appendices, here are a few facts that may help in interpreting the meaning of these numbers:

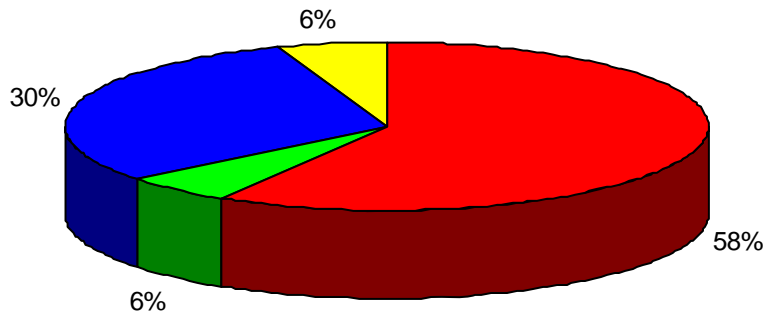
1. Of the sixty-six [66] possible violation categories included, fourteen [14] categories were violated by South Carolina's PWSs. The actual number of violations, two-hundred sixty-eight [268] noted in calendar year **2008**, is less than **1%** of the potential number of violations.
2. The largest number of violations, sixty-two [62] were for bacteriological contaminants. It is also useful to note that fifty-two [52] or **84%** of these MCL exceedances were one-time occurrences and were corrected immediately.
3. Forty-seven [47] radionuclide MCL violations were noted during **2008**. These violations occurred in nine [9] PWSs which utilized groundwater as their source. It was from these wells that naturally occurring radionuclides entered the PWSs. These PWSs have been required to inform their customers of the quality of the water and that action is being taken to either add treatment, replace the well(s) or to obtain another suitable water source. The PWSs and SCDHEC are continuing to work toward bringing these PWSs back into compliance.
4. Sixty-six [66] M/R violations for bacteriological were noted during **2008**. These violations occurred in fifty-three [53] PWS. It is useful to know that most of the PWSs included in this report must monitor monthly, which makes for a higher percentage of possible violations.

5. Water quality violations noted in this report were attributed as follows: thirty-four [34] Type C PWSs incurred ninety-one [93] violations; five [5] Type P PWSs incurred nine [9] violations; forty-two [42] Type N PWSs incurred forty-eight [48] violations; and four [4] PWS incurred nine [9] violations that were reduced from being a federally defined PWS. [Figure 4.1] For overall violations [water quality and M/R]; one-hundred eighty-nine [89] Type C PWSs incurred one-hundred sixty-five [165] violations; twenty-nine [29] Type P PWSs incurred forty-one [41] violations; and, forty-two [42] Type N PWSs incurred forty-eight [48] violations; and nine [9] PWS incurred fourteen [14] violations that were reduced from being a federally defined PWS. [Figure 4.2]
6. A total of six-hundred fourteen [614] PWSs were required to complete an annual Consumer Confidence Report (CCR) and submit a copy to the Department by July 1, 2004. Sixteen [16] PWSs failed to submit their report on time. All sixteen [16] PWSs have returned to compliance.

In summary, South Carolina's PWSs and SCDHEC continue to work together and do an excellent job in providing quality drinking water for South Carolinians. Of the State's one-thousand four-hundred ninety-four [1494] PWSs one-thousand two-hundred forty [1240] PWSs or approximately 83% were in full compliance with all of the regulatory requirements during calendar year 2008. The two-hundred fifty-four [254] or 83% of the PWSs that had violations were not in significant non-compliance. Less than 1% of the State's PWSs were in significant non-compliance.

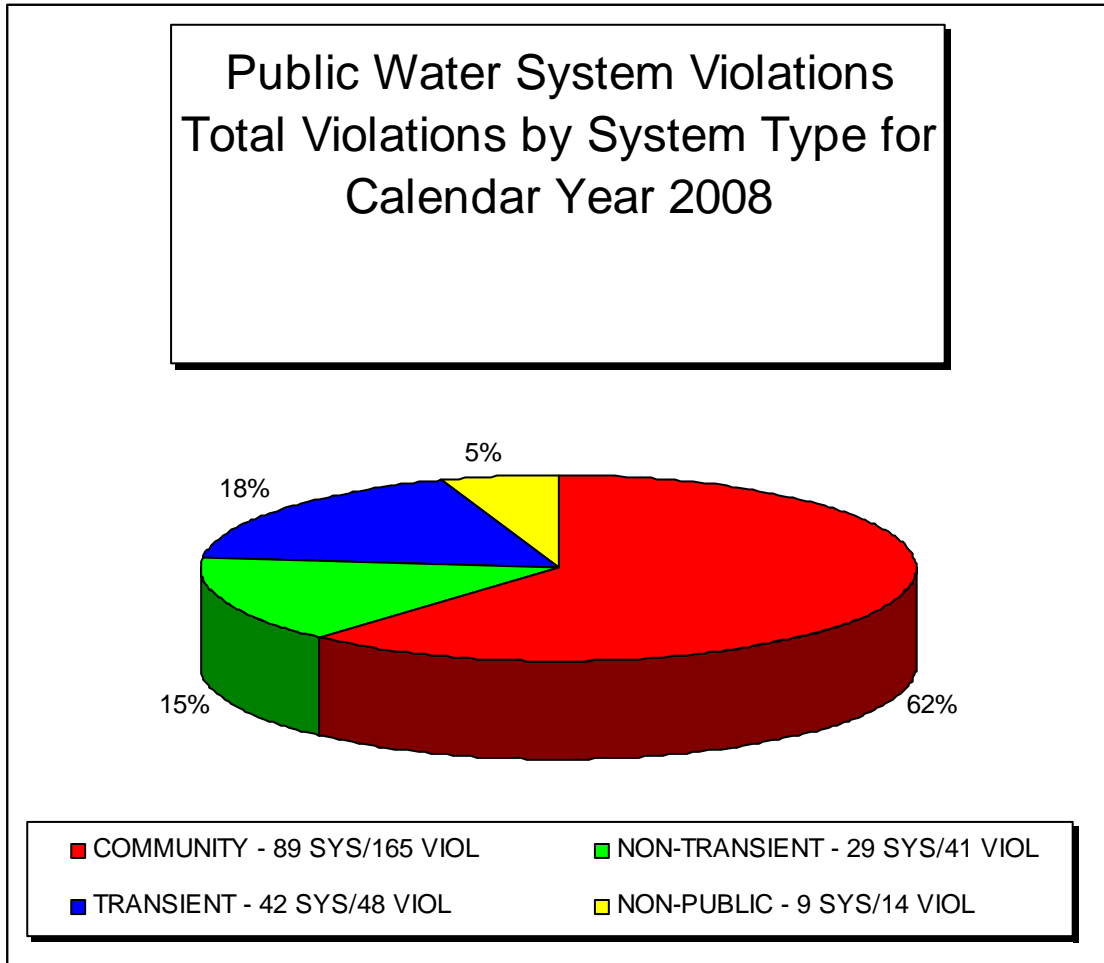
**FIGURE 4-1**

**Public Water System Violations  
Water Quality Violations by System Type for  
Calendar Year 2008**



■ COMMUNITY - 34SYS/93 VIOL	■ NON-TRANSIENT - 5SYS/9 VIOL
■ TRANSIENT - 42SYS/48VIOL	■ NON-PUBLIC - 4SYS/9VIOL

**FIGURE 4-2**



## **REPORT DISTRIBUTION AND AVAILABILITY**

Notification of the availability of this report was accomplished through a SCDHEC press release, and through the Internet on the Bureau of Water web page.

Copies of this report or previous years' reports may be obtained by contacting Mr Bruce Bleau with SCDHEC's Bureau of Water at (803) 898-4154 or by fax at (803) 898-3795 or by email at [bleaup@dhec.sc.gov](mailto:bleaup@dhec.sc.gov) or by writing to 2600 Bull Street Columbia, South Carolina 29201. The report will be made available on the Bureau of Water web page at [www.scdhec.gov/water](http://www.scdhec.gov/water). Any additional information not contained in this particular report may be obtained through SCDHEC's Freedom of Information Office at (803) 898-3880 or by writing to the above address. The USEPA will be compiling a national summary of state reports that will be made available after completed and can be obtained through the USEPA-Region IV office at 61 Forsyth Street SW, Atlanta, Georgia 30303-8960 or through the above named SCDHEC contact.

**APPENDIX A**  
**VIOLATIONS TABLE FOR**  
**CALENDAR YEAR 2008**

**APPENDIX A**

**SOUTH CAROLINA  
CALENDAR YEAR 2008**

**MAXIMUM CONTAMINANT LEVEL EXCEEDANCES**

<b>SDWIS CODE</b>	<b>CONTAMINANT</b>	<b>MCL</b>	<b># OF VIOL</b>	<b># OF SYS WITH VIOL</b>
<b>ORGANICS</b>				
2456	HAA5	.06 mg/l	1	8
2950	TTHM	.08 mg/l	8	4
1025	FLOURIDE	4.0 mg/l	16	3
<b>RADIONUCLIDES</b>				
4000	GROSS ALPHA	15 pCi/l	6	2
4010	RADIUM 226/228	5 pCi/l	44	10
4006	URANIUM	30 mg/l	4	2
<b>BACTERIOLOGICAL</b>				
21	ACUTE	PRESENCE	6	6
22	NON-ACUTE	PRESENCE	69	58
<b>TOTAL</b>			<b>154</b>	<b>86</b>

**SIGNIFICANT MONITORING/REPORTING VIOLATIONS**

<b>SDWIS CODE</b>	<b>CONTAMINANT</b>	<b># OF VIOL</b>	<b># OF SYS WITH VIOL</b>
<b>BACTERIOLOGICAL</b>			
23/25	Monitoring/Reporting	66	53
<b>SURFACE WATER TREATMENT RULE (FILTERED SYSTEMS)</b>			
27	M/R Stage 1	5	2
<b>LEAD &amp; COPPER</b>			
52	Follow-up or routine lead and copper tamp M/R	35	35
<b>TOTAL</b>		<b>106</b>	<b>90</b>

**CONSUMER CONFIDENCE REPORT**

<b>SDWIS CODE</b>	<b>CONTAMINANT</b>	<b># OF VIOL</b>	<b># OF SYS WITH VIOL</b>
<b>CCR</b>			
71	Consumer Confidence Report	16	16

## DEFINITIONS

**Filtered Systems:** Water systems that have installed filtration treatment.

**Lead and Copper Rule:** This rule established national limits on lead and copper in drinking water. Lead and copper corrosion pose various health risks when ingested at any level, and can enter drinking water from household pipes and plumbing fixtures.

**Follow-up or routine lead and copper tap M/R:** SDWIS Violation Code 52 indicates that a system did not meet follow-up routine lead and copper tap testing requirements, or failed to report results.

**Maximum Contaminant Level (MCL):** The highest amount of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. MCLs are defined in milligrams per liter (parts per million) (mg/L) unless otherwise specified.

**Organic Contaminants:** Carbon-based compounds, such as industrial solvents and pesticides. These contaminants generally get into water through runoff from cropland or discharge from factories. EPA has set legal limits on 54 organic contaminants.

**Radionuclides:** Radioactive particles, which can occur naturally in water or result from human activity. EPA has set legal limits on four type of radionuclides: radium 226, radium 228, gross alpha, and uranium.

**Gross Alpha:** SDWIS Contaminant Code 4000 for alpha radiation above MCL of 15 picocuries/liter (pCi/L). Gross alpha includes radium 226 but excludes radon and uranium.

**Combined Radium 226/228:** SDWIS Contaminant Code 4010 for combined radiation from these two isotopes above MCL of 5 pCi/L.

**Uranium:** SDWIS Contaminant Code 4006 for uranium above MCL of 30 mg/l.

**Surface Water Treatment Rule (SWTR):** The SWTR establishes criteria under which water systems supplied by surface water sources, or ground water sources under the direct influence of surface water, must filter and disinfect their water.

**Monitoring, routine/repeat (for filtered systems):** SDWIS violation code 27 indicates a system's failure to carry out required tests, or to report the results of those tests.

**Total Coliform Rule (TCR):** The TCR establishes regulations for microbiological contaminants in drinking water. These contaminants can cause short-term health problems. If no samples are collected during the one month compliance period, a significant monitoring violation occurs.

**Acute MCL:** SDWIS violation code 21 indicates that the system found fecal coliform or E.coli, potentially harmful bacteria in its water, thereby violating the rule.

**Non-Acute MCL:** SDWIS violation code 22 indicates that the system found total coliform in samples of its water at a frequency or at a level that violates the rule. For systems collecting fewer than 40 samples per month, more than one positive sample for total coliform is a violation. For systems collecting 40 or more samples per month, more than 5% of the samples positive for total coliform is a violation.

**Major routine and follow-up monitoring:** SDWIS violation codes 23 and 25 show that a system did not perform any monitoring.

**Treatment Techniques:** A water disinfection process that EPA requires of an MCL for contaminants that laboratories cannot adequately measure. Failure to meet other operational and system requirements under the SWTR and Lead and Copper Rules have also been included in this category of violation for purposes of this report.

**Violation:** A failure to meet any state or federal drinking water regulation.

**APPENDIX B**

**SYSTEM-SPECIFIC MAXIMUM CONTAMINANT**

**LEVEL/TREATMENT TECHNIQUE**

**VIOLATIONS TABLE FOR**

**CALENDAR YEAR 2008**

**APPENDIX B**

**COMMUNITY**

<b>SYS</b>	<b>POP</b>	<b>SYSTEM NAME</b>	<b>ACTION</b>
		<b>ACUTE BACTERIOLOGICAL</b>	
1360019	74	WALNUT RIDGE MHP	CO
		<b>NON-ACUTE BACTERIOLOGICAL</b>	
0850018	1012	BCWSA – SINEATH MHP	RTC
2510007	260	FURMAN, TOWN OF	RTC
2510009	400	GIFFORD, TOWN OF	RTC
3210006	1670	SWANSEA, TOWN OF	RTC
3250065	69	CRYSTAL PINES	RTC
3260048	79	JAKES LANDING	RTC
3260049	38	TRIPLE ACRES MHP 1	RTC
3260090	90	HALTERS ACRES MHP	RTC
3260103	35	GLENDALE ESTATES	RTC
3420002	2517	WALLACE WATER CO	RTC
3910006	6276	CLEMSON UNIVERSITY	RTC
4010501	29904	FORT JACKSON	RTC
4060024	42	PINE VALLEY COMMUNITY	RTC
4060032	147	LAKESWOOD MHP	RTC
4150007	52	AAA – PERRY WATER SYSTEM	RTC
		<b>FLUORIDE</b>	
0860023	105	STRAWBERRY MHP	AO
2660048	8228	OCEAN LAKES LTD	AO
		<b>HALOACETIC ACIDS (HAA5)</b>	
3610004	2755	WHITMIRE, TOWN OF	RTC
		<b>TOTAL TRIHALOMETHANES (TTHM)</b>	
2220013	1030	GCWSD – CARVERS BAY	AO
2920002	25	CATAWBA RIVER WTP	AO
4610001	6614	YORK, CITY OF	AO
		<b>GROSS ALPHA</b>	
0150014	242	USSC – PURDY SHORES	CO
1370903	55	CHURCH OF GOD-EMMANUAL	SOURCE-DEL
		<b>URANIUM</b>	
4660055	90	WHITLEY ESTATES	SOURCE-DEL

**COMMUNITY**

<b>SYS #</b>	<b>POP</b>	<b>SYSTEM NAME</b>	<b>ACTION</b>
		<b>RADIUM 226/228</b>	
0150014	242	USSC – PURDY SHORES	CO
1370903	55	CHURCH OF GOD-EMMANUEL	SOURCE—DEL
3250028	59	USSC – DUTCHMAN ACRES	AO
3250058	824	CWS - GLENN VILLAGE II	SOURCE-DEL
3250075	175	AAA – MILL POND	CO
3260115	68	HICKORY HILL MHP	
4050008	510	USSC – CHARLESWOOD S/D	AO
4050019	208	USSC – OAKRIDGE HUNT CLUB	
4060055	280	NORTH GATE MHP	CO
4370050	983	WATEREE CORRECTIONAL INSTITUTE	AO

**NON-COMMUNITY NON-TRANSIENT  
NON-ACUTE BACTERIOLOGICAL**

1470100		ST PAUL SCHOOL	RTC
4070113		MYERS DAY CARE	RTC
4370119		GOODWILL HEADSTART	

**FLUORIDE**

1070916		BOONE HALL PLANTATION	CO
		<b>TOTAL TRIHALOMETHANES (TTHM)</b>	
4430003		CARLISLE CONE MILLS	AO

**TRANSIENT  
ACUTE BACTERIOLOGICAL**

0970201		STUMPHOLE LANDING	RTC
1870912		JR GROCERY	RTC
3670800		SALUDA RIVER RESORT	
3770803		JOCASSEE RV CAMP	RTC
4170875		PERSIMMON HILL	RTC

**NON-ACUTE BACTERIOLOGICAL**

0170200		YODERS RESTAURANT	RTC
0172001		FORRESTER'S RESTAURANT	
0274000		EL CHEAPOS	
0472001		WENDELLS	RTC
0670600		SCPRT – BARNWELL STATE PARK	RTC
0870922		WRIGHT'S GROCERY	RTC
1030801		MARVINS MEATS	RTC
1270205		CATAWBA FISH CAMP	
1270905		97 SPEEDY SHOP	RTC

**TRANSIENT**

<b>SYS #</b>	<b>SYSTEM NAME</b>	<b>ACTION</b>
<b>NON-ACUTE BACTERIOLOGICAL (CONTINUED)</b>		
1470915	ROYAL OAKS	RTC
1570928	BROXTON BRIDGE PLANTATION BED AND BREAKFAST	RTC
1971004	JW YONCE 606	RTC
2172007	CROSSROADS	RTC
2270001	ST JAMES – SANTEE FHC, INC	RTC
2330803	ORCHARD VIEW MEATS	
2370681	MARIETTA BAPTIST CAMP	RTC
2370684	CAMP AWANITA VALLEY	
2470875	THE GOLF CLUB @ STAR FORT INC	
2870876	GREEN HILL GOLF COURSE	
3060005	DILLARD’S MHP	RTC
3230807	OLE TIMEY MEATS	
3270206	MIDSTATE AUTO AUCTION	
3270802	SIESTA COVE RV PARK AND MARINA	RTC
3279008	VILLAGE STORE	RTC
3279014	MR J CONVENIENCE STORE	RTC
3280011	QUALITY LIFE SOLUTIONS	RTC
3472001	PICK AND PAY	RTC
3670800	SALUDA RIVER RESORT	
3770802	JOCASSEE ASSOCIATION	RTC
3770807	DIAKONIA CENTER	RTC
3870937	M&M CONVENIENCE STORE	
4670400	PORTERS MOTEL	RTC
4670801	TRACY TRIGG INC	RTC
4670900	BETHELWOODS CENTER	
4670958	MCCONNELLS CORNER MART	RTC
4670988	STACY’S GARDEN CENTER	RTC
4672000	T&M FOOD STORE	RTC
4672012	CALIFORNIA GRILL	RTC
<b>NON LONGER FEDERAL SYSTEM NON-ACUTE BACTERIOLOGICAL</b>		
2172008	GODWIN AND WELCH	DELETED
4070228	AUNTY’S LLC	DELETED
<b>RADIONUCLIDES</b>		
3660014	WHITES MHP (URANIUM)	DELETED
3260171	CIERA MHP (RADIUM 226/228)	STATE