

2015 Annual Report

Purpose

This report is submitted to the General Assembly and the Department of Health and Environmental Control (DHEC) in order to fulfill the requirements of Title 44, Chapter 2 of the 1976 South Carolina Code of Laws, as amended. Specifically, Section 44-2-150(G) of the State Underground Petroleum Environmental Response Bank (SUPERB) Act requires the SUPERB Advisory Committee (the Committee) to submit an annual report that addresses the financial status and viability of the SUPERB Account and the SUPERB Financial Responsibility Fund (SFRF), the number of sites successfully remediated, the number of sites remaining to be remediated, and any statutory or regulatory changes the Committee recommends. In addition, this report contains information regarding the current status of the underground storage tank (UST) population in South Carolina.

The SUPERB Accounts

Federal regulations (enacted in 1988) require UST owners or operators to demonstrate financial responsibility for corrective action and third party liability at \$1,000,000 per leak occurrence. The South Carolina General Assembly created the SUPERB Account in 1988 to assist UST owners and operators in meeting the corrective action portion of the federal financial responsibility requirements, and the SFRF was legislatively created in 1993 to assist owners and operators in meeting the third party liability requirement. UST owners and operators are responsible for a \$25,000 deductible per UST leak occurrence, and they remain liable for costs above \$1,000,000.

A ¹/₂ cent environmental impact fee imposed on each gallon of petroleum entering the state funds the SUPERB Accounts. The Department of Revenue collects the fee under the authority of Section 12-28-2355. Impact fee revenue received during calendar year 2015 totaled \$18,819,126.30, and the total revenue received including impact fee revenue, tank fees, interest, and recovered funds totaled \$24,975,981.17 (Table 1). SUPERB payments during calendar year 2015 totaled \$20,355,267.11. As of December 31, 2015, a total of \$22,408,638.75 in SUPERB funds was committed through current contracts for site rehabilitation activities leaving an available SUPERB balance of \$4,080,621.19 (Table 1). The cumulative expenditures since 1988 total \$412,686,566.99.

Table 1. SUI END Account millimation as of December 51, 2015	
Impact Fee Revenue Received in Calendar Year 2015	\$ 18,819,126.30
Additional Tank Fee Revenue of \$400 Per Tank in 2015	\$ 4,505,419.70
Interest received in 2015	\$ 252,598.15
Penalties received in 2015	\$ 33,679.40
Recovered funds received in 2015	\$ 14,603.00
Settlements received in 2015	\$ 1,350,554.62
Beginning Cash Balance January 1, 2015	\$ 21,911,178.23
Total Revenue Received in Calendar Year 2015	\$ 24,975,981.17
Total Available Calendar Year 2015	\$ 46,887,159.40
Total Payments from SUPERB in Calendar Year 2015	\$ 20,355,267.11
Cash Balance December 31, 2015	\$ 26,531,892.29

Table 1. SUPERB Account information as of December 31, 2015

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Commitments (Current Contracts)	\$ 22,408,638.75
Available for Commitment	\$ 4,123,253.54
Cumulative Spent Since 1988	\$ 412,686,566.99

2015

SUPERB Financial Responsibility Fund (SFRF)

DHEC is currently aware of five active third party claims or suits and actively participates in their resolution as allowed for in Section 44-2-40 of the SUPERB Act. One new claim was submitted in 2015, and one existing claim was defended late in the year and a final order is anticipated during the first quarter of 2016. A total of \$1,257,841.32 has been spent for claims, legal fees, and appraisal activities since the creation of this fund in 1993. As of December 31, 2015, the SFRF balance was \$1,027,377.97.

Financial Responsibility for the State Fund Deductible

The SUPERB Act requires that UST owners and operators demonstrate financial responsibility (FR) for \$25,000 per UST leak occurrence as the SUPERB Accounts provide the remaining required coverage. Allowable FR options include: self insurance, environmental insurance, guarantee, surety bond, letter of credit, trust fund, and several local government options. With a total of 4,100 facilities or responsible parties (owner/operator) that require proof of financial responsibility, the following is a breakdown of what is currently recorded. Fifty-one percent (51%) are covered by self-insurance, eight percent (8%) by letters of credit, sixteen percent (16%) by guarantees, nineteen percent (19%) by environmental insurance, two percent (2%) by local government options, two percent (2%) by surety bonds and trust funds, and the remaining one percent (1%) of facilities or responsible parties (owner/operator) are in violation of R.61-92 or are new owners required to submit FR.

Cleanup Progress

CUDEDD 4 1 :

Since the inception of the program and through December 31, 2015, DHEC has confirmed a total of 9,932 UST releases. Of these, 7,631 or about 76.8% have been closed. A total of 133 releases were closed in calendar year 2015; of these, 27 releases were closed under the regulatory program where no assessment activities were required, 43 releases were closed under the assessment program where some assessment activities were completed, and 63 releases were closed under an approved Corrective Action Plan for either Monitored Natural Attenuation or Active Corrective Action. SUPERB funds were expended on 93 of the 133 releases. The remaining 40 release closures aside from the 27 regulatory closures were comprised of 10 release closures under the \$25,000 deductible and 3 release closures where SUPERB funds could not be used to provide coverage (e.g., site could not be qualified or another financial mechanism was in place). Pay for Performance contracts, often referred to as active cleanups, can take more than five years to complete. In order to foster quicker cleanups, current specifications for active corrective action sites now require the site rehabilitation work to be completed within five years unless DHEC provides written approval to extend the duration of the contract.

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At year's end, there were 2,301 open releases, of which 2,265 are eligible to receive SUPERB funds. Confirmed releases are ranked by DHEC for funding priority according to the risk each poses. The priority system is outlined in the SUPERB Fund Access Regulations (R.61-98). Appendix 1 of this

report depicts the total number of SUPERB eligible releases by their risk category and Appendix 2 depicts this number by county. Appendix 3 depicts the number of cases, by risk category, where rehabilitation activity is being funded and the number where no funding is provided.

As of December 31, 2015, 138 releases were in active cleanup, 167 releases were in limited cleanup with free product removal activities being conducted, and 275 releases were being monitored as part of a formalized natural attenuation remedial plan. Assessment activities were being funded at another 1,105 sites. A total of 1,699 releases were receiving SUPERB funding at year's end. For the most part, site rehabilitation activities are funded by SUPERB or by the UST owner under the \$25,000 SUPERB deductible.

At year's end, fifteen (15) DHEC project manager positions were overseeing environmental assessment or cleanup efforts on 2,032 releases being worked with SUPERB funds or under the \$25,000 deductible. One project manager position in the Assessment Section was vacated late in the year. The Division will conduct interviews for the last position during January 2016. Once the remaining vacancy is filled, sixteen (16) project managers will be providing oversight on the active UST releases. During the calendar year, approximately 25% of the project management staff left SUPERB program (assessment or corrective action sections). The departures were mainly due to personal and promotional opportunities. This considerable turnover of staff created delays in project work while the positions went through the hiring processes.

Quality Assurance Program Plan

The UST Program Quality Assurance Program Plan (QAPP) was revised in May 2015, and was approved by the Environmental Protection Agency (EPA). The purpose of the QAPP is to ensure that all data produced and reported to the Department is scientifically valid, legally defensible, and of known and acceptable precision and accuracy. Between January 1, 2015 and December 31, 2015, 1,362 reviews of QAPP Addendums and Site-specific Work Plans were completed. Since implementation of the QAPP, UST Program staff has worked closely with contractors to facilitate the review process. Based on experience and feedback from contractors, the latest revision of the QAPP includes changes designed to streamline the process and improve efficiency of implementation. The QAPP Addendum submitted by contractors for each scope of work was revised to eliminate potentially duplicative information, reducing the size of that document (originally about 25 pages) by about 25 percent. In November 2013, the Division began requesting that contractors submit a comprehensive QA Plan including Standard Operating Procedures that will be approved and revised on an annual basis in conjunction with renewal of each contractor's certification. Once the annual contractor QA plan has been approved, the contractor is only required to submit a two-page work plan with a few attachments for each scope of work. As of December 31, 2015, the

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Department has received and approved 70 annual contractor QA plans. In June 2013, a full time Quality Assurance officer was hired by the UST Management Division to take over management of the QAPP and to oversee the review and approval of the annual contractor QA plans. The position was vacant for several months during the year, but a replacement was hired in November 2014 and the position has remained filled during the 2015 calendar year.

Underground Storage Tank Information

Since 1986, there have been 46,153 petroleum USTs registered with DHEC. Of those, 33,704 have been removed from the ground or properly closed in place. As of December 31, 2015, there were 11,511 operating USTs at 4,088 locations across the state owned by 2,107 individuals or companies.

EPA requires reporting on the percentage of UST facilities deemed to be in combined significant operational compliance with both the UST spill, overfill, and corrosion protection requirements and the UST leak detection requirements. At the end of the calendar year, DHEC reported that 68.40 % of the approximately 3,533 UST facilities inspected during 2015 met both the release prevention and release detection requirements and were in significant operational compliance (SOC). The SOC rate is affected by many factors including; tank population, rate of inspections performed, increased inspector knowledge/efficiency, and tank owner compliance. Historically, SCDHEC/EPA Region 4/National averages have been as follows:

Calendar Year	SCDHEC	EPA Region 4	National
2015	68 %	69 %	72 %
2014	73 %	70 %	72 %
2013	76 %	72 %	71 %
2012	77 %	74 %	71 %
2011	79 %	73 %	70 %
2010	77 %	70 %	68 %
2009	76 %	71 %	66 %
2008	72 %	70 %	66 %

Leak Rate

For the 2015 reporting period, a total of 115 new releases were confirmed and reported, of which 88 were forwarded to the assessment section for review and 27 were issued regulatory no further actions. Regulatory no further actions are issued when sampling results are reported above the reporting limit, but below the risk based screening level. To determine the leak rate, the DHEC divides the number of confirmed releases from currently in use tanks (102), by the total number of currently in use tanks (11,511). Therefore, a leak rate of 0.89% is calculated for 2015.

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Additional Tank Fee Information

An actuarial study of the SUPERB fund, completed in March 2007, listed the current liabilities of the fund at \$153 million and estimated future liabilities at \$373 million. The fund was projected to have a negative balance of \$32 million at the scheduled sunset date in 2026. The EPA voiced concerns about solvency of the SUPERB fund and in September of 2006, DHEC received official notice from EPA Region 4 that the SUPERB Fund was in danger of being declared insolvent. DHEC consulted with South Carolina Petroleum representatives and ultimately developed a funding solution with EPA Region 4, EPA Headquarters Office of Underground Storage Tanks, and the SUPERB Advisory Committee. In January 2009, Bill H. 3270 was introduced through industry-led efforts to address SUPERB solvency by amending Section 44-2-60 Code of Laws of South Carolina, relating to the registration of underground storage tanks so as to establish new annual renewal fees and to require that the additional revenue generated from the tank fee increases be deposited into the SUPERB account. Bill H.3270 was signed by the Governor and made effective on May 19, 2010. The EPA fully endorsed the funding solution incorporated in the 2010 legislation to address the solvency of SUPERB.

Beginning January 1, 2012, the amended SUPERB Act increased annual tank fees by \$100 each year over four years, ultimately reaching \$500 per tank, and maintains the fee at this level until an additional \$36 million is generated and deposited into the SUPERB account. When the SUPERB account is credited with the additional \$36 million, the annual tank fee will revert back to \$100 per tank the following January. DHEC will not be allowed to use any of the additional tank fee revenue for administration of the UST Program or for orphan sites as defined in 44-2-20(11). The additional monies began being collected following the June 1, 2012 billing cycle for tank fees. During the 2015 calendar year, \$1,350,554.62 million was collected as a result of a legal settlement with ConocoPhillips in an insurance recovery case. In accordance with the SUPERB Act, this \$1,350,554.62 million settlement was deposited into the SUPERB Account and counted towards the \$36 million. The table below provides information on revenues collected and expenditures on a calendar year basis. The balance is derived by subtracting the revenues from the previous year's balance.

Calendar Year	Fee Increase/Year	Expenditures	Revenues	Balance*
				\$36,000,000.00
2012	\$100	\$0	\$1,135,120.00	\$34,864,880.00
2013	\$200	\$3,391,441.09	\$2,307,586.36	\$32,557,293.64
2014	\$300	\$3,436,925.76	\$3,384,491.61	\$29,172,802.03
2015	\$400	\$4,335,235.97	\$4,505,919.70	\$24,666,882.33
2015	Legal Settlement	\$4,335,235.97	\$1,350,554.62	\$23,316,327.71

*Remaining to be collected to reach \$36 million

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Legislative Information - Secondary Containment Requirement

In accordance with UST Control Regulation R.61-92. Part 280.25, not later than December 22, 2018, all UST systems located within 100 feet of an existing water supply well, a coastal zone critical area, or state navigable waters must be either secondarily contained or permanently closed. Using GIS map layers and known facility locations, DHEC determined that approximately 395 facilities located in coastal zone critical areas and/or near state navigable waters may be affected by the implementation of this regulation and 94 facilities are known to have a water supply well located within 100 feet of any part of the UST system.

After public and owner/operator input the R.61-92 Part 280.25 was then revised to ensure that secondary containment requirements would apply to those existing single walled underground storage tank systems that are located within 100 feet of an existing water supply well, a coastal zone critical area, or state navigable waters and meet one of the following conditions: the underground storage tank system has not been upgraded to meet the performance standards as required in Section 280.21 of the regulations or the underground storage tank system has failed to remain in substantial compliance based on the last three consecutive annual inspections. UST systems described in this Section shall meet the secondary containment requirements of Section 280.20(g) or the closure requirements under Subpart G of this Part (including applicable requirements of Section 280.20 (g) shall also apply to any UST system determined to be described by Section 280.25 (a) after December 22, 2018.

The Department initiated the statutory process to amend R.61-92 by publication of a Notice of Drafting in the S.C. State Register on December 26, 2014; the drafting comment period closed January 29, 2015. The DHEC Board granted staff initial approval on March 12, 2015, to publicly notice these regulations for comment. A Notice of Proposed Regulation, to include therein a notice of opportunity for public comment, was published as Document No. 4565 in the State Register on March 27, 2015. On May 7, 2015, the Department's Board conducted a public hearing and found for the need and reasonableness of the proposed regulation. The regulations were filed May 12, 2015, with the Legislative Council for submission to the General Assembly for review. The regulations and legislative status can be viewed on the S.C. Legislature Online Internet site at http://www.scstatehouse.gov/regs/4565.docx.

Revisions to Federal Regulations - 40 CFR Parts 280 and Part 281

The revised federal regulations were published in the Federal Register on July 15, 2015, and became effective October 13, 2015. Major revisions pertain to incorporating the provisions of the Energy Policy Act of 2005, inclusion of tanks that were deferred in the 1988 version and to update the regulations with new and recent information related to regulating UST systems. These revisions will help improve prevention and detection of UST releases, which are one of the leading sources of groundwater contamination. Areas where revisions are proposed include: updating codes of practice, operator training requirement, secondary containment requirements, removing deferrals, notification

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process, addressing compatibility issues, interstitial monitoring, upgrade requirements, state approval program requirements, etc. In response, DHEC will propose to amend the current SC UST Control Regulation 61-92, Part 280. This amendment will focus on adopting all new federal UST requirements, so that the South Carolina regulation is no less stringent than the federal requirements. Additional amendments will be proposed to ensure release prevention and release detection are maintained at all facilities in South Carolina to better protect the environment and to reduce potential financial liability for the SUPERB Account.

Operator Training

In keeping with the requirements of the Energy Policy Act of 2005 and UST Control Regulations R.61-92, Part 280.35, a total of 554 new A/B operators were trained in South Carolina during the 2015 calendar year. If an owner or operator receives a violation, retraining is required. Of the 3,533 inspections performed this past year, approximately 48% involved retraining (1,704 retraining events).

The majority of these took place at the time of the inspection. If the A/B operator was not present at the time of the inspection, retraining was completed using the online training program.

Electronic Inspections

In April 2013, DHEC began development of a custom electronic inspection program to be used to inspect all UST facilities in South Carolina. With implementation of this electronic system, DHEC has benefitted from paperless operations, improved data quality, and fewer man hours necessary to transfer data into the database. The system is designed to incorporate the existing regulatory requirements of the Agency for consistent citations and to enhance the reporting capabilities to the EPA, owners and operators. Most owners and operators now receive their inspection results via email at the time of inspection. Violations are documented thoroughly using the tablet camera and photos are stored electronically. State wide deployment began in December of 2013, and 7,569 facility inspections have been performed to date using the tablets. In 2015, DHEC hosted staff from Tennessee and Kentucky in a peer match exercise to showcase the electronic inspection process.

Recommendations

Recommendations approved during the Monday, February 1, 2016 SAC meeting are:

- 1. Conduct an actuarial study that would provide an update on the solvency of the SUPERB Account.
- 2. SAC will assist SCDHEC staff with review and comment on the proposed amendments to the SC Underground Storage Tank Control Regulation (R. 61-92, Part 280) after SCDHEC has prepared a red-line draft of the proposed amendments.

Appendix 1

SUPERB Eligible Releases by Risk Category As of December 31, 2015

Risk	Open Releases					
Category	2015	2014	2013	2012	2011	
1	136	134	152	160	177	
2A	104	112	105	114	124	
2B	747	772	797	818	876	
3A	63	54	46	47	50	
3B	770	784	818	879	915	
4A	193	203	204	182	189	
4B	123	121	128	134	132	
5	129	109	122	137	136	
Total	2,265	2,289	2,372	2,471	2,599	

Risk Category Definitions:

Category 1 Emergency

Category 2A Threat to human health or environment is predicted to be less than 1 year

- Category 2B Drinking well identified less than 1,000 feet away
- Category 3A Threat to human health or the environment is predicted to be 1 to 2 years
- Category 3B Release in shallow groundwater with migration expected
- Category 4A Threat to human health or the environment is predicted to be greater than 2 years
- Category 4B Release in shallow groundwater with minimal migration expected

Category 5 Data currently inconclusive

Appendix 2

	Risk Category								
County	1	2A	2B	3A	3B	4A	4B	5	Total
Abbeville	3	0	10	1	2	3	3	0	22
Aiken	1	1	14	2	12	2	2	6	40
Allendale	0	0	3	0	8	0	1	2	14
Anderson	2	1	14	0	41	7	2	12	79
Bamberg	0	1	10	0	4	1	1	1	18
Barnwell	1	2	11	3	4	0	0	0	21
Beaufort	3	2	9	2	8	0	0	5	29
Berkeley	1	0	15	0	21	0	2	1	40
Calhoun	0	0	2	0	4	0	1	0	7
Charleston	1	0	9	0	58	0	2	4	74
Cherokee	1	1	9	2	11	3	3	3	33
Chester	4	1	9	1	16	1	2	6	40
Chesterfield	0	2	8	1	7	1	1	2	22
Clarendon	4	2	31	1	15	0	2	3	58
Colleton	4	2	16	0	6	0	0	1	29
Darlington	1	0	20	0	22	1	6	1	51
Dillon	4	1	10	4	11	0	3	0	33
Dorchester	2	1	16	1	16	1	0	1	38
Edgefield	0	1	3	1	7	0	1	2	15
Fairfield	4	1	8	0	3	0	0	3	19
Florence	6	6	34	2	49	3	14	1	115
Georgetown	2	1	9	2	12	0	0	1	27
Greenville	6	8	38	4	60	37	17	25	195
Greenwood	3	2	20	1	7	7	5	0	45
Hampton	0	4	14	1	6	0	1	1	27
Horry	4	11	37	14	61	0	2	3	132
Jasper	2	5	19	1	10	0	0	0	37
Kershaw	0	4	11	1	8	3	0	2	29
Lancaster	2	3	21	4	13	8	11	0	62
Laurens	2	0	23	0	11	10	0	2	48
Lee	0	2	7	0	1	0	0	0	10
Lexington	6	2	29	2	32	6	6	9	92
Marion	1	0	21	0	13	0	0	4	39
Marlboro	3	3	1	0	11	4	4	2	41
McCormick	2	0	5	0	6	1	0	1	15
Newberry	3	3	8	1	10	3	4	2	40
Oconee	2	3	8	1	4	3	0	1	22
Drangeburg	7	5	27	0	34	1	2	2	78
Pickens	1	0	6	0	6	7	0	2	22
Richland	15	7	37	2	25	12	4	6	108
Saluda	3	0	2	0	9	0	1	0	15
Spartanburg	5	2	21	5	43	56	11	5	148
Sumter	6	2	35	0	17	0	2	3	65
Union	2	0	3	1	5	0	0	0	11
Williamsburg	2	6	21	2	15	1	1	1	49
York	16	6	42	0	26	12	8	5	115

SUPERB Eligible Releases by Risk Category and County as of December 31, 2014.

Appendix 3

SUPERB Eligible Releases by Risk Category Work Ongoing or Not Currently Working As of December 31, 2015

Risk Category	Work Currently Ongoing With SUPERB Funds or under the \$25,000 Deductible ¹	Not Currently Working Awaiting SUPERB Funding or under the \$25,000 Deductible		
1	136	0		
2A	84	20^{2}		
2B	623	124^{2}		
3A	46	17^{2}		
3B	583	187 ³		
4A	90	103 ⁴		
4B	48	75 ⁴		
5	89	40^{4}		
Total	1699	566		

In accordance with the SUPERB Site Rehabilitation and Fund Access Regulations R.61-98, Section II.B., UST releases, regardless of its time of occurrence, shall be classified accordingly:

¹SUPERB funds are available for the current scope of work and ongoing site rehabilitation activities (e.g., IGWA, Tier I, Tier II, AFVR, MNA, ACA) based on high priority or anticipation of a cleanup complete measure. Includes releases where the Owner/Operator is conducting activities under the deductible (includes a subset of 195 releases where the \$25,000 deductible has not been met).

²SUPERB funds are available for the next scope of work but currently no site rehabilitation work is funded (e.g., awaiting a decision from the owner/operator, between active scopes of work with new work pending process review and funding, ongoing enforcement actions, RP resolutions, etc.). This number may include the subset of 161 releases working strictly under the \$25,000 SUPERB deductible. However, all \$25,000 deductible sites are being actively worked or pursued to start work.

³SUPERB funds may become available for the next scope of work for some of these lower risk category releases.

⁴SUPERB funds are not currently available for these lowest risk category releases. No site rehabilitation activities are ongoing. Site rehabilitation will be initiated as funds become available.