

2014 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 2014 totaled \$17,398,940.80, and the total revenue received including impact fee revenue, tank fees, interest, and recovered funds totaled \$21,089,469.39 (Table 1). SUPERB payments during calendar year 2014 totaled \$21,977,178.23. As of December 31, 2014, a total of \$18,827,970.28 in SUPERB funds was committed through current contracts for site rehabilitation activities leaving an available SUPERB balance of \$3,083,795.88 (Table 1). The cumulative expenditures since 1988 total \$392,331,299.88.

Table 1. SUPERB Account information as of December 51, 2014	
Impact Fee Revenue Received in Calendar Year 2014	\$ 17,398,940.80
Additional Tank Fee Revenue of \$300 Per Tank in 2014	\$ 3,384,491.61
Interest, penalties and/or recovered funds in 2014	\$ 306,036.98
Beginning Cash Balance January 1, 2014	\$ 22,799,474.85
Total Revenue Received in Calendar Year 2014	\$ 21,089,469.39
Total Available Calendar Year 2014	\$ 43,888,944.39
Total Payments from SUPERB in Calendar Year 2014	\$ 21,977,178.23
Cash Balance December 31, 2014	\$ 21,911,178.23
Commitments (Current Contracts)	\$ 18,827,970.28
Available for Commitment	\$ 3,083,795.88
Cumulative Spent Since 1988	\$ 392,331,299.88

Table 1. SUPERB Account information as of December 31, 2014

SUPERB Advisory Committee Annual Report for 2014 January 2015 Page 2 of 7

SUPERB Financial Responsibility Fund (SFRF)

DHEC is currently aware of four active third party claims or suits and actively participates in their resolution as allowed for in Section 44-2-40 of the SUPERB Act. A total of \$1,234,696.99 has been spent for claims, legal fees, and appraisal activities since the creation of this fund in 1993. As of December 31, 2014, the SFRF balance was \$1,039,188.17.

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 4,073 facilities or responsible parties that require proof of financial responsibility, the following is a breakdown of what is currently recorded. Fifty-four percent (53.82%) are covered by self-insurance, fifteen percent (15.30%) by letters of credit, nine percent (8.79%) by guarantees, nineteen percent (18.54%) by environmental insurance, three percent (2.60%) by local government options, less than one percent (0.32%) by surety bonds and trust funds, and the remaining one percent (0.64%) of facilities or responsible parties are in violation of R.61-92 or are new owners required to submit FR.

Cleanup Progress

Since the inception of the program and through December 31, 2014, DHEC has confirmed a total of 9,818 UST releases. Of these, 7,498 or about 76.4% have been closed. A total of 161 releases were closed in calendar year 2014; of these, 10 releases were closed under the regulatory program where no assessment activities were required, 36 releases were closed under the assessment program where some assessment activities were completed, and 115 releases were closed under an approved Corrective Action Plan for either Monitored Natural Attenuation or Active Corrective Action. SUPERB funds were expended on 122 of the 161 releases. The remaining 39 release closures aside from the 10 regulatory closures were comprised of 17 release closures under the \$25,000 deductible and 22 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.

At year's end, there were 2,320 open releases, of which 2,289 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.

SUPERB Advisory Committee Annual Report for 2014 January 2015 Page 3 of 7

As of December 31, 2014, 141 releases were in active cleanup, 173 releases were in limited cleanup with free product removal activities being conducted, and 284 releases were being monitored as part of a formalized natural attenuation remedial plan. Assessment activities were being funded at another 903 sites. A total of 1,501 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, thirteen (13) DHEC project manager positions were overseeing environmental assessment or cleanup efforts on 2,301 releases being worked with SUPERB funds or under the \$25,000 deductible. Two project manager positions in the Corrective Action Section and one project manager position in the Assessment Section were vacated late in the year. Candidates have been selected for two of the positions, and the Division will conduct interviews for the last position during January 2015. Once the remaining vacancy is filled, fifteen (15) project managers will be providing oversight on the active UST releases. During the calendar year, approximately 30% of the project management staff left the UST Management Division. 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 April 2013, 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, 2014 and December 31, 2014, 1,439 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 twopage work plan with a few attachments for each scope of work. As of December 31, 2014, the Department has received and approved 45 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.

SUPERB Advisory Committee Annual Report for 2014 January 2015 Page 4 of 7

Underground Storage Tank Information

Since 1986, there have been 46,021 petroleum USTs registered with DHEC. Of those, 33,467 have been removed from the ground or properly closed in place. As of December 31, 2014, there were 11,610 operating USTs at 4,109 locations across the state owned by 2,113 individuals or companies.

EPA requires reporting on the UST compliance rate for both release prevention and release detection, commonly referred to as the combined significant operational compliance (SOC). At the end of the calendar year, DHEC reported that 73.26 % of the approximately 3,784 UST facilities inspected during 2014 met both the release prevention and release detection requirements and were in significant operational compliance (SOC). The overall compliance rate for 2014 has decreased from the previous year's report of 76%. The SOC rate is affected by many factors including; tank population, rate of inspections performed, increased inspector knowledge/efficiency, and tank owner compliance.

Leak Rate

Leak rate is defined as the total number of confirmed releases from registered and permitted tanks, divided by the total number of currently in use tanks. For the 2014 reporting period, 61 confirmed releases were reported from a tank population of 11,610 operating USTs, calculating a leak rate of 0.52%. This percentage is the lowest rate achieved since 2007.

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

SUPERB Advisory Committee Annual Report for 2014 January 2015 Page 5 of 7

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 will be collected following the June 1, 2012 billing cycle for tank fees. 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	crease/Year Expenditures		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

*Remaining to be collected to reach \$36 million

Legislative Information

House Bill H. 4501:

Following the publication and implementation of the revised SUPERB Allowable Costs, House Bill 4501 to amend Section 44-2-40 of the SUPERB Act was introduced and referred to the Committee on Agriculture, Natural Resources and Environmental Affairs on January 15, 2014. Resolutions of certain allowable costs were later negotiated, which resulted in House Bill 4501 not moving forward. Accordingly, the SUPERB Allowable Costs were republished on May 15, 2014, to reflect the renegotiated line item amounts.

Proposed Revisions to Federal Regulations

EPA's proposed revisions to the federal UST regulations Part 280 and 281 were published in a November 8, 2011 Federal Register Notice and made available for a public comment period. The deadline to submit comments was February 16, 2012, which was extended by 60 days until April 16, 2012. 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 process, addressing compatibility issues, interstitial monitoring, upgrade requirements, state approval program requirements, etc. As of December 31, 2014, the proposed regulations and comments received continue to be reviewed by USEPA and other federal agencies.

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 504 new A/B operators were trained in South Carolina during the 2014 calendar year. If an owner or operator receives a violation, retraining is required. Of the 3,784

SUPERB Advisory Committee Annual Report for 2014 January 2015 Page 6 of 7 inspections performed this past year, approximately 21% involved retraining (799 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. The online training program was placed back online September 18, 2014, after being down due to security issues.

Electronic Inspections

In April 2013, DHEC began development of a custom electronic inspection program that will 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. In August of 2013, sixteen fully functional Panasonic tablets were purchased and distributed among the regional inspectors. Funding for this project was provided by EPA Region 4. State wide deployment began in December of 2013, and 4,531 facility inspections have been performed to date using the tablets.

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. It was more difficult to identify single walled UST systems located within 100 feet of a water supply well, so DHEC began investigations by distributing a questionnaire to owners and operators of 3,429 UST systems. The owners were asked to identify if a water supply well was located within 100 feet of any portion of their UST system. The questionnaire was distributed by standard mail, e-mail, and facsimile. DHEC received responses from 52% of those owners and operators. Results of this questionnaire were confirmed using the database and information collected from routine inspections. Facilities that did not respond to the mail out were visited by staff. Results of these efforts reveal that 94 facilities are known to have a water supply well located within 100 feet of any part of the UST system. In an effort to inform the regulated community of the approaching deadline, DHEC published articles in the summer 2013 and summer 2014 UST newsletters that included information about the upcoming regulation.

On December 29, 2014, DHEC proposed amending R.61-92. Part 280.25, focusing on provisions of the regulation relating to secondary containment for all UST systems located within 100 feet of an existing water supply well, a coastal zone critical area, or state navigable waters.

SUPERB Advisory Committee Annual Report for 2014 January 2015 Page 7 of 7

Comments on the notice of drafting for amending this portion of the regulations were solicited from stakeholders until January 29, 2015. The DHEC notice for State register publication dated March 27, 2015: The notice of proposed regulations: Proposed Amendments of R.61-92, Underground Storage Tanks. This is the opportunity for the public to comment on amendments to Part 280.25 Secondary Containment Requirement. The public comment period is for thirty calendar days and ends on April 27, 2015.

UST Online Registry

The UST on-line registry was restored to the SC DHEC web page on August 19, 2014. The public can now search for underground storage tank locations by filling in one (or more) of the fields from the registry. This information is automatically updated from the DHEC database.

Recommendations

Recommendations approved during the Monday, January 26, 2015 SAC meeting are:

- 1. The UST Program should hire and maintain sufficient SCDHEC Project Managers to oversee the expenditure of additional account revenues, enable an efficient flow of project caseload, and to avoid delays with proposed assessment and cleanup efforts.
- 2. The UST Program should commission an actuarial study to evaluate current and future SUPERB Fund liabilities with respect to the current and projected releases, and the anticipated revenues to be collected by the Fund sunset date in 2026.

Appendix 1

SUPERB Eligible Releases by Risk Category As of December 31, 2014

Risk	Open Releases				
Category	2014	2013	2012	2011	
1	134	152	160	177	
2A	112	105	114	124	
2B	772	797	818	876	
3A	54	46	47	50	
3B	784	818	879	915	
4A	203	204	182	189	
4B	121	128	134	132	
5	109	122	137	136	
Total	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	2	1	11	0	2	3	3	0	22
Aiken	1	1	16	2	12	2	2	3	39
Allendale	0	0	3	0	9	0	1	1	14
Anderson	2	1	18	0	34	9	1	9	74
Bamberg	0	1	10	0	4	1	1	0	17
Barnwell	1	2	12	3	4	1	1	0	22
Beaufort	2	2	9	2	9	0	0	1	25
Berkeley	1	0	13	0	19	0	2	0	35
Calhoun	0	0	1	0	5	0	1	0	7
Charleston	1	0	10	0	56	0	2	1	70
Cherokee	1	1	11	0	10	3	3	1	30
Chester	4	1	9	2	16	1	2	3	38
Chesterfield	0	2	9	1	9	1	1	1	24
Clarendon	4	2	32	1	14	0	2	5	60
Colleton	3	2	15	0	8	0	0	1	29
Darlington	1	0	19	0	22	1	6	2	51
Dillon	4	4	11	1	9	0	3	1	33
Dorchester	3	0	14	1	24	1	0	0	43
Edgefield	0	1	3	1	7	0	1	2	15
Fairfield	4	1	10	0	1	0	0	2	18
Florence	б	7	34	2	51	5	13	1	119
Georgetown	2	1	9	1	13	0	0	2	28
Greenville	6	9	39	3	61	37	19	17	191
Greenwood	4	2	20	1	4	9	5	0	45
Hampton	0	3	18	1	6	0	1	0	29
Horry	4	10	37	12	66	0	1	3	133
Jasper	2	5	17	1	7	0	0	0	32
Kershaw	0	4	11	0	7	4	1	1	28
Lancaster	5	3	24	4	11	8	10	1	66
Laurens	2	0	23	0	10	10	1	2	48
Lee	1	2	6	0	1	0	0	0	10
Lexington	5	2	29	2	35	7	6	9	95
Marion	0	0	21	0	14	0	0	2	37
Marlboro	3	3	14	1	11	2	1	0	35
McCormick	2	0	5	0	6	1	0	1	15
Newberry	3	3	15	0	10	3	4	2	40
Oconee	2	3	8	1	3	4	0	0	21
Orangeburg	7	5	26	1	34	1	2	0	76
Pickens	1	0	6	0	4	7	1	0	20
Richland	17	7	38	2	32	12	5	2	115
Saluda	3	0	3	0	8	0	1	0	15
Spartanburg	4	3	24	4	52	57	11	6	161
Sumter	4	1	40	0	18	0	2	2	67
Union	1	2	3	1	5	0	0	0	12
Williamsburg	1	9	23	3	13	1	2	0	52
York	16	6	40	0	27	12	4	6	111

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

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 3

SUPERB Eligible Releases by Risk Category Work Ongoing or Not Currently Working As of December 31, 2014

Risk Category	Work Currently Ongoing With SUPERB Funds or under the \$25,000 Deductible ¹	Not Currently Working Awaiting SUPERB Funding or under the \$25K Deductible
1	134	0
2A	84	28^2
2B	557	215 ²
3A	33	21^{2}
3B	532	252^{3}
4A	89	114 ⁴
4B	47	74^4
5	49	60^{4}
Total	1525	764

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: 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

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 195 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.