

SUPERB ADVISORY COMMITTEE

2016 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 ½ 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 2016 totaled \$19,824,568.44 and the total revenue received including impact fee revenue, tank fees, interest, and recovered funds totaled \$24,750,123.78 (Table 1). SUPERB payments during calendar year 2016 totaled \$22,039,782.26. As of December 31, 2016, a total of \$20,457,860.69 in SUPERB funds was committed through current contracts for site rehabilitation activities leaving an available SUPERB balance of \$8,784,373.12 (Table 1). The cumulative expenditures since 1988 total \$434,726,349.25.

Table 1. SUPERB Account information as of December 31, 2016

Impact Fee Revenue Received in Calendar Year 2016	\$ 19,824,568.44
Additional Tank Fee Revenue of \$400 Per Tank in 2016	\$ 4,481,194.37
Interest received in 2016	\$ 371,311.51
Penalties received in 2016	\$ 37,005.03
Recovered funds received in 2016	\$ 22,092.49
Court Fees and Fines	\$ 13,951.94
Settlements received in 2016	\$ 0.00
Beginning Cash Balance January 1, 2016	\$ 26,531,892.29
Total Revenue Received in Calendar Year 2016	\$ 24,750,123.78

Total Available Calendar Year 2016	\$ 51,282,016.07
Total Payments from SUPERB in Calendar Year 2016	\$ 22,039,782.26
Cash Balance December 31, 2016	\$ 29,242,233.81
Commitments (Current Contracts)	\$ 20,457,860.69
Available for Commitment	\$ 8,784,373.12
Cumulative Spent Since 1988	\$434,726,349.25

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. One claim was resolved during the calendar year resulting in a payment against SUPERB in the amount of \$23,000. A total of \$1,290,476.02 has been spent for claims, legal fees, and appraisal activities since the creation of this fund in 1993. As of December 31, 2016, the SFRF balance was \$1,013,447.82.

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 4,087 facilities or responsible parties (owner/operator) that require proof of financial responsibility, the following is a breakdown of what is currently recorded. Fifty-two percent (52%) are covered by self-insurance, nine percent (9%) by letters of credit, sixteen percent (16%) by guarantees, eighteen percent (18%) 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

Since the inception of the program and through December 31, 2016, DHEC has confirmed a total of 10,004 UST releases. Of these, 7,756 or about 77.52% have been closed. A total of 125 releases were closed in calendar year 2016; of these, 25 releases were closed under the regulatory program where no assessment activities were required, 63 releases were closed under the assessment program where some assessment activities were completed, and 37 releases were closed under an approved Corrective Action Plan for either Monitored Natural Attenuation or Active Corrective Action. SUPERB funds were expended on 61 of the 125 releases. The remaining 39 release closures aside from the 25 regulatory closures were comprised of 32 release closures under the \$25,000 deductible and 7 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 2,248 open releases, of which 2,217 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, 2016, 135 releases were in active cleanup, 147 releases were in limited cleanup with free product removal activities being conducted, and 282 releases were being monitored as part of a formalized natural attenuation remedial plan. Assessment activities were being funded at another 1,159 sites. A total of 1,895 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, sixteen (16) 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 senior level project manager position in the Corrective action Section was vacated late in the year, and one senior level project manager vacancy is anticipated early in 2017. Over the 2016 calendar year, there were six total vacancies in the Corrective Action Section. An additional project manager was added to the Corrective Action Section in August 2016. There were three total vacancies in the Assessment Section and all of those vacancies have been filled. The Division will conduct interviews for the current vacant position(s) in the Corrective Action Section during the first several months in 2017. Once at full staff, seventeen (17) project managers will be providing oversight on the active UST releases. During the calendar year, approximately 40% of the project management staff left SUPERB program positions resulting in vacancies (Assessment or Corrective Action sections). The departures were mainly due to personal and promotional opportunities, both within and outside the UST Program, as well as retirement for one senior level staff member. This considerable turnover of staff created delays in project work.

Quality Assurance Program Plan

The UST Program Quality Assurance Program Plan (QAPP) Revision 3.1 was approved by EPA and implemented in August 2016. 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, 2016 and December 31, 2016, 1,224 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. 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, 2016, the Department has received and approved 50 annual contractor QA plans.

Underground Storage Tank Information

Since 1986, there have been 46,285 petroleum USTs registered with DHEC. Of those, 33,928 have been removed from the ground or properly closed in place. As of December 31, 2016, there were 11,429 operating USTs at 4,065 locations across the state owned by 2,095 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 63% of the approximately 3,670 UST facilities inspected during 2016 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, tank owner compliance and other factors. Beginning in December 2013, the SC UST Program moved from paper inspections to electronic inspection program requiring inspectors to answer specific compliance questions, promoting a more consistent inspection process. The precision of capturing this information electronically has resulted in a more accurate determination of SOC by allowing for consistency between inspections conducted by different staff across the state. Additionally, the UST Program determines SOC by following a specific matrix of compliance measures provided by the EPA. A review of citations used to determine SOC issued since 2013 reveals that some citations included by the electronic inspection are not included in the EPA matrix. The electronic program has been updated to include only those citations that match the EPA matrix. The Program is reevaluating each inspection for the last two years and will update the SOC rate as deemed appropriate. Historically, SCDHEC rates have been as follows:

Calendar Year	SCDHEC
2016	63 %
2015	68 %
2014 *First full year of performing electronic inspections	73 %
2013	76 %
2012	77 %
2011	79 %
2010	77 %
2009	76 %
2008	72 %

Release Rate

For the 2016 reporting period, a total of 74 new releases were confirmed. 49 of these were forwarded to the assessment section and 25 were issued regulatory no further actions. Of the 74 confirmed releases, 67 releases were confirmed from currently in use tanks, of which 43 of these releases were forwarded to the assessment section for review and 24 were issued regulatory no further action decisions. 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 release rate, the DHEC divides the number of confirmed releases from currently in use tanks (67), by the total number of currently in use tanks (11,429). Therefore, a release rate of 0.59% is calculated for 2016.

Year	Total Number of confirmed Releases (Releases Forwarded to Assessment / Releases closed via Regulatory NFA)	Release Rate
2008	119 (77 / 42)	119/11,933*100=1%
2009	116 (70 / 46)	116/11,836*100=0.98%
2010	97 (64 / 33)	97/11,850*100=0.82%
2011	70 (39 / 31)	70/11,782*100=0.59%
2012	82 (50 / 32)	82/11,792*100=0.69%
2013	87 (61 / 26)	87/11,749*100=0.74%
2014	61(53 / 8)	61/11,610*100=0.52%
2015	102 (75 / 27)	102/11,511*100=0.89%
2016	67 (43 / 24)	67/11,429*100=0.59%

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 \$400 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. 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 (A)	\$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
2016	\$400 (A)	\$4,115,332.10	\$4,481,194.37	\$18,835,133.34

*Remaining to be collected to reach \$36 million
(A) Maximum fee increase of \$400 per statute.

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 UST Control Regulation R.61-92, Part 280.25 was 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 for corrective action under Subpart F), no later than December 22, 2018. The 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 and promulgated on May 27, 2016. The regulations and legislative status can be viewed on the South Carolina Legislature Online Internet site at <http://www.scstatehouse.gov/regs/4565.docx>.

Revisions to State UST Regulations, R. 61-92, Part 280

The amendments of R.61-92 Part 280 focus on adopting the federal underground storage tank requirements of 40 CFR Section 280 effective October 13, 2015, and revising portions of R.61-92, Part 280 pertaining to compliance requirements of the UST Control Regulations. These amendments also reorganize the regulations for clarity and consistency with the format of the revised federal regulation effective October 13, 2015, along with other stylistic changes made to improve the overall quality of the regulation. These revisions seek to ensure releases from underground storage tanks are minimized, protect the human health and environment, and reduce the financial liability on the State Underground Petroleum Environmental Response Bank (SUPERB) Account and the SUPERB Financial Responsibility Fund as it pertains to assessment, corrective action, and third party liability claims for petroleum releases from UST systems. 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 April 22, 2016. The drafting comment period closed May 23, 2017.

The Department conducted a stakeholder meeting on May 16, 2016 and invited more than 100 UST facility owners and operators, SUPERB Advisory Committee members, SC Petroleum Marketers (SCPMA) members, SC Convenience Stores Association members, UST equipment contractors, environmental consultants, local governments, and environmental groups to provide an opportunity to share their ideas and concerns. The Department solicited and invited folks to sign up for future workgroup meeting during the May 16, 2016 stakeholder meeting. About 26 entities signed up to participate in the workgroup meetings. The workgroup meetings were conducted on June 13, July 11, August 15 and August 29 of 2016. At the four workgroup meetings the proposed revisions to the regulation were highlighted and discussed in detail all of the proposed changes. The workgroup made numerous suggestions that were incorporated and

On October 13, 2016, the DHEC Board approved the proposed revised regulation for public notice. A Notice of Proposed Regulations with notice of opportunity for public comment was published as Document No. 4706 in the State Register on October 28, 2016. After a public hearing on December 8, 2016, the DHEC Board found for the need and reasonableness of the proposed revised regulation and approved it for submission to the legislature for review. The revised regulation was submitted to the legislature for 2017 review on January 10, 2017, and will expire on May 10, 2017. The revised regulation can be viewed on the S.C. Legislature Online website at <http://www.scstatehouse.gov/regs/4706/docx>.

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. This continues to benefit owners and operators by increasing the time available for them to return to compliance. Violations are documented thoroughly using the tablet camera and photos are stored electronically. Also, the ability to retrain owners and operators on site is reducing the burden to follow up for training. State wide deployment began in December of 2013, and 11,239 facility inspections have been performed to date using the tablets, with 3,670 conducted in 2016.

Recommendations

Recommendations approved during the Monday, January 23, 2017 SAC meeting are:

1. UST Management Division and DHEC should assess the staffing issue and develop a plan to hire quickly and retain project staff.
2. The UST Management Division should conduct an actuarial study of the SUPERB Account that would provide an update on fund solvency.
3. A motion was made, seconded and overwhelmingly adopted by the SAC that supports legislation being proposed to repeal the sunset date provision of the SUPERB Act

Appendix 1

SUPERB Eligible Releases by Risk Category As of December 31, 2016

Risk Category	Open Releases					
	2016	2015	2014	2013	2012	2011
1	148	136	134	152	160	177
2A	100	104	112	105	114	124
2B	731	747	772	797	818	876
3A	59	63	54	46	47	50
3B	752	770	784	818	879	915
4A	192	193	203	204	182	189
4B	116	123	121	128	134	132
5	119	129	109	122	137	136
Total	2217	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

SUPERB Eligible Releases by Risk Category and County as of December 31, 2016.

County	Risk Category								Total
	1	2A	2B	3A	3B	4A	4B	5	
Abbeville	3	0	10	1	2	3	3	0	22
Aiken	2	1	13	2	12	1	1	1	33
Allendale	0	0	3	0	8	1	1	1	14
Anderson	3	1	14	1	42	5	1	11	78
Bamberg	0	1	9	0	5	1	1	0	17
Barnwell	1	2	11	3	3	0	0	0	20
Beaufort	3	2	11	1	11	0	0	2	30
Berkeley	1	0	15	0	21	0	2	1	40
Calhoun	0	0	1	0	4	0	1	0	6
Charleston	1	1	6	0	55	0	1	4	68
Cherokee	2	1	9	2	10	3	3	3	33
Chester	5	1	9	1	18	0	2	3	39
Chesterfield	2	3	5	1	7	0	1	3	22
Clarendon	7	2	28	1	12	0	2	2	54
Colleton	4	2	14	0	7	0	0	0	27
Darlington	1	0	20	0	21	1	6	1	50
Dillon	4	1	10	4	11	0	3	0	33
Dorchester	2	1	12	1	17	1	0	1	35
Edgefield	1	0	3	1	7	0	1	2	15
Fairfield	4	1	9	0	2	0	0	3	19
Florence	6	6	36	2	43	2	12	3	110
Georgetown	2	1	11	2	8	0	0	1	25
Greenville	7	7	36	5	59	40	17	32	203
Greenwood	3	1	20	1	7	7	4	0	43
Hampton	0	4	14	1	6	0	1	0	26
Horry	3	11	33	12	57	0	1	4	121
Jasper	2	4	21	1	7	0	0	0	35
Kershaw	1	4	9	1	8	3	0	2	28
Lancaster	1	2	21	4	13	8	11	1	61
Laurens	2	0	21	0	11	10	2	2	48
Lee	0	2	7	0	1	0	0	0	10
Lexington	5	2	31	2	31	7	6	6	90
Marion	1	0	21	0	12	1	1	2	38
Marlboro	3	3	12	0	12	1	1	0	32
McCormick	2	0	5	0	6	1	0	1	15
Newberry	3	2	15	0	11	4	4	3	42
Oconee	2	3	7	0	4	3	1	1	21
Orangeburg	7	4	28	0	34	0	2	2	77
Pickens	1	0	5	0	6	7	0	1	20
Richland	15	8	37	1	29	12	3	2	107
Saluda	3	0	2	0	10	0	0	0	15
Spartanburg	5	2	25	5	39	56	11	6	149
Sumter	6	2	33	0	18	0	2	2	63
Union	2	0	3	1	5	0	0	0	11
Williamsburg	4	6	21	2	11	1	1	1	47
York	16	6	41	0	27	13	7	8	118

Appendix 3

SUPERB Eligible Releases by Risk Category Work Ongoing or Not Currently Working As of December 31, 2016

Risk Category	Work Currently Ongoing With SUPERB Funds or under the \$25,000 Deductible¹	Not Currently Working Awaiting SUPERB Funding or under the \$25,000 Deductible
1	148	0
2A	87	13 ²
2B	619	112 ²
3A	51	8 ²
3B	612	140 ³
4A	90	102 ⁴
4B	43	73 ⁴
5	84	35 ⁴
Total	1734	483

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.