



2022 Annual Report

Purpose

This report is submitted to the General Assembly and the Department of Health and Environmental Control (DHEC) 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 status of the underground storage tank (UST) population in South Carolina.

The DHEC UST Management Division operations are funded by several mechanisms that allow the program to meet its federal grant commitments and programmatic goals. Funding mechanisms consist of a ½ cent environmental impact fee, federal Leaking Underground Storage Tank (LUST) Prevention/Trust grants, and annual tank fees. Penalties and Interest received are also utilized for management of the UST program.

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. SUPERB eligible 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 2022 totaled \$19,846,887.34 and the total revenue received including impact fee revenue, additional tank fees, interest, and penalties received from violations totaled \$20,566,007.09 (Table 1). Monies from the SUPERB Account were utilized for administrative expenses of the UST Program for the calendar year at a total of \$2,366,243.78. Final SUPERB expenditures during calendar year 2022 totaled \$17,676,141.56. As of December 31, 2021, a total of \$27,110,861.72 in SUPERB funds was committed through current contracts for site rehabilitation activities leaving an available SUPERB balance of \$2,719,886.38 (Table 1). The uncommitted balance reflects the amount in the South Carolina Enterprise Information System (SCEIS) system as of COB on December 31, 2022. The revenues for December were deposited in January 2023. The cumulative expenditures since 1988 total \$569,095,711.62.

Section 44-2-90 of the SUPERB Act was ratified to repeal the sunset date during the 2019-2020

Legislative session. Senate Bill 525 passed both the Senate and the House with near unanimous support. It was signed by the Governor and became effective on March 24, 2020, as 2020 Act No. 120, § 1.

Table 1. SUPERB Account information as of December 31, 2022

REVENUE	
Impact Fee Revenue	\$19,846,887.34
Additional Tank Fee Revenue	\$18,250.06
Interest Revenue	\$417,212.07
Penalties received	\$283,657.62
Total Revenue Received	\$20,566,007.09
Beginning Cash Balance	\$26,940,882.57
Total Available CY	\$47,506,889.66
EXPENDITURES	
Site Rehabilitation	\$15,309,897.78
Administrative Expenses	\$2,366,243.78
Total Expenditures	\$17,676,141.56
Cash Balance	\$29,830,748.10
Commitments	\$27,110,861.72
Available for Commitment	\$2,719,886.38
Cumulative Spent since 1988	\$569,095,711.62

SUPERB Financial Responsibility Fund (SFRF)

DHEC actively participates in third party claim resolutions as allowed for in Section 44-2-40 of the SUPERB Act. DHEC is currently aware of no active third-party claims or suits, and no claim was resolved during the 2022 calendar year. A total of \$1,505,165.02 has been spent on claims, legal fees, and appraisal activities since the creation of this fund in 1993. There was no monthly transfer from SUPERB Account during the calendar year 2022. As of December 31, 2022, the SFRF balance was \$2,090,748.81.

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 Account provides 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. Of the 4,197 facilities or tank owners/operators that require proof of financial responsibility, fifty-two percent (52%) are covered by self-insurance, twenty percent (20%) by environmental insurance, thirteen percent (13%) by guarantees, seven percent (7%) by letters of credit, four percent (4%) by surety bonds and trust funds, two percent (2%) by local government options, and the remaining two percent (2%) 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, 2022, DHEC has confirmed a total of 10,813 UST releases. Of these, 8,590 or just over 79% have been closed. A total of 148 releases were closed in

calendar year 2022; of these, 30 releases were closed under the regulatory program where no site rehabilitation activities were required, 24 releases were closed under the assessment program where some assessment activities were completed, and 94 releases were closed under an approved Corrective Action Plan for either Monitored Natural Attenuation or Active Corrective Action.

SUPERB funds were expended on 86 of the 148 releases. The remaining 62 release closures aside from the 30 regulatory closures were comprised of 25 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. 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. DHEC continues to make contract modifications as necessary in consultation with the Office of General Counsel and Office of Business Management to enhance contract management for active corrective action cleanups.

At year's end, there were 2,223 open releases, of which 2,180 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.

For SUPERB eligible releases as of December 31, 2022, 112 releases were in active cleanup, 82 releases were in limited cleanup with free product removal activities being conducted, and 183 releases were being monitored as part of a formalized natural attenuation remedial plan. Site rehabilitation activities were being conducted at another 1,116 releases. Most site rehabilitation activities are funded by SUPERB or by the UST owner under the \$25,000 SUPERB deductible.

Over the 2022 calendar year, a total of 7 project managers left the Corrective Action and Assessment Sections and 7 new project managers were hired. As of December 31, 2022, there were 2 project managers vacancies for the Assessment Section. These vacancies are anticipated to be filled in early 2023. Once at full staff, 26 project managers will be providing oversight on the active UST releases.

Quality Assurance Program Plan

The UST Program Quality Assurance Program Plan (QAPP) Revision 4.0 was approved by the Environmental Protection Agency (EPA) and implemented in August 2021. The purpose of the QAPP is to ensure that all data produced and reported to DHEC is scientifically valid, legally defensible, and of known and acceptable precision and accuracy. Between January 1, 2022, and December 31, 2022, 1,231 reviews of QAPP Addendums and Site-Specific Work Plans were completed. Since implementation of the QAPP, UST Management Division 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 quality assurance plan (ACQAP) 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, 2022, DHEC has received and approved 61 ACQAPs.

Underground Storage Tank Information

Since 1986, there have been 47,199 petroleum USTs registered with DHEC. Of those, 35,179 have been removed from the ground or properly closed in place. As of December 31, 2022, there were 10,982 operating USTs at 3,922 locations across the state owned by 1,986 individuals or companies.

In response to the 2015 Federal UST regulation revisions, EPA updated the existing compliance measures and added new measures. South Carolina regulations were amended on May 26, 2017, when the new Federal requirements were adopted. May 26, 2020, marked the first deadline for tank owners to comply with new testing requirements. The new measure of compliance is now called the Technical Compliance Rate (TCR). DHEC has been calculating TCR since May 26, 2020, and began reporting to EPA during the fourth quarter of the 2020 federal fiscal year. The TCR for the 2022 reporting period from January 1, 2022, to December 31, 2022, is 63%. South Carolina will continue efforts to provide outreach, compliance assistance or follow up to citations for owners/operators in pursuit to continually be at or above the national average for TCR. South Carolina may experience fluctuations in TCR every year, due to tank owners adjusting to the new testing requirements.

Table 2. Technical Compliance Rate

Calendar Year	DHEC
2022	63%
2021	49%
2020**	45%

**partial data; 5/26/2020-12/31/2020

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, consistent violation documentation, enhanced compliance assistance and reporting. Statewide deployment began in December of 2013, and 30,756 facility inspections have been performed to date using the tablets, with 3,026 conducted in 2022.

Release Rate

For the 2022 reporting period, a total of 111 new releases were confirmed. Eighty-one (81) of these were forwarded to the assessment section for site rehabilitation activities and 30 were issued a regulatory no further action (NFA). Of the 111 confirmed releases, 100 new releases were confirmed from facilities with currently in use tanks, of which 70 were forwarded to the assessment section and 30 were issued a regulatory NFA. Regulatory NFA's are issued when sampling results are below the risk-based screening level. To determine the release rate, the DHEC divides the number of confirmed releases from currently in use tanks (100), by the total number of currently in use tanks (10,982). Therefore, a release rate of 0.91% is calculated for 2022.

DHEC amended the SC UST Control Regulation R.61-92, Part 280 on May 26, 2017. On May 26, 2020, operating UST facilities were required to perform annual and triannual tests for specific equipment. If the tests results failed for spill/overflow containment equipment or sump containment equipment, the facility was required to repair the equipment and perform a site check to identify any release to the environment.

Table 3. Annual Release Rate

Year	Total Number of confirmed Releases from facilities with currently in use tanks (Releases Forwarded to Assessment / Releases closed via Regulatory NFA)	Release Rate
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%
2017	114 (89 / 25)	114/11,340*100=1%
2018	98 (62/36)	98/11,273*100=0.87%
2019	109 (76/33)	109/11,191*100=0.97%
2020	128 (84/44)	128/11,156*100=1.15%
2021	191 (118/73)	191/11,055*100=1.73%
2022	100 (70/30)	100/10,982*100=0.91%

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

DHEC amended the SC UST Control Regulation R. 61-92, Part 280 on May 26, 2017, in response to revisions to the Federal UST Regulations which became effective October 13, 2015. DHEC continues to foster collaboration with the regulated community and stakeholders through compliance assistance and outreach initiatives to assist tank owners/operators with the new regulatory requirements.

DHEC continued its quarterly meetings with industry contractors. The goal of these meetings is to create dialogue and develop a collaborative partnership. These meetings continue to be well attended and the group will continue to meet quarterly in 2022.

DHEC staff hosted a booth at the Southeast Food and Petro Expo in Myrtle Beach, SC in March 2022 and will do so again in March of 2023.

Recommendations:

Appendix 1

SUPERB Eligible Releases by Risk Category As of December 31, 2022

Risk Category	Open Releases									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
1	160	159	183	181	174	154	148	136	134	152
2A	111	120	105	107	102	105	100	104	112	105
2B	627	642	627	666	682	713	731	747	772	797
3A	99	100	95	86	73	63	59	63	54	46
3B	785	790	785	797	788	758	752	770	784	818
4A	170	175	188	187	186	189	192	193	203	204
4B	103	99	100	111	116	116	116	123	121	128
5	125	136	138	135	139	144	119	129	109	122
Total	2,180	2,221	2,221	2,270	2,260	2,242	2,217	2,265	2,289	2,372

Risk Category Definitions:

- Category 1 Emergency situation; a fire or explosion hazard; vapors or free product in a structure or utility; concentrations of chemicals of concern have been detected in a potable water supply or surface water supply intake; free product exists on surface water; chemicals of concern exist in surface water.
- 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 Needs further assessment or additional data.

Appendix 2

SUPERB Eligible Releases by Risk Category and County As of December 31, 2022

County	Risk Category								Total
	1	2A	2B	3A	3B	4A	4B	5	
Abbeville	4	0	7	0	2	3	2	2	20
Aiken	0	1	8	3	15	8	4	4	43
Allendale	0	0	4	0	8	1	1	1	15
Anderson	4	4	8	6	37	14	1	4	78
Bamberg	0	1	5	0	4	0	0	0	10
Barnwell	0	2	8	2	2	0	1	3	18
Beaufort	0	3	6	1	15	0	0	0	25
Berkeley	0	0	19	2	28	0	3	1	53
Calhoun	1	0	1	0	5	0	0	1	8
Charleston	2	6	10	2	64	0	1	5	90
Cherokee	1	2	8	2	12	1	3	2	31
Chester	8	2	11	0	14	1	3	5	44
Chesterfield	3	1	4	0	7	2	1	3	21
Clarendon	8	6	19	0	13	0	1	1	48
Colleton	2	1	18	1	12	0	0	0	34
Darlington	1	0	18	0	23	2	5	0	49
Dillon	8	0	7	2	18	0	2	0	37
Dorchester	4	0	10	0	20	1	0	0	35
Edgefield	2	0	4	1	4	0	1	3	15
Fairfield	4	2	9	0	6	0	1	1	23
Florence	7	2	39	0	38	0	10	5	101
Georgetown	0	0	8	5	13	0	0	4	30
Greenville	9	4	34	11	79	25	15	16	193
Greenwood	4	1	14	1	12	9	1	3	45
Hampton	1	1	9	0	6	0	0	1	18
Horry	6	9	29	10	37	0	1	4	96
Jasper	2	5	14	1	9	1	0	1	33
Kershaw	3	2	5	0	10	0	1	3	24
Lancaster	3	1	23	4	17	6	7	3	64
Laurens	3	0	20	2	15	10	0	6	56
Lee	0	2	5	0	1	0	0	0	8
Lexington	4	3	23	7	36	4	5	4	86
Marion	4	2	11	3	13	0	0	1	34
Marlboro	5	1	12	0	8	2	1	2	31
McCormick	3	0	5	0	4	2	0	1	15
Newberry	2	5	16	3	10	2	3	1	42
Oconee	3	1	6	1	6	2	0	1	20
Orangeburg	2	6	37	0	25	0	0	1	71
Pickens	1	2	2	1	9	2	2	5	24
Richland	7	13	25	9	29	6	6	11	106
Saluda	2	1	2	0	10	0	0	1	16
Spartanburg	6	4	27	4	33	52	14	6	146
Sumter	11	5	35	5	15	1	1	2	75
Union	0	0	3	2	5	2	0	1	13
Williamsburg	4	3	17	3	14	1	0	1	43
York	16	7	22	5	22	10	6	5	93

Appendix 3

SUPERB Eligible Releases by Risk Category Work Ongoing or Not Currently Working As of December 31, 2022

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	160	0
2A	111	0
2B	615	12 ²
3A	95	4 ²
3B	758	27
4A	101	69
4B	50	53
5	103	22
Total	1,993	187

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 338 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 2 releases working strictly under the \$25,000 SUPERB deductible. However, all \$25,000 deductible sites are being actively worked or pursued to start work.