



Department of
Environmental
Conservation

DIVISION OF ENVIRONMENTAL REMEDIATION

2022/2023 ANNUAL REPORT



www.dec.ny.gov

Kathy Hochul, Governor

Basil Seggos, Commissioner

CONTENTS

EXECUTIVE SUMMARY.....	3
DIVISION SUMMARY	5
STATE SUPERFUND PROGRAM.....	6
BROWNFIELD CLEANUP PROGRAM.....	10
ENVIRONMENTAL RESTORATION PROGRAM	16
VOLUNTARY CLEANUP PROGRAM.....	19
SPILL RESPONSE PROGRAM	20
BULK STORAGE PROGRAMS	22
HAZARDOUS WASTE MANAGEMENT PROGRAM.....	25
OTHER MAJOR INITIATIVES.....	27
WEB RESOURCES	31

Cover Photograph – Former mill structures are demolished in Watervliet as part of the cleanup at State Superfund Program Site No. 401003 Al Tech Specialty Steel.

EXECUTIVE SUMMARY

The New York State Department of Environmental Conservation (DEC) Division of Environmental Remediation's 2022/2023 Annual Report highlights continuing efforts to clean up and revitalize contaminated properties and to effectively manage petroleum and chemicals.

- *State Superfund Program (SSF)*
 - 8 new Class 2 sites added to the Registry during SFY 2022/2023; total of 429 Class 2 sites as of March 31, 2023.
 - 1,963 sites cleaned up or determined to not require further action as of March 31, 2023.
 - 919 sites (Registry and Non-Registry) being or to be addressed as of March 31, 2023.
 - 931 sites listed on the State Superfund Registry as of March 31, 2023.
- *Brownfield Cleanup Program (BCP)*
 - 61 applications approved during SFY 2022/2023.
 - 55 Certificates of Completion issued during SFY 2022/2023.
 - 519 sites active as of March 31, 2023.
- *Environmental Restoration Program (ERP)*
 - No applications received during SFY 2022/2023.
 - 2 sites completed during SFY 2022/2023.
 - 142 sites completed as of March 31, 2023.
 - 30 sites active as of March 31, 2023.
- *Voluntary Cleanup Program (VCP)*
 - Applications are no longer accepted.
 - 183 sites require site management.
- *Spill Response Program*
 - 10,314 spill incidents reported during SFY 2022/2023.
 - 10,416 spill incidents closed during SFY 2022/2023.
 - 9,437 spill incidents remain open as of March 31, 2023.

- *Bulk Storage Programs*
 - 5,842 inspections conducted during SFY 2022/2023.
 - 11,025 registrations processed during SFY 2022/2023.
 - 43,457 facilities and vessels active as of March 31, 2023.
- *Hazardous Waste Management Program*
 - 4 Corrective Measures implemented during 2022/2023.
 - 275 facilities subject to Corrective Action as of March 31, 2023.
- *Per-and polyfluoroalkyl substances (PFAS) and Emerging Contaminants*
 - 330 Alternate Water Supplies provided in response to PFAS and Emerging Contaminants during 2022/2023.
 - 2,211 Alternate Water Supplies provided in response to PFAS and Emerging Contaminants as of March 31, 2023.
- *Manufactured Gas Plants (MGPs)*
 - 232 sites identified as of March 31, 2023.
 - 229 sites under order or agreement as of March 31, 2023.
 - 129 sites addressed as of March 31, 2023.

DIVISION OF ENVIRONMENTAL REMEDIATION

2022/2023 ANNUAL REPORT

DIVISION SUMMARY

Mission: The mission of the Department of Environmental Conservation's (DEC) Division of Environmental Remediation (DER) is to protect public health and the environment of the State of New York by preventing releases to the environment through the regulation of petroleum and chemical bulk storage facilities, hazardous waste facilities; and responding to, investigating, and remediating releases of contaminants that have occurred.

The DER Annual Report summarizes program accomplishments and statistics for the State Fiscal Year (SFY) 2022/2023 (April 1, 2022 through March 31, 2023) and satisfies various reporting requirements in the New York State Environmental Conservation Law.

The DEC's eBusiness plan encourages the use of the Internet to expedite and increase public access to DEC information. It is also a more cost-effective and sustainable process. Therefore, the DER Annual Report will only be available on the DEC website. See: <https://www.dec.ny.gov/chemical/50491.html>

In 2019, DEC launched DECinfo Locator (Locator). Locator is an interactive map that allows the public to access many DEC documents and public data about the environmental quality sites in New York State, including specific remedial program sites, as well as information about sites for outdoor recreation. The Locator continues to be enhanced. Information and a link to launch Locator can be found at <https://www.dec.ny.gov/pubs/109457.html>

Programs: This annual report provides an overview of the DER programs listed below:

- State Superfund Program (SSF)
- Brownfield Cleanup Program (BCP)
- Environmental Restoration Program (ERP)
- Voluntary Cleanup Program (VCP)
- Spill Response Program
- Bulk Storage Programs
- Hazardous Waste Management Program (Corrective Action)

STATE SUPERFUND PROGRAM

PROGRAM STATISTICS

Number of sites identified as needing evaluation¹: **2,882**

Number of sites cleaned up or determined to not require further action¹: **1,963**

Number of sites being or to be addressed as of 3/31/2023¹: **919**

Number of Class 2 (significant threat) sites as of 3/31/2023: **429**

Number of Class 4 (properly closed/require management) sites as of 3/31/2023: **460**

Number of federal National Priorities List (NPL) sites as of 3/31/2023: **86**

Number of NPL sites delisted as of 3/31/2023: **36**

Cost recovery revenue received during SFY 2022/2023²: **\$16.6 million**

¹ Life to Date as of 3/31/2023. Includes Registry and Non-Registry sites.

² \$407,286.55 of the amount recovered under the State Superfund Program was from CWIA funding.

PROGRAM DESCRIPTION

Statutory Authority: ECL Article 27, Title 13 **Regulation:** 6 NYCRR Subpart 375-2

The goal of the Inactive Hazardous Waste Disposal Site Remedial Program, also known as the State Superfund (SSF) Program, is to identify and characterize suspected inactive hazardous waste disposal sites and to ensure that those sites which pose a significant threat to public health or the environment are properly addressed.

Sites that pose a significant threat are listed on New York's Registry of Inactive Hazardous Waste Disposal Sites as class 2 sites. Those sites being evaluated prior to listing on the Registry, or others which are being cleaned up voluntarily under an order on consent without being listed on the Registry, are identified as "Non-Registry" sites for the purposes of this report.

The SSF Program is an enforcement program. The State is obligated by law to make a good faith effort to identify the parties responsible for the contamination (responsible parties or RPs) at the site and to obtain their agreement to either perform the necessary remedial activities or provide funding to the State to perform the remedial activities. If the State is not successful at doing so, the remedial work is performed by DEC using State

funds, and legal action is initiated by the State against the identified responsible party to recover the State remedial costs.

Sites in New York also include those that qualify for inclusion on the Federal National Priority List (NPL) making them eligible for cleanup under the Federal Superfund Program. The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for administering the Federal Superfund Program. One change to New York sites included on the NPL occurred during SFY 2022/2023. One site, Brillo Landfill (706013), was added to the NPL. No sites were removed from the NPL during SFY 2022/2023.

The 2015/2016 New York State Budget provided a \$100 million yearly appropriation and extends the State Superfund cleanup program for 10 years. The extension will expire after the 2025/2026 State Fiscal Year.

Clean Water Infrastructure Act and the State Superfund Program

DER has received \$97 million from the \$130 million in Clean Water Infrastructure Act (CWIA) Hazardous Waste funding appropriated in 2017. All funding received to date has been utilized under Title 13 (State Superfund). CWIA funding is focused on projects where 1) one of the site's primary contaminants of concern is PFAS or an emerging contaminant; 2) work involves a landfill that was investigated by DEC's Division of Materials Management (DMM) using CWIA funds and referred to DER for remediation; or 3) drinking water is potentially impacted at a site. As of March 31, 2023, DER had expended \$63,704,943 in CWIA funding.

Statutory Authority: ECL Article 27, Title 12

Governor Hochul signed legislation on December 23, 2021, which added an additional 23 chemicals to the list of emerging contaminants that must be addressed under the 2017 CWIA. These new emerging contaminants are not currently listed as hazardous substances, and therefore cannot be addressed using other State Superfund monies. However, drinking water sites affected by these emerging contaminants can be investigated and mitigated using funds appropriated under Title 12. Additional budget allocations were received to address the expanded list of emerging contaminants under Title 12. This funding will be critical for sites contaminated with the new emerging contaminants. A separate Drinking Water Contamination Site Program (DWC) is being implemented as an off shoot of the State Superfund Program that will utilize CWIA funding exclusively. As of March 31, 2023, two sites are targeted for further

investigation under this program, Unilock Corporation (D340037) and Mayville PFAS (D907050).

THE REMEDIAL PROCESS

Since the remedial program for a site takes a number of years to complete, progress is tracked, not only by the number of sites completed, but also by the number of major remedial elements started and completed for a site. The major remedial elements in the SSF Program are site characterization, remedial investigation/feasibility study, remedial design, remedial action, and interim remedial measure. Site management follows for those sites requiring continued operation, maintenance, and monitoring of the engineering and/or institutional controls put in place as part of the site remedy.

Table 1

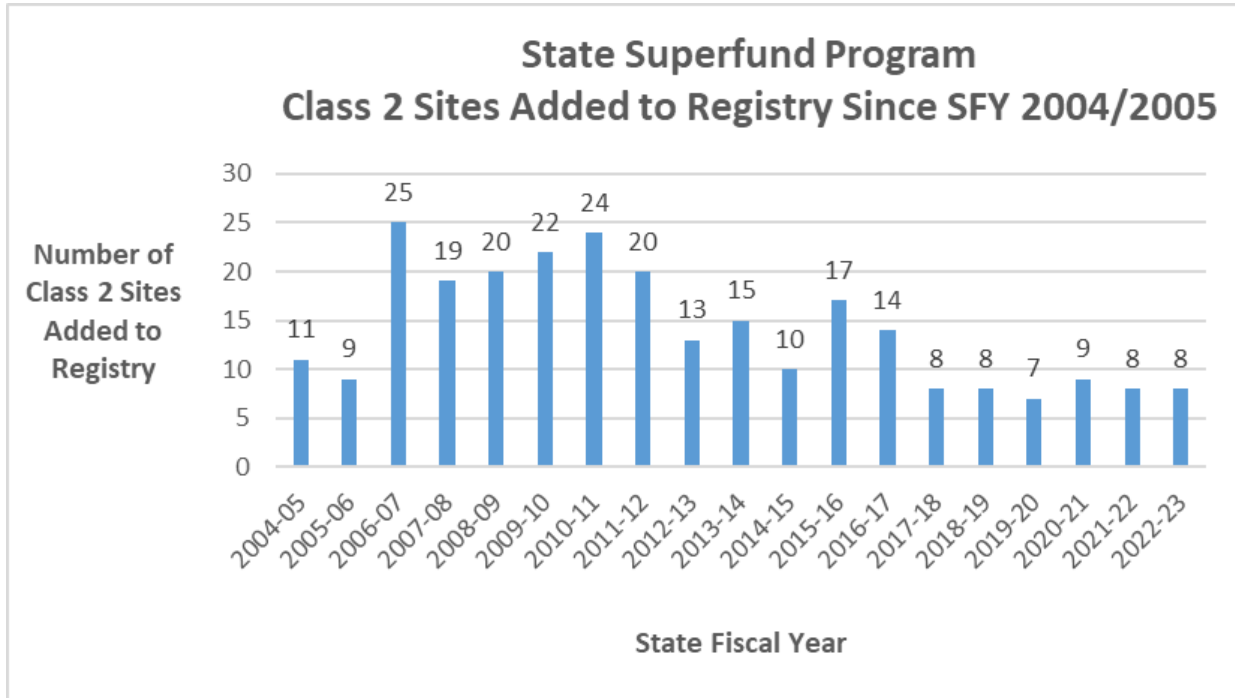
State Superfund Remedial Project Starts/Completions as of March 31, 2023				
Remedial Element	Starts		Completions	
	SFY 2022/23	Life to Date	SFY 2022/23	Life to Date
Site Characterization	35	1,532	19	1,350
Remedial Investigation/Feasibility Study	13	1,741	14	1,454
Remedial Design	14	1,268	19	1,132
Remedial Action	25	1,268	19	1,052
Interim Remedial Measure	9	1,321	9	1,253

Table 2

Classification of Sites Listed on the State Superfund Registry ¹ as of March 31, 2023		
Registry Class	Class Description	Number of Sites
Class 1	Causing or presenting an imminent danger of causing irreversible or irreparable damage to public health or the environment - immediate action required.	0
Class 2	Significant threat to public health or the environment - action required.	429
Class 3	Does not present a significant threat to public health or the environment - action may be deferred.	42
Class 4	Site properly closed - requires continued management.	460
Class 5	Site properly closed, no evidence of present or potential adverse impact - no further action required (classification is no longer used).	0
	Total Number of Sites on the Registry	931
Class C	Inactivated or delisted after clean up (includes both Registry and Non-Registry sites).	404

¹A listing of State Superfund sites can be searched on the DEC website in the [Environmental Site Remediation Database](#).

Chart 1



Class 2 Site Trend: As of 3/31/2023 there are 429 Class 2 sites on the Registry. Class 2 sites require a remedial investigation and feasibility study to determine the nature and extent of contamination and to evaluate potential remedies, which results in a Record of Decision that identifies the remedy selected. Design and implementation of the selected remedy(ies) for a site will follow, resulting in either a reclassification to Class 4, where site management is required, or delisting.

BROWNFIELD CLEANUP PROGRAM

PROGRAM STATISTICS

	SFY 2022/2023	LTD ¹
Number of applications received	72	1,552
Number of applications approved	61	1,279
Number of applications pending as of 3/31/2023	42	
Number of applications ineligible or withdrawn prior to approval	11	231
Number of active sites as of 3/31/2023		519
Number of active sites that currently pose a significant threat as of 3/31/2023		171
Number of Certificates of Completion (COC) issued	55	597
Number of sites with COCs that posed a significant threat		155
Total Acreage associated with COC sites		2,867
Total Acreage associated with active BCP sites		3,545
Cost recovery revenue received during SFY	\$3.5 million	

¹ Life to date as of 3/31/2023

PROGRAM DESCRIPTION

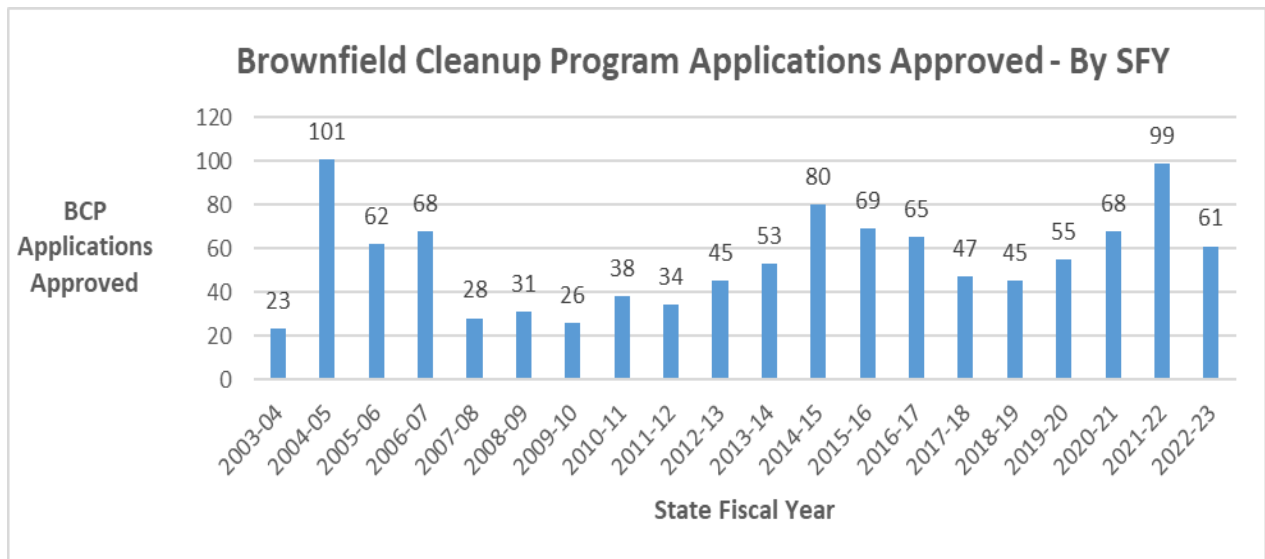
Statutory Authority: ECL Article 27, Title 14 **Regulation:** 6 NYCRR Subpart 375-3

The Brownfield Cleanup Program (BCP) is intended to encourage private-sector cleanups of brownfields and to reduce development pressure on “greenfields” (land not previously developed or contaminated). Once all technical and legal requirements have been met under a Brownfield Cleanup Agreement, DEC issues a Certificate of Completion (COC), which entitles the BCP party to State liability limitation (with standard reservations) and eligibility for various tax credits. The State oversees the cleanup at BCP sites. A BCP party determined to be responsible for site contamination (participant) must evaluate and implement an effective remedy that addresses not only contamination on-site but any contamination that has migrated off-site. BCP parties that are not responsible for the contamination (volunteers) must evaluate and implement an effective remedy to address the contamination on-site as well as prevent further migration of contamination to off-site properties.

Under the BCP, a participant must reimburse the State for oversight costs and any other site-related remedial costs the State incurred prior to the Site becoming a BCP site. Volunteers are not required to pay oversight costs. If a BCP site is determined to be a significant threat and the BCP party is a volunteer, DEC is legally required to pursue potentially responsible parties (PRPs) to address off-site contamination. If no viable PRPs are identified, or if a PRP is identified but no remedial program is initiated, then DEC initiates a State-funded remedial program for the off-site remediation and pursues cost recovery.

In the 2022/2023 State Budget, New York extended and expanded the BCP, which was set to expire in December 2022. The program is now reauthorized for 10 years. The updates improve the program by incentivizing cleanups in disadvantaged communities. Additionally, the program reaffirms New York’s commitment to affordable housing development by expanding the universe of affordable housing programs eligible for BCP property tax credits, providing vital benefits to incentivize the redevelopment of brownfields as much-needed affordable housing. Further, the BCP now encourages the development of certain renewable energy facility sites with new tax credits, to help focus BCP-driven redevelopment and meet the State's ambitious climate goals.

Chart 2



BCP Application Trend: The total number of BCP applications approved is 1,279. The spike in the number of applications in 2004 was the result of parties in the Voluntary Cleanup Program transferring to the BCP during the 2004 transfer period. The high number in 2014/2015 was in part the result of developers’ desire to qualify for tax credits under existing criteria, before the effective date of changes adopted in 2015. The high number in 2021/2022 may have been due to proposed reforms that included application fees and a rising real estate market.

Table 3

BCP Approved Applications and Active Sites ¹ by DEC Regions as of March 31, 2023					
DEC Region	Counties	BCP Sites with Approved Applications	Approved Applications: Percentage of Total	Active Sites ¹	Active Sites ¹ Percentage of Total
1	Nassau, Suffolk	50	4.0%	23	4.4%
2	Kings, Bronx, Queens, New York, Richmond	540	43.3%	247	47.6%
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	177	14.2%	72	13.9%
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	29	2.3%	8	1.5%
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	10	0.8%	11	0.9%
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	16	1.3%	6	1.2%
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	76	6.1%	26	5.0%
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	97	7.8%	41	7.9%
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	251	20.2%	91	17.5%
Totals		1,246	100.0%	519	100.0%

¹ Active sites are sites with approved BCP applications that have not yet received a COC and that have not withdrawn or been terminated from the BCP. A listing of active BCP sites can be searched in the [Environmental Site Remediation Database](#), available on the DEC website.

THE REMEDIAL PROCESS

Since the remedial program for a site can take a number of years to complete, DEC tracks BCP progress by the number of COCs issued as well as the number of major remedial elements started and completed for a site. The major BCP remedial elements are remedial investigation, remedial design, remedial action and interim remedial measure.

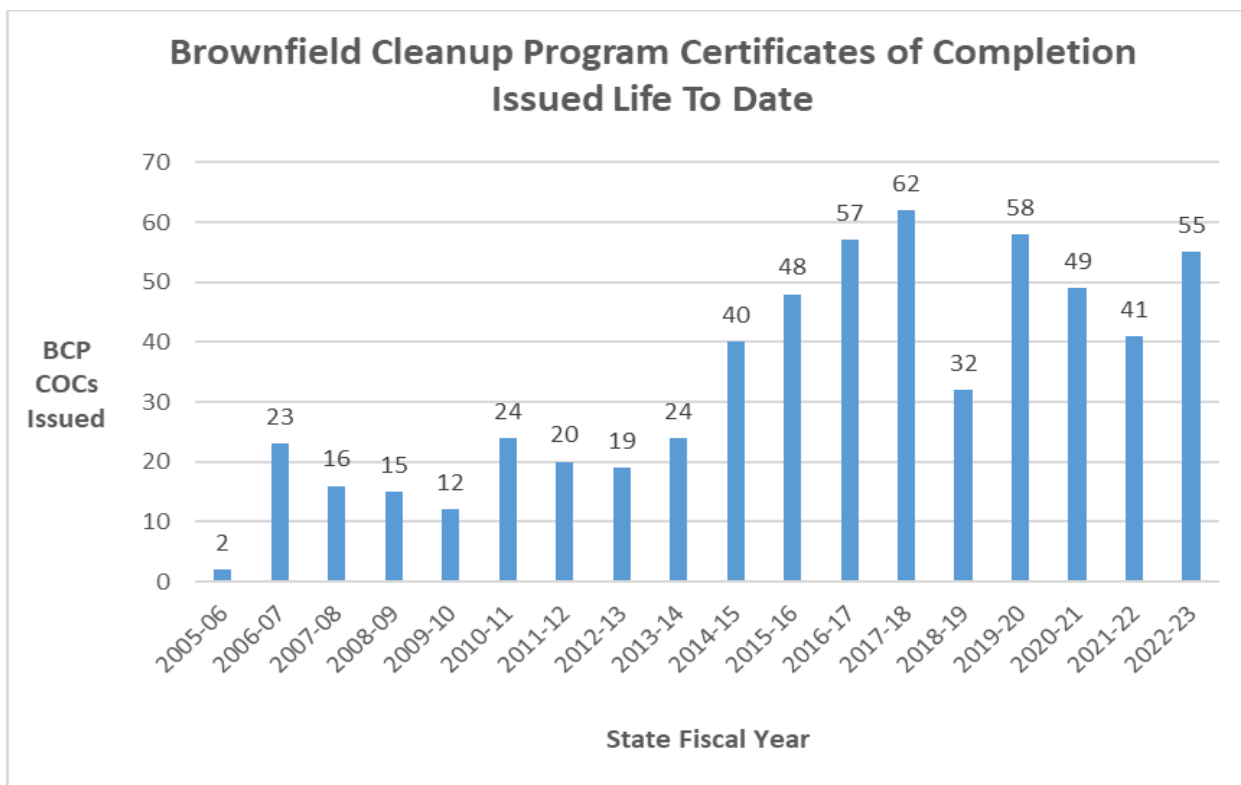
Table 4

BCP Remedial Project Starts/Completions as of March 31, 2023				
Remedial Element	Starts		Completions	
	SFY 2022/23	Life to Date	SFY 2022/23	Life to Date
Remedial Investigation	82	1,133	75	798
Remedial Design	51	573	50	540
Remedial Action	83	724	53	579
Interim Remedial Measure	35	450	28	346

BCP CERTIFICATES OF COMPLETION

In SFY 2022/2023, DEC issued 55 COCs to BCP projects across the state bringing the total for the life of the program up to 597.

Chart 3



BCP COC Trend: A COC is issued to Brownfield Cleanup Agreement (BCA) parties once the State determines that all technical and legal requirements under the BCA have been met. It takes approximately 4.5 years to complete a BCP remedial program. The spike in COCs in 2006-2007 is the result of 2006 being the first year BCP tax credits could be claimed. In SFY 2016/2017 and SFY 2017/2018 new record numbers of COCs were issued (57 and 62, respectively), in part due to the result of developers' desire to qualify for tax credits under existing criteria, before the effective date of changes adopted in 2015. The second highest number of COCs issued in a SFY (58) was recorded in SFY 2019/2020, and the third highest (55) was recorded in SFY 2022/2023, periods when developers' interest in obtaining tax credits remained high in a volatile and uncertain economic climate.

Table 5

BCP Certificates of Completion by Region and Allowable Uses¹ as of March 31, 2023								
DEC Region	Counties	Unrestricted	Residential	Restricted Residential²	Commercial	Industrial	Multiple Uses Allowed	Total
1	Nassau, Suffolk	4	0	3	6	0	0	13
2	Kings, Bronx, Queens, New York, Richmond	66	17	129	26	1	18	257
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	25	0	40	24	0	3	92
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	2	0	4	4	1	1	12
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	0	0	1	2	0	0	3
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	0	0	1	3	1	0	5
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	0	1	9	18	0	2	30
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	0	0	18	15	7	0	40
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	24	6	31	71	8	5	145
Totals		122	24	236	169	18	28	597
Percent by Allowable Use		20.5%	4.0%	39.5%	28.3%	3.0%	4.7%	100%

¹ For more information and criteria for each "allowable use", see [6 NYCRR Subpart 375-6](#).

² Most of these "restricted residential" COCs are "Track 4," which means site-specific information and guidance are used to identify soil cleanup objectives to achieve a restricted-use remedy.

Table 6

BCP Certificates of Completion by Region and Cleanup Track ¹ as of March 31, 2023								
DEC Region	Counties	Track 1	Track 2	Track 3	Track 4	Conditional Track 1	Multiple Tracks	Total
1	Nassau, Suffolk	4	2	0	7	0	0	13
2	Kings, Bronx, Queens, New York, Richmond	52	38	0	126	12	29	257
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	19	2	0	61	7	3	92
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	1	0	0	10	1	0	12
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	0	1	0	2	0	0	3
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	0	0	0	5	0	0	5
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	0	1	0	28	0	1	30
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	0	4	0	36	0	0	40
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	23	29	0	90	1	2	145
Totals		99	77	0	365	21	35	597
Percentage by Cleanup Track		16.6%	12.9%	0.0%	61.1%	3.5 %	5.9%	100%

¹ For the description and criteria for "cleanup tracks" see 6 NYCRR Subdivision 375-3.8(e).

BROWNFIELD CREDIT REPORT

Chapter 390 of the Laws of 2008 requires the New York State Department of Taxation and Finance (NYSDTF) to produce a *Brownfield Credit Report* (Tax Law § 171-r) by January 31 of each year. These reports can be found on the NYSDTF website at https://www.tax.ny.gov/research/stats/statistics/special_interest_reports/brownfield_credit/brownfield_credit_reports_open_data.htm

ENVIRONMENTAL RESTORATION PROGRAM

PROGRAM STATISTICS

	SFY 2022/2023	LTD ¹
Number of applications received	0	441
Number of active sites as of 3/31/2023	30	
Number of sites completed ²	2	142
Total acreage associated with completed sites ²		682
Cost recovery revenue received during SFY	\$0.06 million	

¹ Life to Date as of 3/31/2023.

² Completed sites are Class C sites on the site database.

PROGRAM DESCRIPTION

Statutory Authority: ECL Article 56, Title 5 **Regulation:** 6 NYCRR Subpart 375-4

The Environmental Restoration Program (ERP) was authorized under the 1996 Clean Water/Clean Air Bond Act. The ERP authorized the State to provide eligible municipalities reimbursement, under a State Assistance Contract (SAC), of up to 90 percent of eligible on-site costs and 100 percent of eligible off-site costs, for the investigation and remediation of eligible ERP sites. The investigations and remediation are carried out by the municipality under State oversight. Legislative reforms enacted in 2015 allow the DEC, upon request, to undertake the project on behalf of the municipality. Parties to the ERP SAC are indemnified by the State for all contamination that existed on the site prior to its being accepted into the ERP.

Overall Program Funding: From 2008 to 2015 DEC stopped accepting new ERP applications due to a lack of funding. Applications were once again accepted in 2015 through NY Works Funding and again in 2018, 2019 and 2021 following additional funding provided through the 2015/2016 State budget. Due to the backlog of unremediated sites previously in the program, only those sites which had been the subject of an environmental investigation under the ERP and had a DEC-issued Record of Decision (ROD) were eligible to apply.

NY Works Funding: In 2015, in response to a DEC request for applications, thirteen municipalities across the state received funding to clean up brownfield sites they own for redevelopment under former Governor Cuomo's 2013/2014 NY Works capital

infrastructure program. The \$12 million in funding is being used to complete ERP remediation projects for sites with a DEC-approved Record of Decision (ROD) that had been awaiting the availability of ERP funding. All 13 municipalities signed agreements with DEC in 2015, although one did not move forward. Under these agreements, DEC undertook the remediation work directly with the municipality paying 10 percent of project costs. Nine sites have received a COC. One site was referred to another program; two remain active.

Hazardous Waste Cleanup Account: The 2015/2016 State budget included a provision allowing up to \$10 million a year (of the \$100 million SSF appropriation) to be used to fund a revitalized ERP for the next 10 years. This funding will serve a critical need, including addressing the backlog of sites where the investigation is complete and cleanup has been identified. DEC reinstated the ERP in 2018 and approved four ERP applications for projects that have a DEC-issued ROD for the site. Applications were approved for six sites as a result of the 2019 solicitation, and another six from the 2021 solicitation. The projects will be funded using the Hazardous Waste Cleanup Account. Due to funding issues, no request for applications was issued in SFY 2022/2023.

Approximately \$180 million of the \$200 million authorized under the 1996 Clean Water/Clean Air Bond Act for the ERP has been committed. Access to a remaining \$20 million portion of the \$200 million is tied to a legislative/gubernatorial Memorandum of Understanding (MOU) which must be executed before these funds can be accessed. This MOU will be pursued during the SFY 2023/2024, and along with the new funding identified above, will be critical in addressing the remaining backlog of ERP projects for sites currently in the program with approved cleanup plans (Records of Decision) or which will soon have approved plans that are not being addressed with the New York Works funding.

Remediation of 142 ERP sites has been completed, 30 sites remain active in various stages of remediation and require close-out.

For additional details on recent ERP reforms, program funding and eligibility, see the ERP web page: <https://www.dec.ny.gov/chemical/8444.html>.

THE REMEDIAL PROCESS

Since the remedial program for an ERP site can take a number of years to complete, DEC tracks progress by the number of sites completed, as well as by the number of major remedial elements (projects) started and completed for a site. The major ERP remedial

elements are remedial investigation/feasibility study, remedial design, remedial action, and interim remedial measure.

Table 7

ERP Remedial Project Starts/Completions as of March 31, 2023				
Remedial Element	Starts		Completions	
	SFY 2022/23	Life to Date	SFY 2022/23	Life to Date
Remedial Investigation	0	233	0	208
Remedial Design	1	76	1	73
Remedial Action	4	82	3	75
Interim Remedial Measure	0	98	0	96

Table 8

ERP Active Sites by DEC Region as of March 31, 2023			
DEC Region	Counties	ERP Active Sites ¹	Percentage of Total
1	Nassau, Suffolk	0	0.0%
2	Kings, Bronx, Queens, New York, Richmond	0	0.0%
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	6	20.0%
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	2	6.7%
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	2	6.7%
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	6	20.0%
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	9	30.0%
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	2	6.7%
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	3	10.0%
Totals		30	100%

¹ Active sites are sites with approved ERP applications that are not completed and that have not withdrawn or been terminated from the ERP. Active sites can be searched in the [Environmental Site Remediation Database](#).

VOLUNTARY CLEANUP PROGRAM

PROGRAM STATISTICS

	SFY 2022/2023	LTD ¹
Number of applications received	0	907
Number of applications approved	0	752
Number of applications ineligible, withdrawn, or terminated	0	155 ³
Number of active sites as of 3/31/2023	0	
Number of sites completed ²	0	324
Cost recovery revenue received during SFY	\$0.04 million	

¹ Life to Date as of 3/31/2023.

² Completed sites are Class C sites.

³ Includes transfers to BCP.

PROGRAM DESCRIPTION

Statutory Authority: Non-Statutory - Administrative Program

Regulations: N/A

DEC established an administrative Voluntary Cleanup Program (VCP) in 1994 to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated brownfield sites. The VCP was developed to enable private parties to investigate and remediate brownfield sites using private rather than public funds, under the oversight of DEC. The VCP party must reimburse the State for its oversight costs. If the party is also determined to be an RP, then it must also reimburse the State for any other site-related remedial costs the State incurred before the site became a VCP site.

Applications for the VCP have not been accepted by DEC since the inception of the Brownfield Cleanup Program and DEC terminated the VCP on June 30, 2018. All project requirements, including institutional controls and approval of final engineering reports, were completed by that date. There are no longer any active sites in the VCP. However, 183 sites still or may require post remedial site management and monitoring.

SPILL RESPONSE PROGRAM

PROGRAM STATISTICS

Number of spill incidents reported during SFY 2022/2023:	State funded:	461
	RP ¹ funded:	9,853
	Total spills:	10,314
Number of spill incidents closed during SFY 2022/2023:	State funded:	481
	RP ¹ funded:	9,935
	Total spills closed:	10,416
Number of open spills as of 3/31/2023:	State funded:	1,231
	RP ¹ funded:	8,206
	Total open spills:	9,437

¹Responsible Party (RP)

PROGRAM DESCRIPTION

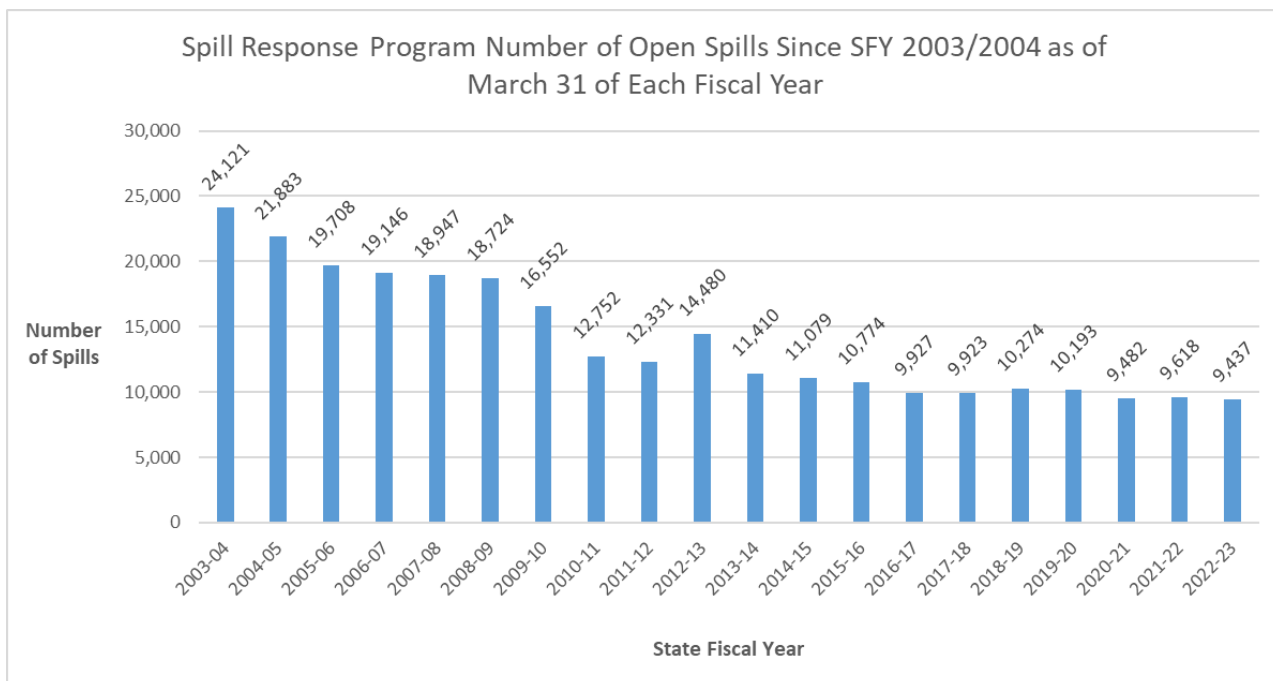
Statutory Authority: Navigation Law, Article 12; ECL, Article 37

Regulations: 6 NYCRR Part 610, Portions of 6 NYCRR 595-597 and 613

The goal of the Spill Response Program is to protect public health and the environment by ensuring a timely and appropriate response to spills and unauthorized discharges of contaminants, and by investigating and remediating such incidents. DEC operates a 24-hour Spill Hotline for receiving notification of incidents. DEC staff promptly respond to significant known and suspected releases reported to the hotline 24 hours a day, 7 days a week.

Federal and State law require the RP to notify government agencies of unauthorized spills and discharges and to respond, contain, clean up, and dispose of any contaminated material. More than 96 percent of incidents are addressed by responsible parties under DEC oversight. When the RP is not known, or unable or unwilling to perform an adequate cleanup, DEC uses State-funded standby contracts to address the incident under DEC direction. If State funds are used to address the incident, the State will identify and take legal action against any RP for reimbursement of State costs. The Spill Response Program is a cooperative effort of DEC, the Office of the State Comptroller, which oversees the New York State Environmental Protection and Spill Compensation Fund, and the New York State Department of Law, which pursues recovery of State costs.

Chart 4



Open Spills Trend: DEC has had an ongoing initiative to reduce the number of open spills. Thousands of open spills have been evaluated to determine the appropriate actions needed to eventually close them out. When DEC undertook the initiative in January 2003, there were 32,948 open spills in New York State. Note that the increase in spills during the 2012/2013 State Fiscal Year was due to 4,875 spills caused by Hurricane Sandy.

Table 9

Spill Incidents Reported and Those Closed During SFY 2022/2023 by DEC Region and County					
DEC Region	Counties	Spill Incidents			
		Reported	Percent of Total Reported	Closed	Percent of Total Closed
1	Nassau, Suffolk	1,814	17.6%	2,015	19.4%
2	Kings, Bronx, Queens, New York, Richmond	1,307	12.7%	1,262	12.1%
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	2,523	24.5%	2,686	25.8%
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	996	9.6%	806	7.7%
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	663	6.4%	506	4.9%
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	516	5.0%	550	5.3%
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	751	7.3%	804	7.7%
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	899	8.7%	973	9.3%
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	845	8.2%	814	7.8%
Total	All Counties	10,314	100%	10,416	100%

BULK STORAGE PROGRAMS

PROGRAM STATISTICS¹

Number of active Petroleum Bulk Storage (PBS) Facilities: **41,929** and Tanks: **102,673**

Number of PBS registrations processed during SFY 2022/2023: **10,407**

Number of active Major Oil Storage Facilities (MOSFs) On-Shore: **146** Vessels: **134** and Tanks: **2,795**

Number of On-Shore MOSF Licenses issued: **45** Vessel Licenses issued during SFY 2022/2023: **126**

Number of active Chemical Bulk Storage (CBS) Facilities: **1,248** and Tanks: **4,238**

Number of CBS Registrations processed during SFY 2022/2023: **447**

¹ As of 3/31/2023 unless otherwise noted.

PROGRAM DESCRIPTION

Statutory Authority: Petroleum Bulk Storage (PBS) Program: ECL Article 17, Title 10; Major Oil Storage Facilities (MOSF) Program: Navigation Law Article 12, ECL Article 17, Title 10; Chemical Bulk Storage (CBS) Program: ECL Articles 37 and 40; Liquefied Natural Gas (LNG): ECL Article 23, Title 17.

Regulations: PBS Program: 6 NYCRR Parts 612, 613, 614; MOSF Program: 6 NYCRR Parts 610, 613, 614, 17 NYCRR Parts 30, 31, and 32; CBS Program: 6 NYCRR Parts 595-599; Liquefied Natural Gas Program: 6 NYCRR Part 570; Federal Underground Storage Tank (UST) Program: 40 CFR Part 280.

The goal of the Bulk Storage Programs is to prevent unauthorized discharges from petroleum, chemical and LNG bulk storage. Registration (PBS and CBS), licensing (MOSF), permitting (LNG), tank testing and closures, and inspections are some of the mandates that DEC performs under these programs. The Bulk Storage Programs include the Petroleum Bulk Storage (PBS) Program, Major Oil Storage Facility (MOSF) Program, Chemical Bulk Storage (CBS) Program and Liquefied Natural Gas (LNG) Program.

Petroleum Bulk Storage Program: Generally, the PBS Program applies to all tanks at any facility with either an underground storage tank greater than 110 gallons or a cumulative storage capacity of more than 1,100 gallons but less than 400,000 gallons. Exclusions are available for certain tanks used to store heating oil for on-premises consumption and for certain non-commercial motor fuel tanks at a farm or residence. Tanks must be registered and registrations must be renewed every five years. A

registration fee is required at the time of registration. Five counties (Nassau, Suffolk, Westchester, Rockland, and Cortland) had been delegated authority to administer the PBS Program. Rockland County and the Nassau County Fire Commission terminated their delegation agreements in SFY 2017/2018 and Cortland County terminated their delegation agreement in SFY 2019/2020. DEC assumed their prior responsibilities. The Nassau County Health Department continues to participate as a delegated entity.

Major Oil Storage Facilities Program: The MOSF Program applies to all tanks at petroleum storage facilities and vessels with a cumulative storage capacity of 400,000 gallons or more. Vessels are regulated if they receive transfers of petroleum from another vessel. Generally, MOSF facilities are subject to license fees and surcharges of 12.25 cents per barrel when the petroleum is first received within the State. Licenses are renewed every one to five years depending on the conditions at the facility.

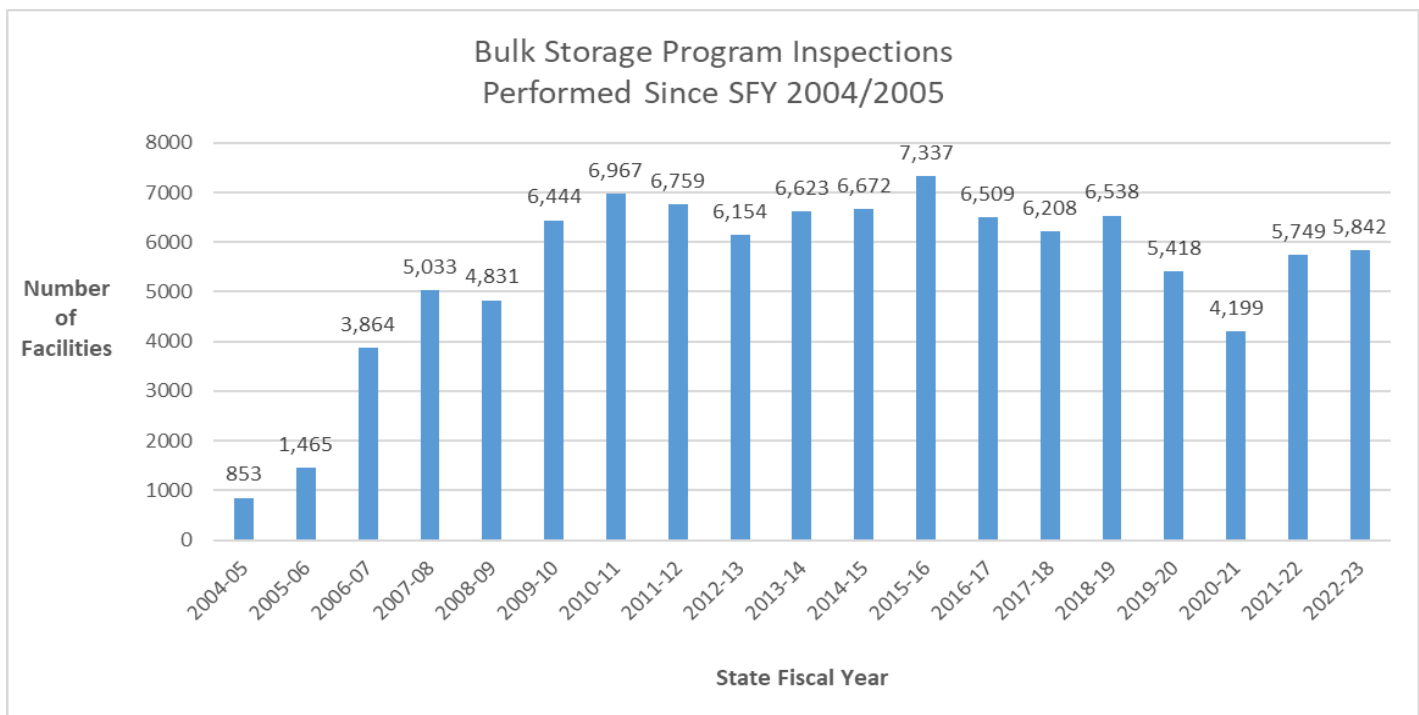
Chemical Bulk Storage Program: The CBS Program applies to any aboveground tank with a capacity of 185 gallons or more of a hazardous substance, all underground tanks storing a hazardous substance regardless of capacity, and non-stationary tanks used to store 1,000 kilograms (2,200 pounds) or more of a hazardous substance for 90 consecutive days or more. Stationary tanks must be registered and registrations must be renewed every two years. A fee is required at registration.

Federal Underground Storage Tank Program: The Federal UST Program applies to any underground tank within the PBS, CBS, and MOSF Programs with the exception of tanks used to store heating oil for on-premises consumption and for certain non-commercial motor fuel tanks at a farm or residence.

Table 10

Breakdown of Inspections by Bulk Storage Program Since SFY 2004/2005				
SFY	PBS	CBS	MOSF	Total
2004/05	705	91	57	853
2005/06	1,448	13	4	1,465
2006/07	3,706	66	92	3,864
2007/08	4,818	121	94	5,033
2008/09	4,710	82	39	4,831
2009/10	6,263	101	80	6,444
2010/11	6,696	199	72	6,967
2011/12	6,487	203	69	6,759
2012/13	5,803	267	84	6,154
2013/14	6,246	297	80	6,623
2014/15	6,313	279	80	6,672
2015/16	7,047	226	64	7,337
2016/17	6,174	276	59	6,509
2017/18	5,861	278	69	6,208
2018/19	6,231	248	59	6,538
2019/20	5,067	278	73	5,418
2020/21	3,926	220	53	4,199
2021/22	5,473	225	51	5,749
2022/23	5,540	246	56	5,842

Chart 5



Inspection Trend: Since SFY 2006/2007 there has been an initiative to inspect federally regulated PBS facilities every three years in order to be in compliance with the federal Energy Policy Act of 2005, which is a requirement to continue to receive federal UST grant funding from USEPA.

HAZARDOUS WASTE MANAGEMENT PROGRAM

PROGRAM STATISTICS

Corrective Action Accomplishments

Number of Hazardous Waste Facilities Subject to Corrective Action as of 3/31/2023: **275**

USEPA Environmental Indicators completed in SFY 2022/2023

CA 550 Corrective Measure Implementation - Construction Complete	4
CA 725 Human Exposure Controlled	1
CA 750 Groundwater Releases Controlled	0

PROGRAM DESCRIPTION

Statutory Authority: ECL Article 3, Title 3; Article 27, Titles 1, 7, 9 and 11; Article 70; Article 71, Titles 25 and 35

Regulations: 6 NYCRR Parts 370 - 374 and 376

Under the Hazardous Waste Management Program, the State regulates all aspects of hazardous waste management in the State, including generators, and treatment, storage, and disposal (TSD) facilities. DER's Hazardous Waste Management Program implements corrective action at sites regulated under the federal Resource Conservation and Recovery Act Subtitle C (RCRA-C) Program, which is delegated to New York State by EPA. The delegation agreement outlines the State's responsibilities. Annual funding is provided by EPA in the form of a grant which is based on an annual work plan detailing the commitments DEC will achieve. DEC's DMM oversees all other aspects of the Hazardous Waste Management Program, including conducting inspections and enforcement at all categories of hazardous waste facilities and handlers, and tracking hazardous waste from its point of generation through final disposition. These are done using the facility permit process, the hazardous waste manifest system, annual reports submitted by generators and hazardous waste facilities, and through the Waste Transporter Permit Program. DMM also administers regulatory hazardous waste fees, special assessment taxes and the Used Oil Regulatory Program. More information on DMM's programs can be found on [DEC's website](#).

THE REMEDIAL PROCESS

Corrective action activities under the RCRA-C Program are similar to the activities in the other remedial programs (i.e., starts and completions of remedial elements); however, the accomplishments are tracked differently by EPA. For the purposes of this report, DER has included key environmental indicators used by EPA in the RCRA-C Program to track accomplishments. DER provides an accounting of progress toward key environmental indicators (i.e., construction complete, human exposures controlled, and groundwater releases controlled) to DMM annually. This information is reported to EPA pursuant to RCRA grant requirements to track accomplishments.

OTHER MAJOR INITIATIVES

PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS) AND EMERGING CONTAMINANTS

Protecting New York's drinking water and ensuring that future generations of New Yorkers have access to clean water is one of the State's greatest challenges. Like many other states, New York is dealing with the impacts of emerging contaminants (ECs), PFAS and 1,4-dioxane affecting groundwater, public water supply systems, and private drinking wells in many communities.

To assess the presence of these ECs and other contaminants in groundwater and to evaluate the types, amounts and likely areas of concern across the state, DEC initiated an Emerging Contaminant Sampling Initiative during SFY 2018/2019 that called for the sampling of groundwater for ECs at all active sites in DER's remedial programs. The targeted sites include all Class 2 and 4 SSF sites, all active BCP sites, and certain RCRA sites in Corrective Action. Groundwater EC sampling was completed at more than 1,200 remedial sites (SSF, BCP and RCRA) as of March 31, 2023. More than 50 percent of sites require additional action to address ECs. If data collected at a site indicates that EC levels exceed DEC-established screening levels, additional steps are taken to identify apparent sources and potential receptors proximate to the site. Follow-up actions depend on the site's overall remedial phase and can include defining the nature and extent of the plume or source, incorporating EC sampling into the site management program, and initiating off-site drinking water supply well sampling. The New York State Department of Health (DOH) may also require provision of an alternate water supply (AWS). Data collected through this initiative is also used to identify potential receptors (especially drinking water) and to formulate priorities, policies, and procedures for addressing ECs and mitigating potential public health and environmental impacts.

Since March 2019, DEC has required the sampling of all environmental media for ECs at new sites entering any DER program. As a result, PFAS and 1,4-dioxane have been incorporated into the investigation of soil, groundwater, surface water, sediment and, where applicable, biota. If an emerging contaminant is identified as a contaminant of concern for a site, that compound is assessed as part of the remedy selection process and included as part of the monitoring program upon entering site management. In January 2020, DEC issued guidelines on sampling and analysis of PFAS under the Part 375 remedial program. Subsequent revisions to the document include procedures for assessing water and soil data at remedial sites along with guidance values for two PFAS compounds: perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).

These guidance values are used in determining whether PFOA and PFOS are contaminants of concern for a site and for determining remedial action objectives and cleanup requirements.

As part of the August 2020 DOH regulatory update that included the maximum contaminant levels (MCLs) for PFOA, PFOS, and 1,4-dioxane, public water suppliers were required to perform an initial test for these compounds within specified time frames. When the MCL is exceeded, DOH works with the water purveyor to address the exposures, as needed. DOH then assesses private wells in the vicinity and, when appropriate, either DOH or the local DOH initiates sampling. Based upon the results of the private well sampling, DOH may request that DEC provide an AWS. During SFY 2022/2023, DEC responded with an AWS at 330 locations to address emerging contaminants and continues to provide AWSs as requested by DOH, bring the total to 2,211 as of March 31, 2023. In most cases, the AWS continues for the long term in the form of bottled water or installation and ongoing maintenance of point of entry treatment (POET) systems. In certain cases, smaller, point of use treatment systems (POUT), which attach to faucets and fixtures where water is dispensed, are provided.

Table 12

Alternate Water Supplies Provided in Response to Emerging Contaminants by Contaminant, AWS Type, and Time Frame as of March 31, 2023			
Contaminant	AWS Type	SFY 2022/23	Life to Date
PFAS	POETS	216	1,858
	Bottled Water	108	187
	POETS and Bottled Water	1	1
	POUT	0	22
	Connect to Public Water	2	41
	Other ¹	0	4
1, 4 Dioxane	POETS	0	2
	Bottled Water	3	94
	Connect to Public Water	0	4
	Total	330	2,211

¹Well owners can refuse further action.

Table 13

Alternate Water Supplies Provided in Response to Emerging Contaminants by Region and AWS Type as of March 31, 2023									
DEC Region	Counties	POETS	Bottled Water	POETS and Bottled Water	POUT	Connect to Public Water	Other ¹	Total	Percent by Region
1	Nassau, Suffolk	80	101	1	0	25	3	210	9.5%
2	Kings, Bronx, Queens, New York, Richmond	0	0	0	0	0	0	0	0.0%
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	512	157	0	3	17	1	690	31.3%
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	1,104	0	0	19	0	0	1,123	50.8%
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	159	21	0	0	0	0	180	8.2%
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	2	0	0	0	0	0	2	0.1%
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	3	2	0	0	1	0	6	0.1%
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	0	0	0	0	0	0	0	0.0%
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	0	0	0	0	0	0	0	0.0%
Totals		1,860	281	1	22	43	4	2,211	100%
Percent by AWS Type		84.1%	12.7%	0.1%	1.0%	2.0%	0.1%	100%	

¹ Well owners can refuse further action.

MANUFACTURED GAS PLANT

A manufactured gas plant (MGP) is a former industrial facility at which gas was historically produced from coal, oil, and other feedstocks. The gas was manufactured, stored, and then piped to the surrounding area, where it was used for lighting, cooking, and heating homes and businesses. Most of these plants have been closed for 50-100 years. The sites where MGPs were located, however, often have abandoned underground structures and pipes containing coal tar or other MGP residuals. Some of these waste materials (especially coal tars) may have migrated from existing or former structures and may be present in the subsurface. Impacts to surface water bodies and their sediments are also common since MGPs were typically located near a source of water. DEC has one of the most comprehensive MGP site investigation and remediation initiatives in the country. Since problems associated with former MGP sites were identified, DEC has been working with utilities on a state-wide basis to identify and address MGP sites. Statistics for MGP sites addressed under the State's various remedial programs are incorporated in the statistics for each cleanup program in this report.

Table 14

Status of Manufactured Gas Plant Sites Currently Identified by DEC as of March 31, 2023				
Utility	MGP Sites Identified	Sites Under Order/Agreement	Sites Awaiting Order/Agreement	Sites Addressed²
Central Hudson Gas & Electric	7	7	0	6
Con Edison	51	51	0	32
National Fuel Gas	8	7	1	5
National Grid (KeySpan)¹	55	54	1	28
National Grid (NiMo)	55	54	1	27
NYS Electric & Gas	38	38	0	21
Orange & Rockland	7	7	0	3
Rochester Gas & Electric	11	11	0	7
Totals	232	229	3	129

¹ Former Long Island Lighting Company and Brooklyn Union Gas MGP Sites (does not include non-MGP Sites).

² Addressed includes sites with completed cleanup programs or determined to require no further action.

WEB RESOURCES

- Brownfield Cleanup Program Certificates of Completion: <https://www.dec.ny.gov/chemical/30360.html>
- Brownfield Cleanup Program: <https://www.dec.ny.gov/chemical/8450.html>
- Brownfields in New York State: <https://www.dec.ny.gov/chemical/brownfields.html>
- Chemical and Petroleum Bulk Storage Information: <https://www.dec.ny.gov/chemical/287.html>
- DEC Division of Environmental Remediation Guidance and Policy Documents: <https://www.dec.ny.gov/regulations/2393.html>
- DEC Brownfield and State Superfund Programs: <https://www.dec.ny.gov/chemical/84286.html>
- Environmental Remediation Database Search. Search for spill incidents, bulk storage sites and sites that have been or are being cleaned up under one of the DEC's remedial programs: <https://www.dec.ny.gov/chemical/8437.html>
- DECinfo Locator. An interactive map that lets you access many DEC documents and public data about specific sites: <https://www.dec.ny.gov/pubs/109457.html>
- Environmental Remediation Programs Regulations - 6 NYCRR Part 375: <https://www.dec.ny.gov/chemical/34189.html>
- Environmental Restoration Program: <https://www.dec.ny.gov/chemical/8444.html>
- Hazardous Waste Management: <https://www.dec.ny.gov/chemical/8486.html>
- State Superfund Program: <https://www.dec.ny.gov/chemical/8439.html>
- Voluntary Cleanup Program: <https://www.dec.ny.gov/chemical/8442.html>