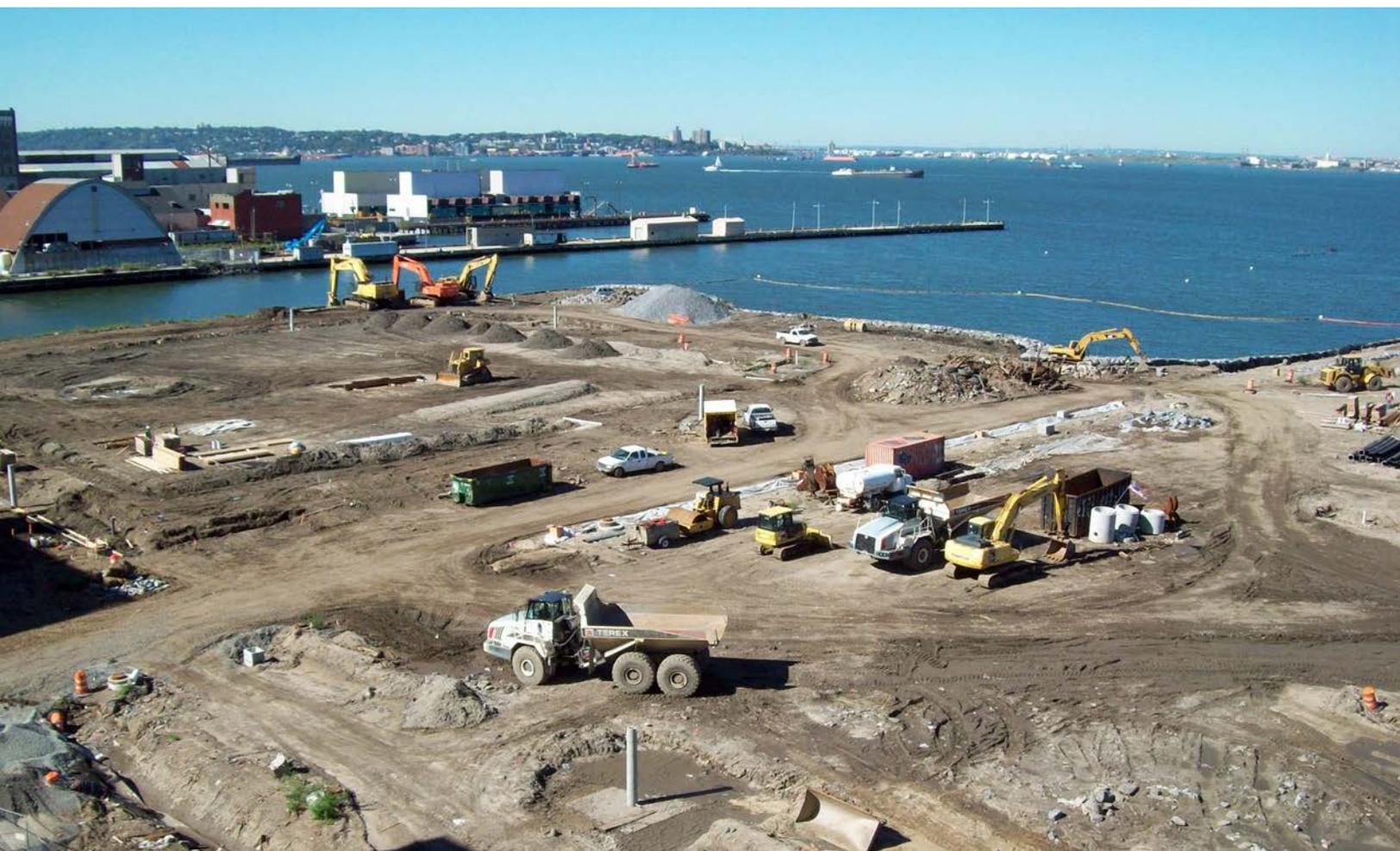




Department of  
Environmental  
Conservation

# DIVISION OF ENVIRONMENTAL REMEDIATION

## 2013/2014 ANNUAL REPORT



[www.dec.ny.gov](http://www.dec.ny.gov)

Andrew M. Cuomo, Governor

Joe Martens, Commissioner

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*Cover Photograph – Environmental Cleanup Activities at the Bush Terminal Environmental Restoration Program Site in Brooklyn, NY.*

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## DIRECTOR'S MESSAGE

*The Division of Environmental Remediation (DER) draws its energy and success from its dedicated staff and the relationships they maintain with the communities we serve, as well as our partners in business and environmental protection. I am pleased to present DER's 2013/2014 Annual Report that highlights continued successes and challenges in our efforts to clean up and revitalize contaminated properties and to effectively manage petroleum and chemicals.*

*Under DER's oversight, for example, almost 800 remedial actions and more than 1,000 expedited cleanups have been completed at State Superfund sites during the life of the program. Of note, remediation of Onondaga Lake continued in full force, with 1.2 million cubic yards of contaminated lake sediments having been removed, dewatered and disposed by April 2014. The remaining dredging was completed in 2014. Within New York's Brownfield Cleanup Program (BCP), 155 sites have been issued certificates of completion as of March 31, 2014, green-lighting the sites for redevelopment. More than 300 other sites currently are active in the BCP. In January 2015 the Executive budget proposed legislation, to reform the BCP. A reform bill which notably extended the tax credit for ten years as well as providing one billion dollars to refinance the State Superfund for ten more years, including funding for the Environmental Restoration Program was enacted.*

*The production of crude oil from the Bakken oil fields in North Dakota has increased substantially, along with significant public concern about the safety of shipping the crude oil through states including New York. In January 2014, Governor Cuomo issued an Executive Order directing several State agencies, including the Department of Environmental Conservation, to do a top-to-bottom review of safety procedures and emergency response preparedness related to the shipment of crude oil through New York. DER staff worked with the Division of Homeland Security and Emergency Services, the State Department of Transportation, and others to assess and strengthen the State's capacity to prevent and respond to accidents involving the transport of crude oil and other petroleum products by rail, ship, and barge. The agencies were tasked to prepare a report to Governor Cuomo in April 2014, setting forth recommendations for state government, federal government and industry to take to reduce risks and increase public safety in the transport of crude oil. DER is contributing relative to spill preparedness and response.*

*The Executive budget for SFY 2015-16 also increased the Oil Spill fund from \$25 million to \$40 million dollars and increased the fees on oil shipped through the State. It also included provisions to strengthen preparedness for potential crude oil spills.*

*DER also undertook a thorough review of its Resource Conservation and Recovery Act permitting process to identify and achieve efficiencies in the procedures. This assessment resulted in a new, streamlined approach which has since been piloted for permits at a number of facilities. Stakeholder feedback has been strongly supportive and staff plan additional outreach in the coming year to roll out this modernized approach.*

*With the input and support of all interested citizens and stakeholders, DER will continue to successfully meet the challenges and opportunities posed in revitalizing contaminated sites.*

**Robert W. Schick, P.E., Director**  
**Division of Environmental Remediation**

# DIVISION OF ENVIRONMENTAL REMEDIATION

## 2013/2014 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 bulk storage, hazardous waste, and radiation 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) 2013/2014 (April 1, 2013 through March 31, 2014) 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: <http://www.dec.ny.gov/about/53234.html>

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

- State Superfund Program
- Brownfield Cleanup Program
- Environmental Restoration Program
- Voluntary Cleanup Program
- Spill Response Program
- Bulk Storage Programs
- Hazardous Waste Management Program
- Radiation Program

## STATE SUPERFUND PROGRAM

### PROGRAM STATISTICS

Number of sites identified as needing evaluation: <sup>1</sup>	<b>2,484</b>
Number of sites cleaned up or determined to not require further action: <sup>2</sup>	<b>1,691</b>
Number of sites being or to be addressed as of 3/31/2014: <sup>2</sup>	<b>793</b>
Number of Class 2 (significant threat) sites as of 3/31/2014:	<b>465</b>
Number of Class 4 (properly closed/require management) sites as of 3/31/2014:	<b>368</b>
Number of federal National Priorities List (NPL) sites as of 3/31/2014:	<b>85</b>
Number of NPL sites delisted as of 3/31/2014:	<b>30</b>
Cost recovery revenue received during SFY 2013/2014:	<b>\$21.2 million</b>

<sup>1</sup> Life to Date as of 3/31/2014. Includes Registry and Non-Registry sites.

<sup>2</sup> Includes Registry and Non-Registry sites.

### 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 (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 (Registry) 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 (the responsible party) 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 (RP) to recover the State remedial costs.

Sites on New York’s Registry 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 United States Environmental Protection Agency (USEPA) is the federal agency responsible for administering the Federal Superfund Program. No sites were added to the NPL in SFY 2013/2014. Two sites were deleted from the NPL during SFY 2013/2014 (Site Numbers 932021 - Hooker Hyde Park Landfill and 633014 - Ludlow’s Sand and Gravel).

The ten-year authorization to bond new funds under the 2003 Superfund/Brownfield law expired on March 31, 2013. Governor Cuomo’s 2014/2015 Executive Budget proposal included an additional \$100 million for the SSF Program as part of a large brownfield reform proposal but was not adopted by the legislature. DEC continues to use funds appropriated from previous years to maintain the program.

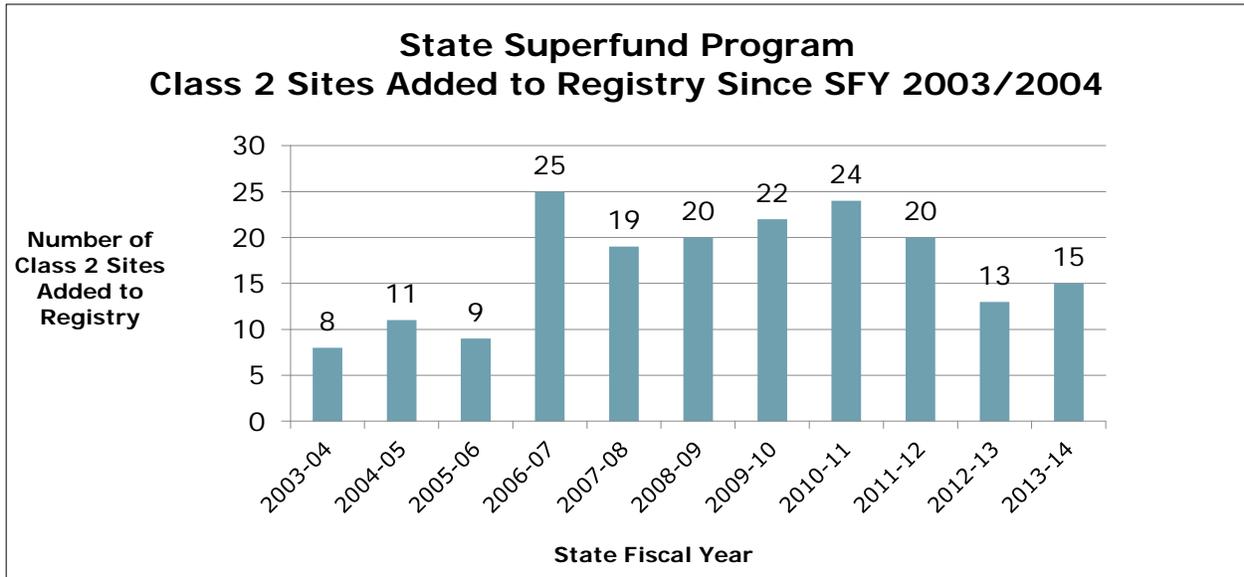
**THE REMEDIAL PROCESS**

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 (projects) 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 engineering controls and/or institutional controls to limit site use.

**Table 1**

<b>State Superfund Remedial Project Starts/Completions as of March 31, 2014</b>				
<b>Remedial Element</b>	<b>Starts</b>		<b>Completions</b>	
	<b>SFY 2013/14</b>	<b>Life to Date</b>	<b>SFY 2013/14</b>	<b>Life to Date</b>
<b>Site Characterization</b>	33	1,270	25	1,162
<b>Remedial Investigation/Feasibility Study</b>	27	1,467	37	1,209
<b>Remedial Design</b>	34	997	33	871
<b>Remedial Action</b>	34	950	25	788
<b>Interim Remedial Measure</b>	29	1,126	26	1,053

Chart 1



**Class 2 Site Trend:** As of 3/31/2014 there are 465 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.

Table 2

Classification of Sites Listed on the State Superfund Registry <sup>1</sup> as of March 31, 2014		
Registry Class	Class Description	Number of Sites
<b>Class 1</b>	Causing or presenting an imminent danger of causing irreversible or irreparable damage to public health or the environment - immediate action required.	0
<b>Class 2</b>	Significant threat to public health or the environment - action required.	465
<b>Class 3</b>	Does not present a significant threat to public health or the environment - action may be deferred.	53
<b>Class 4</b>	Site properly closed - requires continued management.	368
<b>Class 5</b>	Site properly closed, no evidence of present or potential adverse impact - no further action required.	2
<b>Total Number of Sites on the Registry</b>		<b>888</b>

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

## KEY SITES

**Onondaga Lake Remediation** (Site Number: 734030): Remedial dredging and capping has been ongoing since July 2012, with the exception of winter shutdowns. As of early April 2014, approximately 1,200,000 cubic yards of contaminated lake sediments had been removed, dewatered and disposed in the Sediment Consolidation Area. In consideration of the volume of material dredged in 2013 (approximately 940,000 cubic yards) and system modifications made by Honeywell over the winter, the remaining 800,000 cubic yards of dredging was expected to be completed in 2014. Capping of dredged areas is scheduled for completion in 2016.

In addition to advancing the lake remedy, work in 2013 and early 2014 continued on upland source controls, including the removal of contaminated sediments (and adjacent floodplain soils) from Geddes Brook, Ninemile Creek, and Harbor Brook, which are tributaries to Onondaga Lake. Work also continued on the groundwater collection systems to prevent contaminated groundwater, migrating from the upland sites, from reaching the lake or its tributaries. Significant habitat restoration was included in this work.

**Hudson River PCB Sediment Site Remediation** (Site Number: 546031): The United States Environmental Protection Agency (USEPA) is the lead on this NPL site. 2013 marked the third year of Phase 2 remedial work and the fourth year for overall dredging operations in the River. At the close of the 2013 dredging season, approximately 1,900,000 cubic yards of contaminated sediments or about two thirds of the total project's estimated 2.6 million cubic yards of sediments targeted for removal had been dredged. EPA currently estimates that the dredging work will likely be completed by the end of the 2015 dredging season, with one additional year of habitat reconstruction work to follow in 2016.

**Grasse River Site** (ALCOA portion of St. Lawrence/Grasse River Site, Number 645015): In September 2013, USEPA issued a Record of Decision (ROD) for this CERCLA-enforced site located in Massena, St. Lawrence County. The selected remedy includes targeted environmental dredging to remove PCBs in the shallow near-shore sediments over the six miles between the ALCOA plant in Massena and the confluence with the St. Lawrence River. PCBs present in deeper, main channel sediments will be addressed by installation of a cap system designed to resist the effects of ice scour during the spring thaw. The remedy also includes appropriate habitat reconstruction work and long-term studies to monitor remedy effectiveness. USEPA, the State, and the St. Regis Mohawk Tribe are working with ALCOA to develop the design for work, which is expected to go forward in approximately three to four years.

## BROWNFIELD CLEANUP PROGRAM

### PROGRAM STATISTICS

	SFY 2013/14	LTD <sup>1</sup>
Number of applications received	<b>77</b>	<b>609</b>
Number of applications approved	<b>53</b>	<b>511</b>
Number of applications pending as of 3/31/2014	<b>32</b>	
Number of applications ineligible or withdrawn prior to approval	<b>10</b>	<b>150</b>
Number of active sites as of 3/31/2014	<b>312</b>	
Number of active sites that currently pose a significant threat as of 3/31/2014	<b>74</b>	
Number of Certificates of Completion (COC) issued	<b>24</b>	<b>155</b>
Number of sites with COCs issued that posed a significant threat		<b>58</b>
Total Acreage associated with COC sites		<b>1,051</b>
Total Acreage associated with active BCP sites		<b>2,216</b>
Cost recovery revenue received during SFY	<b>\$2.8 million</b>	

<sup>1</sup> Life to date as of 3/31/2014

### 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). A brownfield site is any real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant. A contaminant may be hazardous waste and/or petroleum. Investigations and remediations are carried out under State oversight. Once all technical and legal requirements have been met under a Brownfield Cleanup Agreement, DEC issues a COC, which entitles the BCP party to State liability limitation (with standard reservations) and various tax credits. The State is reimbursed for costs it incurs in overseeing the cleanup. If the BCP party is determined to be

a responsible party (participant) under the BCP, then the party must also reimburse the State for any other site-related remedial costs the State incurred prior to the site becoming a BCP site. The BCP tax credits are currently scheduled to sunset by December 31, 2015. With this deadline in sight, the number of applications received and approved has jumped sharply over levels seen in the past seven years.

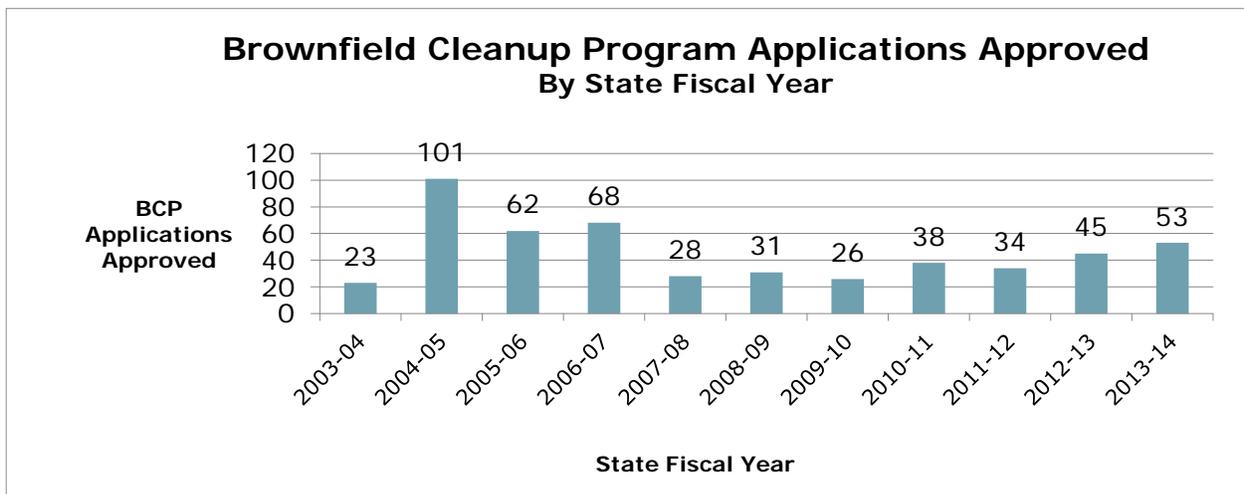
## THE REMEDIAL PROCESS

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

Table 3

BCP Remedial Project Starts/Completions as of March 31, 2014				
Remedial Element	Starts		Completions	
	SFY 2013/14	Life to Date	SFY 2013/14	Life to Date
Remedial Investigation	62	406	40	215
Remedial Design	25	191	23	168
Remedial Action	22	179	22	138
Interim Remedial Measure	19	149	18	113

Chart 2



**BCP Application Trend:** The total number of BCP applications approved is 511. 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.

Table 4

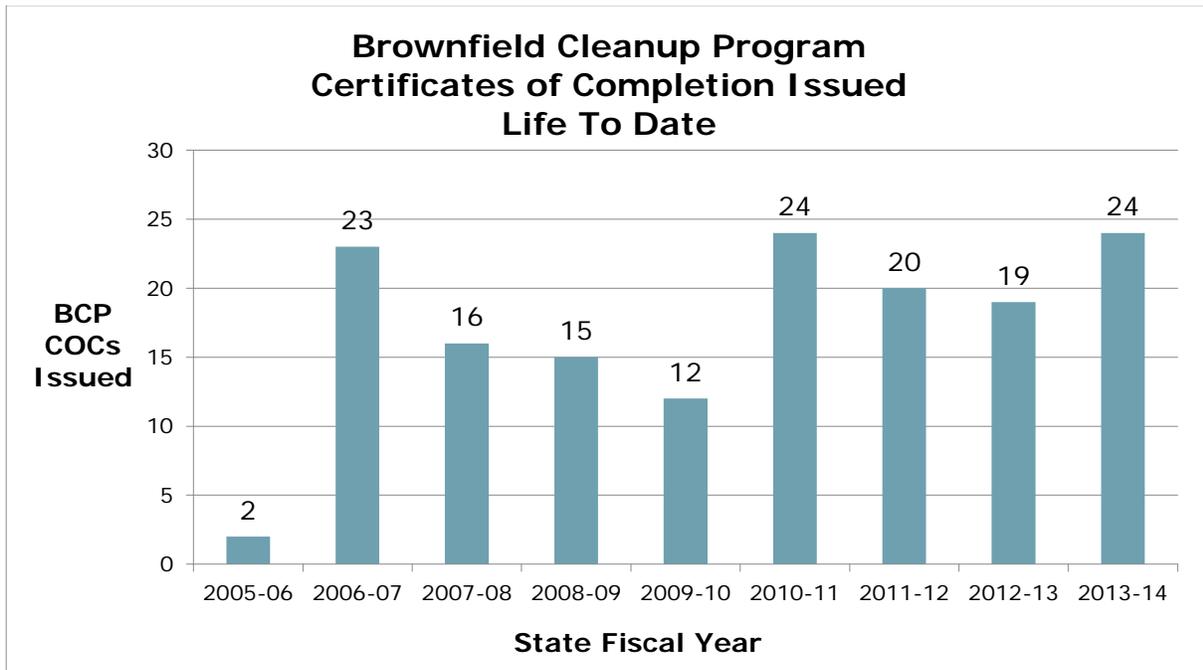
<b>BCP Approved Applications and Active Sites<sup>1</sup> by DEC Regions as of March 31, 2014</b>					
<b>DEC Region</b>	<b>Counties</b>	<b>BCP Approved Applications</b>	<b>Approved Applications: Percentage of Total</b>	<b>Active Sites<sup>1</sup></b>	<b>Active Sites<sup>1</sup> Percentage of Total</b>
<b>1</b>	Nassau, Suffolk	26	5.1%	12	<b>3.8%</b>
<b>2</b>	Kings, Bronx, Queens, New York, Richmond	161	31.5%	91	<b>29.2%</b>
<b>3</b>	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	82	16.1%	59	<b>18.9%</b>
<b>4</b>	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	16	3.1%	10	<b>3.2%</b>
<b>5</b>	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	7	1.4%	4	<b>1.3%</b>
<b>6</b>	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	10	2.0%	8	<b>2.6%</b>
<b>7</b>	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	40	7.8%	19	<b>6.0%</b>
<b>8</b>	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	59	11.5%	28	<b>9.0%</b>
<b>9</b>	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	110	21.5%	81	<b>26.0%</b>
<b>Totals</b>		<b>511</b>	<b>100%</b>	<b>312</b>	<b>100%</b>

<sup>1</sup>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.

## BCP CERTIFICATES OF COMPLETION

An annual information session for BCP parties has been held at the beginning of each SFY since 2009. This ensures that the parties that want a COC for a site issued prior to the end of the calendar year understand the requirements and the time frame for their completion. The session provides an overview of the technical and legal requirements of the COC process, and a recommended schedule for the completion of those requirements in order to receive a COC by the end of the calendar year. Also in SFY 2013/2014, new streamlined environmental easement procedures were discussed at the annual information session; and, a form amendment to the BCA was unveiled. These improvements should expedite such common amendments as adding new parties to an agreement or changing the names of existing parties. Monthly calendar call meetings for all parties seeking a COC continue to be held, starting in July, with attendance required by all parties not in compliance with the COC submission schedule for their site.

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 3 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. The increases which began in 2010-2011 can be attributed in part to the COC annual information session initiative described above. In SFY 2013/2014, the previous high of 24 COCs was equaled. The projections for SFY 2014/2015 indicate that a new record number of COCs will be issued.

Table 5

BCP Certificates of Completion By Region and Allowable Uses <sup>1</sup> as of March 31, 2014							
DEC Region	Counties	Unrestricted	Residential	Restricted Residential <sup>2</sup>	Commercial	Industrial	Total
1	Nassau, Suffolk	2	0	1	1	0	4
2	Kings, Bronx, Queens, New York, Richmond	13	2	27	8	1	51
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	3	0	11	11	0	25
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	0	0	0	2	1	3
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	0	0	0	0	0	0
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	0	0	0	2	1	3
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	0	1	1	13	0	15
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	0	0	5	9	5	19
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	1	4	4	19	7	35
<b>Totals</b>		<b>19</b>	<b>7</b>	<b>49</b>	<b>65</b>	<b>15</b>	<b>155</b>
<b>Percent by Allowable Use</b>		<b>12.3%</b>	<b>4.5%</b>	<b>31.6%</b>	<b>41.9%</b>	<b>9.7%</b>	<b>100%</b>

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

<sup>2</sup>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 <sup>1</sup> as of March 31, 2014						
DEC Region	Counties	Track 1	Track 2	Track 3	Track 4	Total
1	Nassau, Suffolk	2	0	0	2	4
2	Kings, Bronx, Queens, New York, Richmond	13	4	0	34	51
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	3	0	0	22	25
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	0	0	0	3	3
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	0	0	0	0	0
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	0	0	0	3	3
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	0	1	0	14	15
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	0	3	0	16	19
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	1	16	0	18	35
<b>Totals</b>		<b>19</b>	<b>24</b>	<b>0</b>	<b>112</b>	<b>155</b>
<b>Percentage by Cleanup Track</b>		<b>12.3%</b>	<b>15.5%</b>	<b>0%</b>	<b>72.3%</b>	<b>100%</b>

<sup>1</sup> For the description and criteria for "cleanup tracks" see [6 NYCRR Subdivision 375-3.8\(e\)](#).

## BCP SITES IN ENVIRONMENTAL ZONES

If at least 50 percent of the area of a BCP site is located in a designated Environmental Zone (En-Zone), the BCP site is eligible for additional BCP tax credits. The New York State Department of Economic Development is responsible for designating En-Zones. In order to be designated as an En-Zone, the census tract must have a poverty rate of 20 percent and unemployment rate at least 1.25 times the statewide unemployment rate. A site can also qualify if it has a poverty rate at least double the rate for the county in which the tract is located if it also was the subject of a Brownfield Cleanup Agreement entered into prior to September 1, 2010. Sixty-three of the 155 sites that received BCP COCs are within En-Zones.

## BROWNFIELD CREDIT REPORT

Chapter 390 of the Laws of 2008 requires the New York State Department of Taxation and Finance (NYSDF) to produce a *Brownfield Credit Report* (Tax Law § 171-r) by January 31st of each year. In addition, all developers and their lessees are required by law (Tax Law § 171-s) to submit a brownfield redevelopment report within one year after the execution of a Brownfield Cleanup Agreement and annually for 11 years thereafter. Both of these reports for calendar year 2013 can be found on the NYSDTF website at:

[http://www.tax.ny.gov/research/stats/statistics/special\\_interest\\_reports/brownfield\\_credit/brownfield\\_credit\\_cy2013.htm](http://www.tax.ny.gov/research/stats/statistics/special_interest_reports/brownfield_credit/brownfield_credit_cy2013.htm)

## ENVIRONMENTAL RESTORATION PROGRAM

### PROGRAM STATISTICS

	SFY 2013/14	LTD <sup>1</sup>
Number of applications received <sup>2</sup>		<b>415</b>
Number of applications approved <sup>2</sup>		<b>286</b>
Number of applications ineligible, withdrawn or terminated	<b>0</b>	<b>108</b>
Number of active sites as of 3/31/2014	<b>95</b>	
Number of sites completed <sup>3</sup>	<b>13</b>	<b>85</b>
Total Acreage associated with completed sites <sup>3</sup>		<b>358</b>
Cost recovery revenue received during SFY	<b>\$0.6 million</b>	

<sup>1</sup> Life to Date as of 3/31/2014.

<sup>2</sup> Applications have not been accepted since 2009.

<sup>3</sup> 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 remedial costs and 100 percent of eligible off-site remedial costs, for the investigation and remediation of eligible ERP sites. The investigations and remediation are carried out by the municipality under State oversight. Parties to the ERP SAC are indemnified by the State for all contamination that existed on the site prior to being accepted into the ERP.

**Program Funding:** The 1996 Clean Water/Clean Air Bond Act authorization included \$200 million for the ERP. Currently \$179.1 million of the \$200 million has been committed. Access to the remaining \$20 million of the \$200 million is tied to a legislative/gubernatorial Memorandum of Understanding (MOU) which must be executed before these funds can be accessed. Applications received since 2009 (21) have been held.

New York Works II Funding: The 2013/2014 New York State budget included a new appropriation for environmental restoration projects under Governor Cuomo's NY Works capital infrastructure program. The \$12 million in funding identified will be used to complete

ERP remediation projects for sites with a DEC-approved Record of Decision (ROD). DEC will solicit applications for those projects identified as eligible to participate in the summer of 2014. In addition, the 2014-15 Executive Budget proposed to authorize the use of a portion of the SSF authorization for the ERP. Unfortunately, this provision was not adopted. DEC continues to seek a regular funding source for the ERP program.

## THE REMEDIAL PROCESS

Since the remedial program for an ERP site can take a number of years to complete, DER 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**

<b>ERP Remedial Project Starts/Completions as of March 31, 2014</b>				
<b>Remedial Element</b>	<b>Starts</b>		<b>Completions</b>	
	<b>SFY 2013/14</b>	<b>Life to Date</b>	<b>SFY 2013/14</b>	<b>Life to Date</b>
<b>Remedial Investigation</b>	0	231	12	183
<b>Remedial Design</b>	0	50	0	50
<b>Remedial Action</b>	2	58	7	41
<b>Interim Remedial Measure</b>	4	84	5	78

Table 8

ERP Active Sites by DEC Region as of March 31, 2014			
DEC Region	Counties	ERP Active Sites <sup>1</sup>	Percentage of Total
1	Nassau, Suffolk	8	8.4%
2	Kings, Bronx, Queens, New York, Richmond	2	2.1%
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	11	11.6%
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	11	11.6%
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	7	7.4%
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	17	17.9%
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	16	16.8%
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	13	13.7%
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	10	10.5%
<b>Totals</b>		<b>95</b>	<b>100%</b>

<sup>1</sup>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 2013/14	LTD <sup>1</sup>
Number of applications received	0	908
Number of applications approved	0	753
Number of applications ineligible, withdrawn, or terminated	0	155 <sup>3</sup>
Number of active sites as of 3/31/2014	175	
Number of sites completed <sup>2</sup>	14	237
Cost recovery revenue received during SFY	\$1.5 million	

<sup>1</sup>Life to Date as of 3/31/2014.

<sup>2</sup>Completed sites are Class C sites.

<sup>3</sup>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 DER. The VCP party must reimburse the State for its oversight costs. If the party is also determined to be an RP under the VCP 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 DER since the inception of the Brownfield Cleanup Program. However, sites in the VCP continue to be addressed. Once the cleanup is completed, DEC provides the volunteer a release from potential liability to DEC for further investigation and/or remediation of the contaminants identified and addressed under the Voluntary Cleanup Agreement.

## THE REMEDIAL PROCESS

Since the remedial program for a VCP site can take a number of years to complete, DER 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 remedial elements in the VCP are remedial investigation, remedial design, remedial action, and interim remedial measure.

Table 9

VCP Remedial Project Starts/Completions as of March 31, 2014				
Remedial Element	Starts		Completions	
	SFY 2013/14	Life to Date	SFY 2013/14	Life to Date
<b>Remedial Investigation</b>	2	403	14	256
<b>Remedial Design</b>	7	196	6	180
<b>Remedial Action</b>	7	306	7	230
<b>Interim Remedial Measure</b>	2	118	5	96

Table 10

VCP Active Sites by DEC Region as of March 31, 2014			
DEC Region	Counties	VCP Active Sites <sup>1</sup>	Percentage of Total
<b>1</b>	Nassau, Suffolk	28	16.0%
<b>2</b>	Kings, Bronx, Queens, New York, Richmond	54	30.9%
<b>3</b>	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	34	19.4%
<b>4</b>	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	10	5.7%
<b>5</b>	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	5	2.9%
<b>6</b>	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	7	4.0%
<b>7</b>	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	11	6.3%
<b>8</b>	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	20	11.4%
<b>9</b>	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	6	3.4%
<b>Totals</b>		<b>175</b>	<b>100%</b>

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

## SPILL RESPONSE PROGRAM

### PROGRAM STATISTICS

Number of spill incidents reported during SFY 2013/2014:	<b>State funded: 449</b>
	<b>RP<sup>1</sup> funded: 11,778</b>
	<b>Total spills: 12,227</b>
Number of spill incidents closed during SFY 2013/2014:	<b>State funded: 480</b>
	<b>RP<sup>1</sup> funded: 15,152</b>
	<b>Total spills closed: 15,632</b>
Number of open spills as of 3/31/2014:	<b>State funded: 1,011</b>
	<b>RP<sup>1</sup> funded: 10,399</b>
	<b>Total open spills: 11,410</b>

<sup>1</sup> Responsible Party (RP)

### PROGRAM DESCRIPTION

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

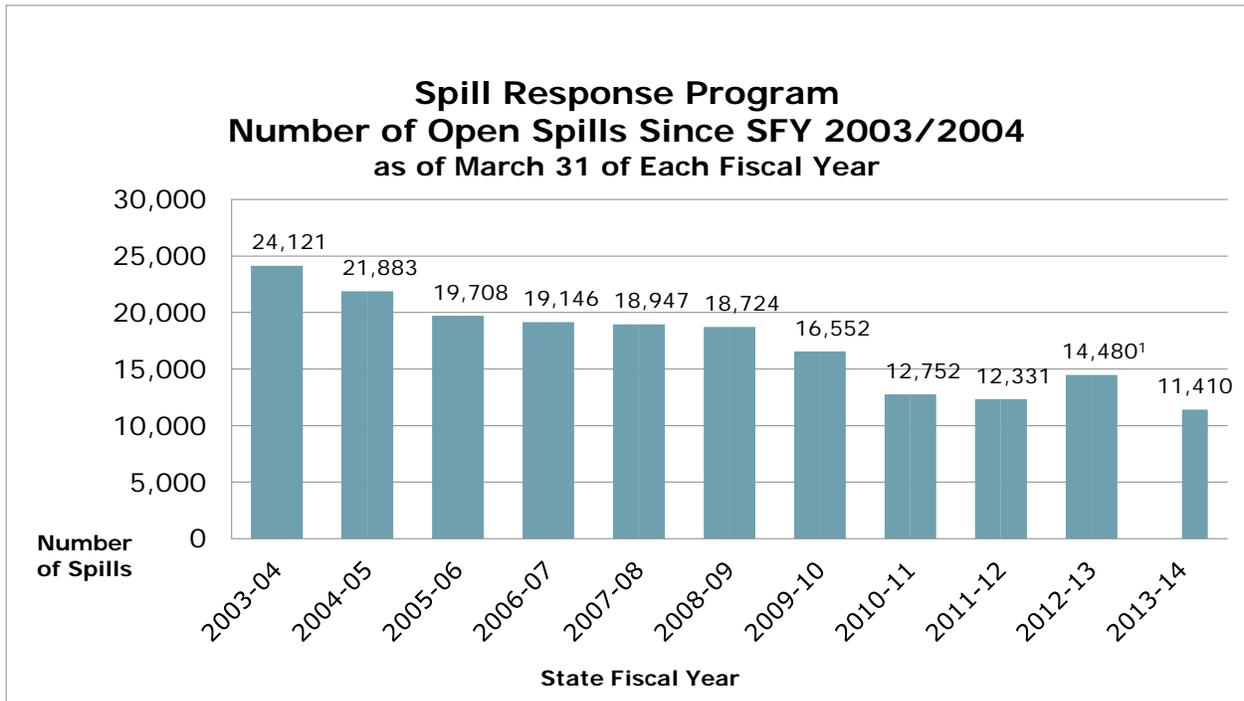
**Regulations:** 6 NYCRR Part 610, Portions of 6 NYCRR 595-597 and 613

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. DER 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. Approximately 97 percent of incidents are addressed by responsible parties under DER oversight. When the RP is not known, or unable or unwilling to perform an adequate cleanup, DER uses State-funded standby contracts to address the incident under DER 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:** DER 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.

<sup>1</sup>Note that the increase in spills during the 2012/2013 State Fiscal Year was due to 4,875 spills caused by Hurricane Sandy.

Table 11

Spill Incidents Reported and Those Closed During SFY 2013/2014 by DEC Region and County					
DEC Region	Counties	Spill Incidents			
		Reported	Percent of Total Reported	Closed	Percent of Total Closed
1	Nassau, Suffolk	1,934	15.8%	4,803	30.7%
2	Kings, Bronx, Queens, New York, Richmond	1,880	15.4%	2,253	14.4%
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	3,223	26.4%	3,326	21.3%
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie	850	7.0%	886	5.7%
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington	919	7.5%	987	6.3%
6	Herkimer, Jefferson, Lewis, Oneida, St. Lawrence	618	5.0%	663	4.2%
7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins	981	8.0%	963	6.2%
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates	967	7.9%	929	5.9%
9	Allegany, Chautauqua, Cattaraugus, Erie, Niagara, Wyoming	855	7.0%	822	5.3%
<b>Total</b>	<b>All Counties</b>	<b>12,227</b>	<b>100%</b>	<b>15,632</b>	<b>100%</b>

## RESPONSE TO NATURAL DISASTERS

Flooding and other damage from Hurricane Sandy in 2012 resulted in releases of petroleum from thousands of petroleum storage tanks, mostly homeowner tanks in basements and outdoor aboveground tanks. More than 4,800 spills were reported to the Spills Hotline and many more spills likely occurred but were unreported. DEC continues to implement cleanup activities to address these sites. To assist in this effort DEC received a \$2.37 million EPA Leaking Underground Storage Tank (LUST) grant.

## CRUDE OIL RAIL SAFETY – EXECUTIVE ORDER #125

The increased production of crude oil from the Bakken Oil Fields in North Dakota has resulted in substantial increase in the use of railways to transport oil through states including New York. In response to significant public concern about the safety of the rail shipments, in January 2014, Governor Cuomo issued Executive Order (EO) #125. EO #125 directs several State agencies, including DEC, to complete a comprehensive review of safety procedures and emergency response preparedness related to the shipment of crude oil through New York. DER staff worked with the Division of Homeland Security and Emergency Services, the New York State Department of Transportation, and others to assess and strengthen the State's capacity to prevent and respond to accidents involving the transport of crude and other petroleum products by rail, ship, and barge. The report, due to the Governor on April 30, 2014, will identify potential risks and makes specific recommendations for various levels of government and industry that will greatly help DER in its mission to prevent, mitigate, prepare for, and respond to such incidents.

## BULK STORAGE PROGRAMS

### PROGRAM STATISTICS<sup>1</sup>

Number of active Petroleum Bulk Storage (PBS) Facilities: **46,425** and Tanks: **107,597**

Number of PBS registrations processed during SFY 2013/2014: **7,291**

Number of active Major Oil Storage Facilities (MOSFs) On-Shore: **167** Vessels: **155** and Tanks: **2,842**

Number of On-Shore MOSF Licenses issued: **57** Vessel Licenses issued during SFY 2013/2014: **41**

Number of active Chemical Bulk Storage (CBS) Facilities: **1,390** and Tanks: **4,585**

Number of CBS Registrations processed during SFY 2013/2014: **805**

<sup>1</sup>As of 3/31/2014 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; Federal Underground Storage Tank (UST) Program: 40 CFR Part 280.

The goal of the Bulk Storage Programs is to prevent unauthorized discharges from petroleum and chemical bulk storage. Registration/licensing, tank testing and closures, and inspections are some of the mandates that DER addresses under these programs. The Bulk Storage Programs include the Petroleum Bulk Storage (PBS) Program, Major Oil Storage Facility (MOSF) Program and Chemical Bulk Storage (CBS) 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) have been delegated authority to administer the PBS Program.

**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.

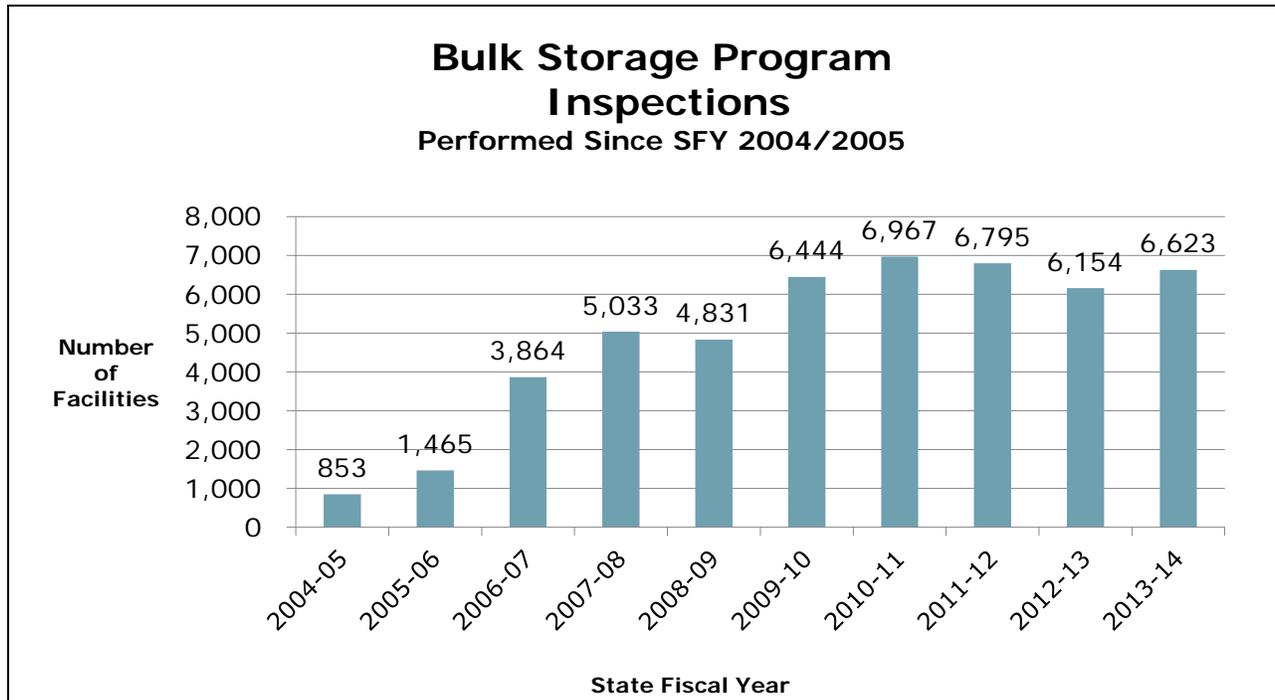
**Chemical Bulk Storage Program:** The CBS Program applies to any aboveground tank with a capacity of 185 gallons or more of a hazardous substance, all underground tanks storing a hazardous substance regardless of capacity, and non-stationary tanks used to store 1,000 kilograms (2,200 pounds) or more 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 12

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

Chart 5



Inspection Trend: Since SFY 2006/07 there has been an initiative to inspect federal 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.

## MAJOR PROGRAM INITIATIVES

### Bulk Storage and Used Oil Rulemakings (6 NYCRR Parts 595-599; 612-614; and, 370, 374-2):

The process to update the petroleum and chemical bulk storage (PBS, CBS and used oil) regulations is underway. To allow for upcoming changes anticipated in the federal regulations, DEC’s rulemaking will occur in two phases. In the first phase, the PBS and CBS regulations will be revised to incorporate **existing** federal requirements in regulations (40 CFR Part 280) and in law (the Energy Policy Act of 2005), consolidate some regulations, and clarify other existing requirements. The PBS regulations (Parts 612-614) will be repealed, consolidated, revised, and reissued as a new Part 613. Parts 595 and 597 of the CBS regulations will be repealed. Part 597 will be reissued and will include minor revisions to the list of hazardous substances to reflect changes in the federal regulation (40 CFR Part 302). Parts 596, 598, and

599 will be revised to incorporate the requirements of existing Part 595, reflect existing federal requirements not yet in State regulations, and to clarify existing State requirements.

DEC is authorized to implement and manage the federal used oil program under the Resource Conservation and Recovery Act (RCRA). Some of DEC's used oil management regulations are included in 6 NYCRR Subpart 374-2. Since "used oil" is a form of petroleum also regulated under the PBS regulations in 6 NYCRR Part 613, it is necessary to revise Subpart 374-2 to make changes to cross references to Part 613, update it with federal changes, and provide clarification with regard to the delivery prohibition requirements. In addition, 6 NYCRR Part 370.1(e)(2)(vi) is being modified to adopt newer versions of the federal regulations just for the purposes of the regulations for Used Oil Management. This is to be consistent with the federal Used Oil regulation (40 CFR Part 279).

In Phase II of the rulemaking process (anticipated for SFY 2015-2016), the State regulations will again be revised to reflect pending new requirements on the federal level and will include any additional requirements deemed necessary by DEC. Significant opportunities for public comment will be made available before any substantive new bulk storage requirements go into effect as a result of Phase II of this rulemaking process.

**eRegistration Initiative:**

A PBS eRegistration web application that will make it possible for applicants to register and update information online continues to be developed. Modifications to the on-line application will be made as a result of the pilot test. The new on-line application will be made available to the regulated community once DEC resolves signature security and payment issues.

**Regulations on Liquefied Natural Gas (LNG) (Part 570):**

DEC is developing regulations for the siting, storage and transport of LNG in New York State as required by ECL Article 23, Title 17. The rulemaking will be finalized and regulations promulgated during SFY 2014/2015.

## HAZARDOUS WASTE MANAGEMENT PROGRAM

### PROGRAM STATISTICS

Number of Operating Hazardous Waste Treatment, Storage or Disposal Facilities as of 3/31/2014: **29**

Number of Hazardous Waste Facilities Subject to Corrective Action as of 3/31/2014: **283**

Number of Hazardous Waste Facility Inspections Completed during SFY 2013/2014: **760**

### 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. The federal Resource Conservation and Recovery Act Subtitle C (RCRA-C) Program, the Hazardous Waste Management Program, is delegated to New York State by USEPA. The delegation agreement outlines the State's responsibilities. Annual funding is provided by USEPA in the form of a grant which is based on an annual work plan detailing the commitments DEC will achieve.

DER conducts inspections and enforcement at all categories of hazardous waste facilities and handlers, and tracks hazardous waste from its point of generation through final disposition using the facility permit process, the hazardous waste manifest system, and annual reports submitted by generators and hazardous waste facilities. DER also administers regulatory hazardous waste fees, special assessment taxes and the Used Oil Regulatory Program. The transportation of hazardous waste and other regulated waste is regulated under the Waste Transporter Permit Program.

### 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 USEPA. For the purposes of this report, DER has included key environmental indicators used by USEPA in the RCRA-C Program to track accomplishments.

**Table 13**

<b>Corrective Action Accomplishments for SFY 2013/2014 USEPA Environmental Indicators</b>		
<b>USEPA Event Code</b>	<b>Description</b>	<b>Accomplishments</b>
<b>CA 550</b>	Corrective Measure Implementation - Construction Complete	8
<b>CA 725</b>	Human Exposure Controlled	20
<b>CA 750</b>	Groundwater Releases Controlled	23

### HAZARDOUS WASTE FACILITY PERMIT PROCESS

Another key activity DER performs is the issuance of hazardous waste facility permits (i.e., new, renewal, modification). DER issues various types of permits (i.e., operating, post-closure, corrective action) related to hazardous waste TSD facilities. Facilities requiring only a post-closure or corrective action may also be addressed by the use of a consent order, which is DEC's preference.

DER has completed a thorough review of the RCRA permitting process to identify areas where greater efficiencies could be achieved. This assessment has resulted in a number of new initiatives being implemented. To improve the coordination, speed and effectiveness of the administration of the permit renewals and modifications, DEC has developed a model permit and associated templates for facility plans to make the content/format more predictable, shorten document preparation time, improve the quality of draft submissions and shorten DEC review time. In addition, to provide more timely and clear decisions on permits, DEC is requiring pre-application meetings 18 months prior to permit renewals and incorporating agreed upon interim deadlines to keep the process timely. Embedded in the renewal process is increased emphasis on communication, including periodic face to face meetings and greater reliance on electronic deliverables. This streamlined approach has been piloted for permits at a number of facilities and stakeholder feedback has been positive.

### HAZARDOUS WASTE COMPLIANCE INSPECTIONS

To ensure that hazardous wastes are managed properly by generators, permitted TSDFs, and TSDFs under order of consent, periodic inspections are completed to determine compliance with the regulations and any permit conditions. Compliance requirements are tailored to the type of facility and the wastes handled. Inspections are completed by trained and certified RCRA inspectors. When violations are observed, enforcement actions are taken to get the

facility into compliance. Penalties are levied as appropriate and in accordance with enforcement regulations and guidance.

## ANNUAL HAZARDOUS WASTE SITING PLAN REVIEW

Environmental Conservation Law § 27-1102(2)(i), as implemented by Chapter 8 of the 2010 Hazardous Waste Facility Siting Plan (the Plan), required DEC to complete an annual review of the Plan to determine if it needs to be updated.

### **Specifically, Chapter 8 includes the following recommendations for the future updating of the Siting Plan:**

- As part of the annual Siting Plan review, DEC will evaluate business changes in the State impacting hazardous waste management using all available information sources, including analysis of hazardous waste annual reports and manifest data. The Plan will be updated as necessary if:
  - a USEPA assessment identifies a current or projected shortfall in national hazardous waste management capacity, including the impact of the addition of newly regulated hazardous waste streams;
  - changes in interstate or international transport law allow limitations on the transportation of hazardous waste. For example, Congress might choose to enact legislation giving states the authority to ban or limit the import of hazardous waste. Such legislation has been proposed for solid waste and was enacted many years ago for low level radioactive wastes;
  - in DEC's annual review, it concludes that there is a trend showing a significant increase in State hazardous waste generation over time or changes in required management methods that would increase the need for additional management capacity; or
  - in DEC's annual review, it identifies a significant decrease in commercial hazardous waste treatment or disposal capacity or required management methods without capacity available elsewhere in the nation.

### **Based on the annual review, DEC has determined that:**

- USEPA has not identified a current or projected shortfall in national hazardous waste management capacity, and USEPA has not added any new hazardous waste streams. The USEPA analysis presented in the July 17, 2009 "Statement of Capacity Assurance in State Superfund Agreements" which stated that there remains adequate national capacity in all management categories through December 31, 2034, has not been changed. (This memo can be found in Appendix E of the Plan.)
- Interstate and international transport law has not changed in such a way that the present Plan is impacted.

- New York State hazardous waste generation and management have not changed significantly from what was anticipated and presented in the Plan. Specifically, generation was higher in 2012 than in recent years due to remedial cleanup actions that were anticipated and discussed in the Plan.
- No significant change in national commercial hazardous waste treatment or disposal capacity has been identified. Using National Biennial RCRA Hazardous Waste Report 2011 data, approximately 360,000 tons of hazardous waste was landfilled in hazardous waste landfills located in the northeast quarter of the United States. The Plan assumed 850,000 tons per year in determining that hazardous waste land disposal capacity for this region was available through at least 2028. Considering the 2011 National Biennial Report data, the conclusion that hazardous waste land disposal capacity exists through at least 2028 remains accurate.

**As a result of this review, DEC has concluded that the existing 2010 Hazardous Waste Facility Siting Plan remains accurate and does not need to be updated.**

## ANNUAL REPORT OF HAZARDOUS WASTE GENERATION

ECL § 27-0907(7) requires the submittal of an annual report to the Governor and the Legislature which:

- identifies the generators of hazardous waste within the State, and
- provides the quantities, composition and disposition of hazardous waste, presented in aggregated form by waste type and by DEC region.

Information is submitted annually to DEC from large quantity generators (LQGs) which provides the basis of the report required by statute.

LQGs are facilities that meet any of the following criteria:

- in any single month, 1,000 kg (2,200 lbs.) or more of hazardous waste is generated; or
- in any single month, or accumulated at any time, 1 kg (2.2 lbs.) of acute hazardous waste is generated; or
- at any time, more than 100 kg (220 lbs.) of spill cleanup material contaminated with acute hazardous waste is generated or accumulated.

Table 14

Hazardous Waste Generation in New York State in Calendar Year 2012					
DEC Region	Number of LOGs	Hazardous Waste Managed On-Site (tons)		Hazardous Waste Shipped Off-Site (tons)	
		Wastewater	Non-Wastewater	Wastewater	Non-Wastewater
<b>1</b>	239	3,943,059.62	316.27	743.34	2,400.79
<b>2</b>	960	3.14	1,568.26	194.73	61,007.08
<b>3</b>	227	1,018,374.84	3,681.19	126.52	13,649.09
<b>4</b>	152	342,738.52	111.60	3,662.27	19,743.32
<b>5</b>	74	16,223,627.55	11,750.77	18.71	658,012.65
<b>6</b>	53	280,681.07	3.75	8.90	117,168.81
<b>7</b>	143	689,660.99	27,211.55	41.15	18,019.03
<b>8</b>	199	18,269,082.84	36,837.28	368.74	16,588.36
<b>9</b>	267	2,429,808.75	5,906.99	2,301.78	10,479.51
<b>Total</b>	<b>2,314</b>	<b>43,197,037.32</b>	<b>87,387.66</b>	<b>7,466.14</b>	<b>917,068.64</b>

Tables are posted on the DEC website at <http://www.dec.ny.gov/chemical/81881.html>. They provide greater detail of hazardous waste generation in New York State. The tables include the following information for calendar year 2012:

- a listing of the large quantity generators by DEC region;
- the quantity of hazardous waste managed at the site of generation (on-site), statewide and in each DEC region, and how it was managed;
- the quantity of hazardous waste shipped off-site, statewide and from each DEC region, and how it was managed at its destination; and
- the quantity of waste shipped off-site, statewide and from each DEC region, by waste type categories.

## RADIATION PROGRAM

### PROGRAM STATISTICS

Number of Part 380 Active Permitted Facilities as of 3/31/13: **28**

Number of Part 380 Facility Permit Actions<sup>1</sup> Issued during SFY 2013/14: **17**

Number of Part 380 Facility Compliance Inspections Completed during SFY 2013/14: **25**

Number of Part 381 Active Low-Level Radioactive Transport Permits as of 3/31/14: **33**

Number of Part 381 Low-Level Radioactive Transporter Permit Actions<sup>1</sup> during SFY 2013/14: **154**

Number of Active Formerly Utilized Sites Remedial Action Program (FUSRAP) Sites: **7**

<sup>1</sup> "Actions" can be new permits or modifications of existing permits.

### PROGRAM DESCRIPTION

**Statutory Authority:** ECL Articles 1, 3, 17, 19, 27 and 29

**Regulations:** 6 NYCRR Parts 380, 381, 382, and 383

As part of the United States Nuclear Regulatory Commission's (NRC) National Agreement States Program, the NRC and the Governor of the State of New York entered into an agreement under which the NRC relinquished its authority to regulate a broad range of radioactive materials to the State. This agreement remains in effect so long as the State maintains a regulatory program that is compatible with the NRC program. In addition to DEC, the agencies that are parties to the agreement are the New York State Department of Health (NYSDOH) and New York City Department of Health & Mental Hygiene (NYCDOH&MH). Each administers a portion of the State's regulatory program. DEC issues permits for the discharge and disposal of radioactive material to the environment and the transportation and disposal of low-level radioactive waste (LLRW).

### PREVENTION AND CONTROL OF RADIOACTIVE MATERIALS

**Radiation Control Permits and Inspections:** The discharge and disposal of radioactive material to the environment from operating State-regulated facilities and the issuance of Radiation Control Permits by DER is controlled pursuant to Part 380 regulations. Inspections are performed to confirm facility compliance with permit conditions regarding the control,

monitoring, and reporting of environmental discharges. Enforcement actions are taken as necessary.

**Low-Level Radioactive Waste (LLRW) Transporter Permits:** Transportation of LLRW into, within or through the State may only be performed by a transporter in possession of a Part 381 LLRW Transport Permit issued by DER. Part 381 regulations set permit standards for transporters, and standards for generators and transporters related to the LLRW manifest system and its recordkeeping requirements. Enforcement actions are taken as necessary.

**LLRW Disposal:** The certification of any proposed new LLRW disposal methods and/or sites would be regulated under Part 382. The design, construction, operation, closure, post-closure and institutional controls for any new disposal facility is subject to regulation under Part 383. Currently there are no active LLRW disposal facilities in the State. However, there are two former radioactive waste disposal sites: the State-licensed Disposal Area (SDA) at West Valley (presently maintained in interim closure status) and the Cornell Radiation Disposal Site (closed under a DEC Consent Order). A Part 380 permit has been issued for the SDA and one is under development for the Cornell site. Inspections are performed on a regular basis to confirm compliance with permit requirements regarding monitoring and maintenance of the secure disposal site.

## CLEANUP OF RADIOACTIVE CONTAMINATED SITES

**Remedial Activities:** DER provides State oversight for the cleanup of Formerly Utilized Remedial Action Program (FUSRAP) sites that is carried out by the United States Department of Energy under an Agreement with the Department of the Army through the Army Corps of Engineers. FUSRAP is a remedial program for sites contaminated by radioactive materials which were formerly part of the country's early development of nuclear weapons (primarily under the old Manhattan Engineering District), or which participated in the early development of other nuclear technologies. There are seven active sites - Niagara Falls Storage Site, Colonie (NL Industries), Guterl, Linde (Praxaire), Tonawanda Landfill, Seaway, and Sylvania. In addition, two sites have been identified as eligible and are still being considered for inclusion in the program: Staten Island Warehouse and Wolff Alport. DER also investigates incidents and allegations of improper transport, disposal, and discharge of radioactive materials and oversees remediation of sites contaminated with radioactive materials.

## MAJOR INITIATIVES

**Regulations on Prevention and Control of Radioactive Material (Part 380):** The Part 380 Prevention and Control of Environmental Pollution by Radioactive Materials regulation will be revised to be compatible with federal rules on emissions of radioactive material to air and to update and clarify other provisions.

**Regulations on Cleanup Criteria for Remediation of Radioactive Contaminated Sites (Part 384):** A new regulation, Part 384 Cleanup of Radioactively Contaminated Sites, is being developed to set cleanup criteria for sites contaminated with radioactive materials. This regulation must be developed for compatibility with federal criteria, and coordinated with companion regulations being developed by the NYSDOH and NYCDOH&MH. Once Part 384 is formally adopted it will supersede existing soil cleanup guidance on the subject.

## OTHER MAJOR INITIATIVES

### BROWNFIELD OPPORTUNITY AREAS PROGRAM

The Brownfield Opportunity Areas (BOA) Program is administered by the New York State Department of State (DOS). This program provides eligible municipalities and community-based organizations with technical and financial resources to address local brownfield issues by providing area-wide brownfield redevelopment planning, access to expert environmental and economic analysis, and environmental site assessment (SA) for strategic brownfield sites when additional environmental data is needed. The role of DER in the BOA process is to provide technical assistance for site assessments (SAs) for strategic brownfield sites within the BOA. No site assessment applications were reviewed during the reporting period by DER staff and no SAs were started.

### TECHNICAL ASSISTANCE GRANTS

Technical Assistance Grants (TAGs) are available to eligible community groups to obtain independent technical assistance to interpret existing environmental data for the eligible site, comment on the site's remedial activities and proposals, and disseminate this information to the community. Eligible sites are Class 1 and 2 SSF Registry sites and significant threat sites in the Brownfield Cleanup Program (BCP). DER accepts TAG applications continuously throughout the year. Funding is limited to \$50,000 per site.

As of March 31, 2014, DER had received twelve TAG applications, seven of which were deemed ineligible or withdrawn prior to approval. Five applications were approved and funded in the amount of \$250,000. Additional information about the TAG program, including applications to download can be found on the DEC public website at:

<http://www.dec.ny.gov/regulations/2630.html>

### VAPOR INTRUSION INITIATIVE

New York State has taken a proactive approach to addressing vapor intrusion issues. "Vapor intrusion" (VI) is the movement of chemical vapors from a subsurface source into the indoor air of overlying buildings. If it is determined that vapor intrusion will result in an exposure, or potential exposure, to residents or workers in a building, the building is fitted with mitigation systems similar to those used to prevent naturally occurring radon from entering structures. DEC and the NYS Department of Health developed a joint strategy to evaluate the VI pathway at all of the sites in the State remedial programs.

DER has incorporated VI investigations into the Remedial Investigation (RI) process which occurs prior to remedy selection at hazardous waste sites. DER identified 421 sites (a.k.a. legacy sites) that completed the RI and remedy selection process prior to the initiative. These legacy sites have been or are also being evaluated for VI. Table 15 shows the status of those legacy sites.

**Table 15**

<b>Status of Vapor Intrusion Legacy Sites</b> as of March 31, 2014	
<b>Action</b>	<b>Total</b>
<b>Sites with Evaluations Completed</b>	<b>332</b>
<b>Sites with Evaluations Underway</b>	<b>89</b>
<b>Sites Awaiting Evaluation</b>	<b>0</b>
<b>Total Legacy Sites</b>	<b>421</b>

#### MANUFACTURED GAS PLANT INITIATIVE

A manufactured gas plant (MGP) is an 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.

DER has one of the most comprehensive MGP site investigation and remediation initiatives in the country. Since problems associated with former MGP sites were identified, DER 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 part of the statistics for each cleanup program in this report.

Table 16

Status of Manufactured Gas Plant Sites Currently Identified by DEC as of March 31, 2014				
Utility	MGP Sites Identified	Sites Under Order/Agreement	Sites Awaiting Order/Agreement	Sites Addressed <sup>2</sup>
Central Hudson Gas & Electric	7	7	0	2
Con Edison	51	51	0	20
National Fuel Gas	10	7	3	3
National Grid (KeySpan) <sup>1</sup>	43	43	0	9
National Grid (NiMo)	54	53	1	14
NYS Electric & Gas	38	36	2	9
Orange & Rockland	7	7	0	1
Rochester Gas & Electric	11	9	2	2
<b>Totals</b>	<b>221</b>	<b>213</b>	<b>8</b>	<b>60</b>

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

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

## OUTREACH INITIATIVES - GOING PAPERLESS

**Electronic Mailing List Initiatives:** DER historically printed and mailed thousands of documents each year to inform the public about investigations and remediations at contaminated sites in compliance with remedial program citizen participation requirements. In addition, other relevant program information is also printed and mailed. As part of DEC's eBusiness Plan efforts, DER has initiated a program to distribute site information electronically using county-based email distribution lists. Distributing information electronically provides the quickest and most efficient way to inform the public. In addition, information can be easily distributed to other interested parties.

Going "paperless" saves paper, energy, postage, and labor, helping our environment and reducing costs to New York's taxpayers. DEC encourages parties to sign up for one or many electronic mailing lists at: <http://www.dec.ny.gov/chemical/61092.html>.

In addition, DER has set up electronic mailing lists to distribute program information for brownfield, hazardous waste management, remediation contract procurement and petroleum bulk storage information as part of the DEC's GovDelivery service to send news and updates via email to the public. The public can sign up to receive these and other DEC email updates at: <http://www.dec.ny.gov/chemical/61092.html>.

## DER SUSTAINABILITY AND CLIMATE ACTION

During SFY 2013/2014, DER progress on making program delivery and internal operations more sustainable and mitigating its climate impacts continued. Some examples of DER sustainable activities include:

- expanded implementation of listservs statewide to replace the paper mailings;
- expanded electronic data and document management initiatives;
- instituted electronic decision document development and review;
- continued work on an application for on-line electronic registration for Petroleum Bulk Storage Program;
- implementation of a DER Green Remediation Policy. In particular, requiring consideration of sustainability and climate impacts in the selection and design of remedies;
- made energy efficiency at remediation sites a focus; and
- explored the use of renewable energy to power remediation systems.

## WEB RESOURCES OF INTEREST

- Brownfield Cleanup Program Certificates of Completion: <http://www.dec.ny.gov/chemical/30360.html>
- Brownfield Cleanup Program: <http://www.dec.ny.gov/chemical/8450.html>
- Brownfields in New York State: <http://www.dec.ny.gov/chemical/brownfields.html>
- Chemical and Petroleum Bulk Storage Information: <http://www.dec.ny.gov/chemical/287.html>
- DEC Division of Environmental Remediation Guidance and Policy Documents: <http://www.dec.ny.gov/regulations/2393.html>
- DEC Division of Environmental Remediation: <http://www.dec.ny.gov/about/627.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: <http://www.dec.ny.gov/chemical/8437.html>
- Environmental Remediation Programs Regulations - 6 NYCRR Part 375: <http://www.dec.ny.gov/chemical/34189.html>
- Environmental Restoration Program: <http://www.dec.ny.gov/chemical/8444.html>
- Hazardous Waste Management: <http://www.dec.ny.gov/chemical/8486.html>
- Hazardous Waste Transfer, Storage, and Disposal: <http://www.dec.ny.gov/chemical/8477.html>
- Regulation of Discharges of Radioactive Material to the Environment: <http://www.dec.ny.gov/chemical/296.html>
- State Superfund Program: <http://www.dec.ny.gov/chemical/8439.html>
- Voluntary Cleanup Program: <http://www.dec.ny.gov/chemical/8442.html>