

**Table 8-1.** Summary of counts of New York State Department of Environmental Conservation spill data for the regions in the Hurricane Sandy reconnaissance study: by source and cause for the full and flooded parts of the regions.

[Values represent the number of reported spills, grouped by their respective source and cause. A separate summary table is provided for the flooded portion of each region, defined by the Federal Emergency Management Agency Modeling Task Force 3-meter final storm surge extent polygons (Federal Emergency Management Agency, 2013). \*, stores more than 400,000 gallons (1,514 cubic meters) of material]

Source	Full region							Flooded region					
	Equipment failure	Human error	Other	Storm	Tank test failure	Unknown	Total	Equipment failure	Human error	Other	Storm	Unknown	Total
Lower Harbor/Raritan Bay region													
Commercial vehicle	3	0	0	0	0	0	3	1	0	0	0	0	1
Commercial/industrial	0	0	2	28	0	0	30	0	0	0	15	0	15
Institutional, educational	0	0	0	6	0	0	6	0	0	0	6	0	6
Major facility*	0	0	0	2	0	0	2	0	0	0	0	0	0
Passenger vehicle	0	0	0	2	0	0	2	0	0	0	2	0	2
Private dwelling	3	0	0	175	0	0	178	2	0	0	170	0	172
Transformer	0	0	0	4	0	0	4	0	0	0	1	0	1
Unknown	0	0	0	3	0	0	3	0	0	0	2	0	2
Newark Bay region													
Commercial/industrial	4	0	4	36	0	0	44	0	0	0	1	0	1
Institutional, educational	0	0	0	1	0	0	1	0	0	0	1	0	1
Private dwelling	0	0	0	2	0	0	2	0	0	0	1	0	1
Transformer	0	0	0	9	0	0	9	0	0	0	0	0	0
Vessel	0	0	0	3	0	0	3	0	0	0	0	0	0
Unknown	0	0	0	0	0	1	1	0	0	0	0	0	0
Upper Harbor region													
Commercial vehicle	1	0	1	2	0	0	4	1	0	0	1	0	2
Commercial/industrial	9	0	30	110	0	2	151	3	0	10	30	1	44
Gasoline station	0	1	0	1	0	0	2	0	0	0	0	0	0
Institutional, educational	1	0	0	11	0	3	15	0	0	0	5	2	7
Major facility*	0	0	0	6	0	0	6	0	0	0	0	0	0
Private dwelling	4	0	1	20	1	0	26	0	0	1	10	0	11
Tank truck	0	0	0	1	0	0	1	0	0	0	0	0	0
Transformer	0	0	0	44	0	0	44	0	0	0	4	0	4
Vessel	0	0	0	2	0	0	2	0	0	0	0	0	0
Unknown	4	0	2	9	0	3	18	2	0	0	0	0	2

**Table 8-1.** Summary of counts of New York State Department of Environmental Conservation spill data for the regions in the Hurricane Sandy reconnaissance study: by source and cause for the full and flooded parts of the regions.—Continued

[Values represent the number of reported spills, grouped by their respective source and cause. A separate summary table is provided for the flooded portion of each region, defined by the Federal Emergency Management Agency Modeling Task Force 3-meter final storm surge extent polygons (Federal Emergency Management Agency, 2013). \*, stores more than 400,000 gallons (1,514 cubic meters) of material]

Source	Full region							Flooded region					
	Equipment failure	Human error	Other	Storm	Tank test failure	Unknown	Total	Equipment failure	Human error	Other	Storm	Unknown	Total
Jamaica Bay region													
Commercial/industrial	1	0	1	43	0	0	45	0	0	1	21	0	22
Institutional, educational	0	0	0	5	0	0	5	0	0	0	4	0	4
Major facility*	0	0	0	1	0	0	1	0	0	0	1	0	1
Passenger vehicle	0	0	0	1	0	0	1	0	0	0	1	0	1
Private dwelling	2	0	6	1,108	0	0	1,116	0	0	6	1,029	0	1,035
Railroad car	0	0	0	2	0	0	2	0	0	0	2	0	2
Transformer	0	0	0	28	0	0	28	0	0	0	4	0	4
Unknown	0	0	0	3	0	0	3	0	0	0	1	0	1
Western Bays region													
Commercial/industrial	0	0	3	92	0	0	95	0	0	2	36	0	38
Gasoline station	0	0	0	1	0	0	1	0	0	0	0	0	0
Institutional, educational	1	0	1	9	0	0	11	1	0	1	6	0	8
Private dwelling	5	0	15	1,072	0	0	1,092	4	0	14	1,004	0	1,022
Tank truck	0	1	0	1	0	0	2	0	0	0	1	0	1
Transformer	0	0	0	47	0	0	47	0	0	0	7	0	7
Vessel	0	0	0	3	0	0	3	0	0	0	1	0	1
Unknown	0	0	0	16	0	0	16	0	0	0	15	0	15
Great South Bay region													
Commercial vehicle	1	0	0	0	0	0	1	3	0	0	15	0	18
Commercial/industrial	3	0	6	78	0	0	87	0	0	0	0	0	0
Institutional, educational	1	0	0	4	0	0	5	1	0	0	4	0	5
Private dwelling	7	1	19	965	0	0	992	5	1	17	833	0	856
Transformer	0	0	0	40	0	0	40	0	0	0	4	0	4
Vessel	0	0	0	5	0	0	5	0	0	0	4	0	4
Unknown	1	0	3	9	0	1	14	0	0	3	2	0	5
Peconic Bay region													
Commercial/industrial	0	0	1	2	0	0	3	0	0	0	0	0	0
Private dwelling	0	0	1	5	0	1	7	0	0	1	2	1	4
Transformer	0	0	0	3	0	0	3	0	0	0	1	0	1
Unknown	0	0	0	0	0	2	2	0	0	0	0	1	1
Shinnecock Bay region													
Commercial/industrial	0	0	0	1	0	0	1	0	0	0	0	0	0
Private dwelling	2	0	2	7	0	0	11	0	0	1	5	0	6
Transformer	0	0	0	1	0	0	1	0	0	0	0	0	0

**Table 8-2.** Summary of counts of New York State Department of Environmental Conservation spill data for the regions in the Hurricane Sandy reconnaissance study: by source and sampling location.

[Values represent the number of reported spills, grouped by their respective source and cause. Map location number refers to figures 2 and 3. A sampling location is defined by a buffer area with a radius of 2 kilometers around each site. Sites for which the search criteria yielded no associated recorded spills were omitted from the table. \*, stores more than 400,000 gallons (1,514 cubic meters) of material]

Site code	Map location number	Source	Equipment failure	Human error	Other	Storm	Tank test failure	Unknown	Total	Per site total
Lower Harbor/Raritan Bay region										
RB401	38	Commercial vehicle	1	0	0	0	0	0	1	50
RB401	38	Commercial/industrial	0	0	0	7	0	0	7	
RB401	38	Institutional, educational	0	0	0	3	0	0	3	
RB401	38	Private dwelling	1	0	0	38	0	0	39	
RB413	49	Passenger vehicle	0	0	0	1	0	0	1	19
RB413	49	Private dwelling	0	0	0	18	0	0	18	
RB414	50	Commercial/industrial	0	0	0	2	0	0	2	25
RB414	50	Major facility*	0	0	0	1	0	0	1	
RB414	50	Private dwelling	0	0	0	22	0	0	22	
RB461	61	Commercial vehicle	1	0	0	0	0	0	1	5
RB461	61	Private dwelling	0	0	0	4	0	0	4	
Newark Bay region										
NB413	72	Commercial/industrial	1	0	1	0	0	0	2	3
NB413	72	Unknown	0	0	0	0	0	1	1	
NB418	75	Commercial/industrial	0	0	0	4	0	0	4	9
NB418	75	Institutional, educational	0	0	0	2	0	0	2	
NB418	75	Private dwelling	1	0	0	0	0	0	1	
NB418	75	Transformer	0	0	0	1	0	0	1	
NB418	75	Unknown	0	0	1	0	0	0	1	
NB423	77	Unknown	0	0	0	0	0	1	1	1
NB424	78	Commercial/industrial	0	0	0	1	0	0	1	1
NB429	82	Vessel	0	0	0	3	0	0	3	3
NB455	89	Commercial/industrial	0	0	0	1	0	0	1	1
NB457	90	Vessel	0	0	0	3	0	0	3	3
NB459	91	Commercial/industrial	0	0	0	1	0	0	1	1

**Table 8-2.** Summary of counts of New York State Department of Environmental Conservation spill data for the regions in the Hurricane Sandy reconnaissance study: by source and sampling location.—Continued

[Values represent the number of reported spills, grouped by their respective source and cause. Map location number refers to figures 2 and 3. A sampling location is defined by a buffer area with a radius of 2 kilometers around each site. Sites for which the search criteria yielded no associated recorded spills were omitted from the table. \*, stores more than 400,000 gallons (1,514 cubic meters) of material]

Site code	Map location number	Source	Equipment failure	Human error	Other	Storm	Tank test failure	Unknown	Total	Per site total
Upper Harbor region										
NB407	93	Commercial/industrial	0	0	0	4	0	0	4	9
NB407	93	Institutional, educational	0	0	0	2	0	0	2	
NB407	93	Private dwelling	1	0	0	0	0	0	1	
NB407	93	Transformer	0	0	0	1	0	0	1	
NB407	93	Unknown	0	0	1	0	0	0	1	
UH401	94	Commercial/industrial	0	0	2	3	0	0	5	13
UH401	94	Institutional, educational	0	0	0	1	0	0	1	
UH401	94	Private dwelling	0	0	0	6	0	0	6	
UH401	94	Unknown	0	0	0	1	0	0	1	
UH402	95	Commercial vehicle	0	0	0	1	0	0	1	6
UH402	95	Commercial/industrial	1	0	0	3	0	0	4	
UH402	95	Transformer	0	0	0	1	0	0	1	
UH409	98	Commercial vehicle	0	0	0	1	0	0	1	7
UH409	98	Commercial/industrial	1	0	0	3	0	0	4	
UH409	98	Transformer	0	0	0	1	0	0	1	
UH409	98	Unknown	0	0	0	1	0	0	1	
UH412	100	Private dwelling	0	0	0	1	0	0	1	2
UH412	100	Transformer	0	0	0	1	0	0	1	
UH413	101	Commercial/industrial	0	0	1	0	0	0	1	2
UH413	101	Unknown	1	0	0	0	0	0	1	
UH415	102	Commercial vehicle	0	0	0	1	0	0	1	12
UH415	102	Commercial/industrial	0	0	0	4	0	0	4	
UH415	102	Transformer	0	0	0	3	0	0	3	
UH415	102	Unknown	0	0	0	3	0	0	3	
UH415	102	Vessel	0	0	0	1	0	0	1	
UH416	103	Commercial/industrial	0	0	3	17	0	1	21	28
UH416	103	Institutional, educational	0	0	0	2	0	1	3	
UH416	103	Transformer	0	0	0	2	0	0	2	
UH416	103	Unknown	0	0	0	1	0	1	2	
UH451	104	Commercial/industrial	0	0	1	0	0	0	1	1

**Table 8-2.** Summary of counts of New York State Department of Environmental Conservation spill data for the regions in the Hurricane Sandy reconnaissance study: by source and sampling location.—Continued

[Values represent the number of reported spills, grouped by their respective source and cause. Map location number refers to figures 2 and 3. A sampling location is defined by a buffer area with a radius of 2 kilometers around each site. Sites for which the search criteria yielded no associated recorded spills were omitted from the table. \*, stores more than 400,000 gallons (1,514 cubic meters) of material]

Site code	Map location number	Source	Equipment failure	Human error	Other	Storm	Tank test failure	Unknown	Total	Per site total
Upper Harbor region—Continued										
UH452	105	Transformer	0	0	0	2	0	0	2	5
UH452	105	Unknown	0	0	0	2	0	0	2	
UH452	105	Vessel	0	0	0	1	0	0	1	
UH456	107	Commercial/industrial	0	0	0	3	0	0	3	7
UH456	107	Institutional, educational	0	0	0	2	0	0	2	
UH456	107	Private dwelling	0	0	0	1	0	0	1	
UH456	107	Unknown	1	0	0	0	0	0	1	
Jamaica Bay region										
JB401	116	Institutional, educational	0	0	0	1	0	0	1	64
JB401	116	Private dwelling	0	0	0	63	0	0	63	
JB403	117	Private dwelling	0	0	0	1	0	0	1	1
JB404	118	Private dwelling	0	0	0	1	0	0	1	1
JB405	119	Commercial/industrial	0	0	0	2	0	0	2	276
JB405	119	Private dwelling	0	0	1	272	0	0	273	
JB405	119	Transformer	0	0	0	1	0	0	1	
JB406	120	Commercial/industrial	0	0	0	8	0	0	8	533
JB406	120	Institutional, educational	0	0	0	1	0	0	1	
JB406	120	Passenger vehicle	0	0	0	1	0	0	1	
JB406	120	Private dwelling	0	0	0	521	0	0	521	
JB406	120	Railroad car	0	0	0	1	0	0	1	
JB406	120	Transformer	0	0	0	1	0	0	1	
JB407	121	Commercial/industrial	0	0	0	7	0	0	7	31
JB407	121	Major facility*	0	0	0	1	0	0	1	
JB407	121	Private dwelling	0	0	2	21	0	0	23	
JB409	122	Commercial/industrial	0	0	0	6	0	0	6	66
JB409	122	Private dwelling	0	0	0	60	0	0	60	
JB410	123	Transformer	0	0	0	1	0	0	1	1
JB416	125	Transformer	0	0	0	1	0	0	1	1
JB417	126	Commercial/industrial	0	0	0	3	0	0	3	344
JB417	126	Institutional, educational	0	0	0	1	0	0	1	
JB417	126	Private dwelling	0	0	1	338	0	0	339	
JB417	126	Transformer	0	0	0	1	0	0	1	

**Table 8-2.** Summary of counts of New York State Department of Environmental Conservation spill data for the regions in the Hurricane Sandy reconnaissance study: by source and sampling location.—Continued

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Site code	Map location number	Source	Equipment failure	Human error	Other	Storm	Tank test failure	Unknown	Total	Per site total
Jamaica Bay region—Continued										
JB419	127	Commercial/industrial	0	0	0	1	0	0	1	211
JB419	127	Institutional, educational	0	0	0	1	0	0	1	
JB419	127	Private dwelling	0	0	1	208	0	0	209	
JB423	129	Private dwelling	0	0	0	15	0	0	15	15
JB458	131	Commercial/industrial	0	0	0	2	0	0	2	257
JB458	131	Institutional, educational	0	0	0	1	0	0	1	
JB458	131	Private dwelling	0	0	1	252	0	0	253	
JB458	131	Transformer	0	0	0	1	0	0	1	
JB464	133	Commercial/industrial	0	0	0	1	0	0	1	49
JB464	133	Private dwelling	0	0	0	48	0	0	48	
JB466	134	Commercial/industrial	0	0	0	5	0	0	5	545
JB466	134	Institutional, educational	0	0	0	1	0	0	1	
JB466	134	Passenger vehicle	0	0	0	1	0	0	1	
JB466	134	Private dwelling	0	0	0	536	0	0	536	
JB466	134	Railroad car	0	0	0	1	0	0	1	
JB466	134	Transformer	0	0	0	1	0	0	1	
JB467	135	Private dwelling	0	0	0	1	0	0	1	1
JB468	136	Commercial/industrial	0	0	0	3	0	0	3	341
JB468	136	Institutional, educational	0	0	0	1	0	0	1	
JB468	136	Private dwelling	0	0	1	335	0	0	336	
JB468	136	Transformer	0	0	0	1	0	0	1	
JB471	137	Private dwelling	0	0	0	42	0	0	42	42
JB472	138	Commercial/industrial	0	0	1	2	0	0	3	31
JB472	138	Private dwelling	0	0	0	28	0	0	28	
JB474	139	Commercial/industrial	0	0	0	6	0	0	6	70
JB474	139	Private dwelling	0	0	0	64	0	0	64	
JB480	140	Commercial/industrial	0	0	0	3	0	0	3	344
JB480	140	Institutional, educational	0	0	0	1	0	0	1	
JB480	140	Private dwelling	0	0	1	338	0	0	339	
JB480	140	Transformer	0	0	0	1	0	0	1	
JB486	142	Institutional, educational	0	0	0	1	0	0	1	73
JB486	142	Private dwelling	0	0	0	72	0	0	72	

**Table 8-2.** Summary of counts of New York State Department of Environmental Conservation spill data for the regions in the Hurricane Sandy reconnaissance study: by source and sampling location.—Continued

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Site code	Map location number	Source	Equipment failure	Human error	Other	Storm	Tank test failure	Unknown	Total	Per site total
Jamaica Bay region—Continued										
NOAA5	144	Commercial/industrial	0	0	1	1	0	0	2	3
NOAA5	144	Private dwelling	0	0	0	1	0	0	1	
NOAA6	145	Institutional, educational	0	0	0	1	0	0	1	16
NOAA6	145	Private dwelling	0	0	0	15	0	0	15	
Western Bays region										
BMB01	147	Commercial/industrial	0	0	0	5	0	0	5	382
BMB01	147	Institutional, educational	0	0	0	2	0	0	2	
BMB01	147	Private dwelling	2	0	5	366	0	0	373	
BMB01	147	Unknown	0	0	0	2	0	0	2	
HHB01	148	Commercial/industrial	0	0	0	5	0	0	5	83
HHB01	148	Institutional, educational	1	0	0	0	0	0	1	
HHB01	148	Private dwelling	0	0	0	74	0	0	74	
HHB01	148	Transformer	0	0	0	1	0	0	1	
HHB01	148	Unknown	0	0	0	2	0	0	2	
RC01	149	Commercial/industrial	0	0	0	7	0	0	7	98
RC01	149	Institutional, educational	0	0	0	1	0	0	1	
RC01	149	Private dwelling	0	0	1	87	0	0	88	
RC01	149	Unknown	0	0	0	2	0	0	2	
RC02	150	Tank truck	0	0	0	1	0	0	1	1
RC03	151	Commercial/industrial	0	0	0	8	0	0	8	161
RC03	151	Institutional, educational	0	0	0	1	0	0	1	
RC03	151	Private dwelling	1	0	1	144	0	0	146	
RC03	151	Transformer	0	0	0	2	0	0	2	
RC03	151	Unknown	0	0	0	4	0	0	4	
Great South Bay region										
GSB01	152	Private dwelling	0	0	0	1	0	0	1	1
GSB03	154	Commercial/industrial	1	0	0	0	0	0	1	1
GSB04	155	Private dwelling	0	0	0	5	0	0	5	6
GSB04	155	Commercial/industrial	0	0	0	1	0	0	1	

**Table 8-2.** Summary of counts of New York State Department of Environmental Conservation spill data for the regions in the Hurricane Sandy reconnaissance study: by source and sampling location.—Continued

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Site code	Map location number	Source	Equipment failure	Human error	Other	Storm	Tank test failure	Unknown	Total	Per site total
Great South Bay region—Continued										
GSB06	157	Commercial/industrial	1	0	0	3	0	0	4	150
GSB06	157	Private dwelling	1	1	1	140	0	0	143	
GSB06	157	Transformer	0	0	0	1	0	0	1	
GSB06	157	Unknown	0	0	1	1	0	0	2	
GSB07	158	Private dwelling	0	0	0	3	0	0	3	3
MB01	159	Commercial/industrial	0	0	0	2	0	0	2	55
MB01	159	Private dwelling	0	0	3	50	0	0	53	
MB02	160	Private dwelling	0	0	2	4	0	0	6	6
NOAA7	161	Commercial/industrial	0	0	0	1	0	0	1	1
SOB01	163	Commercial/industrial	0	0	0	1	0	0	1	131
SOB01	163	Private dwelling	1	0	1	127	0	0	129	
SOB01	163	Transformer	0	0	0	1	0	0	1	
Peconic Bay region										
FB03	166	Transformer	0	0	0	1	0	0	1	1