Semiannual Report Of UST Performance Measures End Of Fiscal Year 2016 (October 1, 2015 – September 30, 2016)

Where does EPA get the performance data?

Twice each year, EPA collects data from states and territories regarding underground storage tank (UST) performance measures and makes the data publicly available. EPA directly provides data on work in Indian country, since the Agency implements the program for those sites. These data include information such as the number of active and closed tanks, releases confirmed, cleanups initiated and completed, facilities in compliance with UST requirements, and inspections. EPA compiles the data and presents it in table format for all states, territories, and Indian country.

What are the UST performance measures?

The most current definitions for the UST performance measures are available on EPA's website www.epa.gov/ust/ust-performance-measures under **Definitions**.

What is in the end of fiscal year (FY) 2016 report?

	Page
UST Corrective Action Measures For End Of FY 2016	
Alphabetical By State Within Region	1
National Totals	5
UST National Backlog Graph	6
UST Compliance Measures For End Of FY 2016	7
States With More Stringent SOC Requirements	9
Inspection/Delivery Prohibition Actions For End Of FY 2016	11

How does the UST program's performance compare with its goals?

FY 2016 UST Program Performance	FY 2016 UST Program Goal
Exceeded the FY 2016 goal by completing 8,977 cleanups; exceeded the Indian country cleanup goal by completing 30 cleanups in Indian country	Complete 8,600 or more cleanups, including 26 or more in Indian country
Exceeded the FY 2016 goal by achieving a significant operational compliance rate of 72.5 percent	Achieve a significant operational compliance rate of 71 percent or higher
Exceeded the FY 2016 goal by reporting 5,582 newly-confirmed releases	Decrease newly-confirmed releases to fewer than 6,615
Met the FY 2016 goal by reducing to 13 percent the percent of confirmed releases at UST facilities remaining to be cleaned up	Reduce to 13 percent or less the percent of confirmed releases at UST facilities remaining to be cleaned up

What other highlights are included in the end of FY 2016 report?

- There are 560,872 active USTs (at approximately 202,000 sites) which are regulated by EPA's UST program
- Since the 1984 inception of the UST program, 1,840,070 USTs have been properly closed



- 93,846 on-site inspections at federally-regulated UST facilities were conducted between October 2015 and September 2016; of those:
 - 93,494 were conducted by states, territories, and third-party inspectors
 - 352 were conducted by EPA and credentialed tribal inspectors in Indian country

How are EPA and its partners doing at reducing the backlog of UST releases?

Reducing the number of releases remaining to be cleaned up (also known as the backlog) remains a priority for the national UST program. The graphic on page 6 of this report shows that the national UST backlog of releases remaining to be cleaned up has been declining since 2000.

For this reporting period, of the 532,420 releases reported since the beginning of the UST program, 461,441—or 87 percent—have been cleaned up. That means 70,979—or 13 percent of—confirmed releases at UST facilities remain to be cleaned up. Our data show EPA, states, territories, tribes, and other UST partners are making continued progress in reducing the percent of confirmed releases at UST facilities pending cleanup completion.

Where can I find performance data from previous years?

EPA's website <u>www.epa.gov/ust/ust-performance-measures</u> provides the most current report, as well as to historical reports beginning with FY 1988, the first year EPA reported UST data. Reports are listed beginning with the most recent first.

For more information, contact Steven McNeely at mcneely.steven@epa.gov or 202-564-0594 or Susan Burnell at burnell.susan@epa.gov or 202-564-0766, both of EPA's Office of Underground Storage Tanks.



Region / State	Active		Confirmed Re	eleases	Cleanups	Cleanups Completed		Cleanups
Region / State	Tanks	Closed Tanks	Actions This Year	Cumulative	Initiated	Actions This Year	Cumulative	Remaining
ONE	•				<u> </u>			
CT	6,062	27,274	121	3,267	3,220	40	2,307	960
MA	9,368	25,906	69	6,469	6,399	109	6,165	304
ME	2,576	13,644	79	2,844	2,814	79	2,818	26
NH	2,746	12,434	27	2,653	2,653	22	2,049	604
RI	1,488	8,717	15	1,406	1,406	15	1,249	157
VT	1,879	6,255	6	2,163	2,161	12	1,506	657
Subtotal	24,119	94,230	317	18,802	18,653	277	16,094	2,708
TWO								
NJ	13,474	59,791	788	16,223	14,483	654	11,449	4,774
NY	23,105	106,171	118	29,735	29,681	306	28,684	1,051
PR	4,483	5,807	2	1,074	840	8	517	557
VI	140	282	0	30	32	0	25	5
Subtotal	41,202	172,051	908	47,062	45,036	968	40,675	6,387
THREE								
DC	622	3,408	14	948	933	18	854	94
DE	1,168	7,467	40	2,828	2,788	53	2,749	79
MD	7,528	36,342	119	12,332	12,158	131	12,130	202
PA	22,504	66,766	192	17,092	17,018	413	15,287	1,805
VA	18,127	62,773	135	12,365	12,261	164	12,062	303
WV	4,380	21,174	50	3,636	3,540	90	3,005	631
Subtotal	54,329	197,930	550	49,201	48,698	869	46,087	3,114

Pagion / State	Active		Confirmed Re	leases	Cleanups	Cleanups Completed		Cleanups
Region / State	Tanks	Closed Tanks	Actions This Year	Cumulative	Initiated	Actions This Year	Cumulative	Remaining
FOUR		•						
AL	16,547	30,796	75	11,988	11,871	108	10,846	1,142
FL	22,438	112,230	115	27,102	19,994	657	16,357	10,745
GA	29,116	50,788	266	13,930	13,755	347	12,890	1,040
KY	9,664	40,668	220	16,766	16,746	308	16,001	765
MS	8,161	23,889	113	7,829	7,651	100	7,410	419
NC	24,953	70,700	235	26,220	23,623	481	22,099	4,121
SC	11,485	33,900	88	9,981	9,803	122	7,725	2,256
TN	16,300	40,703	172	15,137	15,137	211	14,893	244
Subtotal	138,664	403,674	1,284	128,953	118,580	2,334	108,221	20,732
FIVE								
IL	19,070	63,932	306	24,980	24,056	415	19,197	5,783
IN	13,399	42,935	156	9,959	9,375	286	8,429	1,530
MI	17,693	71,546	143	22,885	22,482	344	14,776	8,109
MN	12,253	33,777	144	11,557	11,429	124	11,237	320
OH	21,585	48,246	384	31,444	31,006	520	29,625	1,819
WI	14,297	68,935	69	19,497	19,272	113	18,512	985
Subtotal	98,297	329,371	1,202	120,322	117,620	1,802	101,776	18,546

Region / State	Active		Confirmed Re	eleases	Cleanups	Cleanups Completed		Cleanups
Region / State	Tanks	Closed Tanks	Actions This Year	Cumulative	Initiated	Actions This Year	Cumulative	Remaining
SIX					•			
AR	8,746	21,800	23	1,786	1,504	31	1,503	283
LA	10,821	35,792	107	5,207	5,207	149	4,550	657
NM	3,649	12,990	12	2,639	2,338	21	1,800	839
OK	9,701	28,537	88	5,258	5,258	87	4,888	370
TX	50,566	122,265	288	27,668	26,755	386	26,114	1,554
Subtotal	83,483	221,384	518	42,558	41,062	674	38,855	3,703
SEVEN								
IA	6,721	23,505	39	6,179	6,031	135	5,510	669
KS	6,508	21,315	47	5,240	5,112	52	3,929	1,311
MO	8,906	32,298	95	7,112	7,093	146	6,287	825
NE	6,433	15,266	58	6,532	5,675	215	5,410	1,122
Subtotal	28,568	92,384	239	25,063	23,911	548	21,136	3,927
EIGHT								
CO	7,211	23,362	152	8,357	7,973	205	7,774	583
MT	3,157	11,887	9	3,068	2,940	62	2,273	795
ND	2,257	7,601	4	886	866	1	842	44
SD	3,079	7,146	28	2,770	2,626	38	2,633	137
UT	3,686	14,006	55	4,959	4,914	85	4,638	321
WY	1,670	8,171	6	2,673	2,667	96	1,966	707
Subtotal	21,060	72,173	254	22,713	21,986	487	20,126	2,587

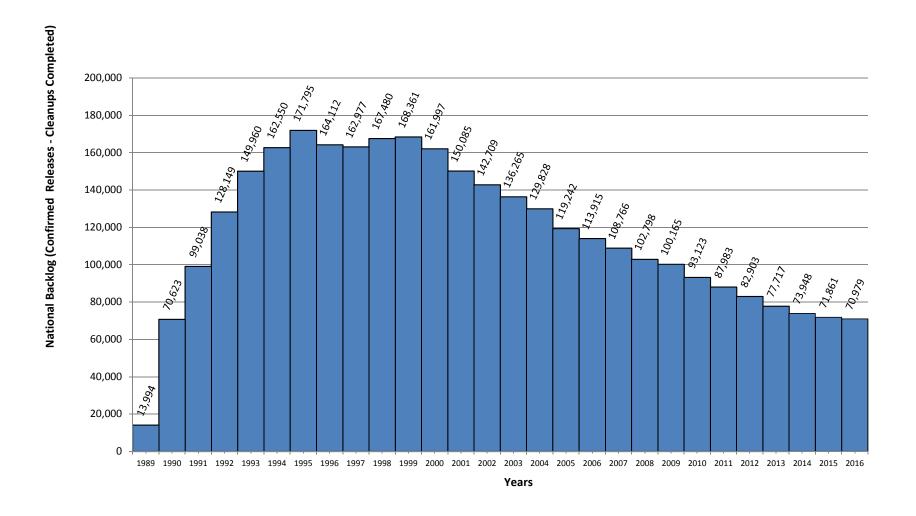
Region / State	Active		Confirmed Re	leases	Cleanups	Cleanups Completed		Cleanups
Region / State	Tanks	Closed Tanks	Actions This Year	Cumulative	Initiated	Actions This Year	Cumulative	Remaining
NINE								
AS	5	63	0	8	7	0	7	1
AZ	6,405	22,136	82	8,939	8,290	80	8,184	755
CA	36,576	132,461	75	44,164	42,752	695	40,122	4,042
GU	243	487	0	140	140	0	120	20
HI	1,536	5,577	15	2,119	2,066	11	1,973	146
MP	64	72	1	15	15	0	14	1
NV	3,769	7,617	22	2,557	2,557	15	2,400	157
Subtotal	48,598	168,413	195	57,942	55,827	801	52,820	5,122
TEN								
AK	974	6,793	22	2,441	2,410	35	2,133	308
ID	3,380	11,364	13	1,501	1,476	27	1,421	80
OR	5,528	26,647	56	7,530	7,349	60	6,691	839
WA	10,053	37,334	16	6,923	6,525	65	4,268	2,655
Subtotal	19,935	82,138	107	18,395	17,760	187	14,513	3,882

	Active		Confirmed Re	leases	Cleanups	Cleanups Con	npleted	Cleanups
Region / State	Tanks	Closed Tanks	Actions This Year	Cumulative	Initiated	Actions This Year	Cumulative	Remaining
REGIONAL CORRE	CTIVE ACTION	IS FOR INDIAN (COUNTRY					
REGION 1	13	6	0	1	1	0	1	0
REGION 2	160	28	0	7	7	0	6	1
REGION 3	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹
REGION 4	68	77	0	16	16	0	10	6
REGION 5	442	1,052	2	252	227	2	181	71
REGION 6	375	319	0	67	67	0	65	2
REGION 7	80	96	0	22	22	0	13	9
REGION 8	527	2,125	2	546	539	16	428	118
REGION 9	561	1,471	4	307	223	9	250	57
REGION 10	391	1,148	0	191	191	3	184	7
SUBTOTAL	2,617	6,322	8	1,409	1,293	30	1,138	271
		_						
			Confirmed Re	leases	Cleanups	Cleanups Con	npleted	Cleanups
	Active Tanks	Closed Tanks	Actions This Year	Cumulative	Initiated	Actions This Year	Cumulative	Remaining
NATIONAL TOTAL	560,872	1,840,070	5,582	532,420	510,426	8,977	461,441	70,979

Definitions of confirmed releases, cleanups initiated, and cleanups completed are on EPA's website at http://www.epa.gov/sites/production/files/2015-03/documents/pmdefinitions.pdf

1 N/A = Not Applicable. There are no tribal USTs in EPA Region 3.

UST National Backlog: FY 1989 Through End of Year FY 2016



UST Compliance Measures for End of Year FY 2016 (October 1, 2015 - September 30, 2016)

		Ī	ī
Region / State	% in Significant Operational Compliance with Release Prevention Regulations	% in Significant Operational Compliance with Release Detection Regulations	% of UST Facilities in SOC w/UST Release Detection and Release Prevention
ONE			
CT ¹	90%	91%	85%
MA	60%	67%	48%
ME	90%	80%	70%
NH	61%	56%	33%
RI ¹	67%	70%	56%
VT ¹	85%	83%	81%
SUBTOTAL	73%	75%	61%
TWO			
NJ	95%	96%	92%
NY	89%	76%	73%
PR	71%	70%	70%
VI	100%	86%	86%
SUBTOTAL	89%	82%	79%
THREE			
DC	86%	90%	79%
DE	97%	97%	95%
MD	83%	90%	78%
PA	86%	85%	76%
VA	86%	75%	69%
WV	84%	83%	77%
SUBTOTAL	85%	83%	74%

Region / State	% in Significant Operational Compliance with Release Prevention Regulations	% in Significant Operational Compliance with Release Detection Regulations	% of UST Facilities in SOC w/UST Release Detection and Release Prevention
FOUR			
AL	89%	78%	72%
FL	98%	80%	78%
GA	80%	73%	66%
KY	74%	78%	63%
MS	77%	68%	58%
NC	77%	70%	63%
SC	76%	77%	62%
TN	86%	86%	77%
SUBTOTAL	83%	76%	68%
FIVE			
IL ¹	75%	69%	62%
IN	90%	91%	88%
MI ¹	87%	74%	67%
MN	DNA ²	DNA ²	DNA ²
ОН	90%	69%	65%
WI ¹	92%	88%	83%
SUBTOTAL	86%	77%	71%
SIX			
AR	67%	72%	55%
LA	81%	79%	72%
NM	84%	83%	72%
OK	79%	88%	74%
TX	93%	90%	87%
SUBTOTAL	87%	86%	80%

These compliance rates indicate the percent of recently-inspected facilities in significant operational compliance (SOC) with federal UST requirements from 10/1/15 through 9/30/16. According to EPA guidelines, states are allowed to report based on requirements more stringent than the federal SOC requirements. States identified with footnote¹ indicated they had done so, as described on pages 9 and 10. Furthermore, states have different approaches to targeting inspections. For example, some states focus inspections on suspected non-compliant facilities, while other states conduct random inspections.

¹ States reporting based on requirements more stringent than the federal SOC requirements.

² DNA = Data Not Available.

UST Compliance Measures for End of Year FY 2016 (October 1, 2015 - September 30, 2016)

Region / State	% in Significant Operational Compliance with Release Prevention Regulations	% in Significant Operational Compliance with Release Detection Regulations	% of UST Facilities in SOC w/UST Release Detection and Release Prevention
SEVEN	2007	2221	
IA	88%	89%	77%
KS	56%	87%	51%
MO ¹	78%	93%	73%
NE ¹	73%	67%	57%
SUBTOTAL	74%	85%	65%
EIGHT			
CO	90%	85%	76%
MT	94%	94%	89%
ND	90%	92%	87%
SD	80%	80%	67%
UT	91%	88%	83%
WY	100%	99%	99%
SUBTOTAL	90%	88%	81%
NINE			
AS	100%	66%	66%
AZ	92%	89%	86%
CA	83%	76%	66%
GU	94%	96%	94%
HI	99%	92%	92%
MP	82%	93%	74%
NV	94%	90%	86%
SUBTOTAL	85%	79%	71%

Region / State	% in Significant Operational Compliance with Release Prevention Regulations	% in Significant Operational Compliance with Release Detection Regulations	% of UST Facilities in SOC w/UST Release Detection and Release Prevention
TEN			
AK	82%	81%	74%
ID ¹	85%	79%	64%
OR	92%	92%	87%
WA	89%	86%	79%
SUBTOTAL	89%	86%	78%
INDIAN COU	NTRY		
REGION 1	100%	75%	75%
REGION 2	41%	41%	41%
REGION 3	N/A ³	N/A ³	N/A ³
REGION 4	100%	0%	0%
REGION 5	74%	63%	55%
REGION 6	93%	91%	86%
REGION 7	10%	20%	10%
REGION 8	86%	86%	78%
REGION 9	97%	84%	83%
REGION 10	79%	69%	58%
SUBTOTAL	82%	73%	67%
NATIONAL T	OTAL		
TOTAL	84.6%	80.2%	72.5%

These compliance rates indicate the percentage of recently-inspected facilities in significant operational compliance (SOC) with federal UST requirements from 10/1/15 through 9/30/16. According to EPA guidelines, states are allowed to report based on requirements more stringent than the federal SOC requirements. States identified with footnote1 indicated they had done so, as described on pages 9 and 10. Furthermore, states have different approaches to targeting inspections. For example, some states focus inspections on suspected non-compliant facilities, while other states conduct random inspections.

¹ States reporting based on requirements more stringent than the federal SOC requirements.

² DNA = Data Not Available.

³ N/A = Not Applicable. There are no tribal USTs in EPA Region 3.

States With Requirements More Stringent Than The Federal Significant Operational Compliance Requirements

CONNECTICUT

Release Prevention: Operation and Maintenance of Cathodic Protection

• Lining not allowed.

Release Detection: Testing

- Tanks and piping require weekly and monthly monitoring for releases and records must be available (for 2 of the most recent consecutive months and for 8 of the last 12 months).
- Statistical Inventory Reconciliation (SIR) not allowed as a stand-alone method.

IDAHO

Release Prevention: Operation and Maintenance of Cathodic Protection

- Three 60-day rectifier inspection checks are required.
- Two three-year system checks are required for impressed current and galvanic.

Release Detection: Testing

Records required for the past 12 months.

Other

 Percent of UST facilities in compliance with both release detection and release prevention also factors in financial responsibility and EPAct requirements, such as operator training and secondary containment.

ILLINOIS

Release Detection: Testing

Owner/operator must produce records within 30 minutes of arrival of inspector.

MICHIGAN

Release Detection: Required Methods

Owners/operators must have inventory control plus another method of release detection.

MISSOURI

Release Prevention: Cathodic Protection

All metal components in contact with any electrolyte must be cathodically protected.

NEBRASKA

Release Prevention: Cathodic Protection

All metal components in contact with any electrolyte must be cathodically protected.

Release Prevention: Reporting

• Owner/operator must submit monthly inventory monitoring reports to the state.

Release Prevention: Temporarily Closed Tanks

 Owner/operator must permanently close USTs that have been in temporary closed status for more than one year.

RHODE ISLAND

Release Prevention: Operation and Maintenance

• All tanks and piping are required to be tightness tested after a repair. No exemptions.

Release Prevention: Operation and Maintenance of Cathodic Protection

- Impressed current cathodic protection systems are required to be tested every 2 years.
- Sacrificial anode systems are required to be tested every 3 years.

Release Detection: Testing

- Records required for the past 36 months.
- Inventory control is required for all tanks (single-walled and double-walled).
- The automatic tank gauge (ATG) has to be checked monthly and have an annual test conducted.
- Tightness testing schedule is different than the federal requirement; it depends on the type of tank.
 - o Tank tightness must be performed on all single walled tanks.

- o Tightness tests must be performed every 5 years after the installation of the ATG until the tank has been installed for 20 years and every 2 years thereafter.
- o UST systems upgraded with interior lining and/or cathodic protections are not required to have an ATG for 10 years after the upgrade. Tank tightness testing must be conducted annually during these 10 years. After 10 years, an ATG is required and tank tightness testing must be performed every 5 years until the tank has been installed for 20 years and then every 2 years thereafter. The results of all tightness tests shall be maintained for 3 years beyond the life of the facility.
- Groundwater or vapor monitoring not accepted as a method of leak detection.
- SIR not accepted.

VERMONT

Release Prevention: Operation and Maintenance of Cathodic Protection

• Lining not allowed unless with impressed current.

Release Detection: Method Presence and Performance Requirements

• Weekly monitoring required for tank and piping. Records must be available for the two most recent consecutive months and for 8 of the last 12 months.

Release Detection: Testing

- Inventory control /Tank Tightness Testing (TTT) not allowed as a release detection method after 6/30/98
- Manual Tank Gauge (MTG) allowed alone up to 550 gallons; 551-1,000 gallons, MTG with annual TTT.

WISCONSIN

Release Prevention: Operation and Maintenance of Cathodic Protection

• Require annual cathodic protection test.

Release Prevention: Spill Prevention

- Require USTs to be equipped with overfill prevention equipment that will operate as follows (NFPA 30-2.6.1.4 2000 and 2003 version):
 - O Automatically shut off the flow of liquid into the tank when the tank is no more than 95% full;
 - o Alert the transfer operator when the tank is no more than 90% full by restricting the flow of liquid into the tank or triggering the high-level alarm; and,
 - Other methods approved by the authority having jurisdiction.

Release Detection: Testing

• Require NFPA 30A09.2.1 (2000 and 2003 versions). Accurate daily inventory records shall be maintained and reconciled for all liquid fuel storage tanks for indication of possible leakage from tanks or piping. The records shall be kept on the premises or shall be made available to the authority having jurisdiction for the inspection within 24 hours of a written or verbal request. The records shall include, as a minimum and by product, daily reconciliation between sales, use, receipts, and inventory on hand. If there is more than one storage system serving an individual pump or dispensing device for any product, the reconciliation shall be maintained separately for each system.

Release Detection: Deferment

• No exclusion or deferment for "remote" emergency generator tanks.

Other

• Require annual permit to operate that includes verification of financial responsibility.

Inspection/Delivery Prohibition Actions for End of Year FY 2016 (October 1, 2015 - September 30, 2016)

Region / State	Number of On- Site Inspections Conducted	Number of Delivery Prohibition Actions
ONE		
CT	615	39
MA	2888	0
ME	1,615	0
NH	455	24
RI	254	1
VT	365	1
SUBTOTAL	6,192	65
TWO		
NJ	1,464	142
NY	2,276	0
PR	598	0
VI	11	2
SUBTOTAL	4,349	144
THREE		
DC	77	0
DE	155	4
MD	920	8
PA	3,273	21
VA	2,006	7
WV	419	5
SUBTOTAL	6,850	45

Region / State	Number of On- Site Inspections Conducted	Number of Delivery Prohibition Actions		
FOUR				
AL	2,646	214		
FL	4,067	0		
GA	3,360	670		
KY	2,027	108		
MS	1,073	124		
NC	3,247	166		
SC	3,581	433		
TN	2,231	69		
SUBTOTAL	22,232	1,784		
FIVE				
IL	3,503	949		
IN	1,693	1		
MI	2,937	289		
MN	968	9		
OH	2,970	0		
WI	3172	363		
SUBTOTAL	15,243	1,611		
SIX				
AR	1,221	89		
LA	1,393	18		
NM	657	19		
OK	3,416	61		
TX	6,631	577		
SUBTOTAL	13,318	764		

Not all states fully implement delivery prohibition at this time, and some states prohibit deliveries primarily for registration violations.

Inspection/Delivery Prohibition Actions for End of Year FY 2016 (October 1, 2015 - September 30, 2016)

Region / State	Number of On- Site Inspections Conducted	Number of Delivery Prohibition Actions		
SEVEN				
IA	428	8		
KS	1,166	34		
MO	781	0		
NE	1,166	1		
SUBTOTAL	3,541	43		
EIGHT				
CO	1,224	22		
MT	472	12		
ND	246	0		
SD	418	0		
UT	890	4		
WY	342	1		
SUBTOTAL	3,592	39		
NINE				
AS	6	1		
AZ	823	25		
CA	13,785	209		
GU	58	1		
HI	114	0		
MP	32	0		
NV	1,059	4		
SUBTOTAL	15,877	240		

Region / State	Number of On- Site Inspections Conducted	Number of Delivery Prohibition Actions		
TEN				
AK	119	28		
ID	358	0		
OR	470	34		
WA	1,353	0		
SUBTOTAL	2,300	62		
INDIAN COUNTRY	,			
REGION 1	4	0		
REGION 2	12	0		
REGION 3	N/A ¹	N/A ¹		
REGION 4	3	0		
REGION 5	122	0		
REGION 6	43	0		
REGION 7	10	0		
REGION 8	72	0		
REGION 9	38	0		
REGION 10	48	0		
SUBTOTAL	352	0		
NATIONAL TOTAL				
TOTAL	93,846	4,797		

Not all states fully implement delivery prohibition at this time, and some states prohibit deliveries primarily for registration violations.

 $^{^{1}}$ N/A = Not Applicable. There are no tribal USTs in EPA Region 3.