



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, D.C. 20460  
Mail Code 5401G

NOV 24, 2004

OFFICE OF  
SOLID WASTE AND EMERGENCY  
RESPONSE

**MEMORANDUM**

SUBJECT: FY 2004 Semi-Annual End-of-Year Activity Report

FROM: Cliff Rothenstein, Director  
Office of Underground Storage Tanks

A handwritten signature in black ink, appearing to read "Cliff Rothenstein", with a large, stylized flourish at the end.

TO: UST/LUST Regional Division Directors, Regions 1-10

The FY 2004 semi-annual-end-of-year activities report for the Underground Storage Tanks program shows both improvements made and challenges that need to be addressed. I am pleased to report that the number of confirmed releases has dropped significantly this year to 7,850 from last year's level of 12,000. This represents a drop of approximately 35 percent and reflects the continued efforts of state programs to focus on prevention and compliance activities. Additionally, we continue to make incremental improvements in reducing our national backlog of confirmed releases yet to be cleaned up. At the end of FY 2004, the backlog of sites requiring remedial action is 129,828 sites, a 5 percent drop from FY 2003.

While the cleanup backlog decreased to its lowest level since 1992, the 14,285 cleanups completed reported in FY 2004 represents a 22 percent decline from 18,518 cleanups completed in FY 2003. This level of cleanups completed also falls short of the historical rate of 18,000 annual cleanups completed.

FY 2004 marked the first year that states and regional offices reported based on the new combined significant operational compliance measure developed jointly by EPA and the states. States and regional offices continue to be responsible for reporting the percent of facilities in significant operational compliance with release prevention and release detection requirements, and starting in FY 2004, reported on the combined significant operational compliance rate. Nationally, at the end of FY 2004, the compliance rate was 77 percent for release prevention, 72 percent for leak detection, and 64 percent for the combined compliance measure. The release prevention and leak detection compliance levels are similar to the levels reported in FY 2003. Since this is the first year reporting the combined measure, FY 2004 will serve as the baseline measure for future years.

There are a number of attachments included with this memo. Attachment 1 presents the corrective action data and Attachment 2 presents the compliance measures data through September 2004.

Finally, I want to thank you and your staff again for using the Quality Assurance/Quality Control Checklist that we first implemented in the end of FY 2003. By continuing to focus on and refine our quality assurance process, we can ensure the highest quality information is included in the Semi-Annual Activities Report.

#### Attachments

cc: Barry Breen, OSWER  
Devereaux Barnes, OSWER  
Susan Bromm, OECA  
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Eric Burman, OSWER/ARMS

**Attachment 1**  
**UST Corrective Action Measures for End of Year FY2004 (as of September 30, 2004)**

Region/State	Active Tanks	Closed Tanks	Confirmed Releases	Cleanups Initiated	Cleanups Completed	Cleanup Backlog	Emergency Responses
ONE							
CT	12,282	19,333	2,408	2,363	1,551	857	110
MA	11,441	21,832	6,009	5,796	4,715	1,294	4,919
ME	3,509	11,969	2,129	2,071	1,995	134	392
NH	2,996	10,717	2,166	2,166	1,329	837	606
RI	1,708	7,073	1,218	1,218	958	260	26
VT	2,982	5,141	1,904	1,892	1,107	797	266
SUBTOTAL	34,918	76,065	15,834	15,506	11,655	4,179	6,319
TWO							
NJ	18,608	53,338	9,383	8,526	5,558	3,825	51
NY	30,161	79,149	19,621	19,200	17,324	2,297	402
PR	4,688	5,220	1,002	853	405	597	171
VI	124	278	22	14	0	22	14
SUBTOTAL	53,581	137,985	30,028	28,593	23,287	6,741	638
THREE							
DC	720	3,017	788	788	545	243	230
DE	1,566	6,373	2,220	2,166	1,923	297	395
MD	9,423	28,248	12,216	10,619	8,936	3,280	332
PA	26,992	57,873	13,609	13,495	9,153	4,456	28
VA	26,994	50,150	10,181	9,847	9,271	910	63
WV	6,197	18,331	2,828	2,680	1,614	1,214	9
SUBTOTAL	71,892	163,992	41,842	39,595	31,442	10,400	1,057
FOUR							
AL	18,153	28,351	10,763	10,647	9,106	1,657	284
FL	32,236	92,132	25,359	14,140	7,815	17,544	204
GA	38,437	44,316	10,636	10,166	7,712	2,924	12
KY	13,380	34,931	12,865	12,853	10,343	2,522	148
MS	8,886	21,499	6,456	6,301	6,155	301	120
NC	30,693	62,331	23,233	22,338	16,306	6,927	522
SC	12,255	31,196	8,541	8,127	5,026	3,515	95
TN	16,279	32,115	12,512	11,846	11,291	1,221	68
SUBTOTAL	170,319	346,871	110,365	96,418	73,754	36,611	1,453

<sup>1</sup> The terms "confirmed release," "cleanup initiated," and "cleanup completed" are defined terms available on the OUST website at <http://www.epa.gov/swerust1/cat/pmo32603.pdf> and attached to this memo. In March 2003 OUST clarified these definitions (see website) to include as a cleanup initiated and cleanup completed a site where a state has determined no cleanup action is necessary to meet a states risk-based cleanup levels.

**Attachment 1**  
**UST Corrective Action Measures for End of Year FY2004 (as of September 30, 2004)**

Region/State	Active Tanks	Closed Tanks	Confirmed Releases	Cleanups Initiated	Cleanups Completed	Cleanup Backlog	Emergency Responses
<b>FIVE</b>							
IL	23,274	61,352	22,218	20,746	13,627	8,591	1,780
IN	14,194	34,876	8,032	7,157	4,583	3,449	231
MI	21,246	64,008	20,511	19,909	11,472	9,039	87
MN	14,129	28,033	9,390	8,920	8,191	1,199	445
OH	24,475	41,739	23,367	22,946	19,904	3,463	417
WI	13,744	64,261	18,136	17,423	14,495	3,641	388
<b>SUBTOTAL</b>	<b>111,062</b>	<b>294,269</b>	<b>101,654</b>	<b>97,101</b>	<b>72,272</b>	<b>29,382</b>	<b>3,348</b>
<b>SIX</b>							
AR	9,873	19,664	1,243	958	911	332	13
LA	13,697	30,914	2,633	1,923	1,618	1,015	802
NM	4,164	12,113	2,433	1,667	1,520	913	79
OK	11,796	24,020	3,946	3,946	3,444	502	98
TX	58,124	107,399	23,771	21,582	19,194	4,577	509
<b>SUBTOTAL</b>	<b>97,654</b>	<b>194,110</b>	<b>34,026</b>	<b>30,076</b>	<b>26,687</b>	<b>7,339</b>	<b>1,501</b>
<b>SEVEN</b>							
IA	7,811	21,849	5,741	5,506	3,702	2,039	0
KS	7,473	19,175	4,560	4,280	2,478	2,082	116
MO	10,281	28,058	6,075	5,659	4,619	1,456	336
NE	6,959	13,982	5,922	3,973	3,660	2,262	10
<b>SUBTOTAL</b>	<b>32,524</b>	<b>83,064</b>	<b>22,298</b>	<b>19,418</b>	<b>14,459</b>	<b>7,839</b>	<b>462</b>
<b>EIGHT</b>							
CO	8,214	20,563	6,368	6,218	5,370	998	42
MT	3,342	12,078	2,854	2,106	1,769	1,085	43
ND	2,187	6,906	811	800	768	43	3
SD	3,060	6,563	2,323	2,302	2,076	247	21
UT	3,995	12,428	4,058	3,874	3,560	498	3
WY	2,064	7,723	1,979	1,411	847	1,132	63
<b>SUBTOTAL</b>	<b>22,862</b>	<b>66,261</b>	<b>18,393</b>	<b>16,711</b>	<b>14,390</b>	<b>4,003</b>	<b>175</b>

<sup>1</sup> The terms "confirmed release," "cleanup initiated," and "cleanup completed" are defined terms available on the OUST website at <http://www.epa.gov/swerust1/cat/pmo32603.pdf> and attached to this memo. In March 2003 OUST clarified these definitions (see website) to include as a cleanup initiated and cleanup completed a site where a state has determined no cleanup action is necessary to meet a states risk-based cleanup levels.

**Attachment 1**

**UST Corrective Action Measures for End of Year FY2004 (as of September 30, 2004)**

Region/State	Active Tanks	Closed Tanks	Confirmed Releases	Cleanups Initiated	Cleanups Completed	Cleanup Backlog	Emergency Responses
<b>NINE</b>							
AZ	8,119	19,911	8,137	5,571	5,540	2,597	2
CA	39,849	120,068	42,825	42,825	27,776	15,049	0
HI	1,814	4,956	1,803	1,690	1,437	366	0
NV	3,677	6,641	2,400	2,390	2,125	275	52
CNMI	79	19	9	8	2	7	0
GU	280	399	136	136	108	28	0
AS	12	52	7	7	6	1	1
<b>SUBTOTAL</b>	<b>53,830</b>	<b>152,046</b>	<b>55,317</b>	<b>52,627</b>	<b>36,994</b>	<b>18,323</b>	<b>55</b>
<b>TEN</b>							
AK	1,081	6,145	2,280	2,187	1,395	885	95
ID	3,528	9,225	1,321	1,295	1,153	168	12
OR	6,531	26,006	6,794	6,478	5,268	1,526	56
WA	9,872	35,214	6,026	5,702	4,024	2,002	37
<b>SUBTOTAL</b>	<b>21,012</b>	<b>76,590</b>	<b>16,421</b>	<b>15,662</b>	<b>11,840</b>	<b>4,581</b>	<b>200</b>
<b>REGIONAL CORRECTIVE ACTIONS FOR INDIAN COUNTRY</b>							
REGION 1	4	2	0	0	0	0	0
REGION 2	179	21	7	1	0	7	2
REGION 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
REGION 4	58	55	11	10	4	6	0
REGION 5	367	1,004	192	189	128	64	0
REGION 6	311	202	37	37	31	6	1
REGION 7	82	97	20	15	8	12	0
REGION 8	565	1,894	440	406	233	207	5
REGION 9	690	1,146	199	149	105	94	0
REGION 10	387	859	149	143	116	33	0
<b>SUBTOTAL</b>	<b>2,643</b>	<b>5,280</b>	<b>1,055</b>	<b>950</b>	<b>625</b>	<b>429</b>	<b>8</b>
	<b>Active Tanks</b>	<b>Closed Tanks</b>	<b>Confirmed Releases</b>	<b>Cleanups Initiated</b>	<b>Cleanups Completed</b>	<b>Cleanup Backlog</b>	<b>Emergency Responses</b>
<b>National Total</b>	<b>672,297</b>	<b>1,596,533</b>	<b>447,233</b>	<b>412,657</b>	<b>317,405</b>	<b>129,827</b>	<b>15,216</b>

<sup>1</sup> The terms "confirmed release," "cleanup initiated," and "cleanup completed" are defined terms available on the OUST website at <http://www.epa.gov/swerust1/cat/pmo32603.pdf> and attached to this memo. In March 2003 OUST clarified these definitions (see website) to include as a cleanup initiated and cleanup completed a site where a state has determined no cleanup action is necessary to meet a states risk-based cleanup levels.

## **Addendum To Attachment 2**

### **States Reporting Based On Requirements More Stringent Than The Federal Significant Operational Compliance Requirements**

#### **CONNECTICUT**

##### **Release Prevention: Operation and Maintenance of CP**

- 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.

#### **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.
  - Tank tightness must be performed on all single walled tanks.
  - 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.
  - 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 CP**

- 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.

## UST Significant Operational Compliance Measures for End of Year FY 2004 (as of 9/30/04)

Region/State	% in Significant Operational Compliance with Release Prevention	% in Significant Operational Compliance with Release Detection	% of UST Facilities in SOC w/UST Release Detection and Release Prevention	Region/State	% in Significant Operational Compliance with Release Prevention	% in Significant Operational Compliance with Release Detection	% of UST Facilities in SOC w/UST Release Detection and Release Prevention
ONE				FIVE			
CT*	93%	69%	68%	IL	58%	65%	48%
ME	75%	75%	64%	IN	see note (1)	see note (1)	see note (1)
MA	57%	27%	19%	MI	74%	44%	39%
NH	50%	43%	31%	MN	68%	73%	62%
RI*	87%	59%	52%	OH	see note (1)	see note (1)	see note (1)
VT*	61%	56%	49%	WI	81%	76%	66%
SUBTOTAL	73%	52%	46%	SUBTOTAL	69%	62%	52%
TWO				SIX			
NJ	data not available	data not available	data not available	AR	61%	72%	53%
NY	83%	63%	55%	LA	77%	72%	71%
PR	86%	85%	79%	NM	91%	86%	81%
VI	90%	69%	data not available	OK	87%	81%	74%
SUBTOTAL	83%	66%	58%	TX	see note (1)	see note (1)	see note (1)
THREE				SUBTOTAL	77%	76%	68%
DC	94%	95%	94%	SEVEN			
DE	73%	72%	55%	IA	57%	79%	49%
MD	83%	81%	77%	KS	70%	87%	62%
PA	80%	74%	64%	MO	87%	82%	80%
VA	56%	53%	40%	NE	77%	71%	59%
WV	70%	63%	54%	SUBTOTAL	74%	80%	64%
SUBTOTAL	71%	66%	56%	EIGHT			
FOUR				CO	78%	86%	72%
AL	88%	79%	76%	MT	96%	90%	90%
FL	90%	87%	85%	ND	81%	85%	71%
GA	86%	75%	73%	SD	80%	73%	65%
KY	69%	67%	55%	UT	81%	74%	64%
MS	84%	88%	82%	WY	87%	91%	75%
NC	71%	68%	61%	SUBTOTAL	83%	83%	72%
SC	84%	78%	68%				
TN	63%	61%	59%				
SUBTOTAL	80%	75%	70%				

\*States reporting based on requirements more stringent than the federal SOC requirements. See addendum to Attachment 2.

(1) Reported compliance rates, but not based on EPA's SOC measures.





## Attachment 3

### End-of-Year FY 2004 Corrective Action Trend Analysis

This attachment contains five charts that provide analyses of FY 2004 end-of-year regional and national corrective action program performance. These charts are being provided so that the regions may gain a better understanding of their end-of-year cleanup program performance as it compares with past periods, other regions and national performance. The attachment contains:

Chart 1: National UST Cumulative Corrective Action Activity: FY 1992 thru FY 2004

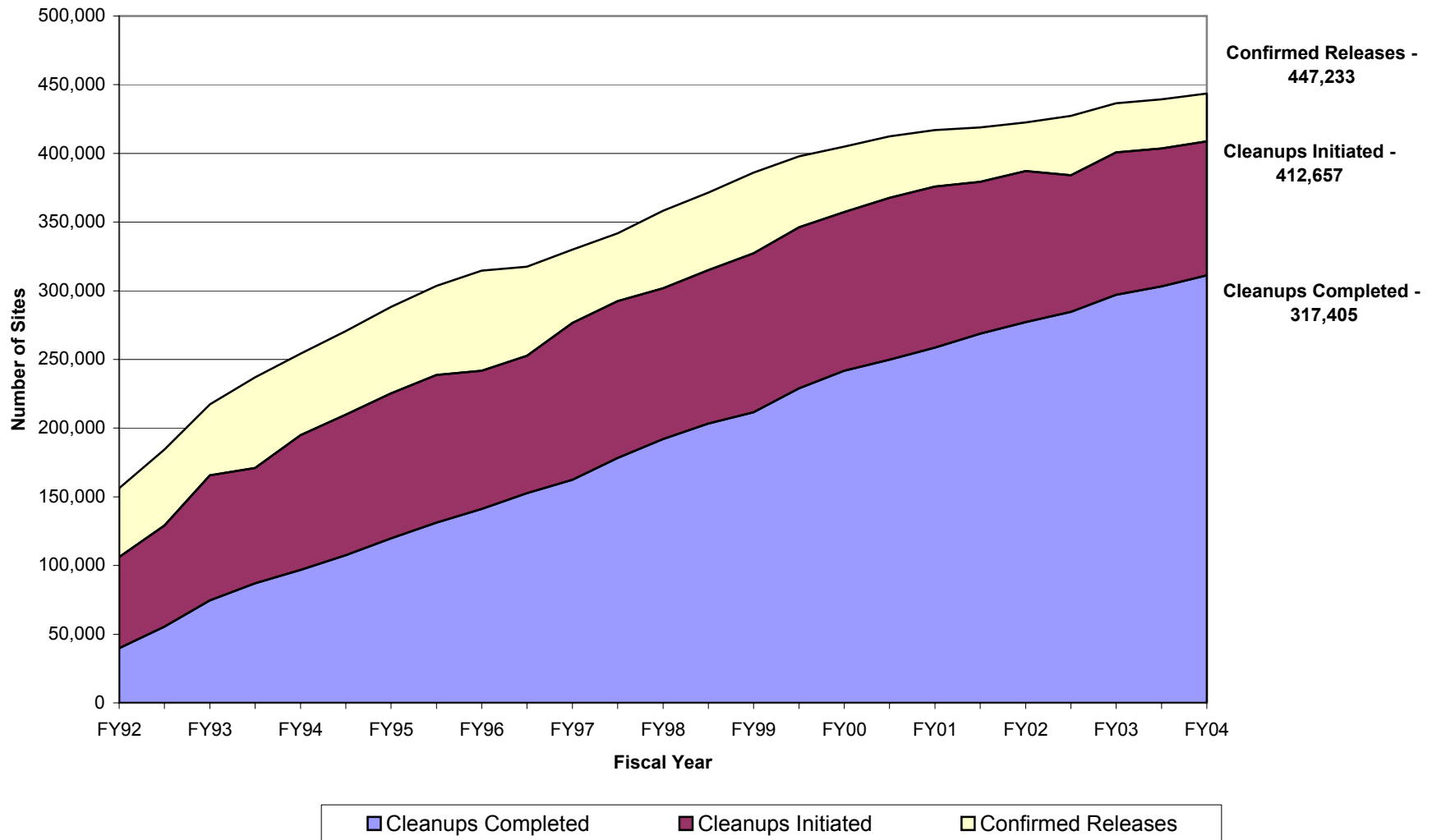
Chart 2: National UST Cleanups Initiated and Completed as a Percentage of Confirmed Releases

Chart 3: UST Cleanup Activity by EPA Region: Cumulative from FY 1987 thru FY 2004

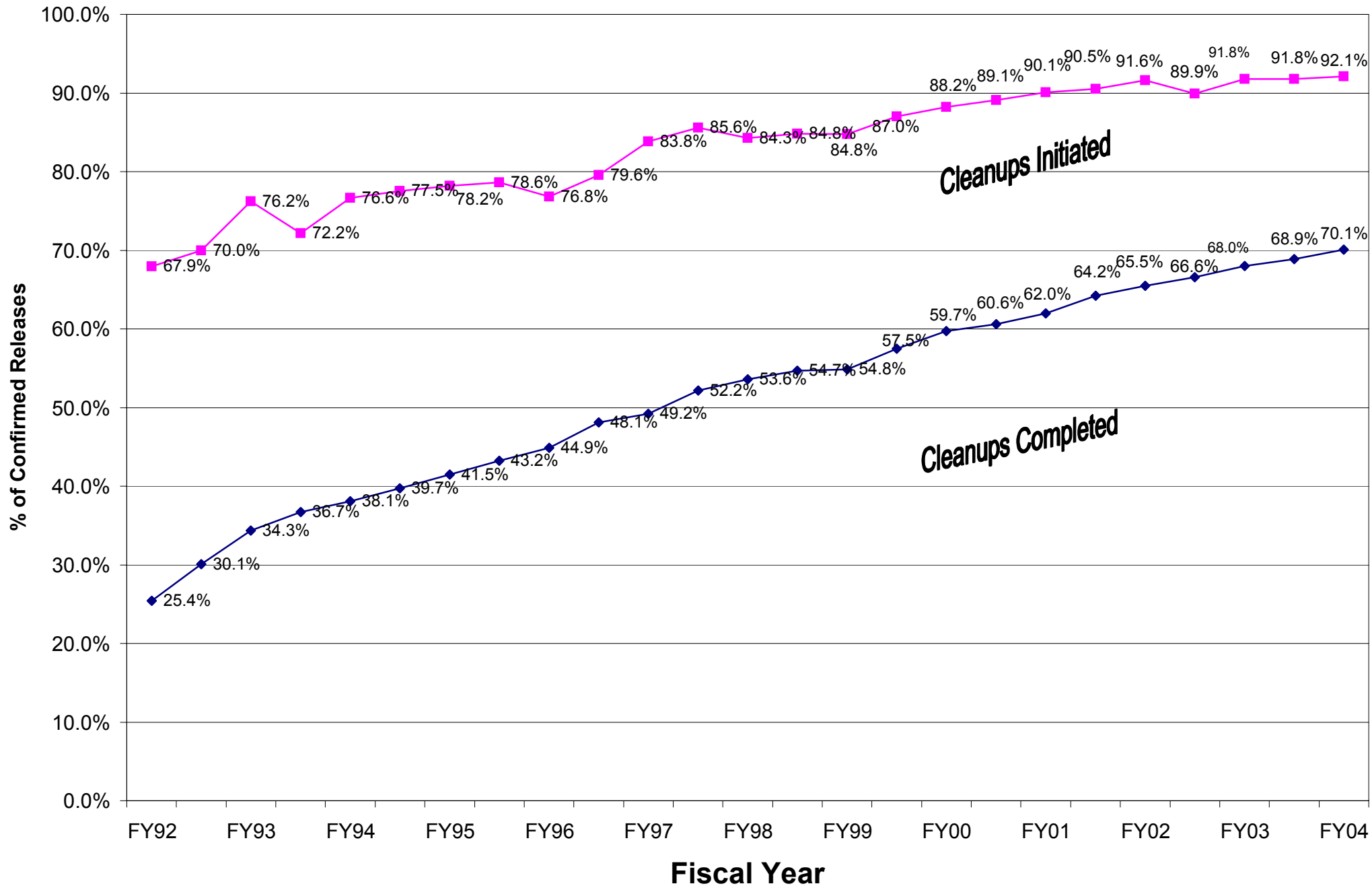
Chart 4: National FY 2004 Totals for UST Confirmed Releases and Cleanups Completed: FY 2004 Compared with Recent and Historical Averages

Chart 5: UST National Backlog: FY 1989 thru FY 2004

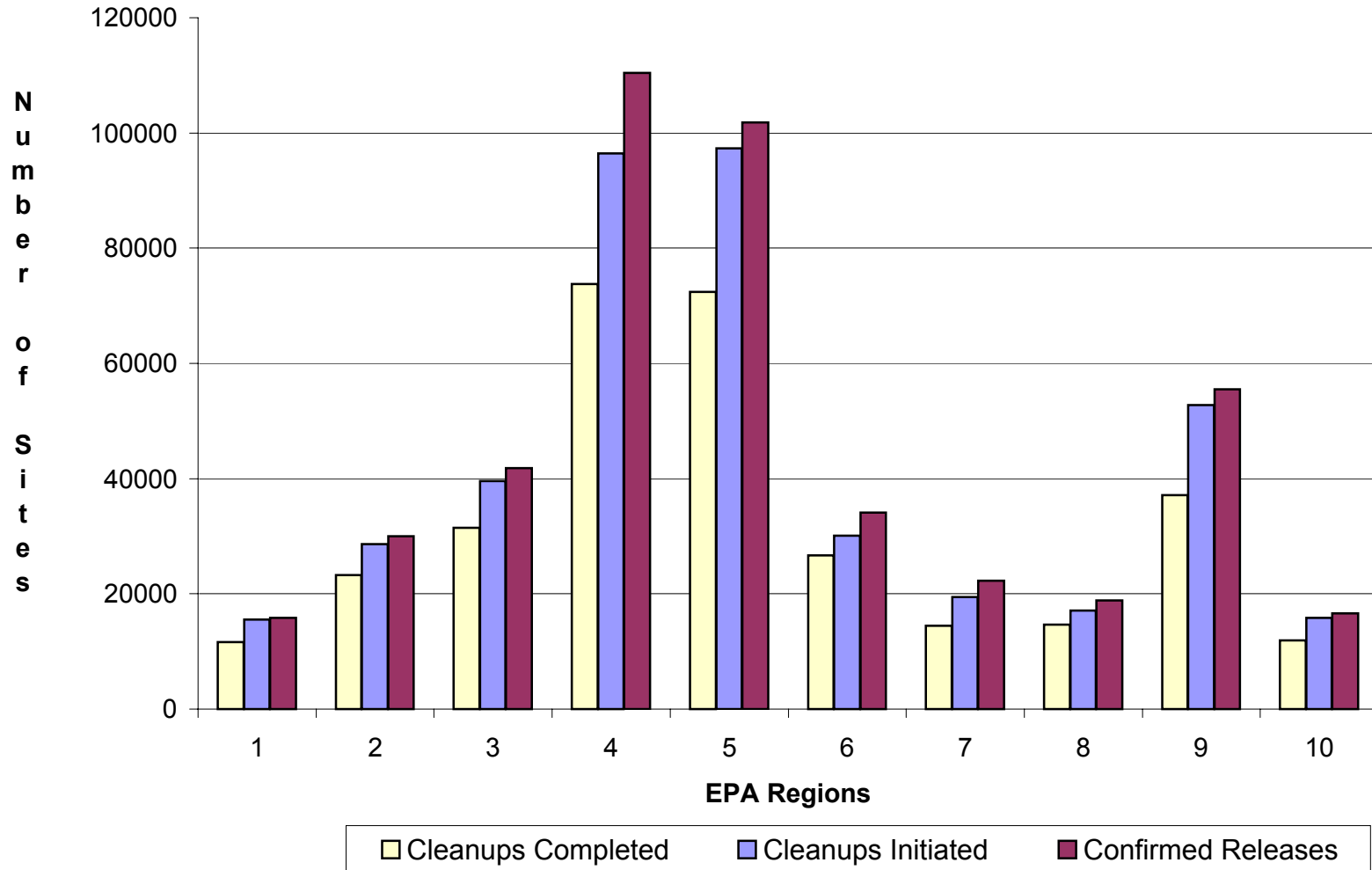
**Chart 1: National UST Cumulative Corrective Action Activity:  
FY 1992 thru FY 2004**



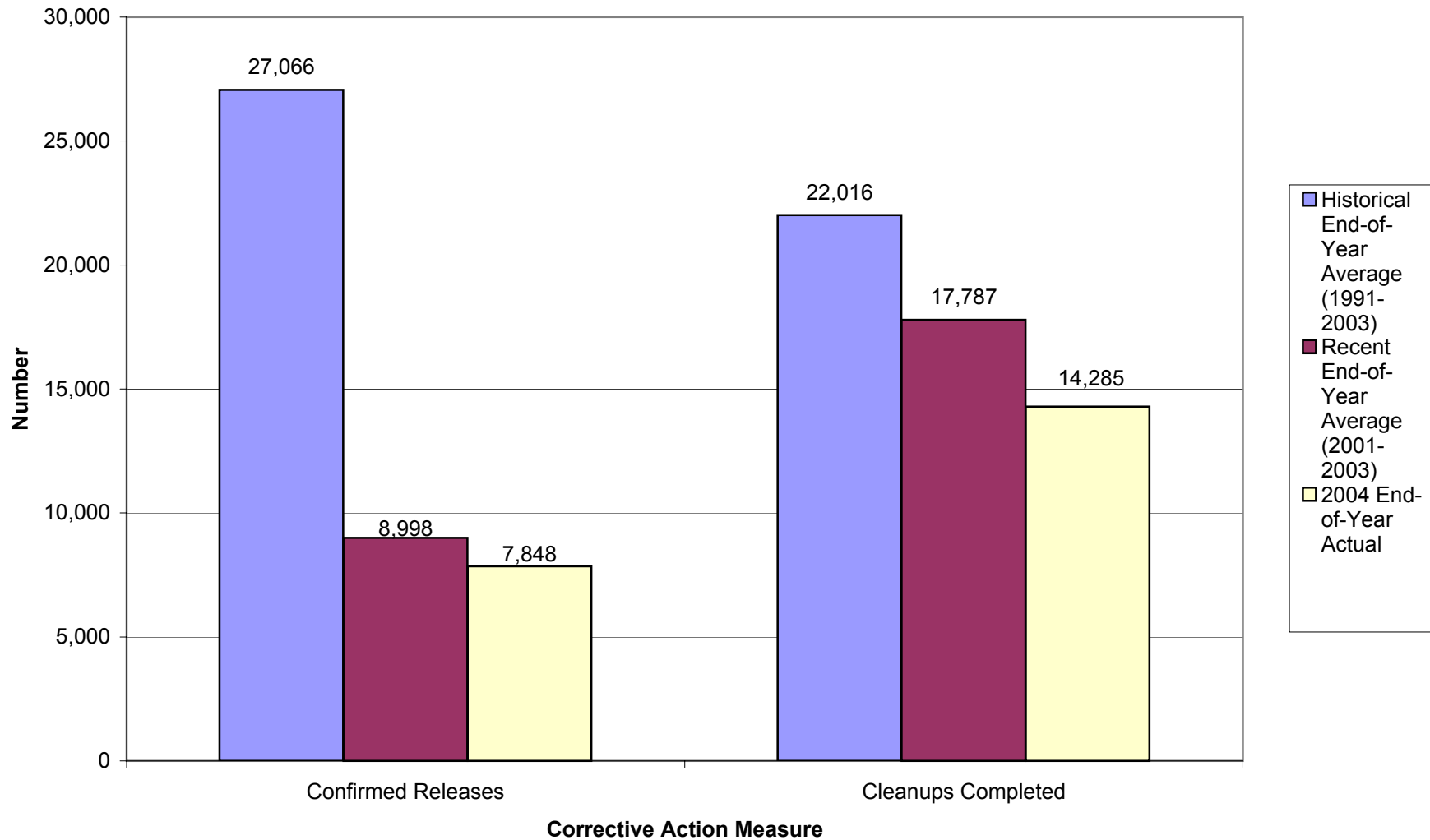
## Chart 2: National UST Cleanups Initiated and Completed as a Percentage of Confirmed Releases



**Chart 3: UST Cleanup Activity by EPA Region:**  
*Cumulative From FY 1989 thru FY 2004*



**Chart 4: National End-of-Year Totals for UST Confirmed Releases and Cleanups Completed:  
FY 2004 Compared with Recent and Historical Averages**



**Chart 5: UST National Backlog:  
FY 1989 Thru FY 2004**

