



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 13 2004

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: FY 2004 Semi-Annual Mid-Year Activity Report

FROM: Cliff Rothenstein, Director
Office of Underground Storage Tanks

A handwritten signature in black ink, appearing to read "Cliff Rothenstein", written over the printed name.

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

The FY 2004 mid-year activities report for the Underground Storage Tank program shows both improvements made and challenges needing to be addressed. I am pleased to report that we are continuing to make progress in cleaning up sites, reducing the national cleanup backlog, and assuring compliance.

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 March 2004. Attachment 3 includes a series of charts and graphs that shows the continuation of a number of positive trends, such as a steady decline in the number of confirmed releases resulting from improved leak detection and prevention activities. In the first half of this fiscal year, for example, there were only 4,000 confirmed releases, 50 percent fewer than in the first half of FY 2003.

One of our biggest challenges is to increase the number of completed cleanups and reduce the national cleanup backlog. As you are aware, two years ago we had a cleanup backlog of approximately 145,000 releases, so we established annual national and regional cleanup goals (expressed as a range of completing 18,000 to 23,000 cleanups nationally each year) to move us toward our goal of reducing the cleanup backlog in half by 2007. In the first half of this fiscal year, collectively we were able to complete over 8,000 cleanups¹ and reduce the cleanup backlog to 132,443 moving the program towards the national goal of reducing the cleanup backlog in half by 2007.

As you know, accurately measuring the compliance rate is also a priority for the Underground Storage Tank program. Therefore, for the first time, this report is based on the new Significant Operational Compliance Guidance, which Walker Smith and I issued in September 2003. States and regional offices now report the percent of facilities in

¹ The terms "confirmed release," "cleanup initiated," and "cleanup completed" are defined terms available on the OUST website at <http://www.epa.gov/swrust1/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.

significant operational compliance with release prevention and leak detection requirements, as well as reporting on the combined compliance rate. Nationally, at the mid-year of FY 2004, the compliance rate for release prevention was 77 percent, for leak detection was 71 percent, and for the combined compliance rate was 62 percent. While these compliance levels are lower than in past reports, we believe these new measures are more accurate indicators of operational compliance.

Finally, I want to thank you and your staff 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
Walker Smith, OECA
David Kling, OECA
Michael Stahl, OECA
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OUST Staff
UST Regional Branch Chiefs 1-10
UST Regional Program Managers 1-10
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Bruce Pumphrey, OSWER

ATTACHMENT

Updated LUST Performance Measures

1. Number Of Confirmed Releases: The cumulative number of incidents (not UST systems) where the owner/operator has identified a release from a Subtitle I regulated petroleum UST system, reported the release to the state/local or other designated implementing agency and the state/local implementing agency has verified the release according to state procedures such as a site visit (including state contractors), phone call, follow-up letter, or other reasonable mechanism that confirmed the release.

Clarification: “Confirmed Releases” is a cumulative category—even as a cleanup is initiated and is completed, it is still counted in the “Confirmed Releases” category. For a site undergoing closure activities, a confirmed release is counted only if petroleum contamination is discovered and verified. In that case, the release is counted under both the “Confirmed Releases” and “Closed Petroleum UST Systems” categories. A release which requires no further action as determined by the implementing agency would still be counted as a confirmed release.

Example: A confirmed release is identified by the incident, not by the receptor(s). For example, ten contaminated residential wells would be considered one release if the contamination was caused by a leaking tank at a single gasoline station. This accounting would be true even if it were discovered that more than one tank at that station was leaking. If tanks at three gasoline stations were found to be leaking, however, then three confirmed releases would be recorded, regardless of the number of receptors. Additionally, the initiation of a new cleanup response indicates a separate confirmed release. The discovery of a leaking tank at the gasoline station, for example, two years after completion of the original cleanup would be classified as a new confirmed release.

2. Number Of Cleanups Initiated: The cumulative number of confirmed releases at which the state or responsible party (under supervision as designated by the state) has **evaluated the site and** initiated **1)** management of petroleum-contaminated soil, **2)** removal of free product (from the surface or subsurface environment), **3)** management or treatment of dissolved petroleum contamination, **4)** monitoring of the groundwater or soil being remediated by natural attenuation or **5) the state has determined that no further actions are currently necessary to protect human health and the environment.** [Subset of Measure 1]

Clarification: “Cleanups Initiated” is a cumulative category—sites should never be deleted from this category. Even as a cleanup progresses and is completed, it is still counted in the cleanups initiated category. “Cleanups Initiated” indicates that physical activity (e.g., pumping, soil removal, recovery well installation) has begun at the site, **unless a state has evaluated the site and has determined that no physical activity is currently necessary to protect human health and the environment.** Site investigations and emergency responses **DO NOT** qualify as a

cleanup initiated unless one of the five actions listed in the definition has occurred. Sites being remediated by natural attenuation can be counted in this category when site characterizations, monitoring plans, and site-specific cleanup goals are established for these sites. It is no longer necessary to report separately those cleanups initiated that are state-lead sites using state money and those that are responsible-party lead sites. It is, however, still necessary to report the number of cleanups initiated that are state lead with Trust Fund money.

3. Number Of Cleanups Completed: The cumulative number of confirmed releases where cleanup has been initiated and where the state has determined that no further actions are currently necessary to protect human health and the environment. This number includes sites where post-closure monitoring as long as site-specific (e.g., risk-based) cleanup goals have been met. Site characterization, monitoring plans, and site-specific cleanup goals must be established and cleanup goals must be attained for sites being remediated by natural attenuation to be counted in this category. [Subset of Measure 2]

Clarification: “Cleanups Completed” is a cumulative category—sites should never be deleted from this category. It is no longer necessary to report separately cleanups completed that are state lead with state money and cleanups completed that are responsible party lead. It is, however, still necessary to report the number of cleanups completed that are state lead with Trust Fund money. A “no further action” determination made by the state that satisfies the “cleanups initiated” measure above, also satisfies this “cleanups completed” measure. This determination will allow a confirmed release that does not require further action to meet the definition of both an initiated and completed cleanup.

4. Number Of Emergency Responses: The cumulative number of sites where the implementing agency takes immediate action to mitigate imminent threats to human health and the environment posed by an UST system release (e.g., venting of explosive vapors, providing bottled water).

Clarification: “Emergency Responses” is a cumulative category—sites should never be deleted from this category. In a situation where petroleum contamination is found during an emergency response, the site is counted under both the “Emergency Responses” and “Confirmed Releases” categories. “Emergency Responses,” however, are not included as cleanups initiated or cleanups completed unless activities listed under those categories has occurred.

Attachment 1

UST Corrective Action Measures for Mid-Year FY 2004 (as of March 31, 2004)

Region/State	Active Tanks	Closed Tanks	Confirmed Releases	Cleanups Initiated	Cleanups Completed	Cleanup Backlog	Emergency Responses
ONE							
CT	12,358	19,149	2,388	2,344	1,538	850	110
MA	11,489	21,689	5,958	5,745	4,525	1,433	4,868
ME	3,443	11,963	2,080	2,029	1,948	132	370
NH	3,027	10,639	2,141	2,141	1,292	849	606
RI	1,720	7,041	1,199	1,199	942	257	26
VT	2,967	5,104	1,897	1,885	1,086	811	261
SUBTOTAL	35,004	75,585	15,663	15,343	11,331	4,332	6,241
TWO							
NJ	18,836	52,720	9,257	8,400	5,466	3,791	51
NY	29,683	78,126	19,719	19,130	17,264	2,455	410
PR	4,684	5,202	999	843	380	619	168
VI	124	278	14	14	0	14	14
SUBTOTAL	53,327	136,326	29,989	28,387	23,110	6,879	643
THREE							
DC	723	2,998	781	781	528	253	228
DE	1,560	6,378	2,204	2,142	1,889	315	390
MD	9,369	27,639	11,999	10,420	8,661	3,338	330
PA	26,739	57,841	13,445	13,331	9,090	4,355	28
VA	28,024	48,907	9,988	9,714	9,083	905	63
WV	6,267	18,198	2,801	2,632	1,584	1,217	9
SUBTOTAL	72,682	161,961	41,218	39,020	30,835	10,383	1,048
FOUR							
AL	18,194	28,236	10,688	10,587	8,987	1,701	276
FL	32,786	91,252	25,220	14,012	7,606	17,614	204
GA	38,725	43,707	10,443	9,904	7,321	3,122	10
KY	13,452	34,284	12,744	12,739	10,176	2,568	148
MS	8,994	21,351	6,357	6,207	6,061	296	114
NC	30,932	61,902	23,090	22,290	16,053	7,037	503
SC	12,325	30,999	8,490	8,101	4,912	3,578	94
TN	16,550	31,726	12,359	11,697	11,092	1,267	68
SUBTOTAL	171,958	343,457	109,391	95,537	72,208	37,183	1,417

¹ 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 Mid-Year FY 2004 (as of March 31, 2004)

Region/State	Active Tanks	Closed Tanks	Confirmed Releases	Cleanups Initiated	Cleanups Completed	Cleanup Backlog	Emergency Responses
FIVE							
IL	23,373	60,961	21,895	20,499	13,158	8,737	1,755
IN	14,299	34,673	7,943	6,994	4,347	3,596	226
MI	21,493	63,453	20,242	19,867	11,296	8,946	87
MN	14,077	28,025	9,311	8,816	8,054	1,257	432
OH	24,758	41,311	23,288	22,891	19,698	3,590	417
WI	14,149	63,672	18,038	17,123	14,464	3,574	388
SUBTOTAL	112,149	292,095	100,717	96,190	71,017	29,700	3,305
SIX							
AR	9,952	19,554	1,205	927	877	328	12
LA	14,913	30,709	2,595	1,894	1,584	1,011	691
NM	4,189	12,086	2,419	1,660	1,502	917	79
OK	11,890	23,908	3,902	3,902	3,395	507	89
TX	58,218	106,926	23,585	21,499	18,186	5,399	500
SUBTOTAL	99,162	193,183	33,706	29,882	25,544	8,162	1,371
SEVEN							
IA	7,846	21,699	5,708	5,492	3,603	2,105	0
KS	7,556	19,055	4,526	4,255	2,438	2,088	115
MO	10,328	27,847	5,995	5,621	4,562	1,433	329
NE	6,962	13,926	5,890	3,837	3,524	2,366	10
SUBTOTAL	32,692	82,527	22,119	19,205	14,127	7,992	454
EIGHT							
CO	8,225	20,453	6,291	6,066	5,241	1,050	41
MT	3,584	12,894	3,045	2,289	1,880	1,165	48
ND	2,194	6,892	811	800	756	55	3
SD	3,084	6,522	2,307	2,258	2,039	268	21
UT	4,042	12,355	4,038	3,852	3,518	520	3
WY	2,073	7,695	1,978	1,212	955	1,023	62
SUBTOTAL	23,202	66,811	18,470	16,477	14,389	4,081	178

¹ The terms "confirmed release," "cleanup initiated," and "cleanup completed" are defined terms available on the OUST website at <http://www.epa.gov/swrust1/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 Mid-Year FY 2004 (as of March 31, 2004)

Region/State	Active Tanks	Closed Tanks	Confirmed Releases	Cleanups Initiated	Cleanups Completed	Cleanup Backlog	Emergency Responses
NINE							
AZ	8,303	19,584	8,085	5,550	5,512	2,573	2
CA	41,005	117,655	42,487	42,487	27,245	15,242	0
HI	1,835	4,921	1,776	1,680	1,414	362	0
NV	3,695	6,613	2,420	2,410	2,133	287	52
CNMI	79	19	9	8	2	7	0
GU	280	398	132	132	108	24	0
AS	12	52	7	7	6	1	1
SUBTOTAL	55,209	149,242	54,916	52,274	36,420	18,496	55
TEN							
AK	1,086	6,151	2,300	2,163	1,292	1,008	95
ID	3,527	9,169	1,315	1,284	1,135	180	12
OR	6,629	25,861	6,760	6,407	5,167	1,593	56
WA	9,939	35,014	5,977	5,742	3,956	2,021	37
SUBTOTAL	21,181	76,195	16,352	15,596	11,550	4,802	200
REGIONAL CORRECTIVE ACTIONS FOR INDIAN COUNTRY							
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	10	10	4	6	0
REGION 5	374	996	191	188	124	67	0
REGION 6	301	195	34	34	30	4	1
REGION 7	88	91	20	15	8	12	0
REGION 8	571	1,885	436	397	215	221	5
REGION 9	708	1,165	181	136	101	80	0
REGION 10	400	846	148	142	112	36	0
SUBTOTAL	2,683	5,256	1,027	923	594	433	8
	Active Tanks	Closed Tanks	Confirmed Releases	Cleanups Initiated	Cleanups Completed	Cleanup Backlog	Emergency Responses
National Total	679,249	1,582,638	443,568	408,834	311,125	132,443	14,920

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UST Leak Detection and Upgrading Compliance Measures for Mid-Year FY 2004 (as of 3/31/04)

Region/State	% in Significant Operational Compliance with Release Prevention	% in Significant Operational Compliance with Leak Detection Regulations	% 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 Leak Detection Regulations	% of UST Facilities in SOC w/UST Release Detection and Release Prevention
ONE				FIVE			
CT*	93%	68%	68%	IL	46%	41%	data not available
ME	77%	82%	69%	IN	86%	91%	80%
MA	61%	27%	20%	MI	73%	45%	40%
NH	50%	45%	31%	MN	64%	69%	58%
RI*	87%	60%	56%	OH	97%	83%	82%
VT*	64%	61%	36%	WI	81%	75%	65%
SUBTOTAL	74%	53%	46%	SUBTOTAL	74%	65%	65%
TWO				SIX			
NJ	data not available	data not available	data not available	AR	58%	65%	49%
NY	data not available	data not available	data not available	LA	70%	71%	data not available
PR	78%	85%	75%	NM	94%	92%	87%
VI	data not available	data not available	data not available	OK	data not available	data not available	data not available
SUBTOTAL	78%	85%	75%	TX	89%	88%	data not available
THREE				SUBTOTAL	82%	83%	60%
DC	88%	88%	88%	SEVEN			
DE	64%	70%	47%	IA	68%	76%	60%
MD	63%	76%	60%	KS	67%	88%	59%
PA	74%	71%	58%	MO	87%	86%	78%
VA	56%	55%	40%	NE	70%	60%	45%
WV	76%	65%	57%	SUBTOTAL	74%	79%	62%
SUBTOTAL	66%	65%	51%	EIGHT			
FOUR				CO	83%	78%	68%
AL	data not available	data not available	data not available	MT	98%	89%	89%
FL	90%	87%	85%	ND	data not available	data not available	data not available
GA	85%	62%	61%	SD	66%	66%	39%
KY	70%	68%	54%	UT	81%	63%	59%
MS	81%	84%	77%	WY	data not available	data not available	data not available
NC	71%	69%	56%	SUBTOTAL	83%	75%	65%
SC	83%	75%	67%				
TN	72%	74%	62%				

*States with requirements more stringent than the federal SOC requirements. See addendum to Attachment 2.

UST Leak Detection and Upgrading Compliance Measures for Mid-Year FY 2004 (as of 3/31/04)

SUBTOTAL	80%	73%	66%
Region/State	% in Significant Operational Compliance with Release Prevention	% in Significant Operational Compliance with Leak Detection Regulations	% of UST Facilities in SOC w/UST Release Detection and Release Prevention
NINE			
AZ	98%	99%	97%
CA	data not available	data not available	data not
HI	99%	92%	86%
NV	90%	82%	78%
CNMI	100%	97%	97%
GU	46%	83%	41%
AS	100%	85%	85%
SUBTOTAL	95%	93%	90%
TEN			
AK	82%	82%	64%
ID	71%	63%	51%
OR	79%	61%	59%
WA	76%	59%	54%
SUBTOTAL	76%	61%	56%

Region/State	% in Significant Operational Compliance with Release Prevention	% in Significant Operational Compliance with Leak Detection Regulations	% of UST Facilities in SOC w/UST Release Detection and Release Prevention
LD Compliance Measures for Indian Country			
REGION 1	N/A	N/A	N/A
REGION 2	data not available	data not available	data not available
REGION 3	N/A	N/A	N/A
REGION 4	data not available	data not available	data not available
REGION 5	data not available	data not available	data not available
REGION 6	data not available	data not available	data not available
REGION 7	data not available	data not available	data not available
REGION 8	71%	43%	43%
REGION 9	77%	73%	64%
REGION 10	56%	44%	44%
SUBTOTAL	70%	56%	52%
NATIONAL TOTAL	77%	71%	62%

These compliance rates indicate the percentage of recently-inspected facilities found to be in significant operational compliance with federal UST requirements. In September 2003, EPA sent guidance to states concerning more detailed procedures and criteria they should use to determine the percentage of facilities in significant operational compliance. EPA prepared this guidance in close cooperation with states. This is the first reporting period states submitted data based on the new guidance. The compliance rates reported may change in the future as states become more experienced with the new procedures and criteria. States are allowed to use requirements more stringent than the federal SOC requirements and three states, Connecticut, Rhode Island and Vermont, indicated they had done so. Please see the addendum on the next page for details, on the more stringent requirements used by these states.

Addendum To Attachment 2

States With 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.

Attachment 3

Mid-Year FY 2004 Corrective Action Trend Analysis

This attachment contains five charts that provide analyses of FY 2004 mid-year regional and national corrective action program performance. These charts are being provided so that the regions may gain a better understanding of their mid-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 Mid-Year 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 Mid-Year FY 2004

Chart 4: National Mid-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 Mid-Year FY 2004

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

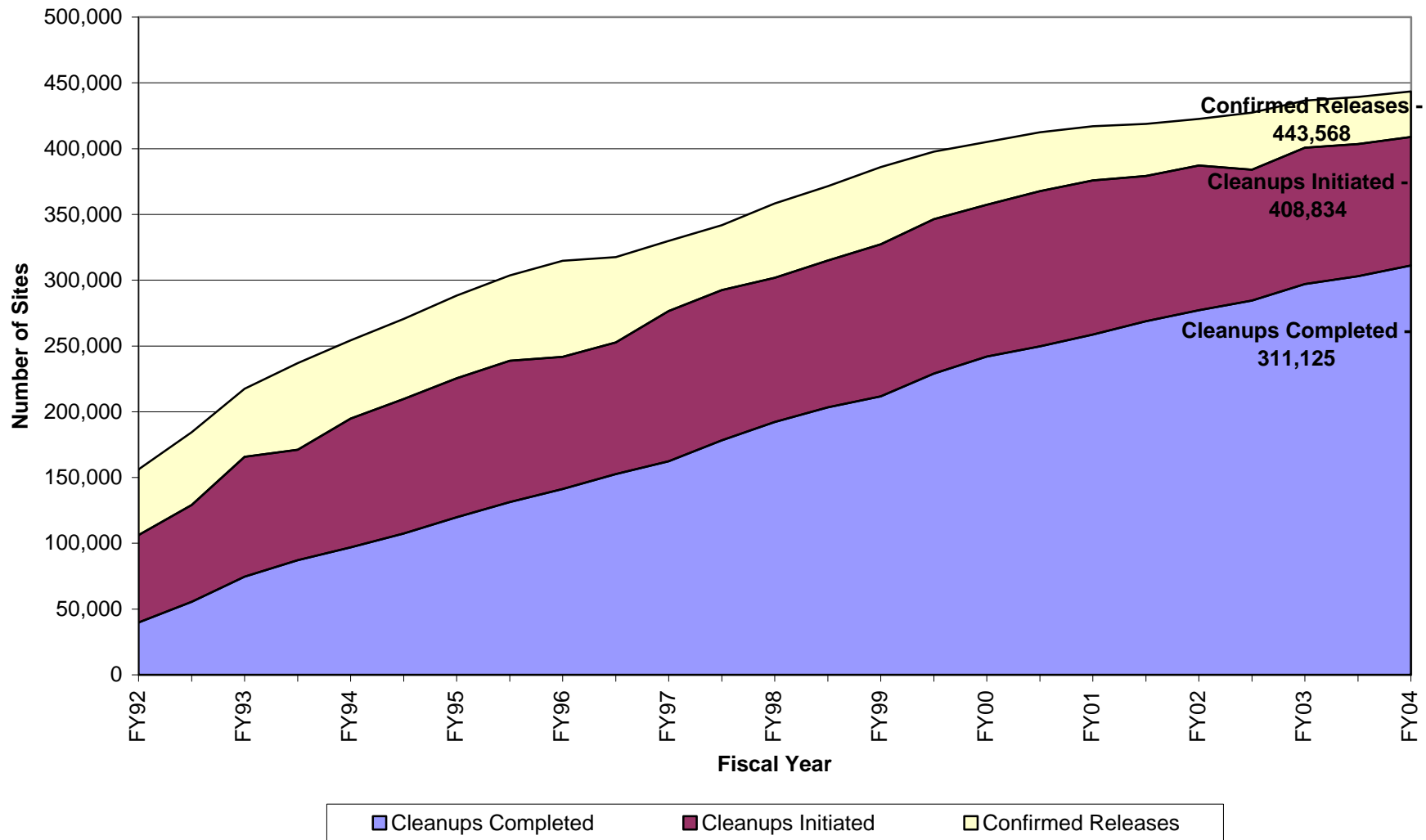


Chart 2: National UST Cleanups Initiated and Completed as a Percentage of Confirmed Releases

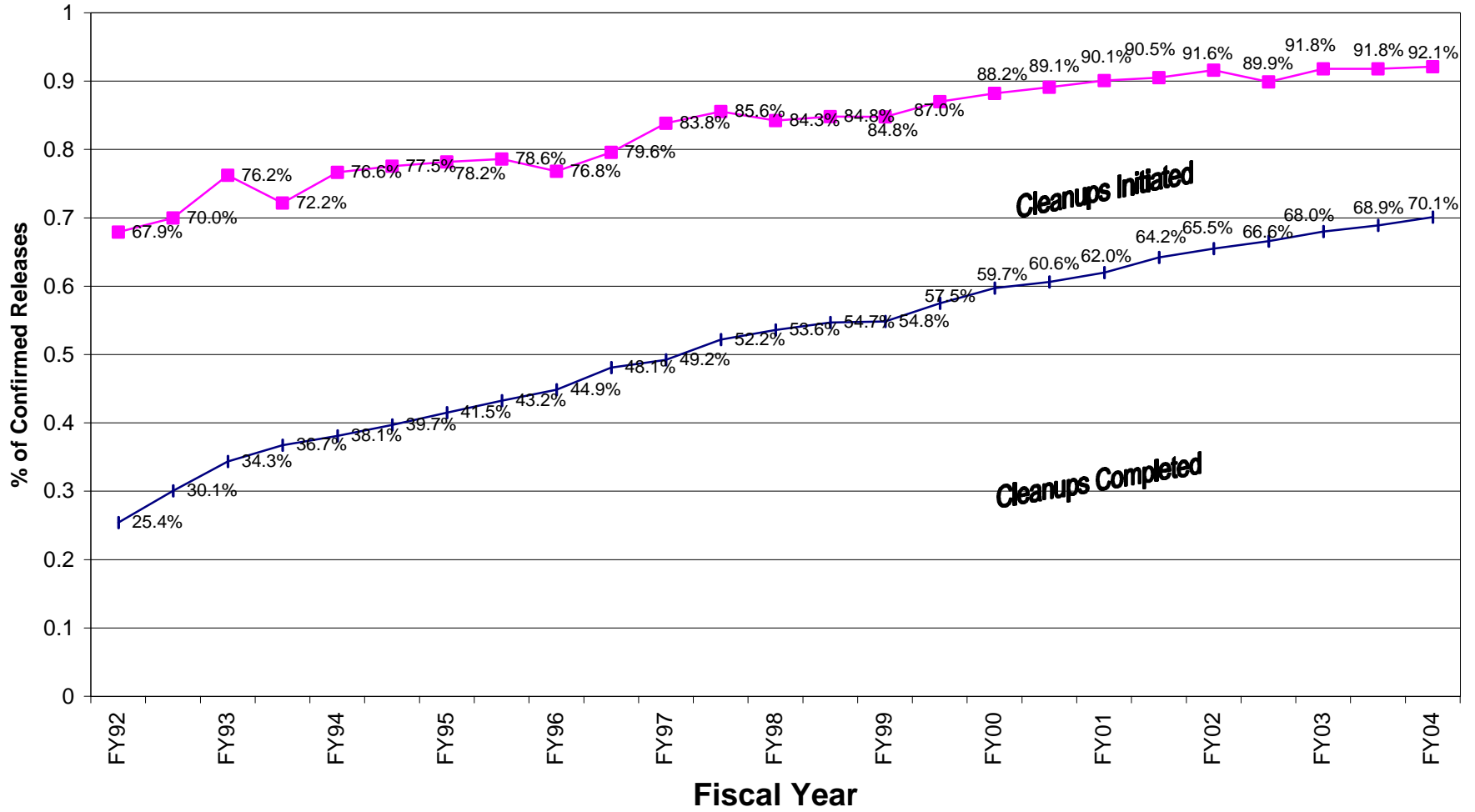
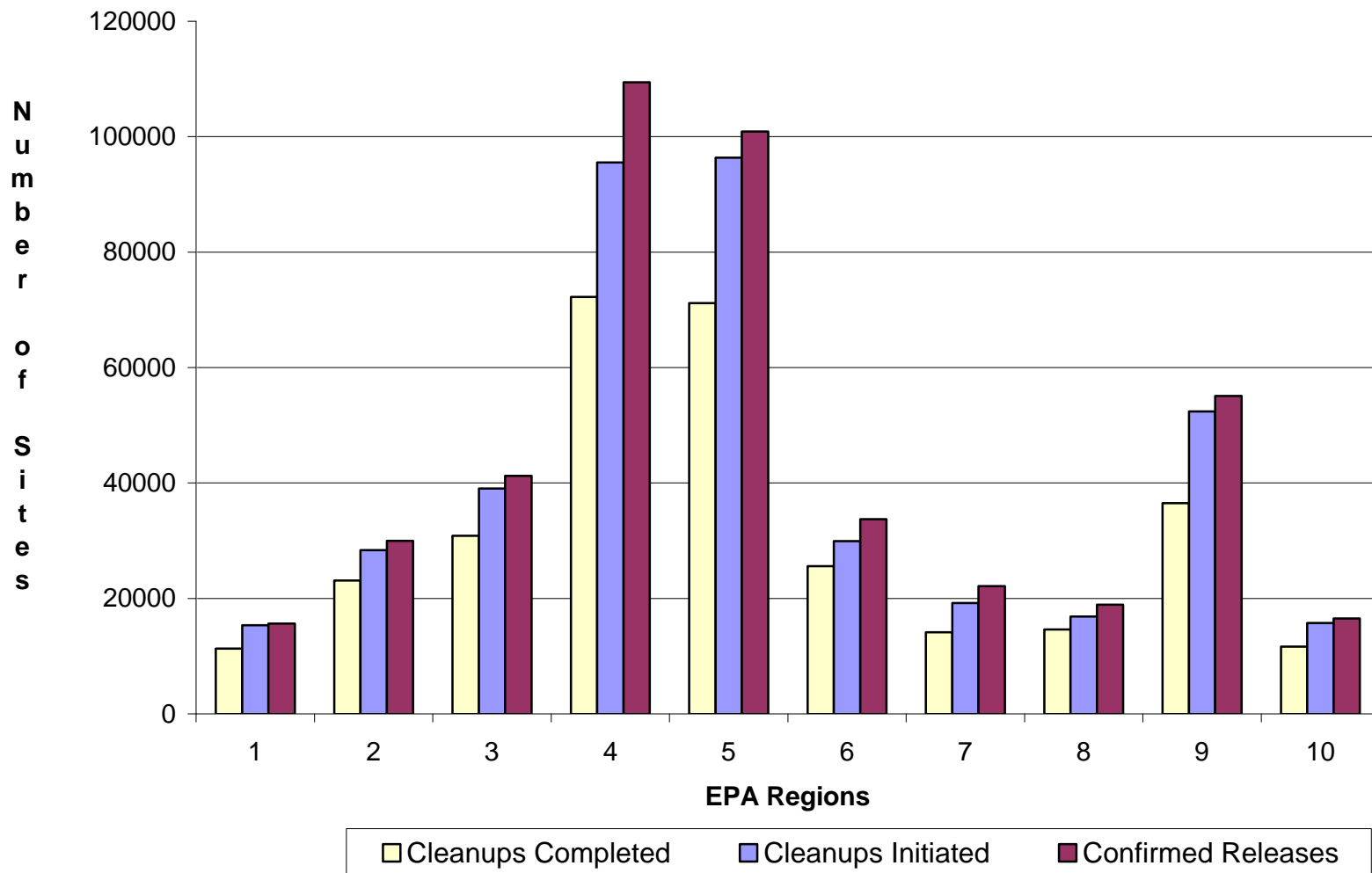


Chart 3: UST Cleanup Activity by EPA Region:
Cumulative From FY 1989 thru Mid-Year FY 2004



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

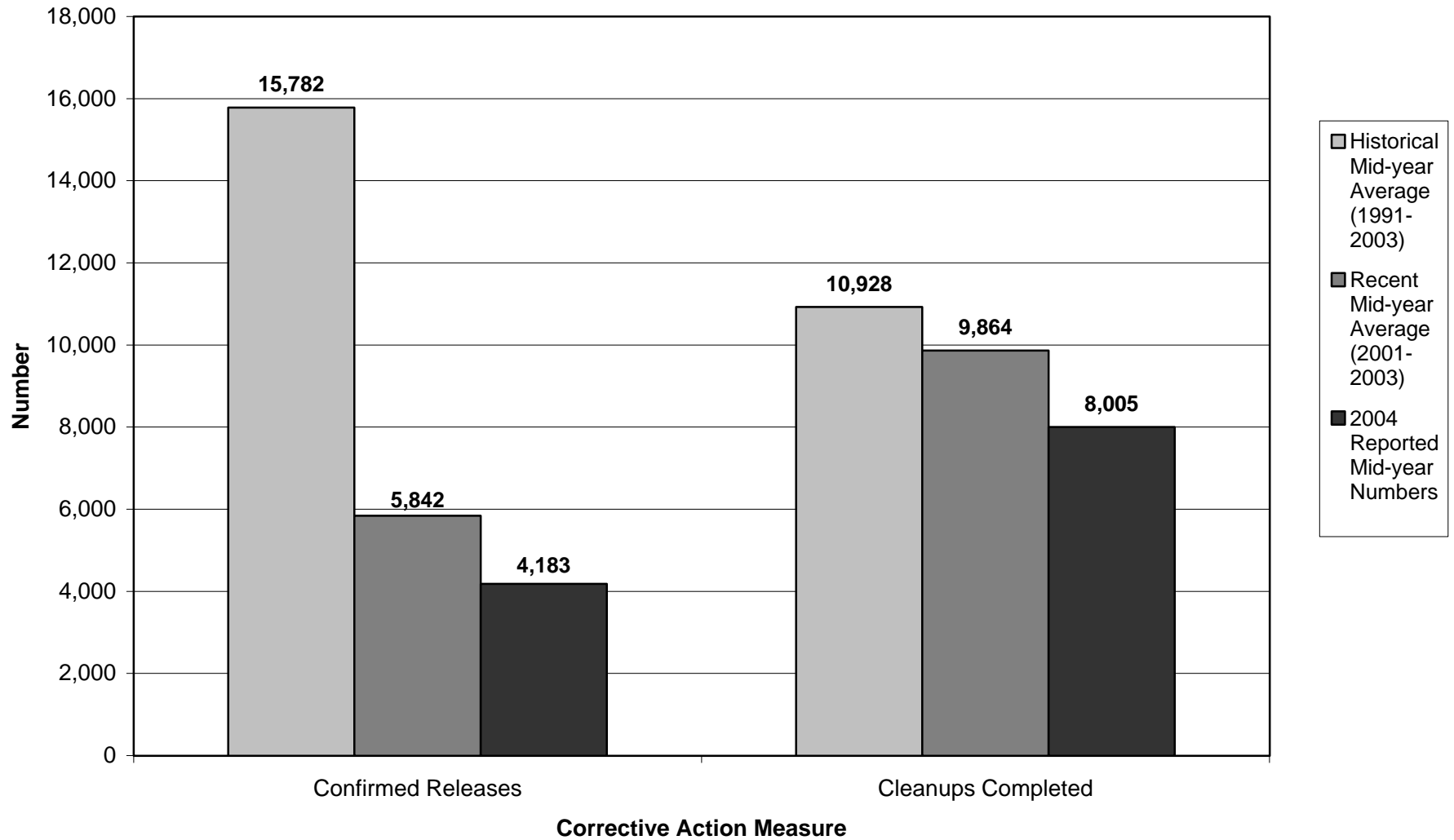


Chart 5: UST National Cumulative Backlog: FY 1989 thru FY 2004

