

**2008**

**Radiological  
Performance Indicators**



**Savannah River Site  
Aiken, SC 29808**

# Summary

<u>Exposure</u>	<b>QTR Actual</b>	<b>CY Actual</b>	<b>CY Goal</b>
Collective Total Effective Dose Equivalent (Person-rem)	<b>34</b>	<b>66</b>	<b>128</b>
Maximum Individual (rem)	<b>0.249</b>	<b>0.455</b>	<b>&lt;1.000<sup>1</sup></b>
Personnel Contamination Cases			<b>8*</b>
Skin	<b>0</b>	<b>1</b>	
Personal Effects	<b>1</b>	<b>1</b>	
Internal Exposure			
≥ 100 mrem CEDE	<b>0</b>	<b>0<sup>2</sup></b>	<b>N/A</b>
≥ 500 mrem CEDE	<b>0</b>	<b>0</b>	<b>0</b>

*\*Combined Skin + Personnel Effects*

*(249 mrem - FCA TRU operator, 455 mrem - SWMF operator)*

*Note<sup>1</sup>: SWMF miners granted higher ACL of 800 mrem & FCA TRU operators granted higher ACL of 1000 mrem. Site ACL is 500 mrem*

*Note<sup>2</sup>: Internal dose identified in 1<sup>st</sup> Qtr. 2008 and assigned to 3<sup>rd</sup> Qtr. 2007*

# 2008 ALARA Goals

CY08 ALARA Goal Summary	D&D	Defense Projects	H-Area Material Disposition	F-Area Closure Project	Waste Solidification Projects	Liquid Waste Disposition Projects	Laboratories	Nuclear Materials Management	Solid Waste & Infrastructure <sup>1</sup>	SRNL	Miscellaneous <sup>1</sup>	WSI <sup>2</sup>	SRS Total
	Cumulative Exposure (rem)												
Base Routine Operations	1.00	0.28	7.22	0.50	8.615	18.54	5.30	12.00	31.00	4.44	2.00	2.00	90.895
Total Special Work Operations		0.35	5.50		3.650	25.345	0.50			1.60			36.945
1 <sup>st</sup> Quarter		0.025	1.5			10.055	0.25			0.40			12.230
2 <sup>nd</sup> Quarter		0.025	1.5		2.35	7.73	0.25			0.40			12.255
3 <sup>rd</sup> Quarter		0.075	1.1		1.2	1.98				0.40			4.755
4 <sup>th</sup> Quarter		0.225	1.4		0.10	5.58				0.40			7.705
Max. Individual Exposure Goal (mrem)	500*												
Personnel Contamination Events	8												
Personal Effects and Skin													

Notes:

- Miscellaneous – defined as those facilities with exposure goals < 1 rem to include SGCP - 0.050 rem base + 0.100 rem special; SFP- 0.500 rem base + 0.300 rem special; and other minor contributors to site total.
- WSI-Base Routine Operations is the total dose estimate from all facilities.

Additional Note: DOE-SR ACL – 150 mrem

\*ACL increases were approved by the Site ALARA Committee on 3/25/08 for FCA TRU operators and SWM drum miners. FCA TRU ACL is 1000 mrem and SWM ACL is 800 mrem.

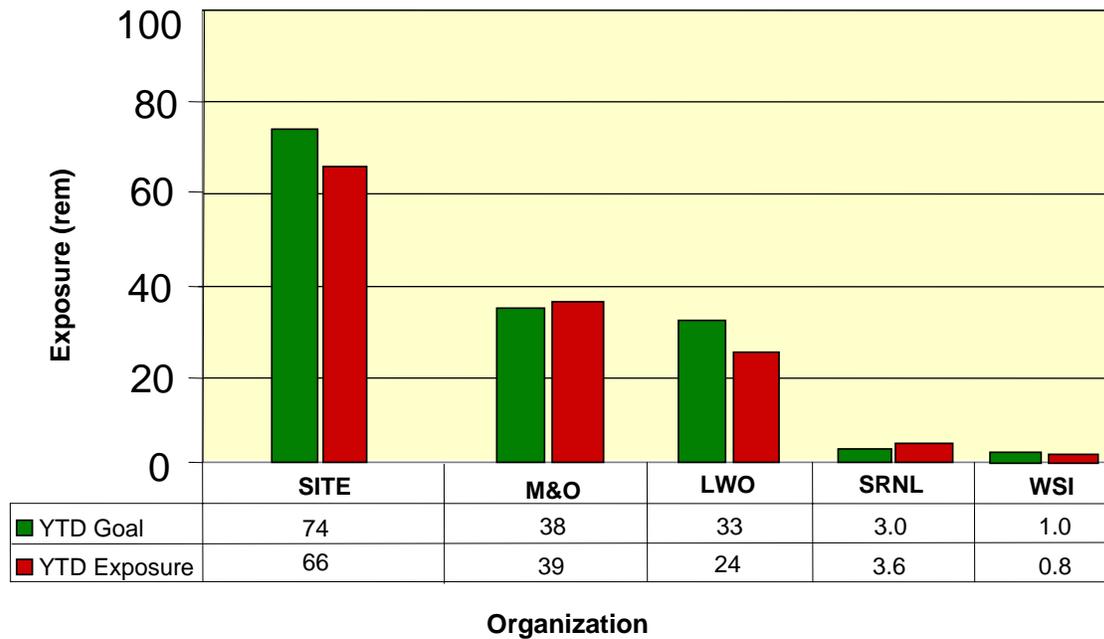
**M&O Maximum Whole Body  
YTD Exposure CY08**

Project	Facility	Exposure TEDE (mrem)	ACL
Solid Waste	SWM	455	1000
Solid Waste	SWM	424	1000
Solid Waste	SWM	415	1000
Solid Waste	SWM	410	1000
Solid Waste	SWM	405	1000
Solid Waste	FCA	386	800
Solid Waste	SWM	378	1000
Solid Waste	SWM	360	1000
Solid Waste	SWM	349	1000
Solid Waste	SWM	346	1000

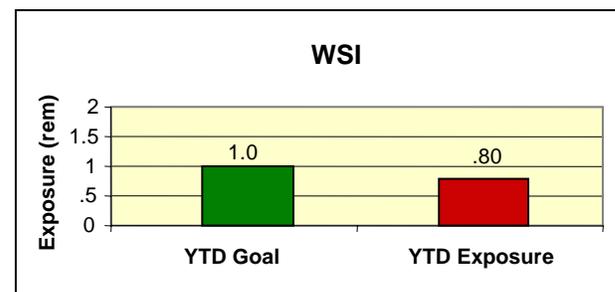
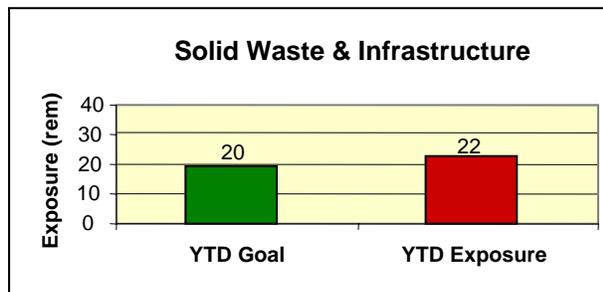
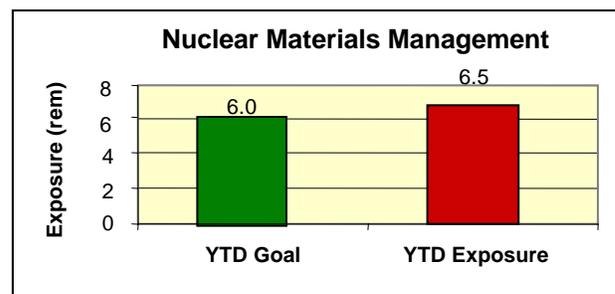
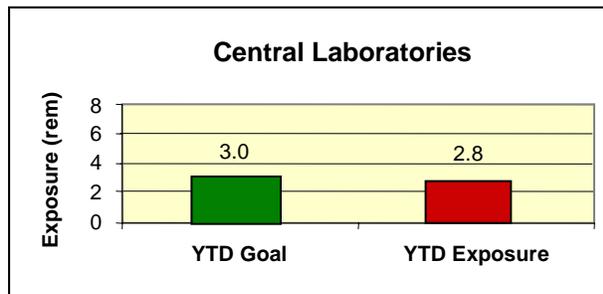
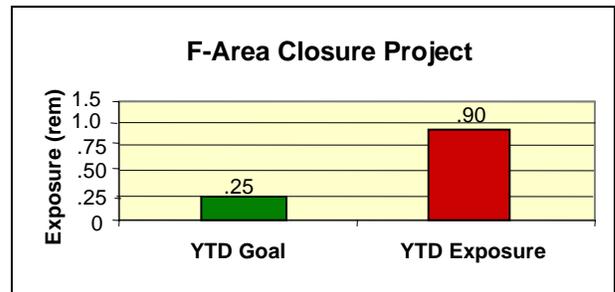
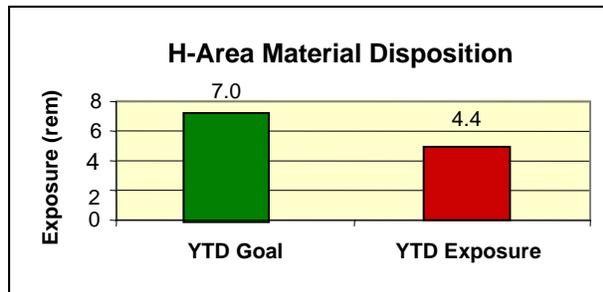
**LWO Maximum Whole Body  
YTD Exposure CY08**

Project	Facility	Exposure TEDE (mrem)	ACL
Waste Solidification	Z-Area	329	500
Waste Solidification	Z-Area	320	500
Waste Solidification	Z-Area	314	500
Waste Solidification	Z-Area	245	500
Waste Solidification	Z-Area	232	500
Liquid Waste	HTF	229	500
Waste Solidification	DWPF	228	500
Liquid Waste	HTF	210	500
Waste Solidification	Z-Area	207	500
Waste Solidification	Z-Area	206	500

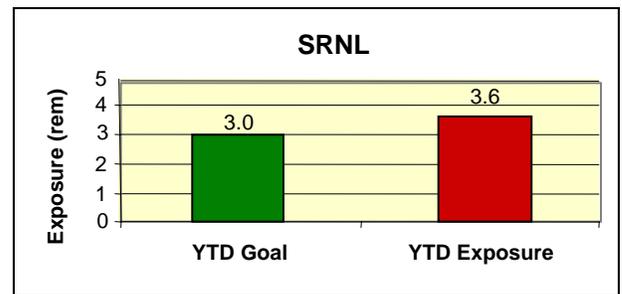
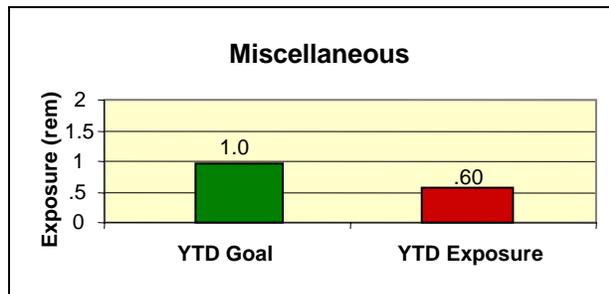
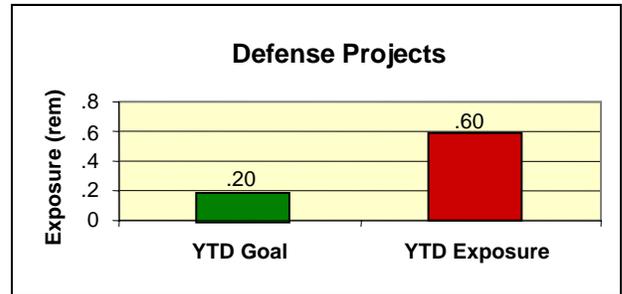
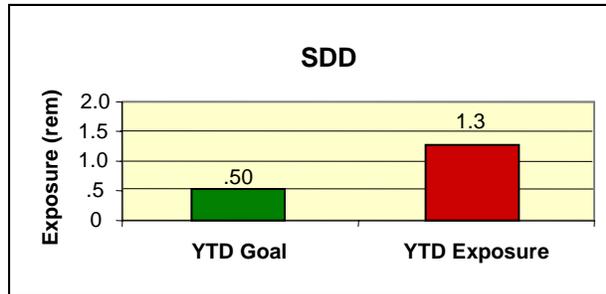
**Site Cumulative Exposure vs. Goal (YTD)**

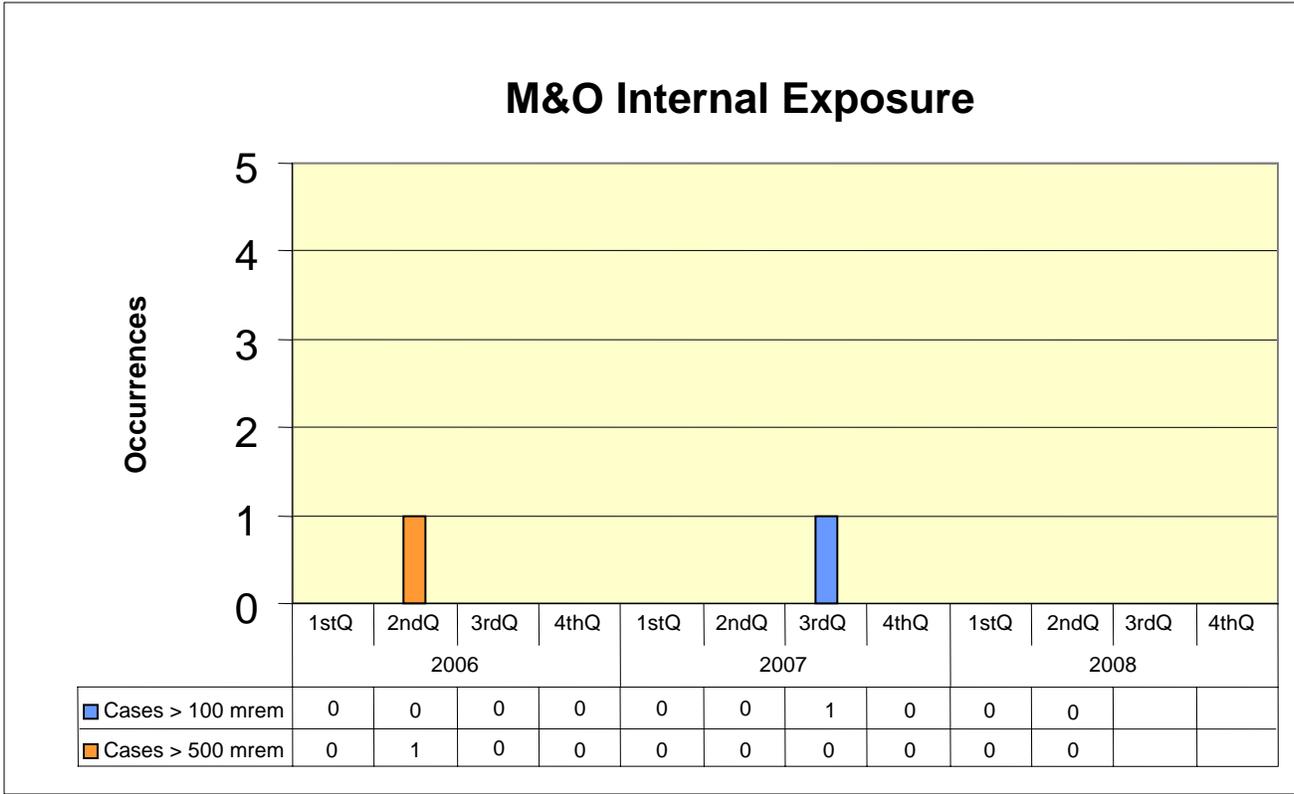


# YTD Cumulative Exposure vs. Goal by Facility



# YTD Cumulative Exposure vs. Goal by Facility





### Table of Corresponding ORPS Reports

ORPS Number	Criteria	Date
1) EM-SR-WSRC-CLAB-2006-0004	6C	4/24/06
2) EM-SR-WSRC-SW&I-2008-NR01*	6C	3/6/08

\* Dose identified in 1<sup>st</sup> Qtr. 2008 and assigned to 3<sup>rd</sup> Qtr. 2007

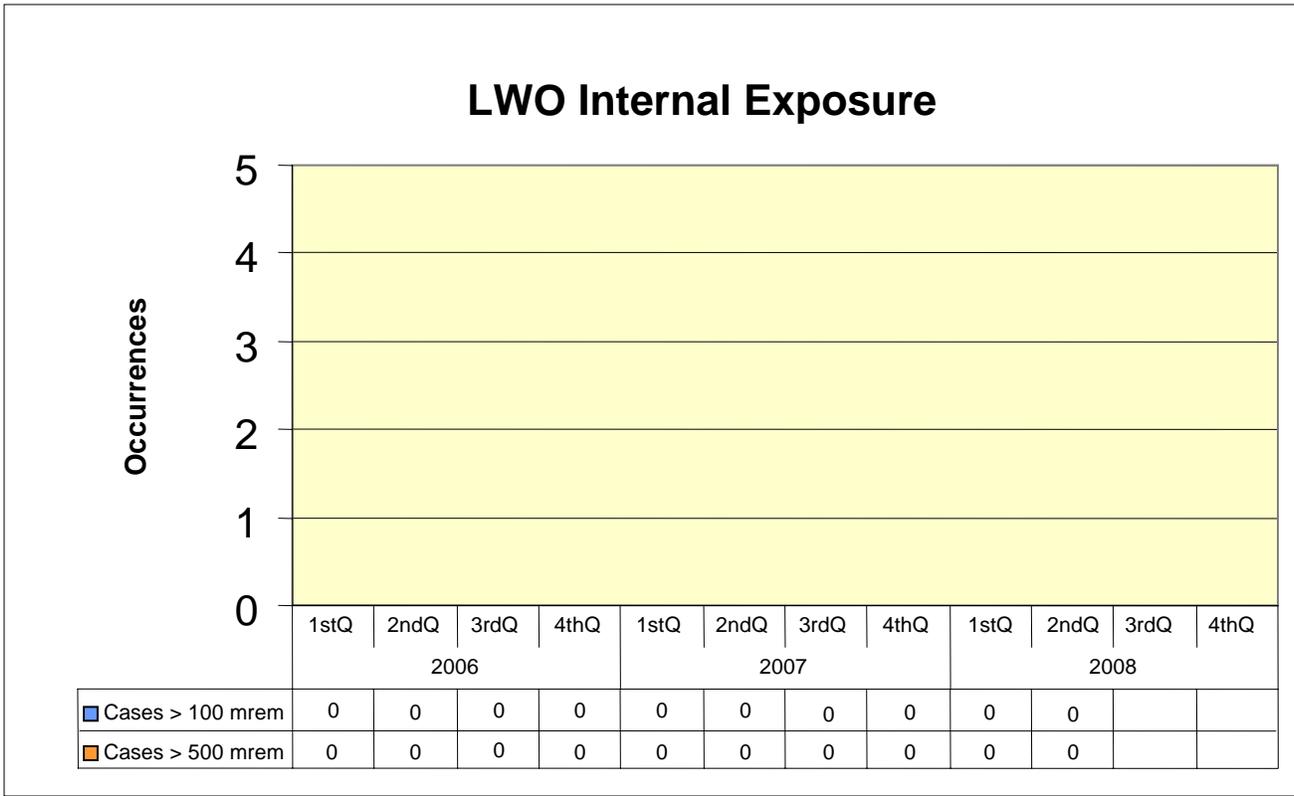
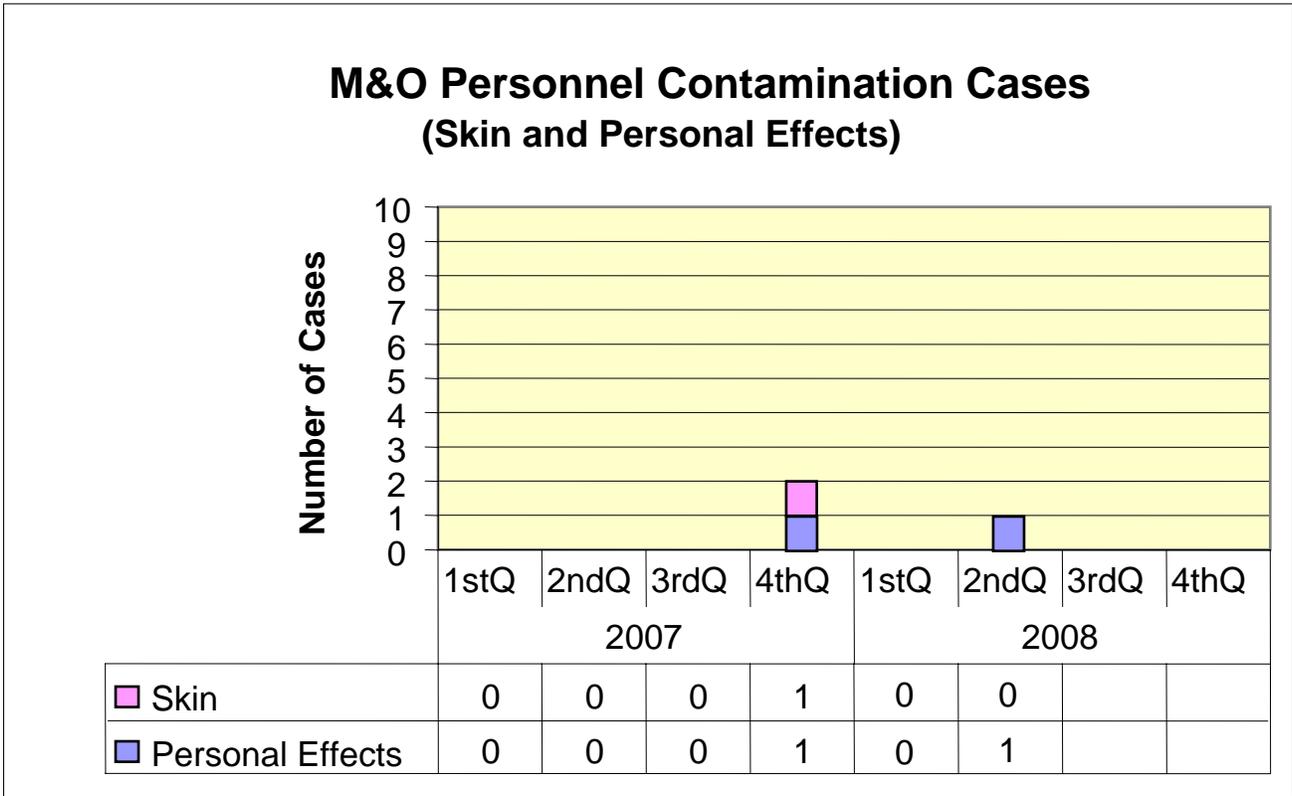


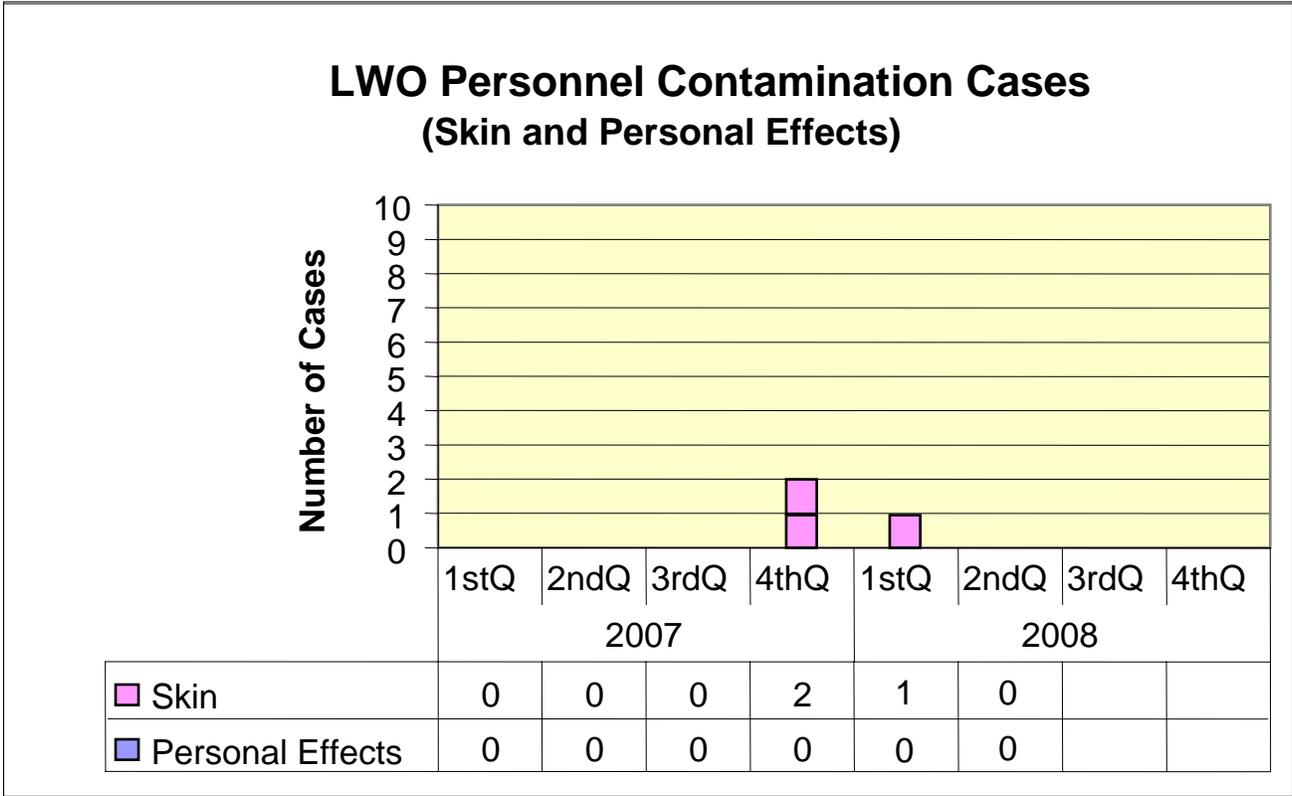
Table of Corresponding ORPS Reports		
ORPS Number	Criteria	Date



### Table of Corresponding ORPS Reports\*

ORPS Number	Criteria	Date
1) EM-SR-WSRC-LTA-2007-0004	6D3	11/30/07
2) EM-SR-WSRC-SW&I-2007-0014	6D3	12/1/07
3) EM-SR-WSRC-LTA-2008-0001	6D3	4/21/08

*\*There were 3 non-ORPS reportable contamination cases in 2007. There are 7 non-ORPS reportable contamination cases in 2008.*



### Table of Corresponding ORPS Reports\*

	ORPS Number	Criteria	Date
1)	EM-SR-WSRC-HTANK-2007-0009 (2 cases)	6D3	12/22/07
2)	EM-SR-WSRC-WVIT-2008-0006	6D3	2/29/08

*\*There were 10 non-ORPS reportable contamination cases in 2007. There are 0 non-ORPS reportable contamination cases in 2008.*