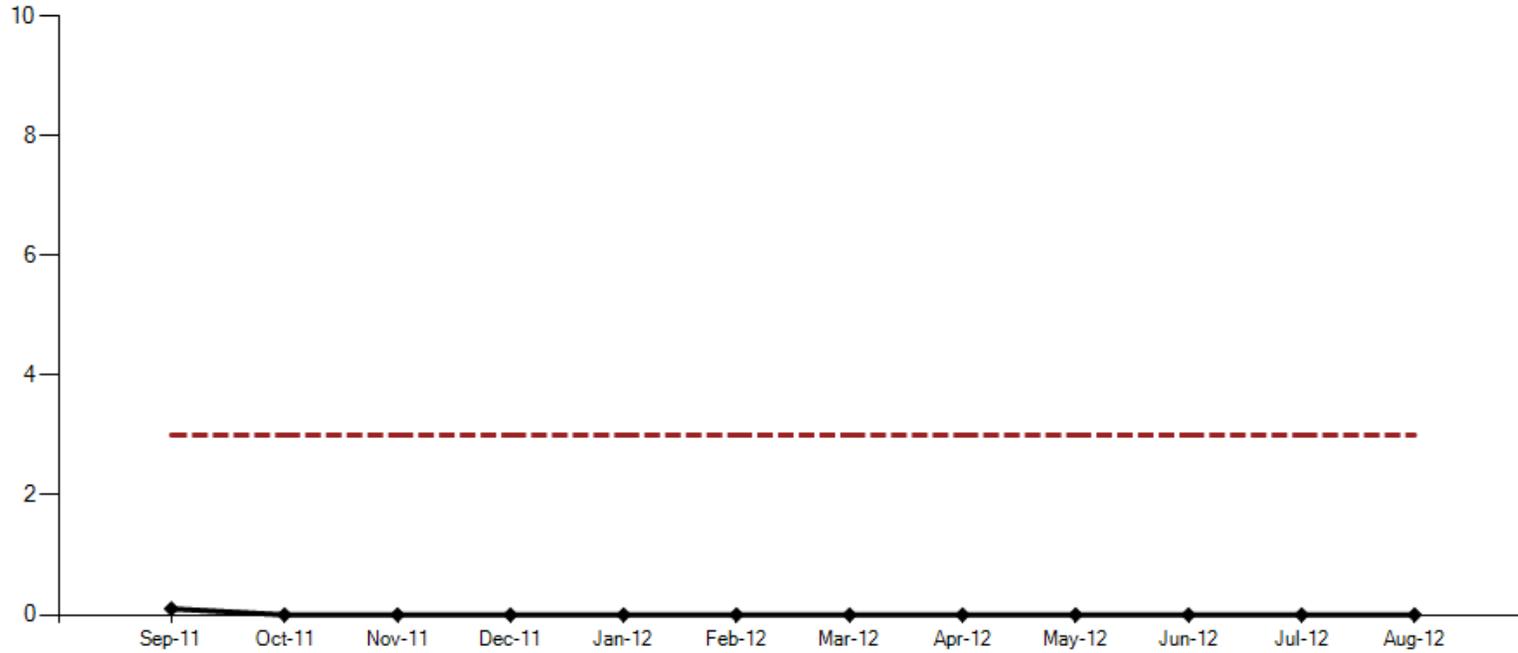


EM Radiological Safety Performance ORPS Personnel Contamination Events Through August 31, 2012



Title	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12
Contamination Events	0	0	0	0	0	0	0	0	0	0	0	0
Contamination Events (FY)	1	0	0	0	0	0	0	0	0	0	0	0
Site Work Hours	1,461,326	981,756	1,105,881	878,118	760,886	1,064,994	958,825	870,855	1,118,760	932,106	850,196	1,099,750
Rad Worker Hrs. (Month)	536,715	382,040	455,284	377,664	345,197	516,792	494,051	476,523	646,692	574,875	517,654	697,836
Rad Worker Hrs. (FY)	1,931,848	382,040	837,324	1,214,988	1,560,185	2,076,977	2,571,028	3,047,550	3,694,242	4,269,117	4,786,771	5,484,607
Fiscal YTD Rate	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Rate	0	0	0	0	0	0	0	0	0	0	0	0
Goal	3	3	3	3	3	3	3	3	3	3	3	3
Score: Fiscal YTD Rate	<=1.5	<=1.5	<=1.5	<=1.5	<=1.5	<=1.5	<=1.5	<=1.5	<=1.5	<=1.5	<=1.5	<=1.5

Note: Data prior to Oct 2011 is located on the Facility Metric page in the Historical ORPS Percon Event Chart under the HISTORICAL header.

Metric Details	
Metric Title	ORPS PerCon Events
Metric Owner/Alternate Owner	Gordon Quillin 2-8389/Greg Tunno 2-8477
Metric SME/POC	Ellen Parrish 2-5825
Metric DOE PI Owner	Chuck Radford 2-8595
Metric Functional Group	RPD, DOE, ESH
Metric Description	Measures ORPS reportable PerCon events 6D(3) & binned as FA 11.10.95
Metric Definition	The Government FYTD rate is obtained by multiplying the number of events by 200,000 hrs & dividing by the number of applicable Rad Worker hrs.
Metric Value	Goal is measured in FYTD Rate
Metric Reporting Frequency	Monthly
Metric Requirements Drivers	5Q , SCD-6 , 5Q1.1-505 , 1-01 4.4 , DOE G 441.1-1C
Data Source(s):	STAR (events) & Hummingbird Database (RWP hrs)
Grade Criteria	Based on ORPS contamination events & RWP hours.
BLUE	< 1.5
VIOLET	> 1.5 - < 2.5
GREEN	≥ 2.5 - ≤ 5.0
YELLOW	> 5.0 - ≤ 7.5
RED	> 7.5
Data Entry/Verification/Validation	Automatic pulls from STAR & Hummingbird Database
Data Inquiry	Please report any Scorecard technical issue to Raine Weimortz or Steve Rich or radiological related questions to Ellen Parrish

Analysis

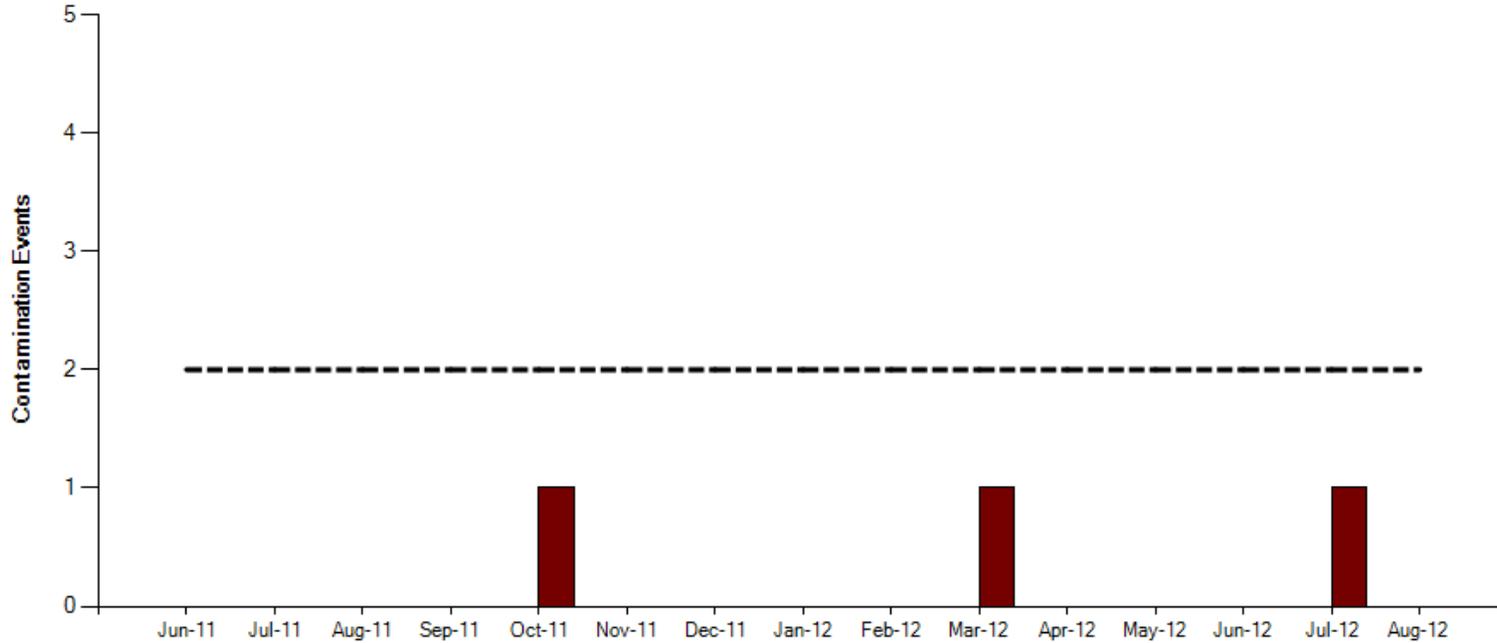
Analysis: Excellent **Color:** Blue
ORPS(6D3) Event: None

Beginning in Oct. 2008 the annual goal converted to a goal of ≤ 3.0 events per 200,000 RWP-hours. In Oct 2011 the method of obtaining Rad worker hours was revised. A percentage is taken of the Site hours to obtain the Rad Work hours. Please address any questions to Ellen Parrish.

Action: SRNS management continues to closely monitor contamination events, including STAR Third Tier events that are below the ORPS reporting thresholds. The Third Tier events are used as a leading indicator that may signal adverse trends that could lead to an increase in the number of reportable events. For each event, corrective actions are taken and documented in STAR and a review is performed for any commonalities that may exist.



EM Radiological Safety Performance
Number of Occurrences of Radioactive Material/Contamination
Detected Outside of Radiological Areas
Through August 31, 2012



Title	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12
Offsite Contamination Events	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Score: Offsite Contamination Events	=0	=0	=0	=0	=0	=0	=0	=0	=0	=0	=0	=0	=0	=0	=0
Contamination Events	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0
Score: Contamination Events	<=1	<=1	<=1	<=1	<=1	<=1	<=1	<=1	<=1	<=1	<=1	<=1	<=1	<=1	<=1

Metric Details	
Metric Title	Number of Rad Material ORPS Events
Metric Owner/Alternate Owner:	Gordon Quillin 2-8389/Greg Tunno 2-8477
Metric SME/POC	Ellen Parrish 2-5825
Metric DOE PI Owner	Chuck Radford 2-8595

Metric Functional Group	RPD, DOE, ESH
Metric Description	Measures ORPS reportable Rad Material events 6B(1-4) & binned as FA 11.10.91 or 11.10.93
Metric Definition	This metric is a lagging indicator for occurrences of radioactive material or spread of contamination found outside of radiological areas.
Metric Value	Measure is in number of events
Metric Reporting Frequency	Monthly
Metric Requirements Drivers	5Q, SCD-6, 5Q1.1-505, 1-01 4.4, DOE G 441.1-1C
Data Source(s)	STAR
Grade Criteria	Based on Rad Material Contamination Events
BLUE	≤ 1 per month Onsite, = 0 per month Offsite
VIOLET	> 1 per month
GREEN	> 3 per month
YELLOW	> 6 per month
RED	> 9 per month or 1 offsite event
Data Entry/Verification/Validation	Automatic pull from STAR & offsite event data entry by Site ALARA Coordinator
Data Inquiry	Please report any Scorecard technical issue to Raine Weimortz or Steve Rich or radiological related questions to Ellen Parrish

Analysis

Analysis: Excellent **Color:** Blue

Current ORPS Events: None

SRS continues to use engineering controls to contain contamination at the source, performs MFO's in the field to assess the work area, and performs fact finding meetings of spread of contamination or radioactive material.

Rate

<=1.5

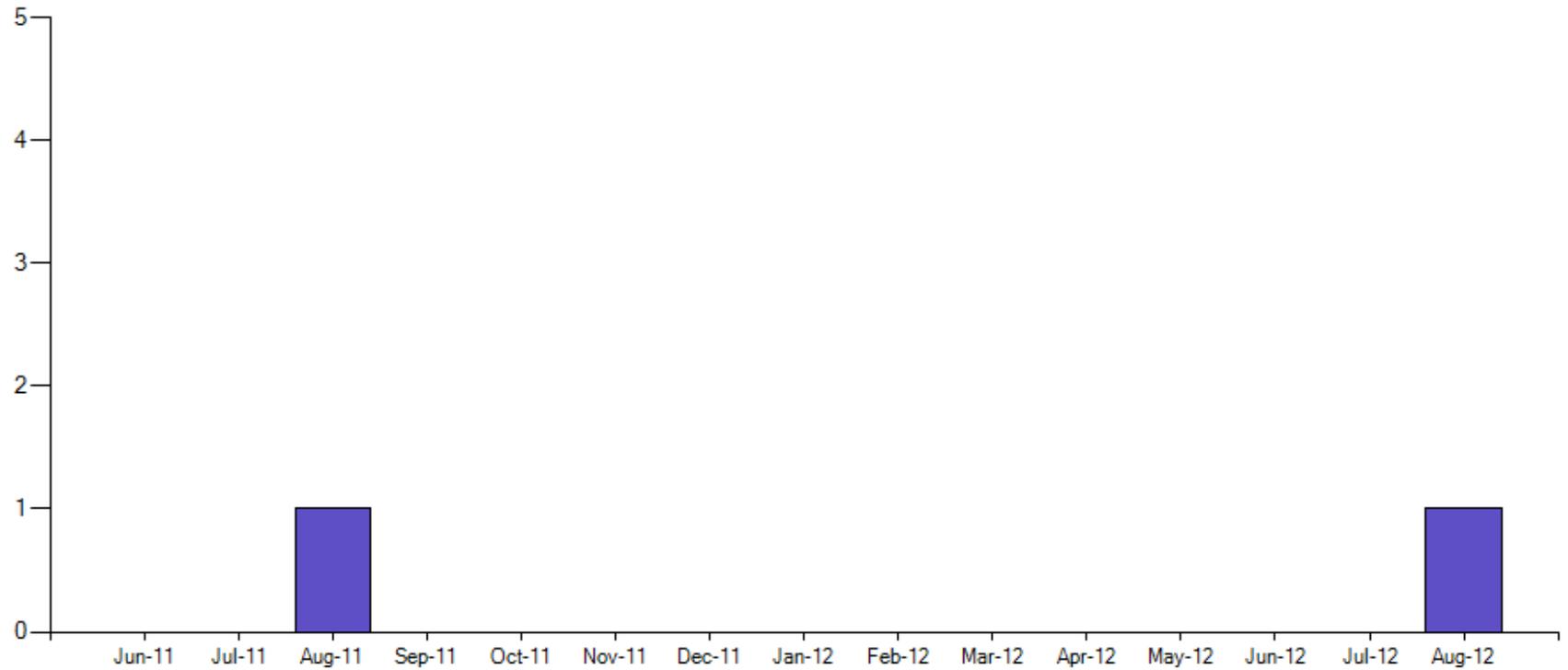
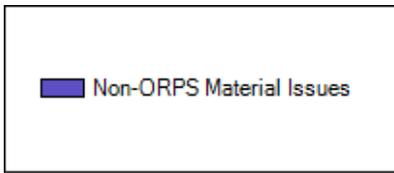
Analysis**Analysis:** Excellent **Color:** Blue**Current ORPS(6D3) Events:** None**Current Non-ORPS Errors:** None

Action: Star Third Tier Bin Items are being categorized with regard to ISMS Core Function. This process will support identification of areas of concern for review and address in response to these leading indicators. Performance continues to be acceptable and stable.

Note: Data prior to Oct 2011 is located on the Facility Metric page in the Historical Non-ORPS Percon Event Chart under the HISTORICAL header.

Metric Details	
Metric Title	Total ORPS & Non-ORPS PerCon Events/Cases
Metric Owner/Alternate Owner	Gordon Quillin 2-8389/Greg Tunno 2-8477
Metric SME/POC	Ellen Parrish 2-5825
Metric DOE PI Owner	Chuck Radford 2-8595
Metric Functional Group	RPD, DOE, ESH
Metric Description	Measures ORPS events & Non-ORPS PerCon errors 6D(3-4) & binned as FA 11.10.94 & 11.10.95 and the number of workers who were contaminated
Metric Definition	The monthly & Government FYTD rates are obtained by multiplying the number of ORPS events by 200,000 hrs & dividing by the number of applicable Rad Worker hrs. This chart reflects non-ORPS and ORPS reportable personnel contamination events/cases per month >500 dpm alpha or >5000 dpm beta-gamma. Beginning in Oct. 2008 we converted to an annual goal of ≤ 3.0 events per 200,000 Rad Worker hrs.
Metric Value	Goal is measured in FYTD rate for ORPS events
Metric Reporting Frequency	Monthly
Metric Requirements Drivers	5Q, SCD-6, 5Q1.1-505, 1-01 4.4
Data Source(s):	STAR (events) and Hummingbird Database (RWP hrs)
Grade Criteria	Based on ORPS contamination events & RWP hours
BLUE	<1.5
VIOLET	> 1.5 - < 2.5
GREEN	≥ 2.5 - ≤ 5.0
YELLOW	>5.0 - ≤ 7.5
RED	> 7.5
Data Entry/Verification/Validation	Automatic pull from STAR & Hummingbird Database, PerCon cases entered by Site ALARA Coordinator
Data Inquiry	Please report any Scorecard technical issue to Raine Weimortz or Steve Rich or radiological related questions to Ellen Parrish

**EM Non-ORPS
Radioactive Material/Contamination
Radiological Protection
Through August 31, 2012**



Title	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12
Non-ORPS Material Issues	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Offsite Discovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Analysis:

Current Non-ORPS Events: 8/20/12 SWM: Slit Trench 9C Extension contamination

Action: SRS continues to use engineering controls to contain contamination at the source, performs MFO's in the field to assess the work area, and performs fact finding

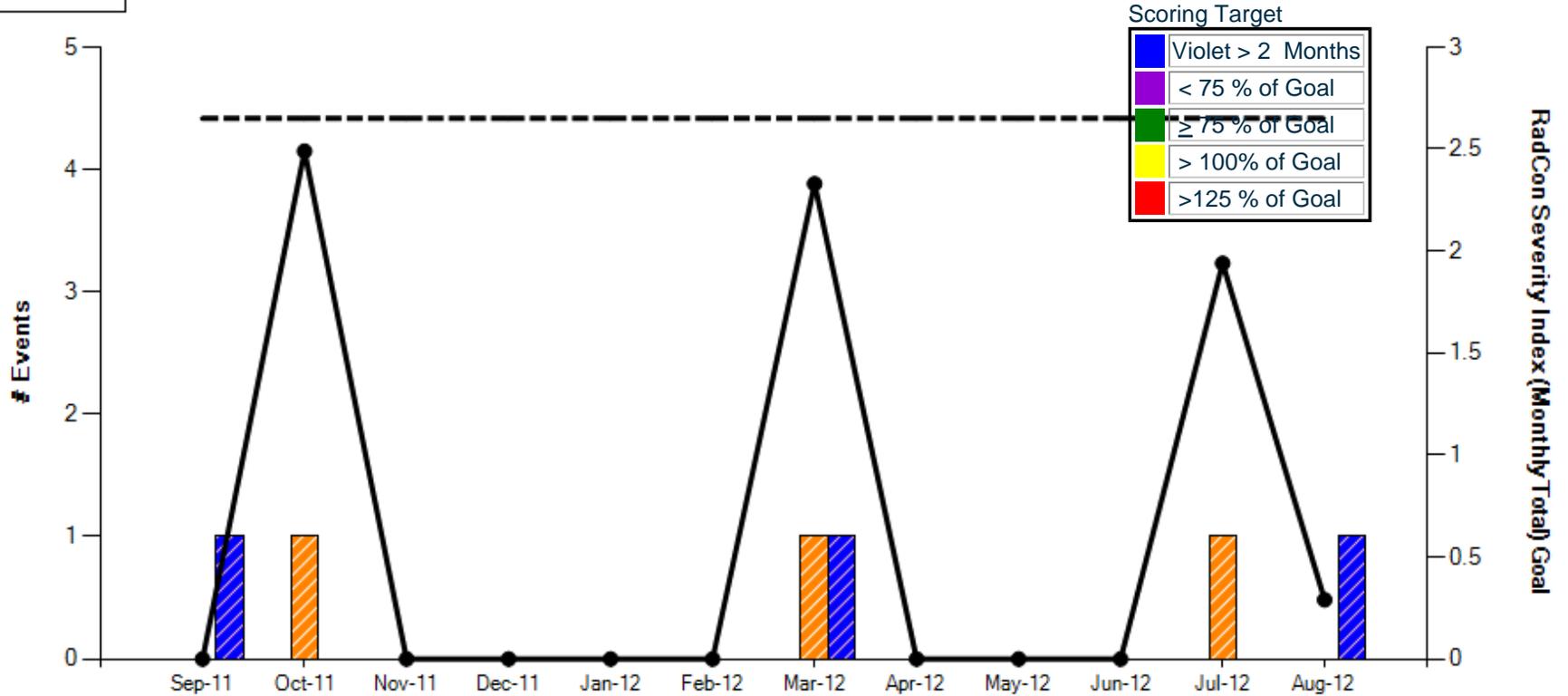
meetings of spread of contamination or radioactive material.

Metric Details	
Metric Title	Non-ORPS Rad Material
Metric Owner/Alternate Owner	Gordon Quillin 2-8389/Greg Tunno 2-8477
Metric SME/POC	Ellen Parrish 2-5825
Metric DOE PI Owner	Chuck Radford 2-8595
Metric Functional Group	RPD, DOE, ESH
Metric Description	Tracks Non-ORPS reportable Rad Material errors 6B(5) & binned as FA 11.10.92. Off-Site events will be covered under 6B1 criteria.
Metric Definition	Rradioactive material or spread of contamination found outside of radiological areas (includes RBAs not contiguous with a Contamination Area, Clean Areas, and Controlled Areas). Area Non-ORPS errors are leading indicators for Area ORPS events.
Metric Value	N/A
Metric Reporting Frequency	Monthly
Metric Requirements Drivers	5Q, SCD-6, 5Q1.1-505, 1-01 4.4
Data Source(s)	STAR
Grade Criteria	None
BLUE	N/A
VIOLET	N/A
GREEN	N/A
YELLOW	N/A
RED	N/A
Data Entry/Verification/Validation	Automatic pull from STAR & offsite event data entry by Site ALARA Coordinator
Data Inquiry	Please report any Scorecard technical issue to Raine Weimortz or Steve Rich or radiological related questions to Ellen Parrish

Rad Con Severity Index

SRNS

Through August 31, 2012



Title	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12
SITE Hours	0	981,756	1,105,881	878,118	760,886	1,064,994	958,825	870,905	1,118,779	932,106	850,196	1,099,750
Rad Worker Hours (Month)	0	401,968	477,923	395,793	361,038	539,148	514,345	494,983	637,001	537,728	516,757	697,836
Rad Work Hours (FY)	0	401,968	879,891	1,275,684	1,636,723	2,175,871	2,690,216	3,185,200	3,822,201	4,359,929	4,876,686	5,574,522
ORPS - Cat 1/2/R	0	0	0	0	0	0	0	0	0	0	0	0
ORPS - Cat 3/3a/4	0	1	0	0	0	0	1	0	0	0	1	0
NOR	1	0	0	0	0	0	1	0	0	0	0	1
Rad Con Points	1	5	0	0	0	0	6	0	0	0	5	1

FY Rad Con Points CUM	26	5	5	5	5	5	11	11	11	11	16	17
Rad Con Severity Index (FY)	0	2.49	1.14	0.78	0.61	0.46	0.82	0.69	0.58	0.5	0.66	0.61
Rad Con Severity Index (Month)	0	2.49	0	0	0	0	2.33	0	0	0	1.94	0.29
Rad Con Index Goal	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65
% Of Goal (Month)	0%	94%	0%	0%	0%	0%	88%	0%	0%	0%	73%	11%
Score (Month)												

Definition

Radiological Contamination events are those that impact personnel or equipment. Each of these required reporting, tracking, evaluation and resolution due to the serious nature of such contamination. Rad Con events are scored based on assigned severity weighting:

STAR CAT 1,2,R = 10 pts

STAR CAT 3 /4 = 5 pts

Non ORPS = 1 pt

ORPS and Non-ORPS data for this metric is pulled from the STAR database. The database manager is Chip Patterson, in case of data integrity concerns.

This metric measures the monthly Rad Con Severity Index. The monthly Index is calculated by multiplying the monthly Rad Con Points by 200,000 hours and then dividing by the total monthly hours. The FY Index is determined by multiplying the number of Rad Con points by 200,000 hours and then dividing it by the total FY hours.

SRNS calculated the baseline on the 2008 SITE ORPS & Non-ORPS events for PerCons, Area Contamination events, and dose related events. The monthly hours for FY10 and FY11 were set based on the number of hours workers signed in on RWPs that tracked time. The FY12 monthly hours will be calculated each month from established queries using various databases to determine the number of radiological worker hours. The Rad Con severity index goal established for FY12 is 2.648.

Note: Data previous to OCT 2011 can be found under Facility Metrics and then under the Historical Rad Con Severity Index. This index was reformatted in Oct 2011 and any data previous to this date on this chart is incomplete.