



*We do the right thing.*

# SRR Safety and CONOPS Continuous Improvement

**Jim French, President and Project Manager  
Savannah River Remediation**

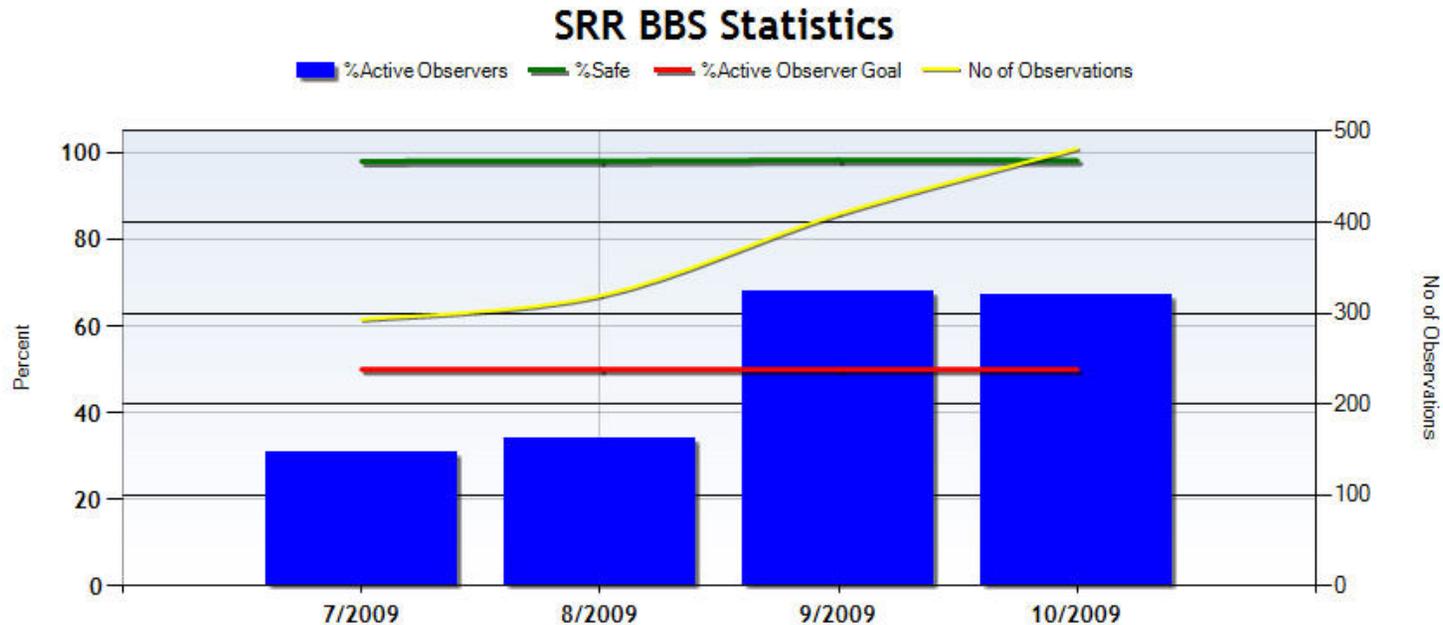
**December 10, 2009**

**Governor's Nuclear Advisory Council**

SRR continues a legacy of safe work within Liquid Waste Operations, an organization that has not recorded a lost time injury since March 2006 (over 11 million safe hours).

- ❑ SRR FY09 Total Recordable Case (TRC) rate is 0.22; FY09 Days Away, Restricted, or Transferred (DART) Rate = 0.0 (7/1/09 - 09/30/09)
- ❑ Current SRR TRC and DART Rates = 0.0 (10/1/09 - 12/8/09)
- ❑ Eighth VPP Star of Excellence (Seven consecutive)
- ❑ National Safety Council's Million Hour Award
- ❑ S.C. Manufacturer's Alliance's Plant Safety Award
- ❑ SC Chamber of Commerce Award
- ❑ Construction employees worked >22 million hours without a lost time injury (since June 1998)

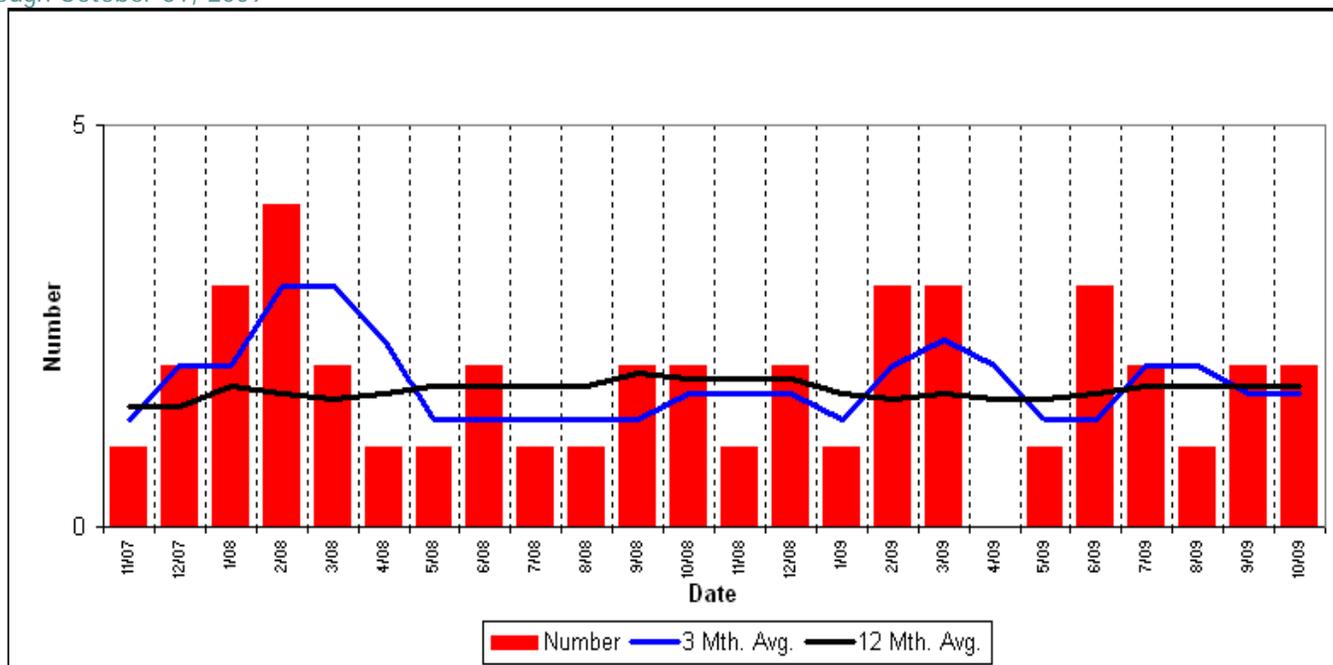
- ❑ WSRC experienced a greater than anticipated incidence of minor injuries leading to transition, with six injuries in the six months preceding transition to SRR.
  - ❑ Behavior Based Safety (BBS) observation rates and observation quality were declining
  - ❑ Employee feedback indicated distraction in the workforce
  
- ❑ SRR challenged Local Safety Improvement Teams to improve performance



- ❑ Injuries at SRS and across the complex indicate an increase in those related to slips/falls and sprains and strains, injuries more common to an aging workforce (SRR average age is 50).
  - ❑ SRR providing strength and balance training to SRR workers.
    - ❑ Training of employees is underway with completion schedule of September 2010.
    - ❑ Workers will then provide reinforcement to their peers on the principles covered in the training through the Behavior Based Safety (BBS) process
  - ❑ BBS observers are focusing on slips and falls (behaviors and conditions).

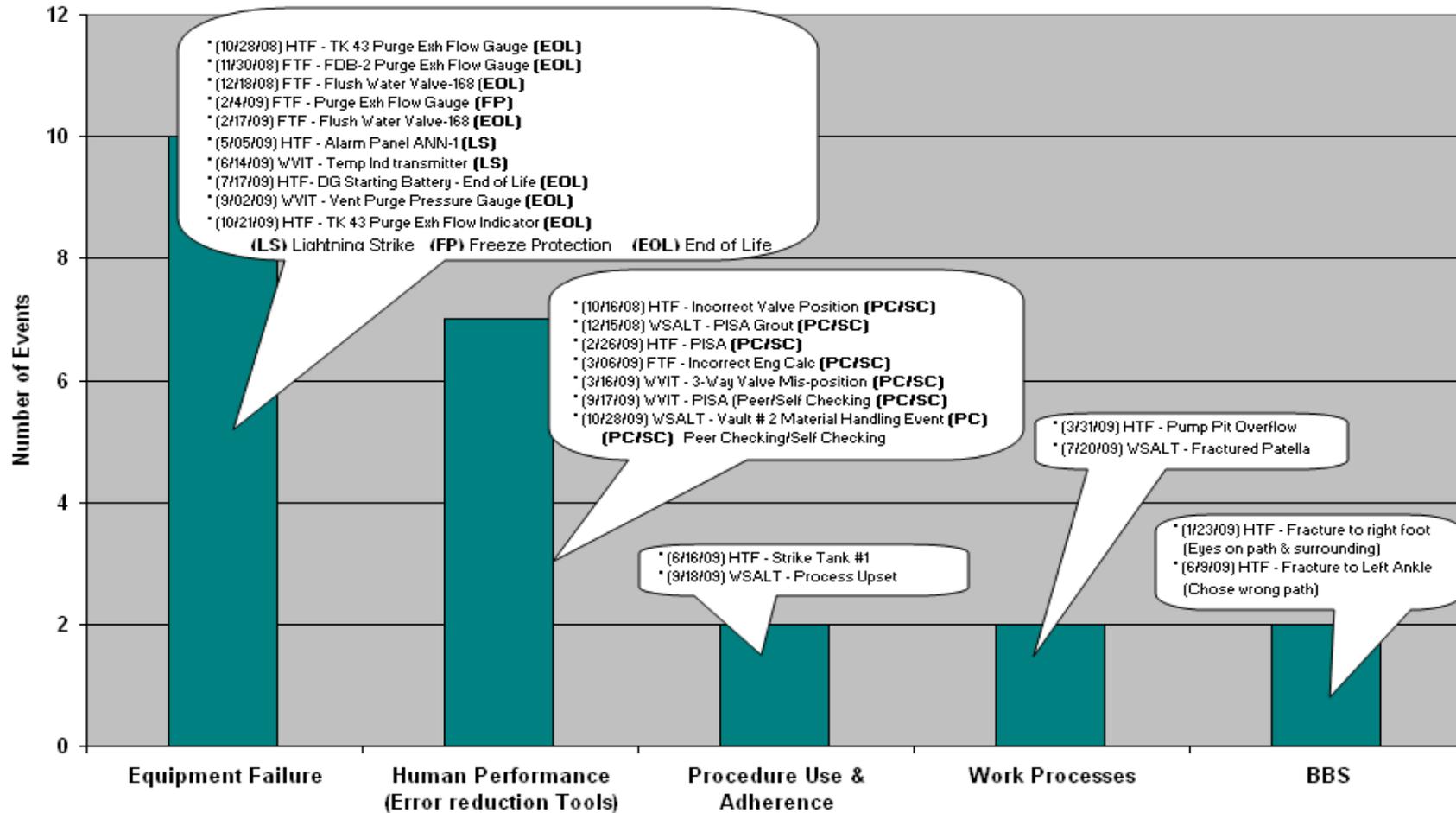
## Liquid Waste Operations

EM ORPS Reportable Events Last 24-Months  
Through October 31, 2009



*SRR Occurrence Reporting and Processing System (ORPS) performance has been stable. As of 10/31, SRR ORPS EM Normalized Score was 0.58 vs. an EM average of 2.04. The SRR goal is 95% of EM average, or 1.94.*

## ORPs Events (10/01/08 through 11/16/09)



- ❑ **Improving Equipment Management**
  - ❑ Engineering utilizing system health reports to determine future modification to improve overall system or equipment reliability
  - ❑ Majority of failures are end of life
  - ❑ No repetitive failures
  - ❑ Equipment failure rate trending downward since 2003
  
- ❑ **Improving Human Performance**
  - ❑ Site Corrective Actions Program now requires HPI error coding of ORPS events
  - ❑ An analysis of ORPS events HPI error coding will be performed in January 2010 in order to determine HPI weaknesses
  - ❑ Results of analysis will be used to develop plan for HPI Error Reduction Refresher Training

**Safety and Conduct of Operations events across the DOE Complex are monitored for lessons learned.**

**Some recent examples:**

- ❑ **Worker injured in cart accident at WIPP**
  - ❑ Carts placed out of service, conducted evaluation of cart.
  - ❑ Cart occupancy restricted to operator only.
  - ❑ All cart operators qualified by classroom training and satisfactory completion of Job Performance Measure (JPM).
- ❑ **Worker injured by fall from catwalk at Hanford**
  - ❑ SRR assessed for compliance with fall protection program requirements, using relevant facts and judgments of need as the basis.
  - ❑ Results indicated strong compliance with regulations and procedures.
- ❑ **Increase in electrical events across the DOE complex**
  - ❑ Electrical Safety Assessment completed to validate facility performance and to reinforce management expectations in this key safety area.
  - ❑ Results indicated compliance with regulations and procedures. Continuous improvement opportunities were identified and are being implemented.
- ❑ **LLNL Vehicle Fatality**
  - ❑ Addressing Type A judgements of need (JON) through procedure changes, and BBS observation.

Some indicators were telling us that it was time to take a *Safety Pause* in order to refocus the workforce on safety.

- ❑ Recent safety events at SRS with other contractors
- ❑ Safety performance degradation in WSRC in months prior to transition
- ❑ Recent safety and conduct of operations events across the DOE Complex
- ❑ The onset of significant ARRA work involving some workers new to the site and not familiar with our safety culture
- ❑ CONOPs leading indicators within SRR showed a need to improve

We understand the need for continuous improvement in our Safety and Conduct of Operations posture and have undertaken the following improvement initiatives:

- ❑ Complete Integrated Safety Management System (ISMS) Baseline
- ❑ Complete electrical safety assessment and implement improvement actions
- ❑ Rollout strength and balance training
- ❑ Continue safety-related equipment improvement initiatives
- ❑ Implement Human Performance Improvements
- ❑ Improve administrative area/skill of the craft safety posture (routine office area walk down, event planning safety procedure)
- ❑ Complete essential work only during holiday work periods - followed by return to work safety focus briefings