



# Benefits of Lean Management in Liquid Waste Operations One Company's Journey

## SRR began the Lean Journey in the Fall 2013

### Lean...

...is a leading edge **continuous improvement process**

...**empowers** the employee to identify and implement improvements rapidly

...in today's environment, **maximizes** achievements with what we have

...is about **"Double the Good and Half the Bad"**

### It's All in the Count

**346** participants  
(>15% of the workforce)

"I see huge potential in streamlining work packages by deleting non-value added steps."

Aaron Weeks, SRR Lead Construction Field Engineer

"I think it is great that SRR is willing to let DOE and our regulators participate. It is an awesome forum for everyone to come together and "take their hats off" and step out of their official roles."

Jolene Seltz, DOE-Savannah River

**12** DOE & Regulator participants

**15** Partner Participants  
(SRNS, SRNL, etc.)

"I believe we have an opportunity for some great collaboration, particularly in areas of standardized equipment and techniques."

Robb Burke, Manager, Retrieval and Closure Engineering, WRPS

### SRR Lean Value Streams and Sample Benefits

**Work Planning & Control** Reduction of Work Packages that need to be planned by converting them to Fix It Now (FIN)

**Supply Chain** 50% reduction in rejected Material/Services requests, resulting in 5-10 hours saved per week, per Planner

**Waste Retrieval & Tank Closure** Closing Tank 12 early by using an inventory of collected data resulting in 3 months of schedule reduction

**Engineering** 9,600 person-hours/year eliminated for Design Authority engineers to now work on backlogs, system health, process reviews, etc.

**Effluent Treatment Facility** Efficiencies identified in facility operations in anticipation of increased retirements

**Cross-Cutting** 50% reduction in procedure backlog by binning/prioritizing procedures and scrubbing backlog of new/revised procedures >2 years in approval cycle

**Work Start Efficiencies** [Data collection underway]



### 8 Forms of Waste



**Waste in a process slows or stops flow**

**"Non Value Added"** ...activities that are not needed...from the customer's perspective

**W**aiting  
**O**verproduction  
**R**ework  
**M**otion  
**P**rocessing  
**I**nventory  
**I**ntellect  
**T**ransportation

### Lean by the Numbers

**39** Lean events  
**7** Value Streams  
**29** Rapid Improvement Events  
**3** 6S Events



**5** Mission Control Centers  
The "war room" for our improvement teams

### What's in it for Me?

- ✓ Removes barriers to allow efficient work execution
- ✓ Brings workgroups together to focus on solving a common problem
- ✓ Allows the people who do the work to determine the best solution

### Celebrate Successes



### Lean Supports a Strong Nuclear Safety Culture



- Improves safety through the elimination of waste and error-likely situations
- Worker engagement emphasizes personal commitment
- Fosters open communication and teamwork
- Field observations result in suggestions for improvements
- Leadership is a core element of Lean and Nuclear Safety Culture
- Worksite Analysis identifies areas of process and safety improvement
- Focuses on problem solving and organizational learning

### Lessons Learned

- Smaller work scope results in rapid achievements and increased savings
- Increased employee participation drives wide-spread knowledge, engagement and culture change
- Clearly defined roles and responsibilities promote ownership, participation and closes gaps
- Enhanced key metric displays increase the lean product knowledge
- Establishing key metrics upfront is critical to properly align resources to sustain change and realize event benefits

