Risk Reduction as a Facilitator of Tank Closure

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SRS Integrated Mission Completion Contract



- Provide a comprehensive risk-based methodology to the SRS legacy cleanup project, such as the dispositioning of radioactive liquid waste through the Salt Waste Processing Facility
- End State Contracting Model Includes Partnering with our regulators

Scope

- Project Management and Support Services
- Liquid Waste Stabilization/Disposition

Contract value: estimated ceiling of approximately \$21 billion over a 10-year ordering period



In addition, SRMC will integrate the Salt Waste Processing Facility into the SRS liquid waste system to maximize salt waste processing and tank closures

New Team In Place



- New Contractor Savannah River Mission Completion (SRMC) is in place
- New Salt Waste Processing Facility (SWPF) is online
- Two Contract Transitions Successfully Completed
 - SRR > SRMC
 - Parsons (SWPF) > SRMC
- Bring New Ideas
 - Optimizations
 - New Strategy & Plans





SRS High Level Waste Inventory





Inventory values as of 2021-12-31

Risk Reduction Focus



- Our mission is to retrieve, process, treat and dispose of the legacy tank waste, and to close the tanks and ancillary structures, as quickly, safely and efficiently as possible
 - Eliminates the long-term risk of storing high-hazard, radioactive waste
- Focus on risk reduction which is driven by curies/activity in tanks
- Prioritize efforts toward high-risk tank acceleration
- Optimize tank closure activities



- Twelve of the original 16 old-style carbon steel tanks constructed in the early to mid 1950's remain in service after 65 years
 - ~7.6 million gallons, 56 million curies stored

Investment in Salt Waste Removal

| Scope | Year 1 | | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | | Year 8 |
|--|-----------------|-------------------------|--------------------|-------------------|--------------------------------------|---|---------------------------|-----------------------|--------|----------|
| Establish Team & Design Input | Design Input | | | Assun | ned WR&TC | Salt Tank E | Sudget/Scho | adule | | |
| Salt Dissolution Design | | Salt Dissolution Design | | | | vary based on | | | | |
| Engineered Equipment | | Engineered Equipment | | | | | | | | |
| Salt Dissolution Installation(LVMJ) | | | Salt Dissolution I | nstallation(LVMJ) | | 🗸 🗸 Risk red | luction | | | |
| Salt Dissolution Execution (LVMJ) | | | | Ę | Salt Dissolution Execution (LVMJ) | }ste | ps | | Wa | aste |
| CSMPInstall | | | | | | C SMP Install | | | Ren | noval |
| Salt Dissolution Execution (CSMP) | | | | | | Salt Dissolution Execution (CSMP) | on | | | |
| Coiling Coil / Annulus Cleaning/D&R | | | | | | Capitri | g Coil / Annulus / D&R | | Та | ink 📃 |
| Sample Preps | | | | | | | Sample Preps | | Clo | sure |
| Sampling | | | | | | | Sampling | | CIU | Surc |
| Sampling Analysis | | | | | | | | Sample An | alysis | |
| Isolation | | | | | | | | Isolation | | |
| Grout Preps | | | | | | | | Grout Preps Instal | | |
| Grouting | | | | | | | | | | Grouting |
| Project Support | | | | | Project Support | | | _ , | | |
| | | | | | | | | | | |

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SRMC

Focus on Optimizations & Waste Removal





Increase in salt processing requires significant increase in waste removal from salt and sludge tanks, & optimized throughput in DWPF, SWPF, and Saltstone The Salt Waste Processing Facility will ultimately increase salt processing significantly over previous processing rate



- 1.5 years of integrated processing
- Good progress has been made and learning more about the integrated process
- Implementing improvements across the integrated system
- New DBD modeling tool
 - Will drive additional optimizations going forward
- Some strategies still under development
 - Detailed strategies will be captured in next System Plan revision

- Not all ideas & improvements are on the table yet as we are following our process
 - That process includes partnering with our regulators
- Many have been completed
- Some actively in progress
- Some to complete in near term
- More to come











Finish in 15 driven by near term risk reduction enabling tank closures