

CSCT Minutes

CSCT Minutes for December on January 4, 2022

Meeting Attendance		
	Attendee	Present
M	Arm, Cheryl	X
M	Berg, Larry	
M	Blanton, Connie	
EM	Bowen, Doug	X
EM	Brady, Mikey	
M	Brooks, Franklin	
M	Bunde, Kermit	X
M	Chambers, Angela	
M	Collens, Jake	X
M	Damba, Darwin	X
M	Dyke, Jimmy	X
M	Eberle, Cris	X
X	Ellis, Daniel	X
EM	Erickson, David	X
M	Fischahs, Christopher	X
M	Gilbertson, Sarah	
M	Hahn, Kevin	
EM	Hayes, David	X
S	Henley, Marsha	X
M	Hines, Tom	
M	Janson, Stephen	X
M	Ly, Gary	X
M	Marenchin, Thomas	X
M	Moore, Josiah	
M	Moss, Patrick	
M	Perry, Christopher	
M	Petraglia, Jeffrey	X
M	Rapp, John	
M	Russell, Paige	
M	Sandgren, Kevin	
X	Smith, Garrett	
M	Thrasher, David	
M	Udenta, Gladys	
M	Vickers, Linda	
M	Wallace, George	
M	Washburn, Peter	X
M	Wilson, Robert	
M	Wise, Tammy	
M	Woodworth, Marc	

M – Member

X – Non-Member

EM – Ex-Officio

S – Scribe

## CSCT Minutes

### Roll call

- Done virtually in lieu of roll call – please acknowledge your presences in the chat.
- Meetings are requirements for NCS oversight folks. Cris hopes the meetings provide value and encourages participation across the board. Attendance is part of the TPQ qualification for criticality safety.

### Previous Items update:

- November minutes reviewed, accepted, and available on the NCSP website
- All previous items current.
- This is our December 2021 meeting.

### Items for discussion:

- Y-12 Elevated Uranium Holdup in Out of Service Reduction Salvage Hopper – Stephen Janson
  - This occurred at Y12 in Oak Ridge, TN
  - Bldg. 9212 has wide range of operations involving fissile material, typically low equity residues (low fissile concentration) and high equity operations for HEU casting operations. Fissile material of concern is U-235 only.
  - Bldg. 9212 constructed in 1949 and been renovated and changed in mission over time.
  - There is a lot of out-of-service equipment – more than 150 equipment items.
  - The facility has a limited life and will move into the Uranium Processing Facility (UPF) which has been under-construction for about 5+ years. There is an exit strategy for evacuating bldg. 9212.
  - Low equity waste from metal reduction process; material added to a large hopper (180 L); then fed into a crusher, then calcined, then dissolved into a useful form for downstream processing.
  - Last operated equipment in 1989 or so; poor condition; not much info about the use of this operation in the past.
  - In the early 2000's there was baseline NDA done for MC&A. In 2004, the Hopper was estimated to have <300 g U-235.
  - In 2021, new measurements taken for clean out and isolation operations to support exit strategy. NDA measurements taken from a variety of new locations and angles in the operation found significantly more estimates of 1 kg U235. This was above the basis requiring a Criticality Safety Evaluation and was report as Occurrence Level 3. ORPS report number NA--NPO-CNS-Y12NSC-2021-0057.
  - Corrective actions - clean out and isolate equipment; need priority and a new evaluation to support these activities; Older NDA data are likely not acceptable for nuclear safety use; unfavorable geometry equipment; etc.
  - Cris has a question about what "low equity" is - low equity is a phase to describe an operation with low fissile content.
  - Cris asked about the quality of the measurement - Stephen indicated the quality was "quick and dirty" to establish a quick basis; the measurement quality is certainly an issue here; Cris asked for an ORPS # but it was not available. It is included in these minutes.
  - Further discussion about the event should be directed to Chris Haught, Y-12.
- Open Discussion:
  - None

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- Topics for next meeting?
  - Next meeting will be Jan 25, 2022
- Meeting adjourned at 11:25 AM EST