



Department of Energy

Washington, DC 20585

January 25, 2019

The Honorable Bruce Hamilton
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue NW, Suite 700
Washington, DC. 20004

Dear Chairman Hamilton:

Consistent with the Board's letter dated February 26, 2016, attached please find the Fiscal Year 2018 Annual Metrics Report on the nuclear criticality safety criteria. This metrics report includes a series of tables and satisfies the annual reporting requirement established for closure of Defense Nuclear Facilities Safety Board Recommendation 97-2, *Continuation of Criticality Safety at Defense Nuclear Facilities in the Department of Energy (DOE) Complex*.

If you have any specific questions regarding the report, please contact Kevin Hahn, National Nuclear Security Administration (NNSA), who has overall responsibility for the consolidated report, at (505) 845-4106. Robert Wilson, Office of Environmental Management (EM), (303) 236-3666, is responsible for the EM information; and Joanna Serra, Office of Science (SC), (301) 903-6136, is responsible for the SC information.

Sincerely,

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2018
ANNUAL METRICS
REPORT

To
THE DEFENSE NUCLEAR
FACILITIES SAFETY BOARD

January 2019

NUCLEAR CRITICALITY
SAFETY PROGRAMS



National Nuclear Security Administration
United States Department of Energy
Washington, DC 20585

Purpose

A Defense Nuclear Facilities Safety Board (DNFSB) letter dated February 26, 2016, requested that the Department of Energy (DOE) provide an annual metrics table on the nuclear criticality safety criteria listed below in its Annual Report on Nuclear Criticality Safety (NCS) Programs. The Board's letter modified the annual reporting requirement established for closure of DNFSB Recommendation 97-2, *Continuation of Criticality Safety at Defense Nuclear Facilities in the Department of Energy (DOE) Complex*, which requires DOE to provide a report and briefing on the requested subject areas for its various NCS programs.

The points-of-contact for this report are Kevin Hahn, National Nuclear Security Administration (NNSA), 505-845-4106, Dr. Robert Wilson, Office of Environmental Management (EM), 303-236-3666, and Joanna Serra, Office of Science (SC), 301-903-6136.

The requested metrics include:

1. DOE's overall evaluation of the contractors' performance in the functional area of criticality safety, consistent with DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy*.

- This qualitative grade is determined by the Field Office.
- Grading is based on the following scheme:

Green	Meets or exceeds expectations
Yellow	Adequate but needs improvement
Red	Does not meet expectations

Note: Starting in Fiscal Year (FY) 17, grading was divided into program health and operational implementation. Previous years had only an overall performance grade for the site's NCS program.

The overall performance of the site has been broken into program health and operational implementation.

- The program health grade is based on items such as contractor staffing levels, quality, timeliness and backlog of NCS Evaluations, adequate funding, NCS procedures and policies...etc.
 - The operational implementation grade is based on items such as those events and issues affecting the handling and processing of nuclear materials...i.e., infractions, conduct of operations, implementation of NCS in operating procedures...etc.
- 2. The number of criticality safety infractions in each severity level, per site-specific criteria;**

3. **The number of identified non-compliances with DOE Order 420.1, *Facility Safety*, and the American National Standards Institute/American Nuclear Society-8 series of criticality safety standards. Includes the number of contractor-identified non-compliances and the number identified by external parties;**
4. **The number of contractor and federal criticality safety assessments completed including the total number of findings and opportunities for improvement from these assessments;**
 - The number of assessments focused on criticality safety include:

For Contractors: Management self-assessments, criticality safety committee reviews, operational readiness assessments, and biennial/triennial external reviews but does not include regularly scheduled operational reviews.

For Federal: DOE Headquarters, field office, and Office of Enterprise assessments; Criticality Safety Support Group's (CSSG) reviews, federal readiness assessments, and "For-cause" assessments but does not include day-to-day oversight conducted by facility representatives.
 - Findings: Total number of assessment observations that generate a corrective action plan.
 - Opportunities for Improvement (OFIs): Total number of all other assessment observations that were not findings.

Note: Information from this metric may overlap the information provided for the third metric.

5. **Current contractor and federal criticality safety staffing levels, including the average years of experience in criticality safety, number of qualified staff, number in training, number of staff lost, number of staff hired in the previous year;**
 - The number of qualified NCS engineers reflects the number of staff qualified to independently perform criticality safety work consistent with site specific criteria.
 - The “target” metric indicates whether the number of qualified NCS staff is sufficient to meet programmatic needs.
 - The “experience” metric is an average of the years of experience in criticality safety for the qualified staff at the time of reporting.

The following tables represent the requested data for DOE sites for FY 18. The overall performance grades and metrics have been provided by each site's Field Office.

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Lawrence Livermore National Laboratory (LLNL)

1. LLNL Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

NA-512, Office of Nuclear Safety Services, provided temporary oversight during FY18.

2. LLNL Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4
FY 16	0	0	0	2
FY 17	0	0	0	2
FY 18	0	0	0	1

3. LLNL Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. LLNL Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	3	0	10	6	0	1
FY 17	1	0	7	1	0	1
FY 18	1	0	1	2	0	0

5. LLNL Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	6	Yes	1	1	0	20
FY 17	5	Yes	1	2	1	19
FY 18	10	Yes	3	0	3	28

6. LLNL Federal Staffing

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	1	Yes	0	0	0	17
FY 17	1	Yes	0	0	0	18
FY 18	0	No	0	1	0	N/A

Nevada National Security Site (NNSS)

1. NNSS Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

NNSS reporting only includes data from the M&O Contractor. Work done at NNSS under other programs is reported in the respective section.

2. NNSS Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	0
FY 17	0	0	0	1	0
FY 18	0	0	0	0	0

3. NNSS Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. NNSS Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	1	3	11	2	4	4
FY 17	2	2	7	2	2	1
FY 18	3	1	3	1	1	2

5. NNSS Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	1	1	0	8
FY 17	3	Yes	1	1	1	17
FY 18	3	Yes	1	0	1	23

6. NNSS Federal Staffing

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	1	Yes	1	0	0	10
FY 17	1	Yes	1	0	0	11
FY 18	2	Yes	0	0	0	14

Los Alamos National Laboratory (LANL)

1. LANL Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Red	
FY 17	Red	Red
FY 18	Yellow	Yellow

Comments:

LANL NCS Program improvements continue and the program is approaching full compliance. Federally approved compensatory measures remain in place until improvements are complete. Working legacy evaluations to remove compensatory measures remain a continuing challenge. The program is addressing these issues at an accelerated rate.

From FY16 to FY18, significant improvements include:

- 18% increase in qualified analysts and 27% increase in analysts-in-training
- Increase in quality of CSEDs issued based on reduction in findings
 - FY16: 2 findings/CSED
 - FY17: < 1 finding/CSED
 - FY18: < 0.5 finding/CSED
- 70% increase in the quantity of CSEDs issued
- 40% increase in analyst presence in the field
- Field Office authorized FTEs for Criticality Safety increased from 1 to 2.

Triad National Security is the new contractor managing and operating LANL. During transition, they presented an understanding of current issues, a commitment to maintain improvement efforts, and plans to accelerate those efforts using corporate resources.

2. LANL Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	1	6	17
FY 17	0	0	3	6	22
FY 18	0	0	1	12	29

3. LANL Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	21	3
FY 17	31	0
FY 18	42	0

4. LANL Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	3	3	0	5	1	5
FY 17	5	5	7	3	1	0
FY 18	8	3	9	1	1	0

5. LANL Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	9	No	11	1	6	8.8
FY 17	9	No	12	5	6	6.25
FY 18	11	No	14	2	6	5.50

6. LANL Federal Staffing

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	1	No	0	0	0	10
FY 17	1	No	0	0	0	11
FY 18	1	No	0	0	0	12

Sandia National Laboratories (SNL)

1. SNL Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

The Program Health grade is green based on an SNL's emphasis on completing criticality safety evaluations (CSEs) to support operations. SNL initiated a *Program Improvement and Implementation Plan* in FY16, updated the plan in FY17 and FY18 and is making progress per the plan. SNL initiated a triennial assessment with external reviewers in FY17 with a grade of adequate and is implementing resultant corrective actions. In FY18, SNL qualified two new staff and continued training for four staff to address the need for resources.

The Operational Implementation grade is green based on the excellent support given to completing two CSEs and starting three CSEs for the handling and processing of fissile materials. The number of infractions and non-compliances for a fourth year was low with a non-compliance due to one person being late on required training.

2. SNL Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	0
FY 17	0	0	0	0	0
FY 18	0	0	0	0	1

3. SNL Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	1	0
FY 18	1	0

4. SNL Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	7	0	13	5	1	5
FY 17	9	0	11	4	0	5
FY 18	9	0	13	6	1	8

5. SNL Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	6	Yes	4	0	1	17
FY 17	6	Yes	6	0	0	18
FY 18	7	Yes	4	1	1	14

6. SNL Federal Staffing

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	1	Yes	0	0	0	11
FY 17	1	Yes	0	0	0	12
FY 18	1	Yes	0	0	0	13

Pantex

1. Pantex Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Yellow	Green

Comments:

The Program Health grade reflects the combined performance of the contractor at Y-12, Pantex and Uranium Processing Facility (UPF). However, the Operational Implementation grade is specific to implementation at this site. See the Y-12 section for information on the Program Health grade.

The NNSA Production Office (NPO) has no NCS staff dedicated solely to Pantex or any specific location. Oversight is provided by periodic site visits and communication with Pantex NPO staff.

2. Pantex Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	0
FY 17	0	0	0	0	0
FY 18	0	0	0	0	0

3. Pantex Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. Pantex Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	3	2	10	1	0	0
FY 17	4	0	3	1	1	0
FY 18	4	0	1	1	0	0

5. Pantex Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	4	Yes	2	0	0	4
FY 17	5	Yes	1	0	0	8.6
FY 18	5	Yes	0	1	0	8.3

6. Pantex Federal Staffing

Note: Criticality Safety Federal oversight of Pantex, Y-12 and UPF is performed by the NPO.

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	1	0	1	20
FY 17	3	Yes	0	0	0	21
FY 18	2	Yes	1	1	1	11

Y-12 National Security Site (Y-12)

1. Y-12 Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Yellow	Yellow

Comments:

The Program Health grade reflects the combined performance of the contractor at Y-12, Pantex and UPF. However, the Operational Implementation grade is specific to implementation at this site.

The performance grade was lowered to yellow to reflect the weaknesses identified following multiple reportable occurrences filed at Y-12 for unanalyzed uranium accumulation. These weaknesses are associated not only with criticality safety analysis but other integrated functions including configuration management and production process knowledge.

Extent of condition reviews of all operations identified areas of concerns with regard to unanalyzed uranium accumulations. These operations, as well as all operations at Y-12, are now shown to be safely subcritical with the identified controls for all normal and credible abnormal conditions. Two exceptions to this have been identified as needing additional studies of the rate of uranium accumulation. Therefore, one operation has been suspended, and one is under conservative operational restriction.

In addition to completing corrective actions derived from causal analyses for the specific events, the contractor responsible for Y-12 operations also committed to a site-level nuclear material stewardship initiative. The objective of this activity is to reduce the risk of inadvertent accumulation. It is composed of multiple deliverables including a new health metric for criticality safety evaluations and action to identify improvements in operator and supervisor training. The progress and effectiveness of this initiative will be the subject of an NPO assessment in Fiscal Year 2019.

2. Y-12 Criticality Safety Infractions

Fiscal Year	Occurrences	Deficiencies	Minor Non-Compliances
FY 16	5	20	35
FY 17	3	16	18
FY 18	4	27	39

3. Y-12 Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. Y-12 Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	7	1	9	7	1	0
FY 17	16	11	32	6	1	8
FY 18	4	3	1	6	2	8

5. Y-12 Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	22	No	15	3	3	15.5
FY 17	21	No	13	6	3	17.5
FY 18	22	No	9	6	7	14.8

6. Y-12 Federal Staffing

Note: Criticality Safety Federal oversight of Pantex, Y-12 and UPF is performed by the NNSA Production Office (NPO).

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	1	0	1	20
FY 17	3	Yes	0	0	0	21
FY 18	2	Yes	1	1	1	11

Uranium Processing Facility (UPF)

1. UPF Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	N/A
FY 18	Yellow	N/A

Comments:

The Program Health grade reflects the combined performance of the contractor at Y-12, Pantex and UPF. However, the Operational Implementation grade is specific to implementation at this site; however, this facility is not operational, so the implementation grade is not applicable (N/A). See the Y-12 section for information on the Program Health grade.

Staffing levels were significantly reduced in FY 17 due to completion of final design in July, 2017.

NPO has no criticality safety staff dedicated solely to UPF or any individual location.

2. UPF Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

3. UPF Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	4	1	2	2	0	1
FY 17	6	0	5	0	0	0
FY 18	5	0	2	0	0	0

4. UPF Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	29	No	6	5	3	22.1
FY 17	18	Yes	1	18	2	27
FY 18	23	Yes	1	1	6	22

5. UPF Federal Staffing

Note: Criticality Safety Federal oversight of Pantex, Y-12 and UPF is performed by the NNSA Production Office (NPO).

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	1	0	1	20
FY 17	3	Yes	0	0	0	21
FY 18	2	Yes	1	1	1	11

Pacific Northwest National Laboratory (PNNL)

1. PNNL Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Yellow	
FY 17	Green	Green
FY 18	Green	Green

Comments:

The last Nuclear Criticality Safety Program (NCSP) assessment was conducted in 2015. Although the NCSP Assessment conducted in 2018 is pending finalization of the assessment report, observations indicate that improvements can be made in program health. The Pacific Northwest Site Office expects that the corrective action program that the contractor has committed to will resolve the issues.

2. PNNL Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	0
FY 17	0	0	0	0	0
FY 18	0	0	0	0	0

3. PNNL Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	1	0
FY 18	0	0

4. PNNL Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	13	1	10	1	0	2
FY 17	12	0	14	0	0	0
FY 18	11	5	5	1	1	0

5. PNNL Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	4	Yes	1	0	0	17
FY 17	3	Yes	4	0	3	12.4
FY 18	3	Yes	3	0	0	13.4

6. PNNL Federal Staffing

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	1	Yes	0	0	0	21
FY 17	1	Yes	0	0	0	22
FY 18	1	Yes	0	0	0	23

Richland CHPRC

1. CHPRC Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

The CHPRC Criticality Safety Program is well established. Updates to the Program document are made to reflect the current state of the facilities under its auspices (i.e., only requirements relevant to current operations are implemented). Operations in CHRPC facilities under the Criticality Safety Program are mainly waste packaging, storage, and transportation and D&D activities. These activities are covered by an established set of criticality safety evaluations.

2. CHPRC Criticality Safety Infractions

Fiscal Year	Criticality	Violation	Infraction	Discrepancy	Deviation
FY 16	0	0	0	0	0
FY 17	0	0	0	0	2
FY 18	0	0	0	0	1

3. CHPRC Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	3	0
FY 17	0	0
FY 18	0	0

4. CHPRC Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	3	0	3	14	0	4
FY 17	3	2	4	7	0	3
FY 18	1	3	1	5	0	4

5. CHPRC Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	8	Yes	0	0	0	20.6
FY 17	5	Yes	0	0	0	23
FY 18	4	Yes	1	1	1	24

6. CHPRC Federal Staffing

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	1	Yes	0	0	0	4
FY 17	1	Yes	0	0	0	5
FY 18	1	Yes	0	0	0	6

River Protection WTP

1. WTP Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	N/A
FY 18	Green	N/A

Comments:

This facility is not operational, so the implementation grade is not applicable (N/A).

2. WTP Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

3. WTP Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	0	0	0	2	4	0
FY 17	2	0	7	0	0	0
FY 18	1	0	0	1	0	0

4. WTP Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	2	1	0	13
FY 17	3	Yes	0	1	0	3
FY 18	2	Yes	1	1	0	5

5. WTP Federal Staffing

Note: Federal oversight is combined for WTP and Tank Farms.

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	5	Yes	2	0	0	7
FY 17	5	Yes	2	0	0	8
FY 18	3	Yes	2	2	0	7

River Protection Tank Farms

1. Tank Farms Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

No comments.

2. Tank Farms Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	0
FY 17	0	0	0	0	0
FY 18	0	0	0	0	0

3. Tank Farms Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	1	0
FY 18	0	0

4. Tank Farms Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	1	1	1	1	0	2
FY 17	1	1	7	2	0	0
FY 18	1	1	4	1	0	0

5. Tank Farms Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	3	Yes	0	0	0	25
FY 17	3	Yes	0	1	1	20
FY 18	3	Yes	0	0	0	21

6. Tank Farms Federal Staffing

Note: Federal oversight is combined for WTP and Tank Farms.

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	5	Yes	2	0	0	7
FY 17	5	Yes	2	0	0	8
FY 18	3	Yes	2	2	0	7

Idaho Flour Idaho LLC

1. Flour Idaho Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

Flour Idaho, LLC assumed the contract scope for CH2M-WG Idaho, LLC (CWI) and Idaho Treatment Group, LLC (ITG) on June 1, 2016.

2. Flour Idaho Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	2	0	0
FY 17	0	0	4	1	0
FY 18	0	0	4	3	0

3. Flour Idaho Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. Flour Idaho Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	14	16	21	1	0	0
FY 17	43	63	77	4	0	0
FY 18	41	58	67	4	0	0

5. Flour Idaho Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	4	Yes	1	0	0	15
FY 17	6	Yes	1	0	2	18
FY 18	5	Yes	0	2	1	20

6. Flour Idaho Federal Staffing

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	3	Yes	0	2	0	7
FY 17	3	Yes	0	0	0	8
FY 18	2	Yes	0	1	0	9

Oak Ridge UCOR

1. UCOR Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

No comments.

2. UCOR Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	3	1
FY 17	0	0	0	7	1
FY 18	0	0	0	8	2

3. UCOR Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. UCOR Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	16	0	0	4	0	0
FY 17	10	0	0	3	2	1
FY 18	13	0	0	4	0	0

5. UCOR Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	4	Yes	0	0	0	16
FY 17	5	Yes	0	1	2	21
FY 18	5	Yes	0	0	0	24

6. UCOR Federal Staffing

Note: Federal oversight is combined for UCOR, Isotek Systems, LLC (Isotek), and Transuranic (TRU) Waste Processing Center (TWPC).

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	0	0	0	22
FY 17	2	Yes	0	0	0	23
FY 18	3	Yes	1	0	0	25

Oak Ridge Isotek

1. Isotek Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

No comments.

2. Isotek Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	3
FY 17	0	0	0	0	5
FY 18	0	0	0	0	0

3. Isotek Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. Isotek Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	1	0	7	4	0	0
FY 17	2	0	17	4	0	0
FY 18	1	0	7	4	0	0

5. Isotek Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	5	Yes	0	1	1	25
FY 17	5	Yes	0	0	0	26
FY 18	4	Yes	1	1	1	27

6. Isotek Federal Staffing

Note: Federal oversight is combined for UCOR, Isotek, and TWPC.

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	0	0	0	22
FY 17	2	Yes	0	0	0	23
FY 18	3	Yes	1	0	0	25

Oak Ridge TWPC

1. TWPC Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

No comments.

2. TWPC Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	1
FY 17	0	0	0	1	0
FY 18	0	0	0	2	0

3. TWPC Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. TWPC Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	1	0	1	5	0	0
FY 17	1	0	0	3	0	0
FY 18	1	0	2	3	0	0

5. TWPC Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	4	Yes	0	0	0	28
FY 17	4	Yes	0	1	1	28
FY 18	3	Yes	0	1	0	29

6. TWPC Federal Staffing

Note: Federal oversight is combined for UCOR, Isotek, and TWPC.

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	0	0	0	22
FY 17	2	Yes	0	0	0	23
FY 18	3	Yes	1	0	0	25

Savannah River SRNS

1. SRNS Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Green	Green

Comments:

No comments.

2. SRNS Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	2
FY 17	0	0	0	1	3
FY 18	0	0	0	2	8

3. SRNS Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. SRNS Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	137	16	77	24	3	8
FY 17	156	14	121	16	3	8
FY 18	150	26	123	36	1	5

5. SRNS Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	20	Yes	8	1	3	21
FY 17	21	Yes	7	2	3	21
FY 18	20	Yes	8	4	5	21

6. SRNS Federal Staffing

Note: Federal oversight is combined for Savannah River Nuclear Solution (SRNS), Parsons Infrastructure and Technology Group, Inc. (Parsons), and Savannah River Remediation (SRR).

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	3	No	0	1	0	16
FY 17	3	No	0	0	0	15
FY 18	3	No	2	0	2	16

Savannah River Parsons

1. Parsons Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	N/A
FY 18	Green	N/A

Comments:

Parsons is not yet approved for operations; therefore, the Operational Implementation grade is not-applicable.

2. Parsons Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	0
FY 17	0	0	0	0	0
FY 18	0	0	0	0	0

3. Parsons Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	N/A*	N/A*
FY 17	N/A*	N/A*
FY 18	N/A*	N/A*

* No assessments performed.

4. Parsons Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	0	0	0	0	0	0
FY 17	0	0	0	0	0	0
FY 18	0	0	0	0	0	0

5. Parsons Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	1	2	1	25
FY 17	2	Yes	0	0	0	30
FY 18	3	Yes	0	0	1	27

6. Parsons Federal Staffing

Note: Federal oversight is combined for SRNS, Parsons, and SRR.

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	3	No	0	1	0	16
FY 17	3	No	0	0	0	15
FY 18	3	No	2	0	2	16

Savannah River SRR

1. SRR Overall Performance

Fiscal Year	Program Health	Operational Implementation
FY 16	Green	
FY 17	Green	Green
FY 18	Red	Green

Comments:

SRR was graded green for operational implementation but red for program health based on insufficient criticality safety staffing.

SRR has a candidate nearing completion of his qualification. The senior staff member that is no longer employed directly by SRR is contractually available for a period of time considered adequate to ensure that the engineer in training completes that qualification. The need for availability of at least a third NCS resource to avoid another the consequence of another future loss is recognized and a proposal for the use of off-site NCS resources has been drafted.

2. SRR Criticality Safety Infractions

Fiscal Year	Level 1	Level 2	Level 3	Level 4	Level 5
FY 16	0	0	0	0	0
FY 17	0	0	0	0	0
FY 18	0	0	0	2	8

3. SRR Program Non-Compliances

Fiscal Year	Contractor Identified	Externally Identified
FY 16	0	0
FY 17	0	0
FY 18	0	0

4. SRR Contractor and Federal Assessments

Fiscal Year	Contractor Assessments			Federal Assessments		
	Total Assessments	Total Findings	Total OFIs	Total Assessments	Total Findings	Total OFIs
FY 16	15	0	7	8	1	4
FY 17	9	1	1	1	0	0
FY 18	13	2	12	5	0	0

5. SRR Contractor Staffing

Fiscal Year	Contractor Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	2	Yes	0	0	0	29
FY 17	2	Yes	1	0	0	28
FY 18	1	No	1	1	0	40

6. SRR Federal Staffing

Note: Federal oversight is combined for SRNS, Parsons, and SRR.

Fiscal Year	Federal Staffing					
	Qualified	Meets Target	In Training	Staff Lost	Staff Hired	Experience
FY 16	3	No	0	1	0	16
FY 17	3	No	0	0	0	15
FY 18	3	No	2	0	2	16