



## Department of Energy

Washington, DC 20585

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### MEMORANDUM FOR DISTRIBUTION

FROM:

ANDREW C. LAWRENCE

DIRECTOR

OFFICE OF NUCLEAR SAFETY, QUALITY ASSURANCE  
AND ENVIRONMENT

OFFICE OF HEALTH, SAFETY AND SECURITY

SUBJECT:

Facility Representative Program Performance Indicators Quarterly  
Report, October – December (Fourth Quarter Calendar Year 2009)

Attached is the Facility Representative (FR) Program Performance Indicators Quarterly Report covering the period from October through December 2009. Data for these indicators are gathered by field elements quarterly per Department of Energy (DOE) Standard 1063-2006, *Facility Representatives*, and reported to Headquarters program offices for evaluation and feedback to improve the FR Program. Highlights from this report are presented below.

#### **FR Staffing/Qualification/Oversight Data**

DOE currently has 188 FRs as of this reporting period. For this quarter, a summary of the FR staffing and qualification and oversight data is:

- 81% Fully Qualified (DOE goal is > 80%);
- 90% Staffing Level (DOE goal is 100%);
- 45% Time Spent in the Field (DOE goal is > 40%); and
- 75% Time Spent in Oversight Activities (DOE Goal is > 65%).

#### **FR Program Highlights**

Fully qualified FRs increased from 78% to 81% during this reporting period, reaching the DOE goal of 80%. The increase can be attributed to a drop in FR attrition from previous quarters translating to a lower need to fill FR vacancies as well as five FRs successfully completing qualification. Additionally, the development and delivery of the training course SAF-107, *Engineering Fundamentals*, by the Savannah River Site in conjunction with the Office of Health, Safety and Security has been effective in minimizing the time necessary for FRs to complete their Functional Area Qualification.

The FR Steering Committee holds monthly teleconferences to share information on oversight activities, issues identified, and FR program initiatives and improvements. During the fourth quarter of calendar year 2009, FRs identified numerous conduct of operations issues during oversight of contractor work activities, including several related to lockout/tagout and improper use of personal protective equipment. Descriptions of these and other observations,



as well as FR program highlights, are provided in the attachment. The sharing of information on these issues benefits all FRs in performing their oversight activities with the goal of providing useful feedback to the contractors to support working safely at DOE hazardous facilities.

Current FR information and past quarterly performance indicator reports are accessible at the FR web site at [Http://www.hss.energy.gov/dep/dep/facrep/](http://www.hss.energy.gov/dep/dep/facrep/). Should you have any questions or comments on this report, please contact me at (202) 586-5680 or the DOE FR Program Manager, James Heffner, at (202) 586-3690.

Attachment

## OFFICE OF ENVIRONMENTAL MANAGEMENT (EM)

### Facility Representative Program Performance Indicators (4QCY2009)

<u>Field or Ops Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
CBFO	3	3	3	100	0	100	33	48	75
ID (EM)	13	13	12	92	0	92	92	50	95
OR (EM)	19	18	16	84	1	75	75	41	65
ORP	15	15	15	100	0	80	80	52	81
PPPO	6	6	6	100	0	67	67	44	69
RL	19	19	19	100	0	90	90	46	71
SPRU	1	1	1	100	0	100	0	45	75
SR	32	32	30	94	1	57	57	48	76
WVDP	2	2	2	100	0	50	50	31	50
<b>EM Totals</b>	<b>110</b>	<b>109</b>	<b>104</b>	<b>95</b>	<b>2</b>	<b>75</b>	<b>72</b>	<b>47</b>	<b>75</b>
<b>DOE GOALS</b>	-	-	-	<b>100</b>	-	-	<b>&gt;80</b>	<b>&gt;40</b>	<b>&gt;65</b>

\* Field or Ops Office Key:

CBFO = Carlsbad Field Office; ID = Idaho Operations Office; OR = Oak Ridge Office; ORP = Office of River Protection; PPPO = Portsmouth/Paducah Project Office; RL = Richland Operations Office; SR = Savannah River Operations Office; SPRU = Separation Process Research Unit; WVDP = West Valley Demonstration Project

\*\* % Field Time is defined as the number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours is the actual number of hours a Facility Representative works in a calendar quarter, including overtime hours. It does not include leave time (sick, annual, or other) or holidays, nor does it include special assignments greater than 1 week assigned by the Field Element Manager.

\*\*\* % Oversight Time includes % Field Time

#### **EM Facility Representative (FR) Highlights:**

- CBFO: FRs conducted a review of the Root Cause Analysis associated with Event EM-CAFO--WTS-WIPP-2009-0011 - Underground Mining Machine Contacted Electrical Cable; identifying additional weaknesses.
- CBFO: FRs initiated a review of the contractor event notification and investigation of the investigation of abnormal events.
- CBFO: FRs participated in DOE oversight activities of contractor ongoing efforts to update the DOE O 5480.19 matrix.
- ID (EM): A Facility and Material Disposition Project (FMDP) FR served as the Team Leader for the DOE-Idaho Cleanup Project (ICP) assessment of the Contractor Readiness Assessment (CRA) for Remote Handled Transuranic (RH-TRU) Repackaging Operations in the CPP-666 Fluorine Dissolution Process Area at the Idaho Nuclear Technology and Engineering Center (INTEC). The team was comprised of FMDP FRs and DOE-ID Subject Matter Experts (SMEs). The Team determined the CRA review to be adequate for all objectives except training. Significant deficiencies existed for Waste Management in both training and issues management.
- ID (EM): A FMDP FR identified multiple weaknesses in the contractor's drill program associated with the RH-TRU activities at the INTEC. Issues included failure to maintain the integrity of a drill scenario, and failure by operations personnel to take the appropriate corrective actions.
- ID (EM): A Waste Disposition Project (WDP) FR planned and coordinated with other EM-ICP FRs a continuous forty-eight-hour monitor watch of waste retrieval operations conducted on the American Recovery and Reinvestment Act (ARRA) work scope performed in the TSA-RE (WMF-636) facility. The monitor watch concluded processes for retrieval were sufficient to complete the work safely, opportunities for improvement exist in the level of formality of operations and the incorporation of past lessons learned into the waste retrieval process.
- ID (EM): A WDP FR performed day-to-day oversight of a contractor Management Self-Assessment and CRA for the startup of Accelerated Retrieval Project (ARP) IV facility. ARP IV operations are ARRA funded work scope.
- ID (EM): A WDP FR planned and coordinated a targeted assessment with assistance from DOE-ID SMEs on the Advanced Mixed Waste Treatment Project (AMWTP) rolling stock program. Due to the nature of the cross cutting issues identified during the assessment the team concluded the rolling stock program was marginally adequate.
- ID (EM): A WDP FR served as a Readiness Assessment (RA) Deputy Team Leader for the Remote Handled Transuranic Work (RH-TRU) project at INTEC, and a second WDP FR also served on the RA team. The RH-TRU

project is ARRA funded work scope.

- ID (EM): The FMDP Deactivation and Demolition FR Work Lead (WL) assumed the duties as the DOE Facility Director of the Nuclear Regulatory Commission (NRC) licensed Three Mile Island (TMI)-2 and Fort St Vrain (FSV) Independent Spent Fuel Storage Installations (ISFSI). The FMDP INTEC FacRep WL assumed the duties as the DOE Facility Director (Alternate) for the NRC licensed TMI-2 and FSV ISFSI.
- ID (EM): Throughout the quarter a FMDP FR identified multiple weaknesses in the contractor's work control and hazard mitigation processes related to RH-TRU activities at the INTEC. Issues included failure to implement lockout/tagout on equipment in the work area that presented a hazard to the workers, and failure to effectively implement compliance with Nationally Recognized Testing Laboratory criteria for an overhead crane control modification.
- OR (EM): During a walkthrough at the K-25 Decontamination and Decommissioning (D&D) project, the FR observed usage of a plasma torch in a damp location. Upon review, Work Packages involving plasma cutting did not permit their usage in damp or wet conditions. However, work was authorized and performed in the wet areas until questioned by the FR and at which time the work was halted.
- OR (EM): During review of a work package for replacement of a Lid Extraction Tool (LET), an FR identified some issues with the critical lift plan. When the crane arrived to make the lift, it was configured with two parts of line and a sheave instead of the single part of line and a headache ball as specified in the critical lift plan. While the change in this instant did not decrease the level of safety, there are instances when a change of this nature could adversely affect the ability to safely make the lift. In addition, the FR worked with the contractor to identify several other areas of concern that led to an overall strategy change by the contractor that precluded use of the crane.
- OR (EM): While completing an initial walkdown to gather data for arc flash calculations, two subcontractor engineers and the Bechtel Jacobs Company LLC (BJC) Facility Manager for B-3001 attempted to open an electrical box. The front panel of the electrical box shifted and leaned open approximately one-half inch at the top. The panel was immediately held in place by the one engineer and while the other secured the panel to the electrical box with painters tape. The personnel confirmed the panel was never fully off the electrical box casing and at no time were any internal components exposed. Both engineers heard clips fall through the inside of the panel. An FR identified to the contractor the significance of this event to the work control program as well as the extent of condition associated with the electrical component failure.
- OR (EM): While performing routine walkthroughs at the Oak Ridge Research Reactor, an FR identified some potential problems with interface points between the facility and ARRA scope. These included power supplies and isolation valves.
- ORP: An FR discovered issues with Radiological Work Permit (RWP) compliance - specifically Health Physics Technicians (HPTs) were not providing "continuous coverage" - for work in the field. "Continuous coverage" requires that the HPT is actively taking surveys on previously unexposed surfaces, and is present to "IMMEDIATELY" protect the worker in the field. During weekly winterization rounds, the FR accompanied the workers in the field and observed that the HPT was not present alongside the worker when opening electrical boxes that are not routinely surveyed by the HPTs. As a result of the finding and meetings with Radcon management, the terminology used in the RWP is being clearly defined, and there will also be a clear expectation of radcon that HPTs covering work requiring "continuous coverage" to be present in the field alongside the workers. This coverage will be provided unless surveys have been documented for the areas being worked, i.e., the areas are not "previously unexposed surfaces."
- ORP: An FR identified contaminated reusable equipment storage practices that did not adequately prevent the spread of radiological contamination in the tank farms. The contractor is pursuing a justification for continued storage and enhanced packaging criteria for those pieces that are still needed.
- ORP: An FR identified lacking procedures for collecting radcon survey data during waste transfers. The FR aided in the development of improvements to the Radcon Survey Sheets which eliminated error precursors. The Radcon Survey Plans for transfers now include: 1) A picture of the location to be surveyed; 2) Criteria alongside each data collection point to clearly indicate if the action level has been exceeded; and 3) The survey sheets are immediately reviewed by the Operations Engineer during the transfer - rather than wait several days for review by the Radcon Supervisor. These improvements were well received by the HPTs and the operations personnel running the transfers, and should significantly eliminate errors in the data collection and evaluation process.
- ORP: An FR identified numerous Life Safety Code violations in occupied building during a Fire Protection assessment.
- ORP: An FR identified that HPTs had not been trained to the Radiological Monitoring Plan (RPM) that supported waste transfer pump operational acceptance testing. During this test, radiation levels exceeded the shutdown criteria;

however, no actions were taken. The lack of HPT knowledge on the RMP contributed to the missed shutdown criteria. Subsequently, the contractor modified the survey sheet to include radiation level shut down criteria and provided additional training for HPTs.

- ORP: An FR identified the use of unapproved Operator Aides in Contractor operations at the tank fanns. The contractor is revising procedure development processes to incorporate the right level of detail to help alleviate the need for unofficial aids.
- ORP: During a Fire Protection assessment, an FR identified that required fire safety assessments had not been accomplished on nine different tank farm facilities.
- ORP: The FR identified that engineering design standards/procedures do not clearly specify fire protection reviews of facility designs.
- ORP: While performing a tour of the C-104-AN-101 retrieval transfer system, an FR observed at least five people within AZ-156 not wearing the proper personnel protective equipment (safety glasses) as required by a posting at the entrance door. The FR made the management representative that was present aware of this condition and the issue was immediately resolved. The contractor has acknowledged this non-compliance, and has conducted training as an effort to prevent recurrence.
- RL: An FR identified during installation of new trailers setup for the U-Canyon work team an electrical service panel (240/120 VAC) was found with its enclosure door open thereby exposing bare electrical conductors.
- RL: An FR identified inconsistencies in work package review at Waste Receiving Processing Facility (WRAP) between supporting documents and work package (i.e., Confined Space Hazard Identification Form, PM/S Data Sheet), Disposition Instructions of the Waste Planning Checklist were unclear, and the requirement for operational Corrective Action Management Systems in a work area was unclear during a ventilation maintenance job.
- RL: An FR identified significant work control issues with system breeching into contaminated UO<sub>3</sub> systems without requiring the use of respiratory equipment causing uptake exposure to workers. Two instances occurred during this past quarter which led to requesting a Corrective Action Plan (CAP) from the contractor as identified in a recently performed Work Control surveillance.
- RL: an FR identified that Condition Reports not always being used when Plutonium Finishing Plant (PFP) Management Oversight identifies actions to be taken.
- RL: An FR identified various items in the Interim Storage Cask (ISC) Pre-start/Re-start Corrective Action Package for Slightly Irradiated Fuel and Plutonium PFP; incomplete training documentation, inconsistent data in monthly crane inspection documentation, unclear performance of on the job evaluations.
- RL: An FR observed Rigger working on top of a crane boom more than six feet above the ground without wearing a fall arrest system.
- RL: An FR observed workers using a ladder running wire rope overhead and were standing on the top rung of the ladder contrary to posted safety signage.
- RL: An FR participated on Readiness Assessment Team at Brookhaven National Laboratory.
- RL: An FR provided oversight of Accident Investigation for accidental firearm discharge at HAMMER.
- RL: An FR supported the ISC Pre-start/Re-start evolutions at the Slightly Irradiated Fuel facility and PFP. The FR was an integral part of management being notified that work was going to resume without all participants knowing/understanding.
- SPRU: The FR identified issues regarding personal protective equipment (PPE) usage, Storm water Pollution Prevention Plan implementation, slope stability analysis, and fall protection system design.
- SPRU: The FR performed oversight of electrical safety corrective actions, electrical work, and excavation safety.
- SR: An FR participated in a Type B Investigation for an arc flash injury.
- SR: Three FRs participated in a Type B Investigation for a severe hand injury.
- WVDP: An FR observed and critiqued a drill of a construction accident. The FR Identified the lack of a clearly identified exclusion zone, failure to communicate work in the accident area at Plan of the Day meeting, less than adequate communication between the Technical Support Center and the Emergency Operations Center, and emergency equipment maintenance in cold weather.
- WVDP: The FR conducted five assessments (three monthly FR site assessments focused on conduct of operations and integrated safety management, an annual FR Team Management assessment, and an annual Freeze Protection assessment). Issues identified included fire extinguishers not in place at signage, fire doors not closed, walkway shortcut use, housekeeping expectations and personal accountability for housekeeping; antiquated document control methods; and placement of markers to prevent damage to equipment, components, utilities, or obstacles.

**Improvements in FR Programs/Staffing Changes:**

- One SRFER completed initial qualification.
- WVDP: An FR completed Asbestos Project Monitor certification class for oversight of the timing, scope, phasing, and remediation methods to be used on an asbestos project.

**OFFICE OF NUCLEAR ENERGY (NE)**

**Facility Representative Program Performance Indicators (4QCY2009)**

<u>Field or Ops Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
ID (NE)	11	11	10	91	0	100	100	44	77
<b>NE Totals</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>91</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>44</b>	<b>77</b>
<b>DOE GOALS</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>&gt;80</b>	<b>&gt;40</b>	<b>&gt;65</b>

\* Field or Ops Office Key:  
ID = Idaho Operations Office

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\*\*\* % Oversight Time includes % Field Time

**NE Facility Representative (FR) Highlights:**

- ID (NE): A FR reviewed the Lockout/Tagout (LO/TO) records for the Treatment Storage and Disposal Facilities at the Materials and Fuels Complex. During the review the FR identified that for one maintenance activity the LO/TO was temporarily removed twice and reapplied twice, and that the required zero energy checks had not been performed.
- ID (NE): An assessment of Conduct of Operations led by FRs at the Specific Manufacturing Capability (SMC) identified numerous issues regarding: operator aids, turnover checklists and round sheets, written procedures, operating logs, and the use of caution tags.
- ID (NE): An FR identified a high voltage electrical disconnect switch cabinet which was not locked as required by the National Electrical Code. The cabinet was found with a standard bolt pushed through the hole where a lock should have been attached.
- ID (NE): An FR identified a step ladder positioned on top of, and close to the edge of, the roof of the Radio-analytical Chemistry Laboratory and on an unstable surface (a shim had been placed under one leg).
- ID (NE): An FR responded to a request for assistance by Brookhaven National Laboratory (BNL) to participate in a Readiness Assessment for graphite pile removal at the Brookhaven Graphite Research Reactor. The ID FR, responsible for assessing readiness in the areas of work control and conduct of operations, noted a number of pre-start safety issues that were corrected prior to BNL commencing the activity.
- ID (NE): An FR shadowed a Contractor Readiness Assessment of the Hydraulic Shuttle Irradiation System at the Advanced Test Reactor. The FR identified that the operating procedure lacked rigor in verifying the expected/predicted response when materials were inserted into the reactor.
- ID (NE): During a facility walkthrough an FR identified that several of the bolts in a circulating blower mounting flange did not have proper thread engagement. The circulating blower was installed in the Confinement System for an inert atmosphere hot cell.
- ID (NE): FRs reviewing winterization maintenance work at SMC, the Laboratory Support Complex, and the Research and Education Complex, discovered a high percentage work orders overdue or completed late, as well as work packages that passed through final completion review with errors and incomplete data.
- ID (NE): While performing backshift oversight of a reactor startup at the Advanced Test Reactor, an FR noted plant operators performing steps outside the reactor startup procedure in an attempt to troubleshoot an unplanned plant response. No procedure, work order, or manager approved plan, was in place to support the troubleshooting.

## NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA)

### Facility Representative Program Performance Indicators (4QCY2009)

<u>Site Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
LASO	14	12	12	86	0	83	75	49	76
LSO	10	10	7	70	0	100	100	43	72
NSO	9	9	6	67	1	100	100	44	74
PXSO	10	9	9	90	0	100	89	44	70
SRSO	3	3	3	100	1	100	100	48	76
SSO	8	8	8	100	0	88	88	35	82
YSO	12	11	9	75	2	89	89	43	72
<b>NNSA Totals</b>	<b>66</b>	<b>62</b>	<b>54</b>	<b>82</b>	<b>4</b>	<b>93</b>	<b>89</b>	<b>44</b>	<b>74</b>
<b>DOE GOALS</b>	-	-	-	<b>100</b>	-	-	<b>&gt;80</b>	<b>&gt;40</b>	<b>&gt;65</b>

\* Field or Ops Office Key:

LASO = Los Alamos Site Office; LSO = Livermore Site Office; NSO = Nevada Site Office; PXSO = Pantex Site Office; SRSO = Savannah River Site Office; SSO = Sandia Site Office; YSO = Y-12 Site Office

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\*\*\* % Oversight Time includes % Field Time

#### **NNSA Facility Representative (FR) Highlights:**

- LASO: An FR provided oversight of the Los Alamos National Laboratory (LANL) Management Self-Assessment for the Isotopic Fuels Impact Test (IFIT) Facility at TA-55.
- LASO: An FR verified implementation of two safety basis changes associated with a fire alarm system.
- LASO: As part of a monthly DSA surveillance the FR determined that the TA-21 LO/TO process did not meet LANL requirements. TA-21 operations personnel subsequently developed the corrective actions necessary to bring the process into alignment with LANL requirements.
- LASO: The LANS D&D operations manager planned to remove a large radio antenna from the roof of TA-21-210 as part of routine operations. After the FR intervened the Facility Operations Director determined that a lift plan was required to perform the work safely.
- LASO: During a pre- D&D radiation survey Los Alamos National Security, LLC (LANS) Radiological Control Technicians (RCTs) discovered that a fume hood in TA-21-210 was internally contaminated with mixed alpha products. Operations management determined that the hood would be demolished and treated as industrial waste. The FR intervened and persuaded management to remove the hood and ventilation system separately from the rest of the building and package it as required for radiologically contaminated waste.
- LASO: On the basis of an FR Observation LANS operations management implemented seasonal protection for TA-21-257 and other unoccupied buildings in the TA-21 area with wet pipe fire protection during LANL's winter curtailment for the first time.
- LSO: An FR identified inconsistencies in high explosives limits between the Facility Safety Plan and postings.
- LSO: An FR identified multiple pressure relief devices that were either overdue for inspection or had no pressure inspection tags in a number of facilities, which resulted in a weakness.
- LSO: An FR participated as a review team member on the Highly Enriched Uranium Materials Facility Operational Readiness Review at the Y-12 Security Complex.
- LSO: An FR provided oversight of a contractor readiness assessment on the Tritium Grinder System.
- NSO: FRs supported two Contractor Operational Readiness Reviews (CORR), The Barolo Barolo SCE and CEF (SCE) and Critical Experiments Facility (CEF). Other special projects included Fall Classic, Harvest Moon, and Sirius II.
- SRSO: An FR participated on the Operational Readiness Review team for the Highly Enriched Uranium Material Facility at the Y-12 Site Office.
- SSO: An FR identified an issue at a pulsed power facility involving weight loading equipment placed onto a mezzanine deck without an engineering loading analysis which resulted in a potential for equipment damage and a

potential fall hazard.

- SSO: FRs participated as members on the Sandia Site Office Line Management Review of the Auxiliary Hot Cell Facility Contractor Operational Readiness Review.
- SSO: The Annular Core Research Reactor FR conducted Technical Safety Requirements compliance verification assessments each month of this quarter. He also completed a fiscal year 2009 assessment of the TSR compliance verification.
- SSO: The SPRF FR completed the CY 2009 Sandia Pulsed Reactor Facility (SPRF) and SPRF/Critical Experiments Technical Safety Requirements Annual Surveillance Requirements assessment.
- YSO: An FR performed verification of closure prestart issues and adequate Corrective Action Plans for post-start issues.
- YSO: An FR supported the NA-24 Highly Enriched Uranium (HEU) Transparency Program with a special monitoring visit to Siberia.
- YSO: FRs in Building 9212 and 9215 conducted and participated in over ten tours of these facilities.
- YSO: The Highly Enriched Uranium Materials Facility (HEUMF) FR led the YSO review team that verified implementation of the HEUMF Safety Basis.
- YSO: Two FRs participated on the HEUMF Readiness Review Team to validate the facility's readiness to begin the Independent NNSA ORR.

#### **Improvements in FR Programs/Staffing Changes:**

- LASO: An FR led and conducted a self-assessment of the LASO FR Program in accordance with DOE-STD-1063.
- LASO: Three FRs completed qualification Oral Boards and Final Evaluation Walkthroughs.
- LSO: An FR completed cross-qualification on the Site 300 explosives facilities.
- LSO: An FR completed cross-qualification on the Tritium, High Energy Radiography, and Hardened Engineering Test facilities.
- LSO: Five FRs have received their re-qualification cards. FR re-qualifications are due in 2010.
- NSO: The High Explosives Facilities FR resigned her position to return to school and further her education. A selection for the new FR Group Lead has been made. Salary and reporting negotiations are in progress.
- NSO: The three-year NSO FR Program Self-Assessment was accomplished.
- NSO: Three FRs completed their interim Emergency Response Organization qualifications for NSO Emergency Management Center Representatives.
- SRSO: An FR completed his Final FR Qualification (Written Examination, Oral Board, and Final Walk-downs) during the month of December 2009.
- SRSO: An FR was transferred to the Pit Disassembly and Conversion project team as the lead for operations.
- SSO: An FR completed qualifications for Manzano Nuclear Facilities and On-Site Transportation Haz-Cat 3 Radioactive Material.
- YSO: The FR qualification process was reviewed during the NNSA Independent ORR for HEUMF and had no issues.
- YSO: The HEUMF ORR concluded that YSO's oversight (including FR's) was satisfactory.

## OFFICE OF SCIENCE (SC)

### Facility Representative Program Performance Indicators (4QCY2009)

<u>Area/Site Office</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time *</u>	<u>% Oversight Time **</u>
AMES	1	1	1	100	0	100	100	26	75
ASO	5	5	4	80	0	100	100	18	84
BHSO	4	4	4	100	0	100	100	49	81
FSO	2	2	2	100	0	50	50	34	65
NBL	1	1	1	100	0	100	100	33	55
OR (SC)	5	5	5	100	0	100	100	43	83
PNSO	3	3	3	100	0	100	100	44	75
<b>SC Totals</b>	<b>21</b>	<b>21</b>	<b>20</b>	<b>95</b>	<b>0</b>	<b>95</b>	<b>95</b>	<b>37</b>	<b>78</b>
<b>DOE GOALS</b>	-	-	-	<b>100</b>	-	-	<b>&gt;80</b>	<b>&gt;40</b>	<b>&gt;65</b>

\* Field or Ops Office Key

AMES=AMES Site Office; ASO = Argonne Site Office; BHSO = Brookhaven Site Office; FSO = Fermi Site Office; NBL = New Brunswick Laboratory; OR = Oak Ridge Office; PNSO = Pacific Northwest Site Office

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\*\*\* % Oversight Time includes % Field Time

#### SC Facility Representative (FR) Highlights:

- ASO: An FR completed a critical review of a new Basis for Interim Operation for a hot cell complex.
- ASO: Building 205 K-Wing achieved reduction of inventory to less than HAZCAT 2 and is on track to be less than HAZCAT 3 in FY 2010.
- ASO: The Building 205 K-Wing in-cell methods for liquids processing and solid material packaging were approved by DOE and work has commenced.
- BHSO: An FR participated in a DOE review of a contractor led injury investigation of a NSLS-II construction accident. Steel reinforcing bars (rebar) were being placed on the ground by a forklift. The forklift spotter could not get out of the way and sustained a broken leg when the rebar struck him.
- BHSO: An FR participated in a Type B Accident Investigation when a BNL worker was injured in reaction to being startled by the loud noise of a relieving gas valve. The worker sustained knee injuries while attempting to run from the noise.
- FSO: FRs were involved in the following activities during the quarter: SC Nuclear Facility Hazard Categorization Review; Regulatory Permitting and Reporting; Fermilab Safety Documentation Update; and Operations and Construction Safety Oversight Walkthroughs.
- NBL: The FR discussed the ARRA-related request for task proposal for the dismantling, removal, and decommissioning of abandoned ductwork with the NBL restart manager. The FR read a proposal from the Safety and Ecology Corporation (SEC) to perform the work.
- NBL: The FR identified issues with portable ladders being incorrectly used to abate fixed ladder deficiencies. The issue was brought to the attention of the NBL Facility Operations Division Director.
- NBL: The FR reviewed a request for proposal regarding the removal of Pu contaminated equipment.
- NBL: The FR walked through parts of the facility with the NBL Industrial Hygienist, Argonne National Laboratory plumbing inspector, and CH-STS personnel. The FR participated in subsequent discussions with SC Chicago Office personnel regarding microbial contamination of the building's water supply.
- OR (SC): A coordinated assessment was conducted of selected chapters of Conduct of Operations at the ORNL nuclear facilities and the SNS. This assessment was completed jointly by the FRs, and an overall assessment report was prepared.
- OR (SC): During this reporting period, FRs conducted and documented 92 walkthroughs. Twelve of these walkthroughs were conducted jointly with ES&H subject matter experts.
- PNSO: An FR followed contractor interactions with Washington State Department of Labor and Industries in

response to a citation for not obtaining required electrical permits during Pacific Northwest National Laboratory (PNNL) work on the local Washington State University campus. Interactions pertain to laboratory work occurring in a number of facilities privately owned by the contractor.

- PNSO: An FR followed contractor response to a small vessel pressure excursion event at the Sigma V Building where a rupture disc released carbon dioxide to a laboratory. FR involvement improved understanding of problematic operating practices.
- PNSO: An FR followed Pretreatment Engineering Platform deactivation activities. This included oversight of contractor response to a spill to the ground of 70 gallons of high pH flush water during the final waste handling evolution.
- PNSO: An FR identified a temporary steam line needing additional barricading for personal protection at the 325 Building. Temporary steam line was rerouted to address issue.
- PNSO: An FR identified an exterior water line that presented a potential freeze protection issue at the 325 Building. Concern was addressed by revision to cold weather protection planning.
- PNSO: An FR identified opportunities for improving the positioning of Hanford Site Environmental Restoration Disposal Facility waste containers at the 325 Building to reduce equipment maneuvering during container loading.
- PNSO: During a routine walk through of the Physical Science Facility's construction site, an FR observed a retractable fall arrester device staged for use which had visible signs of damaged. The construction site safety representative was immediately notified and the damaged device was removed from service.
- PNSO: During routine walkthroughs of the 329 Building, an FR observed a radioactive source storage cabinet being occasionally left unlocked contrary to the contractor's source management program. This observation was brought to the attention of the facility's radiological supervisor. Subsequent FR tours now find the cabinet being locked as required.