



Department of Energy
Washington, DC 20585

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MEMORANDUM FOR DISTRIBUTION

FROM:

ANDREW C. LAWRENCE
DIRECTOR

A handwritten signature in blue ink that reads "Andrew C. Lawrence".

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 2010)

This memorandum summarizes the highlights of the Facility Representative (FR) Program Performance Indicators Quarterly Report covering the period October through December 2010. Data for these indicators were gathered by Field Elements quarterly per Department of Energy (DOE) Standard (STD)-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 was staffed at 184 FR Full Time Equivalents (FTEs) which is 92 percent of the full staffing level (DOE goal is 100 percent).
- DOE FR qualification level was 91 percent Fully Qualified (DOE goal is > 80 percent).
- DOE FRs spent 41 percent of their time in the field (DOE goal is > 40 percent) and 73 percent of their time on oversight activities (DOE Goal is > 65 percent).

FR Program Highlights

Individual site program highlights are included in the current FR Quarterly Report.

Current FR information and the current and past quarterly performance indicator reports are available at the FR web site at <http://www.hss.energy.gov/deprep/facrep/>. If you have any questions or comments on this report, please contact me at (202) 586-5680, or the DOE FR Program Manager, Earl Hughes, at (202) 586-0065.

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Manager, Richland Operations Office
Manager, Sandia Site Office
Manager, Savannah River Operations Office
Manager, Savannah River Site Office (NNSA)
Manager, Y-12 Site Office

FR Program Sponsors and Steering Committee Members

Facility Representative Performance Indicators October-December 2010

OFFICE OF ENVIRONMENTAL MANAGEMENT (EM)

<u>Location*</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Gains/Losses</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time **</u>	<u>% Oversight Time ***</u>
CBFO ¹	3	3	3	100	+1	100	100	53	76
ID (EM) ²	12	12	10	92	-1	100	100	49	94
OR (EM) ³	18	17	16	89	0	100	100	49	68
ORP ⁴	15	15	15	100	+2	80	80	58	78
PPPO ⁵	6	6	5	83	-1	100	100	43	75
RL ⁶	19	19	19	100	0	95	95	47	72
SR	32	32	30	94	0	90	77	39	80
WVDP	2	2	2	100	0	100	50	46	72
EM Totals	107	107	100	93	+1	96	88	48	77
DOE GOALS	—	—	—	100	—	—	>80	>40	>65

* Location 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
 WVDP = West Valley Demonstration Project

** % Field Time :

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 includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned.

*** % Oversight Time includes % Field Time

Notes:

- 1 One CBFO FR who was promoted out of the FR program last quarter returned as the FR Supervisor. One CBFO FR completed qualification
- 2 One ID (EM) FR took a lateral transfer within DOE-ID
- 3 One OR (EM) FR was on detail the whole quarter and not counted in the statistics
- 4 ORP hired two new FRs this quarter. One ORP FR was detailed all this quarter and is not included in the statistics.
- 5 One PPPO FR transferred to another position within PPPO
- 6 One FR from RL was on detail the whole quarter and is not counted in the statistics. RL uses 4 additional support service contract personnel for non-nuclear oversight of Recovery Act work.

EM Facility Representative (FR) Highlights:

- ID (EM): A Facility and Materials Disposition (FMDP) Deactivation and Decommissioning (D&D) FR augmented the Department of Energy Separations Project Research Unit (SPRU) Disposition Project staff located at the Knolls Atomic Power Laboratory (KAPL) in Schenectady, New York by serving as a FR from November 8 through November 20, 2010, following the September 29, 2010, spread of contamination at KAPL while demolishing the H-2 Building.
- ID (EM): From October 28, 2010, through November 11, 2010, a Waste Disposition Project (WDP) FR served as a team member for the Type B Accident Investigation into the KAPL H-2 Building spread of contamination.
- ID (EM): An FMDP FR served as a team member for the Richland Operations Office Integrated Safety Management System (ISMS) review during December 2010.
- ID (EM): FRs found several Lockout/Tagout and work control issues.
- OR (EM): An FR noted an inadequate radiological work procedure for maintenance and coordinated with the contractor to correct the issues.

Facility Representative Performance Indicators October-December 2010

EM Facility Representative (FR) Highlights:

- OR (EM): An FR noted that waste glovebox operations that could result in strain or overexertion and potential glove breach. The FR recommended an alternative approach that was adopted for future operations.
- OR (EM): An FR noted that a power outage would affect a waste site that generated large volumes of water, impacting pumps required to handle the water. The FR worked with the utilities organization to plan the outage to minimize pump down time, reduce the outage duration, and finish all the work during the regular work week.
- OR (EM): An FR identified potential rain water drainage issue that could spread contamination from excavation work. The FR's timely intervention resulted in storm water control work prior to the excavation to prevent problems.
- OR (EM): An FR noted during a walkthrough that storm water was near the top of a retention berm. Immediate action to add portable pumps and all-night work to correct the problem prevented breaching the berm.
- OR (EM): An FR found that personnel were about to enter a hot cell without careful preparation and As Low as Reasonably Achievable (ALARA) precautions. The work was delayed and reconsidered, resulting in significant changes to the process and use of remote manipulators to reduce exposure.
- ORP: An FR found a portable radiation monitor improperly set, jeopardizing survey results. The FR reported it to contractor management and it was immediately corrected.
- ORP: An FR identified a potential conflict of interest where contractor management repeatedly assigned as Senior Supervisory Watch personnel who had been directly responsible for the project's schedule and cost.
- ORP: FRs noted improved contractor performance in winterization planning and use of torch flashback preventers.
- ORP: FRs found several issues with periodic ladder inspections and step-box labeling, and several fall protection and elevated work problems.
- ORP: An FR identified excavated spoils too close to a trench, endangering workers. The FR's report resulted in immediate correction.
- ORP: FRs found several radiological protection issues with postings, radiography, radiological work packages configuration and document control, and contamination mapping. All led to corrective actions for improved operations.
- ORP: An FR assisted developing improved containment worker training for better glove bag operations across several site contractors.
- ORP: An FR detailed to the SPRU Disposition Project in New York found several significant problems with freeze protection, cold weather operations, fire protection, and conduct of operations issues with procedures and round sheets. The FR's observations led to a number of changes and improvements in operations.
- RL: FRs identified several fall protection and elevated work issues.
- RL: An FR identified a rising trend in senior contractor managers departing from important positions on decontamination and decommissioning projects.
- RL: FRs identified several electrical safety issues involving both planning and execution of work.
- RL: An FR identified a no-compliance with a Justification for Continued Operation.

Facility Representative Performance Indicators October-December 2010

EM Facility Representative (FR) Highlights:

- RL: FRs identified several problems with radiological work planning and execution.
- RL: An FR observed workers bypassing required prerequisite signatures while performing a work package.
- RL: FRs serving on ISMS Verification reviews, safety program assessments, and various topical assessments found important issues whose correction led to improved performance.
- SR: An FR identified deficiencies with the weekly chemical inspection program in the F/H Lab.
- SR: An FR found that F-Area Operations did not have the required personnel to support the Emergency Response Organization staffing.
- SR: FRs conducting a Lockout/Tagout evaluation found issues that required five procedure revisions to make the program conform to the statute.
- SR: FRs found the contractor had not established a fire water source within one floor of the highest construction.
- SR: An FR was named the DOE-SR Employee of the Quarter.
- SR: FRs found equipment improperly stored in the weather instead of inside.
- WVDP: The FR identified issues with freeze protection, fire door hardware, worker accountability, and chemical labeling.

Facility Representative Performance Indicators October-December 2010

OFFICE OF NUCLEAR ENERGY (NE)

<u>Location*</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Gains/Losses</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time **</u>	<u>% Oversight Time ***</u>
ID (NE)	9	9	8	89	0	100	100	40	77
NE Totals	9	9	8	89	0	100	100	40	77
DOE GOALS	—	—	—	100	—	—	>80	>40	>65

* Location Key:

ID = Idaho Operations Office

** % Field Time :

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 includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned.

*** % Oversight Time includes % Field Time

NE Facility Representative (FR) Highlights:

- ID (NE): An FR at the Advanced Test Reactor (ATR) recognized that the bulkhead seal system in the ATR Canal was not in compliance with existing safety analysis. The Contractor was slow to act on the information and did not declare a Potential Inadequacy in the Safety Analysis (PISA) for 20 days, outside the intended time limits. The subsequent Unresolved Safety Question (USQ) Determination was positive, and an extent of conditions review related to the same problem resulted in a declaration of a second positive USQ.
- ID (NE): An ATR Complex FR observed improper fall protection by roofing subcontractors on two consecutive days. The fall protection gear would have allowed ground contact in the event of a fall. Work was stopped until the problem was corrected.
- ID (NE): A Materials and Fuel Complex FR observed subcontractor mechanic working in required fall protection gear without anyone else within range to respond and/or call for assistance. If the individual were to fall and become suspended, they could become incapacitated before being found. The FR's intervention resulted in the Contractor changing procedures to improve the safety of future operations.
- ID (NE): An FR observed testing at the National Security Test Range and identified that the Contractor did not sound the required warning signals before detonating a large charge of explosives that was potentially hazardous at a range of over one mile.

Facility Representative Performance Indicators October-December 2010

NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA)

<u>Location*</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Gains/Losses</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time **</u>	<u>% Oversight Time ***</u>
LASO	13	13	13	100	0	92	85	49	76
LSO	10	10	6	60	0	100	100	42	73
NSO	7	7	7	100	0	86	86	50	73
PXSO	10	9	9	90	0	100	100	47	76
SRSO	3	3	3	100	0	100	100	44	75
SSO	8	8	8	100	0	88	88	42	79
YSO ¹	11	11	10	91	0	100	100	49	75
NNSA Totals	62	61	56	90	0	95	94	46	75
DOE GOALS	—	—	—	100	—	—	>80	>40	>65

* Location 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

** % Field Time :

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 includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned.

*** % Oversight Time includes % Field Time

Notes:

1 YSO conducted a new FR Staffing analysis showing 11 required vice 12 previously.

NNSA Facility Representative (FR) Highlights:

- LASO: An FR served on a Chief of Defense Nuclear Safety (CDNS) Assessment team at Savannah River.
- LASO: AN FR identified multiple Lockout/Tagout issues during fire pump replacements.
- LASO: An FR identified a procedural issue that led to finding a Technical Safeguard Requirements violation.
- LASO: An FR detected waste container issues that led to the discovery of contamination spread and a cleanup response.
- LASO: An FR issued a Stop Work order because of inadequate work control documentation and preparation for a critical lift.
- LASO: An FR identified issues with work documentation and life-safety inspections during re-start efforts. The issues resulted in delaying the Beryllium Technology Facility restart while they are resolved.
- LSO: One FR completed periodic requalification
- LSO: An FR identified incomplete flow down of hazardous material inventory limits from the safety basis documents to the implementing plans.
- LSO: An FR attending a critique of a tritium stack monitoring event identified a number of issues with the tritium monitor operability check procedure.
- LSO: During Conduct of Operations surveillance, FRs identified a number of issues relating to inadequate contractor implementation of log keeping.

Facility Representative Performance Indicators October-December 2010

NNSA Facility Representative (FR) Highlights:

- LSO: While observing fissile material machining, an FR identified work planning and materials control issues that resulted in a near-miss to exceeding criticality control limits.
- NSO: Two FRs completed site-specific qualification for two different facilities.
- NSO: Two FRs completed site-specific qualification for two different facilities.
- NSO: An FR achieved International Facility Management Association (IFMA) certification as a Facility Management Professional (FMP).
- PXS0: FRs conducted an assessment of Activity Level Work Control and Planning during a planned electrical outage of all nuclear facilities.
- SRSO: An external review by the CDNS identified a noteworthy practice for SRSO Facility Representative participation in Operational Readiness Reviews and Readiness Assessments at other DOE/NNSA facilities within the complex.
- SSO: An FR found a newly installed fire protection system valve had reversed position labels (read open when the valve was actually closed).
- YSO: An FR found that Quality Assurance requirements were improperly determined by using draft vice final drawings.
- YSO: An FR found the improper use of testing documents instead of work packages for complicated and precision work to replace parts and equipment.
- YSO: An FR identified issues with the implementation of Independent Verification.

Facility Representative Performance Indicators October-December 2010

OFFICE OF SCIENCE (SC)

<u>Location*</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Gains/Losses</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	20	65
ASO	5	5	4	80	0	100	100	21	82
BHSO	4	4	4	100	0	100	100	51	80
FSO	2	2	2	100	0	50	50	39	76
NBL	1	1	1	100	0	100	100	31	53
OR (SC)	5	5	5	100	0	100	100	43	78
PNSO	3	3	3	100	0	100	100	42	78
SC Totals	21	21	20	95	0	93	93	35	73
DOE GOALS	—	—	—	100	—	—	>80	>40	>65

* Location Key

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

** % Field Time :

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*** % Oversight Time includes % Field Time

SC Facility Representative (FR) Highlights:

- ASO: An FR served as the Deputy Team Leader for a Documented Safety Analysis (DSA) review, resulting in rejection of the DSA due to significant issues and 152 comments.
- BHSO: An FR participated in a contractor-led accident investigation of a relay fire in the Alternating Gradient Synchrotron (AGS) and Relativistic Heavy Ion Collider (RHIC) terminal room.
- FSO: One FR served as Acting Deputy Site Manager for a month.
- NBL: An FR issued a Stop Work order due to fall protection deficiencies. Subsequent investigation found fall protection postings had been changed without abating the original hazard.
- NBL: The FR found work planning issues and inadequate management reviews. The corrective actions delayed the start of a decontamination job.
- PNSO: An FR found that the contractor lacked a DOE-approved Site Plan for conducting explosives handling. The contractor was directed to provide the Site Plan for DOE review by Jan. 31, 2011.
- PNSO: An FR following up on an inadvertent acid hood shutdown found that the hood's operating procedure did not coordinate operation with the facility operations staff. These deficiencies were discussed with the responsible researcher and the procedure was revised.
- PNSO: An FR reviewing an updated Emergency Preparedness Hazard Analysis (EPHA) found that Hanford 325 Building inventory limits were not consistent with an existing Justification for Continued Operation.
- PNSO: An FR identified inconsistencies and errors on the Conduct of Operations Matrix submitted by the Contractor. Changes led to improved understanding of Conduct of Operations implementation.
- PNSO: Site Office FRs assessed the adequacy of the contractor Management Self Assessment and Readiness Assessment for the startup of new gloveboxes and hot cells in the Hanford 325 Building. FR efforts allowed for a well documented and timely startup recommendation for the approval authority.