



Department of Energy

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MEMORANDUM FOR DISTRIBUTION

FROM: ANDREW C. LAWRENCE *Andrew C. Lawrence*
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OFFICE OF HEALTH, SAFETY AND SECURITY

SUBJECT: Facility Representative Program Performance Indicators Quarterly Report, July – September (Third Quarter CY 2009)

Attached is the Facility Representative (FR) Program Performance Indicators Quarterly Report covering the period from July to September 2009. Data for these indicators are 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 currently has 190 FRs (which is an increase of one over the last reporting period). For this quarter, a summary of the FR staffing and qualification and oversight data is:

- 78% Fully Qualified (DOE goal is > 80%);
- 90% Staffing Level (DOE goal is 100%);
- 43% Time Spent in the Field (DOE goal is > 40%); and
- 73% Time Spent in Oversight Activities (DOE Goal is > 65%).

FR Program Highlights

The Savannah River Site, in conjunction with the Office of Health, Safety and Security (HSS), sponsored a Facility Representative Fundamentals training course during the last Quarter, to aid in qualification of new FRs. Twenty FRs from across the DOE complex participated. This course has since evolved into SAF-107, Engineering Fundamentals at the National Training Center. The next installment of SAF-107, which has been expanded to now cover all of the General Technical Competencies of DOE-STD-1151, *Facility Representative Functional Area Qualification Standard*, is planned for early 2010.

The FR Steering Committee holds monthly teleconferences to share information on oversight activities, issues identified, and FR program initiatives and improvements. During this quarters calls, FRs identified numerous conduct of operations issues during oversight of contractor work activities including several related to electrical safety 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/deprep/facrep/](http://www.hss.energy.gov/deprep/facrep/) . Should you have any questions or comments on this report, please contact me (202) 586-5680 or the DOE FR Program Manager, James Heffner at (202) 586-3690.

Attachment

OFFICE OF ENVIRONMENTAL MANAGEMENT

Facility Representative Program Performance Indicators (3QCY2009)

Field or Ops Office *	Staffing Analysis	FTEs	Actual Staffing	% Staffing	Attrition	% Core Qualified	% Fully Qualified	% Field Time **	% Oversight Time ***
CBFO	3	3	3	100	0	66	33	44	78
ID (EM)	13	13	12	92	0	92	92	51	93
OR (EM)	19	18	17	89	1	75	75	44	66
ORP	15	15	14	93	1	93	79	48	78
PPPO	6	6	6	100	0	67	67	44	70
RL	19	19	19	100	0	84	84	46	72
SPRU	1	1	1	100	0	100	0	45	75
SR	32	32	31	97	1	55	55	30	65
WVDP	2	2	2	100	0	50	50	37	53
EM Totals	110	109	105	95	3	74	70	41	72
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

*** 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:

Note: The highlights have been grouped into several general categories as identified below.

FR Program Infrastructure

- CBFO: A new data base for the tracking and trending of events is being implemented.
- CBFO: Two FRs are in the process of completing initial qualification.

FR Activities

- CBFO: Carlsbad Field Office conducted a post event drill down of a transformer failure operational event. Areas focused on included Conduct of Operations and Occurrence Reporting and and Processing of Information Compliance.
- ID: A Facility and Material Disposition Project (FMDP) work lead FR assisted DOE Hanford with Phase I and II combined Integrated Safety Management System (ISMS) verification of the Tank Operating Contractor (TOC).
- OR: An FR toured Building 3026 with University of Tennessee-Battelle (UTB) personnel. Building 3026 is an abandoned facility at Oak Ridge National Laboratory (ORNL) that is being tom down. Activities in progress include asbestos abatement, waste characterization, and material removal. The roof of 3026 has degraded over the years and has allowed water to accumulate in the facility. As a result the wooden structure has degraded to the point that supports have had to be installed in the facility in order to allow personnel to enter and perform work activities. The work occurring in 3026 is being conducted by a sub contractor to UTB. During the tour, the FR observed temporary lighting installed in the facility and numerous installed supports for the structure. The work activities seem to be well managed and necessary precautions are being taken to protect workers during the decontamination and decommissioning (D&D) activities.

Issues Identified – Work Planning and Control

- ID: A FMDP FR participated in an extensive review of the contractor's Work Planning and Control process. The review team concluded that the contractor's implementation of Work Planning and Control continues to improve but

that greater attention to detail is needed at all levels to further improve performance. The review team identified several opportunities for contractor performance improvement.

- ORP: An FR discovered containment design and work practice issues with glove bags. The FR worked with the Radiological Control Site Safety Officer to develop the issue. Also discovered was the fact that workers do not receive continuing training on glove bag usage. As a result, a refresher training cycle for containment workers will be created, thus improving containment design and work practices at the site.

Issues Identified – Conduct of Operations

- OR: An FR conducted a walkthrough of the Environmental Management Waste Management Facility (EMWMF) Cell 1 dump ramp construction activities. Dump trucks were being utilized to haul clean fill to the area on top of Cell 1 to construct a new dump ramp. A dump truck was observed moving forward after dumping its contents with its bed fully extended up in the air. Since the truck was on uneven and uncompacted material, the bed of the truck moved back and forth having the potential to fall over. The EMWMF Operations Superintendent was notified. The Superintendent stopped the work, discussed the issue with the laborer directing the trucks, as well as the truck driver to lower the bed of the truck prior to moving forward if on uncompacted material.
- OR: During a walkthrough an FR discovered two 55-gallon drums between UTB facilities 3544 and 3544a. The drums were not marked "Empty", nor were there any labels saying what was in the drums. Tops were on both drums and slightly tilting. The drums indicated that they were not empty. UTB indicated that the drums would be surveyed to ensure they were not contaminated inside or outside, and that they would be removed.
- OR: While reviewing the west side demo work, FRs inspected one of the facilities used by the mechanics. A stereo/radio system with recording ability was in the shop and the radio/stereo was in use.
- OR: While walking down the K-25 cell floor truck alley, an FR observed several flexible conduits with conductors (exposed) that have been disconnected/cut loose from electrical transformers/fire protection systems in 302-1 and 303-2. These conduits had checkered tape applied (indicating energized circuits).

Issues Identified – Conduct of Engineering/Configuration Management

- ID: FMDP FRs performed extensive oversight during loss of normal power testing of INTEC's standby power distribution system. The oversight identified material deficiencies in the 13.8 kilovolt distribution system, anomalies in Utility Control System code, and a weakness related to backup power for INTEC radio communications during unplanned outages.
- ORP: An FR found a lack of understanding of timeframes associated with a Technical Safety Requirements (TSR) action. The contractor operations group had errantly read the requirement to allow one extra day to take flammable gas readings in the tanks after losing primary ventilation. The corrective actions will significantly improve the contractor's adherence to the TSR associated with preventing a flammable gas accident at Tank Farms.
- ORP: An FR found that numerous contractor identified Problem Evaluation requests were under-categorized, resulting in the extent of condition review and apparent cause analysis for the issues not being performed. The contractor is developing guidance on how this process can be improved.
- ORP: The FR identified a situation in which inadequate personal protective equipment (PPE) was being used for entry into a contamination area. The contractor was using partial PPE (arm sleeves) for partial entry into a Contamination Area (CA) from a Radiological Buffer Area (reaching over). The work exceeded the protection of the arm sleeves. The work was suspended and the area was modified to increase the size of the CA to allow for a full

body entry, with a full body PPE suit up. The use of partial PPE is no longer allowed.

- ORP: The FR identified an operator responsible for monitoring tank pressures during an electrical outage that did not know where to monitor the tank pressures and was reading the wrong gage. The operator's responsibility was to warn personnel to evacuate the Tank Farms in the event of a loss of ventilation, as the alarm was inoperable due to the electrical outage. The operator was qualified to perform the assigned task, but had not performed the task in some time. The result of this issue has been that the Contractor has reviewed operator proficiency for tasks that are infrequent and has performed the necessary retraining.
- ORP: The FR identified both an Operator knowledge issue and an issue with the transfer procedure. The transfer procedure did not provide adequate information for the Operator to comply with shutdown criteria. The shutdown criteria provided different action levels, depending on if the thermocouples were in the liquid or in the solids, but did not identify which thermocouples were in the liquid and which were in the solids. The operator was unable to explain how he was applying the shutdown criteria to the temperature data obtained. The Operator was also unable to explain what bulk temperature meant, nor how he was to obtain the bulk temperature.
- ORP: The FR identified problems with the proficiency tracking for Tank Farm Operators. A required proficiency tracking system was not being used consistently and most responsible supervisors were not aware of it. Procedural requirements for maintaining Operator proficiency were not being followed consistently. Corrective actions are still being implemented, but include modifications to the proficiency procedure and tracking system, and training applicable personnel to the modified procedure and tracking system.
- ORP: The FR identified weaknesses in lock and tag practices of a subcontractor, which led to a change in the field implementation of the program.
- ORP: The FR performed an ISMS review of DOE line management resulting in an Observation to improve the method of collecting data in the Operational Awareness Database. This will allow better use of the data by DOE line management when performing trending, which will help proactively allocate resources and reduce future events.
- ORP: The FR random review of the Nanlift/Scissor Lift Daily Checklists on the Waste Treatment and Immobilization Plant (WTP) site found a remark for a manlift dated July 13, that indicated the emergency stop button was not working and the operator had to use the key to shut the unit off. On July 15, a remark on the checklist for the same lift indicated the emergency stop button was loose. Failure to tag the manlift out of service per procedure was considered a finding.
- PPPO: An FR reviewed the C-400 IRA project test documents for skid mounted equipment were and identified a range of discrepancies. Five of the test documents were missing signatures; this affects the determination that the equipment has been certified. Ten of the test documents have incomplete data which includes incomplete calibration data, test start and stop times, allowable/actual leakage, test pressure and a test method not specified by project technical specifications. The absence of this data affects the determination that the equipment has been certified. One piece of skid mounted equipment identified a Test Pressure that does not comply with technical specification requirements. Project technical specifications requires off-site fabrication to be performed in compliance with on-site fabrication requirements, and that acceptance of piping systems and associated equipment is contingent upon proper execution of specified tests and acceptable test results. The Contractor was requested to evaluate the test documents for acceptability.
- PPPO: In the DUF6 facility, an FR noted a Service Water System (SWS) valve, with a hose adapter connected to it located above an electrical transformer and adjacent to an Operator Work Station (OWS) that allows an operator to use the control system and operate equipment. This connection is not capped and there is no hose connected to it. Inadvertent valve operation will result in water flowing onto the transformer and possibly splashing on top of the OWS, possibly running inside and affecting electronic/electrical components. A review of the SWS P&ID drawing, identified that this hose connection is normally capped. The Contractor was requested to explain why this hose connection is uncapped and available for use. Subsequently the Contractor expeditiously removed the hose adapter

and capped this connection.

- PPPO: While conducting routine oversight at the DUF6 facility, an FR observed UDS subcontractor electricians conducting troubleshooting electrical work on or near 480 volt energized electrical equipment. The work package included a UDS Energized Electrical Work Permit (EEWP) form; with an attached arc flash hazard analysis which required compliance with NFPA 70E personal protective equipment requirements. The UDS subcontractor electrician performing the work was wearing a green FR shirt that has been worn by welders performing hot work and the shirt front was left open. The shirt label indicates that this is a "WESTEX PROBAN/FR-7A" shirt and the shirt has metal snaps to close it. An internet search for "WESTEX PROBAN/FR-7A" identified that the material was designed primarily for welding operations. NFPA 70E identifies that ASTM F1506 is a performance specification that covers flame resistant garments intended for wear by electrical workers who are at risk for exposure to electric arcs and the related thermal hazards. The fabric is required to be arc tested and flame resistant. In addition there are specific labeling requirements for the garment. The garment used did not meet these requirements and was not worn in accordance with NFPA-70E requirements. In addition the EEWP was missing authorization signatures from the "RCM/Facility Manager" and "Site ES&H Manager". UDS was informed of these deficiencies and suspended work until the subcontractor work force and UDS staff were re-briefed on requirements for working on or near energized electrical equipment.
- RL: An FR identified inadequate corrective actions to address facility configuration/labeling and shift routine issues on the Soil and Groundwater Remediation Project.
- RL: An FR identified issues related to flow down of Plateau Remediation Contractor (PRC) work control requirements to subcontractors during the RL ISMS Phase I Verification of PRC.
- RL: An FR identified issues that the contractor did not find in the scaffold erector nearly falling near miss event at 224-U. Issues included weaknesses in the qualifications for persons designated as a "Competent" person, training deficiencies, non adherence to scaffold tags, lack of supervision in the field, procedural differences, and the use of fall arrest equipment for protection.
- RL: An FR identified radiological issues that involve personnel working under Radiation Work Permits when void limits have been reached at U-Plant that lead to an uptake exposure to Deactivation & Decommissioning (D&D) workers.
- RL: An FR identified Solid Waste Operations Complex (SWOC) Safety Basis implementation issues and negative trending.
- RL: An FR identified that a subcontractor employee not wearing proper Personal Protective Equipment (PPE) for electrical work with an arc flash potential for the Mission Support Alliance, LLC contractor.
- RL: An FR identified that the fissile gram / criticality safety drum type label was not corrected after a drum was identified as a criticality safety Type E level drum at SWOC.
- RL: An FR identified that the fork lift position required by the Critical Lift Plan for movement of FRP box 28 was not met during the critical lift at SWOC.
- RL: An FR rejected Corrective Action Plan for Delhur Electrical Issues due to incomplete causal analysis.
- RL: FR participation in the WCH Fall at Bldg 336 Type B Investigation lead to a number of Judgments of Need (JON) in Work Control and Fall Protection.
- SPRU: The FR identified a fork truck being operated without a spotter in a restricted visibility area.

- SPRU: The FR performed a Readiness Surveillance for North Field remediation work.
- SPRU: The FR performed an Electrical Safety surveillance identifying lockout/tagout implementation issues.
- SR: Four FR vacancies were filled during this reporting period and one FR was promoted to a non-FR position. New FRs are working on their qualifications. To assist with the qualification, SAF-107 Applied Engineering Fundamentals, is tentatively planned to be offered at SR in January 2010.
- WVDP: FRs conducted three monthly site assessments focused on quality assurance and integrated safety management. Issues addressed included chemical container storage area maintenance; vegetative overgrowth at power panels and junction boxes; exterior lights on during the day; fire doors to be maintained and kept closed; and housekeeping issues relative to work room floors maintained in a clean and dry condition.
- WVDP: The FR-in-training provided EM Program support at Brookhaven National Laboratory and the Separation Process Research Unit.

OFFICE OF NUCLEAR ENERGY

Facility Representative Program Performance Indicators (3QCY2009)

<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	47	76
NE Totals	11	11	10	91	0	100	100	47	76
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

*** Field or Ops Office Key**

ID = Idaho Operations Office

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*** % Oversight Time includes % Field Time

NE Facility Representative (FR) Highlights:

- ID: An FR identified that a key Idaho National Laboratory map in use by emergency response personnel incorrectly identified an active 13.8 kV power line as de-energized.
- ID: An FR identified that a subcontractor employee was not wearing the proper PPE for cleanup of a large sulfuric acid spill. Additionally the heat stress hazard associated with performing work in the PPE had not been analyzed.
- ID: An FR identified that workers had failed to use proper PPE, and when questioned, failed to understand the PPE requirements. Workers operating a hand held bandsaw were not wearing glasses with side shields, and when questioned, the workers did not know the PPE requirements and could not recognize the hazard.
- ID: An FR observed several workers in close proximity to operating heavy equipment without the proper PPE. Multiple subcontractor personnel were working near an operating front end loader and most (including the job supervisor) were not wearing high visibility vests as required.
- ID: An Operational Emergency was declared in August 2009 when a Boron Trifluoride detector was accidentally dropped. Several days after the emergency, an FR requested information and a list of corrective actions that had resulted from an almost identical event that occurred in November 2008. The Contractor located the unfinished critique paperwork and supporting documents from the 2008 event, but none of the actions specified in the critique report or supporting documentation had been entered into the issues management system. The FR determined that had the proposed corrective actions been completed, the detectors would have been identified, located, characterized, and controlled, and the most recent Operational Emergency would have been prevented.
- ID: During a pre-job review of a Lockout/Tagout (LO/TO) record sheet at the Advanced Test Reactor, two FRs noted that the zero-energy verification was limited to "verify discharge valves do not operate." There was no identification of which specific valves were required to be verified inoperable or how the verification was to be performed. The purpose of the LO/TO was to prevent primary coolant system flow from entering the system that was being opened.
- ID: During a sitewide emergency drill an FR observed that Emergency Command Center personnel were unsure of the requirements for invoking "Mass Casualty" response criteria, and that emergency response procedures did not provide clear guidance on the subject.
- ID: During Cask Cart operations at the Hot Fuel Examination Facility, an FR identified that workers on the cart were within a few inches of an energized 480 V AC bus bar that supplied power to the cart. The bus bar cover was

open on the underside and was large enough for a tool or a person's fingers to contact the energized bus bar.

NATIONAL NUCLEAR SECURITY ADMINISTRATION

Facility Representative Program Performance Indicators (3QCY2009)

<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>
LASO	14	13	12	86	1	83	50	54	73
LSO	10	10	7	70	0	100	100	40	68
NSO	9	9	7	78	1	100	86	47	71
PXSO	10	9	9	90	1	100	89	43	72
SRSO	4	4	4	100	0	100	75	43	73
SSO	11	11	7	64	0	100	100	37	76
YSO	12	11	10	83	1	100	90	47	71
NNSA Totals	70	67	56	80	4	96	82	45	72
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

*** 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 attended the DOE Oversight Awareness SAF-380 and DOE Oversight Implementation SAF-381 training courses.
- LASO: An FR discovered missing page of Technical Safety Requirement (TSR) Surveillance Round Sheets resulting in Facility declaration of a TSR violation
- LASO: An FR discovered an unvented transuranic (TRU) waste drum in the basement resulting in Facility declaration of a TSR violation.
- LASO: An FR identified safety concerns to the Los Alamos National Security, LLC (LANS) Decontamination and Decommissioning (D&D) and Environment, Safety, Health, and Quality (ESH&Q) managers resulting in work pauses for building 370 and Tritium Systems Test Assembly (TSTA) room 5503 activities.
- LASO: An FR performed 15 vital safety system (VSS), documented safety analysis (DSA) and operational walkthroughs/reviews resulting in the identification of, in working with Chemistry and Metallurgy Research (CMR) personnel, opportunities for improvement primarily in the areas of emergency management, the containerization program, and the flammable gas program.
- LASO: Two FRs shadowed a LANL team investigation of two TA-35 chemical accidents.
- LSO: An FR participated as a review team member on the High Energy Radiography Facility DSA/TSR annual update.
- LSO: An FR participated as a team member in a maintenance assessment of the Superblock facilities.
- LSO: An FR participated as a team member in verifying implementation of the recently approved Building 332 TSR revision.

- LSO: An FR provided oversight of a facility readiness review of the metal conversion glovebox.
- LSO: An FR provided oversight of the contractor's management self assessment of the Tritium Facility Modernization.
- LSO: During assessment of non-nuclear facilities material inventory control, an FR identified explosive and radiological inventories that exceed the facilities' safety plan limit.
- LSO: Two FRs participated as team members in a maintenance assessment of the Maintenance and Utilities Service Department.
- NSO: An FR revised the FR Group procedure by consolidating four FR procedures into one.
- NSO: The Acting FR Group Leader provided oversight for the Barolo Sub-critical Experiment Confirmatory Shot, Readiness Verification, and the Criticality Experiments Facility (CEF) Management Assessment.
- NSO: The High Energy Physics FR provided after hours coverage for the Big Explosive Experiments Facility Experiment FFT-4 and the Nonproliferation Test and Evaluation Complex Sirius Test Series.
- NSO: The Underground Operation FR retired this quarter and two FRs became fully qualified this reporting period.
- PXSO: The Lead FR was moved by directed reassignment into the position of Assistant Senior Scientific & Technical Advisor for the Pantex Site Office.
- SRSO: During preliminary welding operations on a waste container for the Tritium Extraction Facility, an FR identified that a heating element was not installed on the waste container lid as required by procedure. Further evaluation of the work package documentation revealed that the waste container heating procedure was signed stating that this step was completed. Due to these observations, the contractor placed all welding operations on hold until a full review could be performed.
- SRSO: To address a series of conduct of operation events during the month of August 2009, FRs conducted reactive assessments and backshift coverage activities focusing on Procedure Compliance and Shift Routines. As a result of increased oversight activities from FRs and attention from contractor management, conduct of operations performance improved.
- SSO: An FR participated on the site office restart review team for the Rocket Sled Track Facility. The team has reviewed Sandia compliance with startup requirement and will be making a recommendation to SSO management on restart readiness.
- SSO: An FR provided a thorough review of the annual updates to the DSA and TSR for the Annular Core Research Reactor Facility and the Sandia Pulsed Reactor Facility (including the Critical Experiments Addendum).
- SSO: An FR supported investigation of the recent Tech Area III Oxygen Flash Flame accident by responding to ensure accident scene preservation and also attended the critique performed later that day. The FR also participated in the initial walkthrough of the accident scene by the Sandia accident investigation team.
- SSO: An FR taught the 2009 NNSA Future Leaders Conduct of Operations course with a Service Center Subject Matter Expert and provided tours of the Sandia Technical Area – V Nuclear Facilities.
- YSO: An FR and welding Subject Matter Expert (SME) led a Pantex Site Office team in an assessment of welding

in which significant issues in welding program quality assurance were identified.

- YSO: An FR identified reject weld conditions which required re-work and repair on one of the two 2,000,000 gallon water tank shells that are part of the new -12 Potable Water Upgrade Project.
- YSO: An FR served as the YSO Readiness Verification Review team leader for the Safe Secure Transport-Equipment (SST-E) start-up activity. The team's primary focus was closing 26 Contractor Operational Readiness Review (CORR) issues (13 pre-start and 13 post-start). Closure of six CORR issues were initially rejected once and one was rejected a second time. The team also identified and documented lessons learned associated with the contractor's efforts and this readiness process phase. As a result of this thorough review and corrective action resolution, during the NNSA YSO Operational Readiness Review (ORR) no pre-start findings identified by the review team. There were only three post-start findings noted in the related YSO ORR.

OFFICE OF SCIENCE

Facility Representative Program Performance Indicators (3QCY2009)

<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>
ASO	5	5	4	80	1	100	100	18	83
BHSO	4	4	4	100	0	100	100	41	83
FSO	2	2	2	100	0	50	50	46	69
NBL	1	1	1	100	0	100	100	36	72
OR (SC)	5	5	5	100	0	100	100	48	81
PNSO	3	3	3	100	0	100	100	45	74
SC Totals	20	20	19	95	1	95	95	39	79
DOE GOALS	-	-	-	100	-	-	>80	>40	>65

*** Field or Ops Office Key**

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 is performing a critical review of a new Basis for Interim Operation for a hot cell complex.
- ASO: One FR was promoted to a non-FR position.
- BHSO: One FR assisted in the coordination of the 2009 Office of Science Accelerator Safety Workshop held at Brookhaven National Laboratory (BNL) in August.
- BHSO: One Interim Qualified FacRep became Fully Qualified in August 2009. This action increased the Fully Qualified FR level to 100%.
- BHSO: Two FRs participated in a BHSO Nanomaterial Safety Assessment of BNL.
- FSO: FRs were involved in the following activities during the quarter: Fermilab Maintenance Shutdown Oversight; National Environmental Policy Act (NEPA) determinations for American Recovery and Reinvestment Act (ARRA) funded projects; FSO/Fermilab Safety Documentation Working Group; and environmental permitting.
- NBL: The FR discussed circuit breaker maintenance with the NBL Building Manager/Nuclear Engineer. No maintenance or testing has been performed on molded circuit breakers (“Run-to-Fail”). Systems that have safety significance require future circuit breakers maintenance.
- NBL: The FR investigated common failure modes and predictive maintenance for induction motors as they relate to the recently failed vault exhaust motor/blown circuit breaker.
- NBL: The FR observed material move activities being conducted as the first step in operations under the uranium justification for continuing operations (JCO).
- OR(SC): A coordinated assessment was conducted of Satellite Accumulation Areas at the Oak Ridge National Laboratory (ORNL) nuclear facilities and the Spallation Neutron Source (SNS). This assessment was completed jointly by the FRs, and an overall assessment report was prepared.

- OR(SC): During the quarter 82 FR walkthroughs were conducted and documented in the ORION tracking system. Twelve of these walkthroughs were conducted jointly with Environmental Safety and Health (ES&H) subject matter experts.
- OR(SC): The newest FR at ORNL successfully completed Full Qualification at her assigned facilities. Another FR completed his Qualifications on newly-assigned facilities.
- OR(SC): Three FRs conducted an Accelerator Safety Assessment at the Holifield Radioactive Ion Beam Facility, Oak Ridge Electron Linear Accelerator, and the SNS.
- PNSO: A chemical use documentation surveillance performed by a FR identified opportunities for improving the contractor's process for preparing Chemical Process Permits. No non-compliances existed, but the surveillance identified that administrative and engineered controls were too general (were not specific to the hazard being mitigated) and that the contractor's self assessment process did not evaluate other authorized chemical use documentation formats.
- PNSO: An electrical safety surveillance was performed by a FR on the assured grounding program at the Physical Sciences Facility construction site. Overall program performance was determined to be adequate. However, a non-compliance with the subcontractor's program resulted in two 480vac heaters being used prior to being tested. This was identified as a minor finding and the site contractor corrected the condition.
- PNSO: An FR completed surveillance of hazardous energy controls implementation in private and user facilities. A variety of procedural adherence issues were found. Also found were differences in execution between facility management groups that introduced risk to program conduct across the Lab. Contractor management accepted the issues and committed to remove variability in program performance.
- PNSO: An FR identified a wide-spread practice where the contractor was failing to follow a prescribed hazardous energy control process. A significance category 3 occurrence report was issued and a formal causal analysis is being performed.
- PNSO: During routine oversight, a FR became aware that preventive maintenance (PM) on electrical breakers and switchgear were not being performed in his assigned facilities. The decision to suspend these PMs was originally made based on plans to vacate and eventually turn these facilities over for demolition. Later these plans were revised to retain and renovate selected facilities for continued use; however, the decision to restart appropriate electrical PMs was overlooked. This issue was brought to the contractor's attention and as a result the PMs were reinstated.