January 2010 Electrical Safety Occurrences

There were 8 electrical safety occurrences for January 2010:

- 3 occurrences involved inadequate lockout/tagout (LOTO)
- 4 occurrences involved electrical workers and 4 occurrences involved non-electrical workers
- 3 occurrences involved subcontractors
- 2 occurrences involved excavation
- 2 occurrences involved severing an energized conductor
- 2 occurrences resulted from inadequate planning
- 1 occurrence involved a violation of NFPA 70E

The year started on a positive note with no electrical injuries reported for the month of January. The number of events related to subcontractors and non-electrical workers remained high. May is National Electrical Safety Month and would be a good opportunity to raise the electrical safety awareness for non-electrical workers. Planning continues to be a challenge and is a critical element in ensuring a safe work place. Continue to focus on maintaining continuous improvement.

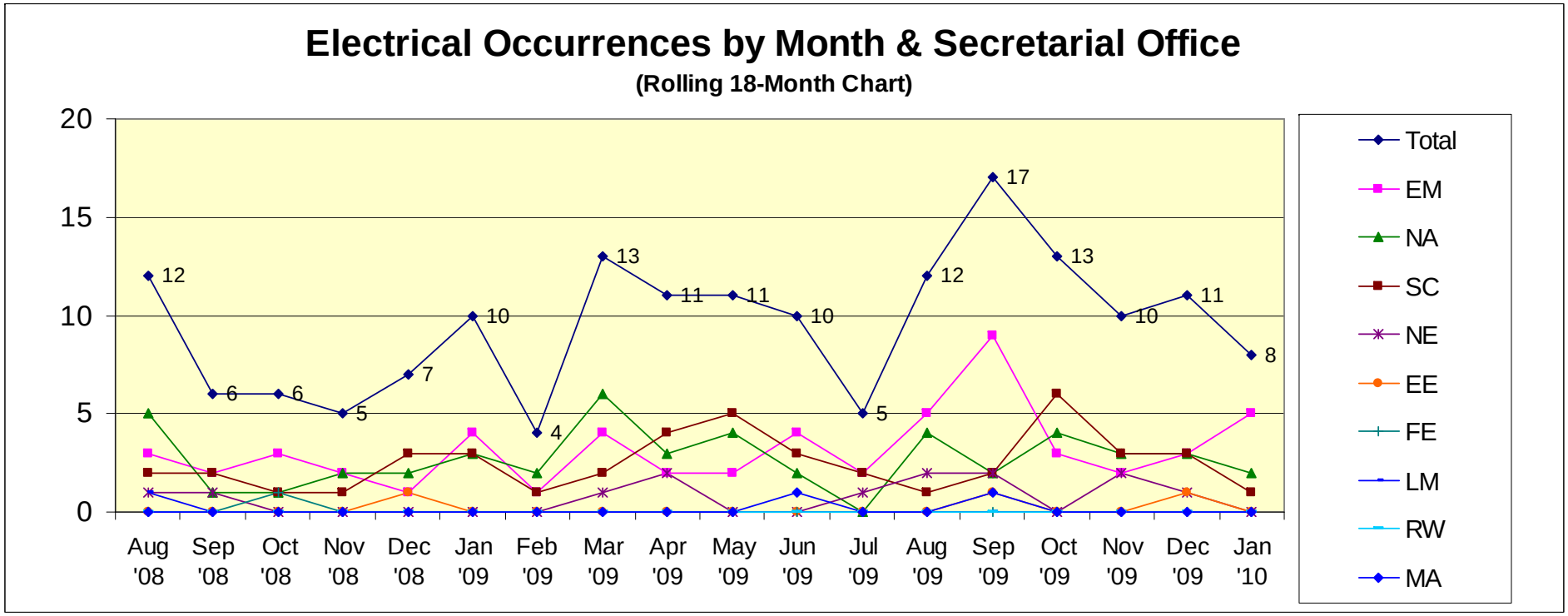
In compiling the monthly totals, the search initially looked for occurrence discovery dates in this month (excluding Significance Category R reports), and for the following ORPS "HQ keywords":
01K – Lockout/Tagout Electrical, 01M - Inadequate Job Planning (Electrical),
08A – Electrical Shock, 08J – Near Miss (Electrical), 12C – Electrical Safety

Using the key words above, 8 events were identified. Please continue to report all events and evaluate the events using the Electrical Severity Measurement Tool. Two of the events this month had an ES of 110 and the others had an ES of zero. This is a big improvement over previous months in which we saw ES scores of 5250, 3500, 2100, and 500.

Below is the current summary of 2010 electrical safety occurrences:

Period	Electrical Safety Occurrences	Shocks	Burns	Fatalities
January-10	8	0	0	0
2010 total	8 (avg. 8/month)	0	0	0
2009 total	128 (avg. 10.7/month)	25	3	0
2008 total	113 (avg. 9.4/month)	26	1	0
2007 total	140 (avg. 11.7/month)	25	2	0
2006 total	166 (avg. 13.8/month)	26	3	0
2005 total	165 (avg. 13.8/month)	39	5	0
2004 total	149 (avg. 12.4/month)	25	3	1

The eight events in January, 2010, are below the average rate of electrical safety occurrences in 2009, which was 10.7 occurrences per month. There were no electrical injuries.



EE - Energy Efficiency and Renewable Energy, EM - Environmental Management, FE - Fossil Energy, LM - Legacy Management,
MA - Management, NA - National Nuclear Security Administration, NE - Nuclear Energy, RW - Civilian Radioactive Waste Management, SC - Science

Electrical Safety Occurrences – January 2010

No	Report Number	Event Summary	SHOCK	BURN	ARCF[1]	LOTO[2]	PLAN[3]	EXCAV[4]	CUT/D[5]	VEH[6]	SC[7]	RC[8]	ES[9]
1	EM-PPPO--LPP-PORTENVRES-2010-0001	Two electrical conduits and associated wiring were severed by a trackhoe.						X			3	10(3)	0
2	EM—CAF--WTS-WIPP-2010-0001	A procedural violation occurred when workers failed to follow the prescribed hazardous energy control process by performing an unauthorized removal of a lockout device.				X	X				3	2C(2)	0
3	EM--ID-BBWI-AMWTF-2010-0001	Two electrical cords were hit by a skid steer bucket. The cords were on the ground buried in snow.					X	X			4	10(2)	0
4	EM--RP-BNRP-RPPWTP-2010-0001	An employee severed an energized appliance power cord.							X		3	10(2)	110
5	EM-SR-SRNS-MOGEN-2010-0001	A potential for discrepancies in application of arc flash evaluations was discovered.									3	10(2)	0
6	NA-PS--LASO-GOLA-BOPLASO-2010-0001	A worker severed an energized 110V extension cord.							X		3	2C(2)	110
7	NA—SRSO-MOXS-MOX-2010-0001	An electrical worker made a termination to an energized 240-volt power circuit.				X					3	2C(2)	0
8	SC--SSO-SU-SLAC-2010-0002	a Subcontractor was found installing an emergency light fixture on a 120-volt circuit in one of the FEH hutches without applying a hazardous energy personal lock and tag to the feeder breaker.				X					3	2C(2)	0
	TOTAL		0	0	0	3	2	2	2	0			

Key

(1) ARCF = significant arc flash, (2) LOTO = lockout/tagout, (3) PLAN = job planning, (4) EXCAV = excavation/penetration, (5) CUT/D = cutting or drilling, (6) VEH = vehicle event, (7) SC = ORPS significance category, (8) RC = ORPS reporting criteria, (9) ES = electrical severity

ES Scores: Extreme is >3301, High is 331-3300, Medium is 31-330, and Low is 1-30

Electrical Safety Occurrences – January 2010

No	Report Number	Event Summary	EW[1]	N-EW[2]	SUB[3]	HFW[4]	WFH[5]	PPE[6]	70E[7]	VOLT[8] H	VOLT[8] L	C/I[9]	NEUT[10]	NM[11]
1	EM-PPPO--LPP-PORTENVRES-2010-0001	Two electrical conduits and associated wiring were severed by a trackhoe.		X		X					X			X
2	EM—CAF--WTS-WIPP-2010-0001	A procedural violation occurred when workers failed to follow the prescribed hazardous energy control process by performing an unauthorized removal of a lockout device.	X				X				X			
3	EM--ID-BBWI-AMWTF-2010-0001	Two electrical cords were hit by a skid steer bucket. The cords were on the ground buried in snow.		X		X					X			
4	EM--RP-BNRP-RPPWTP-2010-0001	An employee severed an energized appliance power cord.		X		X					X			X
5	EM-SR-SRNS-MOGEN-2010-0001	A potential for discrepancies in application of arc flash evaluations was discovered.	X				X		X		X			
6	NA-PS--LASO-GOLA-BOPLASO-2010-0001	A worker severed an energized 110V extension cord.		X	X	X					X			X
7	NA—SRSO-MOXS-MOX-2010-0001	An electrical worker made a termination to an energized 240-volt power circuit.	X		X		X				X			
8	SC--SSO-SU-SLAC-2010-0002	a Subcontractor was found installing an emergency light fixture on a 120-volt circuit in one of the FEH hutches without applying a hazardous energy personal lock and tag to the feeder breaker.	X		X		X				X			
	TOTAL		4	4	3	4	4	0	1	0	8	0	0	3

Key

(1) EW = electrical worker, (2) N-EW = non-electrical worker, (3) SUB = subcontractor, (4) HFW = hazard found the worker, (5) WFH = worker found the hazard, (6) PPE = inadequate or no PPE used, (7) 70E = NFPA 70E issues, (8) VOLT = H (>600) L(≤600), (9) C/I = Capacitance/Inductance, (10) NEUT = neutral circuit, (11) NM = near miss

ORPS Operating Experience Report

Production GUI - New ORPS

ORPS contains 54544 OR(s) with 57862 occurrences(s) as of 2/5/2010 10:06:16 AM
Query selected 8 OR(s) with 8 occurrences(s) as of 2/5/2010 10:07:22 AM

Download this report in Microsoft Word format.

1)Report Number:	EM--PPPO-LPP-PORTENVRES-2010-0001 **After 2003 Redesign**
Secretarial Office:	Environmental Management
Lab/Site/Org:	Portsmouth Gaseous Diffusion Plant
Facility Name:	Environmental Restoration
Subject/Title:	Near Miss, Trackhoe Operator Cut Through Two Electrical Lines (ARRA)
Date/Time Discovered:	01/19/2010 04:55 (ETZ)
Date/Time Categorized:	01/19/2010 14:50 (ETZ)
Report Type:	Notification
Report Dates:	Notification: 01/20/2010 13:45 (ETZ) Initial Update: Latest Update: Final:
Significance Category:	3
Reporting Criteria:	10(3) - A near miss, where no barrier or only one barrier prevented an event from having a reportable consequence. One of the four significance categories should be assigned to the near miss, based on an evaluation of the potential risks and the corrective actions taken. (1 of 4 criteria - This is a SC 3 occurrence)
Cause Codes:	
ISM:	3) Develop and Implement Hazard Controls 4) Perform Work Within Controls
Subcontractor Involved:	No
Occurrence Description:	At approximately 4:55 a.m. on January 19, 2010, a trackhoe operator cut through two electrical conduits and associated wiring on the X-701B Interim Remedial Measure project. The conduits contained multiple wires which provide power to sump pumps and the associated instrument controls. One of the wires was 230 Volts and another was 110 Volts. The remaining wires were of lower voltage. No arcing was observed. The conduits were buried shallow in the soil, approximately 2 to 4 inches deep. Flags and cones were in place to mark the location of the buried lines. The conduits run from the X-701B pond sump to a control panel outside of X-701E Building. The sump pumps allow removal of water from the X-701B pond area and route it to the X-623 water treatment facility.

	The project is being performed in two shifts. This event occurred on the night shift, which uses stadium lighting to provide illumination. At the time of the incident, the operator was using a long reach excavator to perform soil work near the southeast corner of remediation Cell #5. Soil had been replaced where a shoring corner post had been removed earlier in the shift. Grading was in process on a hillside when the lines were severed. The trackhoe was positioned to reach uphill toward the buried conduits while grading. An investigation is in progress. This project is funded by the American Recovery and Reinvestment Act (ARRA).
Cause Description:	
Operating Conditions:	Normal operations
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)
Immediate Action(s):	--Paused work, placed site was in a safe condition, and cordoned off the area with safety barricades at 4:57 a.m.; --LPP Safety was notified at 5:00 a.m.; --Notified the Plant Shift Superintendent (PSS) at 5:00 a.m. and they arrived at 5:25 a.m. and determined that there was no impact on plant operations; --Notified the X-623 Operator at 5:20 a.m.; --Confirmed that there was no electrical disruptions at X-623; --Started notifications to LPP Management at 6:05 and DOE at 6:45 a.m.; --Confirmed that the circuit breaker was de-energized at the control panel at 5:40 a.m. and LOTO at 7:30 a.m.; --Held a Fact Finding meeting with project personnel; --Notified dayshift Superintendents to rebrief X-701B crews on X-701B site hazards and directed them not to proceed with further work until authorized; and --Initiated an Occurrence Report and started the investigation.
FM Evaluation:	An internal corrective action plan will be developed to address this issue.
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: Clyde Gaston By When:
Division or Project:	X-701B Interim Remedial Measure
Plant Area:	F5
System/Building/Equipment:	X-701B

Facility Function:	Environmental Restoration Operations
Corrective Action:	
Lessons(s) Learned:	A Lessons Learned will be developed as a result of this incident.
HQ Keywords:	07D--Electrical Systems - Electrical Wiring 08F--OSHA Reportable/Industrial Hygiene - Industrial Operations Issues 08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical) 12K--EH Categories - Near Miss (Could have been a serious injury or fatality) 13H--Management Concerns - American Recovery and Reinvestment Act (ARRA) 14E--Quality Assurance - Work Process Deficiency
HQ Summary:	On January 19, 2010, a trackhoe operator cut through two electrical conduits and associated wiring on the X-701B Interim Remedial Measure project during soil grading. The conduits contained multiple wires which provide power to sump pumps and the associated instrument controls. One of the wires was 230 volts and another was 110 volts. The remaining wires were of lower voltage. No arcing was observed. The conduits were buried 2 to 4 inches deep and flags and cones were in place to mark the location of the lines. This event occurred on the night shift, which uses stadium lighting to provide illumination. At the time of the incident, the operator was using a long reach excavator to grade the soil near the southeast corner of remediation Cell #5. The trackhoe was positioned to reach uphill toward the buried conduits while grading. The site was placed in a safe condition and the area was cordoned off. An investigation is in progress.
Similar OR Report Number:	
Facility Manager:	Name: L.R. Bauer, Ph.D. Phone: (740) 897-2203 Title: LATA/Parallax Portsmouth Project Manager
Originator:	Name: BOOK, JACQUELINE G Phone: (740) 897-2569 Title: QUALITY PROGRAMS COORDINATOR

HQ OC Notification:

Date	Time	Person Notified	Organization
NA	NA	NA	NA

Other Notifications:

Date	Time	Person Notified	Organization
01/19/2010	14:57 (ETZ)	Bill Franz	PORTSLPP
01/19/2010	14:58 (ETZ)	Matt Miller	PORTSLPP
01/19/2010	15:07 (ETZ)	Tony Takacs	DOEPORT

Authorized Classifier(AC): J.G. McCleery Date: 01/20/2010

2)Report Number:	EM-CAFO--WTS-WIPP-2010-0001 **After 2003 Redesign**
Secretarial Office:	Environmental Management
Lab/Site/Org:	Carlsbad Field Office
Facility Name:	Waste Isolation Pilot Plant
Subject/Title:	Failure to follow prescribed hazardous energy process - Electrical
Date/Time Discovered:	01/15/2010 12:03 (MTZ)
Date/Time Categorized:	01/15/2010 13:25 (MTZ)
Report Type:	Update
Report Dates:	Notification 01/19/2010 18:46 (ETZ) Initial Update 01/20/2010 18:12 (ETZ) Latest Update 01/20/2010 18:12 (ETZ) Final
Significance Category:	3
Reporting Criteria:	2C(2) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.
Cause Codes:	
ISM:	4) Perform Work Within Controls
Subcontractor Involved:	No
Occurrence Description:	On December 30, 2009, a procedural violation occurred when workers failed to follow the prescribed hazardous energy control process (electrical Lockout/Tagout) by performing an unauthorized removal of a lockout device. Partial information pertaining to the event was not reported until January 13, 2010. At no time were workers at risk of contacting a hazardous energy source. Lockout 09-UF-172 was prepared and installed on December 28, 2009 by Underground Services, for Modification Work Order 0903040. Underground electrical craft involvement started on December 28, 2009 and continued through January 9, 2010. Management was first notified by a Safety Individual on January 13, 2010 about a potential lockout issue. The reporting individual gave no specifics about the situation and did not give the name of the individual with the concern. Management immediately initiated an investigation upon receiving the information. Employee interviews were conducted on January 13 and January 14, 2010. Interview notes, a copy of the work order and lock out documentation were presented to the Maintenance Manager on January 14th for review. Conclusions from the initial interviews and document review were

presented to Operations Facility Manager on January 15, 2010 where it was determined that the issue was reportable under ORPS Hazardous Energy Control requirement 2C(2)3.

DETAILS
A debrief was held on January 18, 2010 to gather additional information from all employees involved and to better understand how the event occurred. Results of the debrief are as follows:

December 28, 2009 - Work order 0903040 was released in accordance with the work control process and approved lock out 09-UF-172 for 53P-DP04/29 Circuit Breaker 2 was placed. Four (4) electricians assigned to the job placed their personal locks on the locking device. Work progressed until approximately 1300 hours. At that time, one of the electricians left to attend training and the others gathered additional materials required to complete the task.

December 29, 2009 - The three (3) electricians that worked the previous day arrived at the work location and performed two additional steps in the work order. The fourth electrician was scheduled off and did not assist.

December 30, 2009 - The three (3) electricians that worked the job the previous day returned and continued work until they stopped for lunch (approximately 1100 hours). When they arrived at the lunchroom, the employees notified the Maintenance Engineer that in order to complete the work task, a voltage test would need to be performed which would require the lockout to be removed. It was noted that the absent worker's personal locking device was still attached and would need to be removed.
Note: The removal of absent employee locks is allowed per approved site procedures.
At approximately 1130 hours, the Maintenance Engineer went to 53P-DP04/29 Circuit Breaker 2 and removed the entire locking device from the breaker that contained the Underground Services lock and electrician's personal locks.
At approximately 1145 hours, the electricians returned to the job site. They verified the disconnect 53P-SW04/130 was open, confirmed the main breaker on 53P-MPC03/15 was open, verified absence of power at the 53P-MPC03/15. Although the electricians verified the lockout early in the shift, the workers did not verify the lock out device was in place at 53P-DP04/29 when they returned from lunch. After completing termination of two wires, the electricians went to remove their personal locks from 53P-DP04/29 and noticed their personal locks, the Underground Services lock and the locking device laying in the bottom of the panel (53P-DP04/29). They discussed the possibility of the locks falling off the breaker and determined since the locking device attachment was in place on the breaker that the locks must have been removed

	inappropriately. A worker called and asked the Maintenance Engineer to meet them at the job site. At approximately 1200 hours, the Maintenance Engineer arrived at the job site and was informed of the issue. The Maintenance Engineer informed the electricians that he had removed the entire locking device, instead cutting the lock or locking device, and laid them in the panel. The Maintenance Engineer was informed by all of the electricians that his actions were not in accordance with the lockout procedures. After some discussion, the group verified there were no safety issues based on breaker positions and that all workers involved were aware of the mistake to prevent recurrence and then placed the locking device back on the breaker. No further activities were performed on the work order until January 4, 2010. January 4 through January 9, 2010 - Work continued from January 4, 2010 through January 9, 2010 with no abnormal conditions or events noted. January 13 and January 14, 2010 - Partial information on the event was reported. Immediate work document reviews of procedures, work package, logs and employee interviews commenced. January 15, 2010 - Results obtained from the document reviews and employee interviews were submitted to and discussed with the Maintenance Manager. At 1203 hours, the Maintenance Manager presented known information to the Operations Facility Manager. It was determined to be a reportable occurrence. A Just-In-Time (JIT) Lessons Learned was distributed to employees and discussed in shift turn-over for oncoming shifts. January 18, 2010 - A debrief was held with employees involved in the event. One employee was absent. January 19, 2010 - The absent employee was interviewed. A Root Cause Analysis (RCA) and a final Corrective Action Plan are scheduled to complete on March 5, 2010.
Cause Description:	
Operating Conditions:	Does not apply
Activity Category:	Maintenance
Immediate Action(s):	Issued a Just-In-Time Lessons Learned. Discussed JIT Lessons Learned and importance of procedure compliance and the reporting process with on-shift crews and at each shift turn-over. Took employee statement from on-sight personnel.

	Scheduled a Debrief meeting with all employees involved in the incident including those that were off when incident was identified. Prepared a WIPP Form to comply with Issues Management requirements.
FM Evaluation:	UPDATE 1/20/10: Three editorial corrections were made in the Description of Occurrence section in yesterday's notification report. -Added the word "of" in first sentence. -Changed "did assist" to "did not assist" in the December 29, 2009 description. -Replaced inadvertently to inappropriately in the December 30, 2009 description.
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: WTS Operations By When:
Division or Project:	WTS/WIPP
Plant Area:	Underground
System/Building/Equipment:	ED13/Underground/Electrical Panel
Facility Function:	Nuclear Waste Operations/Disposal
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical) 01M--Inadequate Conduct of Operations - Inadequate Job Planning (Electrical) 12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 14E--Quality Assurance - Work Process Deficiency
HQ Summary:	On December 30, 2009, a procedural violation occurred when workers failed to follow the prescribed hazardous energy control process (electrical Lockout/Tagout) by performing an unauthorized removal of a lockout device for 53P-DP04/29 Circuit Breaker 2. Four electricians assigned to the job had placed their personal locks on the locking device. In order to complete the work task, a voltage test would need to be performed which would require the lockout to be removed. However, one of the four electricians was absent and that electrician’s personal locking device was still attached and would need to be removed, which is allowed per approved site procedures. The Maintenance Engineer was notified. The Maintenance Engineer went to 53P-DP04/29 Circuit Breaker 2 and removed the entire locking device from the breaker that contained the

	Underground Services lock and electrician's personal locks. The Maintenance Engineer was informed by all of the electricians that his actions were not in accordance with the lockout procedures. After some discussion, the group verified there were no safety issues based on breaker positions. All workers involved were aware of the mistake to prevent recurrence and the locking device was placed back on the breaker. Work continued from January 4, 2010 through January 9, 2010 with no abnormal conditions or events noted.
Similar OR Report Number:	1. EM-CAFO--WTS-WIPP-2007-0013
	2. EM-ALO--WWID-WIPP-1996-0006
Facility Manager:	Name: BRYAN, WESLEY H. Phone: (575) 234-8250 Title: FACILITY MANAGER
Originator:	Name: KNOX, JEFF W. Phone: (575) 234-8462 Title: TECHNICAL COORDINATOR
HQ OC Notification:	Date: 01/15/2010 | Time: 13:41 (MTZ) | Person Notified: Lina Pacheco | Organization: CBFO/FRD
Other Notifications:	01/15/2010 12:03 (MTZ) Jeff Knox WTS/FMD 01/15/2010 12:17 (MTZ) Farok Sharif WTS/GM 01/15/2010 13:25 (MTZ) Joel Howard WTS/FSM 01/15/2010 13:41 (MTZ) Kenny Padilla CBFO/FRD 01/15/2010 12:03 (MTZ) Wesley Bryan WTS/FM
Authorized Classifier(AC):	

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3)Report Number:	EM-ID--BBWI-AMWTF-2010-0001 **After 2003 Redesign**
Secretarial Office:	Environmental Management
Lab/Site/Org:	Idaho National Laboratory
Facility Name:	ADVANCED MIXED WASTE TREATMENT FAC
Subject/Title:	Electrical Cord Contact During Snow Removal Activities
Date/Time Discovered:	01/02/2010 08:50 (MTZ)
Date/Time Categorized:	01/02/2010 09:35 (MTZ)
Report Type:	Notification/Final
Report Dates:	Notification: 01/05/2010 12:04 (ETZ) Initial Update: 01/05/2010 12:04 (ETZ)

	Latest Update	01/05/2010	12:04 (ETZ)
	Final	01/05/2010	12:04 (ETZ)
Significance Category:	4		
Reporting Criteria:	10(2) - An event, condition, or series of events that does not meet any of the other reporting criteria, but is determined by the Facility Manager or line management to be of safety significance or of concern to other facilities or activities in the DOE complex. One of the four significance categories should be assigned to the occurrence, based on an evaluation of the potential risks and the corrective actions taken. (1 of 4 criteria - This is a SC 4 occurrence)		
Cause Codes:			
ISM:	4) Perform Work Within Controls		
Subcontractor Involved:	No		
Occurrence Description:	On 1/2/10 during snow removal activities outside the west wall of Building WMF-636, two electrical cords were contacted by a skid steer bucket. The cords were on the ground buried in snow. One of the cords, which was not plugged into any component and not energized, was completely severed; the other cord plugged into the block heater of a truck from a 110 volt building outlet was superficially damaged with no exposed conductors. Upon discovery, the cord which fed the block heater was immediately unplugged from its source inside the building by one of the spotters observing the activity. There were no injuries and no electrical shock hazard. Snow removal was subsequently stopped and notifications made. All AMWTP intrusive snow removal activities were also suspended pending a critique of the event. The damaged cords were disposed of to preclude use. Later in the day, a fact finding meeting was conducted. Several organizational weaknesses/areas of improvement were identified. A pre-job briefing required for this task was not performed. The skid steer operator was qualified to operate the specific machinery but was not qualified to remove snow. Electrical cord management was deficient as the cords were required to be elevated above ground to preclude entanglement and contact issues. In addition, the cord was not plugged into a GFCI which is required by the project's electrical safety program. Detailed site inspections were performed later in the day to identify/correct cord elevation and GFCI plug issues. In addition, a briefing of the event and lessons learned/corrective actions was performed to all working crews.		
Cause Description:			
Operating Conditions:	Normal snow removal operations		
Activity Category:	Normal Operations (other than Activities specifically listed in this		

	Category)
Immediate Action(s):	1. De-energized the plugged in cord. 2. Inspected both cords for damage. Subsequently disposed of both cords. 3. Suspended snow removal activities pending fact finding to identify corrective actions.
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	No
Division or Project:	AMWTP
Plant Area:	WMF-636
System/Building/Equipment:	WMF-636
Facility Function:	Nuclear Waste Operations/Disposal
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	01A--Inadequate Conduct of Operations - Inadequate Conduct of Operations (miscellaneous) 01F--Inadequate Conduct of Operations - Training Deficiency 01M--Inadequate Conduct of Operations - Inadequate Job Planning (Electrical) 01R--Inadequate Conduct of Operations - Management issues 07D--Electrical Systems - Electrical Wiring 12C--EH Categories - Electrical Safety 14B--Quality Assurance - Training and Qualification Deficiency 14E--Quality Assurance - Work Process Deficiency
HQ Summary:	On January 2, 2010, during snow removal outside Building WMF-636, the bucket of a skid steer hit two electrical cords that were on the ground and buried in the snow. One of the cords, which was not plugged into any component and not energized, was completely severed; the other cord, which was plugged into the engine block heater of a truck and a 110-volt building outlet, was superficially damaged (no exposed conductors). A spotter immediately unplugged the cord to the block heater. There were no injuries and no electrical shock hazard. The damaged cords were disposed of and all snow removal was stopped pending a critique of the event. During the critique it was learned that a pre-job briefing was not performed, the skid steer operator was not qualified to remove snow, and the electrical cords were not elevated above ground and not plugged into a GFCI.
Similar OR Report Number:	

Facility Manager:	Name: WINKLER , JOHN Phone: (208) 557-7063 Title: RETRIEVAL PRODUCTION MANAGER
Originator:	Name: GRIFFITH, THEODORE P Phone: (208) 557-7975 Title: PLANT SHIFT MANAGER
HQ OC Notification:	Date: NA; Time: NA; Person Notified: NA; Organization: NA
Other Notifications:	Date: 01/02/2010; Time: 09:35 (MTZ); Person Notified: Ed Garza; Organization: DOE-ID
Authorized Classifier(AC):	

4)Report Number:	EM-RP--BNRP-RPPWTP-2010-0001 **After 2003 Redesign**
Secretarial Office:	Environmental Management
Lab/Site/Org:	Hanford Site
Facility Name:	RPP Waste Treatment Plant
Subject/Title:	Cut power cord on microwave
Date/Time Discovered:	01/27/2010 09:30 (PTZ)
Date/Time Categorized:	01/27/2010 09:51 (PTZ)
Report Type:	Notification
Report Dates:	Notification: 01/29/2010 16:30 (ETZ) Initial Update: Latest Update: Final:
Significance Category:	3
Reporting Criteria:	10(2) - An event, condition, or series of events that does not meet any of the other reporting criteria, but is determined by the Facility Manager or line management to be of safety significance or of concern to other facilities or activities in the DOE complex. One of the four significance categories should be assigned to the occurrence, based on an evaluation of the potential risks and the corrective actions taken. (1 of 4 criteria - This is a SC 3 occurrence)
Cause Codes:	
ISM:	2) Analyze the Hazards 4) Perform Work Within Controls
Subcontractor Involved:	No

Occurrence Description:	At approximately 08:50 AM on Wednesday 01/27/2010 while disposing of a disabled microwave in the T01 building 2nd floor kitchen. An employee cut the power cord off with a pair of pliers at the back of the microwave before unplugging it. When the power cord was cut the breaker tripped into the off position protecting the employee.
Cause Description:	
Operating Conditions:	Construction
Activity Category:	Construction
Immediate Action(s):	The work was stopped; worker made notifications to Management. Management convened a meeting to ascertain the circumstances of the event.
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: Michael A Readdy Sr By When:
Division or Project:	WTP Waste Treatment Plant
Plant Area:	600
System/Building/Equipment:	T-1 Building
Facility Function:	Nuclear Waste Operations/Disposal
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	01A--Inadequate Conduct of Operations - Inadequate Conduct of Operations (miscellaneous) 01Q--Inadequate Conduct of Operations - Personnel error 08H--OSHA Reportable/Industrial Hygiene - Safety Noncompliance 08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical) 12C--EH Categories - Electrical Safety 14E--Quality Assurance - Work Process Deficiency
HQ Summary:	On January 27, 2010, while disposing of a disabled microwave in the second floor kitchen of the T01 building, an employee cut the power cord off the back of the microwave with a pair of pliers before unplugging it. When the power cord was cut, the circuit breaker tripped protecting the employee. The work was stopped and the worker notified management. Management convened a meeting to determine the circumstances of the event.
Similar OR Report Number:	1. N/A

Facility Manager:	Name: READDY, MICHAEL A Phone: (509) 373-8300 Title: OCCURRENCE REPORT COORDINATOR
Originator:	Name: READDY, MICHAEL A Phone: (509) 373-8300 Title: OCCURRENCE REPORT COORDINATOR

HQ OC Notification:

Date	Time	Person Notified	Organization
NA	NA	NA	NA

Other Notifications:

Date	Time	Person Notified	Organization
01/27/2010	09:35 (PTZ)	Dave Leeth	BNI/Con
01/27/2010	09:35 (PTZ)	Max Hammond	BNI/Con
01/27/2010	09:35 (PTZ)	Tucker Campbell	BNI/Con
01/27/2010	09:35 (PTZ)	Miles Stauffer	BNI/SA
01/27/2010	09:40 (PTZ)	Jim Navarro	DOE/FR
01/27/2010	09:53 (PTZ)	Gary Trump	ONC

Authorized Classifier(AC):

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5)Report Number:	EM-SR--SRNS-MOGEN-2010-0001 **After 2003 Redesign**
Secretarial Office:	Environmental Management
Lab/Site/Org:	Savannah River Site
Facility Name:	Management and Operating - General
Subject/Title:	Arc Flash Calculation Evaluation
Date/Time Discovered:	01/14/2010 13:07 (ETZ)
Date/Time Categorized:	01/14/2010 14:00 (ETZ)
Report Type:	Notification

Report Dates:

Notification	01/19/2010	11:40 (ETZ)
Initial Update		
Latest Update		
Final		

Significance Category:	3
Reporting Criteria:	10(2) - An event, condition, or series of events that does not meet any of the other reporting criteria, but is determined by the Facility Manager or line management to be of safety significance or of concern to other facilities or activities in the DOE complex. One of the four significance categories should be assigned to the occurrence, based on an evaluation of

	the potential risks and the corrective actions taken. (1 of 4 criteria - This is a SC 3 occurrence)
Cause Codes:	
ISM:	
Subcontractor Involved:	No
Occurrence Description:	During a detailed review of electrical work planned for B Area, resulting from SRNS-directed heightened awareness of arc flash issues and technical inquisitiveness on the part of an employee (a breaker coordinator), a potential for discrepancies in application of arc flash evaluations was discovered that may also apply across the Savannah River Site (SRS). This is a legacy issue, that stems from the method established by the prior contractor for the application of the NFPA 70E Task Table (i.e., conclusions may not always be conservative). Therefore, all electrical work on equipment that does not have an arc flash label indicating the calories per square centimeter (cal/cm2) value was suspended.
Cause Description:	
Operating Conditions:	Normal
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)
Immediate Action(s):	All electrical work on equipment that does not have an arc flash label indicating the calories per square centimeter value was suspended. The following provisions were established to continue electrical work: 1. If an arc flash label (SRS Manual 18Q, Procedure 2, Figure 2) is present at the equipment and includes the cal/cm2 value, work can proceed using the PPE indicated in Manual 18Q, Procedure 2, Table 3 for the calories indicated. 2. If an arc flash label is not present or is present and does not contain the cal/cm2 value, an engineering evaluation must performed to determine the applicability of Manual 18Q, Procedure 2, Table 1; prior to working on the equipment in question. The engineering evaluation* shall comply with the Engineering Guide 16070-G, Arc Flash Hazard Analysis and Calculations (or with specific instruction issued by the respective company Chief Engineer); except that the use of Section 5.2.4 is to be discontinued. In addition, Manual 18Q, Procedure 2, Table 1 cannot be used for arc flash PPE until the completion of the evaluation. *If an existing evaluation is available that meets the criteria of Guide 16070-G; but does not use Section 5.2.4 of the Guide, then a new evaluation is not required.

FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: Site Engineering By When:
Division or Project:	MOGEN/ESH
Plant Area:	Site
System/Building/Equipment:	Site
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	01B--Inadequate Conduct of Operations - Loss of Configuration Management/Control 08H--OSHA Reportable/Industrial Hygiene - Safety Noncompliance 12C--EH Categories - Electrical Safety 14D--Quality Assurance - Documents and Records Deficiency 14E--Quality Assurance - Work Process Deficiency
HQ Summary:	On January 14, 2009, during a detailed review of electrical work planned for B Area, a potential for discrepancies in application of arc flash evaluations was discovered that may also apply across the Savannah River Site. This is a legacy issue, that stems from the method established by the previous contractor for the application of the NFPA 70E Task Table (i.e., conclusions may not always be conservative). Therefore, all electrical work on equipment that does not have an arc flash label indicating the calories per square centimeter (cal/cm2) value was suspended. Other provisions were established to continue electrical work when an arc flash label was and was not present.
Similar OR Report Number:	
Facility Manager:	Name: J.M. Clark Phone: (803) 952-7294 Title: M&O Chief Engineer
Originator:	Name: HUTTO, JR, CONRAD R Phone: (803) 952-9748 Title: WSRC LESSONS LEARNED COORDINATOR

HQ OC Notification:

Date	Time	Person Notified	Organization
NA	NA	NA	NA

Other Notifications:

Date	Time	Person Notified	Organization
01/14/2010	13:07 (ETZ)	C.C. Gentile - NNSA Ops	SRNS
01/14/2010	13:07 (ETZ)	A.M. Umek	SRNS ESH
01/14/2010	13:07 (ETZ)	S.J. Robinson	DOE-SR
01/14/2010	13:07 (ETZ)	R.E. Gentry	SRNS OSS
01/14/2010	13:07 (ETZ)	R. Slocum	SRNS RA
01/14/2010	13:07 (ETZ)	M.A. Mikolanis	DOE-SR
01/14/2010	13:07 (ETZ)	J.F. Dohse	SRNS NMO
01/14/2010	13:07 (ETZ)	J.D. Chiou	SRNS RA
01/14/2010	13:07 (ETZ)	M.R. Eshelman	SRNS COO
01/14/2010	13:07 (ETZ)	J.M. Clark Ch. Eng	SRNS
01/14/2010	14:04 (ETZ)	A.B. Williams	DOE-SR

Authorized Classifier(AC): Rod Hutto Date: 01/14/2010

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6)Report Number: NA--LASO-GOLA-BOPLASO-2010-0001 **After 2003 Redesign**

Secretarial Office: National Nuclear Security Administration

Lab/Site/Org: Los Alamos Site

Facility Name: Balance of Plant Los Alamos Site Office

Subject/Title: WORKER STRIKES ENERGIZED 110V TEMPORARY POWER CORD DURING D&D ACTIVITY

Date/Time Discovered: 01/25/2010 15:00 (MTZ)

Date/Time Categorized: 01/27/2010 09:15 (MTZ)

Report Type: Notification

Report Dates:

Notification	01/29/2010	18:14 (ETZ)
Initial Update		
Latest Update		
Final		

Significance Category: 3

Reporting Criteria: 2C(2) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.

Cause Codes:	
ISM:	
Subcontractor Involved:	Yes Construction Management, Engineering and Consulting
Occurrence Description:	Management Synopsis: At approximately 1500 hours on Monday, January 25, 2010, a worker severed an energized 110V extension cord. The worker was on the snowy rooftop of a building undergoing demolition. He was removing snow and sampling the roof for asbestos. He was aware the building was cold and dark. He nicked an extension cord under the snow. He felt no voltage and thought the cord was part of the building system. As he continued to cut through the ice and snow to access the roof, he encountered the cord again. Because buildings in demolition often have this type of debris on the roof and the cord was mostly covered in snow, he believed the cord was refuse and in a cold and dark status. He cut the cord so he could pull it up and remove it from his work area. Upon cutting the cord, which exposed a greater portion of it, he realized the cord looked like the type of temporary power cord standard in his company. Although he did not feel a shock or witness any spark, he walked away from the cord and informed his management. When he and his management examined the situation, they determined the power cord was part of the temporary power to the decommissioning effort and that it was connected to a breaker equipped with GFCI. The breaker was tripped. The worker planned on discussing lessons learned at the next mornings safety briefing, which he did. Background: Construction Management, Engineering and Consulting (CMEC) was contracted by the Department of Energy (DOE) Albuquerque Service Center, with Los Alamos Site Office (LASO) support, to demolish and decommission the former DOE LASO site office. CMEC has subcontracted with Nuprecon to provide asbestos abatement services. LASO is currently providing two construction safety inspectors and is also utilizing LANS personnel to provide safety oversight of the contractor.
Cause Description:	
Operating Conditions:	Cold and Dark for Decommissioning
Activity Category:	Facility Decontamination/Decommissioning
Immediate Action(s):	- The worker immediately stopped work upon suspicion that the cord was part of the temporary power supply. - The worker informed his manager (site supervisor) - The worker and his manager investigated the "path" of the cord as best they could given the snow and ice on the roof. - The worker and his manager determined the cord was part of the temporary power supply and his action of either nicking the cord or

	subsequent severing of the cord caused the GFCI breaker to close.
FM Evaluation:	There were no injuries resulting from this event. The worker took appropriate action to ensure his personal safety and the safety of others when he suspected the cord could have been energized.
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: NNSA LASO By When: 03/12/2010
Division or Project:	D&D of Former LASO Building
Plant Area:	TA-43-39
System/Building/Equipment:	D&D of Former LASO Building
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	01A--Inadequate Conduct of Operations - Inadequate Conduct of Operations (miscellaneous) 01Q--Inadequate Conduct of Operations - Personnel error 07D--Electrical Systems - Electrical Wiring 08H--OSHA Reportable/Industrial Hygiene - Safety Noncompliance 08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical) 11D--Other - Natural Phenomena 11G--Other - Subcontractor 12C--EH Categories - Electrical Safety 14E--Quality Assurance - Work Process Deficiency 14G--Quality Assurance - Procurement Deficiency
HQ Summary:	On January 25, 2010, while removing snow to sample for asbestos on the rooftop of a building undergoing demolition, a worker severed an energized 110-volt extension cord. When he nicked the cord under the snow and felt no voltage, he believed the cord was part of the building system, which he knew was cold and dark. As he continued to cut through the ice and snow to access the roof, he encountered the cord again and believed the cord was refuse and in a cold and dark status. He cut the cord to pull it up and remove it from his work area, exposing a greater portion of the cord. The worker then realized the cord looked like the type of temporary power cord standard in his company. Although he did not feel a shock or witness any spark, he walked away from the cord and informed his management. When he and his management examined the situation, they determined the power cord was part of the temporary power to the

	decommissioning effort and that it was connected to a breaker equipped with GFCI, which had tripped.
Similar OR Report Number:	
Facility Manager:	Name: John Gallegos Phone: (505) 665-8439 Title: Facility Manager
Originator:	Name: KIRSCH, MICHELLE M Phone: (505) 665-8146 Title: OCCURRENCE INVESTIGATOR
HQ OC Notification:	Date: NA; Time: NA; Person Notified: NA; Organization: NA
Other Notifications:	Date: 01/27/2010; Time: 09:15 (MTZ); Person Notified: John Gallegos; Organization: LASO
Authorized Classifier(AC):	Linda Collier Date: 01/29/2010

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7)Report Number:	NA--SRSO-MOXS-MOX-2010-0001 **After 2003 Redesign**
Secretarial Office:	National Nuclear Security Administration
Lab/Site/Org:	Savannah River Site
Facility Name:	MOX Fuel Fabrication Facility
Subject/Title:	Electrical Procedure Violation
Date/Time Discovered:	01/14/2010 09:00 (ETZ)
Date/Time Categorized:	01/14/2010 10:00 (ETZ)
Report Type:	Notification
Report Dates:	Notification: 01/14/2010 11:43 (ETZ) Initial Update: Latest Update: Final:
Significance Category:	3
Reporting Criteria:	2C(2) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.
Cause Codes:	

ISM:	
Subcontractor Involved:	Yes Alberici Constructors
Occurrence Description:	While working on a temporary power connection at the subcontractor's storage building, an electrical employee made a termination to a live 280 volt power circuit. The employee had been instructed to wait by his supervisor while additional equipment was provided. The employee believed the task was minor and performed it contrary to instruction from the supervisor.
Cause Description:	
Operating Conditions:	Conditions clear and cold. not a factor in this occurrence
Activity Category:	Construction
Immediate Action(s):	Work was stopped by the subcontractor electrical supervisor and the incident is under investigation.
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: Subcontractor By When:
Division or Project:	Shaw AREVA MOX Services
Plant Area:	F-Area
System/Building/Equipment:	Temporary Construction
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical) 01T--Inadequate Conduct of Operations - Willful Violation 08H--OSHA Reportable/Industrial Hygiene - Safety Noncompliance 11G--Other - Subcontractor 12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 14E--Quality Assurance - Work Process Deficiency 14G--Quality Assurance - Procurement Deficiency
HQ Summary:	On January 14, 2010, a subcontractor electrical worker made a termination to an energized 280-volt power circuit while working on a temporary power connection at the subcontractor storage building. The electrical

	worker had been instructed to wait by his supervisor while additional equipment was provided. The electrical worker believed the task was minor and performed it contrary to instruction from the supervisor. Work was stopped and an investigation is ongoing.
Similar OR Report Number:	
Facility Manager:	Name: JONES, EMORY H Phone: (803) 819-2332 Title: ES&H Programs Manager
Originator:	Name: JONES, EMORY H Phone: (803) 819-2332 Title: ES&H ENGINEER
HQ OC Notification:	Date: NA; Time: NA; Person Notified: NA; Organization: NA
Other Notifications:	01/14/2010 10:30 (ETZ) A.B. Robinson MOX 01/14/2010 10:30 (ETZ) Kevin Buchanan NNSA 01/14/2010 10:30 (ETZ) Dave Stinson MOX
Authorized Classifier(AC):	Richard Stuhler Date: 01/14/2010

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8)Report Number:	SC--SSO-SU-SLAC-2010-0002 **After 2003 Redesign**
Secretarial Office:	Science
Lab/Site/Org:	Stanford Linear Accelerator Center
Facility Name:	Stanford Linear Accelerator Center
Subject/Title:	Lock Out Tag Out (LOTO) Procedural Violation Hutch Construction
Date/Time Discovered:	01/14/2010 14:30 (PTZ)
Date/Time Categorized:	01/14/2010 17:35 (PTZ)
Report Type:	Notification
Report Dates:	Notification: 01/22/2010 14:49 (ETZ) Initial Update Latest Update Final
Significance Category:	3
Reporting Criteria:	2C(2) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include

	discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.
Cause Codes:	
ISM:	
Subcontractor Involved:	Yes Rudolph & Sletten Subcontractor
Occurrence Description:	At about 2:30 pm on Jan. 14, a Subcontractor was found installing an emergency light fixture on a 120V circuit in one of the FEH hutches without applying a hazardous energy personal lock and tag to the feeder breaker. The worker was asked by the SLAC University Technical Representative (UTR) to put the fixture being worked on in a safe condition and to come down off the ladder and stop work. The work the subcontractor was performing was not documented in Jan. 14, work documents. No injuries or contact with hazardous energy occurred during this incident. The SLAC power supplying this circuit had been locked out until the following morning by SLAC, when the lock was removed at the request of the Subcontractor. The opened circuit breaker located in the inverter equipment was under the Subcontractor's control. An investigation is being conducted by Linac Coherent Light Source (LCLS) construction, who performs oversight of construction personnel. The subcontractor crew involved has been asked to not return to site.
Cause Description:	
Operating Conditions:	Does not apply.
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)
Immediate Action(s):	SLAC UTR asked the worker to put the fixture in a safe condtion and to stop work.
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: SLAC Accident Committee By When:
Division or Project:	Operations

Plant Area:	Bldg. 999
System/Building/Equipment:	Far Experimental Hall (FEH) Bldg. 999
Facility Function:	Accelerators
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical) 11G--Other - Subcontractor 12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 14E--Quality Assurance - Work Process Deficiency 14G--Quality Assurance - Procurement Deficiency
HQ Summary:	On January 14, 2010, a SLAC University Technical Representative (UTR) found a subcontractor installing an emergency light fixture on a 120-volt circuit in one of the Far Experimental Hall hutches without applying a hazardous energy personal lock and tag to the feeder breaker. The UTR asked the subcontractor to put the light fixture in a safe condition and to come down off the ladder and stop work. The work the subcontractor was performing was not documented in the January 14, work documents. No injuries or contact with hazardous energy occurred during this incident. The power supplying this circuit had been locked out until the following morning by SLAC personnel, when the lock was removed at the request of the subcontractor. The opened circuit breaker located in the inverter equipment was under the subcontractor's control. Linac Coherent Light Source construction, which performs oversight of construction personnel, is conducting an investigation. The subcontractor crew involved has been asked not to return to the site.
Similar OR Report Number:	
Facility Manager:	Name: KERWIN, RALPH R Phone: (650) 926-2095 Title: FIRE MARSHAL
Originator:	Name: JOHNSON, HOPE E Phone: (650) 926-4322 Title: FACILITY MANAGER ADMIN.
HQ OC Notification:	Date: NA Time: NA Person Notified: NA Organization: NA
Other Notifications:	Date: 01/14/2010 Time: 17:00 (PTZ) Person Notified: Ralph Kerwin Organization: SLAC

	01/14/2010	17:15 (PTZ)	Donald Wilhelm	SSO DOE
	01/14/2010	17:15 (PTZ)	Hanley Lee	SSO DOE
Authorized Classifier(AC):				