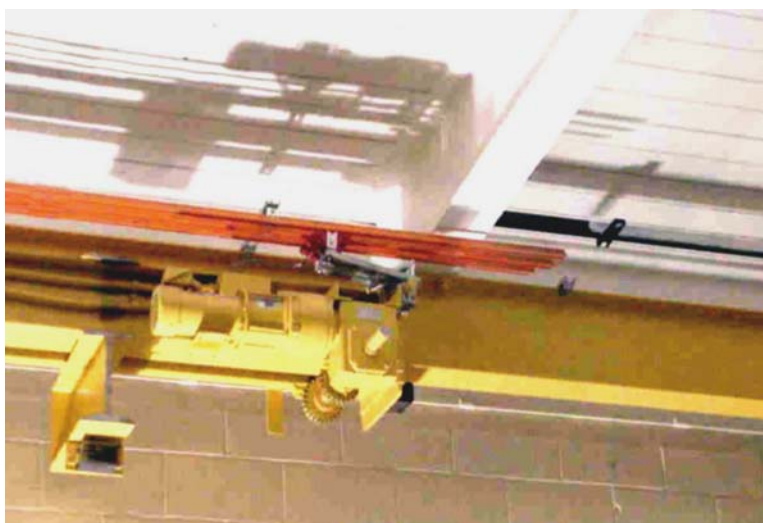


OPERATING EXPERIENCE SUMMARY



Inside This Issue

- *Follow-up on overexposure event reported in OE Summary 2002-15*
- *A worker cut into an electrical conduit with a reciprocating saw, cutting an energized conductor inside*
- *An electrical buss bar dropped 18 feet from a ceiling and struck a worker on the shoulder*
- *An index of all OE Summary articles published in 2002*



U.S. Department of Energy
Office of Environment, Safety and Health

OE Summary 2002-26

December 30, 2002

The Office of Environment, Safety and Health (EH), Office of Performance Assessment and Analysis publishes the Operating Experience Summary to promote safety throughout the Department of Energy (DOE) complex by encouraging the exchange of lessons-learned information among DOE facilities.

To issue the Summary in a timely manner, EH relies on preliminary information such as daily operations reports, notification reports, and, time permitting, conversations with cognizant facility or DOE field office staff. If you have additional pertinent information or identify inaccurate statements in the Summary, please bring this to the attention of Frank Russo, 301-903-8008, or Internet address Frank.Russo@eh.doe.gov, so we may issue a correction.

The OE Summary can be used as a DOE-wide information source as described in Section 5.1.2, DOE-STD-7501-99, *The DOE Corporate Lessons Learned Program*. Readers are cautioned that review of the Summary should not be a substitute for a thorough review of the interim and final occurrence reports.

Operating Experience Summary 2002-26

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EVENTS

1. FOLLOW-UP ON EXTREMITY OVEREXPOSURE EVENT

Operating Experience Summary 2002-15 carried a notice about an extremity overexposure event that occurred at Lawrence Livermore National Laboratory. The following is a summary of the event and the findings and Judgments of Need (JONs) identified by a Type B investigation of the event.

On July 22, 2002, health physics personnel processing monthly dosimetry discovered that a researcher had received a radiation dose to his hands that exceeded the 50-rem annual limit specified in 10 CFR 835, *Occupational Radiation Protection*. The previous month, the researcher had worked with 55 millicuries of californium-249 (Cf-249) in a glovebox. He wore finger-ring dosimetry that indicated a 62-rem exposure to one hand and 111 rem to the other. His whole body dosimetry showed an exposure of 57 mrem for the monitoring period. (ORPS Report OAK-LLNL-LLNL-2002-0019; update/final report filed December 13, 2002)

A Type B Accident Investigation Board convened to investigate the incident, determine causality, and identify JONs. Laboratory management also convened a Dose Reconstruction Board to determine the appropriate dose to assign to the researcher.

Based on the researcher's notes and a time-motion-study conducted by a radiochemist, the Dose Reconstruction Board estimated that the researcher had his hands in the glovebox for more than 2 hours over a 10-day period; however, they could not determine how long he actually handled the Cf-249. Neither Board could reconcile the extremity dosimetry readings with the analysis of the event records and materials, researcher interviews and the reading from his torso dosimeter, or the time-motion study. Because no clear factor discounted the dosimetry data, the observed dose was assigned to the researcher's dose record.

Investigators determined that personnel error was the direct cause of the overexposure be-

cause the researcher handled the Cf-249 for an extended period of time, resulting in the measured overexposure. They attributed the root cause to procedure violations. The researcher did not adhere to the principles of Integrated Safety Management (ISM) and As Low As Reasonably Achievable (ALARA) pertaining to exposures and did not follow documented procedures. He also failed to use adequate shielding and did not minimize his exposure time.

Investigators identified three contributing causes. First, the researcher failed to follow established administrative requirements for additional reviews while working with radioactive material having activities greater than 100 microcuries or resulting in radiation fields greater than 5 mrem/hr at 30 cm from the source. The researcher had recorded radiation fields that exceeded 5 mrem/hr at 30 cm (criteria for a Radiation Area), but he did not request Hazards Control/Environment, Safety and Health (ES&H) Team support at the beginning of the job, as required.

A communication problem also contributed to this event. The researcher did not tell the ES&H Team that the area dose rate exceeded 5 mrem/hr at 30 cm so the team could post the area appropriately and notify health physics.

The third contributing cause was a work organizing/planning deficiency that resulted because Chemistry and Materials Science (CMS) operations and the ES&H support team were not sufficiently integrated. This hindered the implementation of safety controls. For example, the researcher's failure to fully involve the team prevented them from identifying and implementing safety controls that could have prevented the overexposure. Also, there were differences between certain ES&H Team operations documents and the operational safety plan for the work activity regarding the requirements for dose monitoring.

On October 23, 2002, the Accident Investigation Board delivered its report to CMS. They identified the following conclusions and JONs.

1. **Conclusion:** The researcher did not follow procedures (e.g., he was not familiar with

integrated work sheets nor did he practice proper conduct of operations).

JON: CMS to ensure that individuals read, understand, and follow procedures.

2. **Conclusion:** The researcher did not use knowledge acquired in training (e.g., did not practice ALARA or ISM, and did not wear ring dosimeters while unpacking radioactive materials).

JON: CMS to hold individuals accountable for implementing ALARA, ISM, and conduct of operations. Ensure dosimeters are worn when handling radioactive materials or radiation-generating devices and when entering areas requiring dosimeters.

3. **Conclusion:** CMS management failed to fully integrate the ES&H functions into line management.

JON: CMS to develop and implement a systematic approach to inform the ES&H Team of activities and operations to improve the integration of the ES&H program.

4. **Conclusion:** ES&H Team lacked attention to detail in support of the Analytical & Nuclear Chemistry Division because package surveys were not performed and room dose rates were not updated as required by the operational safety plan.

JON: Hazards Control personnel to ensure that the ES&H Team is aware of applicable requirements and support is conducted with attention to detail. CMS to foster an environment that encourages the ES&H Team to be proactive and exercise more initiative when providing coverage.

5. **Conclusion:** The Analytical & Nuclear Chemistry Division failed to ensure that adequate procedures existed to perform work safely (e.g., no surveys of incoming radioactive packages, conflicting survey requirements [contact with glovebox window versus 30 cm from the window], inadequate frequencies for direct and contamination surveys, and no ALARA requirements).

JON: CMS to ensure that safety documents are in place and updated with respect to frequency, methodology, and quality of surveys. ALARA requirements are to be spelled out for all potential high-dose work.

Ensure that safety procedures do not contain conflicting requirements. Ensure that ES&H Team responsibilities listed in safety documents are clearly communicated to the team.

One of the difficulties the investigators encountered was that so many details of the scene, as well as personnel recollections, were no longer clear because too much time had elapsed between the exposure and its detection. This made it impossible to assert conclusively that supplemental controls would have prevented the overexposure altogether. However, if the researcher's activities were monitored more closely, it probably would have prevented the overexposure or detected it before it reached the severity seen in this event.

This event underscores the importance of following sound radiological work controls and practices and working in accordance with the principle of maintaining radiation exposure levels ALARA. Managers need to clearly convey their expectations to workers about knowing and following applicable work controls. Similarly, workers have a responsibility to be familiar with the applicable work controls and to avoid assuming that a certain activity is acceptable because it has been done in the past.

KEYWORDS: Radiation protection, extremity, overexposure, ALARA, work controls

ISM CORE FUNCTIONS: Analyze the Hazards, Develop and Implement Hazard Controls, Perform Work within Controls

2. NEAR MISS – WORKER CUTS INTO AN ELECTRICAL CONDUIT

On October 15, 2002, at the Savannah River Site, a worker inadvertently cut through a ½-inch conduit with a reciprocating saw, severing an energized 110-volt conductor inside the conduit and tripping two circuit breakers. No one was injured. (ORPS Report SR--WSRC-SUD-2002-0013; update/final report filed November 26, 2002)

The worker was cutting through a sheetrock wall to create an opening through which new

sheetrock could be moved. Earlier, the work crew removed a section of the wall to expose any electrical interference and discovered a ½-inch electrical conduit located near the floor. The worker rested the boot of the reciprocating saw on the conduit (Figure 2-1) and continued cutting. The saw blade apparently became caught in a metal stud, bound up, kicked back, and recoiled, cutting into the conduit (Figure 2-2) and a 110-volt conductor, resulting in a power outage to computers in another room.



Figure 2-1. The boot of the saw resting against the conduit

The subcontractor conducted a safety meeting and safety stand-down, including a mockup of the event. Investigators attributed the direct cause of this event to the worker's failure to use the proper tool to saw through the sheetrock in the vicinity of a known electrical interference. The worker should have used a handsaw to cut the sheetrock around the conduit.

The root cause was the lack of clear guidelines for subcontractor workers when working around a known electrical conductor. Subcontractor management prohibited the use of power tools within 12 inches of electrical wires or conduits.



Figure 2-2. The cut conduit

A similar event occurred at the East Tennessee Technology Park on August 20, 2001, when an electrician using a reciprocating saw to cut and remove electrical conduit cut through a conduit that contained energized 120-volt conductors, resulting in a short to ground and a tripped breaker. No injuries occurred. (ORPS Report ORO--BNFL-K33-2001-0011)

These events demonstrate the importance of using tools appropriate to the tasks and hazards at hand. Working around energized electrical lines is inherently hazardous, and workers should pay full attention to what they are doing.

KEYWORDS: Reciprocating saw, near miss, electrical conduit

ISM CORE FUNCTIONS: Analyze the Hazards, Perform Work within Controls

3. WORKER STRUCK BY FALLING SECTION OF BUSS BAR

On November 21, 2002, at the Rocky Flats Environmental Technology Site, a section of electrical buss bar fell unexpectedly during decontamination and decommissioning work and struck a worker on the shoulder. After determining that there was no contamination on the injured worker's clothing or skin, he was escorted to the occupational medicine office where medical personnel diagnosed contusions and abrasions of the left shoulder area. X-rays confirmed that he had no fractures. This occur-

rence was categorized as a near miss to a serious injury. (ORPS Report RFO--KHLL-SOLIDWST-2002-0068; update/final report filed 12/24/2002)

Three workers were removing the buss bar from an I-beam in an airborne radioactivity area. All three members of the work team wore anti-contamination clothing and full-face respirators. Figure 3-1 shows the I-beam with the partially removed buss bar.

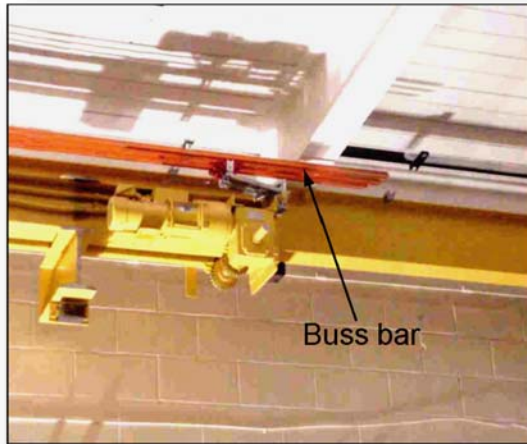


Figure 3-1. I-beam showing partially removed buss bar

The section of buss bar (shown in Figure 3-2) that struck the worker was approximately 4 feet long, weighed between 7 and 10 pounds, and fell from a height of 18 feet. The injured worker was assigned to restricted duty status at the facility, but did not miss any work time as a result of his injuries.

None of the work team members wore a hard hat because a provision in the work package allowed the task supervisor to make a field decision on the appropriate overhead protection for workers. However, the supervisor decided to have the workers continue using "bump caps" instead of hard hats, while removing the buss bar. Bump caps are lightweight plastic shells that protect against head bumps and lacerations but do not have a suspension system to protect against falling objects. He based this decision, in part, on the fact that nearly all of the previous work in the room had involved glovebox removal, with very little overhead work.

A preliminary investigation indicated that one causal factor in this occurrence was the deficient



Figure 3-2. Section of buss bar that fell

technique used to cut and remove the buss bar. The worker cut through two of the three channels in the buss bar (see Figure 3-2). He intended to cut part-way through the third channel, put down the cutting tool, bend the piece back and forth until it detached, then hand it down to another worker on the floor below. However, the cutting tool unexpectedly cut too far into the third channel. The buss bar section bent under its own unsupported weight, separated from the fixed portion, fell and struck the worker. Modifications to this technique will be implemented before the buss duct removal task is resumed.

Another change to be instituted as a result of the preliminary investigation is to withdraw the existing conditional control on overhead protection for workers based on a field decision by the task supervisor. This provision in the work package will be replaced by a requirement for all personnel in the room to wear hard hats, reflecting the change in work focus from glovebox removal to overhead work. Also, the area beneath any ongoing overhead work will be roped off and controlled as a restricted area.

Although worker injuries from falling objects are relatively infrequent events within the DOE complex, near misses occur frequently. Examples of events involving falling objects include

the following. On December 12, 2002, at the Oak Ridge Y-12 Site, an 8-foot fluorescent light bulb fell about 18 feet from the ceiling, landing approximately 8 feet from a technician. The technician was not injured, and no equipment was damaged. (ORPS Report ORO--BWXT-Y12NUCLEAR-2002-0079) On April 19, 2002, at the Los Alamos Neutron Science Center, a worker who was spotting for a forklift operator was injured when a steel bar fell off the forklift and struck his foot. The worker, who was not wearing safety shoes, was hospitalized for reconstructive surgery on the big toe of his right foot. (ORPS Report ALO-LA-LANL-ACCCOMPLEX-2002-0001, Operating Experience Summary 2002-09) On June 13, 2001, at the Fermi Laboratory, a lattice support assembly being lifted by a crane slipped out of the rigging struck the basket of a manlift, and injured two workers. One worker sustained two broken ribs and the other suffered a minor finger laceration. (ORPS Report CH-BA-FNAL-FERMILAB-2001-0005)

These occurrences highlight the importance of paying attention to detail and using demonstrably safe work practices and techniques at all times. The worker cutting the buss bar thought that his cutting technique was a viable and safe approach. The shortcomings of the approach became apparent only when the section of buss bar separated from the fixed portion and fell. It is not only formal procedures that need to be examined to ensure an acceptable level of safety assurance in the workplace, but the approaches, practices, and details of the techniques to be used must also be examined for safety implications.

KEYWORDS: *Personnel injury, falling objects, buss bar*

ISM CORE FUNCTIONS: *Analyze the Hazards, Develop and Implement Hazard Controls*

INDEX OF OE SUMMARY ARTICLES PUBLISHED IN 2002

OE SUMMARY 2002-25 (Published 12/16/02)

TITLE	OR NUMBER
Cutoff Wheel Failures Result in Near Miss to Injury	OH-FN-FFI-FEMP-2002-0020
Metal Sprocket Falls from Roll-up Door Resulting in Near Miss	ORO--ORNL-X10CENTRAL-2002-0007
OSHA Violation Leads to Worker Fall and Injury	ALO-AO-BWXP-PANTEX-2002-0059
Worker Injured while Size-Reducing Metal Components	OAK--SU-SLAC-2002-0009
Near Miss to Severe Injury When Bus Drops Off Jack Stand	RFO--KHLL-NONPUOPS1-2002-0006
	NVOO--BN-NTS-2002-0004



OE SUMMARY 2002-24 (Published 12/02/02)

TITLE	OR NUMBER
Transportation Events involving Uncoupled Tractor-Trailer Fifth Wheels	OH-AB-RMI-RMIDP-2002-0005
	HQ--SPR-NO-2002-0001
	SELLS Identifier 2001-RL-HNF-0047
	RL--RHMC-SOLIDEASTE-2001-0007
	ALO-LA-LANL-WASTEMGT-2001-0011
	SELLS Identifier RFETS-02-0010
Work Control Deficiencies Lead to Lockout/Tagout Violation	RL--PNNL-PNNLBOPER-2002-0013
Nitric Acid Spill Results From Inadvertent Removal of Valve Bonnet	RFO--KHLL-371OPS-2002-0049
UF6 Cylinder Dropped During Handling	ORO- -BJC-K25GENLAN-2002-0016



OE SUMMARY 2002-23 (Published 11/18/02)

TITLE	OR NUMBER
Radiological Control Technician Injured by Moving Manlift	ORO--BJC-PGDPENVRES-2002-0018
Near Miss While Placing a Trench Box	HQ--SPR-WH-2002-0004
Near Miss Working Near 480-Volt Cable	RP--BNRP-RPPWTP-2002-0011
OSHA Violation Results in Electrical Near Miss	OH-FN-FFI-FEMP-2002-0031
Angle Iron Ejected From Debris Container	OH-AB-RMI-RMIDP-2002-0006



OE SUMMARY 2002-22 (Published 11/4/02)

TITLE	OR NUMBER
Worker Receives Hand Injury From Falling Cage Assembly Cap	ALO-LA-LANL-CMPTRDIV-2002-0003
Crane Damaged Due To Operator Inattention and Inadequate Controls	SR--WSRC-HCAN-2002-0013
Two Dump Trucks Overturn in Separate Accidents	OAK--LBL-OPERATIONS-2002-0004
	ORO--BJC-Y12WASTE-2002-0006
Near Miss When 150-Pound Stainless Steel Part Was Thrown From A Lathe	ORO--BWXT-Y12NUCLEAR-2002-0070
Freeze Protection Reminder	NOTICE
Machinist Injured by Rotating Cutting Bit	OAK- -LLNL-LLNL-2002-0016



OE SUMMARY 2002-21 (Published 10/21/02)

TITLE	OR NUMBER
Beryllium-Contaminated Refrigerator Moved Offsite	RL--PNNL-PNNLBOPER-2002-0014
Two Pinch-Point Accidents Cause Fractured Fingers	ALO-AO-BWXP-PANTEX-2002-0053
	ALO-LA-LANL-WASTEMGT-2002-0005
Inadequate Hazard Analysis Results in Nitrogen Dioxide Exposures	OH-FN-FFI-FEMP-2002-0012, -0013, -0029, -0030
Lid To Sandblasting Pot Blows Off Causing Near Miss	OH-FN-FFI-FEMP-2002-0034



OE SUMMARY 2002-20 (Published 10/07/02)

TITLE	OR NUMBER
Student Researcher Receives Electrical Shock	RL--PNNL-PNNLBOPER-2002-0011
Crane Load Falls When Lifting Slings Cut	RFO--KHLL-NONPUOPSI-2002-0003
Near Miss When Hoist Counterweight Falls	NVOO--BN-NTS-2002-0010
System Modifications Compromise Facility Configuration	RP--CHG-TANKFARM-2002-0098
Potential Problems with Heat Collectors on Fire Protection Sprinklers	NRC Information Notice 2002-24



OE SUMMARY 2002-19 (Published 09/23/02)

TITLE	OR NUMBER
Failure to Use Shoring or Sloping in Trench Compromises Worker Safety	ID--BBWI-ATR-2002-0005
Inconsistency between OSP and SAR	OAK--LLNL-LLNL-2002-0020
Crane Failure Causes Near Miss	OH--WV-WVNS-CF-2002-0002
Secondary Assay Reveals Unexpectedly High U-235 Mass Deposit	ORO--BNFL-K31-2002-0003
Type B Investigation of Worker Injured In Fall While Ascending Shoring System	SR--WSRC-CMD-2002-0002
Breaker Arcs Unexpectedly When Closed	SR--WSRC-SRDD-2002-0003

**OE SUMMARY 2002-18 (Published 09/09/02)**

TITLE	OR NUMBER
Electrical Intrusion Events Continue to Occur Across the DOE Complex	RFO--KHLL-PUFAB-2002-0052
Improperly Designed Piping and Worker Inattention Cause Injury	ID--BNFL-AMWTF-2002-0003
Construction Crew Works Outside Isolation Boundaries	ID--BBWI-WASTEMNGT-2002-0009
Lockout/Tagout Error Leads to Near Miss	ID--BBWI-TAN-2002-0003, revised to ID--BBWI-TOWN-2002-0004
Sparks From Torch Cutting Cause Fire	OAK--LBL-OPERATIONS-2002-0002

**OE SUMMARY 2002-17 (Published 08/26/02)**

TITLE	OR NUMBER
Unsecured Forklift Loads Result in Property Damage and Spread of Contamination	SR--WSRC-SRDD-2002-0004
Improper Packaging of Radioactive Material for Off-site shipment	RL--PHMC-GENSERVICE-2002-0002
Glovebox Bagout Operation Releases Airborne Radioactive Material	ALO-LA-LANL-TA55-2002-0011
Incorrect Installation Results in High Pressure Regulator Failure	ALO-KO-SNL-6000-2002-0007

**OE SUMMARY 2002-16 (Published 08/12/02)**

TITLE	OR NUMBER
Exothermic Metal Reaction During Converter Disassembly	ORO--BNFL-K33-2002-0005
Near Miss to Personnel Injury When a Jib Crane Falls	ALO-LA-LANL-HEMACHPRES-2002-0001
Workers Cut Pressurized Instrument Air Line	RFO--KHLL-371OPS-2002-0029
Fall From Ladder Causes Injury	OAK--SU-SLAC-2002-0004
Static Electricity Can Cause Fires During Vehicle Refueling	Safety Warning
Mechanical Lockout/Tagout Improperly Verified	RL--PHMC-SNF-2002-0043

**OE SUMMARY 2002-15 (Published 07/29/02)**

TITLE	OR NUMBER
Regulations Violated in Transportation of Explosives	NVOO-BN-NTS-2001-0016
Electrician Injured By Electrical Arc Flash	RP--CHG-TANKFARM-2002-0075
Worker Falls From Roof and Sustains Serious Injuries	ALO-KO-SNL-CAFAC-2002-0002
Underground Bucket Loader Overturns	ALO--WWID-WIPP-2002-0002
Near Miss – 2,800-Pound Load Drops from Crane	ID--BNFL-AMWTF-2002-0005
Extremity Exposure Exceeds Annual Limit of 50 Rem	OAK--LLNL-LLNL-2002-0019

**OE SUMMARY 2002-14 (Published 07/16/02)**

TITLE	OR NUMBER
Worker Injured By Fall While Installing Handrail	ORO--BJC-X10ENVRES-2002-0007
Laboratory Researcher Receives Electric Shock	RL--PNNL-PNNLBOPER-2002-0005
I-Beam Trolley Failure Under Load	RL--PHMC-WESF-2002-0001
OSHA Cites Construction Company for Trenching Fatality	OSHA National News Release USDL 02-377
Respirators Connected to Isolated Breathing Air Bottles	RL--BHI-REMACT-2002-0008



OE SUMMARY 2002-13 (Published 07/01/02)

TITLE	OR NUMBER
Crane Operation Near Power Line Causes Electrical Arc	ORO--FWEC-TRUPFAC-2002-0001
Worker Pinned Between Railcar and Loading Platform	OH-FN-FFI-FEMP-2002-0016
Near Miss From Cutting Energized Heat Trace Line	RP--CHG-TANKFARM-2002-0054
Misuse of Compressed Gas Cylinders Results in Respiratory Exposure	CH--AMES-AMES-2002-0002
Worker Exposed To Silica Dust	HQ--BSYM-YMSGD-2002-0002

**OE SUMMARY 2002-12 (Published 06/17/02)**

TITLE	OR NUMBER
Crane Loses Balance During Lifting Operation	ALO-KO-SNL-1000-2002-0002
Falling Part From Roll-Up Door Results in Near Miss	ID--BBWI-TAN-2002-0001
Blistered and Leaking Shipping Containers Discovered	ORO--BJC-PORTENVRES-2002-0012
Inadequate Administrative Control of Electrical Water Heater Installation	SR--WSRC-SUD-2002-0002
Follow-up Medical Monitoring Identifies False Positive for Cadmium Uptake	ORO--PGDPENVRES-2002-0004

**OE SUMMARY 2002-11 (Published 06/04/02)**

TITLE	OR NUMBER
Poor Maintenance of Crane Headache Ball Causes Near Miss	ORO--ORNL-X10SNS-2002-0002
Human Error Results in an Inadvertent Liquid Transfer	SR--WSRC-HTANKW-2002-0009
Combustible Liquids Not Properly Stored	RFO--KHLL-371OPS-2002-0014
Tritium Contamination From Unknown Source During D&D	ALO-LA-LANL-TRITFACILS-2002-0002
Stowing Hook Failure Causes Near Miss	NVOO--BN-NTS-2002-0003

**OE SUMMARY 2002-10 (Published 05/20/02)**

TITLE	OR NUMBER
Inadequate Rigging Results in Dropped 400-Pound Load	RL--BHI-REMACT-2002-0007
Incorrectly Wired Connector Results in Electrical Shock	OAK--LLNL-LLNL-2002-0002
DOE Cites Westinghouse Savannah River Company for Nuclear Safety Violations	PAAA
Trenching Accident Results in Occupational Injury	CH-PA-PPPL-PPPL-2002-0001
Violation of Radiological Postings	RL--PHMC-PFP-2002-0016
Temporary Electrical Power Line Severed by Trackhoe	ORO--ORNL-X10SNS-2002-0003

**OE SUMMARY 2002-09 (Published 05/07/02)**

TITLE	OR NUMBER
Inadequate Equipment Grounding Results in Electrical Shock	SR--WSRC-FSSDGEN-2002-0001
Using Wrong Lockout Type Poses Electrical Hazard	SR--WSRC-LTA-2002-0004
Drum Roller Overturns	OH-FN-FFI-FEMP-2002-0015
Beryllium Surface Contamination Found in Leased Building	RL--PHMC-COMMLEASE-2002-0001
Steel Bar Falls From Forklift and Injures Worker's Foot	ALO-LA-LANL-ACCCOMPLEX-2002-0001
Excavator Boom Contacts Overhead 13.8-Kilovolt Power Liner	RFO--KHLL-NONPUOPS3-2002-0002
Positive Bioassay Results From Failed Glovebox Glove	RFO--KHLL-SOLIDWST-2001-0051

**OE SUMMARY 2002-08 (Published 04/22/02)**

TITLE	OR NUMBER
Failure to Issue and Use a Fit-Tested Respirator	RL--PHMC-327FAC-2002-0001
Gantry Crane Collapse During Lift	ALO-KC-AS-KCP-2002-0001
Worker Removes Respirator Inside Airborne Radioactivity Area	RL--PHMC-PFP-2002-0010
Inadequate Lockout Discovered By Pre-work Voltage Check	SR--WSRC-WVIT-2002-0002
Undetected Vessel Overfilling	SR--WSRC-FCAN-2002-0004
Water Intrusion Damages Stored Diesel Generator	SR--WSRC-FSSDGEN-2002-0003
Deficiencies in Quality Assurance Process Allow Shipment of Nonconforming Parts	ORO--ORNL-X10HFIR-2002-0003



OE SUMMARY 2002-07 (Published 04/08/02)

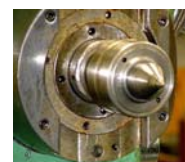
TITLE	OR NUMBER
Inadequate Welding Ground Damages Electrical Equipment	RP--CHG-TANKFARM-2001-0095
Cut Bolt under Tension Becomes Missile	RFO--KHLL-PUFAB-2002-0023
Excavator Snags Guy Wire of a Utility Pole	OH-FN-FFI-FEMP-2002-0010
Near Miss From Overturned Trencher	ORO--BJC-Y12WASTE-2002-0003
Trenching Accident Results in Occupational Injury	CH-PA-PPPL-PPPL-2002-0001
Energized Electrical Lines Cut During Decommission	RFO--KHLL-SOLIDWST-2002-0024
HEPA Filter Fire Caused By Missing Spark Arrestor	ORO--BNFL-K33-2002-0001
Fall from a Scaffold Results in Injury – Announcement	SR--WSRC-CMD-2002-0002

**OE SUMMARY 2002-06 (Published 03/26/02)**

TITLE	OR NUMBER
Work Performed on Energized 480-Volt Circuit	ALO-AO-BWXP-PANTEX-2002-0010
Field Repair Causes Drill Rig Accident with Injury	ALO-AO-BWXP-PANTEX-2001-0082
Lids Propelled from Pressurized Waste Drums	ORO--BJC-K25WASTMAN-2002-0001
Workers Nauseated by Vapors From Chemical Spill	RFO--KHLL-NONPUOPS02-2002-0001
A Concrete Plug Falls Through Ceiling Tile	ID--BBWI-SMC-2002-0004
Subcontractor Work Performed without Proper Authorization	ID--BBWI-TRA-2002-0002

**OE SUMMARY 2002-05 (Published 03/11/02)**

TITLE	OR NUMBER
Subcontractor Worker Violates Fall Protection Plan	RL--BHI-DND-2002-0001
Loose Connections Cause Unanticipated Tritium Release	ALO-LA-LANL-TRITFACILS-2002-0001
Near Miss Personal Injury Involving a Lathe	ALO-KC-AS-KCP-2002-0002
Worker Sprayed with Gasoline While Changing Fuel Filter	ORO--ORNL-X10EAST-2002-0003
Forklift Pierces Electrical Transformer	ORO--BWXT-Y12SITE-2002-0003
Inadequate Spacing of Fissile Material Raises Nuclear Safety Concerns	SR--WSRC-FBLINE-2002-0002

**OE SUMMARY 2002-04 (Published 02/26/02)**

TITLE	OR NUMBER
Backhoe Severs Buried Electrical Power Cable	ORO--ORNL-X10SNS-2002-0001
Electrician Shocked After Repairing Welding Receptacle	ORO--SURA-TJNAF-2001-0005
Breach of Radiological Area Boundary Results in a Near Miss	NVOO--BN-NTS-2001-0018
Trapped Steam Expels Valve Packing During Troubleshooting	RFO--KHLL-374OPS-2001-0004
Near Miss from Compressor Moved by Overhead Crane	ORO--BNFL-K33-2001-0025

**OE SUMMARY 2002-03 (Published 02/11/02)**

TITLE	OR NUMBER
Unauthorized Work Causes Electrical Near Miss	CH-BH-BNL-BNL-2001-0026
Blowout From Conduit Electrical Fault Damages Equipment	ORO--BWXT-Y12SITE-2001-0041
Suspect/Counterfeit Bolts Identified Through Information Sharing	CH-AA-ANLW-ANLW-2002-0001
Request for Good Practices for Excavation and Electrical Penetration Safety	REQUEST
Near Miss When 963-Pound Glass Projection Screen Falls	ALO-LA-LANL-CMPTRDIV-2002-0001
Stop Use and Recall Notice on Fall Protection	RECALL NOTICE

**OE SUMMARY 2002-02 (Published 01/28/02)**

TITLE	OR NUMBER
Subcontractor Observed Working Without Fall Protection	ORO--BJC-PORTENVRES-2001-0017
480-Volt Wires Exposed During Demolition Project	RFO--KHLL-FACOPS-2001-0006
Near Miss from Explosion in Microwave Oven	ORO--ORNL-X10WEST-2001-0012
Chlorine Dioxide Explosion at Laboratory	ALO--LA-LANL-WASTEMGT-2002-0001
DOE Cites Fluor Fernald, Inc. for Nuclear Safety Violations	OH-FN-FFI-FEMP-2000-0005
	OH-FN-FFI-FEMP-2000-0006
	OH-FN-FFI-FEMP-2001-0003
	OH-FN-FFI-FEMP-2001-0004
	OH--FN-FFI-FEMP-2001-0017
Subcontractor Struck on Head by Portable Floodlight	



OE SUMMARY 2002-01 (Published 01/14/02)

TITLE	OR NUMBER
Driller Injured in Pinch Point Incident	ORO--BJC-PORTENVRES-2001-0020
Failed Hose Connection Causes Flooding of Laboratories and Offices	OAK--LLNL-LLNL-2001-0019
Researcher Receives X-Ray Exposure	ORO--ORNL-X10CENTRAL-2001-0009
Inadequate Welds on Drum Dolly Retaining Hooks	RFO--KHLL-371OPS-2001-0080
Large Shipping Container Lid Falls, Resulting in a Near Miss	CH-PA-PPPL-PPPL-2001-0006
End-of-Life Failure of Buried Waste Pipe Releases Radionuclides	ID--BBWI-ATR-2001-0014

