Office of Environment, Safety and Health • U.S. Department of Energy • Washington, DC 20585

OPERATING EXPERIENCE SUMMARY

Office of Environment, Safety and Health

Summary 2001-08

The 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, 301-903-1845, 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 2001-08

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EVENTS

TYPE B INVESTIGATION OF WORKER INJURED BY FAILED GROUTING EQUIPMENT

On October 15, 2001, a subcontractor employee was struck in the head by failed grouting equipment parts at the Radioactive Waste Management Complex at the Idaho National Engineering and Environmental Laboratory. A metal fitting broke on a high-pressure grout pump, propelling grout and parts of the coupling through the air with great force. One of the coupling parts struck the worker above his eye, gashing his forehead and knocking him unconscious. He was hospitalized. The worker was wearing the required hardhat and safety goggles, and the goggles absorbed much of the impact. The Idaho Operations Office has begun a Type B investigation of the accident. When the investigation is completed, the OE Summary will discuss its major findings and conclusions. (ORPS Report ID--BBWI-RWMC-2001-0028)

Figure 1. The broken fitting

1. INADEQUATE WORK PLANNING RESULTS IN A NEAR MISS TO A SEVERE ELECTRICAL SHOCK

On October 4, 2001, at Fernald Environmental Management Project, two subcontractor surveyors were measuring the overhead clearance of what they believed were low-voltage telecommunication lines. A Fluor Fernald electrician observed one of the surveyors using an uninsulated pole to measure the height of an overhead high-voltage line. The electrician immediately directed the surveyors to take the pole down and stop work. The surveyor's actions of bringing a conductive object closer than the minimum distance from an unguarded, live 13.2 kV line is a near miss to a severe electrical shock. (ORPS Report OH-FN-FFI-FEMP-2001-0014)

In August 2001, the Silos Project initiated a contract with a subcontractor topographical survey company to perform surveys along vehicle routes to the Silos area as part of a plan to improve the roads. A work plan covering the surveys was not prepared. The company was asked to "shoot elevations" of existing electrical lines that cross the roadways to ensure proper clearances could be maintained during the ingress and egress of heavy equipment.

Approximately two weeks before this incident, the subcontractor supervisor and a surveyor with no electrical expertise, walked down the area along the road to determine the configuration of cables to be measured. Based on the walkdown of the area, the supervisor instructed his crew to use a calibrated (for length, not electrical resistance) pole in order to decrease the time for such measurements.

The supervisor did not notice that a high-voltage cable crossed over the road at one utility pole and the low-voltage communications lines crossed over at the next utility pole. If they had all crossed the road at the same place the low-voltage communications cable would have been the lowest line of the group. However, since they crossed the road from different utility poles, the high-voltage lines became the "first encounter" lines at this particular crossing. The survey crew used a calibrated, 25-foot, telescoping fiberglass pole to measure the minimum height of overhead lines. They had performed about 15 measurements prior to this event.

The Fluor Fernald electrician was driving by when he observed one of the surveyors lifting the pole close to an overhead line, which he recognized as a 13,200-volt line. The electrician immediately directed the surveyors to take the pole down and to stop work. Moments later, two utility engineers were driving by, and the electrician requested them to stop. He explained what he had witnessed and the potential for serious personal injury if the pole had made contact with the energized high-voltage line.

The survey crew did not recognize that the line was a high-voltage line. They believed, based on pre-work instructions and their experience so far that day, that the lines they were measuring were 46-volt

low-voltage telecommunications cables. They had placed wooden splints on the upper end of the pole in order to minimize bending when the pole was lifted straight up. They stated that they tried to make sure that the pole did not contact any of the overhead lines, but also tried to stay close to the line in order to get a good measurement. The fiberglass pole they used did not have a rating for insulation and must therefore be considered conductive. The workers were not qualified to work on energized electrical equipment, and they did not wear any protective equipment for electrical hazards.

This action of bringing a conductive object closer than the minimum distance from an elevated unguarded live line is a violation of 29 CFR 1926, *Safety and Health Regulations for Construction*, Section 403(j)(3)(iii). The standard states the following:

Unguarded live parts above working space shall be maintained at elevations not less than specified in Table K-3 of the standard.

Elevation of Unguarded Energized Parts Above Working Space

Nominal voltage between phases	Minimum elevation
601 – 7,500	8 feet 6 inches[1]
7,501 – 35,000	9 feet
Over 35 kV	9 feet + 0.37 inches per kV above 35kV

[1]NOTE: For SI units: one inch = 25.4 mm; one foot = 0.3048 m.

This occurrence reveals the difficulty of distinguishing between different types of overhead utility lines and the importance of using qualified personnel to perform hazard surveys. It is imperative that management ensures that work control processes are followed, facility safety requirements are enforced, and personnel have the skills to assess potential hazards.

KEYWORDS: *Electrical hazards, work planning, training*

ISM CORE FUNCTIONS: *Analyze the Hazards; Develop and Implement Work Controls*

2. ELECTRICAL NEAR MISS DURING EQUIPMENT REMOVAL

On September 24, 2001, in the Waste Experimental Reduction Facility (WERF) at the Idaho National Engineering and Environmental Laboratory (INEEL), a work crew incorrectly disconnected and removed electrical equipment that had the potential to be energized to 240 volts and 480 volts. This equipment was not locked and tagged out. Fortunately, circuit breakers had been left open and so no one was hurt. The contractor reported this as an electrical near miss when he realized the workers' error. (ORPS Report ID--BBWI-WERF-2001-0002)

The planned job was to remove electrical components and attached conduits that had previously been de-energized and isolated. Normally, electricians would have performed such dismantlement tasks, using instructions and drawings to identify the equipment to be removed. Electricians would have been familiar with the informal color tagging used to identify equipment that can be removed safely from equipment that could still be energized. However, the electricians were not qualified to work with asbestos. In this case, because the equipment was mounted on drywall that potentially contained asbestos, the job was assigned to an asbestos-qualified welder and laborer.

As was common practice when using non-electricians to remove equipment, the workers were given only a pre-job briefing, including a walkdown of the equipment to be removed. The supervisor and facility electrical subject matter expert who normally participated in pre-job briefings and walkdowns were not present this time because of other commitments. No electricians took part in the briefing. The pre-job

briefing did not adequately define the work authorized by the work package. In addition, the workers apparently did not fully understand the meaning of the informal color tagging the electricians relied upon, and were later misled by ambiguous text written on the tags.

Typically, craftsmen, like the welder and laborer involved, were not required to carry the work order on the job. The workers did not get the support of an electrician when removing electrical equipment, skipping that step in the work order. They cut a conduit and removed two junction boxes (electrical disconnects) that were not in the work order, and which could have been energized. They became suspicious when they noticed fuses in another box they were about to dismantle. When consulted, the facility electrical subject matter expert verified their mistakes, and a stop-work order was initiated along with a lockout/tagout for the circuits involved.

Investigators determined the root cause of this occurrence to be an inadequate pre-job briefing. They also found communication weaknesses, failure to use critical personnel such as electricians, inadequate review and use of the work package by the workers, and problems with the informal equipment tagging practice. Corrective actions include the following:

- assessing facility configurations with respect to equipment removal,
- removing the informal color tags,
- reviewing and walking down all existing work orders,
- increasing the level of senior management involvement in such work,
- reviewing other work orders across the INEEL site, and
- implementing a policy to increase the rigor of pre-job briefings and work order compliance.

On May 5, 2000, a similar near-miss occurrence involving misidentified 480-volt equipment took place at the Idaho Nuclear Technology and Engineering Center. Workers intending to replace a well pump disconnected the electrical leads on the wrong pump, and would have received an electrical shock had the pump become energized from water level demand. As in the WERF occurrence, inadequate knowledge, training, and communication were cited as causes for the near miss. (ORPS Report ID--BBWI-LANDLORD-2000-0015)

These occurrences demonstrate the need for workers to understand the systems they service and the hazards and controls associated with these systems. Work packages and pre-job instructions should fully address these items.

KEYWORDS: *Electrical near miss, pre-job instruction, tagging*

ISM CORE FUNCTION: *Perform Work Within Controls*

3. WORKER'S SAFE-TO-WORK CHECK PREVENTS POSSIBLE INCIDENT

On September 25, 2001, at the Hanford Waste Receiving and Processing Facility, while performing a safe-to-work check, an operator determined that the wrong lift table on the restricted waste glovebox had been locked and tagged out. Millwrights had requested that a second safe-to-work check of the lift table be performed before starting a filter replacement job. Although two supervisors and an operator had reviewed the tagout authorization form and determined that the lift table matched what was documented on the form, the lift table that was locked and tagged out was not the correct one. (ORPS Report RL--PHMC-WRAP-2001-0004)

On September 24, a qualified duty operations supervisor prepared the tagout authorization form using system drawings. He also conducted a walk-down of the circuit breakers in the electrical room. The millwrights required a lockout of the lift table and conveyor for glovebox port 402-A. The glovebox ports are identified as 402-A and 402-B and the lift tables are identified as 201-A and 201-B. However, the lift table numbers do not align numerically with the port numbers and the circuit breakers do not specify

which conveyor/lift table goes with which port. The supervisor tagged out the circuit breaker for 201-A, rather than the appropriate breaker for 201-B. A second qualified duty operations supervisor performed a technical review using the system drawings and conducted a walk-down of the circuit breakers.

The supervisor who prepared the tagout authorization form installed the lockout/tagout and a nuclear chemical operator performed the verification and safe-to-work check. The operator returned the completed the tagout authorization form to the supervisor, who was overseeing process area activities. The maintenance person in charge obtained release of the work and instructed the millwrights to install their authorized worker locks, which they did. The millwrights then requested that a second operator perform another safe-to-work check. The second operator attempted to operate the lift table and conveyor for port 402-A, and discovered that they were still operable.

The problem was reported to the maintenance person in charge, who contacted an engineer and the process area supervisor. The process area supervisor and an engineer determined the error in the lockout and prepared a tagout authorization form for the appropriate conveyor and lift table. The incorrect lockout was removed and new tags were installed. The millwrights installed their locks, performed a safe-to-work check, and commenced to change the filter.

The process area supervisor reported the error to the operations manager. A critique meeting was convened prior to resuming work. During the critique of the event, members learned that the initial safe-to-work check was performed improperly, in that the operator had de-energized the lift table and conveyor by a secondary means that masked the existing inadequate isolation. Critique members also learned that the systems walk-down was inadequate to verify that the appropriate component was tagged out.

Several errors are evident from this occurrence and need to be addressed in the corrective actions. The system walk-down and second check to ensure the proper tagout was installed were inadequate. De-energizing of the lift table and conveyor by placing a local control switch in "off" and pulling the safety rope switch before the first safe-to-work check, masked the fact that the original tagout boundary was incorrect. However, it is also important to address the importance of workers' involvement in ensuring their own safety. The millwrights' request for a second safe-to-work check found the inadequate lockout/tagout and eliminated the potential for serious injury from inadvertent movement of the lift table and conveyor.

This occurrence illustrates the importance of workers' involvement in their own safety. Workers should not always take for granted that all necessary controls to protect their safety have been properly implemented.

KEYWORDS: *Lockout/tagout, personal ownership of safety*

ISM CORE FUNCTIONS: *Develop and Implement Hazard Controls, Provide Feedback and Continuous Improvement*

4. UNREVIEWED MODIFICATIONS RESULT IN EQUIPMENT FAILURE

On August 14, 2001 at the Thomas Jefferson National Accelerator Facility (TJNAF), a 40-pound electric hoist failed when its support chain broke. The hoist arm fell about four feet and landed on the lid of an ultrasonic tank, which was not damaged. A technician was working about six feet away from the hoist, but was not injured. TJNAF had designed and fabricated the hoist for special operations, but had not reviewed the hoist's design or fabrication. The hoist was installed for handling larger accelerator components weighing up to 200 pounds. All lifting equipment was reviewed following this incident. (ORPS Report ORO--SURA-TJNAF-2001-0004)

A preliminary review noted that the hoist's support chain and chain sprocket did not align properly. The hoist was not operating at the time of the incident. The misalignment is believed to have stressed the

Figure 1. The broken sprocket chain

chain by placing a bending action on the chain, and may have been the direct cause of the chain failure. Figure 1 shows the broken chain. The accelerator's material handling coordinator failed to review the fabrication process. In addition, the modifications were not made to any specific safety criteria or regulations.

All lifting equipment was reviewed following the hoist chain failure. This review disclosed that a number of these lifting equipment devices may not have been certified.

Workers failed to follow a process for modifications to equipment in which changes are reviewed and approved by a cognizant authority before they are implemented.

This occurrence underscores the need for special attention to the design, modification, and inspection of equipment before installation or operation.

- DOE Order 5480.19, *Conduct of Operations Requirements for DOE Facilities*, Chapter VIII, "Control of Equipment and System Status," states that DOE facilities are required to establish administrative control programs to handle configuration changes arising from maintenance, modifications, and testing.

- DOE-STD-1073-93, Parts 1 and 2*, Guide for Operational Configuration Management Programs,* provide guidelines and good practices for an operational configuration management program, including change control and document control.

KEYWORDS: *Hoisting and rigging, lifting device, industrial safety, rigging*

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

5. UNEXPECTED TRITIUM CONTAMINATION DURING D&D ACTIVITIES

On October 3, 2001, at the Miamisburg Environmental Management Project, a worker outside the radiological area, but within the controlled area, was exposed to tritium contamination while performing trash removal activities. The worker was not wearing personal protective equipment (PPE), since the work was not required to have a Radiological Work Permit (RWP). The source of the tritium contamination was material from an ongoing tritium decontamination and decommissioning (D&D) project. The tritium source was unanticipated, and thus protective measures were not included in the job planning. (ORPS Report OH-MB-BWO-BWO01-2001-0010)

Low specific activity (LSA) waste was being generated from glovebox bubbler lines, vacuum pump intake lines, and vacuum pumps. The tritiated oil in the vacuum pumps and bubblers was sampled prior to the removal of the piping and pumps, and was determined to consist of a sufficiently small quantity for work to be performed without plastic suits. No tritiated oil was anticipated to be present in the vacuum pump intake line or the bubbler lines, because oil is not normally present in these lines during operation. The piping was removed using standard tubing cutters and a reciprocating saw. The lines were monitored with a portable tritium monitor when the initial cuts were made, and whenever a cut was made after a valve was encountered in the line. No tritium off-gassing from the lines was detected. The lines were removed in long sections to minimize the exposure of the workers to any tritium residue. After each section of pipe was removed, the ends were taped to prevent off-gassing.

Bagged waste was removed from the work area. The bags were put into another clean bag, and taken to the stepoff pad, and then transported to the waste receptacle. This part of the process took place outside of the contamination area, and did not require an RWP. Not all the workers removing the bags of LSA waste from the stepoff pad to the waste receptacle were wearing gloves. One of the workers noticed a-yellowish-brown oily spot (the color of vacuum oil) on her hand after loading bags. The worker told the Radiological Control Technician, who immediately wiped the hand off with a rag and then took a swipe survey of the hand, head, and body. That survey indicated contamination of 11,820 dpm/100 cm^2 tritium on the hand (after wiping). A small oily spot on an LSA bag the worker had handled was swipe-surveyed, and the survey indicated contamination of 962,355 dpm/100 cm^2.

Surveys were taken of all workers associated with the job, as well as the hallways. All swipe surveys other than the one on the worker's hand and the oily spot on the LSA bag measured less than 10,000 dpm/100 cm^2.

The apparent direct cause of the event was pipe puncturing the bag. The long lengths of the pipe cuts increase the puncturing probability. Additionally, absorbent material was not added to the trash bags when the piping was first removed and oil was observed. The piping itself, not suspected to be a source of tritium residue (tritiated oil) was not capped, but taped instead.

EH has previously noted similar unanticipated tritiated oil contamination events resulting from inadequate controls. In 1997, at the Los Alamos National Laboratory, shippers sent vacuum pumps to an off-site company for maintenance that were internally contaminated with residual tritiated oil. The off-site company was unaware that the pumps were contaminated, and did not have the appropriate controls, procedures, or radiological support in place for working with contaminated equipment. (OE Weekly Summary 97-43)

Because of the inherent difficulties associated with detecting residual tritium, D&D work planning activities should incorporate the use of appropriate PPE for unexpected residual tritium encounters and plan activities to minimize waste handling. Tritium may be encountered in D&D activities in locations where it would not normally be expected. In this event, it was found in locations where it was not present during operation. Consideration should be given to moving LSA drums or boxes to the point of work activities, if feasible, and to cutting pieces to fit into standard-sized receptacles directly without double-bagging and transportation to larger waste receptacles.

KEYWORDS: *Tritium, D&D, tritium waste handling*

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

6. RESPIRATOR CANISTERS IDENTIFIED WITH STRONG, IRRITATING ODOR

Between September 28, 2001 and October 3, 2001, at Rocky Flats Environmental Technology Site, several decommissioning workers encountered full-face respirators that had a strong, irritating odor. Following an investigation, management determined that the respirators emitting the strong odor all had

canisters manufactured by Mine Safety Appliance (MSA), lot number 3201, but not all canisters of that lot exhibited the odor. Because the respirators are used site wide, management issued a site-wide safety flash to warn workers of the importance of always performing a pre-use inspection before donning respirators. Management further determined that this issue was a potential concern and should be disseminated through the Occurrence Reporting and Processing System. (ORPS Report RFO--KHLL-SITEWIDE-2001-0008)

Ten workers had reported the strong odor coming from their respirator masks upon donning them. Industrial hygienist recognized the odor to be like that of formaldehyde and sampled the suspect respirators with Dräger formaldehyde tubes. The sample tubes indicated that the odor was most likely formaldehyde. Additional testing is being conducted by analytical laboratories to verify the contaminant. Formaldehyde (HCHO) can cause irritation to the eyes, nose, throat, and respiratory system. Site respiratory protection personnel removed all respirators with MSA canisters of lot number 3201 from service and recalled any respirators that were out on projects. Safety personnel identified and removed approximately 80 full-face respirators from service pending further analyses and discussions with the manufacturer.

Members from the Site Respiratory Protection Advisory Committee and Occupational Safety and Industrial Hygiene representatives went to an off-site laundering facility to investigate how the respirators were washed, handled, and distributed to find the source of the odor. The members concluded that the introduction of an irritant during the cleaning process was not likely and that the potential chemical irritating odor was tied to the MSA P-100 high-efficiency particulate air (HEPA) canisters from lot 3201. However, additional testing conducted on a larger sampling of the affected respirators showed that not all canisters of lot 3201 exhibit the odor. MSA is also conducting an investigation to determine the cause.

The Society for Effective Lessons Learned Sharing (SELLS) issued a Yellow Alert (Identifier No. 2001-707/776/777PROJECT-01) on this event. The alert can be accessed from the DOE Lessons Learned database at http://tis.eh.doe.gov/ll/lldb.

Facility managers and personnel in charge of respiratory protection programs should check their inventories for these respirator canisters. Personnel who wear respirators should perform a pre-use inspection before donning respirators to ensure the respirators are in proper working condition. DOE-STD-1098-99, *Radiological Control*, Federal Regulation 29 CFR 1910.134, *Respiratory Protection,* and ANSI standard Z88.2-1992, *Respiratory Protection*, discuss respiratory protection equipment and the requirements of respiratory protection programs and provide additional references.

KEYWORDS: *OSHA Industrial hygiene, respirator, respirator canister, formaldehyde*

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

7. PRICE-ANDERSON AMENDMENTS ACT PROGRAM REVIEWS

The Department of Energy (DOE) Office of Price-Anderson Enforcement (OE) has conducted four different site reviews of contractor's Price-Anderson Amendments Act (PAAA) Programs during the year 2001. These reviews evaluated the individual site processes for screening noncompliances for applicability under the PAAA, for reporting and tracking in the Noncompliance Tracking System (NTS) and internal reporting and tracking systems, and for correcting noncompliance conditions in a timely manner. While strengths and deficiencies were noted in the resulting reports back to the contractors, no enforcement actions were contemplated as a result of these site reviews. However, some of the noted deficiencies, if not corrected, have the potential to impact application of enforcement discretion (e.g., no mitigation of civil penalties) in any future enforcement action. The DOE Enforcement Policy (10 CFR 820, Appendix A) provides positive incentives for contractors who identify, report, and promptly and comprehensively correct nuclear safety noncompliances. Additionally, OE is currently involved in the development of an Enforcement Guidance Supplement (EGS) to outline DOE's enforcement position

including implementation of the Management Assessment and Independent Assessment requirements presented in quality assurance criteria 9 and 10, respectively, of 10 CFR 830.122.

Examining the common issues existing among these four site reviews can help identify lessons learned that could be applicable to others in the complex. The issues were separated into five categories: 1- Identification and Screening of Potential Noncompliances; 2- Evaluation of NTS Reportability; 3-Cause Determination; 4- Corrective Action Identification and Closure; and 5- Issues Management System.

Identification and Screening of Potential Noncompliances

A common element among the sites reviewed this year was a disproportionate reliance for identifying PAAA noncompliances on events (e.g., ORPS reports) without enough emphasis on the more proactive identification through self-assessments and external evaluations, nonconformance reports, employee concerns, Radiological Awareness Reports, etc. Furthermore there was little formalized guidance at the four sites reviewed on how trending for repetitive or programmatic issues was to be performed, thereby precluding recognition of some of these issues.

Another common element among the sites reviewed was that the identification of the potential noncompliance is the responsibility of line management personnel, who are also responsible for correcting the issue. Some Contractor PAAA coordinators have developed checklists to be used by line managers across various divisions and groups. Reviews of these checklists indicate an inappropriate narrowing of the scope for PAAA screening. At most of the sites reviewed, the checklists indicate that, in order to be enforceable under the PAAA, the issue needs to have a nuclear or fissionable material component or affect the facility authorization basis. This is a faulty approach to determining PAAA enforceability because Part 830 includes quality assurance requirements as well as radiological safety and authorization basis requirements. The screening also needs to account for support services or activities, and the faulty screening approach used at many sites improperly narrows the scope of Part 830 enforcement issues.

Inconsistencies among various divisions and groups existed to some degree at all of the sites reviewed. Training of line management personnel responsible for identifying potential noncompliances was not targeted to all the correct individuals within individual divisions. Additionally, PAAA was not addressed in General Employee Training (GET) at some of the sites reviewed. At some of the sites reviewed, there was a tendency to evaluate the actual consequences of an issue rather than the potential consequences. At one of the sites, the contractor program for identifying PAAA enforcement issues did not capture subcontractor or vendor work.

Evaluation of NTS Reportability

Timeliness, whether in getting the issue to the PAAA On-Site Review Board, or in processing the issue into the NTS once the Board has made the determination, could be improved to varying degrees at all the sites reviewed. The reviews for potentially repetitive, programmatic or common problems were inadequate at the sites reviewed. This was deemed to be due in part to the lack of a common perspective across different divisions and groups on-site.

Cause Determination

Cause determinations were routinely performed at all of the reviewed sites for event-driven noncompliances because the ORPS process includes causal analysis. However, determinations of root cause, direct cause, and contributing cause(s) were lacking when roll-up or repetitive noncompliances indicated a programmatic problem. The analysis of repetitive or similar events did not address the effectiveness of the initial corrective actions taken at all reviewed sites, nor was reevaluation of the significance of the issue performed after the analysis was completed at all sites reviewed.

Corrective Action Identification and Closure

Delay in the closure of outstanding corrective actions was a common element among the sites reviewed. A problem encountered at one of the larger reviewed sites was that corrective actions implemented by the division tasked with issue closure did not properly address the issue for other divisions. Most of the reviewed sites possessed adequate requirements for verification of issue closure, but few formalized the review for effectiveness of corrective actions. Some of the reviewed sites structured the issue closure process entirely within the responsible line organization, without independent validation, while others require independent validation of issue closure.

Issues Management System

There is a tendency at larger sites for each line organization, division, or group to develop its own unique issues management system. These systems are often designed without consideration of compatibility with other systems outside their organization. This fragmented approach has led to difficulty tracking or identifying issues that are common to several line organizations. This was noted at one of the sites reviewed. A common element among the sites reviewed was a lack of a formalized description of the roles, responsibilities, and processes for the identification and trending of repetitive or programmatic issues.

The Price-Anderson Amendments Act of 1988 requires the Energy Department to undertake regulatory enforcement actions against contractors for violations of its nuclear safety requirements. The program is implemented by the Office of Price-Anderson Enforcement. Additional details on DOE's enforcement program, as well as reports from current and prior year program reviews, can be found on the Internet at http://tis.eh.doe.gov/enforce.