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SUBJECT: Quarterly Performance Analysis and Identification of Recurring Occurrences

Summary

The "Quarterly Performance Analysis and Identification of Recurring Occurrences" is being performed in accordance with the criteria provided in DOE Occurrence Reporting and Processing of Operations Information (ORPS) Manual M 231.1-2 and Occurrence Reporting and Performance Analysis Guide G 231.1-1. The data being reviewed to complete the performance analysis includes Injury and Illness data, Ames Local Events, Occurrences (ORPS), Noncompliance Tracking System (NTS) and Incidents of Security Concern (ISC).

The analysis of related data is necessary to ensure recurring events are identified and corrected.

The ORPS Manual states that sites must perform ongoing, at a minimum of quarterly, analyses of events during a 12-month period to look for trends. Although there have been similar issues in the various data fields, there is not a significant trend of recurrence. As such, a Category R Occurrence will not be submitted. The following summary of information for the various data fields will explain the analysis of data.

Background / Analysis

Injury and Illness Data

There have been eighteen injuries at the Laboratory in the last twelve months. Five of the injuries were deemed to be OSHA Recordable (medical treatment beyond first aid).

Six of the injuries in the same injury classification were lacerations. Two of the six lacerations were OSHA Recordable. Numerous efforts have been taken since 2002 to reduce / eliminate lacerations including heightened training, communication through various mechanisms including issuance of Lessons Learned and the introduction of two new glove styles. In addition, a Working Safely with Glassware Guide has recently been created and released to educate researchers on the proper handling of glassware. It is the consensus of the Injury / Illness Committee that the continued actions taken to reduce / eliminate lacerations have been effective in the reduction of lacerations. There is not a statistically significant trend of recurring lacerations.

There were four injuries in the acute musculoskeletal injuries (sprains and strains that are not cumulative) classification. Three of the four injuries were deemed to be OSHA Recordable. Of the four injuries, two were sprains of the lumbar area and both were recordable. One was in operations and the other a researcher. Although not a significant indicator of a trend, corrective actions were taken including the creation and distribution of a Sprains and Strains Prevention Training Module. In addition, a lessons learned has been distributed, heavy items required to be lifted have been labeled with safe lifting techniques and a new mechanism is in place to identify and correct risk factors during the readiness review of all activities.

The two remaining injuries in the acute musculoskeletal classification include a sprained ankle (OSHA Recordable) and a strained wrist. The sprained ankle occurred at a loading dock with different levels to accommodate delivery trucks of different heights. Four corrective actions are in place to address this issue. The corrective actions are to paint the transition areas to indicate changes in walking and working surfaces, to modify the Condition Assessment Survey procedure to incorporate specific exterior site inspection with component codes and deficiency description that address the painting of such hazards, add a preventative maintenance task to inspect the dock approaches bi-annually and to annually perform a Walk-About of the building exteriors and public spaces by the Industrial Safety Specialist and the Fire Safety Specialist.

Two other classifications that had more than one case were two contusions and three cumulative trauma disorders (CDT). The first contusion was to an elbow and the second was a to a leg. The first CDT (tendonitis) was that of an operations employee, the second was that of an administrative assistant performing key boarding and the third was that of a custodian preparing floors for resurfacing. The Ergonomics Review Team consisting of the Laboratory Industrial Hygienist and Occupational Medicine are addressing the CDT concerns. All of the injuries are in the same injury classification but they are not related in any manner.

Although corrective actions have been implemented to address all of the injuries, there is not a significant trend of recurring concerns to warrant the issuance of a recurring ORPS.

Ames Local Events

There have been eleven events categorized as Ames Local Events within the last 12 months.

Three events involved the discovery of legacy radioactive samples (1) and contaminated equipment (2). All were below reportable thresholds per DOE Manual 231.1-2 (Group 6). Although the samples and equipment didn't meet the reportable thresholds, the Laboratory has chosen to track these incidents in the Ames Laboratory Corrective Action Tracking System (ALCATS) - Ames Local database. The Laboratory recognizes the potential to discover radioactive materials and contaminated equipment as part of renovations and cleanout of lab spaces as a result of work performed in the past (thus the purpose for a Radiological Work Permit). In addition, the Laboratory promotes a positive culture for all employees to inform ESH&A of confirmed or suspected contaminated materials and equipment. The identification of radioactive materials or contaminated equipment is not indicative of a deficiency of the radiation safety program; rather the safety program is functioning as desired. No concerns of recurrence.

In addition to the tracking of the entire list of injuries and illnesses, all OSHA Recordable injuries and illnesses are entered into ALCATS - Ames Local database as part of the Event Reporting Program. As stated above, there were 5 OSHA Recordable injuries including two lacerations, two sprains of the lumbar and one sprained ankle. None of the activities leading to the lacerations or sprains was similar to each other.

The remaining Ames Local Events are not related or similar to each other. There are no recurring concerns.

Reportable Events

There was only one concern that led to an ORPS (Occurrence Reporting and Processing System) in the last 12 months. The ORPS was that of electrical contact by an Ames Laboratory Associate when accessing an electrical box housing a laser interlock relay.

Noncompliance Tracking System (NTS)
There were no concerns warranting the issuance of an NTS in the last 12 months.

Incidents of Security Concern (ISC)
There were no Incidents of Security Concern for the past 12 months.

The following sources of information are reviewed per the Event Reporting Program 40000.001 by the Event Screening Team for issues, concerns, and other operational data that are potentially reportable events per ORPS (DOE Order 231.1A), PAAA (10 CFR 820) and Incidents of Security Concern (DOE Order 471.1):

Sources Of Information
Independent Walk-Through concerns
Program/Department Walk-Through concerns reported to ESH&A
Safety/Security Concerns Program Issues
Injury/Illness reports
Plant Protection Section Tour Discrepancy Reports
Issues from Topical Appraisals
Radiological Survey Results
X-ray Inspections and Reviews
Readiness Reviews
Fume Hood Testing Results
Waste Management Pickup Observations
FSG CAMs and Repair Tickets
ALARA Reports and Meeting Notes
IH Exposure Monitoring Reports
IH Chemical Management Laboratory Reviews
Electrical Safety (Committee discussions and observations)
Safety Review Committee (SRC) discussions and minutes
Fire Safety Committee (FSC) discussions and minutes
Building Key Management Issues
Packaging and Transportation Issues

Conclusions

No recurring concerns indicating a significant negative trend were noted in the quarterly performance analysis and identification of recurring occurrences. In addition, there was not a significant number or percentage of failures discovered to indicate that one or more components of a specific program were ineffective.

There were no small or apparently isolated series / groups of events within various aspects of an overall program that could collectively indicate a program weakness or that could potentially lead to a more serious event.

No common underlying recurring weaknesses in controls necessitated corrective actions.

No breakdown in management controls was identified. In addition, no errors in decisions / directions by group leaders / managers resulted in recurring problems or violations of safety rules were identified.

As a result of this analysis, a Category R Occurrence will not be submitted.

C: Mike Saar, DOE-Chicago Facility Representative
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