

Ames Laboratory
Office: Chief Operations Officer
Title: Event Reporting Program
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Plan 40000.001
Revision 4
Effective 05/01/00
Review 05/01/03

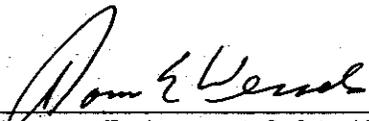
Event Reporting Program

The Event Reporting Program is designed to integrate the Occurrence Report, Noncompliance Tracking System (NTS) report and Incidents of Security Concern report requirements applicable to the Ames Laboratory into a unified process. It also provides assurance to management and the Department of Energy (DOE) that issues connected with events that do not meet the DOE threshold reporting requirements are addressed through appropriate corrective actions.

Comments and questions regarding this plan should be directed to the contact person listed below:

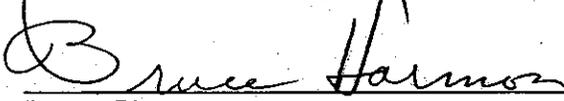
Name: Mark L. Murphy
Title: Chief Operations Officer
Address: 311 TASF
Phone: 515/294-2618

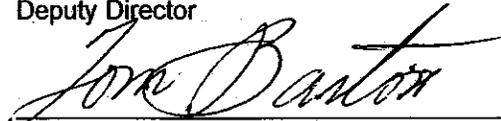
Sign-off Record:

Approved by:  Date: 4/27/00
Manager, Environment, Safety, Health and Assurance

Approved by:  Date: 4/27/00
Manager, Facilities Services

Approved by:  Date: 4/27/00
Chief Operations Officer

Approved by:  Date: 4/27/00
Deputy Director

Approved by:  Date: 4/27/00
Laboratory Director

1.0 Revision/Review Log

This plan shall be reviewed every three years at a minimum.

<u>Revision Number</u>	<u>Effective Date</u>	<u>Contact Person</u>	<u>Pages Affected</u>	<u>Description of Revision</u>
0	02/09/93	Struss		Initial Issue
1	09/30/94	Struss	All	Roles & Responsibilities
2	02/01/99	Murphy	All	Roles & Responsibilities
3	09/28/99	Murphy	All	Roles & Responsibilities, Title Change, PAAA and Security notations.
4	05/01/00	Murphy	All	Expansion of criteria to address DOE O 232.1A, section 8.c. and incidents of security concern.

2.0 Purpose and Scope

Ames Laboratory is a government owned, contractor-operated national research laboratory, which conducts basic and applied research for the U.S. Department of Energy. Ames Laboratory is located on the Iowa State University campus in Ames, Iowa. Government owned buildings are located on land leased from the State of Iowa under a long-term lease. Some space for Laboratory activities is rented from the University.

There are no major facilities at this site, such as a nuclear reactor or accelerator. Ames Laboratory purchases utility services from the City of Ames and the University, therefore no power plants, water-treatment, sewage, or solid-waste facilities are operated by the Laboratory. The City of Ames provides fire protection, under contract. Local Law Enforcement Agency assistance is provided by Iowa State University Department of Public Safety (ISU DPS) and the City of Ames Police Department.

Ames Laboratory conducts no classified research, has no classified documents and does not sponsor any security clearances. Ames Laboratory is required by contract to implement the requirements of DOE Order 232.1 (Occurrence Reporting and Processing of Operations Information), DOE Order 470.1 (Safeguards and Security Program) and the Price-Anderson Amendments Act (PAAA) of 1988. This plan describes the internal practices required for the implementation of these, the reporting, and the follow-up activities including lessons learned from occurrences.

3.0 Event Reporting Policy (40000.002)

It is the policy of Ames Laboratory to encourage a positive attitude toward reporting incidents to assure that Ames Laboratory management and DOE officials are kept fully and currently informed of all events and conditions which could affect the health and safety of the public, seriously impact the intended purpose of Laboratory facilities, have a noticeable adverse effect on the environment, or endanger the health and safety of workers.

It is also the policy of Ames Laboratory that the Event Reporting Program is established and shall include assignment of responsibilities and the establishment of implementing procedures in accordance with DOE mandates. The Event Reporting Program shall address the investigation of events and conditions, the identification of root causes, the development, tracking and closeout of corrective actions and the development and distribution of lessons learned.

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4.0 Event Reporting Procedure (40000.001)

4.1 Roles and Responsibilities

4.1.1 Categorization and Investigation Team

Ames Laboratory utilizes a team approach for review and investigation of incidents and the categorization of occurrences. The Categorization and Investigation Team consists of the following individuals:

- Chief Operations Officer (Mark L. Murphy)
- Manager, Environment, Safety, Health and Assurance (Tom E. Wessels [James H. Withers, Assistant Manager of ESH&A as alternate])
- Emergency Coordinator (Mark E. Grootveld [Mike Vaclav, Alternate Emergency Coordinator in the absence of Mark E. Grootveld])
- Lessons Learned Coordinator (G. P. Jones)

Event and condition review, investigation and occurrence categorization is performed by the available members of the Categorization and Investigation Team with the assistance of appropriate laboratory specialists. These individuals include:

- Safeguards and Security Manager (David Baldwin)
- Chair, Safety Review Committee (John Hayes)
- Industrial Hygienist (Jim Withers)
- Health Physicist (Bruce Hokel)
- Industrial Safety Officer (Shawn Nelson)
- Environmental Specialist (Dan Kayser)
- Training Coordinator (Kate Sordelet)
- Computer Security Officer (Mark Clarridge)
- Export Control Officer (Debra Covey)
- Transportation Specialist (Jim Brazelton)
- Electrical Safety Inspector (John Hjortshoj)
- Pressure Vessel Safety Specialist (Terry Herrman)

Responsibilities for the Categorization and Investigation Team include:

- Perform a level of investigation based on the severity or risk associated with the event or condition in order to provide the data necessary for categorization.
- Make notifications, as appropriate, to the authorities designated by the affected standard.
- Conduct causal analysis for determination of root cause and development of corrective action.
- Develop corrective actions/Lessons Learned appropriate with the root cause of the event.

4.1.2 Chief Operations Officer

Mark L. Murphy serves as the Chief Operations Officer. In this role, he acts as the Facility Manager for the Occurrence Reporting requirements of DOE O 231.1 and the Ames Laboratory Emergency Plan, and as a member of the Categorization and Investigation Team.

The Facility Manager is responsible for ensuring reporting procedures are implemented through coordination with the Event Reporting Officer and the Emergency Coordinator and has responsibilities as described in section 4.7 of DOE M 232.1-1A including:

- Monitoring day-to-day operations through interactions with department managers and review

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of facility status information.

- Identifying lessons learned through the actions of the Lessons Learned Coordinator.
- Determining root causes through actions of the Categorization and Investigation Team and implementing corrective actions through actions of department managers.
- Disseminating Occurrence Reports and operations information from other organizations through actions of the Lessons Learned Coordinator.
- Preparing and transmitting Occurrence Reports through the Event Reporting Officer.
- Contacting HQ EOC (phone: 202-586-8500), CH EOC (phone: 630-252-4800), and the Ames Group Manager (James A. Buchar, phone: 630-252-2402) within 2 hours after categorization of an Emergency.
- Performing point-of-contact responsibilities and requirements of DOE M 232.1-1A.

As a member of the Categorization and Investigation Team, the Chief Operations Officer represents the Executive Council for the Ames Laboratory in matters pertaining to Safeguards and Security, and Price-Anderson Amendment Act compliance. In the absence of the Chief Operations Officer, the Manager for ESH&A shall be his alternate as Facility Manager.

4.1.3 Environment, Safety, Health and Assurance Manager

Tom E. Wessels is the manager of the Environment, Safety, Health and Assurance Office for Ames Laboratory. As such, he serves as the Event Reporting Officer for Occurrence Reporting issues, the Contractor PAAA Coordinator for nuclear safety issues, and the Laboratory's Safeguards and Security Assistant Manager. In his absence, the Assistant Manager for ESH&A shall be his alternate.

4.1.3.1 Event Reporting Officer Responsibilities

- Coordination of event and facility status information for consideration as Occurrence Reports.
- Coordination of Categorization and Investigation Team efforts.
- Oversight of preparation and transmittal of Occurrence Reports as per the requirements of DOE M 232.1-1A.
- Oversight of NTS (Noncompliance Tracking System) reports.
- Oversight of reports for Incidents of Security Concern.
- Oversight of Lessons Learned Program and corrective action tracking.

The Event Reporting Officer designee is G.P. Jones.

4.1.3.2 Contractor PAAA Coordinator Responsibilities

- Coordination of Categorization and Investigation Team efforts.
- Oversight of preparation and transmittal NTS Reports as per the requirements of the Price-Anderson Amendments Act.
- Assurance of adequacy and completion of corrective actions developed for non-compliance issues.

The Contractor PAAA Coordinator designee is G.P. Jones.

4.1.3.3 Safeguards and Security Assistant Manager Responsibilities

- Notification of Ames Laboratory Safeguards and Security Manager immediately upon receipt of information alleging an actual or suspected security incident.
- Initiation of an inquiry within 24 hours into the incident.
- Full protection of all evidence, and the prevention of tampering and destruction of evidence.
- Coordination of Categorization and Investigation Team efforts.
- Assist with the development of corrective actions and track to closure.

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- Assist with the development of disciplinary action deemed appropriate, according to the personnel policies and procedures of Iowa State University.

The Safeguards and Security Assistant Manager designee is G.P. Jones.

4.1.4 Emergency Coordinator

The Emergency Coordinator (EC) is Mark Grootveld, Manager of Facilities Services. As a member of the Categorization and Investigation Team, the EC represents the Emergency Team, as defined in the Emergency Plan (Plan 46300.001), on issues involving Occurrence Reporting, Safeguards and Security and Price-Anderson issues. In his absence, the First Alternate EC shall be his alternate.

4.1.5 Lessons Learned Coordinator

G. P. Jones is the Laboratory's Lessons Learned Coordinator. Lessons Learned Coordinator responsibilities include:

- Gathering of lessons learned information from DOE and other applicable sources.
- Review of lessons learned reports, event and condition investigative reports, and Occurrence Report information for applicability to Ames Laboratory.
- Determination of applicability of lessons learned information, through consultation and discussion with Ames Laboratory specialists.
- Development and dissemination of lessons learned information to appropriate individuals at Ames Laboratory.

4.2 Performance

4.2.1 Safety Significant Structures, Systems and Components (SSC)

The system developed for the hydrogen fluoride operation in 147 Metals Development Building (Activity 30411.003, Hydrofluorination of Rare Earth Oxides) is considered a Safety Significant SSC. The hood exhaust, detectors and valving are interlocked to prevent employee exposure to HF gas should a leak develop. If a leak is detected in either the room or hood, the cylinder valve is automatically closed to stop the flow of HF into the sample furnace. Inadequate exhaust from the hood will close the valves, as well. Exposure to HF gas would pose an acute fatality risk. Any performance degradation of these SSCs that prevents satisfactory performance of its design function when it is required to be operable or in operation is reportable as a Group 1 - Facility Condition, E. Safety Structure/System/Component Degradation, Off-Normal event.

4.2.2 Reporting Events and Laboratory Conditions

Events and conditions related to the Ames Laboratory which may have an adverse effect on the safety, health, security, quality assurance, or have an operational or environmental implication are required to be reported to the Event Reporting Officer (Tom E. Wessels, 515-294-4965) or the Facility Manager (Mark L. Murphy, Chief Operations Officer, 515-294-2618).

4.2.3 Categorization of Event

The Event Reporting Officer, upon receiving notification of the occurrence of a potentially reportable event or condition, will assemble the available Categorization and Investigation Team members and proceed with categorization.

4.2.3.1 Occurrence Reports

Events are reportable as occurrences as defined in DOE M 232.1-1A, *Occurrence Reporting and Processing of Operations Information*. Occurrences are categorized as follows.

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- Group 1. Facility Condition
- Group 2. Environmental
- Group 3. Personnel Safety
- Group 4. Personnel Radiological Protection
- Group 5. Safeguards and Security
- Group 6. Transportation
- Group 7. Value Basis Reporting
- Group 8. Facility Status
- Group 9. Nuclear Explosive Safety
- Group 10. Cross-Category Items

4.2.3.2 Noncompliance Tracking System (NTS) Reports

Events which involve noncompliance with a nuclear safety requirement set forth in a Price-Anderson Amendments Act (PAAA) Rule or a Rule implementation plan should be considered for reporting as a Noncompliance Tracking System (NTS) issue. Events which involve noncompliance with a nuclear safety requirement set forth in a Price-Anderson Amendments Act (PAAA) Rule or a Rule implementation plan that do not meet the threshold criteria shall be considered for tracking by the Ames Laboratory. Events tracked as NTS issues or tracked by the Ames Laboratory require appropriate documentation and correction.

Additional information related to threshold reporting criteria for the Noncompliance Tracking System (NTS) is available from the operational procedure, *Identifying, Reporting, and Tracking Nuclear Safety Noncompliances Under Price-Anderson Amendments Act of 1988*, (<http://tis.eh.doe.gov/enforce/handbks/hndbkr4g.pdf>).

The criteria for NTS reporting includes Programmatic Deficiencies such as:

- Repetitive,
- Programmatic Issue, and
- Intentional Violation or Misrepresentation.

The criteria also includes noncompliance involving DOE Manual M-232.1A-1 occurrences, including Unusual Occurrences in the following subgroups:

Group 1, Facility Condition

- A. Nuclear Criticality Safety
- B. Fires/Explosions
- C. Safety Status Degradation
- D. Loss of Control of Radioactive Material/Spread of Contamination
- E. Safety Structure/System/Component Degradation
- H. Operations

Group 2, Environmental

- A. Radionuclide Releases
- C. Hazardous Material Contamination

Group 4, Personnel Radiological Protection

- A. Radiation Exposure
- B. Personnel Contamination

4.2.3.3 Incidents of Security Concern

Incidents of Security Concern are any incident, as identified below that upon occurrence requires notification, the conduct of an inquiry, and formal reporting. Additional information related to Incidents of Security Concern can be gleaned from DOE Order 471.3, *Incidents of Security Concern*. The following are considered incidents of security concern:

- a. Incidents involving the intentional infliction or threat of death or serious physical harm. Such incidents include: homicide, assault, and kidnapping.
- b. Incidents likely to impact upon the National Security, Defense or Foreign Relations of the United States. Such incidents may include the following:
 1. Incidents involving the compromise or potential compromise of classified information.
 2. Incidents involving automated information systems.
 3. Incidents involving special nuclear materials, nuclear weapons, or nuclear weapons components.
 4. Incidents involving sabotage of DOE facilities.
 5. Incidents involving access controls and security systems.
 6. Incidents involving possible or discovered technical interception of classified or sensitive unclassified matter (technical surveillance countermeasures incidents).
 7. Incidents involving foreign interference with U.S. Governmental institutions and processes.
 8. Incidents that appear to have been committed by or on behalf of a foreign power or in connection with international terrorist activity.
 9. Other incidents of security concern; such as theft, diversion or intentional destruction of Government property valued greater than one million dollars, and racketeering or other organized criminal activity occurring at any DOE facility.

4.2.4 DOE Notification

After categorization, the Facility Manager will proceed with oral and written notification reports according to the notification requirements for the specific Occurrence Category as described in DOE M 232.1-1A and the Ames Laboratory Emergency Plan. The DOE HQ notification phone number is 202-586-8100. The Ames Group Manager phone number is 630-252-2402 (630-252-4800 during off hours). The Ames Facility Representative (Mike Saar) phone number is 630-252-2245.

4.2.5 Investigation

The Categorization and Investigation Team will conduct investigations. A graded approach will be considered when determining the level of effort for the investigation into the cause of the event or condition.

4.2.6 Reporting

Occurrence reports are prepared by the Event Reporting Officer based on the results of the investigation and submitted via the Occurrence Reporting and Processing System (ORPS) according to the timing described DOE 232.1-1A.

Price-Anderson Amendments Act non-compliance will be reported through the Noncompliance Tracking System (NTS) by the Contractor PAAA Coordinator.

Security incidents will be reported to the cognizant DOE safeguards and security office by the Laboratory's Safeguards and Security Manager.

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4.2.7 Corrective Action Tracking

Corrective action tracking is performed by the Environment, Safety, Health and Assurance Office and the status reported to the Facility Manager.

4.2.8 Lessons Learned

Lessons learned are developed and issued within the Laboratory and within DOE as appropriate by the Lessons Learned Coordinator.

4.2.9 Trend Analysis

Trend analysis is performed by the Environment, Safety, Health and Assurance Office and the status reported to the Facility Manager.

4.3 Post Performance Activity

Additional follow-up ORPS, NTS and event reports will be prepared by the Event Reporting Officer and submitted according to requirements.

5.0 Additional Information

- DOE Order 151.1, Comprehensive Emergency Management System.
- DOE Order 232.1, Occurrence Reporting and Processing of Operations Information.
- DOE Manual 232.1-1A, Occurrence Reporting and Processing of Operations Information.
- Identifying, Reporting, and Tracking Nuclear Safety Noncompliances Under Price-Anderson Amendments Act of 1988, (<http://tis.eh.doe.gov/enforce/handbks/hndbkr4g.pdf>)
- Draft DOE Order 471.3, Incidents of Security Concern