

LLE INSTRUCTION 6950D

SUBJECT: INCIDENT REVIEW AND REPORTING

ENCLOSURE: (1) Incident Report Format

- 1. Purpose:** To formalize procedures for reporting, investigating, and documenting incidents and taking corrective actions to prevent their recurrence. This instruction applies to the OMEGA Facility and all other laboratories within LLE.
- 2. Definition:** An incident is defined as any accident, abnormal operation, or event that causes or could have caused personnel injury resulting in hospital emergency room treatment or lost time, significant equipment damage, exceeding environmental release limits for hazardous or radioactive material, or a significant loss of OMEGA system effectiveness or availability.
- 3. Discussion:** Prevention of incidents is of paramount importance in laboratory operations. Implicit in this objective is to learn from incidents when they occur and implement actions to prevent their recurrence. This requires that incidents be promptly and thoroughly investigated to determine what happened and what caused it to happen. Causes can be classified as either Personnel, Procedure, Equipment, or Material. The root cause of most incidents is often due to human error. For example, if a piece of equipment fails due to improper operation, maintenance, or assembly, the cause of an incident is Personnel or Procedure and not Equipment or Material. The investigation of an incident must be thorough enough to get past “first impressions” and determine root causes. The purpose of an investigation is not to assign blame or to determine punitive action. Rather, it is to seek the truth so that the reason for an incident is clearly understood and so that proper and sufficient corrective actions can be implemented.

In some instances, the potential follow-on consequences of an incident may be severe enough that operations must be curtailed pending investigation, review, and corrective action. For example, if an incident causes a serious injury or extensive equipment damage or the potential for significant subsequent damage exists, operations should be curtailed in the affected area until the incident investigation and review are completed and necessary corrective actions are implemented to prevent recurrence.

- 4. Procedures:** All accidents or events that have the potential of being incidents within the context of this instruction shall be immediately reported to the cognizant Group Leader, Division Director, and the Associate Director for Operations; and for OMEGA incidents, to the Shot Director, Associate Laser Facility Manager, and Laser Facility Manager after a safe situation has been established. Any incident that affects or could have affected personnel or equipment safety should also be reported to the Laboratory Safety Officer.

Operations will be temporally halted until the cognizant Division Director and Laser Facility Manager and Laboratory Safety Officer, as applicable, have made a determination as to whether the event is an incident or not.

- a. Non Incident—If the event is determined not to be an incident by the cognizant Division Director and Laser Facility Manager and Laboratory Safety Officer, as applicable, operations may be resumed at the discretion of the Group Leader.
- b. Incident—If the event is classified as an incident by the cognizant Division Director and Laser Facility Manager and Laboratory Safety Officer, as applicable, an immediate determination will be made regarding the resumption of operations prior to the completion of the incident investigation and implementation of corrective actions. Thereafter an individual will be appointed by the cognizant Division Director to conduct the review/investigation and to prepare a draft Incident Report.
- c. Incident Investigation—The individual assigned will conduct a thorough investigation within a reasonable time, usually one day. More time may be required depending on the seriousness and extent of the incident to access damage, obtain analysis results, or interview personnel who are not immediately available. The investigation may take the form of individual interviews with personnel involved, obtaining written statements, holding a joint review meeting with all involved personnel, review of applicable logs and records, inspection, analysis, etc. If the investigation does not lead to closure in a reasonable time, the investigator should seek the advice of the applicable Division Director or Laboratory Safety Officer (for safety-related incidents) and proceed accordingly.
- d. Incident Report—Once the investigation is completed, a draft Incident Report will be prepared by the individual assigned to investigate the incident using the format of Enclosure (1). The report shall be submitted to the cognizant Group Leader and Division Director, the Laboratory Safety Officer (for personnel or equipment safety-related incidents), the OMEGA Laser Facility Manager (for OMEGA incidents), and the Associate Director for Operations for review. The recipients will submit comments to the applicable Division Director who will prepare the smooth Incident Report. Incident reports will be approved by the Applicable Division Director, the Laboratory Safety Officer (for personnel or equipment safety-related incidents), and the Associate Director for Operations. If all corrective actions cannot be completed in a timely manner, a Preliminary Incident Report will be issued first, and a Final report will be issued when all corrective actions have been completed. Preliminary and Final Incident Reports will be distributed to the Laboratory Director, Associate Director for Operations, Division Directors, Laboratory Safety Officers, and Group Leaders. Group Leaders will be responsible for reviewing relevant incidents with their Group.
- e. Corrective Actions—The completion of corrective actions will be administered by the OMEGA Facility Director. Personnel assigned in the Preliminary Incident Report to implement corrective actions will take the requisite actions and report in writing to the OMEGA Facility Director when such actions are completed. If circumstances prevent the completion of corrective actions by the time specified, personnel assigned responsibility shall inform the OMEGA Facility Director prior to the due date of the reason for the delay. After all corrective actions are

completed, a Final Incident Report will be written by the OMEGA Facility Director, and distributed.

- f. Completed Incident Reports—Hard copies of signed incident reports will be filed by the OMEGA Facility Director Administrative Assistant. Additionally, the incident reports will be filed electronically in a searchable database.

5. Responsibilities

a. Individual

- (1) Any individual who believes that an accident or event may be an incident within the context of this instruction shall immediately report the event to his Group Leader, Shot Director, Laser Facility Manager, Division Director and Laboratory Safety Officer, as appropriate and most expedient.

b. Group Leader or Shot Director

- (1) Report an event to cognizant Division Director, Laser Facility Manager (for OMEGA incidents), and the Laboratory Safety Officer (for personnel or equipment safety-related incidents).
- (2) Support the incident investigation as appropriate and as requested by the person assigned responsibility for the incident investigation.
- (3) Review the draft Incident Report and give comments to the applicable Division Director within one working day.

c. Incident Investigator

- (1) Conduct a timely and thorough investigation to determine what happened, the extent of damage or injury, and the causes of the incident.
- (2) Recommend temporary and long-term permanent corrective action to prevent recurrence of the incident.
- (3) Prepare a draft Incident Report using the format of Enclosure (1).

d. Division Director, OMEGA Facility Manager, and/or Laboratory Safety Officer

- (1) Make a determination as to whether or not an accident or event should be classified as an incident within the context of this instruction.
- (2) Determine if operations should be halted until the incident investigation is completed.
- (3) Report the incident to the Associate Director for Operations.
- (4) Review the draft Incident Report and give comments to the applicable Division Director within one working day.

e. Division Director

- (1) Appoint an individual to conduct the investigation and write the preliminary incident report.

- (2) Prepare smooth Preliminary and Final Incident Reports based on investigations and preliminary reports and comments received. Approve preliminary and final incident reports.
 - (3) Ensure that specified corrective actions are taken by the time indicated in the final incident report
- f. OMEGA Facility Director
- (1) Direct the overall laboratory incident program.
 - (2) Maintain a file of Incident Reports and follow up to ensure corrective actions identified in Preliminary Incident Reports are completed.
- g. Associate Director for Operations
- (1) Review and approve all incident reports.

Robert L. McCrory

Preliminary/ Final LLE Incident Report

Number _____

Area:

Key Words:

1. **DESCRIPTION of INCIDENT:** (describe what happened including indications and the results of the investigation)

2. **IDENTIFICATION OF APPARENT CAUSE**

_____ Personnel _____ Procedure _____ Equipment _____ Material

3.

CORRECTIVE ACTIONS

a. **IMMEDIATE ACTIONS** (actions taken at the time of the incident to establish stable conditions)

b. **TEMPORARY CORRECTIVE ACTIONS** (actions taken to resume normal operations in advance of completion of permanent actions, identify specific actions, persons responsible, and completion due date)

c. **PERMANENT CORRECTIVE ACTIONS** (permanent corrective actions to prevent recurrence, identify specific actions, person responsible, and completion due date)

4. SUBMITTED BY _____ Date _____
Person Investigating the Incident

5. REVIEWED BY a. _____ Date _____
Applicable Group Leader

b. _____ Date _____
Laser Facility Manager
(for OMEGA incidents)

6. APPROVED BY a. _____ Date _____
Applicable Division Director

b. _____ Date _____
Laboratory Safety Officer
(for safety-related incidents)

c. _____ Date _____
Associate Director for Operations