LLE INSTRUCTION 6950F

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 event that causes or could have caused personnel injury resulting in medical 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 Personnel, Procedure, Equipment, and/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 temporary corrective actions are implemented to prevent recurrence.

4. **Procedures:** When an event that has the potential of being an incident within the context of this instruction occurs, operators shall first secure equipment to a safe state. Thereafter, the event shall be immediately reported to the cognizant Area Supervisor, Group Leader, and Division Director; and for Omega Operations events, to the Shot Director, Associate Laser Facility Manager, Laser Facility Manager, and Operations Manager. Any incident that affects or could have affected personnel safety should also be reported to the Laboratory Safety Officer.

Operations will be temporally halted until the Division Director responsible for the area/operation approves continued operation.

a. Non-Incident: If the event is determined not to be an incident by the DD, operations may be resumed.

b. Incident: If the event is classified as an incident, the Division Director, Laser Facility Manager (for operations events), and Laboratory Safety Officer (for safety-related incidents) determine the necessary actions to be completed in advance of the resumption of operations. Thereafter, an individual will be appointed by the DD 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 assess damage, obtain analysis results, or interview personnel who are not immediately available. The investigation may take the form of holding a joint review meeting with all involved personnel followed by individual interviews with personnel involved, obtaining written statements, 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 DD and 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 draft report shall be circulated to the reviewers for comment as designated in Enclosure (1). The recipients will submit comments to the Omega Operations Manager who will prepare the Incident Report. Incident reports will be reviewed and approved by key stakeholders before distribution. 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, 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 Operations Manager. Personnel assigned in the Preliminary Incident Report to implement corrective actions will take the requisite actions and report in writing to the Omega Operations Manager when such actions are completed. If circumstances prevent the completion of corrective actions by the time specified, personnel assigned responsibility shall inform the Omega Operations Manager 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 Operations Manager and formally approved by the identified key stakeholders

f. Completed Incident Reports: The incident reports will be filed electronically in a searchable webpage.

5. Responsibilities

a. Individual

(1) Any individual who believes that an event may be an incident within the context of this instruction shall immediately report the event to his supervisor as appropriate (i.e., Shot Director, Area Supervisor, Group Leader, or Division Director).

(2) Support the incident investigation as appropriate and requested.

b. Area Supervisor

(1) Report an event to cognizant Group Leader.

(2) Support the incident investigation as appropriate and requested.

c. Group Leader or Shot Director

(1) Report an event to cognizant Division Director, Laser Facility Manager (for operations incidents), and the Laboratory Safety Officer (for personnel 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 within two working days.

d. 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).

e. Group Leader, Laser Facility Manager (for operations incidents), and Laboratory Safety Officer (for safety-related incidents)

(1) Recommend whether or not an accident or event should be classified as an incident within the context of this instruction.

(2) Determine temporary actions necessary to resume operations (if any). Actions may include investigation, procedure changes, equipment modifications, and training.

(3) Review the draft Incident Report and give comments within two working days.

f. Division Director

(1) Make a determination as to whether or not an event should be classified as an incident within the context of this instruction.

(2) Appoint an individual to conduct the investigation and write the draft preliminary incident report.

(3) Authorize the resumption of operations.

g. OMEGA Operations Manager

(1) Prepare Preliminary and Final Incident Reports based on investigations and draft reports and comments received.

(2) Approve preliminary and final incident reports.

(3) Ensure that specified corrective actions are taken by the time indicated in the final incident report.

(4) Maintain a file of Incident Reports and follow up to ensure corrective actions identified in Preliminary Incident Reports are completed by the date indicated in the Preliminary Incident Report.

g. Omega Facility Director

(1) Direct the overall laboratory incident program.

(2) Approve preliminary and final incident reports.

(3) Administer periodic refresher training for each operational group for relevant incidents.

E. M. Campbell
Director

(Preliminary/ Final) LLE Incident Report **Number_____**

Area: (OMEGA, OMEGA EP, C&TF, Student Lab, LLE general, etc.)
Key Words:
Category: (Safety or Operational)
Injury: (yes, no)
Date of Incident:

1. **DESCRIPTION of INCIDENT:** (describe what happened including indications)

2. **IDENTIFICATION OF APPARENT CAUSE:** (describe cause and events leading up to the incident)

   _____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 assure safe and effective 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 (including training requirements), person responsible, and completion due date)

4. Approvals (Approval through Teamcenter by the following)

SUBMITTED BY _____ **Date**
Person Investigating the Incident

REVIEWED BY

a. _____ **Date**
Applicable Group Leader(s)

b. **N/A** **Date** _____
Applicable Safety Officer(s)

c. _____ **Date** _____
Applicable Laser Facility Manager(s)

APPROVED BY

a. _____ **Date** _____
Operations Manager

b. **N/A** **Date** _____
Laboratory Safety Officer

c. _____ **Date** _____
Applicable Division Director(s)

Distribution:

1. **Key members of LLE management, Safety Team, and Group Leaders:**

   M. Campbell, S. Loucks, S. Morse, C. Sangster, V. Goncharov, C. Sorce, J. Zuegel, S. Stagnitto, T. Buczek, S. Householder, K. Marshall, N. Urban, J. Sawyer, W. Shmayda, J. Puth, M. Shoup, J. DiVincenzo, G. Brent, G. Pien, M. Labuzeta, D. Canning, A. Consentino, R. Janezic, D. Harding, T. Agliata, T. Smith, J. Kwiatkowski, S. Regan, S. Ivancic, B. Cronkite, J. Hayes, J. Steve, L. Morgan, R. Ghosh

2. **Include personnel involved with investigation, corrective actions, and approval list:**