

<h1>PPPL</h1>	PRINCETON PLASMA PHYSICS LABORATORY ES&H DIRECTIVES	
	ES&HD 5008 SECTION 11, CHAPTER 2 Safety Certification System	
Approved	Date: 01/29/99	Revision 0
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1.0 INTRODUCTION

This **chapter** establishes a system to require, issue, review, and control Safety Certificates. The Safety Certification System **provides** a formalized, standardized means of assuring independent review and authorization of **High Hazard operations designated in accordance with ES&HD 5008, Section 11, Chapter 1**. Reviews and authorizations conducted under this chapter are in addition to NEPA reviews and certifications required by procedure ESH-014.

1.1 POLICY

Safety Certificates shall be required for all **operations which have been designated by the Responsible Line Manager to be High Hazard**. These Certificates will be issued by the **ES&H Executive Board (ES&H/EB)**. For **High Hazard operations**, the **ES&H/EB** will appoint an Activity Certification Committee (**ACC**) to review the **proposed operation**. The **Safety Certificate** constitutes **PPPL approval to conduct the High Hazard operation** within the constraints indicated therein. **Other approvals (e.g., DOE)** may also be required to commence operations.

2.0 RESPONSIBILITIES

2.1 LINE MANAGEMENT

The **Responsible Line Manager** has responsibility for **defining a proposed activity and determining the appropriate hazard level per Section 11, Chapter 1**. If the activity is determined to be a **High Hazard operation**, the **Responsible Line Manager** must request the **ES&H/EB** to appoint an **ACC** for the activity. **Line management** must **prepare all required information to support the granting of a Safety Certificate, and must operate within the stated constraints of the Certificate**. **Line management** will:

- A. Arrange for all required supporting analyses and documentation **for the Safety Certificate**, allowing for appropriate lead time.
- B. Respond to all action items and requests for further information by the **ACC**.
- C. When necessary, take action to obtain **modifications to** a Safety Certificate.
- D. Take necessary action to close out a Safety Certificate upon completion of the operations for which it was issued.

2.2 ES&H EXECUTIVE BOARD (ES&H/EB)

The **ES&H/EB** will appoint an Activity Certification Committee (**ACC**), **consisting of at least two (2) members who are not part of the activity's line organization, for each High Hazard operation**. The **ACC** will remain intact for the duration of the **High Hazard operation** or until dissolved by the **ES&H/EB**. The **ES&H/EB** will issue a **Safety Certificate** for a **High Hazard operation** based on the recommendations of the **ACC** and other factors (e.g., results of Management Safety Walkthroughs, DOE Operational Readiness Assessments, etc.).

2.3 ACTIVITY CERTIFICATION COMMITTEE (ACC)

The appointed Activity Certification Committee will:

- A. Conduct safety reviews supporting issuance of Safety Certificates.
- B. Recommend issuance or denial of Safety Certificates.
- C. Consult, as required, with line management and the ES&H and Infrastructure Support Department on safety and environmental matters pertaining to the High Hazard operation under its review.
- D. Recommend to the ES&H/EB any necessary special conditions or constraints on which the issuance of Safety Certificates should be based.

2.4 ES&H AND INFRASTRUCTURE SUPPORT DEPARTMENT:

Appropriate ES&H and Infrastructure Support Department personnel (e.g., ES&H Division, Site Protection Division, etc.) will participate (ex officio) in the safety review process conducted by the ACC, and will provide assistance to the ACC and Line Management as required to support issuance of a Safety Certificate.

3.0 PRACTICES AND PROCEDURES

3.1 INITIAL SAFETY CERTIFICATE

3.1.1 When it has been decided to undertake a new activity requiring a Safety Certificate, the Responsible Line Manager shall request the ES&H/EB to appoint an ACC to review the activity and recommend issuance of a Safety Certificate. As early as practicable, line management will work with the ACC to provide information necessary to support a recommendation for issuance of the Safety Certificate.

3.1.2 The ACC shall review the proposed operation.

3.1.3 The ACC may consult with others during its review including, but not limited to, line management personnel, the ES&H Division, and DOE. The ACC should keep a record of its deliberations.

3.1.4 When the ACC has completed its review, a report on its findings should be presented to the ES&H/EB. The report should include a recommendation on the issuance of a Safety Certificate for the High Hazard operation and any relevant conditions or limitations on operations.

3.1.5 When the Responsible Line Manager indicates that the High Hazard operation is ready to commence, a Management Safety Walkthrough (MSW) should be performed of the planned operation to help verify readiness. This MSW, including correction of any deficiencies deemed important to operational readiness, must be completed prior to issuance of a Safety Certificate by the ES&H/EB.

3.1.6 Based on the ACC recommendations, the results of the MSW and completion of corrective actions for any deficiencies which are important to operational readiness, and other factors deemed relevant by the ES&H/EB, the Board will decide on issuance of the Safety Certificate. The Safety Certificate Form (see Appendix 1) should be completed by the Responsible Line Manager and approved by the ES&H/EB Chairperson.

3.1.7 The Responsible Line Manager retains the original approved Safety Certificate. A copy of the Certificate must be posted prominently in a location visible to the operations personnel for the High Hazard operation.

3.2 MODIFICATION OF A SAFETY CERTIFICATE

If, in the judgement of the Responsible Line Manager, there are significant changes required to be made in the conditions under which a Safety Certificate was issued, the Responsible Line Manager must modify the Safety Certificate and request approval from the ES&H/EB. The procedures for issuing a modified Safety Certificate are the same as outlined in Section 3.1 for the initial Safety Certificate.

3.3 CLOSEOUT OF A SAFETY CERTIFICATE

Upon completion of the operation or activity covered by a Safety Certificate, the Responsible Line Manager shall remove the posted copy of the Safety Certificate and indicate and initial the date of activity completion on the original Safety Certificate. The original Safety Certificate should be retained by the Responsible Line Manager. Copies of the closed out Safety Certificate should be sent to the ES&H/EB Chairperson and the Head of the ES&H and Infrastructure Department.

3.4 SUPPORTING DOCUMENTATION

Information provided by line management to the ACC to support their review for issuance of a Safety Certificate should include, but not necessarily be limited to:

- A. A Safety Assessment Document (SAD) or Safety Analysis Report (SAR) prepared per ES&HD 5008, Section 11, Chapter 1.
- B. Preoperational test plans, and any necessary emergency response plans.
- C. Operating procedures relevant to the safe conduct of operations.
- D. Certification of Qualified Operators. When the circumstances of the activity warrant medical and/or technical certification of operating personnel, the specific certification requirements shall be submitted. This submission shall document the medical, training, and/or experience requirements.
- E. Other information deemed relevant by the ACC.

4.0 DEFINITIONS

ACC - Activity Certification Committee

ES&H/EB - Environment, Safety & Health Executive Board (PPPL document O-021)

MSW – Management Safety Walkthrough which involves participation by PPPL management (including those independent of the High Hazard operation) in a physical walkdown of the High Hazard facility.

Responsible Line Manager - For the purposes of this Manual chapter, the Responsible Line Manager is the responsible Department Head or his/her designee (i.e., Principal Investigator or Project Head).

SAD - Safety Assessment Document

SAR - Safety Analysis Report

5.0 REFERENCES

ES&H 5008, Section 11, Chapter 1 - Operations Hazards Criteria

ESH-014 – NEPA Review System

O-021 - ES&H Executive Board Charter

APPENDIX 1



SAFETY CERTIFICATE

LOCATION (Site, Area, Bldg., Room, etc.)

ACTIVITY (Brief Description)

CONDITIONS/LIMITATIONS:

RESPONSIBLE LINE MANAGER:

APPROVED BY (ES&H/EB Chairperson):

ACTIVITY COMPLETED (Dated and Signed by Responsible Line Manager)