

IMPLEMENTATION PLAN  
For  
EMS Validation Audit CAP Action P2-001-1

BACKGROUND

An audit was conducted from April 28 through April 30, 2009 to validate the Environmental Management System (EMS) implemented at the Thomas Jefferson National Accelerator Facility (JLab).

The audit assessed performance of the activities required by the EMS, and to validate that the EMS continues to be implemented/integrated as required by International Standards Organization (ISO) *Environmental Management System Requirements*, Executive Order 13423 *Strengthening Federal Environmental, Energy, and Transportation Management*, and the E.O. requirements that are flowed down to DOE Order 450.1A, *Environmental Protection Programs*, and DOE Order 430.2 B, *Departmental Energy, Renewable Energy and Transportation Management Implementation Plan*.

The results of the audit were documented in the report titled *Validation Audit Report of The Thomas Jefferson National Accelerator Facility Environmental Management System*. The report stated the following: “A Priority 2 finding was noted regarding overall implementation of the EMS. Based on interviews with staff and review of documents, a general reluctance to participate in the EMS was noted. Staff appeared competent and generally embraced environmental improvement. However, contrary to the contractual implementation requirements and the stated intent of Executive Order 13423, the EMS, while documented, is not routinely being used as the primary system for accomplishing and documenting the goals of the ISO 14001, Executive Order 13423, and DOE orders at JLab. For example, several environmental improvements are being implemented, but are not documented within the framework of the EMS **(P2-001)**.”

In response to the finding, Jefferson Science Associates (JSA) completed a causal analysis utilizing the “5 Whys” process. The general result of the causal analysis identified that confusion in program documentation (especially related to objectives and targets) was leading to hesitation on the part of JLab staff to utilize the EMS. A Corrective Action Plan (CAP) has been developed to correct this deficiency and prevent recurrence.

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**IMPLEMENTATION PLAN OBJECTIVES**

The approved CAP Action P2-001-1 requires that JSA develop this Implementation Plan (IP) in response to Finding P2-001. This IP outlines the process to be used to revise EMS program documents (and resulting processes) to clarify the management system and to tailor system activities to JLab. Documents will be revised to:

- (a) better reflect ISO 14001 terminology
- (b) result in a more appropriate significant aspect list
- (c) result in more efficient, lab-wide generation of objectives and targets
- (d) document the rationale when objectives and targets are not appropriate

**IMPLEMENTATION PLAN ACTIONS**

Attachment 1 is a project schedule that outlines the activities, schedule, and responsibilities for executing program improvements. The following is a discussion of the IP steps:

ID#	DESCRIPTION
4	Interviews will be conducted to review how other sites identify and manage their significant environmental aspects (and the results of this process). The identification and execution of objectives and targets will also be observed. Candidate sites include Brookhaven, Fermi, Argonne, SLAC, and NASA Langley.
7	Current JSA processes to identify environmental significant aspects, objectives, and targets will be diagrammed. Improvements as outlined above (IMPLEMENTATION PLAN OBJECTIVES) will be mapped-in if identified to produce revised processes.
8	EMS Committee will review and provide input on process changes. Reviews outside of the committee will be conducted if necessary.
9	Final process diagrams will be developed to guide document revision and other communications.
12	EMP-01, <i>Identifying Environmental Aspects and Determining Significance</i> , will be revised to reflect improvements. A main focus will be on a process that results in a significant aspect list more appropriate for a site with JLab's operations. Other document related weaknesses identified in Finding P3-001 will also be resolved if needed.
13	EMP-03, <i>Objectives, Targets, and Programs</i> , will be revised. A main focus will be developing a process that more effectively identifies relevant objectives and targets. Other document related weaknesses identified in Finding P3-001 will also be resolved if needed.
14	EMP-08, <i>Operational Control</i> , will be revised to reflect revised roles, responsibilities, and processes as developed above. Other document related weaknesses identified in Finding P3-001 will also be resolved if needed.
17	ES&H Manual Chapter 6710, <i>Environmental Protection</i> , will be revised to be consistent with the revised EMPs and the revised EMS Plan.
18	The EMS Plan will be revised to be consistent with the revised ES&H Manual Chapter 6710, EMP-01, 03, and 08.

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Following the revision of this specific documentation, remaining EMS documentation will be revised to reflect current program elements and resolve weaknesses identified in Finding P3-001. These actions, not directly associated with this IP, will be tracked in CATs as continual improvement efforts.