FESHM 1010.1: ES&H SELF-ASSESSMENT PROGRAM

Revision History

Author	Description of Change	Revision Date
T.J. Sarlina	- Replaced frESHTRK with iTrack - Updated document references to the Quality Assurance Manual	February 2014
Rafael Coll	- Modified the planning meeting date to make it flexible by establishing the planning timeframe as August/September. - Added a note to para. 5.2.1.2 assigning Directorate and Finance tripartite audits on even years due to the nature of their activities.	August 2012
Rafael Coll	-Added definition for "Assessment" and expanded other definitions. -Deleted references that were not mentioned in the body of the chapter. -Deleted definitions not found in the body of the chapter -Added a planning meeting for October and entered a requirement for ESHS to disseminate FSO audit goals and topics ahead of meeting. - Added flexibility to cross organizational lines with audit team lead. - Added flexibility in start/end dates. - Modified program to have each organization lead a tripartite with their assets (own or another D/S). - Each organization will have a tripartite performed on their organization with own or other assets. - Defined end date as the date when findings are entered in frESHTRK by the audited organization and a final report is transmitted to ESHS. -Reworked the flow diagram to clearly illustrate the tripartite process.	November 2011
Nancy Grossman	- Definitions and terms were standardized between each of the FESHM chapters and the CAPA procedure. Particularly Corrective Action, Preventive Action, Root Cause Analysis, ESHTRK became frESHTRK, Causal analysis was replaced with root cause analysis. - Added reference to (1004.1001 Fermilab Corrective & Preventive Action Procedure) and (1004.1002 Fermilab Root Cause Analysis Procedure) if they were not already present in FESHM chapters. - Under Program Description, modified the following: "If an assessment results in finding(s) of severity 1 or 2, a root cause analysis will be conducted. If findings of severity 3 or 4 or other opportunities for improvement are identified, the need for root cause analysis will be determined."	March 2011

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1.0 INTRODUCTION

ES&H Assessments are a means of collecting information about ES&H program performance. Reliable, timely information is important for top level managers to monitor the Laboratory ES&H performance against contractual requirements, raise ES&H awareness among employees, identify lessons learned that can be used to accelerate improvements, to feel confident that vulnerabilities are aggressively sought out and mitigated responsibly, to evaluate how well the Lab is fulfilling all regulatory requirements, to provide data for making risk based decisions on resource allocations and program direction, and to improve the overall laboratory ES&H program.

Fermilab is committed to implementing a strong ES&H Self-Assessment program (SAP) to achieve its goal of no injuries to employees or damage to equipment and the environment. Self-assessments are conducted consistent with the principles and functions of Integrated ES&H Management.

2.0 DEFINITIONS

- **Assessment:** A review, evaluation, inspection, test, check, surveillance, or audit to determine and document whether items, processes, systems, or services meet specified requirements and perform effectively.

- **Assessment Plan:** Description of the activities and arrangements for an assessment.

- **Assessment Scope:** Extent and boundaries of an assessment.

- **Assessor:** A person with the competence to conduct an assessment.

- **Audit Criteria:** Specific endpoints that delineate the desired state of the function to be audited. These often are contained in policies, procedures and requirements.

- **Audit Evidence:** Direct observations, reviews of records, results of interviews, and analyses of their inter- relationships.

- **Competence:** Demonstrated personal attributes and demonstrated ability to apply knowledge and skills. Competence may be obtained or improved through training, education or work experience.

- **Corrective Action:** Action to eliminate the cause of a detected nonconformity or other undesirable situation in order to prevent recurrence. It is a reactive, long-term solution to prevent the same problem from happening again by removing its source.
  Note: *There can be more than one cause for nonconformity. Corrective action is taken to prevent recurrence whereas preventive action is taken to prevent occurrence.*

- **Finding:** A violation of or non-conformance with a published standard. Published standards are FESHM chapters, the work smart standard set, and applicable DOE and executive orders.

- **Impartial/Independent:** Someone outside of the scope of the assessment and not directly or indirectly responsible for the work process.
  Note: *The word "independent" does not necessarily mean external to the organization.*

- **Management Assessment:** A comprehensive, systematic, and periodic review of an organization's activities and results compared to audit criteria.

- **Noteworthy Practice:** A work process that is shrouded in safe work practices, improves productivity and exceeds the spirit and intent of the applicable regulations and standards. Noteworthy practices may include best management practices.

- **Operational Awareness Review:** A review planned and conducted by DOE-FSO. Results of these reviews may be considered when developing Fermilab's and/or D/S/C self-assessment reports. Findings from these reviews are formally transmitted to the Laboratory along with requests for corrective and preventive actions that must be addressed.

- **Preventive Action:** Action to eliminate the cause(s) of a potential nonconformity or other potential negative outcome in order to prevent occurrence. It is a proactive action.
  Note: *There can be more than one cause for a potential nonconformity. Preventive action is taken to prevent occurrence whereas corrective action is taken to prevent recurrence.*

- **Recommendation:** An opportunity for improvement of a work process or practice that does not rise to the level of a finding. May also be referred to as a Best Management Practice.

- **Regulatory Agency Inspections:** Review by non-DOE agencies (i.e. EPA, IEPA, DOT, etc).

- **Root Cause:** The fundamental cause of a non-conformity or event which, when eliminated, would prevent recurrence of the non-conformity or event. . Root cause is the source or origin of an event also known as the system cause.

- **Tripartite ES&H Assessments:** A major component of Fermilab's ES&H Self-Assessment program. Tripartite assessments are jointly planned and performed by a D/S, the ESH Section, and DOE-FSO.

3.0 REFERENCES

QAM 12010	Lessons Learned Program and Procedures
QAM 12030	iTrack Procedures and Risk Assessment
QAM 12040	Corrective & Preventive Actions
QAM 12050	Root Cause Analysis
QAM 12070	Graded Approach Procedure

4.0 RESPONSIBILITIES

4.1 The Laboratory Director:

- Establishing expectations for the self-assessment program to meet the requirements in the references.
- Reviewing and accepting the annual self-assessment report and proposed corrective and preventive actions.
- Conducting self-assessment of key aspects of the ES&H program on a triennial basis.

4.2 D/S/C Head:

- Developing a written internal self-assessment program tailored to the hazards and risks associated with the work of the organization. Self-assessment programs will consist of documented inspections, management assessments and/or walkthroughs, and independent assessments.
- Providing an annual report to the Laboratory Director and ES&H Director with the results of the self-assessment program, including those actions identified in the Annual ES&H Plan.
- Identifying subjects for Tripartite Assessments based upon input from his/her organization, the ESHQ Section, and DOE-FSO.
- Providing personnel to participate in the Tripartite Assessment process who are impartial and independent. The D/S/C Head determines the level of experience, competence and training necessary to ensure the capability of the assigned assessors.
- Securing the participation of personnel from another D/S/C if an independent and impartial member of the assessed D/S/C cannot be found.
- Providing a coordinator to assist the Tripartite Assessment team.
  Note: *The D/S/C lead may be able to fulfill both roles if agreed by the audit team.*
- Entering findings into iTrack on audits performed on their organization. This requirement excludes third party audits from external sources and US DOE audits.
- Developing corrective or preventive actions in response to assessment findings and entering them into iTrack.
- Completing corrective actions in a timely manner.
- Conducting a root cause analysis for any assessment findings having a risk assignment of 1 or 2 to assure corrective actions will be effective.
- Developing lessons learned for any assessment findings having a risk assignment of 1 or 2 in order to share information across the Laboratory.

4.3 D/S/C Coordinator:

- Providing organizational support to the Tripartite Assessment team, including items such as arranging for interviews and securing requested documents.
- Serve as information conduit to the D/S/C Head regarding the planning and progress of the Tripartite Assessment.

4.4 Assessment Lead Assessor:

- Planning and executing the assessment process.
- Conducting opening and closing meetings with the D/S/C Head of the assessed organization.

- Drafting reports with the assistance of the assessing team. Provide a copy to the D/S/C Head for evaluation of factual accuracy. Incorporate comments and prepare the final report for submittal to D/S/C Head.
- Identifying any significant findings (those having a risk assignment of 1 or 2) and informing the D/S/C Head as soon as possible, so that immediate action can be taken.

4.5 Assessment Team Member:

- Participating in the planning and execution stages of the assessment.
- Providing input to the draft report that includes observations, recommendations, best management practices and findings.
- Participating in the opening and closing meetings with the D/S/C Head of the assessed organization.

4.6 The ES&H Director:

- Coordinating the Tripartite ES&H Assessment process and determining the level of independence and potential external support needed.
- Performing lab-wide assessment against lab-wide contractual ES&H performance measures, with a report to the Director.
- Performing an annual ISM effectiveness assessment, with a report to the Laboratory Director.
- Performing an annual assessment of effectiveness of self-assessment program, based upon input for D/S/Cs.
- Serving as liaison for reviews conducted by DOE or external agencies.
- Conducting special independent reviews or assessments as directed by the Director.
- Arbitrating when the independence and impartiality of a tripartite member is questioned.
- Entering findings into iTrack from third party external auditors and US DOE audits.

5.0 PROGRAM DESCRIPTION

The purpose of an assessment is to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable for achieving the organization's policy and objectives. It is a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled. The principles and function of Integrated ES&H Management should be used as a guide in conducting and reporting self-assessment activities.

Wherever possible, an assessment will be conducted by comparing performance to established objectives and criteria. Attaining full benefit from assessments for continuous improvement requires that, to the extent appropriate, findings are analyzed for root cause and trends, and action plans be prepared, and tracked until complete. If an assessment results in finding of severity 1 or 2 a root cause analysis will be conducted. If findings of severity 3 or 4 or other opportunities for improvement are identified, the need for root cause analysis will be determined.

Recording and tracking assessments and subsequent findings in the iTrack database are required. Lessons learned shall be identified and shared with the rest of the Laboratory as appropriate in order to facilitate improved performance.

5.1 Self-Assessments

Each D/S/C Head shall establish a written self-assessment program. A roll-up assessment report of the results of these activities (including identification of trends and corrective actions) is to be performed at the end of every fiscal year. A report is due to the ES&H Director, with a copy to the Laboratory Director by September 30th of each year. At a minimum, the following elements will be included in the self-assessment activities:

- OSHA-style inspections - All areas for which the D/S/C Head has responsibility must have documented inspections. The frequency of inspection should be tailored to the level of risk. "Office" areas should be inspected at least biannually, industrial and other technical areas at least quarterly. This could also include Building Manager inspections and radiological "Snoop Surveys". Completion of the inspection and any findings are to be documented in iTrack
- Management Assessments - Activities of the D/S/C Head, or designee, to satisfy himself/herself that the ES&H program has been implemented properly. Such activities may include management walkthroughs, internal team assessments, participation in an ES&H committee, review of appropriate documentation, or regular meetings with staff and workers. These can range from very informal to very formal. The results of those assessments that the D/S/C identifies as "formal" and any findings arising from those assessments are to be documented in iTrack.
- Tripartite ES&H Assessments as discussed below.
- Continuous self-assessment of performance against the contractual ES&H performance measures for which a D/S/C contribution can be identified. D/S/C Heads will monitor their performance against these measures and work with the ES&H Director to implement a program to support achieving the Laboratory goals. This is routinely accomplished through establishment of an Annual ES&H Plan.

The written assessment program shall be a controlled document. The written program shall contain a document number, revision number, and issue date.

5.2 Tripartite Assessments

Tripartite assessments involve the partnering of three organizations in evaluating an aspect of ES&H performance within a D/S/C. Those three organizations are the ESH&Q Section, DOE-FSO, and the D/S/C being evaluated. This approach reduces the need for redundant assessments, allows concentration of expertise, and provides opportunities for operational awareness. In addition, the collaborative style tends to minimize defensive behaviors and focuses the process on the ES&H topic at hand. At a minimum, each D/S/C will have a tripartite focused on their organization once/year with the exception of the Directorate and Finance who will have a tripartite performed on their organization once every two years. A diagram of the tripartite assessment process is shown in Section 5.9 below.

5.2.1 Tripartite Assessment Planning Meeting

5.2.1.1 The ESHQ Section will provide a listing of DOE-FSO topics being considered in their fiscal year planning of audits. This listing will be provided to the D/S/C contacts prior to the planning meeting to assist in aligning tripartite topics with DOE-FSO topics and goals for the year.

Note: Assumption of a global topic from DOE-FSO is encouraged to fulfill their requirements as well as Fermilab requirements. This will eliminate a separate audit from DOE-FSO.

5.2.1.2 The ESH Section will schedule and lead a planning meeting every year in the August/September timeframe made of a representative/s from DOE-FSO, D/S ES&H representative or SSO and ESHQ Section to discuss topics and assign participants. Each division and section representative must come prepared to present up to three focused topics with detailed assessment scope, audit criteria and start and end dates that will be agreed upon at this meeting.

***Note 1** : The Directorate, Finance and WDRS will perform a tripartite only once every two years on even years.*
***Note 2** : Start and end dates may be modified at a later time with suitable justification provided to the Director of Safety for approval and with consideration given to the schedules and responsibilities assigned to the participating DOE-FSO representative.*

5.2.1.3 The audited organization will offer the name of a member of the organization who will act as the lead assessor on a tripartite and the name of a coordinator. The lead is responsible for drafting an assessment plan, identifying audit evidence, directing the audit efforts and drafting the audit report. Two major considerations for inclusion are expertise in the topic and independence from the management system being assessed.

5.2.1.4 The coordinator will arrange for interviews, location and transport of the audit team as necessary and may be called upon to secure documentation. Since this individual is not evaluating their organization's performance as part of the assessment, they do not need to be impartial and independent.

5.2.1.5 Each D/S/C will have a tripartite performed on their organization lead by their own employee or by an employee from another organization; or, each D/S/C will have a tripartite performed and lead by their own employee on their own or another organization. Agreements must be reached for these cross-organization tripartite audits at the September meeting as explained in paragraph 5.2.1.2. Topics that may apply across organizational lines may be considered for these cross-organizational tripartite audits and are encouraged.
***Note:** If an organization leads and performs a tripartite on their own organization it will have met both conditions stipulated above.*

5.2.1.6 The ESHQ Section will report to the Directorate the results of the FY tripartite audits within the first month of the new fiscal year.

5.2.2 Tripartite audit reports

5.2.2.1 The tripartite audit completion date is considered to be the date of submittal to the ESH&Q Section of the final report and all iTrack entries made. The ESH&Q Section will post the final reports to DocDB.

5.2.2.2 The ESH&Q Section publishes and maintains the annual Lab-wide schedule.

The details of the assessment approach and interpretation of results are left to the judgment of the assessors. This includes the identification of findings, noteworthy practices as well as the need to hold meetings with D/S/C management at the beginning or end of the assessment. Reports are drafted by the team members and results entered into iTrack by the D/S/C leading the review.

5.3 Independent Assessments

An independent assessment may be conducted on an as-needed basis at the discretion of the Laboratory Director and/or Director of Safety and scheduled outside the Tripartite Assessment process. Supplemental assessments may be motivated by an incident, a perceived ES&H program weakness, or by a new ES&H requirement. The Laboratory Director or Director of Safety will appoint an assessment lead and team. The need for a root cause analysis will be identified.

5.4 Director's Triennial ES&H Assessment

Every three years, the Laboratory Director conducts an assessment whose purpose is to determine how well the Laboratory is meeting its goals to maintain a safe work place, protect the environment, strive for the highest quality work, and comply with Laboratory requirements. The ES&H Director will recommend a topic to the Laboratory Director. The Laboratory Director will appoint an assessment lead and team membership. The need for a formal root cause analysis will be identified.

5.5 External Assessments

On occasion, there may be assessments performed by agencies external to Fermilab. These include DOE-FSO Operational Awareness Reviews, DOE Assessments, regulatory agency inspections or registration/surveillance to international standards. The ESHQ Section will coordinate these assessments with the affected organizations, including factual accuracy review of the report, and entering of the assessment and assessment findings and recommendations into iTrack. Participation of a division/section in an external assessment cannot be used to fulfill the tripartite assessment responsibility under this chapter. A waiver of this requirement may be obtained in writing from the Director of Safety with suitable justification.

The inspections performed by regulatory agencies are generally done with minimal notice. The protocol for both the inspection and any corrective or preventive actions is specified by the inspecting agency. All Laboratory personnel are expected to cooperate fully with such inspections. Inspectors from any external regulatory agency should always be directed to begin their inspection by visiting DOE-FSO. All documentation generated in response to such an inspection should be routed through DOE-FSO.

5.6 Fiscal Year Summary Assessment

At the end of the fiscal year, the ESH&Q Section will perform an assessment of the Laboratory's Integrated ES&H Management System. The purpose of this assessment is to review the results of all the assessments and inspections conducted during the fiscal year, including QA assessments, tripartite audits and external reviews, and identified strengths, weaknesses, and trends within the Laboratory's ES&H programs. This assessment will be documented and the report will be submitted to the Laboratory Director. Recommendations for improvement will be identified.

This assessment will serve as the basis for the various required summary assessments, including the Annual Integrated Environment Safety & Health Manual (IESHM) Effective Assessment and assessment against contractual performance measures.

5.7 Assessor Competence

The organization that is leading the assessment will assure that the lead assessor is independent of the work being assessed and qualified through training and/or experience to lead the assessment. An individual shall not be assigned to lead an assessment until he/she has participated in at least two prior assessments as a team member.

5.8 Records

Assessment reports shall be entered into the ESH&Q document database with all associated records. These records shall be kept for a period of 3 years. Findings shall be entered into iTrack.

5.9 Tripartite Audit Process Flow Diagram