

ES&H SELF ASSESSMENT PROGRAM

INTRODUCTION

ES&H Assessments are a means of collecting information about the 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 amongst 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, and to provide data for making risk based decisions on resource allocations and program direction.

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.

DEFINITIONS

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.

Director's Triennial ES&H assessments - 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.

DOE Headquarters Reviews – Reviews conducted by DOE organizations at the headquarters level, i.e., Office of Science or Environment, Safety, and Health. The methods for conducting these reviews and the handling of any associated corrective actions that result from them are established by the sponsoring Office.

ESH Section Independent Assessments - Assessments conducted on an as-needed basis by the ESH Section that are scheduled outside the Tripartite Assessment process. Such supplemental assessments may be motivated by an incident, a perceived weakness in an ES&H program, or by a new ES&H requirement.

Finding- A violation of 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.*

Leading/Lagging Indicators – Anything that can be used to predict future trends. A leading indicator signals a future event and is normally tied to observation of behaviors intended to achieve a particular outcome. A lagging indicator follows an event and is used to confirm that a pattern is occurring or is about to occur.

Management Assessment - A comprehensive, systematic, and periodic review of an organisation's activities and results compared to audit criteria (see definition above).

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 Reviews – A review planned and conducted by DOE-FSO. Results of these reviews may be considered when developing Fermilab's and/or division/section self assessment reports. Findings from these reviews are formally transmitted to the Laboratory along with requests for corrective actions that must be addressed.

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 – Inspection by agencies external to DOE including EPA, IEPA, and USDOT.

Tripartite ES&H Assessments – a major component of Fermilab’s ES&H self assessment program. The Tripartite assessment is performed and planned jointly by a Division/Section, the ESH Section, and the DOE-FSO.

REFERENCES

- (a) ISO 14001 Environmental management systems- Requirements with guidance for use
- (b) BSI-OHSAS 18001 Occupational Health and Safety Management Systems Specifications
- (c) ISO 19011 Guidelines for quality and/or environmental management systems auditing.
- (d) DOE P 226.1 Department of Energy Oversight Policy
- (e) DOE O 226.1A Implementation of Department of Energy Oversight Policy

RESPONSIBILITIES

The Laboratory Director is responsible for

- 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 actions
- Conducting self assessment of key aspects of the ES&H program on a triennial basis

Division/Section Head is responsible for

- 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.

- Provide a report to the Laboratory Director or and ES&H Director on an annual basis of 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 ESH Section, and DOE-FSO.
- Providing personnel to participate in the Tripartite Assessment process who are impartial and independent. The D/S Head determines the level of experience, competence and training necessary to ensure the capability of the assessor/s assigned.
- Upon request of the Tripartite Assessment team, securing the participation of personnel from another D/S if an independent and impartial member of the assessed D/S cannot be found.
- Providing a coordinator to assist the Tripartite Assessment team, but who is not part of the assessment process.
- Developing corrective actions in response to assessment findings and entering them into ESHTRK.
- Completing corrective actions in a timely manner.
- Conducting a formal 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 (FESHM 3010) for any assessment findings having a risk assignment of 1 or 2 in order to share information across the Laboratory.

Division/Section 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 Head regarding the planning and progress of the Tripartite Assessment.

Assessment Lead Assessor

- Plan and execute the assessment process.
- Conduct and opening and closing meeting with the D/S Head of the assessed organization.
- Draft reports with the assistance of the assessing team. Provide copy to D/S Head for factual accuracy. Incorporates comments and prepares final report for submittal to D/S Head.
- Identify any significant findings (those having a risk assignment of 1 or 2 per 1040.2), as soon as possible to the D/S Head, so that immediate action can be taken.

Assessment Team Member

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

The ES&H Director is responsible for

- Coordinating the Tripartite ES&H Assessment process, including meeting with individual D/S to schedule the assessment. Determination of level of independence and potential external support needed will be made at that meeting.
- Performing lab-wide assessment against lab-wide contractual ES&H performance measures, with a report to the Director.
- Performing annual ISM effectiveness assessment, with a report to the Laboratory Director.
- Performing annual assessment of effectiveness of self-assessment program, based upon input for D/S.
- 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.

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 (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 on 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. Recording and tracking assessments and any subsequent findings in the ESHTRK database is required. Lessons learned shall be identified and shared with the rest of the Laboratory as appropriate in order to spur improved performance.

Self-Assessments

Each Division/Section 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 Laboratory Director, with a copy to the ES&H Director by December 1st 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 Division/Section 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 (see FESHM 5120), and radiological "Snoop Surveys". Completion of the inspection and any findings are to be documented in ESHTRK
- Management Assessments - Activities of the Division/Section 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 identifies as "formal" and any findings arising from those assessments are to be documented in ESHTRK.
- Tripartite ES&H Assessments as discussed below.
- Continuous self-assessment of performance against the contract ES&H performance measures to which the division/section contribution can be identified. Division/Section Heads will monitor their performance against contract ES&H performance 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 assessment plan shall be a controlled document. The plan shall contain a document number, revision number, and issue date.

Tripartite Assessments

A Tripartite assessment is an audit of an organizational unit that brings together three groups- the DOE-FSO, ES&H Section and division/section personnel. This system of assessment or oversight is an efficient use of manpower and time. The assessment team should be composed of people that are outside of the scope of the assessment and not directly or indirectly responsible for the work process.

Questions regarding the impartiality and independence of any assessment team member will be brought to the attention of the ES&H Director for final resolution.

Personnel from a separate division or section may be asked by the assessed D/S Head to join the team as a lead or a participant. This option supports the intent of tripartite and guarantees independence and impartiality.

a. Tripartite Assessment Scheduling

Meetings for tripartite assessment are scheduled and conducted by the ESH Section. Assessment topics are considered from the list below. In considering the priority of each topic, a Risk Assessment Code (FESHM 1040.3) is assigned. A report is generated by the ESH Section identifying topics discussed and final assessment schedule. The tripartite assessment topics require a reference to the specific chapter of the FESHM, the work smart standard set, DOE Orders or executive orders that the D/S is being assessed against and a clear goal as to the expectations after the assessment is completed. Tripartite assessment titles should be specific to convey the assessment scope and goal of the assessment and not written using generic and broad terminology.

The topics to be considered for assessment will include:

- Status of ES&H matters that planners wish to better understand. This may be motivated by a lack of knowledge, or by evidence that the situation may be poor or exemplary.
- ES&H assessments imposed by organizations external to Fermilab. It is not unusual for DOE to impose ad-hoc ES&H assessment requirements upon its contractors. Tripartite assessments are one approach for addressing such requests.
- Compliance status with respect to applicable ES&H standards. This may be done as a periodic compliance requirement, as “status

check” (see above), or as part of preparation for an upcoming assessment by an organization external to Fermilab. Fermilab’s Work Smart Set of Standards shall be reviewed for potential assessment topics.

As part of the assessment scheduling meeting, the lead organization shall be identified. The need for impartiality of the team shall be determined.

b. Responsibilities of the lead organization

The lead organization representative will plan the assessment and create a plan to illustrate the approach to be used to meet the goals of the assessment that includes document reviews, interviews, and visits to the Laboratory locations under the scope of the assessment. The assessment team will conduct an opening conference meeting to inform the D/S Head of the scope and methodology. A closing meeting will be held to present the final report before posting as a completed assessment.

The lead will produce a draft and a final report using the template document found in the [ES&H web page](#).

c. Responsibilities of the participants

Each participant will contribute ideas and other approaches during the tripartite planning meeting. After the planning is completed, it is expected that the participants keep their management informed of progress in the assessment and any noteworthy practices, recommendations and findings resulting from the assessment.

d. Reports

A report shall be written by the assessment team. It should contain an introduction explaining the drivers for the tripartite, the assessment scope and the goals that must be achieved. A separate paragraph should explain the method used to achieve the goal (assessment plan). It should be followed with a discussion of all aspects of the assessment to clearly convey to the reader how the assessment was carried out.

Following the discussion, paragraphs should follow with Noteworthy Practices, Recommendations and then Findings.

A draft report shall be distributed to the assessment team and the D/S Head for factual accuracy review. After consideration of comments, a final

report shall be generated and sent to the affected D/S Head. The report shall be sent to ESH-SEP to assure report and findings and recommendations get entered into ESHTRK.

Other Assessments

At the discretion of the ES&H Director, other assessments may be conducted on an as-needed basis and are scheduled outside the Tripartite Assessment process. Such supplemental assessments may be motivated by an incident, a perceived weakness in an ES&H program, or by a new ES&H requirement. The ES&H Director will appoint an assessment lead and team membership. The conduct of the assessment will follow that described in sections b. through d. of the Tripartite Assessment Section of this Chapter.

Independent Assessments

At the discretion of the Laboratory Director and/or ES&H Director, an independent assessment may be conducted on an as-needed basis and are scheduled outside the Tripartite Assessment process. Such supplemental assessments may be motivated by an incident, a perceived weakness in an ES&H program, or by a new ES&H requirement. The Laboratory Director or ES&H Director will appoint an assessment lead and team membership. The need for a formal root cause analysis will be identified. The conduct of the assessment will follow that described in sections b. through d. of the Tripartite Assessment Section of this Chapter.

Director's Triennial ES&H Assessment

Every three years, the Laboratory Director will conduct 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. The conduct of the assessment will follow that described in sections b. through d. of the Tripartite Assessment Section of this Chapter.

External Assessments

Upon occasion, there may be assessments performed by agencies external to Fermilab. These include DOE-FSO Operational Awareness Reviews, DOE Assessments, and regulatory agency inspections. The ESH Section will coordinate these assessments with the affected organizations, including factual

accuracy review of report, and entering of assessment and findings and recommendations into ESHTRK.

The inspections performed by regulatory agencies entities are generally done with minimal notice and the protocol for both the inspection and any corrective 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.

Fiscal Year Summary Assessment

At the end of the fiscal year, the ESH 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 that year, including external reviews, and identify 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 for acceptance. Recommendations for improvement will be identified.

This assessment will serve as the basis for the various required summary assessments, including the Annual IES&HM Effective Assessment and assessment against contractual performance measures.

Assessor Competence

The organization that is leading the assessment will assure that the lead assessor is 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 2 prior assessments as a team member.

Records

Assessment reports shall be entered into ESHTRK. Any other formal records associated with the activities of this chapter shall be kept in a central location for a period of 3 years.