

Effective Safety Audit & Report writing Procedure

Shamim Rayani

Email id: Shamimrayani@voltas.com

Abstract

Safety Audit is important parameter to ensure effectiveness of organization safety performance. Safety Audit helps to identify occupational health Safety related gaps and look opportunities to remove such gaps or deficiencies from organization to improve safety performance and reduce risk up to tolerable level. To improve organizational Safety performance, need to conduct effective safety Audit time to time, prepare Safety Audit report and share with organisation for needful action. Report should be prepare in effective ways as per based of observation to categories to risk, needful action level priority and positive observation. Organization will get less or no chance to improve Safety performance due to ineffective Safety audit, ineffective Report & Poor interest of Auditee management in field of safety. For Current Scenario, this is need of every organization to conduct effective safety audit for their organization to measure safety performance and improvements. Safety report is prepared by auditor on based on their finding, observation and examination. This study is carried out to ensure effectiveness of safety audit and report writing. This paper is very helpful to identify suitable method to conduct safety audit in any organization and effective safety audit report writing procedure.

Objective

- To Measure effectiveness of organization safety performance and look opportunities for improvements
- To Plan and Conduct Effective Safety Audit in any organisation
- To know effective report writing method and writing report in such manner to prioritize to risk, needful action & Cost factor consideration during writing recommendation
- To prevent Accident or organisational harm
- Identify Non-conformance and ensuring their effective compliance
- To fulfill statutory requirements as per respective state or country rules & Codes

Key Word: Effective Safety Audit report writing, Method to conduct effective Safety Audit, Factor that can results ineffective safety audit, Content of Safety Audit, Safety Audit objective

1. Introduction

In industries several Techniques has been used to identify hazard and control work place risk. Management always work to implement effective Safety management system in industries and this is only possible whenever all applicable (for this organization) safety management related elements will be identified and existing gaps will be known. Job Safety Analysis, Safety inspection, HAZOP study, Hazard identification & Risk assessment, Preliminary hazard analysis like several techniques used to identify potential sources of harm or situation of organization to eliminate or control potential associated risk from such sources. Similarly, Safety Audit is a technique that used to identify potential associated risk with any organization and ensuring their effective control measure to reduce or control risk for preventing organizational harm. Safety Audit is detail examination of organization safety performance and such examinations help to seek gaps where are possibility of improvements. Safety audit help to identify all potential sources of harm and mitigating to such sources of harm. Safety Audit can be conducted through internal organization people or outside people of other company (third party) or government officer.

Safety Audit report is a type of documents that includes Auditor finding and finding may be Non-conformance (N.C), conformance and recommendation for compliance of found non-conformance. Non-conformance means safety related deficiency that not fulfill to safety standard, rules and regulation. After Audit, Auditor prepare report and share with management representative to include organization safety performance to know existing safety performance is acceptable as per company policy and respective state or country legislation or need any improvements. Non-conformance is categorized in different ways on based of their level of risk to ensure safety control measure as per priority basis or level. Priority level may be low, medium and high and management should focus first on high priority Non-conformance and then median and lastly to low priority items. In few safety audit report, Auditor not prioritize to their observed non-conformance or recommendation to additional improvements and this can results harm to organization due to organization take needful action on low priority risk level items earlier instead of high and medium priority risk level observed Non-conformance.

2. Procedure to conduct effective Safety Audit

Effective Safety Audit help to identify the necessary requirements in organization and measure to available existing system and based on this auditor comparison their finding with actual requirements as per applicable safety audit elements and finally prepare report with recommendation for needful action whenever require. Below Few important parameters to conduct effective Safety Audit

Plan for Audit: Planning is important part of safety Audit. Effective Planning will help to identify require resources and decide the procedure to conduct effective safety Audit. This will also help to identify safety audit element that are applicable for respective organization.

Select to Team and define clear role & responsibility: Select Team to conduct Audit is also major parameters that ensure effectiveness of safety audit. So, Safety auditor should be competent (qualified, experienced & certified), Knowledgeable (Knowledge of Process, Knowledge of Legislation & Codes) and they should have leadership quality. One auditor will be act as lead Auditor and rest member will be Team member (Auditor). Define clear Role and responsibility of safety audit Team member.

Identify to Safety Audit element: Identify elements of Safety Audit that are applicable for organization. It will help to Check and verify the system effectively and to identify non-conformance. Audit element will help to measure organization safety performance to compare with actual requirements with present existing system of organization and look possibility of improvements.

Safety Policy, Safety Budget, safety observation and their compliance, Safety Training record, Tools Tackle record, Safety committee meeting and compliance of minutes of meeting (MOM), Safety Campaign records, Employees safety awareness activity, Accident Investigation & reporting, Personnel Protective equipments (PPE's) are few example of safety audit element and during safety audit, such elements are examined and verified by auditor to check its compliance status.

Conduct opening meeting: Before starting safety audit, need to conduct opening meeting with management representative and respective organizational personnel. In opening meeting Auditor

brief introduce to team, procedure and objective to conduct Safety Audit. Management representative also introduce to self and organization.

Conduct Audit: Whenever opening meeting close, Auditor start to audit as per plan schedule. During audit, Auditor Physically visit to site and respective department including Occupational health center to check and examine to existing system. Auditor will make a note of their observation. Whenever Audit finish, All member will seat together and discuss about finding and observation to finalize report.

Closing Meeting: Conduct closing meeting and Share to observed conformance, non-conformance and how to improve organization safety performance summary with organization representative.

Prepare Report: To ensure effectiveness of Safety Audit report, Auditor should includes their finding, observation, Recommendation and good practices in a positive ways to compare with respective state or country rules, regulation and codes. Include introduction, Executive summary, Objective, Organisation Profile, Observation, Recommendation, Conclusion and other applicable items in effective manner in Report. Auditor should share report to Auditee for needful action and Auditee will take follow up regularly with respective Department or section head to close to finding and improve organization safety performance.

In few Audit, Auditor prepare report before closing meeting and few audit, Auditor prepare report latter because to prepare effective report, need times and report preparing instantly can result any error.

3. How to prepare Effective report

For Effective Safety Audit Report, need to write actual finding with evidences and supporting documents. Identify to Actual gaps that resulted to human error and created Potential sources of harm or situation. Without finding to actual root cause of N.C, Organisation can not eliminate to human error and potential sources of harm completely and this may results repetition to generate such non-conformance in future. Report should be written in such manners that easily understand by everyone. In Report need to include positive observation i.e good practices with Non-Conformance (N.C). All Non-conformance must be link with respective state or country Safety

Rules, regulation and codes. Non-Conformance related risk must be categorise in low, medium, high risk and based on this, need to write recommendation with priority basis such as low, Medium and high priority. Always use positive words during report writing. For Report Writing, See the content Table 1.

Table 1, Content of Safety Audit Report

Cover Letter
Contents
Acknowledgement
Executive Summary
1. Introduction 1.1 Organization Profile Summary including Achievements (awards, Appreciation letter, Certification etc) 1.2 Audit Objective 1.3 Audit Scope 1.4 Audit Team 1.5 Process Layout (if applicable)
2. Methodology (method and steps which have been used to conduct safety Audit) Write down Method that has been applied to conduct safety audit
3. Findings (As per Applicable Elements) 4.1 Finding as per Applicable Elements 4.1.1 Positive observation 4.1.2 Non-conformance 4.2 Findings as per checklist 4.3 Finding as per Previous 3 rd Party observation or internal audit and inspection or Notice and their compliance status 4.4 Safety Statistics for 3-5-year comparison (if available)
4. Categories to Risk on base of Priority
5. Closing meeting
6. Recommendation (As per Findings to link with respective standards) & compliance report Write down recommendation of audit observation on based on priority.
7. Conclusion: Write down conclusion of Safety audit.
8. Annexure: In Annexure, Add to following below items 8.1 Chart 8.2 Results 8.3 Drawing 8.4 Achievement (award, certification etc.)

8.5 Other Supporting compliance documents (such as Air quality monitoring report, Water test report, Training Report etc.) and other documents if applicable

9. References

In this section, Write down references

10. Abbreviation

In this section, Write down abbreviation

This content of safety audit report is author idea but no limitation. On based on this, Safety Audit report can be prepared. Report can be prepared by different ways and this depends on Auditor and requirements of respective organization.

4. Factor that results to cause of ineffective Safety Audit Report

Poor Planning: Planning is major factors that can effects to safety audit. Poor planning and inadequate resources can results ineffective Safety Audit and report.

Incompetency of Safety Audit Team: Team member selection always effects to Safety Audit. Incompetence Audit team will not be able to find actual gaps in existing system and this can results ineffective Safety audit report. So, always select to Skilled, experience and certified personnel that are able to conduct effective Safety audit and report writing. Lead Auditor should have ability to handle to team in right manner to fulfill audit objective.

Poor interest of management Representative including organization top management personnel: Management representative plays vital role to support to Auditor during safety audit and effective report writing. Management representative maintain suitable co-ordination with their team, auditor and share correct information to find to actual gaps. Some Time organization hide information and avoid to share correct information with auditor, so auditor not able to find gaps and organization miss to find non-conformance and chances of improvements. Some time Management conduct Safety Audit just for report, management submit such report to their stake holder and this factor also may cause of ineffective safety audit report.

Cost Factor Consideration: During writing recommendation, many auditor not consider cost factor and give any recommendation that management unable to fulfill comply due to huge expenses on recommendation and cost factor can also results ineffective safety audit. So Auditor should check such effective alternate solutions, which have less cost and easily implemented by

management. Some time organisation hire to less experience Auditor to save money and this may be also cause of ineffective safety Audit and report.

Risk classification: Classify Risk on based on their nature to link with respective state, country rules, regulations and codes are major parameter to ensure quality report. So during writing Audit report, Auditor not classify to non-conformance on based on their nature and action priority level, So management not taken action on based of priority and latter such factor can results accident and effect to organization safety performance. Therefore not mentioning priority for action to comply N.C can also effect to safety audit report. Therefore, report should be prepared by auditor to mention risk level priority to aware to management for taking needful action accordingly.

Poor Follow up: Poor Follow up to ensure compliance of all observed non-conformance during safety audit can results fail to achieve safety Audit goal and deviate to organization objective.

Apart from this safety related statistics of few year comparison data missing in Audit report, Missing Positive observation such as compliance, good practices like factor also effect to safety audit report. Poor enforcement of Govt. safety rules is also factor that effects to safety audit. Therefore there may be several reasons of ineffective Safety Audit and report writing.

5. Study & Results

A study conducted to collect 48 Safety Audit report (external) of industries from different sources including construction industries to identify human error and other Non-conformance including availability of potential sources of harm or situation that were found and included in safety audit report. Total 23 Safety Audit report reviewed for year 2018 and 25 Safety Audit Report reviewed for year 2019. In year 2018, Total finding (N.C) included in Report were 307 including 89 were related to human error. In year 2019, Total finding (N.C) included in report were 497 including 156 were related to human error. Causes of human errors are categorized into three parts, error due to resources un-availability, Less experience of working personnel and Poor interest of management in ineffective enforcement of safety rules. Poor interest of management are identified to view report, safe procedure related documents of organization,

allocated safety budget and supporting documents of enforcement of Safety rules on based of safety audit report.

In this study, found that Auditor have mentioned to their finding and recommendation but they have not analyses and included to root cause of such N.C in 28% Audit report. This was major parameter to measure effective organization safety performance and seeking actual gaps for improvements. In 17% Safety Audit report, Finding and recommendation were not link with respective state or country rules, codes and standards. In few safety Audit report, found that finding were risk not categories and their recommendation were written simply instead of writing on based on risk level priority. On based on study, author classify to Audit report in three parts, Very effective Safety Audit Report, Effective Safety Audit report & Partially effective safety Audit Report and found that 27% Safety Audit was very effective, 51% were effective and 22% were report were partly effective.

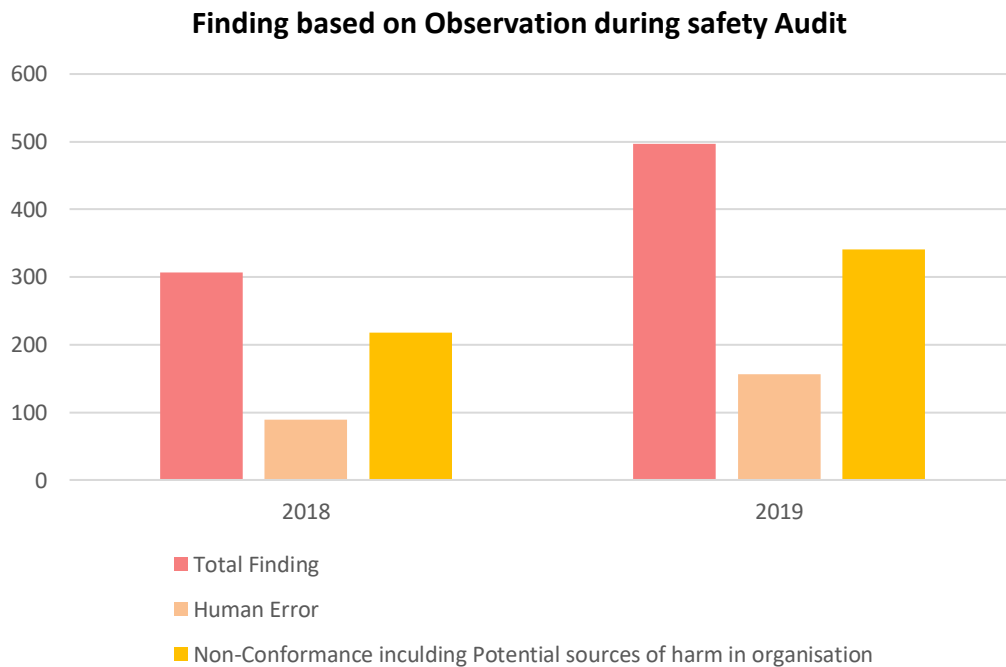


Fig.1, Findings (N.C) as per safety Audit Report study, 2018 & 2019

Human Error causes

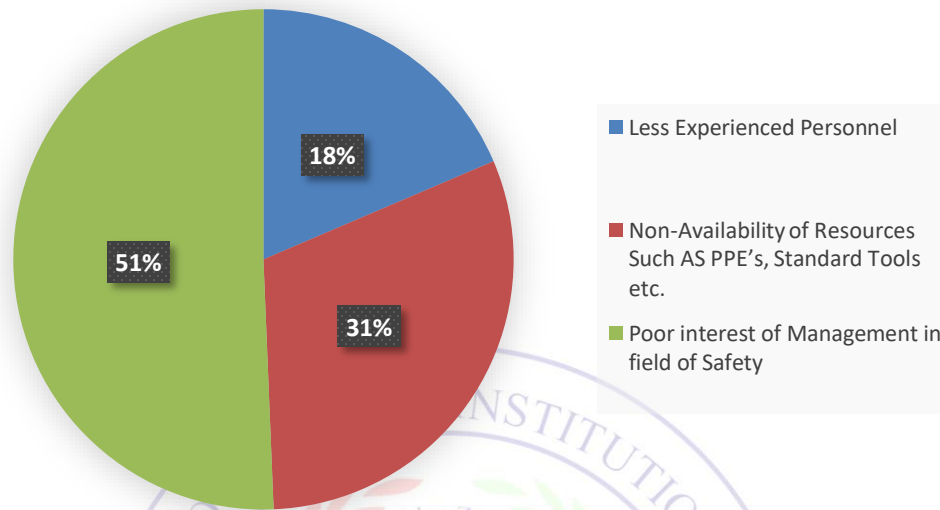


Fig., 2, Human Error causes on based on Safety Audit Report study, 2019

Safety audit report effectiveness

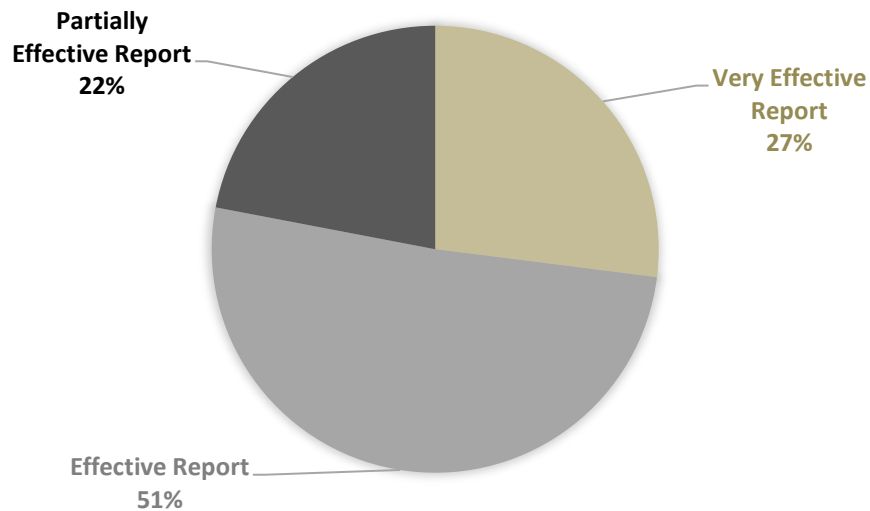


Fig. 3, Safety Audit Report effectiveness based on Study

6. Conclusion

In this Study, this has been found that major Numbers of Safety audit report were prepared in effective manners in which 27% Safety Reports were very effective, 51 % Reports were effective and 22% Safety Reports were partially effective. To prepare conduct and prepare effective safety audit report, there is need to consider many parameters such as Effective planning for audit, Selection of skill, Experience and certified Auditor and Auditee interest related to safety. In several reports found that Auditor missed to find actual gaps of human error and other Non-conformance and such condition may lead to cause of repeat occurrences in future and effect to organization safety performance. In safety audit report, if Auditor not clearly mention to add reference of respective state Safety rules, code and standard for compliance of their finding (N.C), then management may be less or not serious to implement to such recommendation. Rules show mandatory compliance like factor and this create positive thoughts among management employees to take needful action to avoid govt. rules breaches. In Few Reports, only highlighted to non-conformance and not included to positive observation and such factors create negative thought among management employees. So Auditor should identify and include positive observation with non-conformance in report. Auditor should use positive word to make sentence of observation and recommendation.

For effective safety audit, Need to identify applicable Safety Audit elements and based on these safety audit elements, create safety audit checklist and during safety audit, verify to all existing control measure, implemented safety management system in organization and seek to missing compliance of safety audit elements including possibility of improvement in existing system. Write report in simple and effective ways to understand by organization easily and implement to recommendation on based of priority as per respective state or country rules, codes & standards. In Safety Audit report also add to supporting documents such as Safety statistics, graph, chart, Air quality monitoring report with Annexure to increase report effectiveness.

Reference:

- Dr. P.Sivaprakash, Dr.R.K.Elangovan, L.M.Karthikeyan , Sebastian joseph, 'A Study on Safety Audit System in Indian Engineering Industries', Life Science Journal 2013;10(9s)

- IS 14489, Occupational Health and Safety Audit — Code of Practice (First Revision)
- IS 18001:2007 Occupational Health and Safety Management System – Requirements with guidance for use
- John Smallwood, ‘Optimising the elements of a construction health and safety(H&S) program and audit system’, ELSEVIER- Creative Construction Conference- 2015
- D.Sailendra, Awadhesh Shah, ‘Study of Internal and External Safety Audit by Gap Analysis approach in Indian Construction Organisations’ , ‘International Journal of Engineering Trends and Applications (IJETA)’ , – Volume 2 Issue 3, May-June 2015
- Alexia Nalewaik, ‘Construction Audit- an essential audit control function’, ‘International Journal of Engineering Trends and Applications (IJETA)’ – Volume 4 Issue 3, May-June 2014
- Schulte, P., Wagner, G., Ostry, A., et al. (2007). Work, obesity and occupational safety and health. American Journal of Public Health, 97, 428-436.
- The Building & Other Construction Workers (Regulation of Employment and Conditions of Services) Act, 1996
- ISEI Handbook
- Safety Culture in Organization: A Review Shamim Rayani, International Journal of Institution of Safety Engineers (India), Volume 3, Issue 1, Jan-March 20, www.ijournal.iseindia.in

