

S-CHASE EVALUATION

Module Information

Full name

Housing Authority Safety Auditing System (HASAS) Version 1.2

Description

This safety auditing system is used to support the Housing Authority Safety Auditing Scheme for Housing Authority construction projects in Hong Kong

Module

Housing Authority Safety Auditing System (HASAS) Version 1.2

Section 1 Safety Policy

Sub-section 1.1 Declaration of Intent

Question 1.1.1

Does the written safety policy commit the organisation to high standards of occupational safety and health for all its employees and for others who might come into contact with its activities?

Guidance

The contractor should ensure that policy includes a commitment to achieve a high level of occupational safety and health performance. (Code of Practice on Safety management Section 5.1.1)

Question 1.1.2

Does the policy clearly state that decisions about other priorities (e.g. production or finance) should take occupational safety and health requirements into proper consideration?

Guidance

The contractor should ensure that policy includes a commitment to recognize safety and health at work as an integral part of its business performance. (Code of Practice on Safety Management Section 5.1.1)

Question 1.1.3

Does the policy commit the organisation to full compliance with all relevant occupational safety and health legislation?

Guidance

The contractor should ensure that policy includes a commitment to achieve a high level of occupational safety and health performance, in compliance with legal requirements as the minimum. (Code of Practice on Safety Management Section 5.1.1)

Question 1.1.4

Does the policy set targets for health and safety performance, including a commitment to progressive improvement?

Guidance

An effective safety policy sets a clear direction for the organization to follow. It contributes to all aspects of business performance as part of a demonstrable commitment to continuous improvement. (Code of Practice on Safety Management Section 5.1.1)

Audit Criteria

Safety Policy

The policy statement should set targets for safety performance on site and the contractor should also commit to have progressive improvement in safety performance.

The concept of progressive improvement is the achievement of better performance by continuous evaluation of the performance of the occupational safety and health management system against its policies, objectives and targets.

1. If the commitment to progressive improvement is not stated in the policy, the answer should be "No".
2. The target should be clear, specific, realistic, achievable and measurable. For example a target set to have accident rate in a certain number of accident per thousand workers in year 2000 and the contractor has committed to improve progressively. The auditee can then compare the actual rate with the target by the end of the year. The target is subject to review annually and the auditee should take necessary measures if the comparison shows there is room for improvement.
3. A target merely states to achieve zero accident will not be accepted and the answer should be "No".

Question 1.1.5

Does the policy commit to provide adequate and appropriate resources to implement the policy?

Guidance

The contractor should ensure that policy includes a commitment to provide adequate and appropriate resources to implement the policy. (Code of Practice on Safety Management Section 5.1.1)

Safety Policy

Sub-section 1.2 Communication and Implementation of the Policy

Question 1.2.1

Is the policy signed by the chief executive/managing/project director?

Guidance

The organisation's most senior management should define, document and endorse its safety policy. (Code of Practice on Safety Management Section 5.1.1)

Question 1.2.2

Does the policy place the management of occupational safety and health as one of the prime responsibilities of line management, from the most senior executive to the first-line supervisory level?

Guidance

The contractor should ensure that policy includes a commitment to make the management of safety and health one of the prime responsibilities of managers at all levels, from the most senior executives down to the front line supervisory staff. (Code of Practice on Safety Management Section 5.1.1)

Question 1.2.3

Does the policy identify key senior personnel for overall co-ordination and implementation of the policy?

Guidance

It is important to realize that the Safety Management Regulation places the responsibility for safety and health on the proprietor or contractor. Many of the duties arising from that responsibility may however be delegated to managers and supervisors. The written policy statement should show clearly how these duties are allocated. (Code of Practice on Safety Management Section 5.1.2)

Question 1.2.4

Is the policy include the commitment to ensure its understanding, implementation and maintenance at all levels?

Guidance

The contractor should ensure that policy includes a commitment to ensure its understanding, implementation and maintenance at all levels in the organisation. (Code of Practice on Safety Management Section 5.1.1)

Safety Policy

Question 1.2.5

Is the policy include the commitment to ensure that employees at all levels have received appropriate training and are competent to carry out their duties and responsibilities?

Guidance

The contractor should ensure that policy includes a commitment to ensure that employees at all levels have received appropriate training and are competent to carry out their duties and responsibilities. (Code of Practice on Safety Management Section 5.1.1)

Safety Policy

Sub-section 1.3 Reviewing of the Policy

Question 1.3.1

Does the policy include the commitment to ensure periodic review of the policy at least annually?

Question 1.3.2

Does the policy include the commitment to ensure periodic review of the organisation's safety management system?

Guidance An effective safety management system should have a self-regulating and self-improving mechanism built in. This is effected by reviewing the safety policy from time to time by way of (a) performance measurement and (b) safety audits or safety reviews. (Code of Practice on Safety Management Section 5.1.2)

Question 1.3.3

Does the policy include the commitment to its compliance?

Guidance

The contractor shall bring the policy statement and any revision of it to the notice of all the workers. The contractor shall cause the safety policy to be reviewed as soon as is practicable after the contractor alters the policy statement. Such alterations include changes to the core elements. A review may also be prompted by changes of particulars due to internal or external factors such as changes in technology, legislation or standards. (Code of Practice on Safety Management Section 5.1.2)

Safety Organization

Section 2 Safety Organization

Sub-section 2.1 Organisation Safety Structure

Question 2.1.1

Is there an organisation safety chart showing the names and positions with responsibility/communication lines for safety management?

Guidance

Whilst the overall responsibility for safety and health rests with the top management, all individuals at every level will have to accept certain amount of responsibility for carrying out the policy. Organisation should lay down direct and vertical relationships between different levels within the company and provide an effective and efficient organisational structure for ensuring the achievement of safety and health objectives. (Code of Practice on Safety Management Section 5.2.1)

Question 2.1.2

Does the organisation chart adequately include the appropriate construction teams/subcontractors?

Guidance

The contractor should ensure that every person in the line organization (include construction teams/subcontractors) has an important safety and health role and that the person should be held accountable for safety and health matters. (Code of Practice on Safety Management Section 5.2.1)

Audit Criteria

The organisation chart should include the management in-charge of safety and health, construction teams such as plant & engineering departments etc. and subcontractors. It is subjected to review and updated in accordance with the construction progress.

Question 2.1.3

Is a director accountable for leading occupational safety and health and is clearly shown on the organisation safety chart?

Guidance

A relevant person at the top management level should be designated to take up the final responsibility and accountability. (Code of Practice on Safety Management Section 5.2.3)

Question 2.1.4

Have the senior management's (including project director, project manager and the site agent) occupational safety and health responsibilities clearly been defined?

Guidance

Senior management

- To provide a safe and healthy working environment.
 - To provide adequate resources (including financial resources), information and training.
 - To provide a system of monitoring compliance with the safety policy.
 - To ensure that relevant safety and health laws are complied with.
 - To maintain contact with in-house safety advisors or safety officers, outside safety consultants, government departments, the Occupational Safety and Health Council and other professional bodies regarding safety and health matters.
 - To provide and maintain a system responding to safety initiatives from safety advisors/safety officers/ persons in charge of the safety office, safety supervisors or workers, and to the safety advice from government officers.
- ("safety supervisor" means a person employed as a safety supervisor in an industrial

undertaking under the Factories and Industrial Undertakings (Safety Officers and Safety Supervisors) Regulations (Cap.59, sub, leg.)

- To provide an effective, efficient and on-going safety and health promotion programme.
- To establish a system to identify, assess and eliminate hazards and control risks at work.
- To ensure that workplace safety rules, procedures and methods are developed, maintained and revised. (Code of Practice on Safety Management Section 5.2.4)

Question 2.1.5

Have the site supervisory staff (including site engineer, foreman, and supervisor) and workers' occupational safety and health responsibilities clearly been defined?

Guidance

Site supervisory staff

- To assist the proprietor or contractor in the implementation of the safety policy, measures and procedures.
- To assist the proprietor or contractor in the identification of hazards, and the evaluation and control of risks.
- To supervise workers to ensure safe and correct working procedures.
- To ensure effective consultation on safety and health matters.
- To investigate work accidents and incidents.
- To participate in induction and on-going safety training programmes for workers.
- To respond to safety initiatives of safety advisors/safety officers/ persons in charge of the safety office, safety supervisors or workers and to the safety advice from government officers.
- To communicate effectively the hazards to workers and keep abreast of current safety and health legislation and information.
- To submit periodically to senior management statistics and reports concerning safety and health performance, unless the task is taken up by the safety office. (Code of Practice on Safety Management Section 5.2.4)

Question 2.1.6

Have the occupational safety and health responsibilities of sub-contractors clearly been defined?

Question 2.1.7

Have the occupational safety and health personnel's responsibilities including safety officer, safety supervisor and safety representative been clearly defined?

Guidance

Safety advisor, safety officer or person in charge of the safety office

An in-house safety advisor, safety officer or person in charge of the safety office should

have the responsibility to assist the top management and senior management in promoting the safety and health of workers in the relevant industrial undertaking. His main duties should include the following:

- To assist in the identification of hazards and evaluation of risks at work.
- To advise senior management or line management as to the measures to be taken to eliminate or control hazards.
- To assist in resolving shop floor safety and health issues.
- To conduct safety and health inspections to check safety performance and recommend corrective action to senior management or line management.
- To investigate occupational accidents and incidents and recommend remedial measures to prevent recurrence.
- To be well informed about workplace safety performance.
- To consult with senior management, line management and workers about changes in the workplace which would likely affect the safety and health at work of workers.
- To report safety performance regularly to the top and senior management and, where appropriate, to the safety committee.

Safety supervisor or the assistant to the person in charge of the safety office

The responsibility of a safety supervisor or an assistant to the person in charge of the safety office should be to assist the top management, senior management and the in-house safety advisor, safety officer or person in charge of the safety office in promoting the safety and health of workers in the relevant industrial undertaking. His main duties should include the following:

- To assist the in-house safety advisor, safety officer or person in charge of the safety office in carrying out his duties.
- To supervise workers' observance of safety standards.
- To advise the senior management or line management as to the observance by workers of safety standards.
- To promote the safe carrying out of work in the workplace.
- To report regularly to the in-house safety advisor, safety officer or person in charge of the safety office on safety and health performance in the workplace. (Code of Practice on Safety Management Section 5.2.4)

Question 2.1.8

Have sufficient and competent safety officer(s), safety advisor(s) and safety representatives appointed and engaged for the site?

Guidance

Audit Criteria

1. There should be at least one safety representative from different activities/ trade of subcontractors
2. The safety representatives should have successfully completed a safety supervisor training or equivalent.
3. Auditor should ask for appointment letters and training certificates of the safety representative.
4. The answer should be considered as "No" if any of the above was not available.

Question 2.1.9

Are there arrangements for keeping up to date risk assessments, safety plans and registers of competent persons and examiners required under the relevant legislation?

Guidance

For ETWB projects, please refer to "Public Works Programme Construction Site Safety Manual" Works Bureau Chapter 3 contractual provisions on construction safety section 3.1.5 and also appendix III section 5,6, and 7.

Section 3 Safety Training

Sub-section 3.1 Equip Personnel with Knowledge to Work Safely

Question 3.1.1

Are there arrangements such as training needs analysis and training plan to ensure all employees received appropriate safety training?

Guidance

To equip the workers with knowledge on work safety and health, the contractor must first identify what their safety and health needs are. These needs are best established as part of an overall training needs analysis. (Code of Practice on Safety Management Section 5.3.2)

Audit Criteria

Auditor should comment on the training need analysis and training plan. The safety training plan should include at least the following items otherwise the answer should be considered as "No".

- (a) provision of schedule of training (with tentative date)
- (b) location of training
- (c) training provider
- (d) the targeted trainees
- (e) specification of the courses
- (f) type of refresher course to be provided.

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures

and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 3.1.2

Have all workers received basic mandatory safety training?

Guidance

The contractor should let his workers know:

(a) the organisation's safety policy and the philosophy underlying it; and

(b) the structure and systems for carrying out the policy.

Moreover, he should also let them know which parts of the systems are relevant to them, what the major risks are and how they are controlled.

(c) the induction courses for new starters, including part-time, temporary and imported workers;

For ETWB projects, please refer to "Public Works Programme Construction Site Safety Manual" Works Bureau Chapter 3 contractual provisions on construction safety appendix III section 8. (Code of Practice on Safety Management Section 5.3.2)

Question 3.1.3

Have all employees received site specific safety training?

Guidance

Individual needs are generally identified through performance appraisal. They may also

arise in situations where an individual has not received formal job training or instruction as part of his induction training. Training needs vary over time, and assessments should cover:

- (a) the performance of long-term workers (especially those who may be involved in critical emergency procedures);
- (b) job changes, and situations involving staff promotion or someone standing in for someone else;
- (c) the introduction of new equipment or technology; and
- (d) the follow-up actions after accident / incident investigations.

(Code of Practice on Safety Management Section 5.3.2)

Question 3.1.4

Have all workers received tool-box training related to the tasks?

Guidance

For ETWB projects, please refer to "Public Works Programme Construction Site Safety Manual" Works Bureau Chapter 3 contractual provisions on construction safety appendix III section 8.

Question 3.1.5

Have all managers received safety management training?

Guidance

Management needs include:

- (i) leadership skills;
- (ii) communication skills;
- (iii) techniques of safety management;
- (iv) training, instruction, coaching and problem-solving skills relevant to safety and health;
- (v) understanding of risks from a manager's perspective;
- (vi) knowledge of relevant legislation and appropriate methods of control including risk management; and
- (vii) knowledge of the organisation's planning, measuring, and auditing or reviewing arrangements.

Some managers in key positions like those who devise and develop the safety management system, investigate accidents or incidents, take part in safety audits or safety reviews and implement emergency procedures, may have particular needs. (Code of Practice on Safety Management Section 5.3.2)

Question 3.1.6

Have employees responsible for operating plant and equipment such as lifting appliances, abrasive wheels and loadshifting machinery received relevant training?

Question 3.1.7

Have all employees responsible for carrying out high risk activities such as demolition, cartridge operated tools, confined spaces and rescue work etc received relevant training?

Question 3.1.8

Is there an arrangement to monitor and assess the effectiveness of safety training?

Guidance

It is necessary to measure the effectiveness of training. Pre-testing determines the needs for the programme; post-testing evaluates how much has been learned. It is important to assess whether the training programme has effectively corrected the previously identified unsafe behaviour. It is also of vital importance to obtain feedback on the training programme. (Code of Practice on Safety Management Section 5.3.5)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 3.1.9

Are proper safety training course records maintained such as data of training date and time, location, duration, contents, trainers, attendees and test?

Guidance

Monitoring involves keeping track of who has been trained in what. Accurate records should be maintained for all safety and health training activities. Such records should, as far as reasonably practicable, include the following data:

- (a) Training date and time;
- (b) Training location;
- (c) Length of training;
- (d) Subject of training;
- (e) Contents of training;
- (f) Trainers and their expertise;
- (g) Attendees; and
- (h) Test results, if any. (Code of Practice on Safety Management Section 5.3.6)

Audit Criteria

1. Auditor should comment on the quality of the recording system.
2. The summary of safety-training record should include at least group or trade of workers receiving the training, date of training offered, and how many classes conducted, etc.

In-house Safety Rules

Section 4 In-house Safety Rules

Sub-section 4.1 In-house Safety Rules to Provide Instruction

Question 4.1.1

Has a survey of overall prevailing activities been made to identify the need for written occupational safety and health rules ?

Guidance

The ultimate objective of any safety management system is to prevent injury and ill health in the workplace. To accomplish this it is necessary for a contractor to devise in-house safety rules. In-house safety rules cover general rules, specialised work rules, specialised work permits and procedures. (Code of Practice on Safety Management Section 5.4)

In devising in-house safety rules, the contractor is encouraged to have prior consultation with his workers, where appropriate. If there is a safety committee, the details of the safety rules can be discussed in the safety committee. (Code of Practice on Safety Management Section 5.4.3)

Question 4.1.2

Have specialised work rules for specific work activities in written method statement or permit to work been prepared ?

Guidance

There should be a system for the identification and establishment of specialised in-house safety rules, specialised work rules, specialised work permits and procedures. Proprietors and contractors of relevant industrial undertakings should refer to the following:

- (a) relevant legislation dealing with safety and health at work, which sets the minimum standards to follow;
- (b) Codes of practice and guidance materials issued by the Labour Department on safety and health at work;
- (c) International standards; and
- (d) the best trade practice and trade performance.

(Code of Practice on Safety Management Section 5.4.2)

Question 4.1.3

Are there written general occupational safety and health rules?

Guidance

General safety rules include clear instructions to personnel in each of the following general areas:

- (a) safe operation of plant, machinery and equipment;
- (b) maintenance of plant, machinery and equipment;
- (c) proper and safe procedures for each production process, in the form of method statements;
- (d) rules and instructions on various risk control systems including the permit-to-work system;
- (e) provision, use and maintenance of personal protective equipment;
- (f) rules for the provision, use and maintenance of safe access and egress and for traffic and plant movement;
- (g) fire precautionary measures;
- (h) safe handling and movement of materials;
- (i) safety procedures for chemical processes and for the handling, transporting and storage of chemicals;
- (a) safety procedures for emergency;
- (b) duties and procedures for reporting hazards;
- (c) duties and procedures for reporting incidents, accidents and ill-health; and
- (d) good housekeeping of the workplace. (Code of Practice on Safety Management Section

5.4.1)

Audit Criteria

1.It is necessary for construction projects to have general safety rules and specific safety rules to cater for various working conditions. General safety rules are for reminding persons on site of the general safety issues that should be followed such as wearing safety helmets, safety shoes, prohibition of smoking, no horseplay, etc. The general safety rules should be regarded as the basic measures/ practices to be followed by all site personnel including site staff and workers.

2.Auditor should comment on the coverage of the general rules.

Question 4.1.4

Are the general safety rules brought to the attention of all employees?

Guidance

Work rules and procedures should be documented and communicated to all appropriate personnel. It may be that not all workers will need to know all of the detailed in-house rules but the contractor should ensure that every workers clearly instructed as to what rules they should follow. (Code of Practice on Safety Management Section 5.4.3)

Question 4.1.5

Are these rules posted in the vicinity of the activities where they apply ?

Guidance

Audit Criteria

The rules in this question referred to specific safety rules. Those engaged in hazardous activities are required to follow the related safety rules that will enable them work safely and prevent the happening of accident. The typical activities that require specific safety rules are welding, lifting operation, woodworking, etc.

1.A copy of sample safety rules displayed or photo showing such should be produced as evidence.

2.Auditor should sample the safety rules and commend on its content.

3.If there are only the general safety rules, the answer should be "No".

4.If there are specific safety rules but not posted out, the answer should be "No".

Question 4.1.6

Is there an arrangement for monitoring the compliance of these safety rules?

Guidance

To ensure compliance with these in-house rules, the contractor should exercise due

diligence in the supervision of his workers. (Code of Practice on Safety Management Section 5.4.4)

Audit Criteria

Safety rules in this question include general safety rules and specific safety rules to cater for various working conditions.

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 4.1.7

Is there disciplinary arrangement for ensuring the compliance of safety rules?

Guidance

There should be a written disciplinary policy addressing violation of rules with details of punitive actions like verbal warnings, written reprimands, suspensions, demotions and, where necessary, termination. Recognition should, on the other hand, be given to workers following the rules to reinforce good behaviour. (Code of Practice on Safety Management Section 5.4.4)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 4.1.8

Are all the rules documented and regularly reviewed?

Section 5 Safety Committee

Sub-section 5.1 Identify, Recommend and Review Measures

Question 5.1.1

Are the terms of reference, membership, frequency, agenda and distribution of minutes of the safety committee clearly defined?

Guidance

The proprietor or contractor required by section 10 of the Safety Management Regulation to establish a safety committee shall ensure that the safety committee is provided with a written statement setting out the rules governing its membership.

[Section 11(1)(b) of the Safety Management Regulation]. (Code of Practice on Safety Management Section 5.10.4)

A contractor required by section 10 of the Safety Management Regulation to establish a safety committee shall ensure that the safety committee is also provided with a written statement setting out rules governing its terms of reference and meeting procedures

[Section 11(1)(b) of the Safety Management Regulation]. (Code of Practice on Safety Management Section 5.10.5)

The safety committee's programme should be arranged well in advance and notices of the dates of meetings published to let all members know. Reports and relevant materials should also be circulated to all members in advance.

For ETWB projects, please refer to "Public Works Programme Construction Site Safety Manual" Works Bureau Chapter 3 contractual provisions on construction safety appendix III sections 9, 10 and 11.

Question 5.1.2

Does the committee meeting cover all the appropriate occupational safety and health matters?

Guidance

A safety committee should carry out the following functions for the purposes of identifying, recommending and keeping under review measures to improve the safety and health of workers in a relevant industrial undertaking:

- (a) monitoring of the safety policy - determining whether it is adequate and how well it is being implemented;
- (b) on-going evaluation of hazards and arrangements to implement safety measures;
- (c) establishment of arrangements to deal promptly and effectively with dangerous working conditions, including those coming to light in disputes arising from workers refusing to work on the grounds of imminent danger;
- (d) discussion and establishment of a mechanism to resolve disputes when workers refuse work on the grounds of imminent danger;
- (e) assistance in the development of safe working procedures and safe systems of work;
- (f) vetting of accident/incident/ill-health statistics to identify trends and monitor safety performance, and submission of reports on its findings to the top management with recommendations;
- (g) examination of safety audit reports and submission of reports on its observations to the top management with recommendations;
- (h) scrutiny of safety performance reports submitted by the safety office and giving of direction on appropriate actions;
- (i) monitoring of the adequacy and effectiveness of safety training;
- (j) monitoring of the adequacy of safety and health communications and publicity in the workplace;
- (k) organisation of safety promotion activities such as safety competitions, exhibitions, safety incentive schemes, and safety suggestion schemes; and

(l)provision of links with external sources regarding safety and health.

(Code of Practice on Safety Management Section 5.10.2)

Only matters relating to safety and health at work of the workers in the relevant industrial undertakings shall be discussed at the meeting of the safety committee. [Section 11(2) of the Safety Management Regulation].

(Code of Practice on Safety Management Section 5.10.5)

Question 5.1.3

Does the safety committee have the active participation of senior management of the organisation?

Guidance

Management membership should come from as many levels as practicable, with senior management well represented and a careful mix of line management and functional management. The aim is to ensure that the committee -

(a)is given adequate authority to consider views and recommendations, and make decisions; and

(b)is provided with the necessary expertise to formulate practicable policies and strategies.

(Code of Practice on Safety Management Section 5.10.4)

Question 5.1.4

Does the committee have effective, two-way communication between management and subcontractors/employees?

Guidance

A safety committee should have a wide representation adequately covering the interests of management and all workers, yet its size should be kept as reasonably compact as possible. The number of members representing workers in the relevant industrial undertaking shall not be less than half the members of the committee [Section 11(1)(a) of the Safety Management Regulation]. Members of the safety committee can be nominated or elected.

(Code of Practice on Safety Management Section 5.10.4)

Audit Criteria

1.Open communication between employees, supervisors and management is an important factor. To be effective, the safety committee meeting should require that management and staff at all levels to provide, observe, and supervise safe working practices and procedures. The senior management responsible for coordinating and monitoring health and safety should chair the meeting, and employees have been well represented at the meetings.

2. A two-way flow of information between the workforce and the safety and health committee should be established. The committee needs to be seen as an effective means of improving safety and health in workplace, and employee representatives should be in a position to raise issues suggested by other employees in the workplace.

3. It is a good practice to have the member's names of the safety committee and the representatives of subcontractors from different trades posted on the notice board. Hence, workers know to whom their opinions pertaining to safety and health should be forwarded. The representatives of subcontractors from different trades are subjected to review in accordance to the progress.

Question 5.1.5

Does the committee have representatives from all parts of every area of responsibility?

Guidance

Management membership should come from as many levels as practicable, with senior management well represented and a careful mix of line management and functional management. The aim is to ensure that the committee -

- (a) is given adequate authority to consider views and recommendations, and make decisions; and
- (b) is provided with the necessary expertise to formulate practicable policies and strategies.

Supervisors are the key men in regard to safety as well as production and their active cooperation is therefore essential. It is most important that the supervisors should be kept continuously informed of the safety committee's work. They should therefore have a representative on the safety committee.

In undertakings where company doctors, industrial hygienists or safety officers or advisers are employed, they should be made ex-officio members of the safety committee. Other specialists, such as project engineers, chemists, organisation and methods personnel and training officers may also be asked to attend meetings on an ad hoc basis when issues on which they have expertise are to be discussed. (Code of Practice on Safety Management Section 5.10.4)

Safety Committee

Question 5.1.6

Does the committee meet regularly?

Guidance

In general, the frequency of meetings of a safety committee depends upon the volume of work to be handled and the complexity and nature of hazards in the workplace.

Nevertheless, in any case, a contractor shall ensure that a safety committee meets at least once every three months [Section 11(1)(c) of the Safety Management Regulation].

Monthly meetings are usually found to be satisfactory. If sub-committees are formed for particular tasks, it will normally be necessary for them to meet more often because their aim is to produce a specified result within a time limit. (Code of Practice on Safety Management Section 5.10.5)

For ETWB projects, please refer to "Public Works Programme Construction Site Safety Manual" Works Bureau Chapter 3 contractual provisions on construction safety appendix III section 9.

Question 5.1.7

Does the committee monitor, record, and recommend action on occupational safety and health performance?

Guidance

Monitoring arrangement should be set up by the safety committee to follow through the implementation of its recommendations. (Code of Practice on Safety Management Section 5.10.3)

The safety committee's programme should be arranged well in advance and notices of the dates of meetings published to let all members know. Reports and relevant materials should also be circulated to all members in advance. (Code of Practice on Safety Management Section 5.10.5)

The proprietor or contractor of a relevant industrial undertaking shall ensure that proper records on safety committee meetings are kept to provide a progress report on decisions made, recommendations put forward and actions taken. These records shall be -

(a) kept for not less than 5 years after the date of the meeting to which the record concerned relates; and

(b) made available for inspection upon request by an occupational safety officer.

[Section 11(d) of the Safety Management Regulation]

Question 5.1.8

Has prompt action been taken according to the recommendations of the committee?

Guidance

The contractor shall implement, so far as is reasonably practicable, any measures recommended by the safety committee in relation to matters of safety and health at work of the workers [Section 10(b) of the Safety Management Regulation]. A mechanism should be established whereby decisions and actions recommended by the safety committee can be effectively communicated to those persons responsible for their implementation. (Code of Practice on Safety Management Section 5.10.3)

Safety Committee

Section 6 Programme for Inspection of Hazardous Conditions

Sub-section 6.1 Identify Hazardous Conditions and Rectification

Question 6.1.1

Has a comprehensive inspection checklist and inspection programme been developed and stipulated in the safety plan?

Guidance

The inspection programme should satisfy any specific legal requirements and reflect the undertaking's risk priorities. Suitable schedules and performance standards for the frequency and contents of inspection can help. The schedules can be supplemented with inspection forms or checklists, both to ensure consistency in approach and to provide records for follow-up action. (Code of Practice on Safety Management Section 5.5.3)

Question 6.1.2

Are there appropriate arrangements to ensure that senior site management actively participated by joining in the safety inspection of their areas of responsibility at regular intervals?

Guidance

The persons carrying out the inspections should have the appropriate safety training and experience so that they are competent to identify the relevant hazards and evaluate the associated risks. (Code of Practice on Safety Management Section 5.5.3)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at

height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 6.1.3

Are there appropriate arrangements to ensure that the site inspections check the level of compliance with safety standards and procedures?

Guidance

A suitable inspection programme should take all risks into account. It should be proportional to the hazard profile of the relevant industrial undertaking. An inspection should concentrate on areas where it is likely to produce the greatest benefit and lead to the greatest control of risk. Key risk control systems and related workplace precautions should therefore be monitored in greater detail or more often (or both) than low-risk systems or management arrangements. For example, low risks may be dealt with by general inspections every month or two covering a wide range of workplace precautions such as the condition of premises, floors, passages, stairs, lighting, welfare facilities and first aid. Higher risks need more frequent and detailed inspections, perhaps weekly or even, in extreme cases, daily or before use (for example, pre-use check on plant and machinery).

A properly thought-out approach to inspection will include:

Programme for Inspection of Hazardous Conditions

- (a) a well-designed inspection form to help plan and initiate remedial action by requiring those doing the inspection to rank any deficiencies in order of importance;
- (b) summary lists of remedial action with names and deadlines to track progress on

implementing improvements;

(c) periodic analysis of inspection forms to identify common features or trends which might reveal underlying weaknesses in the system; and

(d) information to aid judgments about any changes required in the frequency or nature of the inspection programme. (Code of Practice on Safety Management Section 5.5.3)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 6.1.4

Are there appropriate arrangements to monitor the effectiveness and thoroughness of the inspection?

Guidance

An effective inspection programme should have a quality check built in to ensure that the line management is carrying out the monitoring function properly. A good reporting system with supervisory checks, for example, will be able to serve the purpose. The safety inspection programme should be regularly reviewed to identify deficiencies and possible areas for improvement. (Code of Practice on Safety Management Section 5.5.4)

Audit Criteria

Internal safety audit has been used as one of the monitoring tools for assessing the effectiveness and thoroughness of the inspections. The audit should be conducted by competent person(s) with independence as far as practicable. Most internal safety audits currently done are by contractor's safety officer or project manager who is actually participated in the job. The findings and recommendations of the audit report mainly focused on the physical conditions rather than the safety management system, in particular, the assessment of the effectiveness and thoroughness of inspection. These are not desirable and not acceptable, as it will defeat the purpose of monitoring.

Competence - the person responsible for the internal audit should be properly trained such as with a certificate for safety auditing or equivalent;

Independence - the person responsible for the internal audit should not be involved in the project. They could be assigned from head office, team member from other project or outside consultants;

Coverage - the audit system adopted for internal safety audit should include the assessment of the safety management system and the actual implementation on site.

If an internal audit report provided does not fulfill the requirement on competence, independence and coverage, the answer should be "No".

Arrangement

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Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 6.1.5

Do safety officers and safety supervisors carry out safety inspections at regular intervals?

Guidance

Audit Criteria

1. Auditor should comment on the quality of inspection reports compiled by safety officers and safety supervisors such as the proper filling in of Form 2A and Form 3A should be emphasized.

2. Verification is necessary especially when inspection is carried on holiday.

Auditor is required to assess and comment on the quality of inspection checklist records. The following items show some of the main points that you need to pay particular attention:

Coverage of the inspection checklist or report should be adequate to cater for all activities on site;

The location, area, date for non-conformity spotted, the priority of rectification action, the person responsible for rectification etc. should be clearly stated and recorded.

Non-conformity identified in the checklist/form should be reflected and follow up in section/report for corrective actions;

Non-conformity that may cause imminent danger such as no guardrail for floor edge/working platform or floor opening not covered etc. should require a prompt remedial action rather than allowance of rectification a couple of days after the inspection.

Repeating of the same non-conformity on site should not be acceptable as it reflects problems on the effectiveness and thoroughness of inspection and the monitoring system on site.

Question 6.1.6

Are there appropriate arrangements to ensure that action is taken as a result of the findings of safety inspection?

Guidance

The results of inspections should be brought to the attention of the senior management. Information from safety inspections should be evaluated promptly to identify immediate risks and to ensure that appropriate remedial action is taken without delay. Any corrective action should be implemented as quickly as reasonably practicable. The inspection system should have a way of checking that remedial action is taken and monitored by the senior management. (Code of Practice on Safety Management Section 5.5.4)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 6.1.7

Are there appropriate arrangements to collate and analyse the results of safety inspections?

Guidance

A contractor should keep full records of each inspection with details of both positive and negative findings. Such reports should be analysed to identify repeated substandard situations and their underlying causes. Records of inspections should be kept for a period of not less than 3 years. (Code of Practice on Safety Management Section 5.5.4)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Job Hazard Analysis

Section 7 Job Hazard Analysis

Sub-section 7.1 A Programme to Identify Hazardous Exposure or Risk

Question 7.1.1

Have a list of all anticipated work activities covering premises, plant, people and procedures, and information?

Guidance

The contractor should establish and maintain a programme for identification of job hazards, assessment of risks, development, implementation and maintenance of safety procedures and risk control measures and review. The programme should aim at:

(a) recording known hazards; (Code of Practice on Safety Management Section 5.11.1)

Audit Criteria

1. Some high-risk activities such as loading operation of batching plant, welding in confined

area e.g. welding in plant room; water tank etc. that will be anticipated should be identified in the survey.

2. Auditor should comment and advise the auditee to review the survey and prepare risk assessment for all the construction activities anticipated.

3. In particular, an additional risk assessment for batching plant operation (if applicable) should be prepared. Missing of any anticipated activities in the survey should be treated as non-conformity.

Question 7.1.2

Are there procedures and methods stipulated in safety plan for ongoing identification of hazards, risk evaluation and development risk control measures?

Guidance

The relevant industrial undertaking should establish and maintain a programme for identification of job hazards, assessment of risks, development, implementation and maintenance of safety procedures and risk control measures and review. The programme should aim at:

- (a) identifying new hazards;
- (b) evaluating the risks associated with the hazards;
- (c) analyzing the effects or the potential effects resulting from these risks, and
- (d) developing and implementing means to eliminate the risks or to reduce them to a tolerable level. (Code of Practice on Safety Management Section 5.11.1)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 7.1.3

Is the risk assessment and evaluation covered a systematic examination of the likelihood and consequences to people, environment and assets and properly recorded?

Guidance

The risk associated with a hazard is a reflection of the likelihood that the hazard will cause harm and the severity of that harm. The two elements of risk, i.e. likelihood and severity, are independent of each other. The vast majority of hazards are relatively straightforward and requiring only a simple method of risk rating. The method incorporates a judgment as to whether or not a risk is tolerable. (Code of Practice on Safety Management Section 5.11.4)

Audit Criteria

1.Risk assessment sheets only consist of activities, potential hazard, control measures and actions, without probability and consequence are considered inadequate and the answer should be "No".

2.A proper risk assessment should be written on an assessment sheet with risk rating incorporated so that the auditee can determine priority for controlling hazards and implementation schedule.

3.Auditor should comment on the content of the risk assessment report. A copy of risk assessment report should be submitted as evidence for verification.

Question 7.1.4

Are the risk assessments carried out and conducted by competent persons and records maintained?

Guidance

The contractor should appoint a competent person to carry out risk assessment. A competent person is a person who is -

(a)appointed by the contractor to ensure that the duty is carried out; and

(b)by reason of substantial training and practical experience competent to perform the duty.
(Code of Practice on Safety Management Section 4.1.1(4))

The contractor should ensure that persons responsible for the analysis of hazards, evaluation of risks, and determination of the means of eliminating or reducing any risks are competent and given the necessary support so that they can perform their duties effectively.
(Code of Practice on Safety Management Section 5.11.1)

Audit Criteria

1.The coverage and the applicability of the safety measures for hazardous activities are subject to challenge if safety officer is the only one carrying out the risk assessment. The frequent missing out of high-risk activities commonly observed reflected that the present practice of some contractors needs improvement.

2.Unless the safety officer is competent and knows all activities well, the existing arrangement of risk assessment need to be reviewed such as setting up a risk assessment team consists of foremen, project manager, site agent etc. who are knowledgeable on the construction activities. Otherwise, the answer should be "No".

Question 7.1.5

Are the recommended risk control measures appropriate to the identified hazards and risk evaluation?

Guidance

Risk assessment and risk control should

(a) form part of element 6 Programme for inspection of hazardous conditions;

(b) be a major component in the element 8 Personal protection programme &

(c) be an essential part of the element 12 health assurance programme .

(Code of Practce on Safety Management Section 5.11.1)

Question 7.1.6

Is there an arrangement to ensure the implementation of the recommended control measures?

Guidance

For safety procedures and risk control measures to be implemented effectively and efficiently, they should be as far as practicable developed at the workplace with the participation of all levels of staff. Feedback from people implementing the safety procedures and risk control measures should be encouraged so that improvement to the procedures and measures can be made.

Maintaining safety procedures and risk control measures requires scheduled inspections and maintenance. It also requires the enforcement of discipline to ensure that people do not tamper with safety procedures and risk control measures (e.g. by removing machine guards). (Code of Practice on Safety Management Section 5.11.6)

Audit Criteria

Arrangement

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Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 7.1.7

Is there arrangement for risk assessment to be reviewed or updated?

Guidance

Whatever safety procedures and risk control measures are used, they should be reviewed if there is reason to suspect that they are no longer effective, or if there has been a significant change in the matters to which they relate.

Examples are :

- (1) When information is obtained about a previously unknown design or manufacturing fault, or about a previously unidentified hazard.
- (2) When the design is revised or modified.

- (3)When the system of work associated with the plant is changed.
- (4)When the plant is moved.
- (5)When there is a change to the workplace environment. (Code of Practice on Safety Management Section 5.11.7)

Audit Criteria

Apart from the regular review of the risk assessment, the assessment should also be reviewed or updated if there was an accident happened/ receive a suspension notice or improvement notice from Labour Department to a process or an activity. Otherwise, the answer to this question should be "No" if no review or updating.

Arrangement

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Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement..

Sub-section 7.2 Safety Procedures, Method Statements and Specialised Permits

Question 7.2.1

Is the development of control measures such as safe working procedures/method statements/permit to work activities as the control measures based on the the results of risk assessment?

Guidance

Safety procedures and risk control measures are procedures and measures to be put in place to reduce risk to a tolerable level.

When deciding on safety procedures and risk control measures, the list below should be considered, in the order given. Safety procedures and risk control measures lower down the list should only be used if it can be shown that using a procedure and/or measure higher up the list is not reasonably practicable.

List of safety procedures and risk control measures

- (1) Procedures and measures to eliminate hazards at source: for example, using a non-hazardous substance instead of a hazardous one.
- (2) Procedures and measures to reduce hazards at source: for example, replacing a noisy machine with a quieter one.
- (3) Procedures and measures to remove workers from the hazard: for example, paint spraying by unattended robots.
- (4) Procedures and measures to contain hazards by enclosure: for example, installing soundproofing enclosure for a noisy machine.
- (5) Procedures and measures to reduce worker exposure: for example, reducing exposure to noise by reducing the hours of work.
- (6) Procedures and measures to ensure the proper use of personal protective equipment as the last resort; for example, using hearing protectors for workers operating noisy machines. (Code of Practice on Safety Management Section 5.11.5)

Audit Criteria

Auditor should testify with site management whether auditee has developed the safe working procedures/method statements/permit to work, etc based on the results of the risk assessment. Otherwise, all questions in sub-section 7.2 should be "No".

Question 7.2.2

Is there written specification of the control measures for each hazard, which includes safe systems of work, protective clothing/equipment and training?

Question 7.2.3

Is there written specification of managers and supervisors or personnel responsible for ensuring the implementation of the control measures for each hazard?

Question 7.2.4

Have the developed safety working procedures/method statements/permit to work been

communicated to the relevant personnel?

Question 7.2.5

Are there arrangements to ensure plant, personal protective equipment, and training provided in accordance with safety procedures/method statements/permit to work?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Personal Protection Programme

Section 8 Personal Protection Programme

Sub-section 8.1 Provision of Suitable Personal Protective Equipment

Question 8.1.1

Have the statutory requirements for the provision of protective clothing/equipment been identified in the safety plan?

Guidance

Personal protective equipment (PPE) includes the following:

Gloves, safety footwear, safety helmets, high visibility waistcoats, aprons, protective clothing for adverse weather conditions, eye protectors, hearing protectors, life-jackets, respirators, breathing apparatus including those used underwater, and safety harness. (Code of Practice on Safety Management Section 5.6.2)

Question 8.1.2

Have the need of protective clothing/equipment been identified as part of the risk assessment?

Guidance

After the identification of the hazardous exposure or the risk of such exposure to the workers, the contractor should find out whether planned or existing safety precautions (if any) are sufficient to keep the risk under control and meet legal requirements. If the findings are negative, he should take steps to control the risks so that they are reduced to the lowest level that is reasonably practicable, using engineering methods (like adopting a safer production process, enclosure of a noisy machine, removal of the hazardous substances at source, etc.).

If -

- (a) after the aforesaid engineering measures have been taken, the hazardous exposure or the risk of such exposure to the workers in the relevant industrial undertaking is still intolerable, or
- (b) there are no feasible engineering methods to control the risk,

If it is necessary to provide PPE, a contractor should conduct an assessment. The purpose of the assessment is to ensure that the correct PPE is chosen for the particular risk. Except in the simplest and most obvious cases which can be repeated and explained at any time, the assessment should be recorded and kept readily accessible by those who need to know the results. (Code of Practice on Safety Management Section 5.6.2)

Question 8.1.3

Is there an arrangement for selection and procurement of appropriate protective clothing/equipment?

Guidance

The contractor should determine what type of PPE is required, taking into consideration the legal requirements for specific situations, the intended use of the PPE, the manufacturer's product standards, the design of the PPE (in line with the principle of ergonomics?), acceptability of PPE to its wearer and user, and, if used in conjunction with other PPE, the question of compatibility, etc. Certain respiratory protective equipment may impose significant physiological burdens to the users. The proprietor or contractor should ensure

that the users are medically fit for using the PPE. (Code of Practice on Safety Management Section 5.6.2)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 8.1.4

Has a sufficient stock of carefully selected and appropriate protective clothing/equipment been ensured?

Guidance

Steps to ensure adequate supply of PPE, including replacement supply and spare parts. (Code of Practice on Safety Management Section 5.6.2)

Question 8.1.5

Has an effective system for the issue and recording of protective clothing/equipment been established?

Question 8.1.6

Has an effective system for inspection of protective clothing/equipment and their replacement been established?

Question 8.1.7

Are there procedures to ensure the proper use of protective clothing/equipment and the provision of training and instruction?

Guidance

1. Steps (including supervision) to ensure that workers make proper use of PPE.
2. Adequate training, information and instruction to ensure that workers make safe and proper use of PPE and can maintain it properly.
3. Maintenance should include, where appropriate, cleaning, disinfection, examination, replacement, repair and testing. The responsibility for carrying out maintenance should be clearly laid down, together with the details of the procedures to be followed and their frequency. Where appropriate, records of tests and examinations should also be kept.

Training, information and instruction should include:

- (a) an explanation of the risks present and why PPE is needed;
- (b) the operation, performance and limitations of the PPE;
- (c) instructions on the selection, use and storage of PPE;
- (d) factors affecting the protection provided by the PPE;
- (e) recognising defects in the PPE and arrangements for reporting loss or defects; and
- (f) hand-on practice in putting on, wearing, removing, inspection, testing and maintenance of PPE. (Code of practice on Safety Management section 5.6.2)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 8.1.8

Are there adequate and secure facilities provided for employees to store their personal protective clothing/equipment?

Question 8.1.9

Is there a procedure to monitor the personal protective equipment brought into site by subcontractors or workers?

Guidance

This includes the steps to monitor the effectiveness of the PPE during use by observing the actual protection provided by the PPE. The results of monitoring would be very useful in providing information for reviewing the selection of the PPE. (Code of Practice on Safety Management Section 5.6.2)

Audit Criteria

Arrangement

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Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Accident/Incident Investigation

Section 9 Accident/Incident Investigation

Sub-section 9.1 Develop Prompt Arrangement to Prevent Recurrence

Question 9.1.1

Is there a detailed procedure to ensure that all accidents and dangerous occurrences are promptly reported and recorded?

Guidance

Audit Criteria

1. Auditor should check the document such as the safety plan to find out whether there is a procedure that can meet the criteria of prompt reporting and recording of accident and dangerous occurrence (including time frame). The detailed procedure refers to procedure that is capable of ensuring all accidents and dangerous occurrences are promptly reported and recorded.

2. Auditors need to comment on "prompt" reporting and recording. It should be within a reasonable period of time such as serious accident immediately reported to site agent/project manager etc. Reporting to Labour Department as required by regulation can be used as a reference.

3. All accidents and dangerous occurrence refer to ALL cases no matter it is serious or not.

4. Auditor should also interview site personnel such as workers, foreman, etc. to verify the practising of the procedure.

There should be no "N/A" even though there is no accident. Auditor should verify the accident reporting procedures as well as verification with site personnel to ensure they understand the procedure. The answer should be "NO" if there is no detailed procedure or the verification proves procedure not practising.

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 9.1.2

Is there a detailed procedure to ensure that all accidents and dangerous occurrences are promptly investigated?

Guidance

Audit Criteria

1. Auditor should check the document such as the safety plan to find out whether there is a procedure that can meet the criteria of prompt investigation of accident and dangerous occurrence (including time frame). The detailed procedure refers to procedure that is capable of ensuring all accidents and dangerous occurrences are promptly investigated.

2. Auditors need to comment on "prompt" investigation. It should be within a reasonable period of time such as serious accident is immediately investigated by the safety office/project manager etc.

3. All accidents and dangerous occurrence refer to ALL cases no matter it is serious or not.

4. Auditor should also interview site personnel such as workers, foreman, etc. to verify the practising of the procedure.

There should be no "N/A" even though there is no accident. Auditor should verify the accident reporting procedures as well as verification with relevant site personnel such as project manager/site agent (or personnel who is responsible for carrying out the investigation) to ensure they understand the procedure.

The answer should be "NO" if there is (a) no detailed procedure, (b) not ALL accidents/dangerous occurrences investigated promptly, (c) the verification proves procedure not practising.

Auditors may need to advise auditee whose safety plans committed only to prompt investigation of serious cases. This is considered generally a higher standard than the normal trade practice.

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 9.1.3

Does person responsible for accident /incident investigation and reporting receive a formal training?

Guidance

Investigations should be led by someone with the status and knowledge to make authoritative recommendations. Usually, this will be a line manager or a safety officer. However, if events have serious or potentially serious consequences, a safety and health consultant/advisor, a medical or nursing advisor, technical staff or equipment suppliers may be called in to provide assistance, and senior managers should be involved from the very beginning. Adequate training in relevant techniques should also be provided. (Code of Practice on Safety Management Section 5.7.1)

Question 9.1.4

Does the accident/incident investigation report cover at least the circumstance, causes of accident and recommendations for preventing the recurrence of accident/incident?

Guidance

- (a) Details of the injured person, including age, sex, experience, training, etc.;
- (b) A description of the circumstances, including the place, time, and conditions at the scene;
- (c) The direct causes of injuries, ill health or other losses;
- (d) The underlying causes like failures in workplace precautions, safety procedures, risk control systems or management arrangements; and
- (e) Details of the outcome, including in particular:
 - (i) The nature of the outcome - examples are injuries, ill health, damage to property, process disruptions and creation of hazards;
 - (ii) The severity of the harm caused, including the seriousness of injuries, ill health and losses;
 - (iii) The immediate management response to the situation and its effectiveness. This involves the consideration of the following questions:
 - Has the situation been dealt with promptly?
 - Have the continuing risks been dealt with promptly and adequately?
 - Has the first-aid response been adequate?
 - Have emergency procedures been followed properly?
 - (iv) Recommendations to prevent the recurrence of the accident or incident. (Code of Practice on Safety Management Section 5.7.2)

Audit Criteria

1. Auditor is required to comment on the whole accident report. If there are too many accidents, auditor can get the overall summary of the causes of the accident before deciding which accident reports are sampled to comment. Generally, serious accidents such as fatal or DO should be the priority. Accidents that are frequently occurred should also look into. The comment could be purely based on the information of the accident report. Where necessary, verification with knowledgeable person will help in arriving at a desirable and acceptable recommendation.
2. A copy of the selected accident report(s) with related information (if any) should be submitted as evidence for OSHC verification.
3. Any audit report that does not have comment on the accident report for the question must clarify.

4.If the recommendations on the report could not prevent the recurrence of similar accident/incident, the answer should be "NO". The answer could be "N/A" if there is no accident.

5.If the quality of audit reports such as skill of writing, investigation technique, etc (not including the basic principle of having the recommendations capable to prevent the recurrence of similar accident) need improvement, the answer could be "Yes" and the auditee should be advised accordingly. At the same time, the related audit questions concerning the competence of the person responsible for accident investigation should be suitably reflected. Please be reminded that even though the person in-charges are generally considered competent based on their title/training certificate obtained (e.g. RSO, SS training, etc.), auditor still can comment on their competency based on the audit findings ending up with "non-conformity".

Question 9.1.5

Is there a procedure for ensuring that prompt actions are taken on the basis of the results of the investigations?

Guidance

The contractor should ensure that there is a mechanism for implementing, with priorities, the aforesaid recommendations to prevent recurrence of accidents/incidents. (Code of Practice on Safety Management Section 5.7.3)

Audit Criteria

1.Auditor should check the document such as the safety plan to find out whether there is a procedure that can meet the criteria of prompt actions are taken on the basis of the results of the investigation.

2.Auditors need to comment on "prompt action". It should be within a reasonable period of time such as control measures for serious accident are taken immediately.

3.Auditor should also interview site personnel such as workers, foreman, etc. to verify the practising of the procedure.

There should be no "N/A" even though there is no accident. Auditor should verify that the procedures for prompt action are taken as well as verification with site personnel to ensure that they understand the procedure. The answer should be "NO" if there is no detailed procedure or the verification proves procedure not practising.

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 9.1.6

Is there a procedure for ensuring the results of investigations and actions taken are notified to employees, and where appropriate clients, subcontractors and suppliers?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 9.1.7

Is there an arrangement for common causes and trends in accident/ incident data analysed as an aid to accident prevention?

Guidance

is essential that a proprietor or contractor of a relevant industrial undertaking should perform statistical analysis based on the information collected from the investigation of accidents and incidents. The analysis will enable the management to identify common causes, features and trends which may not be apparent from the investigation of an individual event. This in turn provides valuable information for the management to review the safety plan and formulate corresponding action programmes.

A safety officer or line manager will be able to assist the proprietor or contractor in statistical analysis. However, in highly specialised areas involving, for example, complicated health issues, the proprietor or contractor may seek advice from professionals, like occupational health experts, on the setting up of a data base, and on the analysis and interpretation of the information. (Code of Practice on Safety Management Section 5.7.4)

Audit Criteria

Maintaining accident statistics and performing trend analysis serve the purposes of identifying trends and developing action plan to prevent recurrences. The arrangement should include:

- The establishment of classifications of accident to group similar data for analysis.
- The application of statistical tools. Purely showing the trend of frequency and incident rate are not acceptable, as they did not serve the purpose.
- Examples are the use of histogram or bar chart to show that a particular type of accident is increasing or decreasing in a period of time to assist the identification of the seriousness and to arrive at a control strategy.
- Use the analysis to provide objective support and justification for budget requests, training programs, or other management safety initiatives.

There should be no "N/A" even though there is no accident. Auditor should verify that the arrangement for accident data analysis as well as verification with site personnel to ensure that they understand the procedure. The answer should be "NO" if there is no detailed procedure or the verification proves procedure not practising.

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Emergency Preparedness

Section 10 Emergency Preparedness

Sub-section 10.1 Emergency Planning, Response Plan and Recovery Plan

Question 10.1.1

Does the emergency plan include arrangements such as means of fire escape, designation of a central gathering point, emergency lighting and power sources, availability and locations of emergency plants/equipment, emergency coordinator, emergency and rescue equipment, and liason with emergency and medical services?

Guidance

A working committee or similar set-up should be formed to work out the details of an emergency response plan for each of the possible emergencies on the list. The members of the working committee should come from the departments/sections likely to be involved in the possible emergency situations. The emergency response plan, covering what can

and should be done, what equipment is necessary and what people are needed, should be developed for each emergency situation. It should be communicated to all workers and be made readily accessible to managers and supervisors. In addition, a notice outlining the plan should be posted up where it can be seen by all people. The emergency plan should, where appropriate, include the following:

- (a) an alarm system;
- (b) the procedures for reporting and declaring emergencies and, when they are over, announcing a return to normal;
- (c) a control centre - its location and resources (such as radio equipment, records, engineering drawings, a list of supporting personnel, etc.);
- (d) an emergency organisation - duties and responsibilities of emergency personnel;
- (e) procedures to be followed by employees who must remain to perform critical operations before they evacuate;
- (f) special teams for first aid, salvage, rescue, fire fighting and other operations, if necessary, and their duties;
- (g) training of team members, workers and staff;
- (h) facilities and equipment to meet the needs of emergencies (such as communication equipment for use during emergencies, fire hoses, fire extinguishers, spill containment materials, breathing apparatus, masks and special suits, first aid boxes, and emergency power supply to the main switchboard, sensors, alarm systems, and exit signs/lights.);
- (i) an evacuation route map and a safe assembly point;
- (j) a schedule for emergency drills to test readiness; and
- (k) a list of the authorities to contact in case of emergency. (Code of Practice on Safety Management Section 5.8.2)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 10.1.2

Is there an emergency plan for an effective and prompt response to adverse weather conditions that may affect the safety of the site?

Question 10.1.3

Are emergency services' locations, telephone numbers and designated personnel listed and displayed prominently?

Question 10.1.4

Are qualified first aiders, first aid facilities and equipment adequate and maintained to legal and contractual requirements?

Question 10.1.5

Are first aid facilities and equipment adequate and maintained to a substantially higher standards than required by the contract?

Question 10.1.6

Is there an emergency team(s) established to respond to emergency situations?

Question 10.1.7

Have emergency team members been suitably trained on emergency evacuation, fire prevention and fighting etc.?

Question 10.1.8

Is there a programme of drills and exercise for all emergency situation?

Question 10.1.9

Are the drills and exercises for all emergency situation been practised and evaluation reports prepared in accordance with the programme?

Section 11 Safety Promotion

Sub-section 11.1 Promotion, Development And Maintenance of OSH Awareness

Question 11.1.1

Are safety bulletin boards provided and located so that every employee has a chance to see during the working day?

Question 11.1.2

Is there a procedure for selection and regularly updating of critical safety problem items on safety bulletin boards?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 11.1.3

Are up-to-date accident statistics distributed or displayed?

Question 11.1.4

Are safety signs and posters prominently displayed?

Question 11.1.5

Does the organisation publish a bulletin or newsletter which includes material related to occupational safety and health of the organisation?

Question 11.1.6

Are safety contest awards or recognition for good safety performance of individual conducted regularly?

Guidance

Safety promotion programmes should have clearly defined objectives. They require very careful thought and consideration if the maximum benefit is to be obtained. The proprietor or contractor should develop, as part of a safety promotion programme, a procedure to recognise and acknowledge good safety performance either by individuals, teams, sections, departments or the organisation. He should appoint a coordinator for the programme to ensure its smooth implementation. (Code of Practice on Safety Management Section 5.12.1)

Question 11.1.7

Are safety contest awards or recognition for good safety performance among sites and subcontractors conducted at least annually?

Guidance

Safety promotion programmes should have clearly defined objectives. They require very careful thought and consideration if the maximum benefit is to be obtained. The proprietor or contractor should develop, as part of a safety promotion programme, a procedure to recognise and acknowledge good safety performance either by individuals, teams, sections, departments or the organisation. He should appoint a coordinator for the programme to ensure its smooth implementation. (Code of Practice on Safety Management Section 5.12.1)

Section 12 Health Assurance Programme

Sub-section 12.1 Assessment and Control of Substances Hazardous to Health

Question 12.1.1

Have all substances hazardous to health which are used, or likely to be encountered, been identified?

Guidance

- (1) Hazardous chemicals which
- if inhaled can cause asthma, bronchitis or cancer;
 - if swallowed can cause poisoning; and

- if spilt onto the skin or splashed into the eyes can cause dermatitis or severe irritation.
(Code of Practice on Safety Management Section 5.14.1(1))

Question 12.1.2

Have the risks to health arising from these substances been assessed?

Guidance

The process of determination of risk helps to decide which health risk should be given priority. The aim is to identify the steps to be taken to control risk. The process should be done by competent persons. (Code of Practice on Safety Management Section 5.14.2)

Audit Criteria

1. Auditor should advise auditee to improve the coverage of risk assessment on substances hazardous to health such as health hazards, severity of harm, likelihood of occurrence and control measures.

2. Risk rating should also be incorporated in the assessment and it should be assessed based on hazards, quantity, frequency and method of using the substances etc. Otherwise, the answer should be "No".

Question 12.1.3

Have adequate information about the risks to health associated with the substances and the precautions been obtained?

Guidance

Relevant sources of information include:

- (a) legislation and supporting codes of practice;
 - (b) information and advice from suppliers of equipment, chemicals and other materials used at work;
 - (c) international standards;
 - (d) industry or trade association guidance;
 - (e) the personal knowledge and experience of managers and workers;
 - (f) accident, ill health and incident data;
 - (g) expert advice and opinion; and
 - (h) findings of research. (Code of Practice on Safety Management Section 5.14.1)
-

Question 12.1.4

Are there arrangements to conduct assessments of health risks, and monitor exposure levels?

Guidance

There should be a critical appraisal of all routine and non-routine business activities. In the simplest cases, hazards can be identified by observation and by reference to the relevant information [(a) to (h) Question 12.1.3]. In more complex cases, measurements such as air sampling may be necessary to identify the presence of health hazards. The assistance of occupational hygienists, occupational physicians and occupational health nurses should be enlisted if necessary. In the most complex cases, special hazard analysis techniques such as hazard and operability studies and fault tree analysis should be used. Specialist advice is needed in choosing and applying the most appropriate method.

(Code of Practice on Safety Management Section 5.14.1)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 12.1.5

Is there a procedure to ensure the health risk assessments are updated regularly?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 12.1.6

Have appropriate measures to control the risks of health hazardous substances used or encountered in the work been introduced?

Guidance

When risks have been analyzed and assessed, decisions about the precautions against occupational health hazards can be made. All final decisions about safety procedures and risk control methods should take into account the relevant legal requirements which establish minimum standards for risk prevention or control.

The following is a summary of the safety procedures and risk control measures in descending order of priority:

- (1) Elimination of risks by substituting the hazardous substances or processes with non-hazardous or less hazardous ones.
- (2) Combat of risks at source by means of engineering controls. Examples are:
 - (a) to separate the operator from the risk of exposure to a known hazardous substance by enclosing the process; and
 - (b) to design process machinery and work activities in such a way as to minimise the release of, or to contain, airborne hazards.
- (3) Minimisation of risk by means of:

- (a) administrative control measures, such as a permit-to-work system; and
 - (b) personal protective equipment as a last resort. (Code of Practice on Safety Management Section 5.14.3)
-

Question 12.1.7

Have procedures been established to ensure that control measures are implemented and that all equipment is properly maintained?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 12.1.8

Have a system such as pre-employment and medical examination programme been established for monitoring the exposure of workers to substances which are hazardous to health?

Guidance

The primary objective of health surveillance is to detect adverse health effects at an early stage, thereby enabling further harm to be prevented.

In addition, the results of health surveillance can provide a means of:

- (a) checking the effectiveness of control measures;
- (b) providing feedback on the accuracy of the risk assessment; and
- (c) identifying and protecting individuals from increased risk.

The contractor should arrange health surveillance and medical checks for workers, such as those working with carcinogenic substances, with asbestos, in compressed air, or underground in accordance with relevant legal requirements. If a worker is found to be suffering from an occupational disease, the proprietor or contractor should take steps to prevent him from further exposure to the substance or agent causing the disease by, for example, transferring him to another job in the industrial undertaking. He should review the health protection programme to identify the deficiencies and take measures to rectify them. (Code of Practice on Safety Management Section 5.14.6)

Question 12.1.9

Have all the employees been informed, instructed and trained about the risks to their health and the precautions to be taken?

Question 12.1.10

Have the appropriate protective clothing/equipment been selected and issued to employees exposed to substances hazardous to health?

Question 12.1.11

Have substances hazardous to health such as asbestos, lubricants etc. that require the engagement of specialist contractors to deal with the use, or disposal been identified?

Guidance

Audit Criteria

Besides asbestos, residue of chemicals, fuel oil and cleaning agents are also considered as substance hazardous to health. Auditor should verify whether auditee has arrangement or engage contractor in handling the residue or chemical waste. If there is no such arrangement in place, the answer to this question should be "No".

Sub-section 12.2 Sprains, Strains And Pains

Question 12.2.1

Has risk assessment for all manual operations been prepared?

Question 12.2.2

Does the assessment include the health hazards of materials been handled?

Question 12.2.3

Have competent persons appointed to assist in carrying out the risk assessment with respect to manual handling operations?

Question 12.2.4

Where materials must be handled manually, are workers properly selected to perform those tasks according to their respective capabilities?

Question 12.2.5

Have relevant information and proper training given to employees to undertake manual operations?

Question 12.2.6

Are personal protective clothing/equipment for manual operations provided and are they used?

Sub-section 12.3 Noise

Question 12.3.1

Have noise assessment been carried out to determine which machines, combinations of machines or work processes including ambient noise, are liable to expose workers to noise levels of 85 dBA or more?

Question 12.3.2

Where noise levels may lead to the risk of deafness, is there a system to reduce the emission or exposure to noise by planning work, changing machinery or appropriate steps to reduce the need for people to work in high noise levels?

Question 12.3.3

Where noise levels may lead to the risk of deafness, or where noise may create a nuisance, are employees selected and issued with approved hearing protection?

Question 12.3.4

Is there an arrangement for identification of noisy operations/machines and marking out high noise level zones?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Sub-section 12.4 Welfare

Question 12.4.1

Is there adequate provision for toilet and washing facilities on site?

Question 12.4.2

Are eating, rest areas and drinking water adequate?

Question 12.4.3

Are storage facilities for personal property and clothing adequate and secure?

Question 12.4.4

Are all welfare facilities inspected regularly and maintained?

Evaluation, Selection and Control of Sub-contractor

Section 13 Evaluation, Selection and Control of Sub-contractor

Sub-section 13.1 Evaluation and Selection Strategy

Question 13.1.1

Is there an evaluation and selection criteria to identify suitable bidders (potential subcontractors)?

Guidance

(a) Each sub-contractor wishing to qualify as a bidder should be asked to provide a safety policy which should be vetted to assess its adequacy.

(b) The sub-contractor should also be required to submit details of his -

- safety organisation;
- safety track records;
- working experience with clients demanding high safety standards;
- safe systems of work/safety programmes in place;
- current safety management system; and
- training programmes and standards.

These should also be vetted to assess adequacy.

(c) Only when a sub-contractor passes the adequacy test mentioned in (a) and (b) above should he become a qualified bidder. (Code of Practice on Safety Management Section 5.9.1)

Question 13.1.2

Are specific occupational safety and health information provided in the specifications to the bidders?

Guidance

Bidders should identify all the safety and health requirements in the specifications. To help them do this, a checklist of all the common safety and health problems which may arise from the work should be presented to them for reference before the bid is made. Where necessary and appropriate, an additional 'on site' briefing can be arranged for bidders who want to have a better understanding of the safety and health problems.

Some topics that should be included in the checklist are:

- Access to and egress from the places of work;
- Working at heights;
- Lifting appliances operation;
- Fire prevention;
- Electrical requirements;
- Underground and overhead services;
- Lighting requirements;
- Manual handling operation;
- Special hazards such as those inherent in working in confined spaces or working with asbestos, etc.;
- Occupational health risks from noise and toxic fumes, etc.;

- Storage of flammable substances and chemicals;
- Personal protective equipment;
- Emergency rescue/first-aid;
- Welfare amenities such as toilets and drinking water facilities; and
- Worker training requirements. (Code of Practice on Safety Management Section 5.9.1)

Question 13.1.3

Is there a procedure for identification of suitable sub-contractors?

Guidance

The contractor should select the sub-contractor who is able to identify all the safety and health hazards inherent in the work, can ensure that the most proper and adequate provisions will be made for the control of the risks, and has the best outline safety plan. (Code of Practice on Safety Management Section 5.9.1)

Audit Criteria

Arrangement

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Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 13.1.4

Are the occupational safety and health responsibilities and obligations of the subcontractors clearly defined?

Question 13.1.5

Is there a procedure set up to evaluate the safety performance of the subcontractor?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Sub-section 13.2 Control Strategy

Question 13.2.1

Is there an arrangement to ensure that the subcontractors are aware of safety policy, safety plan, in-house rules and regulations, emergency plan etc.?

Guidance

All safety rules and provisions should be laid down in detail in the contract for the sub-contractor to follow and implement. One of the provisions should be that the sub-contractor abides by all the provisions of the proprietor's or contractor's safety policy, including compliance with workplace safety rules. In case the sub-contractor further sub-contracts all or part of his work to other sub-sub-contractors, the sub-contractor should ensure that the sub-sub-contractors are fully aware of the safety policy and the safety rules.

The following special conditions should therefore be attached to the contract for the sub-contractor to follow:

- to inform any sub-sub-contractor of all safety requirements;
- to include observance of all safety requirements as a condition in any future sub-contract; and
- to require the sub-sub-contractor to do similarly if he in turn sub-contracts his work.

Another provision in the contract should require the sub-contractor to submit a detailed and comprehensive safety plan based on the outline safety plan, setting out how he and the sub-sub-contractors (if any) will implement the safety measures for controlling the risks during work in compliance with all the safety and health provisions stipulated in the contract. The sub-contractor should adhere to the safety plan in carrying out his obligations under the contract and should ensure that his own sub-sub-contractors (if any) receive copies of the safety plan and comply with its requirements as well.

In addition, a subcontractor's participation in on-site safety committees should also be one of the contract conditions. (Code of Practice on Safety Management Section 5.9.2)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make

continuous improvement.

Question 13.2.2

Is there an arrangement whereby the sub-contractor has to participate in conducting a risk assessment and recommending a safe system of work before commencement?

Guidance

The sub-contractor should be requested to conduct a risk assessment before work commences and recommend the necessary safety procedures and risk control measures. The system should spell out how the sub-contractor should organise and perform his work to reduce risks to workers' safety and health.

The sub-contractor should be required to submit the risk assessment report, together with the recommended safe system of work, to the proprietor or contractor for scrutiny and endorsement. (Code of Practice on Safety Management Section 5.9.2)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 13.2.3

Is there an arrangement with subcontractors' staff well in advance of the start of work to discuss occupational safety and health aspects of the work under their contracts?

Guidance

The sub-contractor should be required to attend a meeting to discuss the safety aspects of the work prior to the commencement of the contract.

(Code of Practice on Safety Management Section 5.9.2)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 13.2.4

In these special meetings with subcontractors' staff, are matters such as occupational safety and health in-house rules and procedures, hazards created by the contractors, sub-contractors and other subcontractors discussed?

Guidance

The sub-contractor should be required to attend regular progress meetings with all other parties, at which safety and health should be on the agenda. (Code of Practice on Safety Management Section 5.9.2)

Question 13.2.5

Is there an arrangement to communicate and coordinate the occupational safety and health matters to subcontractors?

Guidance

The sub-contractor should be required to appoint a person or a team to co-ordinate all aspects of the contract, including safety and health matters on site. In addition, the sub-contractor should develop communication paths to pass on all relevant safety information to those at the shop floor level. (Code of Practice on Safety Management Section 5.9.2)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 13.2.6

Is there an arrangement to ensure the compliance of occupational safety and health in-house rules and procedures by subcontractors and their employees?

Guidance

- The proprietor or contractor should inspect his sub-contractor's activities at regular intervals. The frequency of inspection should be commensurate with the hazards and complexity of the construction project. Generally, inspection at weekly intervals is desirable.
- The sub-contractor should be required to provide written method statements before carrying out any work with special hazards like demolition work, confined space work,

asbestos work, work on energised electrical installations, falsework erection work, steel erection work and any other work involving disruptions or alterations to main services or other facilities. In the event that there is a need to deviate from the method statement, further progress of work should be withheld until a revised method statement has been drawn up and endorsed.

- The sub-contractor should be required to report all lost-time accidents and dangerous occurrences, including those of sub-sub-contractors.
- The sub-contractor's safety and health training programme should be regularly monitored to ensure effectiveness. (Code of Practice on Safety Management Section 5.9.2)

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 13.2.7

Is there an arrangement to ensure that the tools, plant, equipment, materials and substances by subcontractors and suppliers comply with relevant statutory requirements?

Guidance

Audit Criteria

1. There should be written document submitted from subcontractors regarding what they will bring into site and there should be a system for checking and monitoring that they are complied with the requirements. Otherwise, the answer should be "No".

2. Document support and verification by interview of knowledgeable person are required in audit.

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 13.2.8

Is there an arrangement to ensure that all necessary information about the hazards from, and safe use of, the tools, plant, equipment, materials, substances, etc. supplied by subcontractors and suppliers are available?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of

the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Process Control Programme

Section 14 Process Control Programme

Sub-section 14.1 Management of Place of Work I

Part 14.1.1 Fire Arrangements

Question 14.1.1.1

Are there arrangements to ensure that adequate fire fighting appliances are provided, and procedures in case of fire are established?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its

pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.1.2

Are appropriate fire extinguishers provided, particularly near places of high risk and are they regularly checked and maintained?

Question 14.1.1.3

Where relevant, are fixed electric water pumps/water tanks installed properly, regularly checked and maintained?

Question 14.1.1.4

Is there a safe means of escape from all sections of the site premises and are all fire exits and routes clearly marked?

Question 14.1.1.5

Have sufficient numbers of employees been trained in fire fighting techniques and in the use of the fire extinguishers provided?

Question 14.1.1.6

Is there a means of raising fire alarm and is it checked regularly?

Question 14.1.1.7

Is there planned fire drill and evacuation procedure and practised on a regular basis?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.1.8

Is the fire drill and evacuation procedure drawn to the attention of employees, sub-contractors, etc. who are new to the site?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's

procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.1.9

Is someone (and a deputy as necessary) appointed to coordinate fire prevention, fire fighting and evacuation procedure?

Part 14.1.2 Work In Confined Spaces

Question 14.1.2.1

Is there a system to identify which locations and processes as work in confined spaces on site, and a procedure to ensure the safety of employees working there?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.2.2

Have risk assessments to all locations and processes on the site which could be confined spaces been conducted?

Question 14.1.2.3

Has a risk assessment been conducted by a competent person before the work in confined space commenced?

Question 14.1.2.4

Have all processes which may create dangerous atmospheres in confined spaces been identified?

Question 14.1.2.5

Where relevant, has atmospheric testing equipment been provided?

Question 14.1.2.6

Where relevant, are personnel responsible for atmospheric testing properly trained?

Question 14.1.2.7

Where relevant, has a defined procedure been established for entry to and work in confined spaces?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's

procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.2.8

Where relevant, have personnel who are expected to work in confined spaces been specially selected?

Question 14.1.2.9

Where relevant, have personnel who are expected to work in confined spaces been specially trained for this work?

Question 14.1.2.10

Where relevant, is a permit-to-enter and a permit-to-work system in operation and have all persons involved been trained and instructed in their use?

Question 14.1.2.11

Where relevant, is rescue equipment available?

Question 14.1.2.12

Where relevant, has an emergency rescue procedure been developed and communicated to all persons involved?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Part 14.1.3 Working At Height

Question 14.1.3.1

Have the requirements in the regulations, codes of practice and guidance which apply to means of access and work positions (e.g. scaffolds) been identified?

Guidance

Audit Criteria

1. There should be no "N/A" for piling and foundation work as working at height is also anticipated in piling and foundation work such as load test, stockpile and adjustment of dropping hammer, etc.

2. If these activities were not identified, the answer should be "No".

3. It is recommended to cover the activities in the survey of risk assessment and develop appropriate control measures to prevent workers falling from height.

Question 14.1.3.2

Is a safe means of access (and egress) to the work area, taking into account the conditions on site such as gangways, stairs and ladders etc. provided?

Guidance

Audit Criteria

1. There should be no "N/A" for piling and foundation site as access and egress is also

anticipated in piling and foundation work such as carrying out load test, stockpile and adjustment of dropping hammer, etc.

2. If safe means of access and egress were not identified, the answer should be "NO".

3. It is recommended to cover them in the survey of risk assessment and develop appropriate control measures to prevent hazard arising from poor means of access such as slip, trip over, etc.

Question 14.1.3.3

Has every worker been provided with a safe place of work such as provision of proper working platforms or if not practicable, the use of the fall-arresting system etc. for all activities?

Question 14.1.3.4

Have competent persons with adequate training and experience been appointed to carry out regular inspections of scaffolds/working platforms to ensure that they are stable and capable to support the weight of workers and materials?

Guidance

Audit Criteria

Competent Person - means a person appointed by the contractor by reason of his/her substantial training and practical experience, competent to perform the duty.

Substantial Training - refers to a person who has satisfactorily completed a formal training in scaffolding work such as the 3-year Bamboo Scaffolder Apprenticeship Scheme (VTC) or the 1-year full-time training course in Bamboo Scaffolding of CITA.

Practical Experience of a Competent Person - refers to experience of 10 years or more in scaffolding work.

Auditor has to get the followings evidence:

1. Check the appointment letter for the competent person to carry out regular inspections of scaffolds and supervision required.
2. Verify records (Form 5) to prove the competent person who has carried out inspections/supervisions.

Scenarios

(a) If the scaffold work has not started yet, Auditor should check item No.1 and the answer should be "Yes" for conformity.

(b) If the scaffold work is in progress, Auditor should check item No.1 to 2 and the answer should be "No" for non-conformity.

(c) If no scaffold work is anticipated or all scaffold work had been completed, the answer should be "N/A".

Question 14.1.3.5

Are inspections carried out at appropriate intervals to scaffolds including working platforms/anchors and results entered in the prescribed forms?

Guidance

Audit Criteria

Auditor has to get the following evidence:

1. Training & experience records and appointment letter as Question 14.1.3.4
2. Update and proper inspection records (Form 5) to prove the competent person has conducted the inspections in 14 day interval or where necessary with his designation and signature.

Name and designation of the person responsible for regular inspection should be clearly stated in the statutory inspection form such as Form 1 for Weekly Inspection of Lifting Appliances, Form 4 for Weekly Inspection for Excavation and Form 5 for Fortnightly Inspection of Scaffold. As this is a mandatory requirement, the form should be properly filled in name and designation otherwise the answer should be "No".

Question 14.1.3.6

Is there a procedure for taking prompt action on faults identified by inspections?

Question 14.1.3.7

Is there a procedure for checking the effectiveness and thoroughness of the inspections and record keeping?

Guidance

Audit Criteria

Internal safety audit has been used as one of the monitoring tools for assessing the effectiveness and thoroughness of the inspections. The audit should be conducted by

competent person(s) with independence as far as practicable. Most internal safety audits currently done are by contractor's safety officer or project manager who is actually participated in the job. The findings and recommendations of the audit report mainly focused on the physical conditions rather than the safety management system, in particular, the assessment of the effectiveness and thoroughness of inspection. These are not desirable and not acceptable, as it will defeat the purpose of monitoring.

Competence - the person responsible for the internal audit should be properly trained such as with a certificate for safety auditing or equivalent;

Independence - the person responsible for the internal audit should not be involved in the project. They could be assigned from head office, team member from other project or outside consultants;

Coverage - the audit system adopted for internal safety audit should include the assessment of the safety management system and the actual implementation on site.

If an internal audit report provided does not fulfill the requirement on competence, independence and coverage, the answer should be "No".

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.3.8

Are all special scaffolds properly designed and certified by a professional engineer?

Question 14.1.3.9

Are temporary loading platforms properly designed and certified by a professional engineer and with safe working loads displayed?

Question 14.1.3.10

Are all floor edges, and stairways provided with suitable guard-rails and toe-boards?

Question 14.1.3.11

Are all floor openings, liftshaft openings and stairwell openings provided with suitable guard-rails and toeboards or properly covered?

Guidance

The intent of this question generally refers to superstructures which have floor openings, lift shaft openings and stairway openings on site.

Question 14.1.3.12

Are all other places included edges, working platforms, gangways, etc. provided with proper guard-rails and toe-boards?

Part 14.1.4 Housekeeping

Question 14.1.4.1

Are there procedures to ensure that housekeeping is properly maintained on site?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's

procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.4.2

Are all entrances, passages and stairs kept clear at all times?

Question 14.1.4.3

Are appropriate steps taken to ensure good housekeeping and proper waste disposal?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.4.4

Are appropriate steps taken to ensure no timber or other material with projecting nails or other sharp objects are used or left on the site?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.4.5

Are materials and equipment stored and stacked safely?

Question 14.1.4.6

Do regular workplace inspections include housekeeping?

Question 14.1.4.7

Are there appropriate arrangements to warn and prevent the general public from entering or trespassing?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.4.8

Are suitable and adequate lighting provided to all places where lighting is necessary to secure workers' safety?

Part 14.1.5 Protection Against Falling Objects

Question 14.1.5.1

Is there a procedure to ensure that the risk of materials falling from height and injuries arising out of such risks are substantially reduced?

Guidance

Audit Criteria

The intent of this question is to ensure that there is an order/ way (planned) to ensure that the risk of being injured by falling objects is reduced. This includes identifying activities that will create risk of falling in a survey and then develop the appropriate control measures, etc.

1. There should be no "N/A" for auditing piling and foundation sites as falling objects are

foreseeable e.g. hand tools falling down.

2. It is recommended to cover the activities in the survey of risk assessment and develop appropriate control measures to prevent falling objects.

3. If the hazard was not identified, the answer should be "No".

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.5.2

Are there arrangements to provide adequate protection such as nylon mesh and catch-fan to guard against falling objects?

Guidance

Audit Criteria

The intent of the question is for the protection against falling objects for condition where the objects are likely to fall from height. Examples of the arrangements are measures such as provision of protective fans and/or nets in retention of objects falling from height (e.g. superstructure construction, slope protection works etc.)

Regular inspection to those arrangements mentioned (protective fans and/or nets) should be carried out to ensure that they are functioning properly (no gaps, holes or accumulated

debris, etc.) There should also be a system to monitor the frequency of the regular inspections and on its effectiveness. It can be a mechanism that the site engineer/ site agent counter check the inspection records to monitor the implementation of such arrangements.

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.5.3

Is there a system for monitoring the frequency of inspections to these arrangements to ensure that there are no gaps, holes or accumulated debris?

Guidance

Audit Criteria

The intent of the question is for the protection against falling objects for condition where the objects are likely to fall from height. Examples of the arrangements are measures such as provision of protective fans and/or nets in retention of objects falling from height (e.g. superstructure construction, slope protection works etc.)

Regular inspection to those arrangements mentioned (protective fans and/or nets) should

be carried out to ensure that they are functioning properly (no gaps, holes or accumulated debris, etc.) There should also be a system to monitor the frequency of the regular inspections and on its effectiveness. It can be a mechanism that the site engineer/ site agent counter check the inspection records to monitor the implementation of such arrangements.

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.5.4

Where relevant, are there arrangements to provide covered walkways to protect workers and pedestrians?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of

auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.1.5.5

Are all working platforms and floor edges provided with toe-boards to prevent materials from falling from height?

Question 14.1.5.6

Are there arrangements to prevent materials, hand tools etc. from falling from height?
Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement..

1. There should be no "N/A" for auditing piling and foundation as falling objects from piling and foundation work are foreseeable e.g. hand tools falling down.

2. It is recommended to cover the activities in the survey of risk assessment and develop appropriate control measures to prevent falling objects.

3. Auditor should verify whether the auditee has arrangement in place e.g. provide tools strap etc. to prevent falling objects. If there is no arrangement in place, the answer should be "No".

Question 14.1.5.7

Are suitable safety helmets properly worn by all workers?

Guidance

Audit Criteria

1. There should be no "N/A" for auditing piling and foundation sites as falling objects or striking against hard objects are foreseeable e.g. hand tools falling down.

2. Auditor should verify whether all workers properly wearing suitable safety helmets. The standard of safety helmet and expiry date of safety helmet should be checked. Otherwise, the answer should be "No".

Sub-section 14.2 Management of Place of Work II

Part 14.2.1 Work Over Water or Adjacent to Water

Question 14.2.1.1

Have the requirements in the regulations and other statutory requirements which apply to the passenger carrying crafts and life saving equipment to be used been identified?

Question 14.2.1.2

Is there an arrangement to plan the work to eliminate single-person working?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.1.3

Has the feasibility of using safety nets and safety harnesses been assessed?

Question 14.2.1.4

Is there an emergency and rescue procedure?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.1.5

Is there a stand-by boat, under the control of a boatman experienced in call-out, man overboard, and other necessary emergency procedures?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.1.6

Where relevant, are all workers provided with buoyancy aids?

Question 14.2.1.7

Are lifebuoys and lifelines provided at regular intervals?

Question 14.2.1.8

Have the requirements for the provision of warning lights and warning signs been checked?

Question 14.2.1.9

Are there plans to provide adequate illumination in darkness?

Question 14.2.1.10

Is there an arrangement to require any person who comes in contact with contaminated water to be medically examined?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make

continuous improvement.

Part 14.2.2 Overhead and Underground Services

Question 14.2.2.1

Have all possible information about underground services and overhead power lines from utility undertakers and from the owners or occupiers of adjacent sites been obtained?

Guidance

Audit Criteria

The "Electrical Supply Lines (Protection) Regulation (Cap. 406)" administered by EMSD will be enforced from 13 December 2000 as mentioned in the last circular. Auditor is advised to assess all audit questions in Part 14.2.2 of overhead and underground power lines according to the new regulation from December 2000 onwards. Auditors are also advised to get a copy of the "Code of Practice on Working near Electrical Supply Lines" published by EMSD for reference.

The suspension of in-house electric cable lines at the entrance or around the site would be dealt with Question 14.5.3.2 under Electricity (Section 14.5.3). Auditor please also comment on sufficient arrangement of barriers, goal posts and signs, etc. where applicable to those cables. The changes of the audit criteria should be effective from 1 January 2001.

Question 14.2.2.2

Where relevant, has a safe system of work been established in consultation with the utility undertakers?

Question 14.2.2.3

Where relevant, have steps to ensure that barriers, goal posts, signs, etc. are provided and properly maintained in position?

Question 14.2.2.4

Where relevant, have all workers in the vicinity of power lines been provided with information and instruction on the safety procedures?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.2.5

Where relevant, have those pipes and cables which are still live or potentially hazardous been identified and marked?

Question 14.2.2.6

Where relevant, has detection equipment been provided and employees trained in its use?

Question 14.2.2.7

Where relevant, have emergency procedures in relation to utilities services been established and communicated to the work-force?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of

auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement..

Part 14.2.3 Flammable Liquids and Gases

Question 14.2.3.1

Have all relevant requirements in regulations and codes of practices that apply to use, storage or transport of flammable liquids and gases been identified?

Question 14.2.3.2

Are there appropriate arrangements for identifying the use of flammable liquids such as petrol, thinner, diesel, LPG and acetylene gases or other materials and substances which could be a high fire risk?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be

repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.3.3

Are these arrangements recorded and updated?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Process Control Programme

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.3.4

Are there arrangements for storage, handling, transport of flammable liquids and gases?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.3.5

Where flammable liquids and gases stored exceeds the exempted quantities, have the appropriate licenses been obtained?

Guidance

Audit Criteria

1. Valid DG licenses should be obtained if there is any flammable liquid and gas such as diesels, thinner, LPG for forklift truck, oxygen & acetylene cylinders etc. stored have exceeded the exempted quantities. Otherwise the answer should be "No".

2. If it is less than the exempted quantity, the answer should be "N/A".

Question 14.2.3.6

Are there "no smoking" signs displayed in all locations containing readily combustible or flammable materials?

Part 14.2.4 Roadworks

Question 14.2.4.1

Have all the requirements in regulations, codes of practice and guidance which apply to roadworks been identified?

Question 14.2.4.2

Are there an approved Temporary Traffic Management Scheme (TTMS) which included a layout plan for lighting, signing and guarding equipment in place for the safe operation of roadworks and work near moving traffic?

Question 14.2.4.3

Is there a procedure to regularly check the compliance of the TTMS?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's

procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.4.4

Have all the lighting signing and guarding equipment provided conform with the Code of Practice for the Lighting, Signing and Guarding of Roadworks?

Question 14.2.4.5

Is there a procedure to check that signing, lighting and guarding provided are regularly cleaned, maintained and replaced?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make

continuous improvement.

Question 14.2.4.6

Have all workers been instructed on the hazards and safe working procedures before work commencement, particularly to stay within the boundary of road works delineated by cones?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.4.7

Where it is impracticable to provide a safety clearance between the works area and any part of the trafficked carriageway, have alternative arrangements such as alternative methods of work, providing work zone protection barriers or methods of reducing traffic speed at the approach to the section of road works been adopted?

Question 14.2.4.8

Have adequate lighting been provided for works during hours of darkness?

Question 14.2.4.9

Do all road warning signs conform with the requirements of the code of practice for Lighting, Signing and Guarding of Roadworks?

Question 14.2.4.10

Are road works segregated from other road users, especially pedestrians?

Question 14.2.4.11

Have workers been provided with appropriate protective clothing/equipment, including high visibility clothing and, where necessary, ear protection, and are they used?

Question 14.2.4.12

Where relevant, have workers been instructed on the hazards involved in the use of thermoplastic substances and bituminous materials supplied and used in hot form?

Question 14.2.4.13

Are there procedures to control the movement and parking of vehicles and plants in or beyond the boundary of roadworks?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.4.14

Are all road making machines, equipment and materials properly guarded?

Question 14.2.4.15

Are construction vehicles fitted with automatic reversing warning indicators?

Part 14.2.5 Occupational Safety and Health in Offices

Question 14.2.5.1

Are all occupants of offices have sufficient floor space and adequate lighting and ventilation?

Question 14.2.5.2

Is there properly signed, safe and protected access from site entrance to the site office?

Question 14.2.5.3

Are all steps, stairs and floors in the office maintained in good condition and free from trip hazards?

Question 14.2.5.7

Is there a planned fire drill and evacuation procedure and practised regularly?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at

height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.5.8

Are the above procedure drawn to the attention of new personnel using the office?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.2.5.9

Are inspections of the office buildings carried out regularly?

Sub-section 14.3 Management of Tasks and Operations I

Part 14.3.1

Demolition

Question 14.3.1.1

Have all the requirements in all regulations, codes of practice and guidance which apply to demolition work been identified?

Question 14.3.1.2

Has a survey been carried out to identify the structural arrangement and condition prior to demolition?

Question 14.3.1.3

Has a method statement in English and Chinese detailing the sequence and method of demolition, taking into account survey information, been produced?

Question 14.3.1.4

Is there a "specialist contractor" appointed to carry out the demolition of a building?

Question 14.3.1.5

Is there a "competent person" appointed to supervise the demolition of a building?

Question 14.3.1.6

Have all demolition workers including plant operators been trained?

Question 14.3.1.7

Have all demolition workers been instructed on the requirements of the method statement?

Question 14.3.1.8

Have all reasonable steps to protect members of the public likely to be in the vicinity of the demolition work been taken?

Question 14.3.1.9

Have local residents and workplaces been informed?

Question 14.3.1.10

Have all overhead and underground services been identified and all necessary precautions taken?

Question 14.3.1.11

Have all materials and processes likely to create health hazards, e.g. noise and dust, been identified and all necessary precautions taken?

Question 14.3.1.12

Are there flame-retardant sheeting installed to cover the building to be demolished?

Part 14.3.2 Excavations

Question 14.3.2.1

Have all the requirements in regulations, codes of practice and guidance which apply to excavations been identified?

Question 14.3.2.2

Is there a procedure to check the excavation plant suitable for the work to be carried out?

Question 14.3.2.3

Is the operator of the excavation plant competent to carry out the work?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's

procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.3.2.4

Has a method statement been produced for the excavation work and for the support of the excavation and all associated protection?

Question 14.3.2.5

Is the excavations adequately shored in accordance with the design of the temporary support systems?

Question 14.3.2.6

Are suitable barriers provided to prevent the fall of person in excavation?

Question 14.3.2.7

Are there measures to prevent materials or plant from being stacked or worked too close to edges of excavation?

Question 14.3.2.8

Are proper access or egress provided to the excavation?

Question 14.3.2.9

Have competent persons with training and experience been appointed to carry out regular inspections and examinations?

Guidance

Audit Criteria

Auditor has to get the following evidence:

1. Training and experience records of the competent person i.e. qualification in engineering and acceptable experience.
2. Appointment letter for the competent person to carry out regular inspections of all excavations.

Scenarios

(a) If the excavation work has not started, Auditor should check item No.1 & 2 and the answer should be "Yes" for conformity.

(b) If the excavation work is in progress, Auditor should check item No.1 & 2 and the answer should be "Yes" for conformity.

(c) If no excavation work is anticipated or all excavation work had been completed, the answer should be "N/A".

Question 14.3.2.10

Are inspections and examinations carried out at appropriate intervals and the results entered in the prescribed form?

Guidance

Audit Criteria

Auditor has to get the following evidence:

1. Training, experience records and appointment letter as Question 14.3.2.8.
2. Update and proper inspection records (Form 4) to prove the competent person had conducted the inspections in 7 day interval or where necessary with his designation and signature.

Name and designation of the person responsible for regular inspection should be clearly stated in the statutory inspection form such as Form 1 for Weekly Inspection of Lifting Appliances, Form 4 for Weekly Inspection for Excavation and Form 5 for Fortnightly Inspection of Scaffold. As this is a mandatory requirement, the form should be properly filled in name and designation otherwise the answer should be "No".

Question 14.3.2.11

Is there a procedure for reporting faults discovered in the inspections and examinations?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.3.2.12

Are there procedures for checking the effectiveness and thoroughness of the inspection, examination and record keeping?

Guidance

Audit Criteria

Internal safety audit has been used as one of the monitoring tools for assessing the effectiveness and thoroughness of the inspections. The audit should be conducted by competent person(s) with independence as far as practicable. Most internal safety audits currently done are by contractor's safety officer or project manager who is actually participated in the job. The findings and recommendations of the audit report mainly focused on the physical conditions rather than the safety management system, in particular, the assessment of the effectiveness and thoroughness of inspection. These are not desirable and not acceptable, as it will defeat the purpose of monitoring.

Competence - the person responsible for the internal audit should be properly trained such as with a certificate for safety auditing or equivalent;

Independence - the person responsible for the internal audit should not be involved in the project. They could be assigned from head office, team member from other project or outside consultants;

Coverage - the audit system adopted for internal safety audit should include the assessment of the safety management system and the actual implementation on site.

If an internal audit report provided does not fulfill the requirement on competence,

independence and coverage, the answer should be "No".

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Part 14.3.3 Lifting Operations

Question 14.3.3.1

Have all the requirements in regulations, codes of practice and guidance which apply to lifting operations been identified?

Question 14.3.3.2

Are there effective written procedures which covered the transportation, erection and dismantling, operation, communication, guarding of dangerous parts, inspection, testing and examination and maintenance to ensure that lifting operations are carried out safely?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of

the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.3.3.3

Have method statements been produced for all non-standard lifting operations such as tandem lifting?

Question 14.3.3.4

Are there any method statements for erecting and dismantling of lifting appliances?

Question 14.3.3.5

Is there a procedure to ensure all lifting plant and associated lifting gear are suitable for the operations to be carried out?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.3.3.6

Are all operators of lifting equipment competent to carry out the work required and has their training achievement been certificated?

Question 14.3.3.7

Are all banksmen engaged on lifting operations trained for the work and competent to carry out their tasks?

Question 14.3.3.8

Have competent persons with training and experience been appointed to carry out regular inspections, examinations, thorough examinations and tests?

Guidance

Audit Criteria

Auditor should refer to the definition of competent examiners and competent person in the Code of Practice for Safe Use of Mobile Cranes and Tower Cranes.

Auditor has to get the following evidence:

1. Training and experience records of the competent person i.e. qualification in engineering and acceptable experience.
2. Appointment letter for the competent person to carry out regular inspections of all lifting appliances

Question 14.3.3.9

Are inspections, examinations, thorough examinations and tests carried out at appropriate intervals and the results entered in the prescribed form?

Guidance

Audit Criteria

Auditor has to get the following evidence:

1. Training, experience records and appointment letter as Question 14.3.3.8.
2. Update and proper inspection records (Form 1) to prove the competent person has conducted the inspections in 7 day or where necessary interval with his designation and signature.
3. Examinations and tests record produced by RPE.

Preliminary certificate will not be accepted as a proof on certification of safe operation. Auditee is advised to obtain the RPE certificate as soon as possible.

Name and designation of the person responsible for regular inspection should be clearly stated in the statutory inspection form such as Form 1 for Weekly Inspection of Lifting Appliances, Form 4 for Weekly Inspection for Excavation and Form 5 for Fortnightly Inspection of Scaffold. As this is a mandatory requirement, the form should be properly filled in name and designation otherwise the answer should be "No".

Question 14.3.3.10

Is there a procedure for reporting on faults discovered in the examinations and inspections?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.3.3.11

Is there a system for checking the effectiveness and thoroughness of inspections record keeping and examinations?

Guidance

Audit Criteria

Internal safety audit has been used as one of the monitoring tools for assessing the effectiveness and thoroughness of the inspections. The audit should be conducted by competent person(s) with independence as far as practicable. Most internal safety audits currently done are by contractor's safety officer or project manager who is actually participated in the job. The findings and recommendations of the audit report mainly focused on the physical conditions rather than the safety management system, in particular, the assessment of the effectiveness and thoroughness of inspection. These are not desirable and not acceptable, as it will defeat the purpose of monitoring.

Competence - the person responsible for the internal audit should be properly trained such as with a certificate for safety auditing or equivalent;

Independence - the person responsible for the internal audit should not be involved in the project. They could be assigned from head office, team member from other project or outside consultants;

Coverage - the audit system adopted for internal safety audit should include the assessment of the safety management system and the actual implementation on site.

If an internal audit report provided does not fulfill the requirement on competence, independence and coverage, the answer should be "No".

Question 14.3.3.12

Are details of any repair, overhaul and routine maintenance by a registered contractor recorded in a log book?

Question 14.3.3.13

Is a registered contractor engaged for the Builder's lift works?

Question 14.3.3.14

Is the Builder's lift equipped with overload sensing device, effective safety gear and overspeed governor and that those protection devices are kept in good working condition?

Question 14.3.3.15

Is there a competent operator for control and operation of the Builder's lift?

Question 14.3.3.16

Is robust gate provided at every access point for the lift cage and in good working condition?

Part 14.3.4

Mechanical Materials Handling

Question 14.3.4.1

Have materials handling tasks planned to be carried out by mechanised methods as far as possible?

Question 14.3.4.2

Have all the requirements in regulations, code of practice and guidance which apply to operations of material hoist and loadshifting machinery been identified?

Question 14.3.4.3

Are there effective written procedures to ensure that the operations of material hoist and loadshifting machinery are carried out safely?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.3.4.4

Where relevant, are all operators of materials handling plant competent to carry out their tasks?

Question 14.3.4.5

Where relevant, are any necessary banksmen/signallers competent to carry out their tasks?

Question 14.3.4.6

Are inspections, examinations and tests carried out by competent persons and examiners at regular intervals and the results recorded?

Question 14.3.4.7

Has the hoistway of the material hoist been efficiently protected by a substantial enclosure and fitted with fail-safe interlocking hoistway gates?

Question 14.3.4.8

Are there method statements for erecting and dismantling of material hoists?

Part 14.3.5 Temporary Works

Question 14.3.5.1

Is there a procedure/method statement for erection and dismantling of temporary works?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.3.5.2

Is someone appointed with clear duties and responsibilities to co-ordinate and implement the temporary works procedures in relation to standard solutions and to fully designed temporary works system?

Question 14.3.5.3

Where relevant, has a permit to load certificate been prepared for a fully designed temporary works before loading?

Question 14.3.5.4

Are safe means of access and safe working platforms provided for temporary works workers, including those who have to check the installations?

Question 14.3.5.5

Where work involves falsework and formwork in particular, is adequate edge protection and leading edge protection provided?

Part 14.3.6 Structural Steel Erection

Question 14.3.6.1

Where work involves the erection of structures, has a method statement been developed in conjunction with the designer of the structure?

Question 14.3.6.2

Does the design and the method statement allow for the reduction, as far as possible, of high level working?

Question 14.3.6.3

Have safe means of access and safe working platforms been provided where high level work is necessary?

Question 14.3.6.4

Are the requirements of the method statement brought to the notice of all erection personnel and others likely to be affected by the work?

Question 14.3.6.5

Is there clear access for all mobile access equipment, cranes, etc?

Question 14.3.6.6

Are there suitable storage areas for components awaiting erection?

Question 14.3.6.7

Are all statutory requirements for lifting operations being complied with?

Question 14.3.6.8

Have all the personnel involved in the erection tasks been trained and provided with appropriate protective clothing/equipment and used?

Part 14.3.7 Welding/Cutting Operations and Equipment

Question 14.3.7.1

Have all the requirement in regulations and codes of practice for safe welding and cutting been identified?

Question 14.3.7.2

Are all personnel involved in welding operations competent?

Question 14.3.7.3

Are welding/cutting equipment including hose, cables, gauges regularly inspected?

Question 14.3.7.4

Are gas welding/cutting cylinders stored as per regulations/guidance?

Guidance

Audit Criteria

1. If the oxygen & acetylene cylinders used on site have exceeded the exempted quantities and a valid DG license was not obtained, the answer should be "No".
2. If the cylinders used on site do not exceed the exempted quantities, Auditor should verify whether cylinders are stored as per Code of Practice for Safety and Health at Work for Gas Welding and Flame Cutting etc.
3. Auditors should comment on the storage condition and visual evidence should be provided for verification.

Question 14.3.7.5

Are gas gauges provided with appropriate flash back arresters?

Question 14.3.7.6

Have purpose-built trollies/carriers been provided for moving cylinders?

Question 14.3.7.7

For electric arc welding, are adequate welding earths and returns ensured and properly connected to the workpiece?

Question 14.3.7.8

Are welding operatives provided with adequate protective clothing/equipment and used?

Guidance

Audit Criteria

1. Auditor should comment on the personal protective equipment provided to welding operatives even though there was no operation being carried during the physical verification.
2. If there is no issue record of personal protective equipment for the welding operatives, the answer should be "No".

3. The answer may be "N/A" if no activity was carried during physical verification provided auditor had verified the provision of personal protective equipment to the operatives.

Question 14.3.7.9

Are welding operations adequately screened or isolated from other workers/passers by?

Part 14.3.8 Site Traffic

Question 14.3.8.1

Is an appropriate speed limit established on the site and observed?

Question 14.3.8.2

Are site roads maintained in a safe condition both in respect of width, gradient and surface conditions?

Question 14.3.8.3

Have site roads been properly demarcated and separated from locations where people have to work?

Question 14.3.8.4

Are parking areas provided for site vehicles, visitor and delivery vehicles so that site road are not obstructed?

Question 14.3.8.5

Is there designated and sufficient location for vehicles to reverse to avoid them from travelling in reverse?

Question 14.3.8.6

Is there facilities to clean and remove mud from vehicles at site exit?

Part 14.3.9 Site Transport

Question 14.3.9.1

Is there a procedure to ensure the safety of site transport and have all requirements in regulations and codes of practices been identified?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.3.9.2

Have all drivers of site transport vehicles been licenced for the class of vehicles irrespective whether the vehicles have to go onto public roads?

Question 14.3.9.3

Are vehicles especially those which are not intended to go onto public roads been maintained in good working condition?

Question 14.3.9.4

Are all construction vehicles over three tonnes fitted with reversing audible warning equipment or under guidance of banksman?

Question 14.3.9.5

Is basic maintenance regularly carried out by drivers/operators?

Question 14.3.9.6

Is there a system to ensure that regular inspection, servicing and recording are carried out by a trained fitter or garage?

Question 14.3.9.7

Is there a system to ensure that vehicles are operated only by the licenced operators?

Sub-section 14.4 Management of Tasks and Operations II

Part 14.4.1 Blasting (Explosives)

Question 14.4.1.1

Have the requirement in regulation, code of practice in respect of blasting by explosives been identified?

Question 14.4.1.2

Have the use of the explosives which are intrinsically safe been identified?

Question 14.4.1.3

Has the shotfirer licenced and is he competent to carry out the particular task required?

Question 14.4.1.4

Has a Safe System of Work for the use of explosives on site been agreed on and issued to all relevant persons?

Question 14.4.1.5

Has a safe procedure for dealing with misfires been established?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.1.6

Have the procedure for storage, transportation, use of explosive been established and followed?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.1.7

Is there a procedure to inspect surrounding areas before and after explosive work to check for damage?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Part 14.4.2 Piling

Question 14.4.2.1

Has a method statement with risk assessment been produced for piling work and loading test process?

Question 14.4.2.2

Where relevant, have all underground services been located and appropriate precautions been taken for safety of personnel?

Question 14.4.2.3

Have adequate arrangements been made for the off loading and stock piling of piles and piling equipment?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.2.4

Have properly trained signallers been made available for the piling operation on site?

Question 14.4.2.5

Have all the safety requirements for lifting operations been observed?

Question 14.4.2.6

Are there devices established to monitor any tilting and settlement caused to nearby structures?

Question 14.4.2.7

If work involved fabrication of reinforcement cages, have special precautions been taken to prevent collapse of reinforcement cages during lifting?

Question 14.4.2.8

Have all materials and processes likely to create health risks e.g. noise and dust been identified and all necessary precautions been taken?

Question 14.4.2.9

Have suitable plant or equipment been designed and provided for the safe operation of piling workers working at height?

Part 14.4.3 Grit Blasting

Question 14.4.3.1

Is a wet process being used in preference to a dry process if possible?

Question 14.4.3.2

Are dust control measures being carried out?

Question 14.4.3.3

Have operatives been provided with protective clothing/equipment and are they used?

Question 14.4.3.4

Have the personal protective equipment and equipments for work been regularly inspected and checked?

Question 14.4.3.5

Have the site been effectively sheeted and screened?

Question 14.4.3.6

Have all personnel been instructed on the safety procedures?

Part 14.4.4 Tunnelling/Pressurised Atmospheres

Question 14.4.4.1

Have all the requirements in regulations, codes of practice and guidance associated with tunnelling been identified?

Question 14.4.4.2

Have workers who work underground been carefully selected and medically examined?

Question 14.4.4.3

Is there regular medical surveillance?

Question 14.4.4.4

Has a method statement for the tunnelling system been established?

Question 14.4.4.5

Have control measures been identified in the method statement?

Question 14.4.4.6

Have relevant people be informed of the system of work, hazards and control measures identified in the method statement?

Question 14.4.4.7

Have emergency evacuation procedures been identified and established for the tunnel?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.4.8

Have procedures been established to ensure the safety of locomotives or vehicles in the tunnel?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.4.9

Have procedures been established to ensure adequate lighting and ventilation are provided and that toxic gases and radon are controlled?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Part 14.4.5 Diving

Question 14.4.5.1

Has the diver been thoroughly trained?

Question 14.4.5.2

Has the diver been medically examined and found to be fit for diving within the last 6 months?

Question 14.4.5.3

In case of skin diving, has the diver been provided with underwater goggles and other diving equipment?

Question 14.4.5.4

In case of diving with apparatus, has the apparatus been tested and checked before diving?

Question 14.4.5.5

In case of diving with apparatus, is there a diver's linesman at the surface holding a rope the other end of which is attached to the diver?

Question 14.4.5.6

In case of diving to depths of over 10m, have all the requirements stipulated in regulations and codes of practices been identified?

Question 14.4.5.7

In case of diving to depth of over 10m, have liaison with the decompression chamber and a emergency procedure in case of decompression sickness been established?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.5.8

Has a suitable rest place been provided for the diver?

Part 14.4.6 Hand Dug Caissons

Question 14.4.6.1

Have all processes which may create dangerous atmospheres in caissons been identified?

Question 14.4.6.2

Has atmospheric testing equipment been provided?

Question 14.4.6.3

Have workers been properly trained in the use of atmospheric testing equipment?

Question 14.4.6.4

Has a defined procedure for entry to and work in the caissons been established?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.6.5

Have method statements with risk assessment been prepared for all tasks and activities in the hand dug caisson work?

Question 14.4.6.6

Have all lifting appliances, lifting gear and receptacles been certified by a Registered Professional Engineer and regularly inspected by a competent person in accordance with statutory requirements?

Question 14.4.6.7

Have reduced voltage systems been provided for the electrical installation in the hand dug caisson?

Question 14.4.6.8

Have regular inspections been conducted for the caisson to reduce the risk of collapse and blow-in?

Question 14.4.6.9

Is rescue equipment been provided?

Question 14.4.6.10

Has emergency rescue procedure been developed?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.6.11

Are all personnel provided with appropriate personal protective equipment and are they used?

Question 14.4.6.12

Is a safe means of access and egress provided?

Part 14.4.7 Ground Investigation

Question 14.4.7.1

Have arrangements been planned on safe access to personnel, equipment and materials to the site?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.7.2

Are the revolving spindle and other moving dangerous parts of drilling rig effectively guarded?

Question 14.4.7.3

Are sufficient lighting, barriers and warning signs provided if the site is accessible by the public?

Question 14.4.7.4

Are areas for plants or stacking of materials properly designated/built on firm level ground?

Question 14.4.7.5

Has there been a minimum of two workers provided per drilling rig?

Part 14.4.8 Sewerage or Drainage Works

Question 14.4.8.1

Have all work processes which may create a dangerous atmosphere in the confined spaces/decked nullah/large sewerage or drainage been identified?

Question 14.4.8.2

Is there a system to identify and monitor harmful discharges from hospitals, commercial and industrial premises?

Question 14.4.8.3

Have method statements/permit to work with risk assessment been prepared by competent persons for all tasks and activities before entering?

Question 14.4.8.4

Have the size and depth of the decked nullah/large sewerage or drainage and the distance between manholes, means of access and egress been identified?

Question 14.4.8.5

Is a safe means of access and egress provided?

Question 14.4.8.6

Is the flow inside the decked nullah/large sewerage or drainage been regularly checked?

Question 14.4.8.7

Have effective communication links been established between the workers inside and those outside the decked nullah/large sewerage or drainage?

Question 14.4.8.8

Are all workers provided with appropriate rescue equipment and properly used?

Part 14.4.9 Prestressing

Question 14.4.9.1

Are approved method statement and safe working procedure provided?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.9.2

Is there procedure to check the compliance of the approved working method and safe working procedure?

Guidance

Audit Criteria

Arrangement

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Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be

repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

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Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.9.3

Have the approved working method and the safe working procedures been communicated to all relevant personnel in appropriate languages?

Guidance

Audit Criteria

Arrangement

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Procedure

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Appropriate Steps

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Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.4.9.4

Have steps been taken to ensure that other contractors working in the vicinity on the site are aware of the stressing operation?

Question 14.4.9.5

Have the weight of stressing equipment been ascertained and equipment and gear used for their lifting tested and inspected before use?

Sub-section 14.5 Management of Equipment, Plant, Materials and Services

Part 14.5.1 Compressed Air Tools

Question 14.5.1.1

Have all the requirements in regulations, codes of practice in respect of compressed air work been identified?

Question 14.5.1.2

Are the air compressor and all compressed air tools regularly inspected?

Question 14.5.1.3

Has the air receiver been examined at statutory intervals by a competent person and is a record kept for the examination?

Question 14.5.1.4

Have the appropriate valve and gauges been set and maintained?

Question 14.5.1.5

Are compressed air line joints fitted with whip check or other devices to prevent accidental dislodge?

Part 14.5.2 Electrical Supply System

Question 14.5.2.1

Have all the requirements in regulations and codes of practice which apply to the use of electricity on site, in workshops and in offices been identified and complied with?

Question 14.5.2.2

Have the electrical supply system and all subsequent alterations or extensions thereto been carried out and certified by a registered electrical contractor/worker using prescribed Work Completion Certificates (WR1)?

Question 14.5.2.3

Is an up to date as-fitted electrical schematic diagram for the electrical supply system displayed near the main switch and is the electrical supply system in accordance with the electrical schematic diagram?

Question 14.5.2.4

Is the name, designation and contact telephone number of the registered electrical contractor/worker responsible for the temporary electrical supply and installations permanently displayed near the main switch of the installation?

Question 14.5.2.5

Are appropriate signage/notice displayed to warn electrical hazard and live parts?

Question 14.5.2.6

Is appropriate notice for treatment of electrical shock and resuscitation, in both English and Chinese, displayed in areas where electricity is used?

Question 14.5.2.7

Are temporary distribution boards securely mounted on supports and provided with suitable main switches?

Question 14.5.2.8

Have appropriate earth leakage protection devices been installed and maintained properly for the electrical supply system?

Question 14.5.2.9

Are reduced voltage systems used for portable and hand-held tools and temporary site lighting?

Question 14.5.2.10

Is an appropriate earthing conductor provided for connection the main earthing terminal of the electrical supply system to an effective earth electrode and is the effectiveness of the earthing system regularly checked and recorded?

Question 14.5.2.11

Where a generator is installed, is there any switch provided for isolation of electricity supply from the generator?

Question 14.5.2.12

Where a generator is installed, is it appropriately earthed and are exhaust fumes discharged in a direction not to cause harm or nuisance?

Part 14.5.3 Electrical Works

Question 14.5.3.1

Are cables securely installed, properly supported and protected against mechanical damage, heat, vibration and ingress of moisture and corrosive substances?

Question 14.5.3.2

Where relevant, are electric cables adequately suspended/installed to avoid them from being unduly laid on floor?

Question 14.5.3.3

Have arrangements been made to inspect, test and record details of all electrical installations including switch boxes, cables, sockets, switches before they are used, and again at regular intervals?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.5.3.4

For electric equipment and installations used in damp situations or exposed to weather, is it a weatherproof type or contained in an appropriate weatherproof enclosure?

Question 14.5.3.5

Are tough rubber workshop cables/armoured cables used as trailing cables and weather proof connections kept in good conditions?

Question 14.5.3.6

Are portable tools and equipment connected to the electrical supply system with approved type of connectors, and provided with appropriate protection against earth leakage and suitably located means of cutting off the electricity supply when necessary?

Question 14.5.3.7

Are there any appropriate means to prevent unexpected restarting of motors where such restarting might cause damage, and for motors designed for automatic restarting, is an appropriate notice displayed warning the possibility of automatic starting?

Question 14.5.3.8

Are all live parts of apparatus, equipment and tools appropriately protected against accidental personal contact either by design and construction of the apparatus or by the manner of its installation?

Question 14.5.3.9

Are the electrical installations and equipment readily accessible for repair and maintenance works to be carried out?

Part 14.5.4 Portable Tools

Question 14.5.4.1

Is there a procedure to inspect portable power tool including those operated by electric, pneumatic, petrol, cartridge regularly and a record maintained?

Question 14.5.4.2

Have all employees been instructed and trained in the proper care and use of portable, power tools and handtools?

Question 14.5.4.3

Have all employees who use the specific portable power tools such as cartridge-operated fixing tools , chainsaw, stapling gun been trained and certificated as appropriate?

Question 14.5.4.4

Are portable power tools and handtools maintained in safe working conditions?

Question 14.5.4.5

Are appropriate protective clothing/equipment been issued to operators of power tools and their use ensured?

Guidance

Audit Criteria

1. Auditor should comment on the personal protective equipment provided to operators even though there was no operation being carried during the physical verification.
 2. If there is no issue record of personal protective equipment for the operators, the answer should be "No".
 3. The answer may be "N/A" if no activity was carried during physical verification provided auditor had verified the provision of personal protective equipment to the operators.
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Part 14.5.5 Mechanical Plant and Equipment

Question 14.5.5.1

Have the safety requirement in regulations, codes of practice, manufacturer's recommendation in respect of the use of mechanical plant and equipment such as earthmoving plant, roadmaking plant, crushing plant, and bar-bending machines etc. been identified?

Guidance

Audit Criteria

Batching plant should also be considered as a mechanical plant and equipment for assessment, where applicable.

Question 14.5.5.2

Are the operators trained and instructed to carry out the work?

Question 14.5.5.3

Is there a system to maintain these mechanical equipment and plant?

Question 14.5.5.4

Are all dangerous parts effectively guarded?

Guidance

Audit Criteria

Conveyors for feeding in the concrete materials at the batching plant should also be considered as dangerous parts that may cause trapping and striking hazards. It is recommended to fenced off the area, adopt log-out/tag-out procedure or other suitable measures to ensure the dangerous parts will not endanger anybody. Otherwise, the answer should be "No".

Question 14.5.5.5

Have the equipment and plant been provided with emergency stop devices whenever possible?

Question 14.5.5.6

Is there a system to ensure that only trained and authorized personnel can use these equipment and plant?

Guidance

Operator of batching plant should be trained and authorized to operate the plant, where applicable.

Question 14.5.5.7

Are appropriate personal protective equipment been issued to the operatives and their use ensured?

Guidance

Audit Criteria

1. Auditor should comment on the personal protective equipment provided to workers involved in mechanical plant and equipment even though there was no operation being carried during the physical verification

2. If there is no issue record of personal protective equipment for the workers, the answer should be "No".

3. The answer may be "N/A" if no activity was carried during physical verification provided auditor had verified the provision of personal protective equipment to the workers.

Part 14.5.6 Woodworking Machines

Question 14.5.6.1

Have all the requirement in regulations and codes of practices in respect of woodworking machinery (fixed, movable, portable) been identified?

Question 14.5.6.2

Are all dangerous parts of woodworking machines effectively guarded and riving knives provided to bench circular saws?

Question 14.5.6.3

Have emergency switch or dead man switch been provided to all the woodworking machines?

Question 14.5.6.4

Are wood chips and dust produced regularly removed and properly stored?

Question 14.5.6.5

Have suitable fire extinguishers been provided to woodworking machines?

Question 14.5.6.6

Are woodworking machines installed and operated in location away from source of ignition and smoking prohibited?

Question 14.5.6.7

Have all employees working with woodworking machinery been instructed of the hazards and the necessary precautions on safe use?

Question 14.5.6.8

Are all employees working with woodworking machines been provided with the necessary PPE including hearing protectors and are they used?

Guidance

Audit Criteria

1. Auditor should comment on the personal protective equipment such as ear protectors, dust mask, etc. provided to workers involved in woodworking even though there was no operation being carried during the physical verification.

2. If there is no issue record of personal protective equipment for woodworkers, the answer

should be "No".

3. The answer may be "N/A" if no activity was carried during physical verification provided auditor had verified the provision of personal protective equipment to the workers.

Part 14.5.7 Abrasive Wheels

Question 14.5.7.1

Have all requirement in all regulation, codes of practices in the use of abrasive wheels been identified

Question 14.5.7.2

Have all users of abrasive wheels been trained, instructed of the hazards and precautions on safe use?

Question 14.5.7.3

Have all mounters of abrasive wheels been trained in accordance with the requirements of the Factories and Industrial Undertakings (Abrasive Wheels) Regulations, been assessed as competent and been given written authority to carry out their work?

Question 14.5.7.4

Have all grinding machines for the work marked with the maximum working speed?

Question 14.5.7.5

Are all abrasive wheels adequately guarded?

Question 14.5.7.6

Is there a procedure which ensures that no abrasive wheel is mounted other than by an appointed person?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.5.7.7

Are all abrasive wheels or discs selected for their suitability and are they marked with their maximum permissible speed?

Question 14.5.7.8

Have the statutory warning notice in respect of use of abrasive wheel been posted at every grinding wheel?

Question 14.5.7.9

Have PPE been provided to all users of abrasive wheels and are they used?

Guidance

Audit Criteria

1. Auditor should comment on the personal protective equipment provided to the users even though there was no operation being carried during the physical verification.
2. If there is no issue record of personal protective equipment for all users, the answer should be "No".
3. The answer may be "N/A" if no activity was carried during physical verification provided auditor had verified the provision of personal protective equipment to the users.

Part 14.5.8 Building Maintenance

Question 14.5.8.1

Has a survey been conducted on the condition of the site and effect of the works etc. before commencing building maintenance work or renovation work?

Question 14.5.8.2

Is there a working program set with the client to ensure that the user and residents of the building, facilities are least affected?

Question 14.5.8.3

Is there regular meeting with the clients on matters relating to the safety and health of employees and users/residents?

Question 14.5.8.4

Have sufficient measures been provided to segregate and protect the public/user/residents from being affected by the works?

Question 14.5.8.5

Are all building maintenance workers fully instructed and trained in the hazards and precautions involved in working with deteriorating structures, fragile materials, toxic substances and existing services?

Question 14.5.8.6

Have all building maintenance workers been provided with appropriate protective clothing/equipment and are they used?

Question 14.5.8.7

Have all full height glass doors and glass panels been identified, marked and adequately protected?

Question 14.5.8.8

Have adequate lighting been provided for all maintenance and renovation work?

Part 14.5.9 Substances Hazardous to Health

Question 14.5.9.1

Is there a register of hazardous substances which indicates the chemical and physical properties, health hazard information, precautions for use and safe handling information of individual hazardous substances on the site?

Question 14.5.9.2

Have workers who have to use these substances been adequately trained and instructed?

Question 14.5.9.3

Are all hazardous substances in workplace labelled correctly?

Question 14.5.9.4

Are all hazardous substances in the workplace stored correctly?

Guidance

Audit Criteria

1. Hazardous substances mean all substances hazardous to health. Auditor should verify whether all these substances are stored correctly and comment on the storage condition.

2. Visual evidence should be provided for verification.

Question 14.5.9.5

Are measures to control hazardous substances in workplace implemented?

Question 14.5.9.6

Are adequate and suitable personal protective equipment provided and properly maintained and are they used?

Guidance

Audit Criteria

1. Auditor should comment on the personal protective equipment provided to workers handling substances hazardous to health even though there was no operation being carried during the physical verification.

2. If there is no issue record of personal protective equipment for the workers, the answer should be "No".

3. The answer may be "N/A" if no activity was carried during physical verification provided auditor had verified the provision of personal protective equipment to the workers.

Part 14.5.10 Asbestos

Question 14.5.10.1

Is the work with asbestos or asbestos-based materials carried out by a specialist contractor with a method statement prepared?

Question 14.5.10.2

Is the work carried under the supervision of a "registered asbestos supervisor"?

Question 14.5.10.3

Has the safe system of work been regularly monitored to ensure that dust levels are kept to a minimum and below statutory control limits?

Question 14.5.10.4

Have all employees likely to be exposed to risk been provided with approved respiratory protective equipment and protective clothing and are they used?

Question 14.5.10.5

Have all employees been instructed about the risks to health with asbestos, the precautions to be taken and how to fit and maintain respirators and other equipment?

Question 14.5.10.6

Has a procedure been established to ensure whereby employees exposed to dust will be medically examined?

Guidance

Audit Criteria

Arrangement

It is a planning of action, organizing and preparation of resources, provision of measures and development of procedures to achieve the pre-designed objective such as review of the safety policy, reaction in emergency situations, reduction of hazards (noise, working at height, falling objects, hazardous substances etc.). Auditor should verify the adequacy of auditee's arrangements for health and safety issues.

Procedure

A procedure should be of specific steps that anyone can follow and able to achieve its pre-designed purpose and meet the required standards. A good procedure should be repeatable, reliable and traceable. Auditor should verify the adequacy of auditee's procedures for health and safety issues.

Appropriate Steps

They refer to steps that considered being practicable, reasonable and suitable to that situation.

Auditor is reminded to comment on the existing procedures, arrangements and appropriate steps (if any) and give recommendations where appropriate to help auditee to make continuous improvement.

Question 14.5.10.7

Has a register of hours been kept for each person spent on work with asbestos and the work involved?

Question 14.5.10.8

Have cleansing units been provided with showers and storage for clothing?

Question 14.5.10.9

Have procedures been established for the temporary storage and subsequent disposal of materials and followed?
