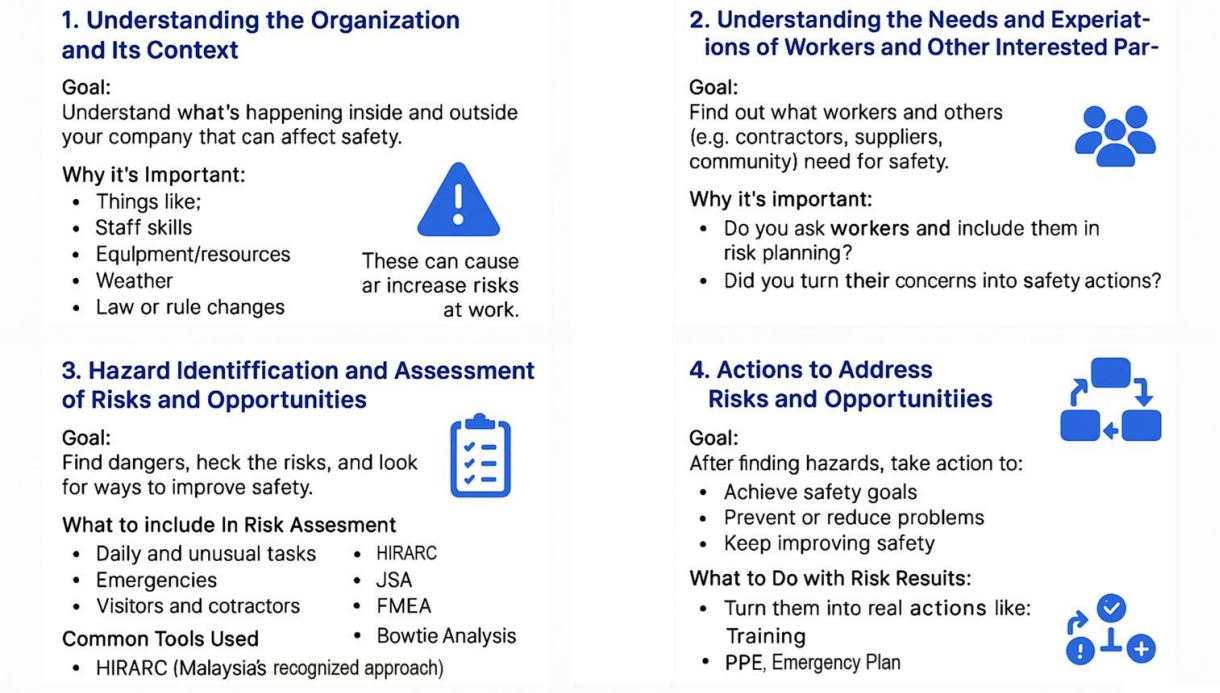
Module 4: OH&S Risk Management and Legal Compliance

OSH Risk Assessment Methodologies

Introduction

To effectively relate the concept of **Occupational Safety and Health (OSH) Management System** with **OSH Risk Assessment Methodologies**, it is essential to integrate the **organizational context**, **relevant issues**, **interested parties**, and the **actions taken to address risks and opportunities** as part of a structured approach aligned with **ISO 45001:2018**. This explanation is designed for OSH Management System **Lead Auditor Training**, providing a comprehensive link between top-level management system requirements and practical risk assessment execution.



1. Understanding the Organization and Its Context

Clause 4.1 of ISO 45001 emphasizes that an organization shall determine external and internal issues that are relevant to its purpose and affect its ability to achieve the intended outcomes of the OH&S management system.

Relevance to OSH Risk Assessment:

- Internal and external issues such as workforce skill levels, availability of resources, regulatory changes, climate conditions, and technological advancements directly **influence the nature and severity of workplace hazards**.
- For example, an organization operating in a high-heat environment must factor heat stress as a contextual issue in risk assessments.
- **Risk methodologies must be dynamic** and reflect the evolving context in which the organization operates.

Auditor Insight:

Auditors must assess whether the organization has:

- Identified contextual factors that influence OSH risks.
- Regularly reviews these factors as part of **risk assessment updates**.

2. Understanding the Needs and Expectations of Workers and Other Interested Parties

Clause 4.2 requires identifying workers and other interested parties (e.g. contractors, regulators, suppliers, local communities) and their relevant needs/expectations.

Relevance to OSH Risk Assessment:

- Interested parties influence **risk acceptance criteria, control implementation, and legal compliance**.
- Workers may express concerns over manual handling tasks, triggering ergonomic risk assessments.
- Contractors may require specific **hazard communication protocols** that must be incorporated into the risk assessment framework.

Auditor Insight:

- Ensure the risk assessment process includes **consultation and participation of workers**.
- Evaluate how the organization has **converted stakeholder needs into measurable risk control actions**.

3. Hazard Identification and Assessment of Risks and Opportunities

Clause 6.1.2 outlines a methodical approach to identify hazards, assess risks, and identify opportunities to enhance OH&S performance.

Integration with Risk Assessment Methodologies:

A comprehensive risk assessment must consider:

- **Routine and non-routine activities**
- **Emergency situations**
- **People access (contractors, visitors)**
- **Human factors and organizational culture**
- **Changes in knowledge or legislation**

Risk Assessment Tools Commonly Used:

- **HIRARC (Hazard Identification, Risk Assessment and Risk Control)** – Malaysia's preferred method.
- **JSA (Job Safety Analysis)**
- **FMEA (Failure Mode and Effects Analysis)**
- **Bowtie Analysis**

Auditor Insight:

- Verify that hazard identification aligns with **legal, operational, and behavioral aspects**.
- Confirm that **risk matrices** or ranking methods are consistent and relevant to actual work conditions.

4. Actions to Address Risks and Opportunities

Once hazards are identified and assessed, **Clause 6.1** requires the organization to determine **actions to address risks and opportunities**—with the goal of:

- Ensuring OH&S system achieves its intended outcomes.
- Preventing or reducing undesired effects.
- Continual improvement of OH&S performance.

Link to OSH Management System:

- This is where **risk assessment results translate into operational controls, training, PPE provision, work redesign, emergency planning, etc.**
- Opportunities may include **new safety technologies**, automation, or **behavioral safety programs**.

Auditor Insight:

- Evaluate whether the actions taken are **proportionate to the level of risk**.

- Confirm linkage between risk register → control actions → monitoring & review → continual improvement.

Final Integration for Lead Auditor Courses:

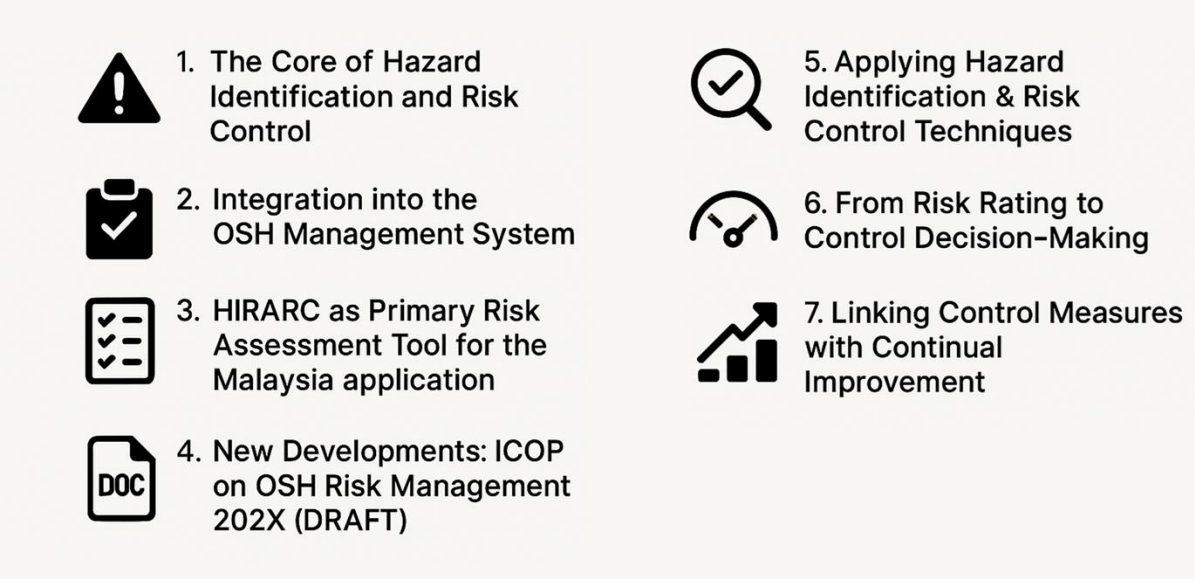
Element	Audit Focus	Risk Assessment Integration
Context of the Organization	Review internal/external factor register	Assess if risk assessments address changing context
Interested Parties	Stakeholder mapping and expectations log	Check if risk evaluations incorporate stakeholder inputs
Hazard Identification	Process walkthroughs, HIRARC reviews	Verify coverage of routine/non-routine/emergencies
Addressing Risks & Opportunities	Action plans, control implementation records	Link controls directly to assessed risk priority

Summary for OSH Lead Auditors:

- Auditors must **evaluate both the process and substance** of risk assessment practices.
- Risk methodologies must not be generic—they must be **context-driven**, **worker-informed**, and **strategically aligned** with OH&S objectives.
- The integration of **Clause 4 and Clause 6 of ISO 45001** into risk assessment ensures a living system that evolves with organizational dynamics.

Hazard Identification & Risk Control Measures

Hazard Identification & Risk Control Measures addresses integration both the **requirements** of ISO 45001:2018 and **practical methodologies** used in Malaysia such as **HIRARC**, while also aligning with the upcoming **ICOP on OSH Risk Management 202X (DRAFT)**. This ensures comprehensive alignment between compliance, risk control practices, and effective auditing.



1. The Core of Hazard Identification and Risk Control

Definition:

Hazard Identification is the process of recognizing sources, situations, or acts with a potential to cause harm in terms of injury or ill health. **Risk Control Measures** are actions taken to eliminate hazards or reduce the risk to an acceptable level.

2. Integration into the OSH Management System (ISO 45001:2018)

Clause 6.1 – Actions to Address Risks and Opportunities

ISO 45001 emphasizes a **proactive, process-based approach** to managing hazards through:

- Understanding hazards from both **routine and non-routine activities**
- Assessing **risk severity and likelihood**
- Establishing **controls within the hierarchy** (elimination to PPE)
- Identifying **opportunities for OSH improvements**

Key Auditing Insight:
Ensure hazard identification is not limited to physical hazards. It should include **human factors, organizational culture, ergonomics, psychosocial risks, and potential emergencies**.

3. Malaysia's Application: HIRARC as Primary Risk Assessment Tool

Reference

- Risk Assessment Concept in Malaysia
  NIOSH HIRARC Journal

✅ **HIRARC Breakdown:**

- **Hazard Identification**: Visual observation, walkthroughs, SOP review
- **Risk Assessment**:
  - *Likelihood (L)* x *Severity (S)* = *Risk Rating (R)*
  - Categorization: Low, Medium, High
- **Risk Control**: Apply **Hierarchy of Control**:

1. **Elimination**
2. **Substitution**
3. **Engineering controls**
4. **Administrative controls**
5. **PPE**

🧠 **Pedagogy-Enhanced Learning (NIOSH 2023):**

- Encourages **worker participation** and **knowledge retention** via collaborative hazard identification.
- Supports ISO 45001 Clause 5.4 on worker participation.

Tips:
Check whether HIRARC documentation is **activity-specific, regularly updated**, and whether controls applied follow the **correct hierarchy and justification**.

4. New Developments: ICOP on OSH Risk Management 202X (DRAFT)

DOSH Draft ICOP

This forthcoming **Industry Code of Practice (ICOP)** will reinforce risk assessment governance:

- Introduces the requirement for **registered competent persons** to conduct HIRARC.
- Reinforces the **legal status** of risk control prioritization.
- Clarifies **sectoral requirements**, including for SMEs, construction, and services.

Auditor Consideration:

- Evaluate whether the organization is preparing to comply with ICOP 202X.
- Check if their HIRARC complies with **upcoming legal expectations** (e.g., registered risk assessors).

5. Applying Hazard Identification & Risk Control Techniques

Technique	Use Case	Aligned Clause (ISO 45001)
Walkthrough Surveys	Physical hazard identification	6.1.2.1(a)
Job Safety Analysis (JSA)	Task-based analysis	6.1.2.1(b)
Checklist & Audits	Routine compliance	9.2
HAZOP / Bowtie Analysis	High-risk processes	8.1.2
Incident Investigations	Historical hazard mapping	10.2

Auditors should assess whether the **control measures implemented** are:

- **Risk-prioritized**
- Supported by **corrective actions**
- Monitored for **effectiveness** under Clause 9.1

6. From Risk Rating to Control Decision-Making

Example Table from HIRARC

Hazard	Risk	L	S	R = L x S	Control
Falling object	Injury to head	4	4	16 (High)	Install guard, PPE (helmet), warning sign
Manual lifting	Back strain	3	3	9 (Medium)	Redesign task, training

Auditor Questioning Technique:

- “Can you justify why substitution was not chosen before applying PPE?”
- “Is this risk reassessed after an incident or operational change?”

7. Linking Control Measures with Continual Improvement

Per Clause **10.3 (Continual Improvement)**:

- Risk control effectiveness must be **monitored, evaluated, and improved**.
- Organizations must demonstrate that **lessons learned from near-misses, audits, and worker feedback** are reintegrated into risk control planning.

Summary for OSH Management System Lead Auditor Perspective

Element	What to Check as Lead Auditor
Hazard Identification	Full coverage (physical, psychological, routine/non-routine)
Risk Assessment	Appropriate method (HIRARC/JSA), documented, justified
Control Measures	Aligned with the Hierarchy of Control, risk-prioritized
Monitoring & Review	Evidence of review, update after incidents/changes
Legal Alignment	Preparedness for ICOP 202X, compliance with OSHA 1994 and ISO 45001

Legal Compliance and OSH Requirements

A. OSHA Compliance: The Responsibilities of Enablers

In Malaysian law, the enabler of the Occupational Safety and Health Act (OSHA) refers to any individual or entity responsible for ensuring compliance with the Act. This typically includes:

1. Safety and Health Officer
    - Any industries that are specified in the SHO Order, are required to employ SHO. SHO has functions to carry out duty as specified by the SHO regulations.
    - SHO is also to be appointed as secretary of the safety and health committee.
2. Competent Person Major Hazard
    - Competent Person Major Hazard is registered under the provisions of Regulation 13, Occupational Safety and Health (The Control of Industrial Major Accident Hazards) Regulations, 1996.
    - He has to provide consultations to the manufacturer in major hazard control including major hazard reporting. The scope of task has also in preparation and keeping up to date an adequate on-site emergency plan for submission to the DOSH
3. CHRA Assessor
    - A competent person who conducts and comes out with a written assessment of the workplace that has potential risks to an employee from exposure to chemicals hazardous to health.
4. Audiometric Testing Centre
    - An entity licensed by DOSH to conduct the annual audiometric test when noise risk assessment report shows that employees exposed to excess noise exceed

the limit. Audiometric Testing Centre shall submit an audiometric test report to the employer within 30 days from the date of the test.

5. Hygiene Technician
    - A competent person who examines the engineering control equipment for at least every twelve months.
    - A competent person who conducts the monitoring of exposure to ensure the maintenance of adequate control of the exposure of employees to chemicals hazardous to health except for confined spaces.
6. Noise Risk Assessor
    - A competent person who carries out noise risk assessment after the workplace has been identified with accessive noise.
7. Registered professional engineer
    - An engineer registered under the Registration of Engineers Act 1967 designed and tested the Local Exhaust Ventilation (LEV) according to an approved standard before installation at the workplace.
8. An Occupational Health Doctor is a competent person who carries out the following processes;
    - Conduct a medical surveillance program when the exposure to chemicals hazardous to health is significant.
    - Determine whether the employee is not allowed to work with chemicals hazardous to health when he determines that the employee has a medical condition that increases their risk of serious health problems from exposure to these chemicals.
    - To be appointed by the Audiometric Testing Centre to interpret the audiogram based on the audiometric test carried out. A medical examination has to be carried out if OHD has determined that the employee faced an abnormal audiogram.
    - Notification to DOSH within 7 days if the medical examination showed the employee has the case of NIHL, hearing impairment, or permanent standard threshold shifted.
9. Registered Medical Practitioner (Doctor)
    - Issuing a report that allows reporting to DOSH to comply with NADOPOD related to Occupational Poison and Occupational Disease including in the case of self-employed persons.
10. Principle Chemical Supplier (including the parties who formulate, manufacture, import, recycles or reformulate a hazardous chemical);
    - Ensure the packaging of hazardous chemicals complies with CLASS Regulation including the Seal of packaging.

- Label every packaging of a hazardous chemical legibly and indelibly comply with specified information;
- Furnish the Safety Data Sheet that contains the information relating to a hazardous chemical.
- A supplier must update a Safety Data Sheet if new information on a hazardous chemical is available, if it's been over five years since the last update, or if instructed by a DOSH.
- Importers or manufacturers of hazardous chemicals must prepare an annual inventory for any chemical imported or supplied in quantities of one metric tonne or more.

B. General OSH Compliance: A Guide to Ensuring Workplace Safety

Maintaining a safe and compliant work environment is crucial for every organization. Here's a comprehensive guide to help you navigate the key Occupational Safety and Health (OSH) compliance requirements, particularly about the Department of Occupational Safety and Health (DOSH) in Malaysia.

1. DOSH (JKKP) Registration

To facilitate smooth enforcement and ensure compliance, organizations must adhere to the following registration requirements with DOSH:

- **Factory Working Environment / Plant**: Ensure your factory or plant is registered with DOSH.
- **Construction Activities**: Register all construction activities under DOSH. Refer to the Notification method
- **Certificated Machinery Compliance**: Machinery, such as Pressure Vessels (PMA), Lifting Equipment (PMT), and Hoisting Machines (PMD), must comply with OSH regulations.
- **Workplaces in Other Sectors (TKLS)**: Refer to the relevant guidelines to register workplaces in other sectors.

Once the workplace registration is confirmed, the submission of the annual JKKP 8 form via the MyKKP online system is required to comply with the Notification of Accident, Dangerous Occurrence, Occupational Poisoning, and Occupational Disease (NADOPOD) Regulations.

Incident Reporting: In case of an incident specified under the NADOPOD regulations, the company must report it to DOSH through MyKKP, using either the JKKP 6 or JKKP 7 forms.

Appointment of OSH Coordinator: Every organization must appoint an OSH Coordinator to handle OSH matters unless a Safety and Health Officer (SHO) has already been hired or the workplace has fewer than five employees.

2. General Workplace Compliance

For all workplaces, the following general OSH compliance measures must be in place:

- **Documented OSH Policy**: Ensure your organization has a documented OSH policy.
- **Documented Risk Assessment**: Conduct and document a thorough risk assessment.
- **Annual Noise Risk Assessment (NRA)**: If workplace is exposed to significant noise levels, NRA is required, or otherwise annual noise identification shall be carried out.
- **OSH General Training**: Regularly provide OSH training to the persons at work.
- **Workplace Conditions**:
    - **Floor Maintenance**: Maintain clean and safe floors.
    - **Accessibility and No Obstruction**: Ensure all walkways are accessible and free from obstructions.
    - **Safety Assurance and Protection**: Secure all holes, manholes, stairways, and ladders to prevent accidents.
    - **Safety Work System**: Implement safe work systems, particularly for work at heights and confined spaces.
    - **Material Handling**: Properly stack, keep, and arrange materials and properties.
    - **Cleanliness, Hygiene, Lighting, and Ventilation**: Maintain high standards of cleanliness and hygiene, with adequate lighting and ventilation.
    - **Preventing Food Contamination**: Ensure food safety in the workplace.
    - **Firefighting Equipment**: Install and maintain adequate firefighting equipment.
    - **First Aid**: Ensure the availability of first aid facilities and trained personnel.
- **Emergency Procedure**: Establish and regularly update your documented procedure for dealing with emergency.

3. Additional Compliance for Workplaces with Machinery

If your workplace involves the use of machinery, additional safety measures must be observed:

- **Machinery Safety Features**: Ensure all machinery has appropriate safety features, such as guarding or fencing.
- **Personal Protective Equipment (PPE)**: Provide PPE to all employees handling machinery.
- **Spill Kits**: Maintain spill kits appropriate for the type of machinery and potential hazards.

4. Additional Compliance for Workplaces Handling Chemicals

For workplaces that involve the handling of chemicals, additional precautions are necessary:

- **Chemical Operation Work System**: Establish a robust work system for chemical operations and scheduled waste management.

5. Additional Compliance for Major Hazard Installations

For major hazard installations, further stringent compliance requirements apply:

- **Industrial Activity Report**: Ensure the Industrial Activity Report is updated by a competent person.
- **Emergency Plan**: Regularly update the emergency plan.
- **Information to Authorities**: Inform local or port authorities about industrial activities and potential hazards.
- **Public Hazard Information**: Provide the public with information on potential hazards associated with your industrial activities.

By adhering to these guidelines, organizations can ensure they meet the necessary OSH compliance requirements, creating a safer and healthier workplace for all employees.

C. Legal Compliance – Approval, Permit, License & Certificate

1. Enhanced Sustainability Disclosure Requirements

Bursa Malaysia: Enhanced sustainability disclosure requirements. In September 2022, Bursa Malaysia announced a phased approach in implementing the enhanced sustainability reporting requirements for public-listed companies (PLCs) commencing in financial year end (FYE) 2023

Sustainability reporting: Key enhanced areas

- Disclose common sustainability matters by 202 (Paragraph 6.3 of Listing Requirements or LR)
- Align with climate change-related disclosures as recommended by the Task Force on Climate-related Financial Disclosures (TCFD) in a dedicated section within the Sustainability Statement
- Disclose the transition plan towards a low carbon economy applicable to ACE market PLCs
- Provide the data from the last three financial years for each reported sustainability indicator and its performance targets (where available) including a summary in a prescribed format
- Consider sector-specific indicators pertaining to sustainability matters deemed material to the organization
- Provide a “Statement of Assurance” on whether the Sustainability Statement (that includes the subject matter and scope covered) has been subjected to an internal review by an internal auditor or if an independent assurance has been performed in accordance with recognized assurance standards

Sustainability Reporting Guide and Toolkits

GHG Assessment can refer to MGTC documents – Green Practices Guideline

2. General OSH Compliance

- DOSH (JKKP) Registration
- To ensure smooth enforcement, the following is a list of compliance requirements with DOSH;

3. Air Compressor/Air receiver

Unless exempted by Order 2017, the Unfired Pressure Vessels (UPV) require a Certificate of fitness (CF) for renewal. Further info on DOSH Website.Example of UPV exempted from permit – A unit that having an internal diameter, width, height or diagonal cross-section not exceeding six inches regardless of the length or pressure of the non-fired pressure vessel".

Note : 6 inches equal to 152.4 mm ID. Other reference of Exempted UPV.

FM (Steam Boiler & Unfired Pressure Vessel) Regulation, 1970
FM (Exemption of Certificate of Fitness for Unfired Pressure Vessel) Order 2017

Unfired Pressured Vessel or UPV

- A vessel designed to stand at pressures above atmospheric pressure contain any type of gas or mixture, or a combination of gases including containers under liquid or gas pressure or both such as bulk storage tanks, also containers under pressure less than atmospheric pressure but excluding cylinder gases.
- Important note: Usually, the State Office DOSH issues a certificate of fitness (CF) for the air compressor for **15 months** only. Before the **60-day** CF period expires, it is necessary to write a letter to the state DOSH for a redo examination. Before the officer wants to make an inspection, make sure maintenance is done. Records need to be kept. DOSH will issue a new CF if passed.

The owner needs to know about **CF Expiry date of each unit** of property belong to them

4. Hoist/Lift/cranes

Unless exempted by Order 2015, the Hoist or Lift or Crane require a Certificate of Certificate of fitness (CF) for renewal. Refer to the guideline on the safe use of lists and escalators

Electronic lifting Equipment

- A hoist is a device used for lifting or lowering a load using a drum or lift wheel around which a rope or chain wraps. It may be manually operated, electrically, or pneumatically driven and may use chain, fiber, or wire rope as its lifting medium. The load is attached to the hoist utilizing a lifting hook. All types of hoists/cranes using electricity are needed to register with the Department of Occupational Safety and Health [DOSH] OR Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP).
- Information required for design approval of hoisting machine.
- It is important for the owner to know about CF Expiry date of each unit of property belong to them

5. Generator Set

Generator set shall be registered with Suruhanjaya Tenaga (ST) and the Department of Environmental (DOE). This certification is required by the authorities to make sure the generator set is safe to operate and has pollution control. Failure to get certification from these authorities can be penalized under the Electricity Supply Act 1990 & Environmental Quality Act 1974.

Generators with fuel consumption of more than 15kg/hr must have a written notification from DOE 30 days before installation. Simply put, in the estimation of 100kVa and above, the equipment owner has to notify the DOE. After notifying, the owner will receive instructions from the DOE, then they can install. After 30 days of installation, the owner needs to make a declaration. Both notify and declare processes usually have their own form. The form can be found on the DOE website. As normal practice, the company will hire a consultant or 3rd party to make this submission. Electricity Supply Act 1990 requires all installations or electrical plant equipment be operated under the control of persons possessing Certificates of Competency as a Chargeman

Compliance can be demonstrated by;

- Evidenced of **Certificate of Registration** as required by the Suruhan jaya Tenaga (ST).
- **Notification** to DOE as stated in Regulation 5 of EQ (Clean Air) Regulation 2014.
- Monthly inspection visit by **competent person** licensed by Suruhanjaya Tenaga (Energy Commission)

6. Diesel Skid Tank

Those who own skid tank units for diesel must comply with the law on the Control of Supply Regulations 1974, Regulation 9 (2) for storage of DieselName of permit: **Scheduled Controlled Goods License**Permit Validity: **One (1) year**

Environmental Requirement;

- To comply with EQA 1974 under section 22, section 24 and Section 25 of this Act
- Assess the efficiency of secondary containment to prevent contamination and pollution

Refer to Bomba Checklist to comply – Pemeriksaan Keperluan Kebombaan Sedia Ada: Skid Tank (Diesel)

- Akses jantera Bomba
    - Pili Bomba
    - Bund Wall: 230 mm (Ketebalan) X Tinggi: Berdasarkan kuantiti minyak
    - Jarak ke bangunan sekiranya kurang dari 3 meter adakan deflector wall setebal 230 mm X 3 meter tinggi
    - Perangkap Minyak
    - Tanda ‘DILARANG MEROKOK’
    - Setiap Pump Island; 2 unit debu kering 9 kg

  - Hazard Code
  - Tiada rumput rampai 5 meter sekeliling tangki
  - Bund wall hendaklah diadakan
  - pump island mestilah dalam bund wall yang berpasir sekiranya tiada perangkap minyak
  - Tiada aktiviti api terbuka
- If the facility is equipped with the details specified in the checklist, the condition or device or equipment must be in good condition and work well

7. Chemical Store / Pesticides Store

Chemical store must comply with USECHH 2000 Regulation. Find further information for clearer compliance conditions

State of compliance;

- To conduct CHRA as required by Reg. 9 of USECHH 2000 Regulation. Info
- To conduct Medical Surveillance if recommended by competent person. Info
- Maintenance of engineering control, example LEV.
- Training for chemical handler – at least once in every 2 years Info
- Information, instruction, and supervision to anyone performing work related to chemical handling.
- Good and safe facilities to keep the hazardous substance.

Evidence as a proof of compliance

- Valid **CHRA** Report
- If LEV has provided, valid examination report shall be available
- IAQ Report, if applicable
- Valid **medical surveillance** (If Medical Surveillance has been carried out as per schedule or recommended in CHRA report)
- Evidence of **Training** for Chemical Handler. *Chemical Handler can be a workers/subcontractor who handle the hazardous chemical and pesticides. Example: Sprayer, Premix Operator, Storekeeper, Sprayer Mandor etc.*
- On-site control has been implemented:-
  - SDS Document still within 5 years validity.
  - Warning sign complied with USECHH Regulations.
  - Warning sign consistent with recommended by SDS and CHRA Report (if applicable)

- Onsite control as recommended by the assessor as defined in Reg. 15 of USECHH Reg.
- Use of PPE as specified by CHRA Report and must be from DOSH-SIRIM approved
  - Respirator Protection
  - eye protection
  - hands protection
  - body protection

8. Scheduled Waste Store

The storage of properties under the categories of waste listed in the First Schedule under EQ (Scheduled Wastes) Reg. 2005 requirements

The compliance can be demonstrated by;

- Notification to DOE as required by Reg. 3 of Environmental Quality (Scheduled Wastes) Regulations 2005
- Employment of a person with certificate of CePSWaM – Certified Environmental Professional (as per Section 49a of Environmental Quality(amendment) Act 2012)
- Labeling is strictly follow with SW Regulation and the storage of SW shall be maintained according to Reg.9 of EQ (Scheduled Wastes) Reg. 2005
- Physical inventory (quantity) and movement of SW shall be consistent as per Schedule 5 reported in eSWIS
- Traceability evidence of transported SW through Schedule 6 or Consignment Notes to meet with Reg.12 of EQ (Scheduled Wastes) Reg. 2005. It shall be consistent with the data recorded in eSWIS
- Periodical training for SW handler.

The compliance can be demonstrated by;

- SW Competent Person (Name / Cert. No)
- DOE Notification document on Scheduled Waste
- Evidence of Training for SW Handler. *Chemical Handler can be a workers/subcontractor who handle the SW. Example: Sprayer, Premix Operator, Storekeeper, Sprayer Mandor etc.*
- SW Store condition, arrangement and labelling are maintained
- Accurate and updated record of SW inventory against (Physical vs eSWIS)
- Transported SW records are maintained – Schedule 6 & Schedule 7

9. Fire Certificate

Law Requirement

According to the Fire Services Act 1988, designated premises with a high risk of catching fire must get a Fire Certificate (FC) issued by the Fire and Rescue Department of Malaysia (BOMBA) to ensure that the buildings are safe to be occupied.

Normally, the building owner, occupant, and the building management committee are responsible for the Fire Certificate application.

According to the Fire Services (Designated Premises) Order (Amendment) 2020, the category of designated buildings that need to apply for a Fire Certificate was Designated Premise.

Evidence as proof of compliance as required by the regulation;

- Valid Fire Certificate
- Valid report of Annual Fire Safety and Emergency Training
- valid report of Annual Fire Drill

10. Stack / Chimney

The EQ (Clean Air) Regulations 2014 to enforce the compliance of maximum concentration limit values for selected air pollutants at the flue-gas stack discharge.The prescribed maximum emission limit value for total particulate matter concentration is **150 mg/Nm3** and for smoke opacity is shade No. 2 on the Ringlemann Chart for boilers of capacities used at palm oil mills. However, the particle concentration limits in term of the particulate size classification are not specified. Maximum value is also prescribed to limit the concentration of gaseous pollutant of Carbon Monoxide to 1000 mg/Nm3.The **Annual Surveillance Test** shall be carried out yearly, and its purpose is to check that the calibration function of the CEMS is still valid.The **Annual Surveillance Test** report shall be prepared & submitted to DOE for verification. The test report should be well organized, readable, and complete.The process of Annual Surveillance Test can refer to this link.According to Environmental Quality (Clean Air) Regulations 2014, the premise shall;

Conduct an Annual Monitoring is required as per Regulation 16(2)

Conduct an Annual Surveillance Test as required by Regulation 17(5)

12. Steam Boiler

Law RequirementFM (Steam Boiler & Unfired Pressure Vessel) Regulation, 1970Boiler cannot be operated without Steam Engineer and Boilerman based on requirement stated in Section 29; Factory and Machinery Act 1967.Evidence as proof of compliance;

Valid **Certificate of Fitness (PMD)**

Valid certificate of **Competent Person** based on capacity of steam boiler unit(s)

13. Wastewater Treatment Plant

A facility to treat the wastewater to comply with Industrial Effluent Reg. 2009 and shall be maintained by using the IETS Guidance ReferenceCompliance can be demonstrated by;

DOE **Notification** date on IETS as required by Reg. 4 of Environmental Quality (Industrial Effluent) Regulations 2009

A written declaration acknowledging that the design & construction of the WWTP has complied with the specifications – Schedule 3

Monitoring result of discharged of industrial effluent

COD parameters & relevant parameters (Table 5)

Installing flow rate meters, sampling, monitoring and recording equipment

Maintain effluent discharge data records – Table 10 – OER online reporting system

Submit the records to DOE within 30 days

Data records retention for minimum 3 years.

Employment of a person with certificate of **CePIETSO**, as per Section 49a of Environmental Quality(amendment) Act 2012), Certified Environmental requirement. Professional in the Operation of Industrial Effluent Treatment Systems – Biological Processes (CePIETSO)

Competent person must be on-duty at anytime of WWTP is in operation to comply with Reg.10.

14. POME Treatment for Palm Oil Mill

Renewal License to Occupy and Use the Prescribed PremisesCompliance can be demonstrated by;

License for operating POME

Employment of a person with certificate of **CePPOME**, as per Section 49a of Environmental Quality(amendment) Act 2012), Certified Environmental Professional in the Treatment of Palm Oil Mill Effluent- CePPOME

Discharge monitoring report based on permitted parameter from Environmental law

15. Transportation / Vehicles

Any vehicles that subject to comply with Road Transport Act 1987 under Section 66Compliance can be demonstrated by;

Vehicles shall have valid inspection certificate, Number of vehicle and dates

Drivers and Conductors shall have valid license.

License No per drivers and date of expiry.

16. Weighbridge

A facility or equipment that subject to comply the Weights and Measures Act 1972 that provides the legal basis for examining and approving patterns/designs of measuring instruments suitable for use for trade and other legal purposes.Permit and license can refer to “Peraturan-Peraturan Timbang dan Sukat 1981The provision under Section 18 (1) (d) of the Weights and Measures Act 1972 [Act 71] clarifies that, any holder of a weights and measures license under regulation 30, Weights and Measures Regulations 1981 must obtain pattern approval from the **The**

National Measurement Standards Laboratory under Act requirement before any such weighing instrument can be sold or used for commercial purposes.

17. Accommodation or living quarters

An Accommodation Certificate, Certificate of Completion and Compliance (CCC) or Temporary Building Permit. Reference. The requirements of workers housing are based on the Workers' Minimum Standards of Housing and Amenities Act 1990 (MSHA) and its Regulations.

However, this act has only applicable to employer located at Semenanjung Malaysia dan Wilayah Persekutuan Labuan. Housing refers to any building including residential buildings built on estates or mines or in any place of employment that is outside the Municipal Council and City Council Areas. While accommodation refers to the accommodation provided to all workers in all employment sectors except workers employed in the estate. Employers are not obliged to provide accommodation for employees. But if the employer employs a foreign worker, the employer needs to provide accommodation based on the Regulations of Workers Required to Be Provided with Accommodation 2020.

The Approval of local authorities for workers' accommodations is the part of the requirements of Jabatan Tenaga Kerja (JTK) to acquire the accommodation certificate. The accommodation certificate can be demonstrated by Certificate of Completion and Compliance (CCC) or Temporary Building Permit.

Main reference of living quarters under the Act 446

Compliance can be demonstrated by;

- Approval by JTK. Checklist for documents
- Weekly inspection records as determined by Section 23 of Workers' Minimum Standards of Housing and Amenities Act 1990.
- Complying with the Part IIIa of the Act under Accommodations maintenance including Certificate for Accommodation, Amenities, safety & health inspection for every 2 weeks, maintenance and appointment of S&H person-in charge. It has been determined in Section 24.
- Sample of Housing Inspection Checklist.
- Sample of Complaint Records.

18. Water System, Sewerage System and Septic Tank

Written approval for any activities related with construction, alteration, modification, disconnection, or close-up the water supply system, sewerage system and septic tanks as required by Water Services Industry Act 2006No part of water supply system and sewerage system to be worked, managed, or operated unless by the controlled of qualified personnelWritten permission to SPAN when carry-out the activity of private connection of pipe, drain to connect directly or indirectly to any public sewer or public sewage treatment works which involve close-up obstruct, stop or deviate any public sewerCompliance can be demonstrated by;

Approval by SPAN for those related activities

19. Underground water / Borewell treatment

An Accommodation Certificate, Certificate of Completion and Compliance (CCC) or Temporary Building Permit. Ref.. The requirements of workers housing are based on the Workers' Minimum Standards of Housing and Amenities Act 1990 (MSHA) and its Regulations.The Approval of local authorities for workers' accommodations is the part of the requirements of Jabatan Tenaga Kerja (JTK) to acquire the accommodation certificate. The accommodation certificate can be demonstrated by Certificate of Completion and Compliance (CCC) or Temporary Building Permit.Compliance can be demonstrated by;

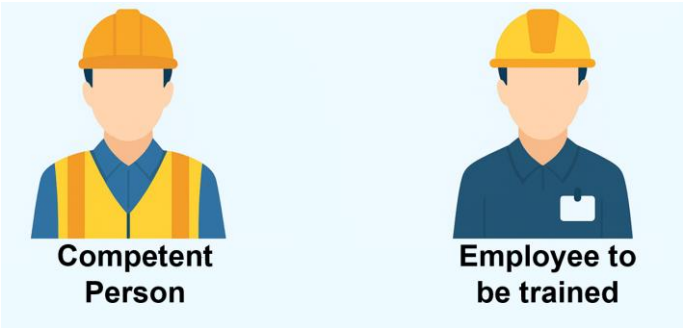
Approval by JTK

Availability of application to JTK. Example

20. HRD Corp Registration

According to PSMB (Amendment of First Schedule) Order 2021, employers with **ten or more employees** from the industry listed, shall register with PMSB (HRD Corp) as stated in Section 13 of PMSB Act (Click HERE to obtain information).

Essential OSH Competency and Compliance: Key Roles, Legal Requirements, and PPE Standards



1. Competent Person

- Safety and Health Officer
- Competency under EQA, e.g. CePPOME, CePIETSO, CePSWaM, etc.
- Monitoring of control equipment under environmental clean air
- Genset Chargeman
- OSH Coordinator
- Boilerman
- Noise Risk Assessor
- CHRA Assessor
- Hygiene Tech. II
- IAQ Assessor (Hygiene Tech. I)
- Fire Safety Manager
- Fire Safety Officer
- Medical Surveillance Competent Person
- CIMAH Competent Person
- Authorized Gas Tester and Entry Supervisor
- Living Quarters Inspector
- Radiation Protection Officer (RPO)

- Other OSH Competency
  - More information
  - Sistem Direktori Orang Yang Kompeten JKKP

2. Specific requirements by law related to training

1. Safety and Health Committee Member
2. OSH Training (Section 18A(3)(c) of OSHA 1994)
3. Hazardous Chemical Handler
4. Scheduled Waste Handler
5. Employees exposed to excessive noise
6. Employees handled the highly toxic pesticides
7. First Aider
8. Fire Safety Manager & Fire Safety Team – Fire Safety & Emergency
9. Fire Drill Training
10. Radiation Protection Officer
11. Radiation Protection & Safety General Training

3. Personal Protective Equipment required for DOSH-SIRIM approval Info

Regulations	Type of PPE
Lead Regulations 1984, Reg 21(3)	Respiratory (air-purifying respirator)
BOWEC Regulations 1986, Reg 15	Head (helmet), Body (safety harness)
Asbestos Process Regulations 1986, Reg 9(1)(b)	Respiratory (air-purifying respirator)
Mineral Dust Regulations 1989, Reg 18(1)(b)	Respiratory (air purifying respirator)
USECHH Regulations 2000, Reg 16(1)	– Head (helmet, face shield), – Face/eyes (face shield, goggles, safety spectacle), – Respiratory (air purifying respirator), – Body (hazardous chemical suit, apron, long sleeve shirt), Hand (chemical resistance gloves), – Foot (safety footwear) As recommended by a competent person
Noise Exposure Regulations 2019, Personal Hearing Protector Reg 7(1)(d)	Ear (earplug & earmuff)

- Workers exposed to hazardous chemical
- Storekeeper of Highly Toxic Pesticide
- Workers exposed to excessive noise & required to wear Noise Hearing Protector
- Workers who work in construction
- Workers who are exposed to lead

- Workers who are exposed to mineral dust
- Workers who are exposed to asbestos

Classification of Workplace Accidents and Incidents

Updated on May 4, 2025

Under the **Occupational Safety and Health (Notification of Accident, Dangerous Occurrence, Occupational Poisoning and Occupational Disease) Regulations 2004** (commonly referred to as the *NADOPOD Regulations*), accidents and incidents are categorized based on severity and reporting requirements. Here is a **structured breakdown** aligned with those regulations and practical classifications used in workplace safety monitoring:

Categories of Accident and Incident (per NADOPOD 2004):

Category	Description	Reporting Requirement
1. First Aid Case	Minor injury requiring on-site first aid only (e.g., small cuts, minor burns, no MC issued).	❌ Not reportable to DOSH
2. Medical Case (MC < 4 days)	Injury resulting in *medical certificate (MC)* of less than 4 days and not considered serious.	❌ Not reportable to DOSH
3. Minor Injury (MC ≥ 4 days)	Injury resulting in 4 or more days MC (e.g., sprains, small fractures, cuts requiring sutures).	✅ Must be reported to DOSH within 7 days

4. Major Injury	Includes amputations, loss of sight, fractures (except fingers or toes), burns over a significant area, or injuries leading to hospitalization.	✅ Must be reported to DOSH within 7 days
5. Fatality (Death)	Any workplace-related death, whether on-site or later in hospital.	✅ Must be reported immediately to DOSH
6. Dangerous Occurrence	Near misses or incidents that did *not cause* injury but had high potential for serious harm (e.g., machinery failure, structural collapse).	✅ Must be reported immediately to DOSH
7. Occupational Disease	Diagnosed work-related diseases (e.g., occupational asthma, skin disease, noise-induced hearing loss, chemical poisoning).	✅ Must be reported to DOSH upon diagnosis
8. Occupational Poisoning	Exposure to toxic chemicals or biological agents leading to poisoning or chronic illness.	✅ Must be reported to DOSH upon confirmation