Time | **Lesson Plan** | Trg Aid

OHSE – HAZARD IDENTIFICATION AND RISK ASSESSMENT

1 **Principle**. Fol are the principles of hazard identification and risk assessment :

a Identification of Hazards

b. Deciding Who Might Be Harmed and How

c Evaluation of Risk

d Record the Findings

e. Review the Risk Assessment

2 **Consequence and Severity of Hazard**. Once all hazards are identified. the consequences/ severity (i.e. harm which could possibly occur in form of personal injury or ill-health or material losses) shall be identified and recordec in Hazard Identification and Risk Assessment Form

Severity/ Consequences	Rating	Severity/ Impact of incident
Catastrophic	5	Permanent disability. death. loss of more people & materials (amputation, blindness, lung cancer)
Major	4	Hospitalization and medical treatment for longer period of time (Fractures. burns, mental ill-health)
Moderate	3	Hospitalization or sick leave over three days (certain fevers, Musculoskeletal Disorder(MSD), certain injuries)
Minor	2	Medical care given in any hospital outdoor (Dermatitis, Allergic Asthma. minor injuries, eyes redness, etc)

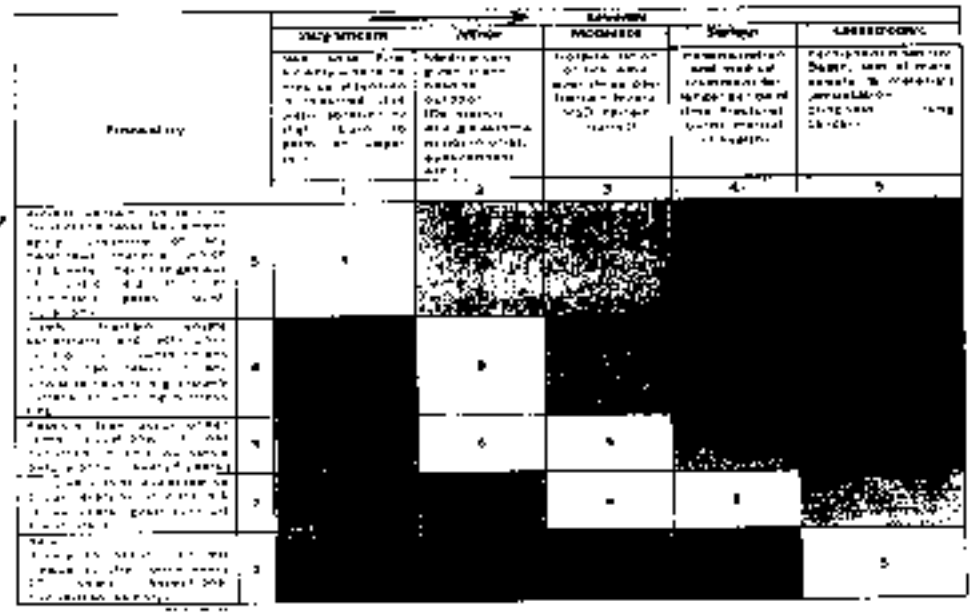
Negligible	1	Near Miss. First aid only where no medical attention is required (Eye wash, abrasion or slight burn to palm or upper skin)

3. **Assessing Hazard by Probability**. Extent to which an event is likely to occur and how often will a certain hazard lead to an incident?

Likelihood	Rating	Description	Frequency
Almost certain	5	Almost certain (certain in most of the cases, Equipment aging, presence of any hazardous material which has greater chance to get out of control e.g. toxic or flammable gases/ liquid, violations.	Likely to occur more than once per year in the organization
Likely	4	Likely (certain unsafe conditions and acts poor control or commitment which can result in any unwanted event, e g slippery surface or working without PPE)	Likely to occur approximately once per year in the organization
Possible	3	Possible (can occur under some situations it has occurred in workshop before once in every 5 years)	Likely to occur approximately once every 5 years
Unlikely	2	Unlikely (Not expected to occur, rarely occur, once in 5 to 10 years, good controls are in place)	Likely to occur approximately once every five to 10 years
Rare	1	Rare (Likely to occur with less frequency than once every 10 years Exceptional circumstances only)	Likely to occur with less frequency than once every ten years

4. **Risk Ratting.** The risk created by each hazard should be evaluated according to the consequences/ severity of the hazard's effects & likelihood/ probability of the hazard. The consequences and likelihood are assessed keeping in view the criteria mentioned before.

Risk = Probability/ Likelihood x Saverity / Consequence



5 **Risk Evaluation**. Risk evaluation of any hazard which is identified can be caried out by taking few actions Those actions along with the severity of hazard is as fol :-

a Extreme risk is highly unacceptable, stop work, immediate action required to mitigate the risk (elimination, substitution, engineering control measures, close supervision is required).

b In high risk improvement is required in specified time (intervention either through elimination, engineering or management action).

c Medium risk is to look for further improvement to prevent even minor risk.

d Acceptable risk level, regular review is required

6 **Risk Control** Measures for the management of risk should reflect the principle of eliminating hazards where practicable, followed in turn by risk reduction with the adoption of personnel protective equipment as a last resort. This shall be applicable to all existing and further control measures required to minimize the risk level.

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	7. **Hierarchy of Control**. Control can be done as:-	
	a. Elimination	
	b Substitution	
	c Engineering controls	
	d Administrative controls	
	e. Personal protective equipment	
	f. Management action for risk control	
	g Action plan for recommended control measures	