

# **EXPECTATION & REQUIREMENT IN COMPETENT PERSON'S REPORT & SUBMISSION**

Industrial Hygiene & Ergonomic Division  
Department of Occupational Safety & Health

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# SCOPE



- Legislation
- Renewal Requirements & Procedures
- Guidelines on Report Writing
- Common Issues

# LEGISLATION: HT II



## FMA 1967

- **Factories and Machinery (Safety, Health & Welfare) Regulations 1970**
  - Air change per hour
  - Removal of dust laden air
  - Hood and ducting
  - Ventilation inlets and outlets
- **Factories and Machinery (Lead) Regulations 1984**
  - Inspection, testing & examination of ventilation
  - Recirculation of air

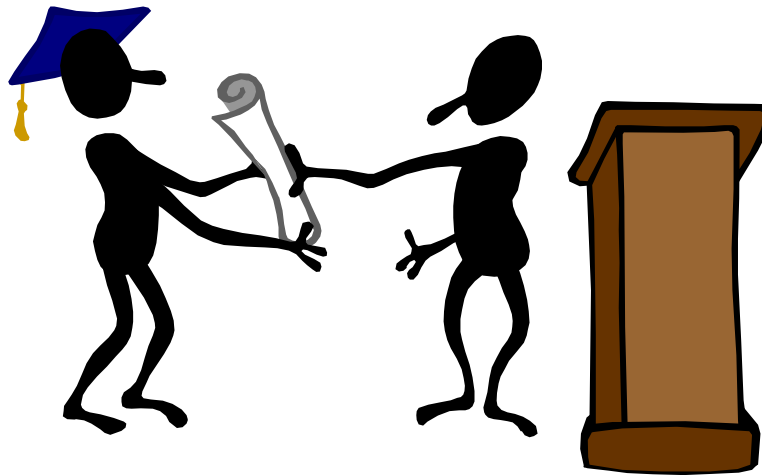
## FMA 1967

- **Factories and Machinery (Asbestos Process) Regulations 1986**
  - Definition of exhaust equipment
  - Inspection, testing and examination of control equipment
  - Duty of competent person
- **Factories and Machinery (Mineral Dust) Regulations 1989**
  - Definition of control equipment
  - Water spray characteristic
  - Inspection, testing and examination of control equipment
  - Duty of competent person

# OSHA 1994 (Use and Standards Of Exposure Of Chemicals Hazardous To Health) Regulations 2000

- Definition of engineering control equipment
- Definition and duty of Hygiene Technician
- Inspection, testing & examination of engineering control equipment
  - Employer : Inspected at interval being no longer than 1 month
  - Hygiene Technician : Examined and Tested at interval being no longer than 12 months.
- Design, construction and commissioning of LEV
  - Shall be designed and tested by Registered Professional Engineer
- Record keeping

# RENEWAL REQUIREMENT & PROCEDURE



# Renewal Prerequisite

## Active

List the past 3 years assessment/monitoring/testing information in renewal form

## CEP

Minimum 30 points per year for 3 years registration period

Total 90 points for 3 years

## VALID

Submit renewal application 3 month before expired



# Document for Renewal

## General

Renewal Form

A copy of work  
permit issued by The  
Malaysian  
Government  
(For foreign resident )

## Specific

A copy of full report  
conducted for the past  
twelve (12) months.

CEP document for the past  
3 years

Original competency  
Certificate

# Renewal Methodology

## Report Presentation

- Review report submitted for renewal
- Instruction for amendment (if any).
- Approval after report amendment (if any).

## On-Site Observation

- Appointment for workplace observation
- Review report submitted for renewal
- Approval based on observation result & report review.

## Good Reputation

- Good reputation for at least 3 times registration period
- No misconduct report/comments in relation with assessment conducted
- Approval can be considered without attending presentation/observation

# **GUIDELINES ON REPORTWRITING - HT II**





## Front Page

- Type of inspection and testing
  - Baseline or
  - Periodic
- Place of inspection and testing
  - Name and address of factory
  - DOSH Factory Registration Number
- Date of Eng. Control Equipment / LEV installed
  - For existing or additional

## Introduction

- Name of P.E (if relevant)
- Date of inspection and testing
- Area of inspection and testing
- Name of competent person
- Reg. Number JKKP HIE 127/12/171-3/2(.....)

## Specific Objective

- Objective of monitoring conducted / compliance

## Process Information

- Process involved toxic chemical release / exposure

## Methodology

- List of equipment used
- Methodology
  - Hood measurement (FV, CV, CD)
  - Duct measurement (SP, VP)
  - Air Cleaner measurement (SP)
  - Motor/Fan measurement (Fan speed)
  - Stack (Physical inspection : abnormal condition / leakage, location – height and distance)

## Result (HOOD)

- Velocity and Flow Rate measurement compared to ACGIH Guidelines

## Result (DUCTING)

- SP, VP, TP, Transport Velocity and Flow Rate measurement

## Calculation

- Fan Static Pressure
- Fan Total Pressure
- Brake Horse Power

## Comparison

- Design Value and Tested Value (Speed, FSP, FTP, BHP and Flow Rate)



# Measurement Form (Summary)

## 6.0 Result of Velocity and Flow Rate Measurement compared to ACGIH Guidelines (Hood)

Summary in tabulated form :

Hood			Point	Contaminant	Face Velocity V (fpm)		Face Flow Rate, Q (cfm)		Remarks	
Type	Size (in)	Face Area (sq.ft.)			Rec.* value	Tested	Rec.* value	Tested	Acc.*	Rej.*

\* Rec – Recommended    Acc – Accept    Rej – Reject

Hood		Point	Hood (Capture Distance)	Contaminant	Capture Velocity V (fpm)		Remarks	
Type	Size (in)				Rec.* value	Tested	Acc.*	Rej.*

\* Rec – Recommended    Acc – Accept    Rej – Reject

# Measurement Form (Summary)

## 7.0 Result of Static Pressure, Velocity Pressure, Total Pressure, Transport Velocity dan Flow Rate measurement (Ducting)

Summary in tabulated form :

Point	Duct size (in)	Duct area (sq.ft)	SP (in wg)	VP (in wg)	TP (in wg)	Velocity (fpm)		Flow Rate (cfm)		Remarks	
						Rec.* value	Tested	Rec.* value	Tested	Acc.*	Rej.*

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## 9.0 Comparisation between Design Value and Tested Value

Description	Speed (rpm)	FSP (in wg)	FTP (in wg)	BHP (hp)	Flow Rate (Q) (cfm)
Design					
Test					



## Discussion

- Existing Control measures
  - Engineering Control
  - Administrative Control

## Recommendation

- Compliance Method
  - Engineering Method
  - Administrative Method
- Compliance to Regulation
- Others if any,

## Conclusion

- Statement of weather objective has been achieved

## Appendices

- Copy of HT II cert.
- Form A - Confirmation letter from management (report has been presented)
- Process Flowchart
- Latest certified copy of calibration certificate for instrument
- Data & Calculation Form
- Schematic Drawing of Eng. Control / LEV

# COMMON ISSUES - HT II



# Common Issues

- Not active
  - Only 1 or no monitoring conducted in past 3 years
- CEP
  - No CEP or not enough CEP for past 3 years
  - Unaware of new CEP format/guidelines
- Missing info & documents, report not according required format
  - Type of inspection and testing not stated in Front Page
  - Company Registration No. not available
  - P.E approval not included / available
  - Form A:
    - not attached & not signed

# Common Issues

- Missing info & documents, report not according required format
  - Calibration certificate:
    - Not attached
    - Not valid during monitoring
    - Monitoring done with equipment cert “out of tolerance”
  - Copy of HT II Registration certificate not attached
  - Process Flow & Description not available
  - Schematic Diagram of Engineering Control / LEV
    - Location / distance of measurement not pointed

# Common Issues

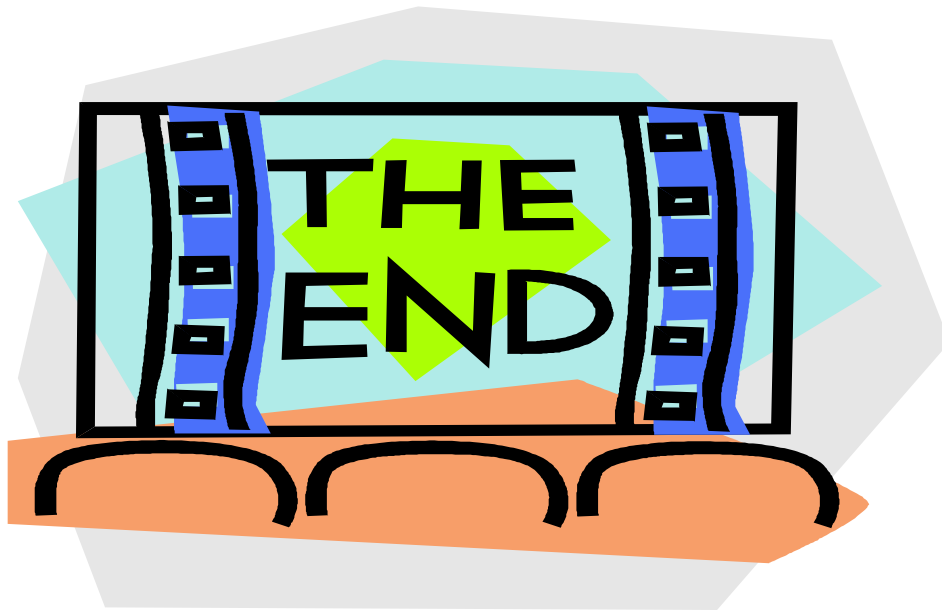
- Data & Calculation
  - Not complete - difficult to analyze performance
  - Scattered - not follow guideline for report writing.
- Methodology
  - Must state serial no. for specific equipment
  - Traverse point for Velocity Pressure (Ducting)
  - Sachs opening (minimum & maximum opening)
  - Fan measurement (not tested) - Justify
  - Air cleaner (not readily / tested) - Justify
  - Lack of Stack observation (position)

# Common Issues

- Discussion & recommendation too general
  - Existing control not discussed.
  - Discussion of the result either over or below recommended range shall in details.
  - Terms “fairly satisfactory” must be explained details.
- Inconsistency/typo error in report
  - Due to copy and paste – many of these issues

# Common Issues

- Ethiques
  - HT II not in the monitoring area/workplace during monitoring
  - Monitoring and report conducted by assistant
  - Report not submitted to employer 1 month after completion of monitoring
  - Report not presented to employer



Any Question?  
Thank you for your attention..