

BIODATA

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DESIGNATION : SENIOR MANAGER, HEAD OF HEALTH & SAFETY
PUTRAJAYA HOLDING SDN. BHD.

**HIGHEST
EDUCATION** : MASTER IN OSH MANAGEMENT, UTM

WORKS EXPERIENCE : 1. PUTRAJAYA HOLDING SDN. BHD - 1997 until Present
2. DEPARTMENT OF SAFETY & HEALTH – 1991 - 1997



PRESENTATION OVERVIEW

Putrajaya Holding (PJH) is a Master Developer of PUTRAJAYA CITY. Since its inception in 1996, PJH as a **PROJECT OWNER** has played **important & active** roles in managing Safety & Health at construction sites. A strong Health & Safety Team was established in 1997 to govern the Health & Safety. PJH manages the project right from the pre-construction phase.

Input was gathered from Project Management for the preparation of tender documents. The Health & Safety requirements were upgraded from time to time. All lessons learnt from previous projects were inserted into new project requirements to ensure contractors have the best practices in managing Health & Safety at construction sites.

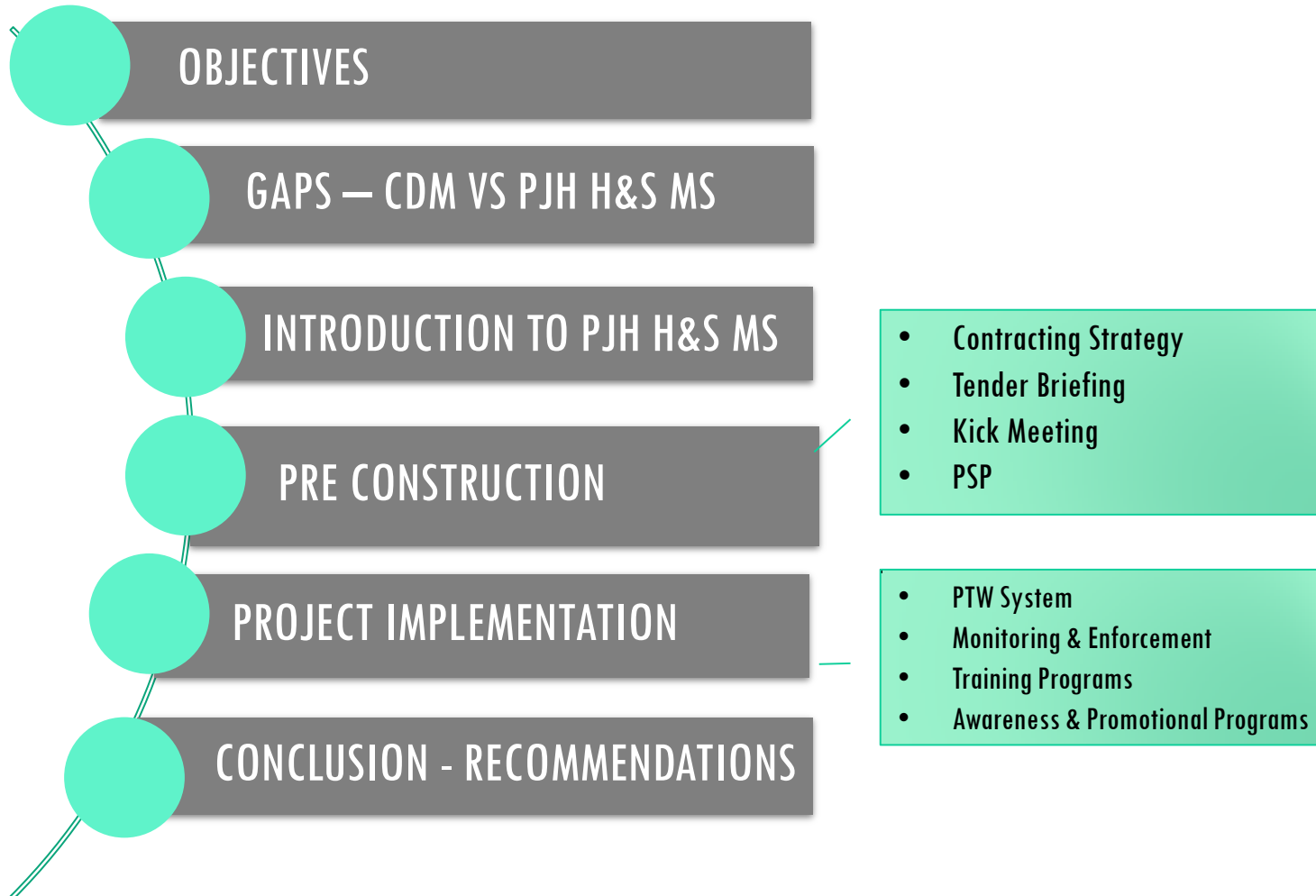
This presentation is to demonstrate that the new CDM guideline which was implemented in PJH for the past 20 years is actually could contribute to the effective management of risk at construction sites. Even though not fully (100%) in line with CDM guideline, but the governance of Health & Safety even at pre construction phase has shown a positive



PUTRAJAYA HOLDINGS SDN BHD
PRACTICING CONSTRUCTION DESIGN
MANAGEMENT (CDM)

8TH DECEMBER 2016
3.30PM – 4.30PM

PRESENTATION OUTLINES



OBJECTIVES

GAPS BETWEEN PJH H&S MS AND CDM

SHARING PJH H&S MS IN RELATION TO CDM

RECOMMENDATIONS

CDM VS PJH HSE GOVERNANCE - GAPS

CONSTRUCTION DESIGN MANAGEMENT

- 1.DESIGN STAGE
- 2.PRE CONSTRUCTION
 - CONTRACTING STRATEGY
- 3.DURING CONSTRUCTION
- 4.FACILITY MANAGEMENT
5. DEMOLITION

PJH HEALTH & SAFETY MANAGEMENT

- 1.DESIGN STAGE
- 2.PRE CONSTRUCTION
 - CONTRACTING STRATEGY
- 3.DURING CONSTRUCTION
- 4.FACILITY MANAGEMENT
5. DEMOLITION

OTHERS

- 1.DESIGN STAGE
- 2.PRE CONSTRUCTION
 - CONTRACTING STRATEGY
- 3.DURING CONSTRUCTION
- 4.FACILITY MANAGEMENT
5. DEMOLITION

SCOPE OF PJH HEALTH & SAFETY GOVERNANCE

- **Pre Construction**

1



- **Construction Stage**

2

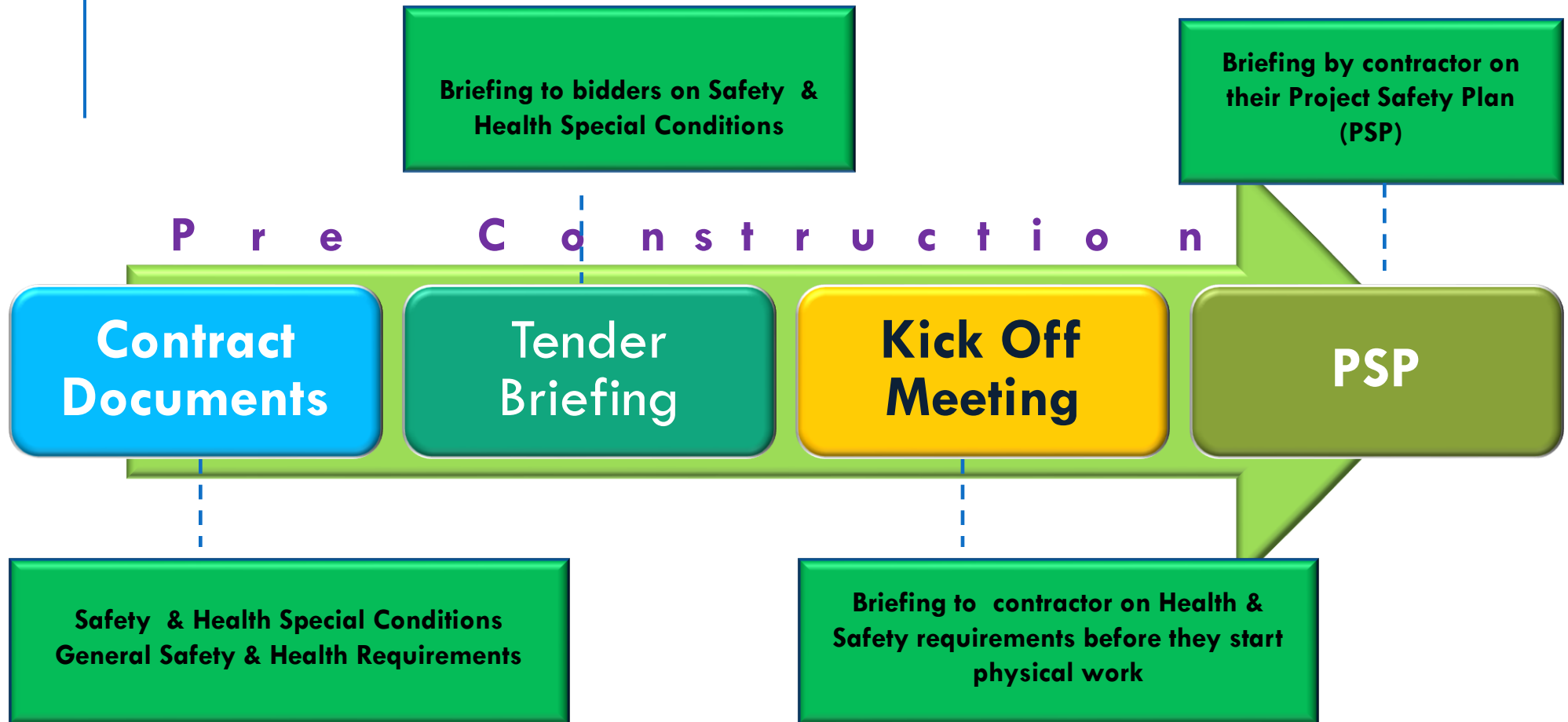


- **Facility Management**

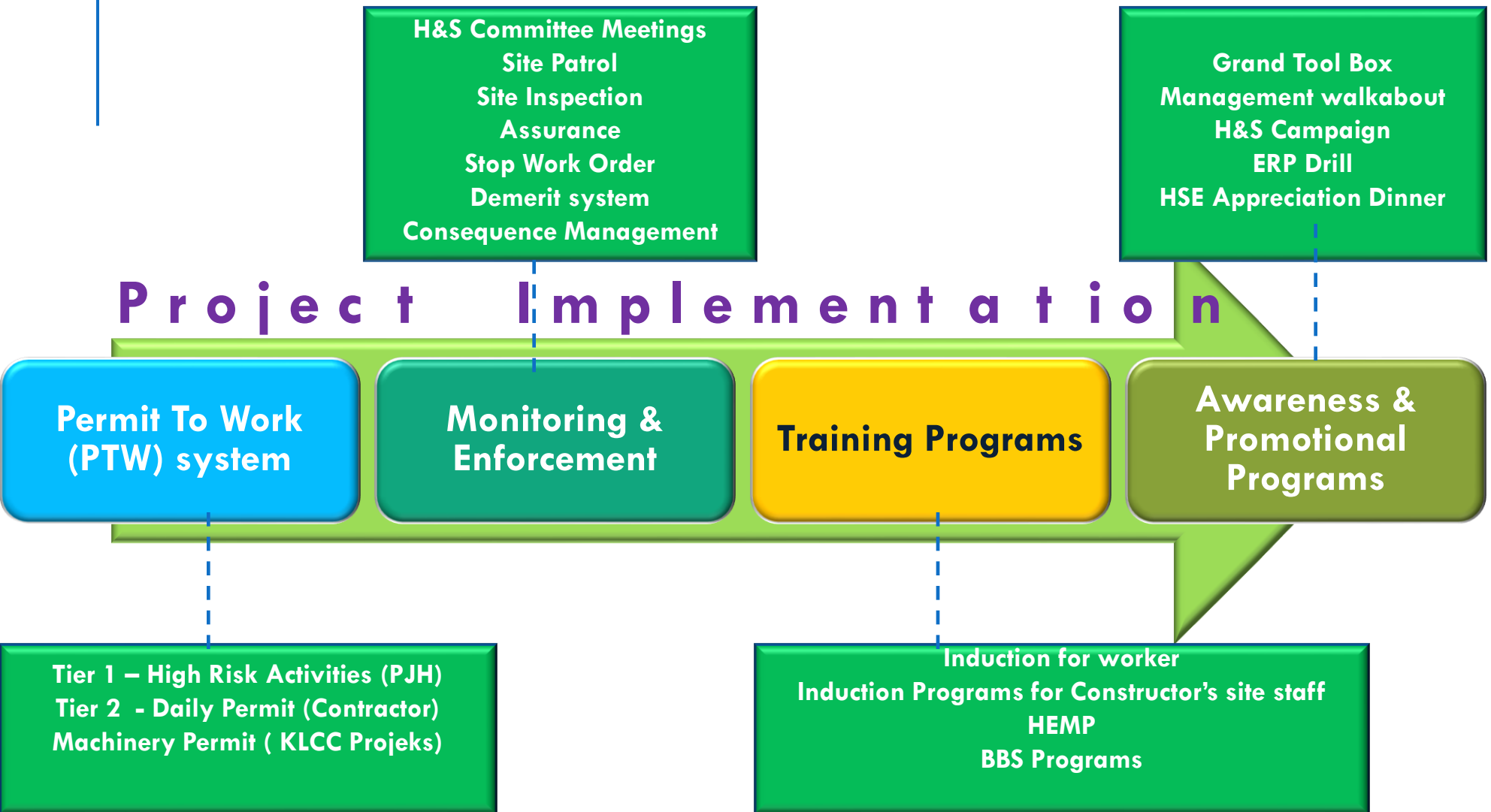
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HEALTH & SAFETY MANAGEMENT



PJH HEALTH & SAFETY MANAGEMENT



HEALTH & SAFETY GOVERNANCE SYSTEM - OWNER OF PROJECT

PJH Sdn Bhd
(Project Owner)

Macro Manage

Set Policy & Standard
Contract Management
PTW System
Awareness & Promotional
Training
Audit
Stop Work Order
Consequence Management
Demerit System

KLCC Projek Sdn Bhd
(Project Management Consultant)

Micro Manage

Close Monitoring & Enforcement
On Contractors Conformance
to PJH HSE Requirements

- Tracking of HSE Training & Program
- PTW audit
- Safety Walkabout
- Inspection
- Grand Toolbox

H&S CONTRACT DOCUMENTS

Established Safety Special Conditions based on:



SCOPE OF WORKS OF CONTRACTOR



CATEGORIES OF CONSTRUCTION

High Risk
Medium Risk
Low Risk



LESSON LEARNT FROM PREVIOUS PROJECT



LESSON LEARNT FROM ACCIDENT CASES



PETRONAS Technical Standard (PTS)

PRE CONSTRUCTION PHASE

TENDER BRIEFING

All potential bidders will be briefed on the salient and main PJH H&S Requirements that have impact on the project cost

KICK OFF MEETING

Contractor briefs PJH on the Details of Their Project H&S Management System

PROJECT SAFETY PLAN MEETING

Contractor will be briefed by PJH on the main PJH H&S requirements that for them to kick start the project

PTW SYSTEM

**Tier 1 – Governed by PJH
Tier 2 – Governed by Main Contractor
Machinery Permit – Governed by PMC**

PERMIT TO WORK (PTW) SYSTEM

TIER 1

- Issued by the PJH HSE Department to Main Contractor and valid for 3 months.
- Permit Applicant is Main Contractor
- Approving Authority is PJH

TIER 2

- Is a Daily Permit
- Issued by the Main Contractor to Sub contractor
- Permit Applicant is Sub Contractor
- Approving Authority is Person In Charge (Main Contractor)
- Permit Verifier is SHO

MACHINERY PERMIT

- Issued by the PMC to Main Contractor and valid for 3 months.
- Permit Applicant is Main Contractor
- Approving Authority is PMC

PERMIT TO WORK (PTW) SYSTEM

CONTRACTOR IS TO PRESENT HEMP TO PJH (PROJECT OWNER) BEFORE PTW IS ISSUED BY PJH TO CONTRACTOR

HAZARDS EFFECT MANAGEMENTS PROCESS (HEMPS)

WORKS SEQUENCE

- Input from Sub contractor, Competent Person and any other technical person e.g Architect, Engineer
- Work Method Statement
- Manual

RISK ASSESSMENT

- HAZARD IDENTIFICATION
- TOP EVENT(POSIBLE INCIDENT)
- CONSEQUENCES
- THREAT (POSSIBLE CAUSES OF ACCIDENT)
- BARRIERS(CONTROL MEASURES BEFORE INCIDENT)
- CONTROL/RECOVERY MEASURES
- RISK LEVEL (BEFORE & AFTER)

SOP

- INCOPORATING SAFETY BARRIERS AND CONTROL & RECOVERY MEASURES TO SEQUENCE OF WORKS

PERMIT TO WORK — LIST OF ACTIVITIES

1. Erection / dismantling of scaffolding, b. Erection / dismantling of tower crane,
2. Erection / dismantling of passenger hoist,
3. Erection / dismantling of safety catch net
4. Erection / dismantling of safety catch platform
5. Erection / dismantling of loading platform
6. Erection/ dismantling of mast climbing working platform,
7. Roofing works,
8. Plastering/painting for outer side of the building,
9. External façade works,
10. Installation of system formwork .i.e. jump formwork, table formwork, steel formwork.
11. Installation of conventional formwork, steel bar and concreting at second floor and above.
12. Lift /escalator installation.
13. Deep excavation works of more than 1.5 meters,
14. Working inside a confined space,
15. Non Destructive Test using Gamma or X Ray.
16. Heavy Lifting of more than 10 tonnes.
17. Rock/Hard Material Blasting work
18. Erection of Steel Structure
19. Portable Equipment & Temporary Electrical Installation
20. Night work
21. Any other Activities deem high risk by Head of Safety Department

ENFORCEMENT OF CONTRACT REQUIREMENT

- **ISSUE BY PROJECT OWNER TO CONTRACTOR AND HAVE TO BE CLOSED WITHIN STIPULATED PERIOD**

NCR

- **HEAD OF HEALTH & SAFETY DEPARTMENT ARE AUTHORISED BY CEO TO ISSUE PARTIAL OR TOTAL STOP WORK ORDER TO CONTRACTOR**

STOP WORK ORDER

- **CONTRACTOR STAFF CAN BE EITHER SUSPENDED FOR ONE MONTH OR PERMANENTLY DISMISSED FROM SITE**

CONSEQUENCE MANAGEMENT

- **ONE DEMERIT POINT IS EQUIVALENT TO RM 1000.00.**
- **E.G FATAL ACCIDENT WILL CARRIED 200 DEMERIT POINT. WORK WITHOUT PTW WILL CARRY 10 DEMERIT POINT**

DEMERIT & FINE SYSTEM

RECOMMENDATIONS



H&S LEADERSHIP & COMMITMENT BY PROJECT OWNER TOP MANAGEMENT



PROJECT OWNER HAS TO HAVE A STRONG H&S TEAM



DELEGATION OF POWER TO H&S TEAM



STRICT ENFORCEMENT AND MONITORING BY PROJECT OWNER



ALLOCATION OF SUFFICIENT H&S RESOURCES

Thank you