



ENVIRONMENTAL MANAGEMENT COMPLIANCE PLAN (EMCP)



PROPOSED STEEL BILLET PLANT  
IN VALDOR INDUSTRIAL ESTATE,  
DAERAH SEBERANG PERAI SELATAN,  
MUKIM 12, PULAU PINANG

Environmental Management Plan  
– Operational Phase  
June 2018

Project Owner: **Padang Mawar Sdn Bhd**  
No. 1, Jalan P2, Presint 2, Putrajaya  
Tel: (03-88918888  
Fax: (03-88919499

Building Contractor: **Ekovest Construction Sdn Bhd**  
No. 170, Jalan Damansara, 53000 Kuala Lumpur  
Tel: (03-42421564  
Fax: (03-42421943

Prepared by: **ERE Consulting Group Sdn Bhd**  
No. 170, Jalan Damansara, 53000 Kuala Lumpur  
Tel: (03-8042087  
Fax: (03-8042021



KERAJAAN MALAYSIA  
JABATAN KERJA RAYA MALAYSIA

KERJA-KERJA NAIKTARAF DAN BAIKPULIH BANGUNAN  
PARLIMEN MALAYSIA (FASA 3B)

NO KONTRAK : JKR/PIKUB/210/2015

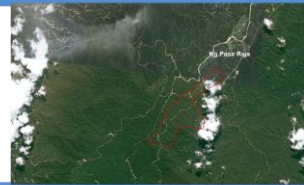


ENVIRONMENTAL MANAGEMENT PLAN

DECEMBER 2015

PROJECT PROponent	IMPLEMENTING AGENCY	CONTRACTOR	ENVIRONMENTAL CONSULTANT
<b>JABATAN PERUMAHAN MESTERI PARLIMEN MALAYSIA</b> JALAN PARLIMEN, SERAJAYA, LUMPUR. Tel: 03-2072 1866 Fax: 03-2072 1408	<b>JABATAN KERJA RAYA MALAYSIA</b> BUKIT MELATI JAYA BANGUNAN AM TOWER, JALAN LADANG MALAYSIA AJAY, No. 35, 7, NO. 60, MELATI, JALAN TUN RAZAK, SARIK, PULAU LUMPUR. Tel: 03-2818 7002 Fax: 03-4441 1928	<b>DKS CONSTRUCTION SDN BHD</b> 157, Jalan 8, PENTHOUSE, IPON TOWNSHIP, JALAN LADANG MALAYSIA AJAY, No. 35, 7, NO. 60, MELATI, JALAN TUN RAZAK, SARIK, PULAU LUMPUR. Tel: 03-2818 7002 Fax: 03-4441 1928	<b>environment ASIA</b> <b>ENVIRONMENT ASIA SDN BHD</b> S17, JALAN 8/222A, DAMANSARA UYU, 47400 PETALING JAYA, SELANGOR Tel: 03-7722 2888 Fax: 03-7722 2099

### ENVIRONMENTAL MANAGEMENT PLAN (I)



THE PROPOSED CONSTRUCTION AND COMPLETION OF PACKAGE 1  
(FARM ESTABLISHMENT, BUILDINGS AND INFRASTRUCTURE WORKS)  
FOR THE HERBAL AND BIOTECHNOLOGY PRODUCT CLUSTERS IN PASIR  
RAJA, DUNGUN, TERENGGANU DARUL IMAN

AUGUST 2012

Client	Project Manager	Principal Consultant	Environmental Consultant (contractor)	Contractor
<b>EAST COAST DEVELOPMENT</b> No. 10, Jalan 1/10, Kuala Lumpur Tel: 03-2010 0099	<b>KEJIC</b> No. 10, Jalan 1/10, Kuala Lumpur Tel: 03-2010 0099	<b>AMARA ASSOCIATES</b> No. 10, Jalan 1/10, Kuala Lumpur Tel: 03-2010 0099	<b>environment ASIA</b> <b>ENVIRONMENT ASIA SDN BHD</b> S17, JALAN 8/222A, DAMANSARA UYU, 47400 PETALING JAYA, SELANGOR Tel: 03-7722 2888 Fax: 03-7722 2099	<b>MIRA JAYA</b> <b>PENBANGUNAN MIRA JAYA SDN BHD</b> No. 10, Jalan 1/10, Kuala Lumpur Tel: 03-2010 0099

### ENVIRONMENTAL MANAGEMENT PLAN REPORT



TENAGA NASIONAL BERHAD (TNB)

THE PROPOSED DEVELOPMENT OF PENCAWANG MASUK UTAMA  
(PMU) BUKIT UNGGUL AT JENDERAM HULU, MUKIM DENGKIL,  
SEPANG, SELANGOR DARUL EHSAN



AUGUST 2019

# ENVIRONMENTAL MANAGEMENT PLAN (EMP)

Jabatan Kerja Raya

## AGENDA

- Recap of Day 1
- Post EIA : EMP
- Components of EMP
- Different Types of EMP

Date: 18.02.2020

Presenter: Kevin Quah

Company: ERE Consulting Group

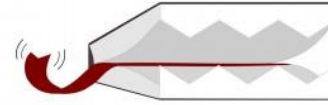
# RECAP DAY 1



**What is an EMP?**  
 How many more reports???  
 Report of another study?



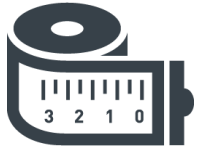
**BEWARE  
 LIVING  
 DOCUMENT!**



- Revised
  - Updated
- Circumstances that **DEMAND CHANGES**



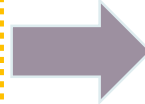
**Actions**



**Measures**



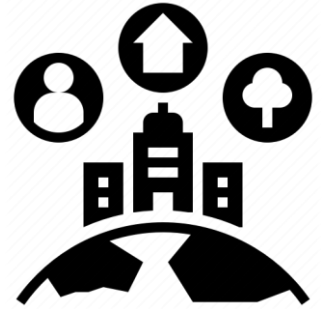
**Structures**



**Project Details**



**Control Measures**



**Surrounding areas**



Implement P2M2 in Project activities

Compliant with **EIA Conditions of Approval**



*Validity*



Living document that has no expiry throughout the phase of the Project

# What stage to submit?



Construction

OR

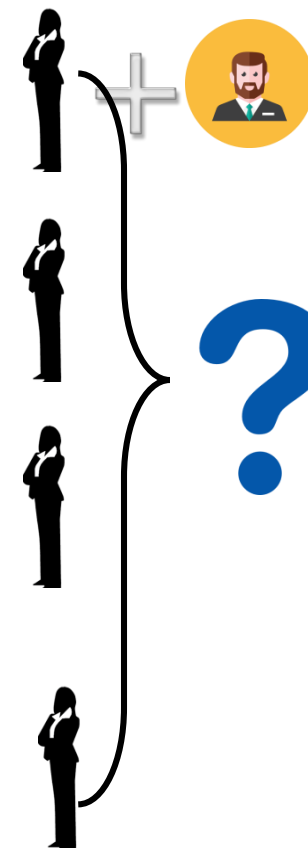


Operation

**EIA  
Conditions  
of Approval**

# Get Started

- 1 Study & understand P2M2 recommended in EIA & EIA COA
- 2 Identify actions required to be executed
- 3 Compute estimated cost to be incurred for each of the executable actions
- 4 Actions to be undertaken and cost implication. Client to make a declaration / a pledge that all actions will be implemented.



# When to submit?



Before  
construction



During  
construction

Translate the EIA COA into the EMP into actionable items → reduce impact to the impact

**EIA Conditions of Approval**



**Consultant Registered with DOE**





# Format of EMP

## CHAPTER 1



### INTRODUCTION

- Project Layout (DO)
- Implementation Schedule
- Info on EMP preparer / firm

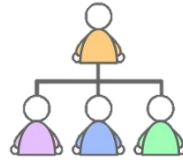
## CHAPTER 2



### POLICY

- Company's corporate policy → Env mgmt & req
- Commitment by top mgmt → continuous compliance with env compliance

## CHAPTER 3



### ORG STRUCTURE

- Org chart → top mgmt on environmental mgmt (names, no., designation, email, roles)
- EM, EO, Engineering Consultant, contractor, site supervisor & competent person
- Env consultant & accredited laboratory

## CHAPTER 4



### TRAINING REQ

- Plan for staff training → develop competency in env req.
- Include maintenance & performance monitoring all P2M2

## CHAPTER 5



### ENVIRONMENTAL REQ

- EIA COA
- LDP2M2 document
- P2M2 to be implemented



Project activities and environmental issues concerned	Impacts	P2M2 recommended in EIA Report	P2M2 to be implemented

## Summary from EIA Report

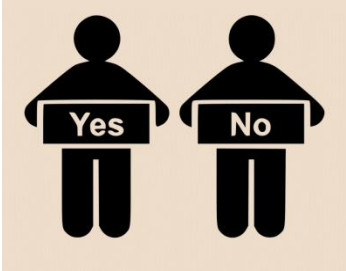


# CORRELATION BETWEEN EIA AND EMP

ARE WE REPORTING THE SAME THING OVER AGAIN IN THE EMP?

**DETAILED FINE-TUNED SOLUTIONS SPECIFIC**

**EIA: WE SHALL DO IT EMP: WE ARE DOING IT**



Noise

Soil Erosion

Hydrology / Flood

Temasya Anggun, Jalan Kerjaya, Glenmarie



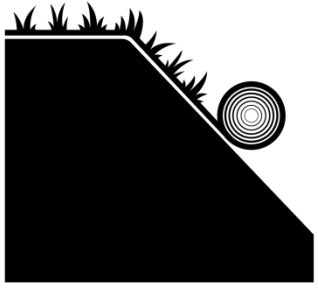
Pocket silt trap



Retention pond (MPK), Kwsn 17



**Changes / difference in LOCATION, DESIGN, ADDITIONAL BMPS**



# LDP2M2 : LAND DISTURBING POLLUTION PREVENTION & MITIGATION MEASURES

**PREVENT, REDUCE AND CONTROL** the discharge of suspended solids and other pollutants from the development site

## WHAT

Complementary document preparing ESCP

Minimum mitigating measures

Reference Document for EO

## WHY

Understand & identify site constraints, areas of concern, designated and potential discharge points of runoffs.

*plan*

## HOW

## WHEN

**effectively implement the P2M2 at the development site**

Schedule of phasing, & sequence

Construction markers

Stabilized Construction Entrance

Stream / drainage buffers

Perimeter control

Sediment basin

Runoff Management

Stockpile Management

Site Inspection

Maintenance





## Water Pollution Control Monitoring

### Performance Monitoring (PM)

IETS, SSTS

- Details on parameters
- Recommended ranges' monitoring frequency
- Filed log sheet
- Data analysis
- Record keeping

### Compliance Monitoring (CM)

Effluent discharge monitoring

- Treatment technology
- Schedule for submission of notification
- Design
- Competent person
- Method to manage discharge of other pollutant

### Impact Monitoring (IM)

River water quality

- Monitoring locations
- Coordinate
- Frequency
- Parameters
- Monitoring Schedule

**Control of oil & grease, concrete wash, etc.**

**Temporary / Permanent Sullage & Sewage Treatment**

**Effluent Treatment**



## Air Pollution Control Monitoring

### Performance Monitoring (PM)

APCS

- Details on parameters
- Recommended ranges' monitoring frequency
- Filed log sheet
- Data analysis
- Record keeping

### Compliance Monitoring (CM)

Air emission discharge monitoring

- Control technology
- Schedule for submission of notification
- Design
- Competent person

### Impact Monitoring (IM)

Ambient air quality

- Monitoring locations
- Coordinate
- Frequency
- Parameters
- Monitoring Schedule

**Air pollution Control**





## Materials and Waste Management

• Raw material and stockpiles

• Solid Waste

• Biomass

• Spoils/ dredge material / construction waste

• Open burning

• Housekeeping

• Schedule Waste



On site ?



Out of site ?



## Audit Requirement

• Frequency

• Scope



## Emergency Response Plan (ERP)

• Fire / Explosion

• Major Incident / Accident

• Oil Spillage

• Traffic

• Flooding

• Electrical Accident

**Response Strategy + Response Procedure**





# GROUP ACTIVITY



JABATAN KERJA RAYA MALAYSIA

## PROJEK MENAIKTARAF JAMBATAN KOTA TINGGI BYPASS DI LALUAN FT003, KOTA TINGGI, JOHOR



## About the Project

- **Problem:** Existing bridge was built with low height clearance (distance from river water level to soffit of bridge). This causes obstruction of Sg Johor river flow during heavy rain which in turn causes water overflow at the bridge and consequently flood to the nearby area. The low bridge height clearance also prevents fishermen's and tourism's boats from passing under the bridge during high tide construct a new bridge across Sg. Johor to replace the existing bypass bridge along Jalan Kota Tinggi Bypass (FT003) in Kota Tinggi, Johor.
- **Solution:** This project aims to construct a new bridge with higher height clearance and upgrading the approaching road from 2 lane single carriageway to 4 lane dual carriageway



# GROUP ACTIVITY





# GROUP ACTIVITY

## About the Project

- EIA Schedule 1
- Approval: 18.12.2019



## TASK:

Client, KKR has appointed contractor ABC to prepare EMP.

As a contractor, please prepare the EMP framework for Kota Tinggi Bridge



# My Project doesn't fall under Prescribed Activity

**NO EIA EMP?**



**ISKANDAR  
MALAYSIA**



## SIMILAR BUT NOT SAME

### Differences....

- No EIA
- Different names : EMP (I), EMCP.
- Approving Authorities
- Different Format
- Different Checklist to refer
- Internal compliance



- To protect the environment