



# EXECUTIVE TALK

## COMMAND AND CONTROL VS SELF REGULATION ENFORCEMENT APPROACH

### “Meeting Your Environmental Obligations”

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# WHAT IS COMMAND AND CONTROL?



- CAC is sometimes refers to “Carrot and Stick” approach

- CAC involves the DOE to:

“command” industries in reducing pollution

“control” industries to meet emission levels

Why CAC approach was introduced in early 1970s?



CAC – speed up behavioural change of industries and project proponents to meet environmental obligations.



# What are the methods involved in CAC?

1. **Laws** – quality standards, specific directives, limits and guidelines

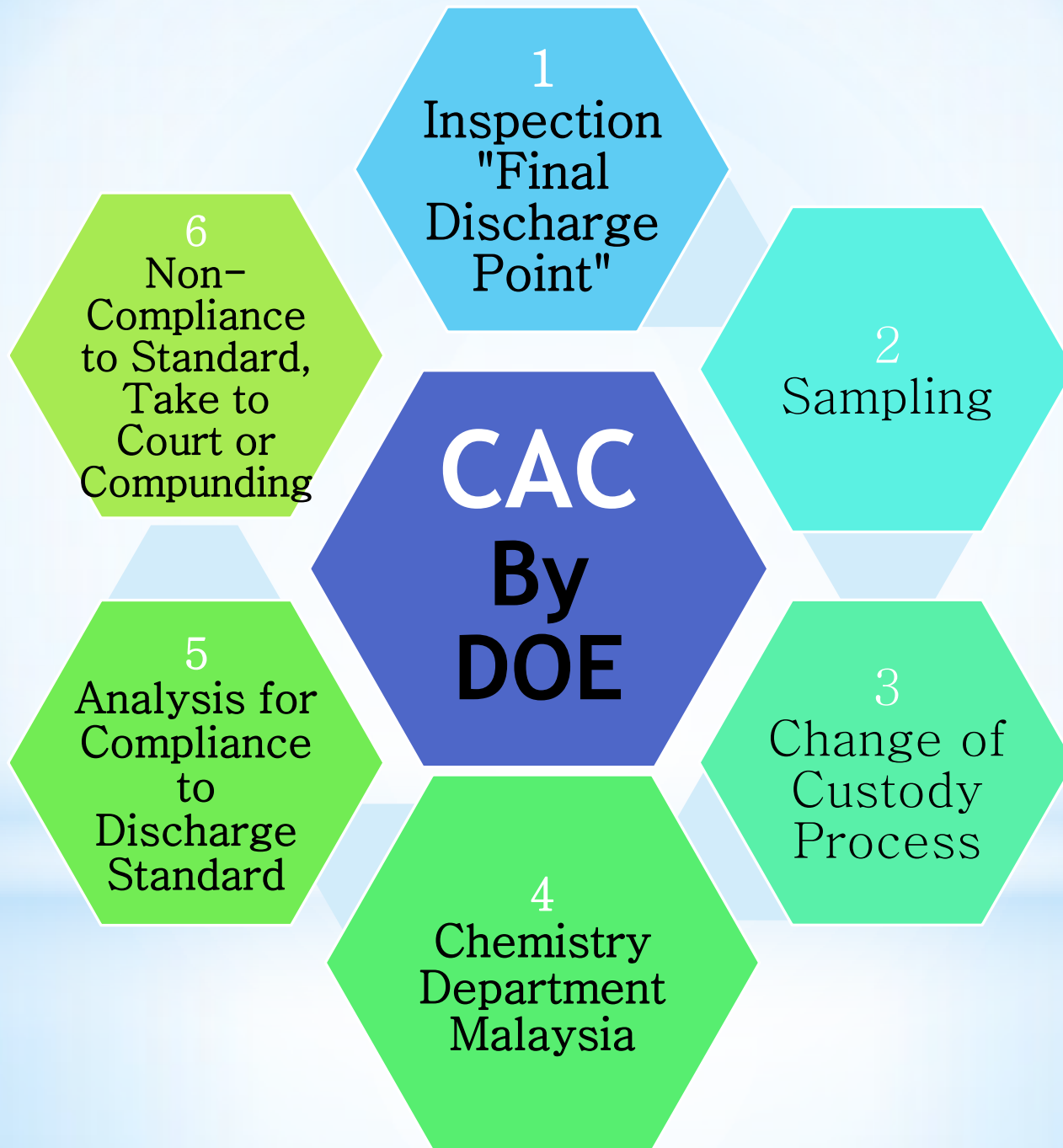
2. **Contracts and Agreements** –



EIA conditions

Schedule Waste Licencing Conditions

Contravention Licence



# What are Strengths and Weaknesses of CAC approach?

A CAC approach in DOE policy is used for several reasons:

- \***Strength** – CAC can respond more quickly with the force of Law
- \***Criticism** – Capture a snapshots (not true big picture) of non-compliance in industries operation.

# Let us consider Math of Enforcement Visit:

## Maths of CAC Enforcement

*Q1. How to establish compliance?*

A1. Of Course, compliance demonstration solely based on factory inspection

The Facts—Conservative Estimate

Say, number of DOE inspectors = 1000

Say, total number of factories (not including EIA Development Projects) in Malaysia = 10,000

Say, an inspector conducts 1 inspection per day

Say, number of working days = 300 days

Therefore, total annual number of inspections =  $1000 \times 300 = 300,000$

Therefore, it means each (1) factory can be inspected 30 times a year ( $300,000/10,000$ )

# Snapshot information



Each factory can be inspected **30** times a year!

Even on an overly exaggerated estimate of **30** inspections a year, the information obtained is

A SNAPSHOT INFORMATION ON COMPLIANCE STATUS

# Snapshot Information? Why?

30 inspections of a factory a year

Say, an inspection is a full working day affair = 6 h/d

So, total inspection time =  $30 \times 6 = 180$  h/y

Say factory operates only 8 h/d, 200 d/y

Total factory working hours =  $8 \times 200 = 1600$  h/y

So, inspection time/factory operating time =  $180/1600 = 11\%$

Let's **think**  
for a while...



- \* Inspection time/factory operating time =  $180/1600$   
= **11** %
- \* Assessment of Compliance status solely based on factory inspections statistically justified?

# SELF-REGULATION APPROACH

Self-Regulation is whereby industries or project proponents be the ownership in enforcing environmental laws in meeting environmental obligations

In short, **DIY (DO IT YOURSELF)** in achieving environmental compliance or **Fully Hands On**



# Why DOE need to shift from CAC and towards Self-Regulation Approach?



## Positive Corporate Image

- The **image** of investors at stake if non-compliance industries taken to court
- Avoid factory or project developers **downtime** and heavy **monetary penalties**

## Snapshot inspection

- Not Fair and within 365 days per year, overlooking **BIG PICTURE** for those highly responsible industries who fully hands on.

## Positive Culture

- The practice of self-regulation-performance monitoring will **mainstreaming** self-regulatory performance issues

Sewage and Industrial Regulations 1979

Which DOE Regulations have been *revoked*?

Clean Air Regulations 1978

Industrial Effluent Regulations 2009

Which DOE **NEW** Regulations with Self-Regulatory Elements

Sewage Regulation 2009

Landfill and Transfer Stations Regulations 2009

Clean Air Regulations 2014

# What Self-Regulatory Elements Advocated by DOE?





# Self-Regulatory Elements in EIA



# Peranan CePEOEIA

1

- Memastikan aspek alam sekitar mengikut keperluan perundangan

2

- Memeriksa langkah kawalan pencemaran dan impak alam sekitar

3

- Memastikan Integriti Persampelan dan Data Intepretasi

4

- Memantau status kualiti alam sekitar

5

- Merekod dan melaporkan prestasi pematuhan projek

6

- Sebagai contact person dengan JAS

# Tugas CePEOEIA

1) Memahami syarat EIA/EMP/ESCP

2) Menginterasikan Langkah Kawalan Pelan Rekabentuk dalam BQ

3) Memastikan jadual pelaksanaan projek selaras dengan keperluan alam sekitar

4) Memastikan pemasangan BMPs secara efektif mengikut EMP dan ESCP

8) Menyemak dan mengesahkan laporan pengawasan dan pemantauan alam sekitar

7) Memastikan program pengawasan dijalankan mengikut EMP

6) Menjalankan pemeriksaan ke atas langkah kawalan dan melaporkan secara online mengikut syarat EIA

5) Memastikan penyenggaraan BMPs mengikut jadual

9) Membuat analisa statistik data pengawasan

10) Mengadakan mesyuarat tapak bersama pemaju projek dan kontraktor

11) Menjalankan pengukuran insitu parameter mengikut syarat EIA



# Self-Regulatory Elements for

## POME

The self-regulatory elements are similar to the Industrial Effluent

# Other Self-Regulatory Elements (CEMS-Continuous Emission Monitoring System)



## Other Self-Regulatory Elements (PEMS-Predictive Emission Monitoring System)

Some industries are encourage to use PEMS together with CEMS;

- Incineration Plants stacks from Oil & Gas Processing and Refinery
- limitation to Coal Fired Power Plants and Cement Plants.

# WRAP UP

- ✓ CAC Vs Self-Regulation (strength and Weaknesses)
- ✓ DOE Moving Forward
  - \* Mainstreaming Self-Regulation
  - \* Competent Persons or Qualified Person (as Environmental Practitioners)
  - \* Certification Program



thank  
you!



# Q & A

