



CONTAMINATED LAND MANAGEMENT IN MALAYSIA

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ABSTRACT

The environmental implication of contaminated land is a potential problem in Malaysia and the Department of Environment (DOE) is taking the initiative to effectively manage it. In June 2009, DOE have published three series of Guidelines for Managing and Controlling Contaminated Land in Malaysia which provides the details and appropriate criteria and standards consists the framework for the assessment, investigation and remediation of contaminated land in Malaysia. The proposed regulatory elements for the management of contaminated land were developed based on these three (3) series of guidelines. The comprehensive nature of such legislations, policies and guidelines indicates that Malaysia is moving in the right direction in term of governance of contaminated land.



INTRODUCTION

In recent years, there are increasing concerns on soil and groundwater contamination in various parts of Malaysia. Cases like illegal dumping, landfills and industrial land contaminations were often highlighted and raised the concern on the need for a solution to address the potential impact to the environment, human well being as well as economic and political implications. The quality of groundwater is strongly linked with the health of the land. In certain parts of Malaysia, groundwater is an important source of water supply for domestic use, potable water supply and irrigation. Contamination of the land could result in contamination of the underlying groundwater thereby rendering it unfit for consumption and use.

GENERAL GUIDING PRINCIPLES

Polluter Pay Principle

- Define the responsibility for performing a site assessment and remediation.
- Polluter can be the land owner or land occupier or any polluter of any land.

Risk-Based Approach

- Highlights potential current and future risk associated with the presence of contaminants in the soil and groundwater matrix.
- recommended corrective actions to mitigate or control incremental risk to the level acceptable from the human health and ecological perspectives.

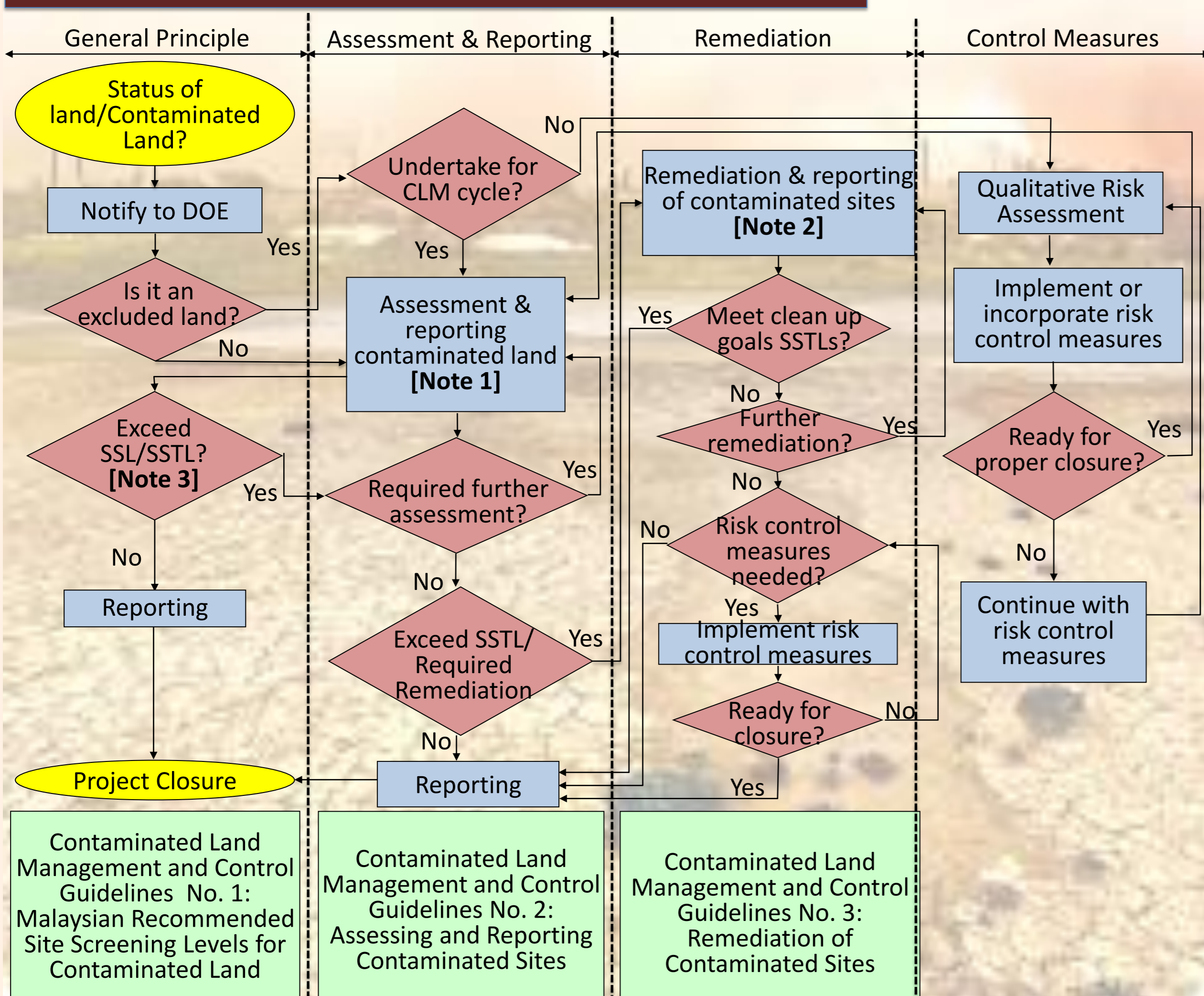
WHAT IS CONTAMINATED LAND?

Contaminated Land means a site at which a substances occur at concentration:

Above the concentration at which the substance is normally present in or on the land in the same locality and pose or are likely to pose an immediate or long term hazard to human health or the environment; or

Exceed concentration specified in the Site Screening Levels (SSLs).

CONTAMINATED LAND MANAGEMENT FRAMEWORK



GUIDELINES

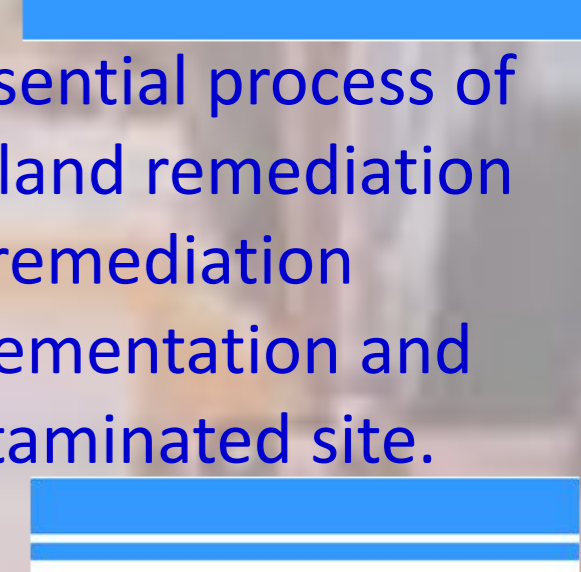
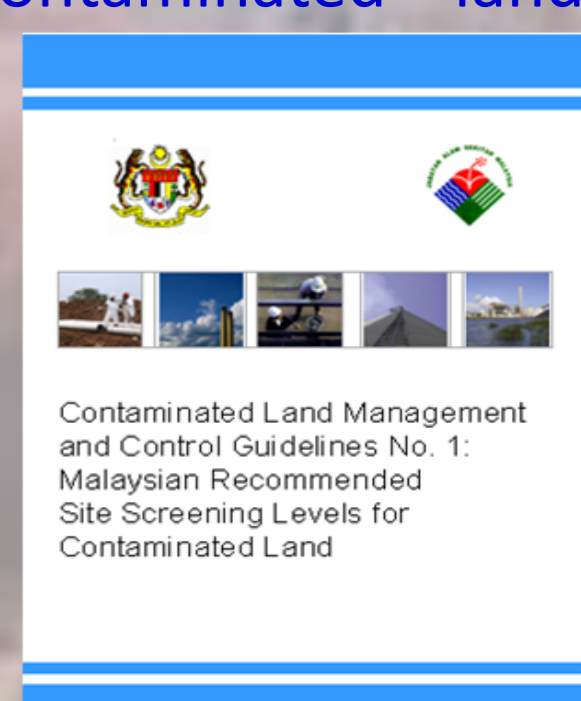
DOE have published 3 series of Guidelines as a guide and reference in relating to contaminated land management in Malaysia, which is:-

Provide the framework with details and appropriate criteria and standards for managing and restoring of contaminated land.

Provide the essential process of contaminated land remediation which covers remediation planning, implementation and closure of contaminated site.

Provide a consistent and uniform approach to site investigation, assessment, risk assessment and reporting of all land properties classified as contaminated land.

Guidelines are available at DOE's website: www.doe.gov.my



CONCLUSION

Increasing population especially in urbanized areas has put heavy pressure on land resources and the necessity to utilize or redevelop contaminated sites will be inevitable. The absence of legislation coupled with the low level of awareness has, in the past diverted attention away from the contaminated sites problem. The general awareness amongst the public need to be heightened and overall capacity amongst professionals need to be raised. DOE looks forward to playing an important role, in partnerships with others, in supporting, encouraging and promoting the importance of identifying contaminated land, managing and bringing back these sites into beneficial uses that would eventually contribute to the overall betterment of our environment.