

# EMPOWERING EROSION AND SEDIMENT CONTROL:

11 CPD (BEM)  
11 PDH (MSO)

## Innovative Tools for Efficient ESCP Design & Management



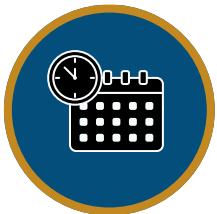
### Introduction:

Effective Erosion and Sediment Control Plans (ESCPs) are crucial for safeguarding the environment during project developments. However, traditional methods of ESCP design, observation, inspection, and reporting can be time-consuming, paper-intensive, and prone to errors.

This course introduces a suite of innovative tools designed to revolutionize ESCP management, empowering construction professionals to:

- Enhance ESCP design accuracy and efficiency
- Streamline ESCP observation and inspection processes
- Conduct Safe and efficient inspections
- Improve communication and collaboration

\*\*\* E-certificate of attendance will be issued, subject to full attendance.



#### DATE & TIME

7-8 October 2024  
9.00 am - 5.00 pm



#### VENUE

Armada Hotel  
Pjs 52, 46200 Petaling  
Jaya, Selangor



#### COURSE FEE

MSO/ACEM Member  
RM900.00  
Non-Member: RM1200.00



Scan or click to the QR  
Code to Register



REGISTRATION LINK

## SPEAKERS:

### LEONG KWOK WING

General Manager  
CHT-Natural Solution Sdn Bhd



### CHEONG HON LOONG

Managing Director  
TGL Environmental Consultancy

## Objective

Highlight the benefits of using new technology for the ESCP management process from Pre-Grading, During Grading, During Construction & Post Construction Stages.

Case studies shall highlight the benefits of this new asset. It shall exemplify the efficiency of the design, construction, inspection and reporting stages of project development with ease, with attention to the environmental needs,

## Learning Outcome

Participants shall gain knowledge on this new technological tool for ESCP management that can significantly improve construction project flow.

This course shall equip participants with valuable knowledge about how new tools & technology revolutionizes ESCP design, inspections, and reporting. Workings of case studies shall provide participants challenges to solve, thereby gaining some insights into this innovative and efficient project execution methods.

## HRDC Claimable:



### Training Provider:

Pertubuhan Saliran Mesra Alam Malaysia  
(Malaysian Stormwater Organisation)

### Training Programme Scheme:

HRD Corp Claimable Courses (SBL-Khas)

Training Programme No.: 10001458610

## INTRODUCTION TO DRONE-POWERED ESCP SOLUTIONS & 360 CAMERA

### Drones

- **Aerial Mapping and 3D Modelling:** Capture high-resolution aerial imagery and generate detailed 3D models of construction site for improve ESCP planning and design,
- **Automated Inspections:** Schedule pre-programmed drone flights to autonomously capture data and images of critical sites prone to erosion activities especially after designated rainfall event magnitudes, for pro-active review and action thereby minimizing risks and saving time.
- **Real-Time Data and Analytics:** Access instant data insights from drone flights, allowing for timely identification of potential issues and rapid response to safeguard the environment.

### Drone Benefits:

#### 1.Enhanced Efficiency:

- Automate inspections, streamline data collection, and reduce field time for significant cost savings.

#### 2.Improved Safety:

- Eliminate the need for manual inspections in hazardous areas, minimizing risks for personnel.

#### 3.Data-Driven Decision Making:

- Gain valuable insights from detailed aerial data for informed decision-making and proactive ESCP management.

#### 4.Enhanced Reporting and Compliance:

- Generate comprehensive reports with visual evidence for regulatory compliance and stakeholder communication.

### Actual Application at Work

Especially **On-Site**



Compass

### GPS Application



Components



Longitude



Latitude



### The Importance of Regulations

Do's & Don'ts



# Unmanned Aerial Vehicle

Basic Introduction



## CONTINUE: INTRODUCTION TO DRONE-POWERED ESCP SOLUTIONS & 360 CAMERA

### *360 Camera*

- **Baseline Condition Documentation:** Before any construction or land disturbance begins, 360 cameras can document the existing conditions of a site, providing a reference point for future assessments and regulatory compliance.
- **Construction Monitoring:** During construction, these cameras help monitor the effectiveness of installed ESC measures, ensuring they are functioning as intended and allowing for timely interventions if issues arise.
- **Post-Construction Analysis:** After construction is complete, 360 cameras can be used to assess the final state of the site, ensuring that all ESC measures are stable and that there is no residual erosion or sedimentation.

### *360 Camera Benefits:*

#### **1. Comprehensive Site Documentation:**

- Full Coverage: 360 cameras capture all angles of a site, ensuring no detail is missed. This is crucial for accurate site assessments and baseline documentation.
- High-Resolution Imagery: The high-quality images provide clear and detailed views of the site conditions, allowing for precise identification of erosion and sedimentation issues.

#### **2. Enhanced Monitoring and Inspection:**

- Real-Time Monitoring: 360 cameras can be used for live-streaming site conditions, enabling continuous monitoring and quick response to potential problems.
- Remote Inspections: They allow stakeholders to conduct virtual site inspections, reducing the need for frequent on-site visits and saving time and resources.

#### **3. Improved Communication and Collaboration:**

- Interactive Visuals: The immersive nature of 360-degree imagery helps in better communicating site conditions and issues to all stakeholders, including project managers, engineers, and regulatory authorities.
- Shared Platform: These visuals can be easily shared and accessed online, fostering collaborative decision-making and ensuring everyone has the same understanding of the site conditions.

#### **4. Enhanced Planning and Design:**

- Accurate Data Collection: The detailed visuals aid in the precise planning and design of ESC measures, ensuring they are appropriately tailored to the site-specific conditions.
- Progress Tracking: 360 cameras can document the progress of ESC implementation, allowing for adjustments and improvements to be made in real-time.

# TENTATIVE PROGRAM:

Day  
1

Monday:  
7 October 2024

- 08.00 AM : Registration
- 09.00 AM : Introduction and Ice Breaking
- 09.30 AM : Introduction to the Fundamental of Erosion and Sediment Control
- 10.30 AM : Morning Tea Break
- 11.00 AM : Continue:  
Introduction to the Fundamental of Erosion and Sediment Control
- 12.30 PM : Lunch
- 02.00 PM : Introduction to UAS
- 04.00 PM : Afternoon Tea Break
- 04.30 PM : New Technology Application on Work in Construction Site
- 5.00 PM : End of the day

Day  
2

Tuesday:  
8 October 2024

- 08.00 AM : Registration
- 09.00 AM : Continue:  
New Technology Application on work in construction site with working examples
- 10.30 AM : Morning Tea Break
- 11.00 AM : Continue:  
New Technology Application on work in construction site with working examples
- 12.30 PM : Lunch
- 2.00 PM : Working Example Group Presentation
- 4.00 PM : Afternoon Tea Break
- 4.30 PM : Working Example Group Presentation
- 5.00 PM : End of the day