





# CePPOME

# COURSE FOR CERTIFIED ENVIRONMENTAL PROFESSIONALS IN THE TREATMENT OF PALM OIL MILL EFFLUENT

Course Information

\*Organized by ENVIRO ACADEMY, certified training provider by DOE

BIL	*DATE	VENUE
1	22-26 February 2021	Training Centre,
2	29 March – 2 April 2021	Enviro Academy
3	5-9 July 2021	Sdn. Bhd 2A & 2B, Jalan
4	23-27 August 2021	Sungai Burung
5	4-8 October 2021	U32/U
6	29 Nov – 3 Dec 2021	Bukit Rimau, Seksyen 32
	APPROVED TRAINING PROVIDER BY HRDF (MYCOID:1002370D)	40460 Shah Alam SELANGOR

\*Subject to changes

Payment must be made prior to attending the course!!

The candidates may not be allowed to attend the course if payment is not made before or on the first day of the course

Seats Limited to 25
Participants Only

Minimum entrance requirement: Candidates must possess a-Bachelors degree or higher in Science or Engineering; or

 Diploma in Science or Engineering with 1 year experience in POMETS operation or supervision.

#### Who should attend::

 Mill personnel who are in charge of supervising the operation of Palm Oil Mill Effluent Treatment Systems (POMETS) Course Fee : RM5,000.00 per pax Subject to 6% SST Closing date : Two weeks before

course date





To ensure continued regulatory compliance, you need COMPETENT PERSONS to operate or supervise the operation of your POMETS 'GET YOUR POMETS OPERATORS AND SUPERVISORS CERTIFIED THROUGH THE CERTIFICATION PROGRAM OF THE DOE!

Enviro Academy Sdn Bhd 2A & 2B, Jalan Sungai Burung U32/U,Bukit Rimau, Seksyen 32 40460 Shah Alam, SELANGOR, Malaysia. Tel: +603-51318032 |Email:registration@enviroacademy.com |

#### INTRODUCTION

The palm oil mills are notorious for generating huge quantities of polluting effluents which need to be treated before disposal. Over the years, various technologies have been developed for the purpose of treating the palm oil mill effluent (POME). POME, a high strength organic effluent is typically treated using a variety of biological treatment systems employing microorganisms as the "work horses". The operation of POME treatment systems (POMETSs) requires knowledge and skills in order to ensure optimal conditions are maintained for the microorganisms to thrive and biodegrade the high concentration of organic matter in the POME. Optimally operated and well maintained POMETSs will produce compliant effluents on a consistent basis hence the mills will be in legal compliance at all times. Effluent treatment systems, especially those employing biological processes such as POMETSs require close attention and monitoring because biological processes are susceptible to upsets due to changes in environmental and process conditions. Trained POMETS personnel who possess the "minds on" and "hands on" qualities are a prerequisite for successful operation of POMETSs that will minimize the adverse environmental impacts resulting from the mill operation.

The "minds on" aspects include sufficient understanding of the relevant regulatory framework and the working concepts of the POME treatment processes. The "hands on" aspects include the skills to monitor the treatment processes and assure the important factors are maintained for optimal treatment process efficiency. As a consequence, compliance with the environmental regulations will be ensured on a sustained basis.

The overall objective of this certified training course is to produce technically competent mill personnel who are also conversant with the regulatory requirements. The certified persons will be the change agents who will mainstream the environmental agenda within the palm oil industry and help to green the industry.

# **COURSE CONTENTS**

#### DAYS 1 and 2

Module 1 The CePPOMETS process

Module 2 Understanding the regulatory framework

Module 3 POME characteristics and impacts of POME discharge

Module 4 Overview of POME treatment systems

Module 5 Overview of POME treatment system Module 5 The working concepts of POMETS

Module 6 Rationale for conducting performance monitoring of POMETS

DAYS 3 and 4

Module 7 Performance monitoring of common POMETS
Module 8 Maintenance of ponding systems
Module 9 How to control angerobic digesters

DAYS 4 and 5

Module 10 How to control activated sludge systems

Module 11 POMETS maths

Module 12 POMETS Performance monitoring laboratory analysis

Module 13 Data analysis and interpretation

Module 14 Record keeping, reporting, and communication

Module 15 Field training report preparation
Module 16 CePPOMETS: The change agent
Comprehensive Examination

Presentation of Certificates of Attendance

#### BENEFITS OF ATTENDING

Course attendance is a mandatory prerequisite for the issuance of competency certificate as a competent person under the POMETS certification program

## **COURSE METHODOLOGY**

- Lectures / Discussions
- Class Assignments
- ♦ Hands on Lab and Computer Sessions
- Field Training Report Assessment

#### **OBJECTIVES**

- To impart understanding of the environmental regulatory framework on palm oil mill operation to mill personnel;
- •To impart knowledge and develop skills on the conduct of POMETS performance monitoring and evaluation of performance monitoring data;
- To produce mill personnel who possess both technical competence in POMETS operation and thorough understanding of regulatory requirements

## ABOUT THE TRAINERS

Ir. Dr. Shamsudin Hj Ab Latif is a registered chemical engineer who holds a B. Sc. in Chemical Eng. from Leeds University, UK., a M. Eng. In Environmental Eng. from Asian Institute of Technology, Bangkok, Thailand, and a Sc. D in Public Health, from Tulane University New Orleans, USA. Dr. Shamsudin's experience in industrial pollution control spans over 30 years with several technical guidance documents to his credit. While with DOE, he prepared technical drafts of several regulations and he was also instrumental in initiating and developing competency certification programs for the DOE's officers and the industry. Dr. Shamsudin is a certified trainer and a certified training evaluator. He also served as an adjunct professor at several universities in Malaysia. (Competent Person Serial Nos.: CePIETSO-PCP/5099, CePIETSO-BP/5099, CePPOME/5059)



Person in charge:

(Finance Department)

#### **APPLICATION FORM**

ENVIRO ACADEMY

Phone: 03-51318032, 0163336347, 0166190238 EMAIL: REGISTRATION@ENVIROACADEMY.COM

FCERT 12	2/2014
FOR O	

PAGE 1

**COURSE APPLICATION FORM** ENVIRO ACADEMY has the right to reject incomplete applications 1. Course Title 2. Course Date Course for Certified Environmental Professionals in The Treatment Of Palm Oil Mill Effluent A. APPLICANT INFORMATION 3. Name 4. IC No. 5. Age years 6. Sex Female Male 7. Nationality Malaysian Others, please specify: 8. Mailing Address: City Postcode State 9. \*Highest Qualification: Diploma BSc/BEng Master PhD \*Note: Minimum Entrance Qualification is Diploma in Science or Engineering with 1 year experience (please submit scanned certified true copy of the certificate). 10. Field of Study: Science; or Engineering Work experience years 11. Current Position: Tel No (O): 12. Contacts H/Phone: Fax No (O): E-mail: **B. SPONSOR'S INFORMATION** Mill/Company-sponsored Self-sponsored \*To be filled out by company-sponsored applicants only YES / NO If company sponsored, do you need an invoice? 13\*. Name of Mill / Employer: 14\*. Mill/Employer Address for Invoicing Purposes: Tel No (O): Fax No. (O): 15. Contacts

E-mail:

		+ SST (6%)	L	3	0	0		0	0				
		TOTAL RM	5	3	0	0		0	0				
17.	Payment Method	: Telegraph	ic Tro	ansfe	er (T	T):		Во	ank-in:	В	ank D	raft :	Cheque:
the	time of course reg	<b>gistration on</b> nt no. is: CIM	<b>the</b> 1	<b>first o</b> 0-035	<b>day</b> 1933								and <b>received before or at</b> ayment by bank-in, please
∩ff	ficial Stamp of Mill/	Company:											
		Company.											
													Signature of Sponsor
Da	ite:	2	0										Signature of Applicant
1. 2.	registration@er	application	form	n and						lated	l docu	ıments	to be submitted via email
3.		ovide a scan	ned (	CER <sup>-</sup>	ΓΙFΙ	ED	TRI	UE C	OPY of to	he di	ploma	/maste	rs/phD degree as attachment
4.	Confirmation Deta	an invoice v	nent <sup>-</sup> /ia e-	Гегт mail	s: L to t	Jpor he a	re app	ceip	t of the re t/compan	egistr	ation f	form, E	ENVIRO ACADEMY will confir quired within fourteen (14) day
5.	Payment Method :  a. ENVIRO the cours	ACADEMY a	iccep dates	ts all may	kin / no	ds c	of pa	ayme	ent as me				ayment should be made prior e payment is not received late
6.		not proof of	_							Y. EN	NVIRO	ACAD	DEMY will not be responsible f
7.	not be responsible	for covering	g airfa	are, h	ote	l, or	oth	her t	ravel cost	ts inc	urred	by the	ourse, ENVIRO ACADEMY was applicants. The course fee want is subject to change without
	r any enquires about 0166190238 or regis						e co	ourse	e coordina	ator N	∕lr. Sai	iful Isla	m at 0163336347 and Raffles

PAGE 2

C. PAYMENT INFORMATION16. Course Fee Amount: RM

**THANK YOU**