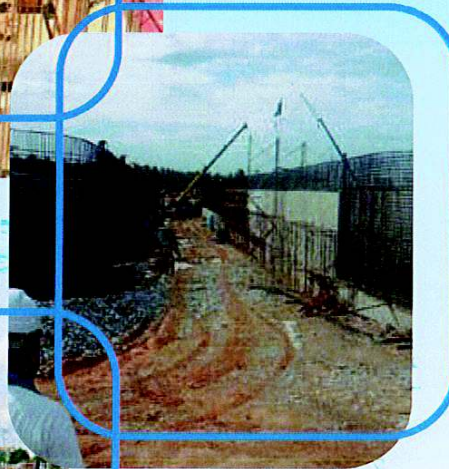
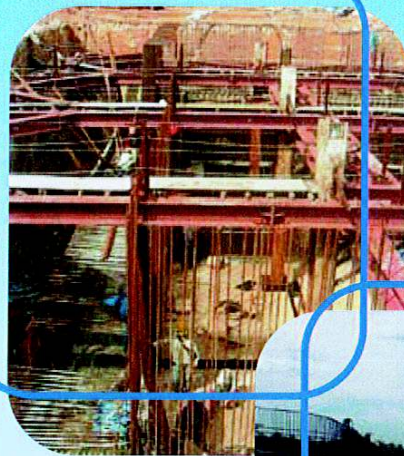


SEWERAGE CONSTRUCTION MANAGER

Training &
Accreditation
Programme



Introduction

One of the major issues currently plaguing the construction industry is in the area of quality of construction. The rise in public complaints concerning low quality construction of buildings and infrastructure works executed by contractors is a wake-up call for all stakeholders of the industry to strive on improving all aspects of the industry including sewerage management construction.

Sewerage work is an important aspect of construction because it does not only involve client satisfaction but also environmental protection. Low quality works executed by sewerage contractors has resulted in increased expenses for rectification works which in turn is a burden on the taxpayers' money.

Realizing the seriousness of the problem, a committee headed by the Director General of The Sewerage Services Department, CIDB and stakeholders of the sewerage sector was formed to develop a training course for the 'Sewerage Construction Manager'. It is hoped that the course will address the issues of quality of construction in the sewerage sector through proper management by qualified personnel.

The successful participant of the course will be awarded a certificate of proficiency. The course will be part of the new registration requirement imposed by CIDB and other relevant authorities for sewerage contractors executing large sewerage projects.

OBJECTIVES

IMPROVING

The quality of sewerage works through Management by qualified sewerage construction managers

RECOGNIZING

The role of sewerage construction managers through training and certification

MEETING

The registration and accreditation requirements of the relevant authorities

TRAINING MODULES

The training is divided into 4 modules. They are:-

- Module A : Management - 4 days
- Module B : Treatment Process Concepts - 3 days
- Module C : Mechanical & Electrical (M&E) - 3 days
- Module D : Civil & Structural (C&S) - 2 days

CANDIDATES ELIGIBLE TO ATTEND

Candidates should possess the following qualifications

CATEGORY	MINIMUM ENTRY REQUIREMENTS	MINIMUM WORK EXPERIENCE (YEARS)
1	Registered Professionals (Ir., Ar., Reg. QS., PhD)	-
2	Master in Construction Related Fields	1
3	Degree in Construction Related Fields	3
4	Diploma in Construction Related Fields	5
5	Certificate in Construction Related Fields	8
6	Sijil Kemahiran Malaysia - Construction Manager (Level 5)	3

VENUE

Training will be conducted at Indah Water Training Centre, Kuala Lumpur

TRAINING STRUCTURE

Training will be conducted according to modules. Only candidates with minimum 10 years experience in the sewerage sector can apply for assessment / test only. However if the candidates is unsuccessful, he/she will have to undergo the training course. A certificate of proficiency will be issued once a candidate fully completes and passes all the training modules.

MEDIUM OF TEACHING

Training will be conducted both in Bahasa Malaysia and English

TRAINING FEE

- The fee is inclusive of course material light refreshments, trainer and certificate
- A rebate of the fee will be given to participants with valid CIDB green card
- Participant are required to pay the module fee upon registration
- Places are confirmed only after payment

SCHEDULE OF SEWERAGE CONSTRUCTION MANAGER COURSE			
MODULE	DURATION	WITH GREEN CARD	WITHOUT GREEN CARD
MODULE A MANAGEMENT	4 Days	RM825.00	RM925.00
MODULE B TREATMENT PROCESS CONCEPT	3 Days	RM725.00	RM825.00
MODULE C MECHANICAL & ELECTRICAL (M&E)	3 Days	RM725.00	RM825.00
MODULE D CIVIL & STRUCTURAL	2 Days	RM625.00	RM725.00
Total of CCD points of this program is 20 points per module			

Training starts at 9.00am and ends at 5.00pm.
Please refer to the table above for the course duration.

NUMBER OF PARTICIPANTS

Limited to 20 participants per session. IWK reserves the right to reject applicants if the number of participants has exceeded the limit.

Confirmation will be based on first come first serve basis

PAYMENT

Payment by bank transfer / cheque should be made in favour of INDAH WATER KONSORTIUM SDN. BHD.

APPLICATION FORM

Application forms for this programme are available at the following address and on www.iwk.com.my/iwtc



INDAH WATER KONSORTIUM SDN. BHD.
(INDAH WATER TRAINING CENTRE)
SG. BESI REGIONAL SEWAGE TREATMENT WORKS, LOT 33519, BUKIT JALIL,
KUALA LUMPUR - KUALA LUMPUR-SEREMBAN HIGHWAY, 56000 KUALA LUMPUR
Tel: 03-8996 7514/13/11 Fax: 03-8994 3032
Attn: Noor Siti Sara Nazli, Hasrina Tukaman
Email: noorzni@iwk.com.my, hasrinat@iwk.com.my

MODULE A Management

PACKAGE	CODE	CORE SUBJECTS & SUBJECTS	DURATION
PACKAGE A1: Regulatory Requirement	RR1-1	Environmental Quality Act	Half Day
	RR1-2	Sewerage Services Act	
	RR1-3	Licensing of Contractors	
	RR1-4	Product Registration	
	RR1-5	Compounding of Offences Regulation	
	RR1-6	Charges Regulation	
	RR1-7	Standard & Guidelines	
PACKAGE A2: Human Resource Management	HRM1-1	Labour Law	Half Day
	HRM1-2	Industrial Relation Act	
	HRM1-3	Foreign Workers Registration	
	HRM1-4	SOCSO / EPF	
	HRM1-5	Training	
PACKAGE A3: Health & Safety and Environment Management System	HS1-1	Introduction to HSE	1 Day
	HS1-2	Legislation (OSHA & FMA) and Related Regulation	
	HS1-3	Principles and Risk Management	
	HS1-4	Construction Hazards and Safe System at Work	
	HS1-5	HSE Management System Elements	
PACKAGE A4: Contract Administration	CA1-1	Overview	1 Day
	CA1-2	Contract Conditions	
	CA1-3	Form of Contract	
	CA1-4	Contract Administration-Overview	
	CA1-5	Contract Administration-Post Contract Stage	
	CA1-6	Sub-contract Administration	
	CA1-7	Ethics	
PACKAGE A5: Construction Management	CM1-1	Planning and Scheduling	1 Day
	CM1-2	Material Management and Inventory Control	
	CM1-3	Site Security	
	CM1-4	Surveying and Setting Out	
	CM1-5	Managing Sub Contractors	
	CM1-6	Quality Awareness	
	CM1-7	Specification	

MODULE B Treatment Process Concepts

PACKAGE	CODE	CORE SUBJECTS & SUBJECTS	DURATION
PACKAGE B1: Treatment Processors	TP1-1	Introduction	2 Days
	TP1-2	Imhoff Tank	
	TP1-3	Pond Systems	
	TP1-4	Preliminary & Primary Treatments	
	TP1-5	Secondary Treatments	
	TP1-6	Suspended Growth Systems i) Conventional Activated Sludge ii) Contact Stabilisation Activated Sludge iii) Extended Aeration Activated Sludge iv) Oxidation Ditch v) Sequential Batch Reactor	
	TP1-7	Fixed Film Process i) Rotating Biological Contactors, RBC ii) Trickling Filters	
	TP1-8	Secondary Clarifier	
	TP1-9	Tertiary Treatment	
	TP1-10	Disinfection	
	TP1-11	Testing & Commissioning of Systems	
PACKAGE B2: SLUDGE PROCESS	SP1-1	Primary Treatment	1 Day
	SP1-2	Sludge Thickening	
	SP1-3	Sludge Stabilisation	
	SP1-4	Sludge Drying Beds	
	SP1-5	Sludge Lagoons	
	SP1-6	Sludge Mechanical Dewatering Systems	
	SP1-7	Sludge Conveyance	
	SP1-8	Odour Control Facility	
	SP1-9	Tankers Sludge Facility	
	SP1-10	Sludge Disposal Procedures	
	SP1-11	Digestors	

COURSE CONTENT

MODULE C Mechanical & Electrical

PACKAGE	CODE	CORE SUBJECTS & SUBJECTS	DURATION
PACKAGE C1: ELECTRICAL	E1-1	Basic Electricity	2 Days
	E1-2	Circuits, Panel Switchgears, Circuit Breaker and Starters	
	E1-3	Cables and Wiring Regulations	
	E1-4	Earthing and Lighting	
	E1-5	Electrical Circuit Drawing	
	E1-6	Electrical Motors	
	E1-7	Standby Supply	
	E1-8	SCADA & PLC	
	E1-9	TNB Supply and Temporary Supply	
	E1-10	Installation Procedures, Testing and Commissioning of Electric Panels	
PACKAGE C2: MECHANICAL	M1-1	Reads and Understand Mechanical Drawings and Construction	1 Day
	M1-2	Installation Procedures for Non-Sewer Pipework	
	M1-3	Pumping Systems and Equipment	
	M1-4	Motors and Drives	
	M1-5	Surge Suppression Systems and Equipment	
	M1-6	Screening Facilities	
	M1-7	Grit and Grease, Screening Disposal Systems	
	M1-8	Aerators, Aeration Systems and Equipment	
	M1-9	Clarifier Equipment	
	M1-10	Disinfection Systems and Equipment	
	M1-11	Flow Measurement Systems and Equipment	
	M1-12	Alarm System and Fire Protection	
	M1-13	Lifting Facilities	
	M1-14	Odour Control Systems and Equipment	
	M1-15	Force Ventilation Systems	
	M1-16	Vacuum system & Equipment	
	M1-17	Sludge Dewatering System and Equipment	

MODULE D Civil and Structural

PACKAGE	CODE	CORE SUBJECTS & SUBJECTS	DURATION
PACKAGE D1: SEWER NETWORK	SN1-1	Sewer Alignment, Installation, Handling & Storage	1 Day
	SN1-2	Sewer Manhole and Applications	
	SN1-3	Trenching, Shoring, Backfilling and Reinstatement	
	SN1-4	Utility Survey and Traffic Management	
	SN1-5	Sewer Testing and Commissioning	
	SN1-6	Soil Investigation Report	
	SN1-7	Household Connection	
	SN1-8	Vacuum Sewer	
	SN1-9	Other Techniques e.g. Pipe Jacking, Trenchless Pipe Laying	
PACKAGE D2: TREATMENT WORKS STRUCTURES	TW1-1	Setting Out	1 Day
	TW1-2	Soil Investigation Works	
	TW1-3	Foundations	
	TW1-4	Excavations, Shoring and Backfilling	
	TW1-5	Reinforcement and Concrete Works	
	TW1-6	Water Proofing and Lining	
	TW1-7	Surface Finishes (Plastering, Painting etc.)	
	TW1-8	Infrastructure Works	
	TW1-9	Outfall Protections	

PHOTO SAJIBAR
One recent 1.0 size colour photograph
Setu keping gambar warna terbaru saiz Kad Pengajian

Please tick the relevant box. Tick only one box. / Sila tandakan kotak yang berkenaan. Tandakan satu kotak sahaja.
 To sit for Competency Test Only / Mendauduki Ujian Kecekapan Sahaja I wish to attend the training / Saya ingin menghadiri kursus

Instruction: Complete the application form / Arahan: Isikan borang dengan lengkap

CIDB Green Card Registration No. (if available):

No. Pendaftaran Kad Hijau CIDB (jika ada):

Green Card Expiry Date / Tarikh Tamat Kad Hijau:

A. APPLICANT'S INFORMATION (if more than 1 participant, please use the same form) / MAKLUMAT PEMOHON (jika peserta lebih dari satu, sila guna kan borang yang sama) **MODULE :**

FULL NAME / NAMA PENUH

MYKAD / PASSPORT / MYKAD / PASPORT

GENDER / JANTINA FEMALE / PEREMPUAN MALE / LELAKI

MAILING ADDRESS / ALAMAT SURAT - MENYURAT

CITY / BANDAR

POSTCODE / POSKOD STATE / NEGERI

CURRENT POSITION / JAWATAN SEMASA

TEL. NO. / NO. TELEFON FAC. NO. / NO. FAKS

HANDPHONE NO. / NO. TEL. BIMBIT EMAIL / EMEL

B. ACADEMIC QUALIFICATION / KELAYAKAN AKADEMIK

Please tick the relevant box. Tick only one box. Please enclose a certified true copy of the certificate.
 Sila tandakan di kotak yang berkenaan. Tandakan satu kotak sahaja. Sila sertakan salinan sijil yang telah disahkan

QUALIFICATION / Kelayakan	COURSE / BIDANG	YEAR COMPLETED / TAHUN TAMAT PENGAJIAN	TICK / TANDA
SRP/PMR/SPM			
POLY. CERT. / SUIK/PUTEKNIK			
SKM LEVEL 3 / SKM TAHAP 3			
DIPLOMA			
DEGREE / SARJANA MUDA			
MASTER / SARJANA			
PHD / DR. FALSAFAH			

C. WORKING EXPERIENCE / PENGALAMAN KERJA

State the number of years of experience in the construction sector / Nyatakan tempoh pengalaman dalam bidang pembinaan : _____
 State the number of years of experience in the sewerage sector / Nyatakan tempoh pengalaman dalam bidang pembetungan : _____

D. COMPANY INFORMATION / MAKLUMAT SYARikat

COMPANY NAME / NAMA SYARikat

MAILING ADDRESS / ALAMAT SURAT - MENYURAT

CITY / BANDAR

POSTCODE / POSKOD STATE / NEGERI

TEL. NO. / NO. TELEFON FAC. NO. / NO. FAKS

E. LICENCE - PERMIT INFORMATION / LESEN - MAKLUMAT LESEN

CIDB REGISTRATION No. : _____
 No. Kad Hijau : _____
 EXPIRY DATE / Tarikh Tamat Tempoh : _____

JPP LICENCE No. : _____
 No. Pendaftaran JPP : _____
 EXPIRY DATE / Tarikh Tamat Tempoh : _____

JPP LICENCE No. : _____
 No. Pendaftaran JPP : _____
 EXPIRY DATE / Tarikh Tamat Tempoh : _____

F. PAYMENT INFORMATION / MAKLUMAT PEMBAYARAN

COURSE FEE / HARGA KURSUS: R M _____

ACCOUNT NUMBER / NO. BIL. AKAUN: MAYBANK 514057242399 (INDAH WATER KONSORTIUM SDN. BHD.)

PAYMENT METHOD / KEDAH PEMBAYARAN: MONEY ORDER / KIRIMAN WANG BANK DRAFT / DRAF. BANK COMPANY CHEQUE / C.E.K.S. SYARikat

G. DECLARATION BY THE APPLICANT / PENGAKUAN PEMOHON

I declare and confirm that the information given and the photostated copy of documents submitted as requested are authentic. The application will be rejected for any false information.
 Dengan ini, saya membuat akuan dan mengesahkan bahawa segala maklumat yang diberikan dan fotostat dokumen yang dikemukakan di dalam borang ini adalah betul dan benar. Permohonan ini akan tertatal dengan sendirinya sekiranya ada maklumat yang palsu.

COMPANY OFFICIAL STAMP / CAP RASMI SYARikat

SIGNATURE / TANDATANGAN

DATE / TARIKH:

H. PLEASE SEND COMPLETE APPLICATION FORM WITH PAYMENT FEE TO / SILA HANTARKAN BORANG PERMOHONAN BERSAMA YURAN PENDAFTARAN YANG TELAH LENGKAP KEPADA

INDAH WATER KONSORTIUM SDN. BHD.
 Training coordinator: (Noor Sib Sara Nazli)
 Indah Water Training Centre (IWTC)
 Sg. Besi Regional Sewage Treatment Works,
 Lot 33519, Bukit Jalil, KL-Seremban Highway, 56000 Kuala Lumpur



Tel : +(06) 03-8996 7511 / 14 / 13
 Fax : +(06) 03-8994 3032
 Attn: noorzi@iwk.com.my
 hasrinat@iwk.com.my
 http://www.iwk.com.my