COMPETENCY TRAINING FOR THE WATER INDUSTRY – ISSUES & CHALLENGES IN MEETING NEEDS FOR AN ENHANCED WORKPLACE PERFORMANCE

by Mohd Nizam Bin Omar
Head of Academy
Penang Water Services Academy (PWSA)
Outline of Presentation

1. Overview of Competency Training in Malaysia
2. Issues and Challenges
3. Strategies to enhance workforce performance
4. Capacity building initiatives by Perbadanan Bekalan Air Pulau Pinang Sdn Bhd (PBAPP) and Penang Water Services Academy (PWSA)
PART I
OVERVIEW OF COMPETENCY TRAINING IN MALAYSIA
## Background & History of Skills Development in Malaysia

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td></td>
</tr>
</tbody>
</table>
- Skills standards was first introduced into Malaysia by International Labor Organization (ILO) experts  
- Known earlier as National Trade Standards |
| 1971 |  
- Establishment of “Lembaga Latihan Persijilan Perindustrian Ketukangan Kebangsaan” known as NITTCB/LLPPKK |
| 1989 |  
- LLPPKK was reorganized as Majlis Latihan Vokasional Kebangsaan (MLVK) |
| 1991 |  
- Introduction of new methodology for developing NOSS known as DACUM (Developing a curriculum) and major skills training reform |
| 2006 |  
- Jabatan Pembangunan Kemahiran (JPK/DSD) was established through re-organization of the Majlis Latihan Vokasional Kebangsaan (MLVK) |
| 2008 |  
- Introduction of National Occupational Skills Standard (NOSS) for water Treatment, water distribution and Instrumentations |
| 2009 |  
- Implementation of 1st Malaysian Skills Certificates (SKM) through Recognition of Prior Achievement (RPA) for Perbadanan Bekalan Air Pulau Pinang Sdn Bhd (PBAPP) for SKM Level 1 to Level 3 |
| 2010 |  
- Implementation of 1st Malaysian Skills Certificates (SKM-Full Time Mode) in Water Distribution Fitter Level 1 for school Leavers |
| 2011 |  
- Implementation of 1st Malaysian Skills Certificates (SKM-Full Time Mode) in Water Distribution Technician Level 2 for school Leavers |
DEPARTMENT OF SKILLS DEVELOPMENT

BRIEF BACKGROUND
BRIEF HISTORY.....

...Lembaga Latihan Persijilan Perindustrian Ketukangan Kebangsaan (NITTCB/LLPPKK) was established in 1971 until 02 May 1989.

LLPPKK was reorganised as Majlis Latihan Vokasional Kebangsaan (MLVK) in 1989 until 2006.

Jabatan Pembangunan Kemahiran (JPK/DSD) was established through re-organization of the Majlis Latihan Vokasional Kebangsaan (MLVK) in 2006.
DSD - Purpose

The main purpose of DSD -

- **Formulate**
- **Coordinate**
- **Promote**

strategies and implementation of skill training in the country.

source: Perlembagaan JPK, 1989
ORGANIZATION CHART

MINISTER OF HUMAN RESOURCES

DEPARTMENT OF SKILLS DEVELOPMENT (JPK)

NATIONAL SKILLS DEVELOPMENT COUNCIL (MPKK)

SKILLS DEVELOPMENT ADVISORY COMMITTEE (JPPK)
EDUCATION & TRAINING SYSTEM IN MALAYSIA

Academic Qualification
- Ph.D Masters Degree Diploma
- STPM
- SPM
- PMR
- Form 6
- Form 5
- Form 4
- Form 3
- Form 2
- Form 1

Education
- Universities & Other Tertiary Education

Training
- JTM
- MARA
- KBS
- KP
- STATE GOV’T
- Other Training Providers

Skill Qualification
- DLKM L5
- DKM L4
- SKM L3
- SKM L2
- SKM L1

Lower Secondary Schools
- Sec. Academic Schools
- Sec. Tech. Schools
- Voc. Ed.
- Skill Training
- Sec. Voc. Schools
IMPLEMENTATION OF MALAYSIAN SKILLS CERTIFICATION PROGRAM THROUGH ACCREDITATION SYSTEM

Launched by the Minister of Human Resources on 27 May 1993.

1st SKM program was implemented in June 1993.

Implemented based on skill Levels (SKM Level 1,2,3,4 & 5)

Implementation is based on National Occupational Skills Standard (NOSS)
MALAYSIAN SKILLS CERTIFICATE (SKM)
# DSD - Skill Certification Structure

<table>
<thead>
<tr>
<th>Academic Qualification</th>
<th>Skill Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>SKM L5 (Adv. Diploma)</td>
</tr>
<tr>
<td>Diploma</td>
<td>SKM L4 (Diploma)</td>
</tr>
<tr>
<td>Certificate</td>
<td>SKM L3</td>
</tr>
<tr>
<td></td>
<td>SKM L2</td>
</tr>
<tr>
<td></td>
<td>SKM L1</td>
</tr>
</tbody>
</table>

**Knowledge**

- Management & Design
- Supervisory
- Operation & Production

**Core Abilities**

- Knowledge
- Supervisory
- Skill
DEFINITION OF NOSS

NOSS (National Occupational Skill Standard) ...defined as a specifications of the competencies expected of a skilled worker, who is gainfully employed in Malaysia for an occupational area & level also the pathway to achieve the standard
THE APPLICATION OF NATIONAL OCCUPATIONAL SKILL STANDARD (NOSS)

IN TRAINING WORLD
- Training Standard
- Training Curriculum
- Training Materials/ Learning Resources
- Tools & Equipment

IN WORLD OF WORK
- Worker Performance Evaluation
- Job Modification
- Job Description
- Career Development/ Planning
- Basis for Wage Structure
PART II
ISSUES AND CHALLENGES
Malaysia introduced 4 strategic thrusts to propel us towards Vision 2020
Government has also launched the New Economic Model (NEM)

**NEM** - Making us ...a rich country, ...for everyone & ...for a long time

- **High Income**: Target USD 15,000 GNI per capita by 2020
- **Inclusiveness**: Enables all community benefits from the wealth of the country
- **Sustainability**: Meets present needs without compromising future generations

Criteria?
What are the criteria for a country to be considered as “developed”?

- Per capita income should be high
- Natural resources exploited to maximum extent
- Having a favourable Balance of Trade
- Human development index should be high
- The real National Income should be growing

More importantly…!

≈ 40% total workforce are skilled workers
Now let’s look at our skilled workers...
..from 11+ millions of Malaysian workforce..

The facts..

25% SPM-leavers enter workforce without proper skills training / tertiary education, thus limiting their career advancement.

10% SPM-leavers opt for TEVT (Australia-62%; Korea-28%)
Where are we now?

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>SKILLED WORKERS (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGAPORE</td>
<td>52.8</td>
</tr>
<tr>
<td>FINLAND</td>
<td>44.5</td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td>43.1</td>
</tr>
<tr>
<td>MALAYSIA</td>
<td>28</td>
</tr>
</tbody>
</table>

* www.OECD.org

Target (minimum) 33% – 40%
The question is.. How do we get there?

33% – 40% skilled workers

28% current highly-skilled workers
Key Points

• To maximise the returns from the large investment in skills and tertiary qualifications, it is not sufficient to concentrate solely on the supply of skills. Priority also needs to be placed on employer demand and emphasising better utilisation of skills.
Key Points

• Water Industry needs a “National Workforce Strategy” that describe policies and practices which support people to participate effectively in the workforce and to develop and apply skills in a workplace context, where learning translates into positive outcomes for enterprises, the wider community and for individuals throughout their working lives.
Key Points

• Skills utilisation is as important to workforce development as skills acquisition and the **key critical success factors** to achieving better use of skills include good leadership, supportive culture, communication, consultation, participative processes and commitment to harnessing and nurturing the talents and skills of the workforce.
Key Points

• Rather changes as to how skills can be better utilised in the workforce can be achieved more indirectly by incentivising good practice and through information and awareness campaigns that emphasise benefits such as improved profitability, productivity and staff morale.
Key Points

• A well-educated and skilled population is seen as a core competitive advantage in an increasing globalised world economy. Higher overall skill levels across the population give a country the ability to produce more efficiently higher value products and services and thus compete with other counties on factors other than the price of labour.
PART III
STRATEGIES TO ENHANCE WORKFORCE QUALITY
Enforcement by Water Regulator through the establishment of "Competency Rules" for water sector

Financial assistant and/or training grants by relevant Government agencies (i.e JPK, PSMB, PTPK etc)

Incentive based funding system to encourage/drives participation among the stakeholders in water industry
1) To establish “The National Workforce development policies” which encompasses all of the factors that encourage the development of skills and their use in workplaces and drives participation, productivity and performance improvements for water sector;

2) To fully enforce competency requirements/regulations and establish a “Competency Rules” as provided in Section 49(1) of Water Services Industry Act 2006 (Act 655) (i.e. competent personnel) and Section 180 (a) (iii) (i.e Minimum qualification)

3) To adopt the “National Occupational Skills Standard” or NOSS as a primary reference in certifying waterworks personnel – Done (SPAN has endorsed NOSS as part of mandatory requirements for Technical Competency courses (Authorised Training Provider)

4) To work with relevant Ministries, Government agencies, SPAN, Department of Skills Development (JPK), Pembangunan Sumber Manusia Berhad (PSMB), Perbadanan Tabung Pembangunan Kemahiran (PTPK) and/or other agencies for financial assistant and/or training grants

5) To introduce “incentive based” funding system to encourage/drives participation among the stakeholders in water industry
NATIONAL DUAL TRAINING SYSTEM (NDTS/SLDN)
“The Way Forward Towards Development of Skilled Manpower for water Sector”
WHY NDTS/SLDN?

1. Accreditation
   * Accredited Centre
   Training-based

2. Recognition of Prior
   Achievement

3. Apprenticeship
   Scheme
   * Industry Driven

- Skills Training @ DSD Accredited Centres
- Non Destructive Testing

- Human Resource Development Fund (HRDF)

- National Dual Training System
  - COMPANY WORKPLACE 70-80%
  - TRAINING INSTITUTE 30-35%
NDTS Concept:
Two Collaborating Training Partners

COMPANY WORKPLACE
70-80% Practical

WORKPLACE LEARNING
- Continuous Performance Assessment.
  - Journal / Log Book Writing

TRAINING INSTITUTE
20-30% Theory

Continous Theoretical Assessment
- Portfolio

CLASSROOM LEARNING

Self-Reliant Learning

Hybrid-Learning

Block Release / Day Release
K-Worker with 3 competencies

- **Technical Competence**
  - knowledge and skills in the technical field, etc.

- **Human and Social Competence**
  - social integration when working in teams, development of personalities, etc.

- **Occupational Competence**
  - willingness for lifelong learning
  - able to work in networks and teams,
    able to anticipate future needs at the workplace

- **Learning and Methodological Competence**
  - lifelong learning, problem solving activities etc. when planning, executing and monitoring workplace assignments, etc.
Why NDTs?

We Mean Business!

- Work process approach
- Workers have not gone for formal skills training
- Workers have the potential to become skilled and competent workforce locally & abroad
- Minimize mismatch (quality and quantity)
- Experienced workers have yet to be certified
- Minimize dependence on foreign experts and workers
- Continuous technological advancement (product and services)
- New kind of training culture in the company
- Increase the velocity of transferring technology to the people
- Strategic and cost-effective succession plan
Globalization + Fast Changes in Technology & Business Work Process

New Competencies
& Qualifications

How to cope up with these... challenges?

Training must be industry-oriented and conducted at the workplace in actual work conditions under the guidance of competent coach/trainer.
**Person(s) involved in NDTS Implementation**

**TRAINING INSTITUTE (20%-30%)**

**TRAINER**
- Trains technical subject including uses of machine/tools
- Trains non technical subjects such as mathematics, moral, etc
- Conducts "Knowledge Assessment" using LWAs/assessment papers based on Training Modules created from NOSS Standard content.

**COORDINATOR**
- Coordinates and manages apprentices and trainers
- Ensures that all training Trains non technical subjects such as mathematics, moral, etc

**COACH**
- Trains apprentices on the actual technical as work in industry
- Imparts social and learning competencies
- Conducts "Continuous Performance Assessment using LWAs / assessment sheet based on NOSS Work Activities"
- Conducts "Observational Assessment" using OA sheets on apprentice's human & social skills

**COMPANY/INDUSTRY (70%-80%)**

**COORDINATOR**
- Coordinates apprentices and coaches in the relevant industries
- Ensures that all training meet the industries need

**APPRENTICES**
- Apprentices will be assessed on knowledge, skills, attitude, log book writing, personality & 80% attendance
- Conducts "Human & Social Skills” Self-Assessment using Social Skills Assignment Sheet
NDTS Training follows NOSS

- Standard Practice
  - Competency Profile Chart (CPC)
  - Competency Profile (CP)
- Standard Content (SC)
- Curriculum of Competency Unit (CoCu)
- Training Summary Duration
NDTS Training Content & Duration

☑ Training Content: Based on the National Occupational Skills Standard (NOSS) or NDTS-Curricula training occupation.

☑ Training Duration: Based on the time frame according to the Levels stipulated by NOSS.

<table>
<thead>
<tr>
<th>Level</th>
<th>Program</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>6 months or 600 hours.</td>
<td></td>
</tr>
<tr>
<td>Level 2</td>
<td>6 months or 600 hours.</td>
<td></td>
</tr>
<tr>
<td>Level 3</td>
<td>12 months or 1200 hours.</td>
<td></td>
</tr>
<tr>
<td>Level 4</td>
<td>12 months or 1200 hours.</td>
<td></td>
</tr>
<tr>
<td>Level 5</td>
<td>18 months or 1800 hours.</td>
<td></td>
</tr>
</tbody>
</table>

The NOSS Standard will determine; what occupational area/sector of a particular competency the training providers (company/training institute) are accredited to run the skills programs, what level of difficulty of the related competencies the candidate/trainee/apprentice will be trained & assessed on and upon successful completion of a training program what level of certification will be awarded to the candidate / trainee / apprentice.
NDTS Program Structure: Assessment

Assessment is HOLISTIC!

- Continuous Assessment and Final Test.
  Level 1 = Continuous Theory & Practical Assessment. No final test.
  Level 2, 3, 4 & 5 = Continuous Theory & Practical Assessment and Final Examination.
  Level 4 & 5 requires the apprentice to “create a project” or “CIP*”.

* Company's “Continuous Improvement Process”

Log Book or Journal Writing at workplace.

‘Human & Social Competencies” Assessment:
  i) Apprentice's Self Assessment and ii) Coach's Observational Assessment.

80% Apprentice attendance at workplace and training institute.

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NDTS/SLDN for a flexible learning experience

NDTS Program Structure: Training
Delivery Methodology: Block Release

Block-release: 1-2 months* theory classes at training institute followed by 4-5 months of practical/hands-on at the workplace.

First Month  2nd Month  3rd Month  4th Month  5th Month  6th Month
January      February  March     April    May       Jun

Theory Classes @ Training Institutes

Hands On @ Workplace

20-30%  70-80%

*Note: A example of a 6 months training program.

First Month  2nd Month  3rd Month  4th Month  5th Month  6th Month
January      February  March     April    May       Jun

Hands On @ Workplace

Theory Classes

20-30%

Hands On @ Workplace

Practical

70-80%
NDTS Program Structure: Training Delivery Methodology: Day Release

**Day-release:** 4-5 days of practical / hands-on at the workplace while 1-2 days of theory classes at participating training institute.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
</table>

**Hands-on @ Workplace**

**Weekend Theory Classes**

**Training Institute/Academy**

**Workplace**

**Morning: Theory classes @ Training Institute.**
- 20-30%

**Afternoon: Hands-on @ Workplace**
- 70-80%
Flow Chart on the Implementation of NDTS

1. Start
2. NDTS Promotion & Briefing Activities by DSD
3. Company/Training Institute interested?
   - No
     - End
   - Yes
4. NOSS / NDTS-C
   - No
     - Study by NOSS Division on training requirements
     - Need to develop NOSS / NDTS-C?
       - No
         - End
       - Yes
         - Develop NOSS / NDTS-C
   - Yes
     - Submit Company/Training Institute Registration Application Form to DSD
     - Verification Visit by DSD
     - continue
Flow Chart on the Implementation of NDTS

1. Recommendation to DSD Technical Committee Meeting
   - Approval from DSD Technical Committee Meeting
     - Yes: Execution of NDTS Program
     - No: End
   - End

2. Execution of NDTS Program
   - Certification
     - Tracer Study
       - End

3. Company & Training Institute Conduct Continuous & Final Assessment
   - Certification
   - Tracer Study
       - End

   - Apprentice registration RM100 / per person.
   - Appointment of Dual System Expert (DSE) by DSD to conduct Monitoring Visits.
   - Company & Training Institute prepare apprenticeship contract.
   - Company coaches & Training Inst. Trainers go for Induction Course.
   - Training institute develop LWA
   - Apprentices write log book / journal writing at workplace.
   - Company application for Verification Visit & Final Exam.
   - Final exam monitored by External Verifier.
   - Application for issuance of MSC.
When NDTs?

...these matters needed to be addressed

- Workers have not gone for formal skills training
- Minimize mismatch (quality and quantity)
- Increase the velocity of transferring technology to the people
- Strategic and cost-effective succession plan
- Continuous technological advancement (product and services)
- Experienced workers have yet to be certified
- Minimize dependence on foreign experts and workers
- New kind of training culture in the company

Workers have the potential to become skilled and competent workforce locally & abroad
Get Skilled, Upskilling & Reskilling

K-Worker Competencies

- Technical Competence
- Human & Social Competence
- Learning & Methodological Competence

Getting Skilled | Upskilling | Reskilling

Fresh school leaver(s) | Young Employee(s) | Senior Employee(s)

New worker(s) | Existing worker(s)

Workforce

Coach
Benefit to company in NDTs

- Less errors
- Workers are trained without leaving workplace
- Increased in production
- Workers work experience get recognition
- Company is at par with current technology
- More locals employed
- New technology learnt
- Uninterrupted Production / Service
- Training according to company's culture and requirement

WE MEAN BUSINESS!
Benefit to company in NDTs

Incentives & Benefits

- **To Apprentice:**
  RM350 - RM500 monthly allowances and job opportunity by company.

- **To Company:**
  Inland Revenue Board (LHDN) Tax Deduction
  Ref: LHDN.01/35/(S)/42/51/286-33

  HRDF Reimbursement.
  Ref: PSMB Pekeliling Majikan Bil. 1/2008.

- **Others.**
  Curriculum development by DSD.
  Consultation & guidance by Dual Training Experts (DSE).
  Induction courses and coaching on dual training for trainers and coaches by CIAST Department of Skills Development.
Incorporation of Malaysian Skills Certificates by company

Company willing to....

...offer company premise(s) to become NDTS training venue(s)

...take in school leaver(s) or existing worker(s) as NDTS apprentice(s)

...provide company resource person(s) such as Supervisors, HOD, HR who are willing to impart knowledge, expertise etcetera

...release staff to attend short courses / workshops conducted by CIAST Department of Skills Development

!....way forward towards developing skilled manpower.
Skills training for the rakyat

It is high time for the skills-training fraternity to become more harmonised and focused in order to push vocational training.

By Reference Seen.

In today’s competitive environment, the workforce, getting workers with the right skills and competency is in a must. To ensure a high standard of living, the workers need to be up-scaled and be equipped with skills and training.

Dr Pang has been advocating for the National Skills Development System (DSD) in order to pave the way for training to be more focused.

We must recognise that in today’s competitive environment, the up-scaling of the workforce, getting workers with the right skills and training is not only a necessity but also an option for them.

— Dr Pang Chuan Lee

Marrying industry and training providers in empowering workers

The Skills Development Department (JPK) has successfully coordinated the National Dual Training System (SDSN), creating 26,000 skilled workers from 2003 to 2011. Thus for the 10th Malaysia Plan (10MP) period until 2015, the programme will focus on a new group of businesses – school dropouts – and is continuous effort towards a 40% skilled workforce by 2020.

W.

Stephanie Angeline

MALAYSIA SME. 17 July 2011

MALAYSIA SME. 23 Sept. 2011
Q-Facts until July. 2014

- 1,193 Accredited Centres
- 6,368 Accredited Programs
- 1,343,396 - Malaysian Skills Certificates (Accumulation)
  (including 95,738 via RPA)
- 39,013 Statements of Achievement
- 2,697 Registered Industry Experts
- 2,750 Expert Trainers
- 495 SDAC members

- 2,4563* NOSS
  *covering 29 sectors
  NCS (16) & NDTTS Curriculum (30)

- 31,187 Malaysian Skills Cert./PC via NDTTS
- 1,594 programs
- 4,164 company
- 2,276 training institutes

Example: Mercedes Benz, TESCO, Mydin,
Sek. Men. Teknik @ Kolej Vokasional
KTMB, Rapidrail, Correction Dept., MAHB, etc

Source: Unpublished Q-Fact DSD.31July.2014
NDTS Training Providers
PART IV
CAPACITY BUILDING INITIATIVES
BY PBAPP AND PWSA
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 2014</td>
<td>PWSA has obtained an accreditation from the Department of Skills Development, Ministry of Human Resources (MoHR) to offer Malaysian Skills Certification (SKM – Sijil Kemahiran Malaysia) in water Distribution, Water Treatment and Instrumentation based on the National Occupational Skills Standards (NOSS) set by the Malaysian Government.</td>
</tr>
<tr>
<td>2013</td>
<td>PWSA was officially certified as an ‘Authorised Training Provider’ by the National Water Services Commission (SPAN) to offer the nationally accredited courses: Water Distribution Competency Course (WDCC) Levels 1 and 2, and Water Treatment Competency Course (WTCC) Levels 1 and 2.</td>
</tr>
<tr>
<td>2010 - 2012</td>
<td>Implement the first Malaysian Skills Certification (SKM) Program in Water Distribution Level 1 and Level 2 for school leaver in 2010 and 2011 and SKM in water treatment Level 1 in 2012.</td>
</tr>
<tr>
<td>31 April 2009</td>
<td>PWSA’s enrolment stands at 160 students – 77 “internal” students from the PBA Group of Companies and 83 “external” students.</td>
</tr>
<tr>
<td>25-26 Oct 2008, 22-23 Nov 2008, 28 Nov-4 Dec 2008, 3-4 Jan 2009</td>
<td>PWSA commences work on developing the National Occupational Skills Standard (NOSS) for the water supply industry in Malaysia. The academy is working with the Skills Development Department of the Malaysian Ministry of Human Resource to develop the NOSS. The NOSS will provide the foundation for a vocational training programme that offers nationally-recognised certification for school-leavers in the near future.</td>
</tr>
<tr>
<td>28 August 2008</td>
<td>Official Opening and Inaugural Graduation Ceremony for 60 students officiated by the Penang State Executive Councillor for Public Works, Utilities and Transportation representing the Penang Chief Minister.</td>
</tr>
<tr>
<td>17 December 2007</td>
<td>PWSA Agreement Signing and Logo Launching Ceremony officiated by the Penang State Secretary representing the Penang Chief Minister.</td>
</tr>
<tr>
<td>14 December 2007</td>
<td>PBA Resources Sdn Bhd is incorporated as a wholly-owned subsidiary of PBA Holdings Bhd (PBAHB), to manage PBAHB Group businesses that are not directly related to water supply. The Penang Water Services Academy (PWSA) was jointly founded by PBA Resources Sdn Bhd (PBAR) and the Penang Skills Development Centre (PSDC) in December 2007.</td>
</tr>
</tbody>
</table>
CERTIFICATE OF ACCREDITATION
(SKM)

JABATAN PEMBANGUNAN KEMAHIRAN
DEPARTMENT OF SKILLS DEVELOPMENT

PERAKUAN PENTAUHLIAN
CERTIFICATE OF ACCREDITATION

NO. RUJUKAN: JPK70102 Jul 12 (030)

TEPOH PENTAUHLIAN:
27 Feb 2014 - 26 Feb 2015

Bahawa dengan ini diperakuan:

PENANG WATER SERVICES ACADEMY
(PWSA)
TINGKAT 3,
KOMPLEKS PRAPP RIFFE RANGE
JALAN PADANG TEMBAK
11400 AIR HITAM
PULAU PINANG

KOD PUSAT BERTAULAH: L0239

Berikut disatahkan oleh Jabatan Pembangunan Kemahiran untuk menunjukkan, mentadbir dan mengawasi mutu Sistem Pendidikan Kemahiran Malaysia bagi program:

RB-040-1 OPERATOR LOJI PEMPROSEDAN AIR
RB-069-2 JURUTEKNIK LOJI PEMPROSESAN AIR
RB-063-3 JURUTEKNIK KANAN LOJI PEMPROSESAN AIR

Kelulusan ini adalah berdasarkan kepatuhan syarat-syarat asas yang ditetapkan oleh jabatan.

(DATUK DR. PANG CHAU LEONG)
Ketua Perguruan
direksional
Bertanggung: 93 Mac 2014

004011

004012

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CERTIFICATE OF ACCREDITATION FOR SLDN
Technical Competency Courses (Accredited by SPAN)

• A 10-day Technical Competency Course for technical personnel to create an opportunities for waterworks personnel in obtaining a recognised and Accredited Competency Certificate by SPAN;
• To develop occupational competency in a wide range of job roles in the water industry.
• To produce a skilled worker trained and qualified for the water industry
• To support the Government’s initiative as outlined in the Water Services Industry Act 2006 (Act 655)
• At the end of the 10-day training program, the participant will be assessed and certified by the Technical Advisory Committee (TAC) before being awarded the Certificate of Competency (COC)
• 2 courses offered for Level 1 and Level 2

<table>
<thead>
<tr>
<th>Level</th>
<th>Distribution</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water Distribution Competency Course</td>
<td>Water Treatment Competency Course</td>
</tr>
<tr>
<td>2</td>
<td>Water Distribution Competency Course</td>
<td>Water Treatment Competency Course</td>
</tr>
</tbody>
</table>
Malaysian Skills Certification Program (SKM)

- An integrated curriculum developed based on National Occupational Skills Standards (NOSS)
- Conducted based on structured training pathway with greater emphasis on the practical and hands-on exercises
- Every candidate to be assessed and certified to meet the requirements of NOSS before being awarded the Malaysian Skills Certificate by Department of Skills Development, Ministry of Human Resource, Malaysia
- 3 courses offered for Level 1 to Level 3

<table>
<thead>
<tr>
<th>Level</th>
<th>Distribution (RB-040)</th>
<th>Treatment (RB-060)</th>
<th>Instrumentation (CM-020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fitter</td>
<td>WTP Operator</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Distri. Technician</td>
<td>WTP Technician</td>
<td>Instru. Technician</td>
</tr>
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<td>3</td>
<td>Distri. Sr. Technician</td>
<td>WTP Sr. Technician</td>
<td>Instru. Sr. Technician</td>
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</table>
STRATEGIC COLLABORATION WITH JICA AND TOKYO SUIDO SERVICES (TSS)
PBAPP was appointed by the Japan International Cooperation Agency (JICA), to serve as the lead organisation for the implementation of the JICA Partnership Programme on “NRW (Non Revenue Water) Reduction Technology Training and Capacity Building in Malaysia”.

The aim of this project is for PBAPP to acquire the latest Japanese technology in NRW management to further reduce water loss In Penang. A team of PBAPP engineers and technicians will be trained to serve as NRW lecturers. Once this team is ready, PBAPP will then provide NRW reduction training for other water supply operators throughout Malaysia, with endorsement from the Ministry of Energy, Green Technology and Water (KeTTHA).
NRW SIMULATION GROUND
STRATEGIC COLLABORATION WITH PERBADANAN MENTERI BESAR KELANTAN (PMBK) & AKSB
SCOPE OF COLLABORATION:

1) To address the Kelantan State’s professional development needs.
2) To enhance skills development in Kelantan.
3) To assist Kelantan State in minimizing the skills gap as well as improving the state’s water management.
4) Darul Digital (DD) in collaboration with Air Kelantan Sdn Bhd (AKSB) will play an important role as an implementation agency.
5) Penang Water Services Academy (PWSA) and Pusat Latihan Darul Digital (DD) will collaborate and work together in establishing and promoting competency enhancement training program in east coast region.
STRATEGIC COLLABORATION WITH MALAYSIAN WATER ACADEMY (MyWA)
SCOPE OF COLLABORATION/PARTNERSHIP

- Exploring opportunities to offer an Apprenticeship Scheme Industry Driven” based on the National Dual Training System (SLDN)

- Exploring opportunities to obtain necessary fund/training grant (SLDN –KHAS) from the Department of Skills Development (JPK) and from relevant agencies (i.e PSMB, PTPK etc)

- Exploring opportunities to collaborate with Water Operators/agencies in establishing Regional Authorized Training Provider (ATP) for Central, Southern & east coast regions.
STRATEGIC COLLABORATION WITH NORTHERN CORRIDOR IMPLEMENTATION AUTHORITY (NCIA) “KORIDOR UTARA”
1. The program will be conducted based on the National Occupational Skills Standard (NOSS) for Malaysian Skills Certification (SKM) requirements.

2. Under the NCIA grant, PWSA will conduct a 6 – 12 months up-skilling and re-skilling training in water treatment, water distribution, Instrumentations and Non-revenue water management.

3. The implementation will be based on National Dual Training system (SLDN) approach with the participation from water operators/contractors/plumbers from Perlis, Kedah, Penang and Northern Perak.
For further enquiries, please contact us

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THANK YOU

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