

# **PMA08 CHEMICALS, HYDROCARBONS AND REFINING TRAINING PACKAGE**

## **Version 5**

### **WA NOMINAL HOURS GUIDE**

**Western Australian Department of Training and Workforce  
Development**

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## Foreword

This has been generated to enable the stakeholders in the Chemicals, Hydrocarbons and Refining Industry in Western Australia to participate in the managed implementation of the National PMA08 Chemicals, Hydrocarbons and Refining Training Package.

This Guide is designed to aid Registered Training Organisations (RTOs) to convert from existing Training Package qualifications to new Training Package qualifications within the scope of their training delivery.

The Guide should be read in conjunction with the **endorsed components** of the Training Package

**Version 5** of the PMA08 Chemicals, Hydrocarbons and Refining Training Package was released by Training.Gov.Au (TGA) on the **13 December 2013**.

## Obtaining the Training Package

The PMA08 Chemicals, Hydrocarbons and Refining Training Package can be purchased from:



Office: Level 8, 80 Arthur Street  
North Sydney NSW 2060  
Postal: PO Box 289  
North Sydney NSW 2059  
T: 1800 358 458 | F: (02) 9955 8044  
E: [info@mskills.com.au](mailto:info@mskills.com.au)  
W: [www.mskills.com.au](http://www.mskills.com.au)

Information on National Training Packages is also available through Training.Gov (TGA), which can be located on the Internet at: [www.training.gov.au](http://www.training.gov.au)

**All RTOs who have Training Package qualifications on their Scope of Delivery must have access to the relevant Training Package.**

## Version Modification History

The version details of this endorsed Training Package are in the table below. The latest information is at the top of the table.

Version	TGA Release Date	Modification History
5.0	13 December 2013	<p><b>Endorsed changes</b></p> <p>Three new units of competency packaged as electives in PMA20113, PMA20213 and PMA40113.</p> <ul style="list-style-type: none"> <li>• PMAOPS226A Monitor and operate flare systems</li> <li>• PMASUP245A Break and make flanged joints using hand tools</li> <li>• PMASUP246A Disconnect and reconnect non-flared tube fitting joints</li> </ul>
4.1	23 October 2013	<p><b>ISC Upgrades</b></p> <p>Inclusion of prerequisite units in Skill Sets:            PMASS00007 Incident response team member            PMASS00009 Off-shore incident response team member            imported units updated to latest release</p> <p>List of Imported Units</p> <ul style="list-style-type: none"> <li>• correction to training package origin details for MSS units</li> </ul> <p>Addition of industry sector and occupation data to taxonomy fields for qualifications:</p> <ul style="list-style-type: none"> <li>• PMA20113</li> <li>• PMA30113</li> <li>• PMA40113</li> </ul> <p>Refer summary mapping</p>
4.0	24 June 2013	<p><b>Qualifications - endorsed changes</b></p> <p>Addition of 24 new electives for metalliferous processing for:</p> <ul style="list-style-type: none"> <li>• PMA20113 Certificate II in Process Plant Operations</li> <li>• PMA30113 Certificate III in Process Plant Operations</li> <li>• PMA40113 Certificate IV in Process Plant Operations</li> </ul> <p>No changes to packaging rules</p> <p>No change to outcomes for existing PMA sector pathways</p> <p><b>ISC upgrades</b></p> <ul style="list-style-type: none"> <li>• PMA50108 New release – addition of one new elective in Group A</li> <li>• PMA60108 New release</li> </ul> <p>New release of Skill Sets</p> <ul style="list-style-type: none"> <li>• PMASS00007</li> <li>• PMASS00012</li> </ul> <p>Imported units updated to current versions</p> <p>Refer to mapping for details</p>
3.1	26 July 2012	<ul style="list-style-type: none"> <li>• MEM elective unit code corrected in PMA20108, PMA30108 and PMA40108: MEM11011B</li> <li>• Removal of duplicate elective unit in PMA40108: MSAPMOPS400A</li> </ul>
3.0	14 November 2011	<p>Addition of:</p> <ul style="list-style-type: none"> <li>• two new PMA units of competency               <ul style="list-style-type: none"> <li>○ PMASUP244A Prepare and isolate plant</li> <li>○ PMASUP444A Plan plant preparation and isolation</li> </ul> </li> <li>• one imported unit to be included as electives in:               <ul style="list-style-type: none"> <li>○ PMA20108</li> <li>○ PMA30108</li> </ul> </li> </ul>

Version	TGA Release Date	Modification History
		<ul style="list-style-type: none"> <li>○ PMA40108</li> </ul> <p>Note: An Implementation Guide is not required for version 3</p>
2.0	October 2010	<p>Six new units of competency included as electives in PMA20108, PMA30108 and PMA40108.</p> <p>ISC updates to all qualifications - superseded imported units replaced and all qualifications adjusted for flexibility rules.</p> <p>Note: A Implementation Guide is not required for version 2</p>
1.1	July 2010	ISC update to PMA20108 to comply with flexibility rules – one unit added to importation allowance
1.0	27 August 2008	Primary release, replacing PMA02

## Transition Arrangements

Registered Training Organisations (RTOs) are required to deliver Training Package qualifications within 12 months of the release date of the Training Package on to Training.gov.au (TGA).

Students currently enrolled in an existing version of the Training Package qualification should be permitted to complete the program they enrolled in initially, unless the move to the related qualification from a Training Package can be made without disadvantage to a student.

## Nominal Hours

The Commonwealth Department of Employment, Education and Workplace Relations' definition of nominal hours states:

***“The value assigned to a structured program of study that nominally represents the anticipated hours of supervised learning and/or training deemed necessary to conduct training/learning and assessment activities associated with the program of study”***

Source: National Quality Council Training Package Glossary Version V2.1  
17/03/2010

<http://www.deewr.gov.au/Skills/Overview/Policy/TPDH/Downloads/Documents/TrainingPackGlossary.pdf>

Nominal hours are identified for each Training Package qualification. Total nominal hours may vary within a qualification depending on the selection of elective units of competency.

In Western Australia, nominal hours are used as a mechanism for funding allocation.

## Qualifications and Nominal Hours

The following table provides a summary of the qualifications and nominal hours in the Version 5 of the PMA08 Training Package Chemical, Hydrocarbons and Refining

<b>National ID</b>	<b>Title</b>	<b>Nominal Hours</b>
PMA20113	Certificate II in Process Plant Operations	475
PMA30113	Certificate III in Process Plant Operations	690
PMA40113	Certificate IV in Process Plant Technology	985
PMA50108	Diploma of Process Plant Technology	421
PMA60108	Advanced Diploma of Process Plant Technology	821
PMA70108	Vocational Graduate Certificate in Surface Coating Technology	536



## Units of Competency and Nominal Hours

The following table provides a summary of the units of competency and nominal hours in version 5 of the PMA08 Chemical, Hydrocarbons and Oil Refining Training Package.

Please note: the new units of competency in version 5 are highlighted in red text.

National ID	Title	Nominal Hours
PMAOHS211B	Prepare equipment for emergency response	20
PMAOHS213B	Undertake fire control and emergency rescue	15
PMAOHS214B	Undertake helicopter safety and escape	30
PMAOHS215B	Apply offshore facility abandonment and sea survival procedures	20
PMAOHS221B	Maintain First Aid supplies and records	10
PMAOHS310B	Investigate incidents	30
PMAOHS311B	Lead emergency teams	20
PMAOHS312B	Command the operation of survival craft	40
PMAOHS320C	Provide advanced First Aid response	20
PMAOHS321B	Provide First Aid response in remote and/or isolated area	25
PMAOHS420B	Develop First Aid procedures and manage resources	40
PMAOHS502B	Contribute to safety case	40
PMAOHS511A	Manage emergency incidents	40
PMAOMIR210B	Control evacuation to muster point	20
PMAOMIR301B	Undertake initial rescue	60
PMAOMIR302B	Respond to a helideck incident	30
PMAOMIR305A	Operate panel during an emergency	45
PMAOMIR317B	Facilitate search and rescue operations	40
PMAOMIR320B	Manage incident response information	40
PMAOMIR321B	Manage communication systems during an incident	30
PMAOMIR346B	Assess and secure an incident site	30
PMAOMIR407B	Audit incident preparedness and established response system	80
PMAOMIR418B	Coordinate incident response	40
PMAOMIR424B	Develop and maintain community relationships	30
PMAOMIR430B	Conduct and assess incident exercises	35
PMAOMIR444B	Develop incident containment tactics	40
PMAOMIR449B	Monitor legal compliance obligations during incidents	40
PMAOMIR512B	Establish incident response preparedness and response systems	80
PMAOMIR523B	Manage corporate media requirements in a crisis	25
PMAOMIR575B	Coordinate welfare support activities in response to an incident	30
PMAOMIR622B	Build partnerships to improve incident response capacity	30
PMAOMIR650B	Manage a crisis	80
PMAOPS101C	Read dials and indicators	15
PMAOPS105C	Select and prepare materials	15
PMAOPS201B	Operate fluid flow equipment	60
PMAOPS202B	Operate fluid mixing equipment	20
PMAOPS203B	Handle goods	15
PMAOPS204B	Use utilities and services	40
PMAOPS205B	Operate heat exchangers	40
PMAOPS206B	Operate separation equipment	15
PMAOPS207B	Operate powered separation equipment	15
PMAOPS208B	Operate chemical separation equipment	20
PMAOPS210B	Operate particulates handling equipment	20
PMAOPS211B	Operate manufacturing extruders	30
PMAOPS213B	Package product/material	20
PMAOPS216B	Operate local control system	40
PMAOPS217B	Operate wet milling equipment	40
PMAOPS220B	Monitor chemical reactions in the process	30
PMAOPS221B	Operate and monitor prime movers	40

National ID	Title	Nominal Hours
PMAOPS222B	Operate and monitor pumping systems and equipment	40
PMAOPS223B	Operate and monitor valve systems	20
PMAOPS224B	Provide fluids for utilities and support	30
<b>PMAOPS226A</b>	<b>Monitor and operate flare systems</b>	<b>25</b>
PMAOPS230B	Monitor, operate and maintain pipeline stations and equipment	40
PMAOPS231B	Control gas odourisation	10
PMAOPS232B	Produce product by filtration	40
PMAOPS240B	Store liquids in bulk	30
PMAOPS242A	Moor ships for transfer of bulk processed particulates or fluids	25
PMAOPS246A	Operate separation equipment	15
PMAOPS247A	Operate powered separation equipment	15
PMAOPS260A	Conduct screening operations	25
PMAOPS261A	Operate bulk solids loading equipment	25
PMAOPS262A	Operate digestion equipment	25
PMAOPS263A	Operate leaching equipment	25
PMAOPS264A	Operate solvent extraction equipment	25
PMAOPS265A	Operate magnetic/ electrical separation equipment	25
PMAOPS280A	Interpret process plant schematics	20
PMAOPS290B	Operate a biotreater	30
PMAOPS300B	Operate a production unit	40
PMAOPS301B	Produce product by distillation	40
PMAOPS302B	Operate reactors and reaction equipment	40
PMAOPS303B	Operate furnaces to induce reaction	40
PMAOPS304B	Operate and monitor compressor systems and equipment	30
PMAOPS305B	Operate process control systems	60
PMAOPS307B	Transfer bulk fluids into/out of storage facility	50
PMAOPS308B	Organise storage and logistics of general materials	20
PMAOPS309B	Operate particulates handling/ storage equipment	40
PMAOPS312B	Undertake ship loading/unloading operations	40
PMAOPS319A	Adjust batch	40
PMAOPS320B	Conduct artificial lift	20
PMAOPS321B	Undertake well management	40
PMAOPS323A	Operate and monitor heating furnace	40
PMAOPS324A	Operate a gas turbine	50
PMAOPS325B	Generate electrical power	30
PMAOPS326B	Produce product using gas absorption	40
PMAOPS327B	Produce product using fixed bed dehydration	40
PMAOPS329B	Produce product using liquid extraction	40
PMAOPS330B	Communicate pipeline control centre operations	40
PMAOPS335A	Conduct pipeline pigging	20
PMAOPS340B	Operate cryogenic processes	40
PMAOPS350B	Match and adjust colour	40
PMAOPS360A	Operate a metalliferous kiln/furnace	35
PMAOPS361A	Operate a smelting furnace	35
PMAOPS362A	Operate a blast furnace	35
PMAOPS364A	Operate an electrochemical process	35
PMAOPS365A	Operate pelletising equipment	25
PMAOPS366A	Operate sintering equipment	25
PMAOPS390B	Operate a biochemical process	40
PMAOPS402A	Respond to abnormal process situations	50
PMAOPS405A	Operate complex control systems	80
PMAOPS410B	Monitor remote production facilities	40
PMAOPS411B	Manage plant shutdown and restart	40
PMAOPS450B	Solve colour problems	50
PMAOPS460A	Monitor and operate tailings management facilities	45
PMAOPS500A	Optimise production systems	100

National ID	Title	Nominal Hours
PMAOPS501A	Provide operational expertise to a project team	80
PMAOPS505A	Control the process in abnormal situations	80
PMAOPS511B	Determine energy transfer loads	40
PMAOPS512B	Determine mass transfer loads	40
PMAOPS520C	Manage utilities	50
PMAOPS521C	Plan plant shutdown	50
PMAOPS522A	Coordinate plant shut down	50
PMAOPS550B	Develop a colour formulation	60
PMAOPS560A	Plan and design tailings management facilities	70
PMAOPS600C	Modify plant	60
PMAOPS601A	Debottleneck plant	60
PMAOPS751A	Apply physiochemical knowledge to select raw materials for surface coatings	80
PMAOPS752A	Develop a decorative coating	60
PMAOPS753A	Develop a non-decorative coating or ink	60
PMAOPS755A	Provide surface coatings application advice	60
PMASMELT260B	Form carbon anodes	40
PMASMELT261B	Bake carbon anodes	30
PMASMELT262B	Clean and strip anode rods	30
PMASMELT263B	Spray carbon anodes	40
PMASMELT264B	Start up reduction cells	60
PMASMELT265B	Operate reduction cells	60
PMASMELT266B	Deliver molten metal	30
PMASMELT267B	Cast aluminium ingots	40
PMASMELT268B	Vertical direct casting	60
PMASMELT269A	Operate cell tending equipment	30
PMASMELT270A	Supply product from reduction cells	30
PMASUP236B	Operate vehicles in the field	20
PMASUP237B	Undertake crane, dogging and load transfer operations	40
PMASUP241B	Maintain pipeline easements	20
PMASUP242B	Monitor pipeline civil works	20
PMASUP243B	Monitor and maintain pipeline coatings	20
PMASUP245A	Break and make flanged joints using hand tools	25
PMASUP246A	Disconnect and reconnect non-flared tube fitting joints	25
PMASUP305A	Operate offshore cranes	80
PMASUP311A	Operate communications hub	40
PMASUP341B	Monitor and maintain instrument and control systems	40
PMASUP342B	Monitor and maintain electrical systems	40
PMASUP343B	Monitor and maintain cathodic protection systems	20
PMASUP344B	Monitor and control repairs and modifications on operational pipe	40
PMASUP345A	Monitor vibration	60
PMASUP346A	Control corrosion	40
PMASUP347A	Undertake corrosion inspection in a petrochemical environment	40
PMASUP410B	Develop plant documentation	30
PMASUP420B	Minimise environmental impact of process	40
PMASUP432B	Coordinate pipeline projects	40
PMASUP440B	Commission/recommission plant	40
PMASUP441C	Decommission plant	20
PMASUP445A	Participate in HAZOP studies	40
PMASUP520B	Review procedures to minimise environmental impact of process	40
PMASUP540B	Analyse equipment performance	50
PMASUP620B	Manage environmental management system	60

## Mapping Units of Competency

The following table provides an overview of the units of competency from Version 4 of the PMA08 Chemical, Hydrocarbons and Oil Refining Training Package which are replaced by the units of competency from Version 5.

Version 3.1			Version 4		
National ID	Title	Hours	National ID	Title	Hours
	No previous equivalent		PMAOPS226A	Monitor and operate flare systems	25
	No previous equivalent		PMASUP245A	Break and make flanged joints using hand tools	25
	No previous equivalent		PMASUP246A	Disconnect and reconnect non-flared tube fitting joints	25

## Traineeships

The following table provides a summary of the qualifications in version 5 of the PMA08 Chemical, Hydrocarbons and Refining Training Package and the accredited traineeship courses they will replace from the previous version of the Training Package.

Version 4 Current Qualification				Version 5 Replacement Qualification		
National ID	Title	Traineeship	Hours	National ID	Title	Hours
PMA20113	Certificate II in Process Plant Operations	Process Plant Operations (Level 2)	475		No change	
PMA20113	Certificate II in Process Plant Operations	Process Plant Operations (Maintenance Engineering) (Level 2)	571		No change	
PMA30113	Certificate III in Process Plant Operations	Process Plant Operations (Level 3)	690		No change	
PMA40113	Certificate IV in Process Plant Technology	Process Plant Technology (Level 4)	985		No change	
PMA50108	Diploma in Process Plant Technology	Process Plant Advanced Technician	421		No change	