

Victorian Purchasing Guide
for
PMA Chemical, Hydrocarbons and Refining
Training Package
Release 2.0

February 2021

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Victorian Purchasing Guide — Release History

Note: RTOs should refer to the National Register for the detail of changes made in each Release. (See [National Register](#) for more information)

Training Package Release	Date VPG Approved	Comments
<p>PMA Chemical, Hydrocarbons and Refining Training Package Release No 2.0</p>	<p>9 February 2021</p>	<p>Release 2 of the PMA Chemical, Hydrocarbons and Refining Training Package reflects the update of PMA30120 Certificate III in Process Plant Operations which now includes seven new Gas/LNG specialisations.</p> <p>For detailed mapping of qualifications and units between PMA Release 2.0 and PMA Release 1.0, please refer to the PMA Chemicals, Hydrocarbons and Refining Training Package Implementation Guide Companion Volume</p>
<p>PMA Chemical, Hydrocarbons and Refining Training Package Release No 1.0</p>	<p>7 July 2016</p>	<p>Release 1 of the PMA Chemical, Hydrocarbons and Refining Training Package reflects the transitioning of the PMA08 Chemicals, Hydrocarbons and Refining Training Package to the new Standards for Training Packages.</p> <ul style="list-style-type: none"> ▪ PMA70108 Graduate Certificate in Surface Coating Technology is not carried forward. <p>This Victorian Purchasing Guide also reflects the changes made from Maximum Nominal Hours to Maximum and Minimum Payable Hours.</p> <p>For detailed mapping of qualifications and units between PMA R 1.0 and PMA08 please refer to the PMA Chemicals, Hydrocarbons and Refining Training Package Implementation Guide Companion Volume</p>

PMA Chemical, Hydrocarbons and Refining Training Package Release 2.0 Victorian Purchasing Guide

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INTRODUCTION

What is a Victorian Purchasing Guide?

The Victorian Purchasing Guide provides information for use by Registered Training Organisations (RTOs) in the provision of Victorian government subsidised training.

Specifically the Victorian Purchasing Guide provides the following information related to the delivery of nationally endorsed Training Packages in Victoria:

- The maximum and minimum payable hours available for each qualification.
- Nominal hours for each unit of competency within the Training Package.

Registration

RTOs must be registered by either the Victorian Registration and Qualifications Authority (VRQA) or the Australian Skills Qualification Authority (ASQA) regulatory body to be eligible to issue qualifications and Statements of Attainment under the Australian Qualifications Framework (AQF).

The VRQA is the regulatory authority in Victoria responsible for the registration of Vocational Education and Training (VET) providers who offer courses to domestic students in Victoria only.

ASQA is the regulatory authority responsible for the registration of VET providers who offer training in Victoria, nationally and / or internationally.

Transition

The relationship between new units and any superseded or replaced units from the previous version of **PMA Chemical, Hydrocarbons and Refining Training Package Release 2.0** is provided in the Training Package Companion Volume Implementation Guide. (See [Companion Volumes](#) for more information).

Information regarding transition arrangements can be obtained from the state or national VET Regulatory Authority (see Contacts and Links section).

RTOs must ensure that all training and assessment leading to issuance of qualifications or Statements of Attainment from the **PMA Chemical, Hydrocarbons and Refining Training Package Release 2.0** is conducted against the Training Package units of competency and complies with the assessment requirements.



QUALIFICATIONS

Code	Title	Minimum Payable Hours	Maximum Payable Hours
PMA20116	Certificate II in Process Plant Operations	608	640
PMA30120	Certificate III in Process Plant Operations	760	800
PMA40116	Certificate IV in Process Plant Technology	1102	1160
PMA50116	Diploma of Process Plant Technology	570	600
PMA60116	Advanced Diploma of Process Plant Technology	884	930



UNITS OF COMPETENCY AND NOMINAL HOURS

Unit Code	Unit Title	Nominal Hours
PMAOMIR210	Control evacuation to muster point	20
PMAOMIR301	Undertake initial rescue	60
PMAOMIR302	Respond to a helideck incident	30
PMAOMIR306	Operate control panel during an emergency	50
PMAOMIR317	Facilitate search and rescue operations	40
PMAOMIR322	Manage incident response information	40
PMAOMIR323	Manage communication systems during an incident	30
PMAOMIR346	Assess and secure an incident site	30
PMAOMIR407	Audit incident preparedness and established response systems	80
PMAOMIR418	Coordinate incident response	40
PMAOMIR424	Develop and maintain community relationships	30
PMAOMIR430	Conduct and assess incident exercises	35
PMAOMIR444	Develop incident containment tactics	40
PMAOMIR449	Monitor legal compliance obligations during incidents	40
PMAOMIR512	Establish incident response preparedness and response systems	70
PMAOMIR523	Manage corporate media requirements in a crisis	25
PMAOMIR575	Coordinate welfare support activities in response to an incident	30
PMAOMIR622	Build partnerships to improve incident response capacity	30



Unit Code	Unit Title	Nominal Hours
PMAOMIR650	Manage a crisis	80
PMAOPS101	Read dials and indicators	15
PMAOPS105	Select and prepare materials	15
PMAOPS201	Operate fluid flow equipment	60
PMAOPS202	Operate fluid mixing equipment	20
PMAOPS204	Select and use utilities and services	40
PMAOPS205	Operate heat exchangers	40
PMAOPS208	Operate chemical separation equipment	30
PMAOPS210	Operate solids handling equipment	20
PMAOPS211	Operate manufacturing extrusion systems	40
PMAOPS213	Package product/material	20
PMAOPS216	Operate local control system	40
PMAOPS217	Operate wet milling equipment	40
PMAOPS220	Monitor chemical reactions in the process	30
PMAOPS221	Operate and monitor prime movers	40
PMAOPS222	Operate and monitor pumping systems and equipment	40
PMAOPS223	Operate and monitor valve systems	20
PMAOPS224	Provide fluids for utilities and support	20
PMAOPS226	Monitor and operate flare systems	30
PMAOPS230	Monitor, operate and maintain pipeline stations and equipment	40
PMAOPS231	Control gas odourisation	10



Unit Code	Unit Title	Nominal Hours
PMAOPS232	Operate filtration equipment	40
PMAOPS233	Monitor wells and gathering systems	30
PMAOPS234	Monitor and operate low pressure compressors	30
PMAOPS236	Monitor continuous process plant	40
PMAOPS240	Store fluids in bulk	30
PMAOPS241	Operate Joule-Thomson effect device	30
PMAOPS242	Moor ships for transfer of bulk processed particulates or fluids	30
PMAOPS246	Operate separation equipment	15
PMAOPS247	Operate powered separation equipment	15
PMAOPS260	Conduct screening operations	30
PMAOPS261	Operate bulk solids loading equipment	30
PMAOPS262	Operate digestion equipment	30
PMAOPS263	Operate leaching equipment	30
PMAOPS264	Operate solvent extraction equipment	30
PMAOPS265	Operate magnetic/electrical separation equipment	30
PMAOPS280	Interpret process plant schematics	20
PMAOPS290	Operate a biotreater	30
PMAOPS306	Operate and troubleshoot production unit	40
PMAOPS309	Operate solids handling/storage facility	40
PMAOPS310	Operate and troubleshoot distillation system	40
PMAOPS311	Operate and troubleshoot reactors and reaction equipment	40



Unit Code	Unit Title	Nominal Hours
PMAOPS313	Operate and troubleshoot furnaces to induce reaction	50
PMAOPS314	Operate and troubleshoot compressor systems	30
PMAOPS315	Operate and troubleshoot process control systems	60
PMAOPS316	Organise storage and logistics of general materials	20
PMAOPS317	Undertake ship transfer operations	40
PMAOPS318	Conduct artificial lift	20
PMAOPS319	Adjust batch	40
PMAOPS322	Undertake well management	40
PMAOPS328	Operate and troubleshoot heating furnace	40
PMAOPS331	Operate and troubleshoot gas turbine system	50
PMAOPS332	Generate electrical power	30
PMAOPS334	Operate and troubleshoot gas absorption system	40
PMAOPS336	Operate and troubleshoot fixed-bed adsorption system	40
PMAOPS337	Operate and troubleshoot liquid extraction system	40
PMAOPS338	Communicate and monitor pipeline activities	40
PMAOPS339	Operate and troubleshoot wells and gathering systems	30
PMAOPS341	Operate and troubleshoot cryogenic processes	40
PMAOPS342	Conduct pipeline pigging	20
PMAOPS343	Transfer bulk fluids into/out of storage facility	40
PMAOPS344	Operate and troubleshoot flare system	40
PMAOPS345	Operate and troubleshoot gas treatment process	60



Unit Code	Unit Title	Nominal Hours
PMAOPS346	Operate and troubleshoot liquefaction process	40
PMAOPS347	Create and conduct isolations in the workplace	60
PMAOPS348	Operate safety, protection and shutdown systems	50
PMAOPS349	Operate and troubleshoot hydraulic systems	40
PMAOPS350	Match and adjust colour	50
PMAOPS351	Operate and troubleshoot turret swivel systems	40
PMAOPS352	Operate and troubleshoot instrument and plant air systems	40
PMAOPS353	Operate and troubleshoot heating, ventilation and air conditioning systems	60
PMAOPS354	Operate and troubleshoot inert gas generation systems	40
PMAOPS355	Operate and troubleshoot fuel systems	40
PMAOPS356	Operate and troubleshoot water treatment systems	60
PMAOPS357	Operate and troubleshoot produced water and water injection systems	40
PMAOPS358	Process design fundamentals	40
PMAOPS359	Operate and troubleshoot process measurement and control systems	40
PMAOPS360	Operate a metalliferous kiln/furnace	40
PMAOPS361	Operate a smelting furnace	40
PMAOPS362	Operate a blast furnace	40
PMAOPS363	Operate and troubleshoot export systems	30
PMAOPS364	Operate an electrochemical process	40
PMAOPS365	Operate pelletising equipment	30



Unit Code	Unit Title	Nominal Hours
PMAOPS366	Operate sintering equipment	30
PMAOPS367	Operate and troubleshoot cooling water systems	40
PMAOPS368	Operate and troubleshoot heating medium/hot oil systems	40
PMAOPS369	Operate and troubleshoot drain and vent systems	30
PMAOPS370	Operate and troubleshoot condensate stabilisation systems	40
PMAOPS390	Operate a biochemical process	40
PMAOPS402	Respond to abnormal process situation	50
PMAOPS405	Operate complex control systems	80
PMAOPS410	Operate remote production facilities	40
PMAOPS411	Manage plant shutdown and restart	40
PMAOPS433	Manage wells and gathering systems	40
PMAOPS434	Commission wells and gathering systems	40
PMAOPS450	Solve colour problems	50
PMAOPS460	Monitor and operate tailings management facilities	50
PMAOPS500	Optimise production systems	100
PMAOPS501	Provide operational expertise to a project team	80
PMAOPS505	Control the process during abnormal situations	80
PMAOPS511	Determine energy transfer loads	40
PMAOPS512	Determine mass transfer loads	40
PMAOPS520	Manage utilities	50
PMAOPS521	Plan plant shutdown	50



Unit Code	Unit Title	Nominal Hours
PMAOPS522	Coordinate plant shutdown	50
PMAOPS550	Develop a colour formulation	60
PMAOPS560	Plan and design tailings management facilities	80
PMAOPS600	Modify plant	60
PMAOPS601	Debottleneck plant	60
PMAOPS751	Apply physiochemical knowledge to select raw materials for surface coatings	80
PMAOPS752	Develop a decorative coating	60
PMAOPS753	Develop a non-decorative coating or ink	60
PMAOPS755	Provide surface coatings application advice	60
PMASMELT260	Form carbon anodes	40
PMASMELT261	Bake carbon anodes	30
PMASMELT262	Clean and strip anode rods	30
PMASMELT263	Spray carbon anodes	40
PMASMELT264	Start up reduction cells	60
PMASMELT265	Operate reduction cells	60
PMASMELT266	Deliver molten metal	30
PMASMELT267	Cast ingots	40
PMASMELT268	Operate vertical direct casting process	60
PMASMELT269	Operate cell tending equipment	30
PMASMELT270	Supply product from reduction cells	30
PMASUP236	Operate vehicles in the field	20



Unit Code	Unit Title	Nominal Hours
PMASUP237	Undertake crane, dogging and load transfer operations	40
PMASUP241	Maintain pipeline easements	20
PMASUP242	Monitor pipeline civil works	20
PMASUP243	Monitor and maintain pipeline coatings	20
PMASUP244	Prepare and isolate plant	50
PMASUP245	Break and make flanged joints using hand tools	30
PMASUP246	Disconnect and reconnect non-flared tube fitting joints	30
PMASUP305	Operate offshore cranes	80
PMASUP311	Operate communications hub	40
PMASUP341	Monitor and maintain instrument and control systems	40
PMASUP342	Monitor and maintain electrical systems	40
PMASUP345	Monitor vibration	60
PMASUP347	Undertake corrosion inspection on process plant	40
PMASUP348	Monitor and maintain cathodic protection systems	20
PMASUP349	Monitor and control repairs and modifications on operational pipe	40
PMASUP350	Control corrosion	40
PMASUP410	Develop plant documentation	30
PMASUP420	Minimise environmental impact of process	40
PMASUP432	Coordinate pipeline projects	40
PMASUP440	Commission/recommission plant	40
PMASUP441	Decommission plant	20



Unit Code	Unit Title	Nominal Hours
PMA SUP444	Plan plant preparation and isolation	50
PMA SUP445	Participate in HAZOP studies	40
PMA SUP520	Review procedures to minimise environmental impact of process	40
PMA SUP540	Analyse equipment performance	50
PMA SUP620	Manage environmental management system	60
PMA WHS211	Prepare equipment for emergency response	20
PMA WHS213	Undertake fire control and emergency rescue	15
PMA WHS214	Undertake helicopter safety and escape	30
PMA WHS215	Apply offshore facility abandonment and sea survival procedures and practices	20
PMA WHS221	Maintain first aid resources and records	10
PMA WHS310	Investigate incidents	30
PMA WHS311	Lead emergency teams	20
PMA WHS312	Command the operation of survival craft	40
PMA WHS320	Provide advanced first aid response	20
PMA WHS321	Provide first aid response in remote and/or isolated area	25
PMA WHS420	Develop first aid procedures and manage resources	40
PMA WHS502	Contribute to safety case	40
PMA WHS511	Manage emergency incidents	40



CONTACTS AND LINKS

Curriculum Maintenance Manager (CMM)		
General Manufacturing	The CMM Service is provided on behalf of Higher Education and Skills. CMM Service Executive Officers can assist with questions on payable and nominal hours.	Name: Paul Saunders Address: Chisholm Institute, PO Box 684, Dandenong, Victoria, 3175. Phone: 03 9238 8448 Email: paul.saunders@chisholm.edu.au
Service Skills Organisation (SSO)		
Innovation & Business Skills Australia (IBSA)	This SSO is responsible for developing this PMA Chemical, Hydrocarbons and Refining Training Package and can be contacted for further information.	Phone: 03 9815 7099 Email: manufacturing@ibsa.org.au See SSO website for further information.
National Register for VET in Australia		
Training.gov.au (TGA)	TGA is the Australian government's official National Register of information on Training Packages, qualifications, courses, units of competency and RTOs.	See the National Register for more information.
Australian Government		
Department of Education, Skills and Employment.	The Commonwealth Department is responsible for national policies and programmes that help Australians access quality vocational education and training.	See the Commonwealth Department of Education, Skills and Employment website for more information.
State Government		
Department of Education and Training (DET)	DET is the State Training Authority responsible for supporting implementation of Vocational Education and Training (VET) in Victoria.	(03) 9637 2000 See the Victorian Department of Education and Training website for more information.
National VET Regulatory Authority		
Australian Skills Quality Authority (ASQA)	ASQA is the national regulator for Australia's VET sector.	Info line: 1300 701 801 See the ASQA website for more information.
Victorian State VET Regulatory Authority		
Victorian Registration and Qualifications Authority (VRQA)	The VRQA is a statutory authority responsible for the registration and regulation of Victorian RTOs and for the regulation of apprenticeships and traineeships in Victoria.	(03) 9637 2806 See the VRQA website for more information.



Industry Regulatory Bodies

WorkSafe Victoria	<p>The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements which may impact on the delivery of training or the issuance of qualifications in this Training Package.</p> <p>WorkSafe needs to provide written verification before High Risk Work Units can be added to an RTO's scope of registration.</p>	<p>Address: 222 Exhibition Street, Melbourne, 3000. Phone: (03) 9641 1444 or 1800 136 089 (toll free)</p> <p>Email: Here.</p> <p>See Worksafe Victoria's website for further information.</p>
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GLOSSARY

Code	Nationally endorsed Training Package qualification code.
Title	Nationally endorsed Training Package qualification title.
Unit Code	Nationally endorsed Training Package unit code.
Unit Title	Nationally endorsed Training Package unit title.
Maximum Payable Hours	<p>The maximum number of hours the Victorian Government will subsidise under Skills First funding for the achievement of the minimum realistic vocational outcome of the qualification, as determined by the qualification packaging rules. The Maximum Payable Hours do not cover every possible combination of core and elective units available for a specific qualification.</p> <p>Minimum payable hours reflect a calculated minimum number of hours that could deliver a minimum realistic vocational outcome, based on efficiencies of contextualisation and integration.</p>
Scope of Registration	Scope of registration specifies the AQF qualifications and/or units of competency the training organisation is registered to issue and the industry training and/or assessment services it is registered to provide.
Nominal Hours	Nominal hours reflect the anticipated time taken to deliver and assess the outcomes of a unit of competency excluding unsupervised delivery or the time taken for repeated practical application of skills. Nominal hours are determined by the Victorian State Training Authority (DET) and are primarily developed for funding purposes in Victoria.