



**Process Manufacturing, Recreation
Vehicle and Laboratory
Industry Reference Committee (IRC)
PMB Plastics, Rubber and CABLEmaking
Training Package
Case for Change
November 2017**

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Prepared on behalf of the Process Manufacturing, Recreational Vehicle and Laboratory IRC for the Australian Industry Skills Committee (AISC)

**Process Manufacturing, Recreational Vehicle and Laboratory Industry Reference Committee (IRC)
Case for Change November 2017**

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Contents

Administrative Information	1
<i>Name of Industry Reference Committee (IRC).....</i>	<i>1</i>
<i>Name of Skills Service Organisation (SSO)</i>	<i>1</i>
<i>Name of the Training Package(s) examined to determine change is required</i>	<i>1</i>
<i>Brief description of how the case for change was developed</i>	<i>1</i>
The case for change	2
<i>Drivers for change and evidence</i>	<i>2</i>
<i>Recommended Changes</i>	<i>5</i>
Industry support for change	6
<i>Stakeholder Consultation.....</i>	<i>6</i>
<i>Overview of the issues identified by stakeholders.....</i>	<i>6</i>
<i>Sensitivities</i>	<i>8</i>
Impact of change.....	8
<i>Impact of recommended changes on stakeholders.....</i>	<i>8</i>
<i>Impacts of Risks of not implementing the changes</i>	<i>8</i>
<i>Estimated timeframes</i>	<i>8</i>
Implementing the COAG Industry and Skills Council (CISC) reforms for Training Packages.....	9
IRC Signoff.....	10
Attachment A: Training Package components to change.....	11
Attachment B: Stakeholder Consultation Method and Scale.....	24

Administrative Information

Name of Industry Reference Committee (IRC)

Process Manufacturing, Recreational Vehicle and Laboratory Industry Reference Committee (IRC)

Name of Skills Service Organisation (SSO)

Innovation and Business Skills Australia (IBSA) Manufacturing.

Name of the Training Package(s) examined to determine change is required

PMB Plastics, Rubber and Cablemaking Training Package.

Brief description of how the case for change was developed

This *Case for Change* proposes the need to review five polymer qualifications and 178 related units of competency in the *PMB Plastics, Rubber and Cablemaking Training Package* to ensure industry continue to support the vocational sector and has access to trained workers with the required skills and knowledge.

This *Case for Change* responds to the *PMB Skills Forecast and Proposed Schedule of work 2017-2021* developed by the **Process Manufacturing, Recreational Vehicle and Laboratory Industry Reference Committee**.

The *Case for Change* was developed in consultation with a range of key stakeholders in the polymer industry. In particular, Plastic Industry Manufacturers of Australia (PIMA) have provided significant input into the *Case for Change*. The *Case for Change* was developed having regard for the Training Package Development and Endorsement Process Policy and provides robust evidence to support AISC's decision making process.

The proposed components that require review in the *PMB Plastics, Rubber and Cablemaking Training Package* are listed in Schedule A and include the following.

Qualifications

- PMB20116 Certificate II in Polymer Processing
- PMB30116 Certificate III in Polymer Processing
- PMB40116 Certificate IV in Polymer Technology
- PMB50116 Diploma of Polymer Technology
- PMB60116 Advanced Diploma of Polymer Technology

Units of Competency

- 178 'native' units of competency to be reviewed and updated
- 116 imported units of competency to be reviewed for relevance and currency.

The case for change

Drivers for change and evidence

This *Case for Change* has identified, through research and stakeholder consultations that the Australian Polymer industry is currently experiencing changes that will necessitate new requirements in existing qualifications. As well as these industry changes, stakeholders have identified that current qualifications have low participation and completion rates and do not produce graduates with contemporary work ready skills. The PMB Plastics, Rubber and Cablemaking Training Package was last reviewed in 2010.¹ During this time rubber manufacturing and cable making in Australia has diminished significantly.²

The rationale for the recommended changes in this report are to meet the concerns expressed by industry stakeholders that without changes these qualifications will be obsolete and may no longer be supported by the polymer industry in the future.

Even though there has been a diminution generally in the manufacturing industry, the chemicals and plastics industry is the second largest manufacturing industry in Australia, with an industry value add of A\$11.3 billion to GDP in 2014-15.³ There was a fall in employment in 2013 and 2014 but it has steadily risen since then.⁴ In 2016, the total employment in the chemical and plastics industry was 63,000 and represented over 11 % of total Australian manufacturing activity. The polymer product manufacturing sector makes up over half this employment with 35,200.⁵

Enterprises are concentrated in Victoria and New South Wales, with these two states accounting for over 63% of the total enterprises in the industry. This trend is largely due to the high density of manufacturing activity in these two states, which ensures demand for plastic components that are used as input materials.⁶

A review of the qualifications is necessary to ensure employees engaged in operations and technical processes can adequately respond to different requirements in the production process. The polymer industry faces some major challenges and opportunities. Trade agreements, economic growth and increased wealth in Asia creates new markets, but also presents the challenge of cheaper imports. New environmental regulations and social pressures arising from the increasing focus on sustainable products and processes could present greater opportunities for the plastics industry to supply new, innovative

¹ Interview with Chair of Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)

² IRC Skills Forecast and Proposed Schedule of Work 2017-2021

³ <https://industry.gov.au/industry/IndustrySectors/chemicalsandplastics>

⁴ Department of Industry, Innovation and Science, Australian Chemical and Plastics Manufacturing Update, 2017
<https://industry.gov.au/industry/IndustrySectors/chemicalsandplastics/Pages/ChemicalsPlasticsManufacturingDataCard.aspx>

⁵ Department of Industry, Innovation and Science, Australian Chemical and Plastics Manufacturing Update 2017
<https://industry.gov.au/industry/IndustrySectors/chemicalsandplastics/Pages/ChemicalsPlasticsManufacturingDataCard.aspx>

⁶ Plastic Pipe and Plastic Packaging Material Manufacturing in Australia: Market Research Report, 2017. IBIS world report.

environmentally-friendly, products to downstream industries. At the same time, a balanced regulatory environment will be necessary to insure a well-functioning industry.⁷

Australian manufacturing industries are finding it difficult to compete with low-cost foreign manufacturers that are able to import and sell products at far lower prices. Businesses have competed with imports in major downstream markets, which have limited demand for a range of domestically manufactured plastic injection-moulded products. Imports from China now account for over 50% of total industry imports. Weaker demand from downstream manufacturing industries for plastic input materials, such as automotive vehicle components, has also negatively affected industry players over the past five years.⁸

The sector is suffering from the rising cost of energy which on one hand is making imports more competitive but also makes it difficult for manufacturers.⁹ This impacts on the need for high quality training as employers need to ensure their workers are appropriately skilled so any wastage of materials or time in the production process is minimised.

The type of skills and knowledge required in training package qualifications will need to be driven by changing production processes which require a better aptitude with using automated practices. In recent years, increased automation, has allowed the industry to produce quality products in smaller volumes with quick turn around times. This has resulted in increased competitiveness with cheaper overseas products. This has occurred in the electrical area, in particular. The use of such automated practices requires skills and knowledge in newer types of equipment as well as numeracy and language skills for operating highly sophisticated machinery.

New technologies integrated into polymer manufacturing, such as the use of robotics are changing the skills needed by industry. Similarly, 3D printing, which as yet cannot compete in terms of speed and volume with more traditional methods, will impact on future techniques.

Workforce issues

Despite these challenges and changes, within the chemical and plastics manufacturing industries, polymer product manufacturing is the largest employer, with most employment occurring in Victoria and NSW.¹⁰

Plastics and Rubber Production machine operators work in most parts of Australia. They mainly work in: manufacturing (72.2%), mining (8.8%) and construction (4.1%).¹¹

⁷ CSIRO (2013), Strategic Directions – Towards sustained growth of the Australian chemicals and plastics industry

⁸ Plastic Pipe and Plastic Packaging Material Manufacturing in Australia: Market Research Report, 2017. IBIS world report.

⁹ Office of the Chief Economist (2016) Australian Industry Report , 2016

¹⁰ Department of Industry, Innovation and Science (2017) Key Facts: Australian Chemicals and Plastic Manufacturing <https://industry.gov.au/industry/IndustrySectors/chemicalsandplastics/Pages/ChemicalsPlasticsManufacturingDataCard.aspx>

¹¹ ABS Labour Force Survey, Department of Employment trend data to May 2017 and Department of Employment projections to 2022.

9,200 persons were employed as Plastics and Rubber Production Machine Operators in 2017. Job openings over the next 5 years are expected to be between 5,001 and 10,000.¹²

Recruitment to the industry is an ongoing concern. This is especially the case for attracting apprentices and finding shop floor staff.¹³ As a result the qualifications need to be reflective of current industry practice. Often workers come from diverse backgrounds and need great assistance with language and numeracy. Companies are increasingly finding that they have to seek staff from overseas and use special visas to allow them to work in Australia. Companies are already recruiting offshore to fill vacancies and in recent years 75 plastics technicians have been on 457 visas.¹⁴

Training issues

Stakeholders expressed in interviews that because the qualifications were not relevant, enrolments had fallen which in turn resulted in limited options for industry to access graduates from registered training organisations (RTOs) who offer these qualifications. In discussions, industry representatives suggested there was a need for more onsite and flexibly delivered training to be offered due to the twenty four hour production cycle that can occur. TAFE in NSW and Victoria were doing this to a certain extent. Recruitment of younger people into the industry via traineeships was also considered crucial. The lack of providers has been identified by stakeholders as a main contributor to the low uptake of qualifications and shortage of skilled workers.¹⁵

The table 1 below shows the number of RTOs that have the various qualifications on scope. These numbers are small and not all of these RTOs are actually offering the courses.

Table 1 2017 Number of RTOs with qualifications on scope.

Qualifications	RTOs
PMB20116 Certificate II in Polymer Processing	2
PMB30116 Certificate III in Polymer Processing	.12
PMB40116 Certificate IV in Polymer Technology	.8
PMB50116 Diploma of Polymer Technology	4
PMB60116 Advanced Diploma of Polymer Technology	1

Stakeholder interviews stressed that if the qualifications were more relevant, participation and completion rates would improve. Table 2 below shows low completion rates for the qualifications PMB20107 Certificate II in Polymer Processing, PMB50107 Diploma of Polymer Technology and PMB60107

¹² Department of Employment. For full details on Plastics and Rubber Production Machine Operators

¹³ IRC Skills Forecast and Proposed Schedule of Work 2017-2021

¹⁴ <http://www.abc.net.au/news/2017-04-19/australia-457-visas-occupations-affected/8454494>

¹⁵ 2017 PMB IRC Skills Forecast

Advanced Diploma of Polymer Technology. Lack of completion in the whole qualification suggests that participation occurs only in relevant units of competency.

Table 2 Funding, participation and completions of PMB polymer qualifications

	Government funded activity					Total VET activity		% govt funded enrols
	2011	2012	2013	2014	2015	2014	2015	2015
PMB20107 Certificate II in Polymer Processing	92	112	96	23	10	79	33	30%
Completions	15	27	23	4	NA	53	18	
PMB30107 Certificate III in Polymer Processing	682	728	845	779	213	1,227	582	37%
Completions	96	99	126	162	NA	228	331	
PMB40107 Certificate IV in Polymer Technology	676	468	747	404	572	522	712	80%
Completions	614	17	19	30	NA	35	19	
PMB50107 Diploma of Polymer Technology	25	25	24	32	44	31	41	100%
Completions	16	3	12	4	NA	7	8	
PMB60107 Advanced Diploma of Polymer Technology	-	6	10	5	7	8	7	100%
Completions	-	0	0	0	NA	0	2	

Recommended Changes

The changes needed are to cover the skill requirements in the polymer area which consist of:

- Reviewing and reconfiguring the five existing qualifications to assess the need for the number and levels of qualifications and their alignment with industry skill needs, current work practices and equipment. Consideration to be given to reducing the 5 qualifications to three.
- For each revised qualification, reviewing and repositioning the existing core and elective units and related qualification packaging rules to ensure graduates would complete the qualifications with work ready skills and knowledge.
- Investigating the application of streams in the listing of groups of electives. The proposed streams to be tested may be: injection moulding; blow moulding; extrusion; compression moulding; composites; rubber manufacture and cable making. These areas will be reviewed as compression, rubber manufacture and cable making are not common.
- Deleting obsolete and redundant units of competency.
- Writing new technical units of competency, if required.

The *Process Manufacturing, Recreational Vehicle and Laboratory Industry Reference Committee (IRC)* recommends the products listed in Appendix A be approved for review.

Industry support for change

Stakeholder Consultation

Feedback was gained through the industry association, PIMA, and a targeted consultation process:

- An interview protocol was prepared with information on the project and a series of questions that covered current context in the polymer industry; the drivers for change; identification of changes needed in the qualifications and any issues or risks in not addressing this industry need.
- A series of phone interviews, with structured questions were held to provide industry intelligence on the skills needs, workforce directions and industry trends.

Key individual and group stakeholders, as identified by the IRC, were consulted during development of this Case for Change in October and November 2017 are detailed in Attachment B.

IBSA Manufacturing has actively engaged with all State and Territory Training Authorities (STAs). STAs had two weeks, from 22 November to 6 December, to review and provide feedback on the Case for Change. There were no objections from STAs to the Case for Change or the proposed training package development and review work.

Overview of the issues identified by stakeholders

All stakeholders agreed that current qualifications were too broad, without industry specific skills and contained redundant electives. Pre-requisites, especially in the Certificate IV also need to be reviewed.

It was suggested that the five qualifications be consolidated into three qualifications as the Certificate II and the Advanced Diploma had low participation and completion rates and were generally considered not relevant to current industry training needs. They also suggested that the packaging rules needed to be reviewed as Certificate III and IV could be completed without graduates developing the required technical and work ready skills. This resulted in them have very little practical applications to apply in the workplace and the employer having to be engaged in 'catch up' training. The electives were in groups rather than being packaged into particular streams or specialties.

Furthermore, the core units need changing as they were often not relevant and very generic as Table 3 below illustrates.

Table 3 Core units of competency in qualifications

PMB20116 Certificate II in Polymer Processing
MSMENV272 Participate in environmentally sustainable work practices MSMWHS200 Work safely MSMSUP210 Process and record information
PMB30116 Certificate III in Polymer Processing
MSS402051 Apply quality standards MSMWHS200 Work safely MSMENV272 Participate in environmentally sustainable work practices MSMSUP210 Process and record information

PMB40116 Certificate IV in Polymer Technology
MSS402051 Apply quality standards MSMWHS200 Work safely MSMSUP210 Process and record information MSMENV272 Participate in environmentally sustainable work practices
PMB50116 Diploma of Polymer Technology
MSMENV472 Implement and monitor environmentally sustainable work practices MSMSUP300 Identify and apply process improvements MSMWHS200 Work safely MSMSUP390 Use structured problem solving tools
PMB60116 Advanced Diploma of Polymer Technology
SMENV472 Implement and monitor environmentally sustainable work practices MSMSUP300 Identify and apply process improvements MSMSUP390 Use structured problem solving tools MSMWHS200 Work safely

There were also redundant units of competency, especially in imported units. An example given was FWPCOT2238 Cut materials with a hand-held chainsaw.

Other issues relevant to changes

Stakeholders raised other issues that have also been considered in the recommendations and include:

- Young people are not attracted to the industry and do not apply for jobs because of misconceptions about working in manufacturing as well VET qualifications competing with the desire to undertake higher education qualifications. Redesign of the *PMB50107 Diploma of Polymer Technology* could ensure there is a pathway to higher education to enable industry to promote its careers to attract new entrants and school leavers. A review of the qualifications, units of competencies and assessment requirements will enable specific requirements and conditions to be built into the redesign of the training products. This would address some stakeholders' concerns about the quality in the current training system. Current issues in the delivery of VET courses such as costs, shrinking of TAFE and lack of trust in private providers were raised by a number of stakeholders. All of the industry stakeholders expressed concern about the training delivered in the private sector. Often these RTOs did not have the infrastructure, the equipment or the staff expertise, to deliver the qualifications successfully. Stakeholders spoke highly of TAFE delivery. Companies are doing more in house training, so it is important that VET providers recognise this through recognition of prior learning (RPL). There needs to be improved links between in-house training and recognition within formal qualifications.
- The changes in equipment and machines in the industry needs to be acknowledged in the VET training and taught in courses. The use of sophisticated and fixed robotics is an increasing area where skills are needed.
- There is a need for language and literacy skills for many operators are from diverse backgrounds and experience difficulty in these areas.

Sensitivities

Risks

There can be a direct loss to the business in terms of efficiency and finances if trained staff are not available.

Impact of change

Impact of recommended changes on stakeholders

Stakeholders have indicated the following benefits from the proposed changes:

- Creation of industry defined and supported national training products
- Ensure the relevance of the VET qualifications in the workplace
- Skill levels of graduates will be as required by employers
- Training providers will offer more relevant training and enrolment and completion rates will improve
- There will be a better alignment between the training package and current industry skill needs
- Strengthened partnerships between industry and the vocational education and training sector.

Impact of Risks of not implementing the changes

Risks of not progressing with this training product development work include:

- There is a serious risk that companies will cease using the national training products. In house and local programs will be delivered. The lack of faith in current training provision, apart from some examples in TAFE will further exacerbate this risk.
- Sustained shortages of skills nationally in growing specialist occupations within the industry
- Training products not responding to the needs of industry
- VET graduates lacking skills and knowledge
- Reduced VET capability to meet the demand for suitably trained technicians
- Increased recruitment costs and loss of productivity for employers as a result of failed recruitment efforts.

Estimated timeframes

- The recommended time to complete review and redesign work on the five qualifications is 16 months to the time of submission for endorsement.
- The review and redesign work will follow the stages of project scoping, industry consultation, technical development, validation, quality check and endorsement. The work will be informed by a Technical Advisory Committee consisting of members selected by the Process Manufacturing, Recreational Vehicles and Laboratory IRC.

Implementing the COAG Industry and Skills Council (CISC) reforms for Training Packages

Undertaking this training package development and review work will support the CISC reforms to the Training Package System as follows:

- **removing obsolete and superfluous qualifications from the training system to make it easier for consumers to find the training relevant to their needs:**
 - There is the potential to remove two qualifications as it seems there is little support for them from industry. There are also a number of units that may be merged and/or removed because they are no longer required by industry.
- **making more information available about industry's expectations of training delivery to training providers to improve their delivery and to consumers to enable them to make more informed course choices:**
 - A review of the qualifications, units of competencies and assessment requirements will enable specific requirements and conditions to be built into the redesign of the training products. This would address some stakeholders' concerns about the quality in the current training system.
 - Industry's expectations of training delivery will be provided in the Companion Volume.
- **ensuring the training system better supports individuals to move easily from one related occupation to another:**
 - There will be further consultation on the potential to add specialisations to some qualifications which will support mobility across occupations - the proposed streams to be tested may be: injection moulding; blow moulding; extrusion; compression moulding; composites; rubber manufacture and cable making.
 - Relevant units will be available in the revised qualifications to ensure individuals are adequately trained to meet the challenges of new processes and related quality assurance production procedures in the polymer industry.
- **improving the efficiency of the training system by creating units that can be owned and used by multiple industry sectors and housing these units in a 'work and participation bank':**
 - There will be consideration to those units in the 'work and participation bank' and where relevant will be used to replace existing units
- **fostering greater recognition of skill sets:**
 - If specialisations are developed these could result in skill sets
- **ensuring that accredited courses 'fill the gap' in training packages and provide for training courses to be developed as quickly as industry needs them and support niche skill needs:**
 - This Case for Change does not relate to accredited courses.

This Case for Change was agreed to by the Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC).

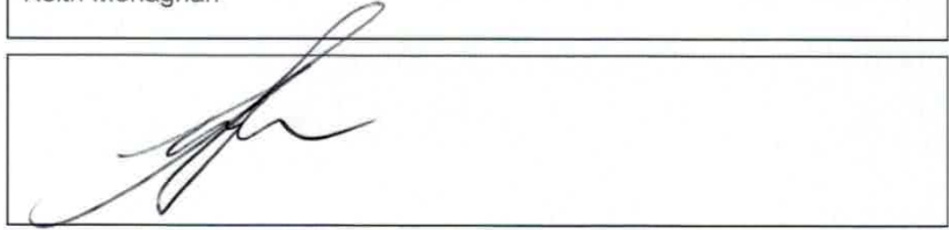
IRC Signoff

This IRC Skills Forecast and Proposed Schedule of Work was agreed as the result of a properly constituted IRC decision and was approved by the Chair, Keith Monaghan in November, 2017.

Name of Chair

Keith Monaghan

Signature of Chair



Date

20 / 4 / 17

Attachment A: Training Package components to change

Innovation and Business Skills Australia – Manufacturing

Contact details: Antoinette Hewitt, IBSA - Manufacturing

Date submitted: November 2017

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMB20116	Certificate II in Polymer Processing	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Content review needed to include improved skills for industry.
PMB	Plastics, Rubber and Cablemaking	PMB30116	Certificate III in Polymer Processing	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Content review needed to include improved skills for industry.
PMB	Plastics, Rubber and Cablemaking	PMB40116	Certificate IV in Polymer Technology	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Content review needed to include improved skills for industry.
PMB	Plastics, Rubber and Cablemaking	PMB50116	Diploma of Polymer Technology	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Content review needed to include improved skills for industry.
PMB	Plastics, Rubber and Cablemaking	PMB60116	Advanced Diploma of Polymer Technology	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Content review needed to include improved skills for industry.
PMB	Plastics, Rubber and Cablemaking	PMBFIN201	Finish products and components	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBFIN202	Fit attachments to products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBFIN203	Repair product imperfections	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBFIN205	Hand decorate products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBHAN103	Shift materials safely by hand	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Process Manufacturing, Recreational Vehicle and Laboratory IRC
Case for Change November 2017
PMB Plastics, Rubber and Cablemaking Training Package

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBHAN208	Store products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPREP201	Prepare moulds for composites production	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPREP205	Assemble materials and equipment for production	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPREP206	Prepare materials to formulae	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPREP301	Set up and prepare for production	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPREP303	Set up equipment for continuous operation	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPREP304	Set a die	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPREP305	Change extrusion die and setup	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD206	Operate ancillary equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD207	Operate calender	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD209	Operate cable winding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD210	Operate injection moulding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD211	Operate blow moulding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD212	Operate thermoforming equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD213	Operate extruders	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBPROD216	Operate blown film equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD217	Operate printing equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD221	Operate rotational moulding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD229	Operate polystyrene shape moulding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD233	Operate film conversion equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD235	Use materials and process knowledge to complete work operations	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD236	Operate hand held air/power equipment for production processes	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD237	Splice cables	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD238	Perform creel rack operations	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD239	Build reinforced conveyor belts	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD240	Cut materials	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD241	Lay up rubber lining or lag pulleys	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD242	Bond polymers to surfaces	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD245	Fabricate materials	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBPROD246	Hand mix materials	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD247	Hand lay up composites	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD248	Prepare surfaces for coating	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD249	Apply liquid surface coatings	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD251	Apply gel coat or other polymer surface finish	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD252	Operate compounding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD253	Operate an internal mill blender	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD254	Operate an open mill blender	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD255	Operate mixing equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD259	Operate granulating equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD261	Operate continuous vulcanising equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD262	Operate tyre curing equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD263	Operate retread curing equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD265	Operate portable vulcanising equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD266	Prepare tyre casings for retreading	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBPROD267	Operate steel cutting equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD268	Operate bead coiling equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD270	Operate injection blow moulding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD280	Operate resin-glass depositor equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD281	Finish composite products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD282	Assemble mould	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD283	Demould product	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD284	Operate open flame moulding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD285	Operate computer controlled equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD287	Weld plastics materials	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD290	Operate filament winding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD291	Operate resin infusion moulding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD292	Operate pultrusion equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD293	Operate vacuum bagging equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD294	Operate resin transfer moulding equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBPROD295	Operate composite sheeting equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD296	Operate centrifugal casting equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD297	Operate equipment using moulding compounds	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD298	Operate equipment using pre-preg material	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD300	Produce products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD301	Draw wire	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD302	Bunch and strand wire	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD303	Lay up and tape cables	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD304	Wind products onto drums	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD305	Colour optical fibre	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD306	Prepare and start equipment for production	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD307	Produce calendered products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD308	Take a machine out of production	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD309	Produce electroplated products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD310	Produce injection moulded products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBPROD311	Produce blow moulded products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD312	Produce continuous thermoforming products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD313	Produce extruded products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD314	Produce compression moulded products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD315	Produce polyurethane foam	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD316	Produce blown film	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD317	Print and decorate rigid products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD319	Build up rollers	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD320	Produce foam injected mouldings	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD321	Produce rotational moulded products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD323	Produce powder coated products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD324	Inspect tyres for retreading	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD325	Lay on tyre retreads	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD326	Inspect tyres	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD328	Produce sheet feed vacuum forming products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBPROD329	Produce polystyrene shape moulded products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD330	Make moulds for formed products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD331	Produce printed and decorated film	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD332	Produce thermally bent products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD333	Convert plastic film	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD334	Produce products using twin screw extruders	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD336	Inspect heavy off-the-road tyres	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD337	Prepare heavy off-the-road tyres for repair	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD338	Repair heavy off-the-road tyres	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD339	Produce reinforced conveyor belts	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD340	Cure heavy off-the-road tyre repairs	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD341	Finish heavy off-the-road tyre repairs	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD343	Shut down plant area	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD347	Produce composites using hand lamination	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD349	Produce liquid surface coated products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBPROD352	Produce compounded materials	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD353	Compound materials using an internal mill blender	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD354	Compound materials using an open mill blender	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD355	Make pattern/plug for composites moulds	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD356	Construct moulds for composite products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD357	Construct jigs and fixtures	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD358	Develop patterns	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD360	Produce centrifugally cast polyurethane products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD362	Produce gravity cast polyurethane products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD367	Remove and replace conveyor belts	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD368	Repair conveyor belt carcass	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD369	Repair conveyor belt covers	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD370	Produce injection blow moulded products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD372	Produce fibre optic preforms	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD373	Draw optical fibre	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBPROD375	Vulcanise products using an autoclave	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD376	Splice steel cord conveyor belts	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD377	Splice fabric ply conveyor belts	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD378	Splice solid woven conveyor belts	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD380	Produce composites using chopper gun/depositor	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD384	Operate multi-axis router	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD385	Program computer controlled equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD387	Produce welded plastics materials	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD390	Produce composites using filament winding	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD391	Produce composites using resin infusion	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD392	Produce composites using pultrusion	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD393	Produce composites using vacuum bagging	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD394	Produce composites using resin transfer moulding	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD395	Produce composite sheet products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD396	Produce composites using centrifugal casting	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBPROD397	Produce composites using moulding compounds	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD398	Produce composites using pre-pregs	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD430	Trial a new die/tool	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBPROD431	Trial a new, advanced or complex mould	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH301	Use materials and process knowledge to solve problems	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH302	Modify existing compounds	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH303	Make minor modifications to products	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH401	Predict polymer properties and characteristics	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH402	Set advanced or complex dies	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH403	Test fibre-composites materials and laminates	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH404	Mould chemical resistant and/or fire retardant fibre-composites	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH405	Repair damage fibre-composite structures	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH406	Diagnose production equipment problems	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH501	Analyse equipment performance	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH502	Review and analyse production trials and specify retrials	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBTECH503	Determine rheology and output of plastics materials from processing equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH504	Determine heat transfer loads for processing equipment	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH505	Choose polymer materials for an application	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH506	Analyse the design of products and tools	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH507	Develop fibre composite products using cored-laminate techniques	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH508	Develop a new compound	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH509	Modify an existing product	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH510	Analyse failure on polymeric materials	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH601	Develop a new product	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH602	Develop a new die or tool	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBTECH603	Design structural/mechanical polymer components	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWASTE101	Collect waste for recycling or safe disposal	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWASTE302	Coordinate waste disposal	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD301	Butt weld polyethylene plastic pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Training Package Code	Training Package Name	Product Code	Product Name	IRC Name	Review status	Change Required
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 02	Electrofusion weld polyethylene pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 03	Install polyethylene (non-pressure) drainage pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 04	Design polyethylene (non-pressure) drainage pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 05	Install polyethylene plastic pressure pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 06	Design polyethylene plastic pressure pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 07	Install high temperature plastic pressure pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 08	Install PVC plastic pressure pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 09	Weld plastic using extrusion techniques	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 10	Design PVC plastic pressure pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content
PMB	Plastics, Rubber and Cablemaking	PMBWELD3 11	Design high temperature plastic pressure pipelines	Process Manufacturing, Recreational Vehicle and Laboratory Reference Committee (IRC)		Review content

Attachment B: Stakeholder Consultation Method and Scale

Name of Stakeholder	Title Organisation	Detail method(s) and Scale of Consultation (examples below)
Keith Monaghan General Manager	R E Davison Pty Ltd	IRC Chairman. Formed Sub-committee and key contributor to draft and final Case for Change (October 2017).
Grahame Aston Managing Director and President of Plastics Industry Manufacturers of Australia	PPC Moulding Services Pty Ltd PPC Moulding Services Malaysia Sdn Bhd L.J.Wallace Pty Ltd	IRC member. Key contributor to draft Case for Change.
Peter Chivers Manufacturing Manager	Australian Plastic Profiles Pty Ltd 12 Cawarra Rd, Caringbah, NSW	Key contributor to draft Case for Change.
Laszlo Magyar and Vice President of Plastics Industry Manufacturers of Australia	Director, Plastic Moulding Pty Ltd, Leichhardt, NSW	Key contributor to draft Case for Change.
Han Michel Owner	Management consulting services E-three & Associates Pty Ltd U 3, 4 Mimke St, Corlette, NSW	IRC member. Key contributor to draft Case for Change.
Kirrilly Peters Manager - Chemicals and Business Facilitation Policy Section	Department of Industry, Innovation & Science Canberra, ACT	Key contributor to draft Case for Change.
Marita Kerslake Laboratory Manager	Chisholm Institute Polymer Testing Laboratory Dandenong South, Victoria.	Key contributor to draft Case for Change.

Craig Hill Manager Engineering & Electronics	Chisholm Institute Dandenong Victoria.	Key contributor to draft Case for Change.
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