Australian Industry and Skills Committee

HIGH PRESSURE WATER JETTING

Case for Endorsement

Name of allocated IRC(s): Process Manufacturing, Recreational Vehicle and Laboratory
Name of the SSO: IBSA Manufacturing

1. Administrative details of the Case for Endorsement

*Refer to **Attachment A** for the title and code for each of the training package components that are submitted for approval, and an indication of whether these are updated (including equivalence or non-equivalence status), new or deleted products*

1.1 Case for Change details

This Case for Endorsement responds to Activity Order IBSA/TPD/2019-2020/001, executed in March 2020. Initial scope of work approved by the AISC was the revision and update of four units of competency:

- MSMWJ202 Use high pressure water jetting equipment
- MSMWJ304 Operate a high pressure water jetting system
- MSMWJ305 Operate a drain cleaning system
- MSMWJ306 Operate a vacuum loading system.

Industry consultations identified the need for one additional new unit of competency and one new skill set to reflect the skills and knowledge requirements to operate a hydro excavation system. A variation request was submitted in May 2020 and subsequently approved.

1.2 Timeframes and delays

The Case for Endorsement was submitted within the agreed timeframes, October 2020. However, the Case for Endorsement was not put to the Australian Industry and Skills Committee (AISC) due to a directive from the AISC Secretariat that Cases for Exception needed to be resolved. More recent advice from the AISC Secretariat has been that work may progress following consultation with Safe Work Australia (SWA).

Continued effort with State and Territory Training Authorities (STAs) has resulted in just one Case for Exception as noted later in this submission.

Safe Work Australia noted the revision of units of competency includes the establishment of Technical Advisory Committees which allow for consultation with relevant stakeholders, however Safe Work Australia is not directly involved in this process. Industry remains strongly committed to the requirement of mandatory hours due to the high risk nature of the work.

2. Changes to training products and how these will meet the needs of industry

*Refer to **Attachment B** for information on how the proposed updates to qualifications will better support job roles in industry.*

High pressure water jetting is a process which uses a stream of pressurised water to remove material, coatings or contamination and debris from the surface of a work piece or material substrate. It is a dangerous activity associated with significant hazards and risks. The use of high pressure water jetting systems has application across several industries including mining, aluminium, steel, oil and gas, petrochemicals and government utilities.

The primary focus for unit and skill set development has been to revise existing MSM Manufacturing Training Package components to ensure that content better supports important safety requirements, current industry practice and advances in equipment technologies, operation and maintenance.

As identified in the Case for Change, industry identified and have subsequently actioned opportunities to:

- more clearly specify industry's expectation of performance and requirements to ensure quality assessment
- support more consistent implementation that is in line with Australian Standards for high pressure water jetting
- remove incorrect and out of date references
- review skill sets, update out of date units and adjust content to better reflect industry skill needs
- improve compliance with the *Standards for Training Packages 2012*, including the COAG Industry Skills Council (CISC) reforms to training packages by removing duplication and superfluous information to create better-defined units that capture competency requirements and industry intent.

As a result of the work above, there will be several key benefits for industry:

- Units of competency will be clearer, easier to read and will provide a more robust framework for training and assessment, thereby strengthening compliance with the *Standards for Training Packages 2012.* Opportunities to respond to CISC reforms were pro-actively identified and tested through consultation resulting in:
    - removal of repetitive and unclear Range of Conditions (some information moved to the MSM Companion Volume Implementation Guide)
    - addition of a performance standard to many Performance Criteria
    - refinement of Knowledge Evidence to ensure coverage of all required content.
- Industry expectations of performance and longstanding industry training practice are now reflected by the inclusion of a requirement to provide evidence of 120 hours of supervised work for the achievement of *MSMWJ304 Operate a high pressure water jetting system*. This requirement is driven by the considerable risks and hazards associated with high pressure water jetting operations and is based on the 2012 decision by members of the Australasian High-Pressure Water Jetting Association to mandate 120 hours as the minimum amount of experience a candidate should have prior to being eligible to achieve this unit of competency and the associated skill set. It was agreed

that in most instances the 120 hours was an achievable and realistic timeframe to deliver the safety outcomes that are required when operating autonomously across the gamut of high pressure water jetting systems and applications.

- Water jetting units of competency will now include skills and knowledge for the interpretation of drawings in context, removing the need for use of an additional generic unit from the MEM Manufacturing and Engineering Training Package
- A new unit of competency and new skill set for hydro excavation will provide improved Training Package coverage of industry skills and knowledge in a specific, limited, but high-risk application of water jetting skills
- Skill sets will be current and continue to provide flexible options for skill development across the broad range of industry sectors in which high pressure water jetting is used.

This Case for Endorsement is designed to support the Process Manufacturing, Recreational Vehicle and Laboratory Industry Reference Committee's (the IRC) request for the AISC's endorsement of MSM Manufacturing Training Package, Release 7.0.

3. Stakeholder consultation strategy

*Refer to **Attachment C** for:*

- *list of stakeholders that actively participated in consultation on the project*
- *summary feedback provided by stakeholder type and the IRCs response to this feedback*
- *summary of issues raised during stakeholder consultation and the IRCs response to these issues*

3.1 Identification of stakeholders

The IRC has directly overseen the development process for the high-pressure water jetting units and skill sets. Consultation activities throughout the project have been commensurate with the scope of the project. A stakeholder map was developed to identify technical industry experts, industry associations, regulators and training providers. Nominations from a range of stakeholders were considered by the IRC to form a Technical Advisory Committee (TAC), to provide technical input to the review and development of training packages and make recommendation to the IRC.

The Australasian High Pressure Water Jetting Association, which incorporates the Australasian Drain Cleaning and Vacuum Association, is the peak national industrial services industry representative body and assisted in connecting with their members across Australia.

3.2 Strategies for engaging stakeholders

A TAC was established to provide specific subject-matter advice and technical expertise for the development and review of the training package components. The TAC was made up of both industry and RTO representatives, including representatives from the peak industry body, the Australasian High-Pressure Water Jetting Association.

During draft 1 consultations with the Water IRC, supported by Australian Industry Standards Skills Service Organisation, indicated a keen interest in the outcomes of the project. As a result, the Water IRC were invited to nominate one of their industry subject matter experts to participate on the TAC. The Water IRC were represented at subsequent TAC meetings to ensure the contextualisation required by the water industry was included in the units, as all water enterprises extensively use these competencies and the associated equipment.

TAC members were actively engaged throughout the project and met several times by video conference to discuss draft documents, consider issues presented through public consultation and to provide expert advice. Five meetings were held as follows:

- 07 May 2020
- 13 May 2020
- 22 July 2020
- 08 August 2020
- 24 September 2020.

In addition to the extensive involvement of TAC members, a range of other stakeholders provided expert input to the project.

Details about the project were made available on the IBSA Manufacturing website at https://ibsa.org.au/consultation-project/high-pressure-water-jetting-case-for-change/ for the life of the project. There were two rounds of public consultation where draft components were available for review and comment via the IBSA Manufacturing website. More than 900 stakeholders were alerted to the availability of the draft content for review and given the opportunity to provide feedback.

The Australasian High Pressure Water Jetting Association promoted the public consultation with their members (approx. 85 organisations), information about the consultation was emailed to each member contact, it was also posted on their social media platforms including LinkedIn and Facebook. Trenchless Australasia, the official publication of the Australasian Society for Trenchless Technology Consultation, also wrote an article about round 1 consultation which was promoted through their networks.

Consultation webinars were held during Rounds 1 and 2 consultation to discuss changes with stake-holders and collect feedback on the draft components.

Feedback received during public consultations was tabled in an Issues Register and considered by the TAC.

3.3 Participation by different types of stakeholders

Consultation was undertaken nationwide (see **Attachment C**), with feedback received from stakeholders in all states and territories except Tasmania and ACT. The consultation strategy provided the opportunity for regional, rural and remote stakeholders to participate via consultation webinars as well as the opportunity to provide written feedback during public consultation periods.

During the consultation period the project web page had:

- 171 discrete page views during Round 1 public consultation
- 44 discrete page views during Round 2 public consultation.

There were 46 stakeholders that actively participated in stakeholder consultations for the project. Safe Work Australia's *Guide for managing risks from high pressure water jetting* aims to provide users of water jetting systems with guidance on safe operating practices to protect workers and other people who are near water jetting operations. Although the *Guide for managing risks from high pressure water jetting* is not specific on training requirements, it states that *'People who use high pressure water jets and equipment should be competent to carry out the task they are requested to complete. This means they should be trained or instructed using a structured competency-based process'.* It is understood that national units of competency are commonly used to show training and operator competency.

Consultation with Safe Work Australia noted:

> *National units of competency are developed and revised under the oversight of the Australian Industry Skills Committee, not Safe Work Australia. We understand the process for revising national units of competency involves the development of a 'Case for Change', which includes the establishment of Technical Advisory Committees which allow for consultation with relevant stakeholders, however Safe Work Australia is not directly involved in this process.*

4. Evidence of industry support

4.1 Industry support

There is strong industry support for changes to training package components as evidenced in this Case for Endorsement. Industry stakeholders support the addition of 120 hours to be mandated in Assessment Requirements of for *MSMWJ304 Operate a high pressure water jetting system* is driven by the considerable risks and hazards associated with high pressure water jetting operations. Please see **Attachment C** for more information on stakeholders consulted and **Attachment F** for letters of support.

4.2 Engagement of States and Territories

IBSA Manufacturing has actively engaged with all State Training Authorities (STAs) throughout the project: providing an initial briefing, maintaining open dialogue and requesting feedback on Draft 1 and Draft 2/Validation draft components.

At the conclusion of the project, STAs were given a further opportunity to review the components and provide feedback, as provisioned for in the *Training Package Development and Endorsement Process Policy*.

Support was received from the STAs of New South Wales, Northern Territory, South Australia, Queensland, Victoria and Tasmania. The Western Australian STA supported:

- *MSMWJ202 Use high pressure water jetting equipment*
- *MSMWJ306 Operate a vacuum loading system*
- *MSMWJ307 Operate a hydro excavation system.*

The WA STA did not support:

- *MSMWJ304 Operate a high pressure water jetting system*
- *MSMWJ306 Operate a drain cleaning system.*

There was no response from the ACT STA.

The South Australian and Queensland STAs had reservations about the 120 hours in *MSMWJ304 Operate a high pressure water jetting system*, however noted that these were not of a level to warrant a Report by Exception. Comments provided by some QLD stakeholders include:

- It is considered the responsibility of the Registered Training Organisation to assess whether a worker undertaking the training is competent or not. Hours of workplace practice does not equate to competence.
- It could disadvantage small business because their small workforce must be more flexible with multiple skills, therefore will take time to accrue the workplace hours, however, large business would be able to have a workforce which is able to specialise on one task allowing them to accrue the workplace hours.
- There is a risk as some businesses may not undertake the training which could lead to major safety issues. This is not a licensed area, therefore, there is no requirement for operators to show a licence when they are on site.

The QLD STA also noted a perceived inconsistency identifying that *MSMWJ305 Operate a drain cleaning system* and *MSMWJ307 Operate a hydro excavation system* also used Class B equipment but did not include the requirement for hours.

See section 5.1 Dissenting views for industry's response to the issues raised.

4.3 Mitigation strategies

All high pressure water jetting units of competency allow for demonstration of skills either in the workplace or in a simulated environment that reflects workplace conditions. Industry is strongly committed to the inclusion of 120 hours in *MSMWJ304 Operate a high pressure water jetting system* as many industry stakeholders already require completion of hours before a person can work autonomously on a high pressure water jetting system. Feedback from industry suggests that this requirement is generally 120 hours but can be up to 250 hours. In 2012, Australasian High-Pressure Water Jetting Association members, which incorporates the Australasian Drain Cleaning and Vacuum Association, mandated 120 hours as the minimum amount of experience a candidate should have prior to being eligible to complete *MSMWJ304 Operate a high pressure water jetting system* unit of competency or *MSMSS00018 Operate a high pressure water jetting system* skill set. Due to the significant safety concerns associated with using the equipment, it's accepted that 120 hours of practical experience is required to develop the skills and knowledge to safely operate Class B high pressure water jetting systems. It was agreed that in most instances the 120 hours was an achievable and realistic timeframe to deliver the safety outcomes that are required when operating autonomously across the gamut of high pressure water jetting systems and applications. This reflects established industry training practice and strong safety-driven industry views that to be deemed competent to autonomously operate a high pressure water jetting system, an individual must have developed and demonstrated skills and knowledge during this period of practical experience. High pressure water jetting systems in the hands of an incompetent person can be very dangerous. Fatalities and serious long-term injuries have occurred.

4.4 Letters of industry support

There are 20 letters of support from industry stakeholders at Attachment F, including a letter from the Chair on behalf of the IRC.

5. Dissenting views

5.1 Dissenting views/issues raised

Dissenting views/issues raised

A small number of stakeholders do not support the inclusion of 120 hours in *MSMWJ304 Operate a high pressure water jetting system.*

Some Process Manufacturing, Recreational Vehicle and Laboratory IRC members noted that because of the increased rigour in the assessment requirements there is the risk that some RTOs may develop their own non accredited training in high pressure water jetting. There is an ongoing risk that non-accredited training will be used to alleviate the requirement for supervision as the occupation is not currently licenced or regulated at Commonwealth or State and Territory levels.

Industry's response to the issues raised

This issue was extensively discussed during the project. Some stakeholders who initially expressed concern, were supportive of the requirement after explanation about its purpose and rationale. Industry remains strongly committed to this requirement as many industry stakeholders already require completion of hours before a person can work autonomously on a high pressure water jetting system. Feedback from industry suggests that this requirement is generally 120 hours but can be up to 250 hours. In 2012, Australasian High-Pressure Water Jetting Association members, which incorporates the Australasian Drain Cleaning and Vacuum Association, mandated 120 hours as the minimum amount of experience a candidate should have prior to being eligible to complete *MSMWJ304 Operate a high pressure water jetting system* unit of competency or *MSMSS00018 Operate a high pressure water jetting system* skill set. Due to the significant safety concerns associated with using the equipment, it's accepted that 120 hours of practical experience is required to develop the skills and knowledge to safely operate Class B high pressure water jetting systems. It was agreed that in most instances the 120 hours was an achievable and realistic timeframe to deliver the safety outcomes that are required when operating autonomously across the gamut of high pressure water jetting systems and applications.

It is reported that a high pressure water jetting injury is very similar to a gunshot wound as the internal damage caused cannot be easily determined by the extent of the external wound. All high pressure water jet injuries should be reported, and medical treatment is required immediately. The urgency of patient transfer is of the same degree as would be required for an amputation injury. Specialist pressure rated body armour worn by the operator significantly reduces the chance of major injuries. High pressure water jetting systems in the hands of an incompetent person can be very dangerous. Fatalities and serious long-term injuries have occurred.

Safe Work Australia recognises the considerable risk and hazards so to assist in managing health and safety risks associated with high pressure water jetting operations, they have developed a '*Guide for managing risks from high pressure water jetting*'.

Efforts made to resolve divergent or outstanding issues

An hours-based evidence requirement has only been specified in *MSMWJ304 Operate a high pressure water jetting system* as applications of high pressure Class B systems (as represented in this unit) require a wider range of knowledge and practical experience, in excess of those required for drain clean-

ing (as represented in *MSMWJ305 Operate a drain cleaning system*) or hydro excavation (as represented in *MSMWJ307 Operate a hydro excavation system*) applications. The drain cleaning and hydro excavation units of competency provide flexible options for those using high pressure water jetting equipment in more specific and limited contexts. In addition, *MSMWJ202 Use high pressure water jetting equipment* is available for those working under supervision.

Both the TAC and the IRC supported the inclusion of the 120 hour work requirement due to the high risk nature of work and longstanding industry training practice.

5.2 Rationale for approval

A fully constituted IRC approved the draft components for submission to the AISC for endorsement. A letter of support from the Chair on behalf of the IRC appears as Attachment F.

Industry stakeholders strongly support the revised components as well as the Australasian High-Pressure Water Jetting Association members, which incorporates the Australasian Drain Cleaning and Vacuum Association. The inclusion of 120 hours reflects established industry training practice and strong safety-driven industry views that to be deemed competent to autonomously operate a high pressure water jetting system, an individual must have developed and demonstrated skills and knowledge during this period of practical experience.

6. Reports by exception

Report(s) by exception from states and territories

The WA STA reported by exception for two units of competency and provided the following feedback:

- *MSMWJ302 Operate a high pressure water jetting system*: The inclusion of 120 hours in the Assessment Conditions of the unit of competency will create an issue for employers, RTOs and learners. The rationale for including the hours is to meet an industry standard mandated by the Australasian High Pressure Water Jetting Association, however this industry standard is not regulated by Work Safe and is not included in Section 1.4 in the *Safe Work Australia Guide 2013* which relates to the High Pressure Water Jetting industry. Industry feedback indicates they need the person to have 120 hours of practical tool time experience prior to a candidate being able to complete the unit of competency.
- *MSMWJ305 Operate a drain cleaning system*: Industry advised most drain cleaning mobile plants incorporate a gun attachment, therefore safe use and maintenance of a gun needs to be included in the unit. Currently, the learner is required to complete additional accredited training specifically relating to the safe use and maintenance of guns, in order to be competent at completing drain cleaning activities requiring the use of a gun.

Efforts by the SSO/IRC to resolve the identified issues

IBSA Manufacturing has actively engaged with all State Training Authorities (STAs) throughout the project: providing an initial briefing, maintaining open dialogue and requesting feedback on Draft 1 and Draft 2/Validation draft components.

The Western Australian STA provided feedback during public consultation about the 120 hours. A meeting was held between the WA STA and a range of WA stakeholders (Veolia, KOR equipment, Cleanaway, All-Ways Training, Solo Resource Recovery and WOMA Australia) as industry representa-

tives in that state strongly support the requirement for 120 hours to be mandated in Assessment Requirements. The WA STA provided several recommendations with most being adopted by the TAC; this includes:

- specification of 120 hours in the Application of *MSMWJ304 Operate a high pressure water jetting system.*
- inclusion of 120 hours in the Skill Set Description of *MSMSS00018 Operate a high pressure water jetting system*.
- specification that *MSMWJ202 Use high pressure water jetting equipment* be a prerequisite unit for *MSMWJ304 Operate a high pressure water jetting system*.
- inclusion of commentary in the Companion Volume Implementation Guide about the requirement for 120 hours
- inclusion of the MSMWJ units being included in the elective bank of a qualification to allow importation into other relevant qualifications.

The WA STA position remains that 120 hours should not be mandated in the Assessment Requirements. Industry remains strongly committed to this being an assessable component in the unit of competency to ensure this requirement is mandated. Recommendation to only include this in the unit application would likely not achieve the desired outcome.

The rationale for industry's position

The requirement for the 120 hours is strongly supported by industry, as evidenced by the numerous letters of support (**Attachment F**). It is due to the significant safety concerns associated with high pressure water jetting that industry have determined the need for 120 hours of practical experience to develop the skills and knowledge required to safely operate high pressure water jetting systems. It is reported that a high pressure water jetting injury is very similar to a gunshot wound as the internal damage caused cannot be easily determined by the extent of the external wound. All high pressure water jet injuries should receive immediate medical treatment and be reported. The urgency of patient transfer is of the same degree as would be required for an amputation injury. Specialist pressure rated body armour worn by the operator significantly reduces the chance of major injuries.

The Safe Work Australia Guide does not refer to 120 hours, nor does it refer to the unit of competency. It provides a guide on how to manage health and safety risks associated with high pressure water jetting operations and states that '*People who use high pressure water jets and equipment should be competent to carry out the task they are requested to complete. This means they should be trained or instructed using a structured competency-based process'*. Industry have determined that to be competent the '*structured competency-based process'* include a requirement for 120 hours of work completed under supervision. The requirement for 120 hours has been common practice for operators in the industry for many years, in fact some will require up to 250 hours. Industry remains strongly committed to this requirement and its mandate in the unit of competency.

Regarding the operations of a gun attachment in the drain cleaning unit, this was discussed at length through the TAC discussions. There was majority support for the unit to remain without specification of this requirement given that not all applications will operate a gun. To assist in this matter commentary was added to the Companion Volume Implementation Guide (CVIG) to specally acknowledge that there

may be circumstances where gun operation may relate to some tasks outlined in the performance criteria, such as cleaning an asset, although a gun would not specifically be used to clean drains (the main focus of the unit). In these circumstances the unit can be contextualised for this requirement.

7. Mandatory Workplace Requirements

*Refer to **Attachment D** for a list of the units of competency, the MWR, the rationale for this, and evidence of employer support for this requirement.*

Industry expectations of performance and longstanding industry training practice are now reflected by the inclusion of a requirement to provide evidence of 120 hours of supervised work for the achievement of *MSMWJ304 Operate a high pressure water jetting system*. This requirement is driven by the considerable risks and hazards associated with high pressure water jetting operations and is based on the 2012 decision by members of the Australasian High-Pressure Water Jetting Association to mandate 120 hours as the minimum amount of experience a candidate should have prior to being eligible to achieve this unit of competency and the associated skill set. It was agreed that in most instances the 120 hours was an achievable and realistic timeframe to deliver the safety outcomes that are required when operating autonomously across the gamut of high pressure water jetting systems and applications.

8. Implementation of the new training packages

8.1 Implementation issues

RTOs will need to review their Training and Assessment Strategy (TAS) documentation to take the revised and new units into consideration.

There is now a requirement to provide evidence of using skills under supervision for a period of 120 hours to achieve the unit *MSMWJ304 Operate a high pressure water jetting system*. This requirement will have implications for RTOs as they will need to collect this evidence. For example, an RTO may have to provide for an assessor to visit a candidate in the workplace to conduct assessments, such as observations. Industry notes, however, that units addressing drain cleaning and hydro excavation will provide options for RTOs when meeting specific needs of a range of client groups that don't require competency of the high pressure water jetting unit.

The introduction of additional assessment requirements may have funding implications in some jurisdictions. As the learner must complete the hours under supervision an employer would also have to provide adequate supervision of the learner. Industry have remained committed to the mandate of hours in the Assessment Requirement and understand the implications of specifying this requirement. It should be noted that in 2012, Australasian High-Pressure Water Jetting Association members, the peak national industrial services industry representative body, mandated 120 hours as the minimum amount of experience a candidate should have prior to being eligible to complete *MSMWJ304 Operate a high pressure water jetting system* unit of competency or *MSMSS00018 Operate a high pressure water jetting system* skill set.

Code changes to units will need to be reflected in two qualifications in the *NWP National Water Training Package*.

8.2 Potential for traineeship or apprenticeships

No qualifications are being submitted for endorsement.

8.3 Occupational and licensing requirements

No vocational licensing or certification requirements apply to the units or qualifications included in this submission; all units include the following statement:

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

High-pressure water jetting work must meet the requirements of Australian/ New Zealand Standard *AS 4233.1 High pressure water jetting systems.* Unit content explicitly identifies these requirements.

8.4 Extension to transition period

Where the need for an extension to the transition period is identified for training products that are the subject of this Case for Endorsement, the SSO will apply to the relevant regulator for an extension to transition, to mitigate the identified impact on other training products, particular student cohorts or industry business needs

There is no request for an extension to the transition period.

9. Quality Assurance

The Case for Endorsement meets the following requirements:

Standards for Training Packages 2012	Yes
Training Package Products Policy	Yes
Training Package Development and Endorsement Process Policy	Yes
Companion Volume Implementation Guide is available and quality assured.	Yes

*Copies of quality assurance reports are included in **Attachment G**.*

10. Implementation of the Minister's priorities in training packages

*Refer to **Attachment E** for information on no enrolment and low enrolment qualifications reviewed as part of this project, and the outcomes of this review (i.e. product proposed for deletion or retention). Attachment D also includes the rationale for retaining no and/or low enrolment products when this is the proposal.*

Please include an explanation of how approval of the proposed training products will support the reform priorities for training packages agreed by skills ministers in November 2015 and October 2020:

Streamlining/rationalisation of training products	• Four existing units were revised. Repetitive, obsolete and superfluous content was removed from units as part of this process.
	• Existing units have been retained and updated, some now including skills and knowledge for the interpretation of drawings in context, removing the need for use of a unit from the MEM Manufacturing and Engineering Training Package. Before development of the new unit analysis was undertaken across all training packages, especially the Water Training Package, to ensure there were no existing unit suitably related to hydro excavation.
	• A new unit of competency and new skill set for hydro excavation will provide improved Training Package coverage of industry skills and knowledge in a specific, limited, but high-risk application of water jetting skills. These techniques are used extensively in scenarios where access to digging equipment is not possible and are effective in clearing trenches and other work areas such as in NBN applications. The risks associated with this process and the required skills and equipment needed to perform this type of work are different to any of the information covered by existing units of competency. In some instances, contracting companies that carry out these works cannot fully comply with AS/NZS 4233:2013 if the

	hydro excavation equipment they are working with uses a Class B high pressure water pump for hydro excavation activities.
	• One new unit is proposed to be added to the MSM Manufacturing Training Package to fill a skills gap and allow companies to fully comply with Australian Standards.
Ensure that more information about industry's expectations of training delivery is available to training providers to improve their delivery and to consumers to enable more informed course choices	• The MSM Companion Volume Implementation Guide, Release 7.0, provides advice on duration of training, modes and pathways of delivery, work-based learning strategies, assessment and learner characteristics. It includes a specific section on high-pressure water jetting. • Units of competency and their associated requirements revised and updated to ensure clarity and ensure consistency of breadth and depth • Components are compliant with the TGA National Register requirements for publication
Ensure the training system better supports individuals to move more easily between related occupations	• Proposed units of competency have been developed to allow for application in diverse industry contexts. Industry has carefully considered requirements in this context. For example, Performance Evidence requirements are structured to allow for the fact in some industry contexts workers may use high-pressure water jetting skills in a limited range of contexts. • Units have been revised or developed specifically to improve the flexibility of training package components. For example, *MSMWJ307 Operate a hydro excavation system* is designed to reflect the needs of workers who only undertake this specific function and who are unable to meet industry requirements for competency in a broader range of water jetting operations. • The MSM Manufacturing Training Package already supports the movement of individuals between related occupations. The draft components support the development of transferable skills that may be applied in diverse industry contexts and therefore support the mobility of skilled workers

Improve the efficiency of the training system by creating units that can be owned and used by multiple industry sectors *Foster greater recognition of skill sets and work with industry to support their implementation*	• Units of competency reflect portable skills and are designed for cross industry application. High-pressure water jetting is used in many sectors such as building and construction, mining, petrochemicals and local government. • This submission includes one new and four revised skill sets for consideration in the endorsement process. These provide flexible skill development options for application in multiple industry sectors. Four existing skill sets have been updated and retained.

11. A link to the full content of the proposed training package component(s)

The AISC should be provided with a link to the full, developed training package component(s) to be approved under the Case for Endorsement.

A link to the training package components proposed for endorsement is included here.

This Case for Endorsement was agreed to by the Process Manufacturing, Recreational Vehicle and Laboratory IRC

Name of Chair	Keith Monaghan
Signature of Chair	
Date	05 May 2021

Attachment A: Training products submitted for approval

Please set out in the table below, the training products submitted for approval, including showing whether this is an updated, new or deleted product.

Training Product Name		Type	For existing products, equivalence/non-equivalence status	For updated products, rationale for equivalence/non-equivalence status
Qualifications				
N/A	*N/A*	**Updated**	*N/A*	*N/A*
Units of competency				
MSMWJ202	Use high pressure water jetting equipment	**Updated**	Equivalent	The TAC and the IRC have determined that all units remain equivalent, where content has been strengthened to provide clarity on industry requirements and vocational outcome remains equivalent.
MSMWJ304	Operate a high pressure water jetting system	**Updated**	Equivalent	As above
MSMWJ305	Operate a drain cleaning system	**Updated**	Equivalent	As above
MSMWJ306	Operate a vacuum loading system.	**Updated**	Equivalent	As above
MSMWJ307	Operate a hydro excavation system	**New**	*N/A*	*N/A*

Attachment B: How qualification updates support job roles

Please use the table below to demonstrate how the proposed updates to qualifications will better support job roles

Job role	Qualification	Proposed updates and how these better support the job role
Surface Preparation and Coating Operator	MSM30216 Certificate III in Surface Preparation and Coating Application	Although this qualification is not submitted for approval it is proposed the updated units will be included as electives to support selection for this job role.

Attachment C: Stakeholder consultation

List of stakeholders that actively participated in stakeholder consultation for the project:

Name	Organisation	Title	Industry	Representation Type	State
First Last	*e.g. Safe Work Australia*	*e.g. Director, WHS policy*	*e.g. Business Services*	*e.g. Employer*	*e.g. ACT*
Lavenya Rajendra	Department of Education	A/Manager, Skills Policy	Government	STA	NSW
Howard Lai	Department of Trade, Business and Innovation	Senior Policy Officer	Government	STA	NT
Filippa Ross	Department of Employ-ment, Small Business and Training	A/Manager, Industry Engagement	Government	STA	QLD
aul Frost	Department for Innovation and Skills	Senior Skills Consultant	Government	STA	SA
Michael McGee	Department of State Growth	Industry Liaison Officer	Government	STA	TAS
Jacqueline Spencer	Department of Education and Training	Manager, Training Products Unit	Government	STA	VIC
Frances Parnell	Department of Training and Workforce Development	Manager, Training Curriculum Services	Government	STA	WA

Suzanne Seinor	Department of Training and Workforce Development	Senior Program Officer	Government	STA	WA
Wayne Lee	Australian Industry Group (AI Group)	Industry Skills Adviser	Government	Industry Advisory Body	QLD
Paul Saunders	Chisholm Institute	Curriculum Maintenance Manager	Education and Training	Training/Education	VIC
Shelley Richards	All-Ways Training	Training Compliance Manager	Education and Training	TAC	WA
Stewart Rizzi	Altrad	Skills Centre Manager	High pressure water jetting	TAC	WA
William Lee	Australasian High Pressure Water Jetting Association	Director	High pressure water jetting	TAC	NSW
Lance McKay	Cleanaway		High pressure water jetting	TAC	
Wally Budia	Into Training Australia	Trainer/Assessor	Education and Training	TAC	SA
Peter Jones	Australasian High Pressure Water Jetting Association	Chairman	High pressure water jetting	TAC	WA
Ethan Leeds	Trainright Industrial Services	Director	Education and Training	TAC	VIC
Gerard Farhi	WA Water Corporation	Snr Advisor - Training and Assessing	Water	Industry	WA
Ian Nathan	Asset Training	Training Centre Manager	Education and Training	RTO	NSW

Peter Schreiner	TAFE NSW	Industry Relationship Lead, Innovative Manufacturing, Robotics and Science	Education and Training	RTO	NSW
Kendra Guy	Into Training Australia	Training Coordinator	Training	RTO	SA
	Civil Contractors Federation NT (CCFNT)		High pressure water jetting	Association	NT
	Mike Excavations		High pressure water jetting	Industry	NT
	Mousellis and Sons Pty Ltd		High pressure water jetting	Industry	NT
Brian Hansen	Cleanaway	IWS Regional Manager	High pressure water jetting	Industry	QLD
Grant Inglis	Hammelmann	Training	High pressure water jetting	Industry	QLD
Raelene Kelly	Kelly's Australia	Executive Manager	High pressure water jetting	Industry	QLD
Carlie Sargent	Queensland Water Directorate	Project Coordinator	High pressure water jetting	Industry	QLD
Rodger Seaman	Into Training	Managing Director	Education and Training	RTO	SA
Paul Steele	Business Intelligence Leadership Development (B.I.L.D)	Director	Education and Training	RTO	WA
Nick Emmett	Cleanaway	Branch Manager	High pressure water jetting	Industry	NSW

Peter Jones	KOR Equipment Solution	Business Manager	High pressure water jetting	Industry	WA
Chas Hewson	Solo Resource Recovery	Manager	High pressure water jetting	Industry	WA
Lee MacIntyre	Veolia	Contracts Manager	High pressure water jetting	Industry	WA
Ian Blevin	WOMA Australia	CEO	High pressure water jetting	Industry	WA
Neil Hooley Water Industry Reference Committee Trevor Stephen (Senior Advisor Training – Networks, Water Corporation WA)	Organisations represented in the IRC: • Sydney Water • Water Corporation WA • Icon Water • Power and Water Corporation NT • VIC Water • SA Water • Tas Water • Australian Services Union • Water Industry Operators Association of Australia • Australian Water Association • Water Services Association of Australia	IRC Member	Water	IRC	National
Peter Bradford	Aqua Prep	Managing Director	High pressure water jetting	Industry	VIC

Eden Di Sipio	DASMA	Managing Director	High pressure water jetting	Industry	VIC
Narayan Lenehan	Orontide	Project Coordinator	High pressure water jetting	Industry	WA
Karen Tooley	Tooleys Waterblasting	Director	High pressure water jetting	Industry	QLD
Paul Smith	Metrocorp Technologies	Managing Director	High pressure water jetting	Industry	NSW
Anthony Jones	UHP Solutions	Owner	High pressure water jetting	Industry	WA
Warren Dennis	MTO Group	CEO	Education and Training	RTO	QLD
Shaun Roser	Cleanaway	National Technical Manager	High pressure water jetting	Industry	WA
	Safe Work Australia		Government	Policy Body	National

Summary of Feedback by Stakeholder type:

Stakeholder Type	Key Feedback Points	Actions Taken to Address Feedback
Industry Reference Committee (IRC) Representatives	Support the changes to the training package components, including the requirement for 120 hours to be mandated in Assessment Requirements of for MSMWJ304 Operate a high pressure water jetting system acknowledging safety concerns.	N/A
Peak Industry Bodies	• more clearly define industry's expectation of performance and requirements to ensure quality assessment • support more consistent implementation that is in line with Australian Standards for high pressure water jetting • develop components for hydro excavation • remove the need for use of an additional generic unit from the MEM Manufacturing and Engineering Training Package	• unit content is clearer, easier to read and provide a more robust framework for training and assessment • industry expectations of performance and longstanding industry training practice are now reflected by the inclusion of a requirement to provide evidence of 120 hours of supervised work for the achievement of *MSMWJ304 Operate a high pressure water jetting system* • reference to Australian Standards strengthened, especially in Knowledge Evidence • units include skills and knowledge for the interpretation of drawings in context • a new unit of competency and new skill set for hydro excavation
Employers (Non-IRC)	• more clearly define industry's expectation of performance and requirements to ensure quality assessment • develop components for hydro excavation	• unit content is clearer, easier to read and provide a more robust framework for training and assessment • industry expectations of performance and longstanding industry training practice are now reflected by the inclusion of a requirement to provide evidence of 120 hours of supervised work for the achievement of MSMWJ304 Operate a high pressure water jetting system. • a new unit of competency and new skill set for hydro excavation

Regulators	Safe Work Australia noted it is not directly involved in the development of training package components.	N/A
Registered Training Organisations (RTOs)	• more clearly define industry's expectation of performance and requirements to ensure quality assessment. • remove incorrect and out of date reference • remove the need for use of an additional generic unit from the MEM Manufacturing and Engineering Training Package	• unit content is clearer, easier to read and provide a more robust framework for training and assessment • industry expectations of performance and longstanding industry training practice are now reflected by the inclusion of a requirement to provide evidence of 120 hours of supervised work for the achievement of MSMWJ304 Operate a high pressure water jetting system. • a new unit of competency and new skill set for hydro excavation
Training Boards/Other	N/A	N/A
State and Territory Training Authorities (STAs)	STAs of NSW, NT, SA, TAS, QLD, VIC support the updated components. The WA STA supported three of the five units submitted for endorsement.	A meeting was held between the WA STA and a range of WA stakeholders as industry representatives strongly support the requirement for 120 hours to be mandated in Assessment Requirements. The WA STA provided several recommendations with most being adopted by the TAC.
Unions	N/A	N/A
Please add other categories as appropriate	N/A	N/A

Summary of Issues raised during stakeholder consultation

Issue raised	Key Feedback Points	Actions Taken to Address Feedback
More clearly define industry's expectation of performance and requirements to ensure quality assessment	Mandate 120 hours of water jetting work under supervision for the achievement of MSMWJ304 Operate a high pressure water jetting system	This issue was extensively discussed during the project. Some stakeholders who initially expressed concern, were supportive of the requirement after explanation about its purpose and rationale. Both the TAC and the IRC supported the inclusion of the 120 hour work requirement to more clearly specify industry's expectation of performance and requirements to ensure quality assessment and due to the high risk nature of work and longstanding industry training practice.
Need to make changes to content and wording across units	Remove incorrect and out of date reference and strengthen reference to Australian Standards	Multiple changes were made based on feedback, including Knowledge Evidence to ensure sufficient coverage. Industry's preferred approach was to ensure that foundation skills were explicit in the performance criteria.
Range of Conditions field inconsistent and incorrect	Some information repetitive and unclear	The Range of Conditions field was removed, with relevant content merged into the assessment requirements of the relevant units or the Companion Volume Implementation Guide, Release 7.0, as relevant.
Remove the need for use of an additional generic unit from the MEM Manufacturing and Engineering Training Package	Addition of several pre-requisites created difficulties as not all content appropriate to high pressure water jetting.	MEM09002B Interpret technical drawing was removed from Operate a high pressure water jetting system skill set and Operate a drain cleaning system skill set. Relevant content was built into associated units of competency – MSMWJ304 Operate a high pressure water jetting system and MSMWJ305 Operate a drain cleaning system.
The need to support tailored training in hydro excavation	The risks associated with this process and the required skills and equipment needed to perform this type of work are different to any of the information covered by existing units of competency. In some instances, contracting companies that carry out these works cannot fully comply with AS/NZS 4233:2013 if the hydro excavation equipment they are	Development of a new unit and a new skill set to address hydro excavation was added to the project in response to industry feedback about the need include content related to this quite specific but limited application of high-pressure water jetting. This is driven by the need to support tailored training in an area of work where there are significant safety concerns

	working with uses a Class B high pressure water pump for hydro excavation activities.	

Attachment D: Mandatory Workplace Requirements in Training Products

Please set out in the table below training products which include a mandatory workplace requirement (i.e. which must be completed in a workplace)

Code/title	Description of the Requirement (e.g. work placement, assessment requirement)	Rationale for Inclusion	Evidence of employer support
MSMWJ304 Operate a high pressure water jetting system	Requirement for 120 hours under supervision specified in Performance Evidence.	Industry expectations of performance and longstanding industry training practice are now reflected by the inclusion of a requirement to provide evidence of 120 hours of supervised work for the achievement of *MSMWJ304 Operate a high pressure water jetting system*. This requirement is driven by the considerable risks and hazards associated with high pressure water jetting operations and is based on the 2012 decision by members of the Australasian High-Pressure Water Jetting Association to mandate 120 hours as the minimum amount of experience a candidate should have prior to being eligible to achieve this unit of competency and the associated skill set. It was agreed that in most instances the 120 hours was an achievable and realistic timeframe to deliver the safety outcomes that are required when operating autonomously across the gamut of high pressure water jetting systems and applications.	Industry expressed strong support for the inclusion of this mandatory workplace requirement: • Australasian High-Pressure Water Jetting Association, includes Australasian Drain Cleaning and Vacuum Association • KOR equipment • Cleanaway • Solo Resource Recovery • WOMA Australia • Kelly's Australia • Aqua Prep • DASMA • Orontide • Tooleys Waterblasting • Hammelmann • Metrocorp Technologies • UHP Solutions • Altrad Australia

Attachment E: No enrolment and low enrolment training products

No Enrolment:

Please set out in the table below those training products that have had no enrolments over the past three years for which data is available

Units of Competency		
Name of Unit/Unit Code	**Proposed for retention/deletion**	**Rationale for Retention**
N/A		
Qualifications		
Name of Qualification/ Qualification Code	**Proposed for retention/deletion**	**Rationale for Retention**
N/A		

Low Enrolment:

Please set out in the table below those training products that have had low enrolments over the past three years for which data is available[1]

Units of Competency		
Name of Unit/Unit Code	**Proposed for retention/deletion**	**Rationale for Retention**
N/A		
Qualifications		
Name of Qualification/ Qualification Code	**Proposed for retention/deletion**	**Rationale for Retention**
N/A		

[1] Low enrolment training products are qualifications or units of competency that have had less than 42 enrolments in each of the past three years *(this is the maximum no. of enrolments for the bottom 25% of qualifications based on average enrolments over 2016 - 2018)*

Attachment F: Letters of Support

IBSA
Innovation & Business Skills Australia

ABN 74 109 430 302
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f +61 3 9815 7001
e reception@ibsa.org.au
w www.ibsa.org.au

Level 11 176 Wellington Pde East Melbourne Victoria AUSTRALIA 3002

14 October 2020

Dear Australian Industry and Skills Committee,

As the Chair of the Process Manufacturing, Recreational Vehicles and Laboratory IRC (IRC), I write on behalf of the IRC to support the endorsement of the MSM Manufacturing Training Package (High Pressure Water Jetting Project), Release 7.0, as completed under the Activity Order IBSA/TPD/2019-2020/001.

The training package components closely reflect current industry practice.

A fully constituted IRC approved the draft components for submission to the Australian Industry and Skills Committee for endorsement.

Regards

Keith Monaghan
Chair, Process Manufacturing, Recreational Vehicle and Laboratory IRC

4 September 2020

IWS QLD
Cleanaway PTY LTD
ABN: 57099813546

24-28 Machinery Street
Darra QLD 4076
Australia
P +61 7 3489 5973
M +61 0418 894009

Ausjet Training

To whom it may concern

Cleanaway believes obtaining 120 hours of tool time following the MSMWJ201, Use high pressure water jetting equipment course, allows the trainee to gain extra skills and knowledge working with different HPWJ operators to better understand the different systems, processes and work standards needed to work autonomously.

The MSMWJ201 course runs for an average of 2 days across the RTOs the information that can be absorbed during the course is limited due to a person's ability to take in and process information, content of the course verses time of the course.

The 120 hours also covers off a person who has had no formal training but has been using HPWJ equipment for some time and needs accreditation.

If the course and assessment is made longer to add more information and make the assessment more stringent, industry may revert to in house training due to the extra cost of the course and days lost while training.

Yours Sincerely

Brian Hansen
IWS Regional Manager QLD

KELLY'S AUSTRALIA

Performance Under Pressure

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

17 October 2020

Dear Mark,

I am writing on behalf of Kelly's Australia, to provide a letter of support for the requirement to complete 120 hours of practical experience before personnel are able to complete msmss00004, 'Operate a High Pressure Water Jetting System.

Kelly's Australia has provided all facets of ultra-high and high pressure water jetting since 1996. The company operates a variety of jetting units, ranging from low pressure/high volume to ultra-high pressure pumps. All the units are classified as Class B water jetting units.

Applications of these units include:

- Handguns for coatings removal and surface preparation
- Flex Lances used for heat exchanger cleaning
- Tooling for drain and pipe cleaning
- Robotics for concrete demolition

These applications require a wider range of knowledge and practical experience than can be gained in a two or three day training course.

Completion of this unit allows a HPWJ operator to work autonomously on any water jetting task. Without 120 hours of practical experience, personnel would not possess the skills or knowledge to safely operate the equipment. Water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

We therefore support the initiative of 120 of practical tool time experience, prior to personnel being able to complete MSMSS00004 Operate a high pressure water jetting system.

Kind regards,

Raelene Kelly
Executive Manager

Tel: (07) 4081 6883
PO Box 514, Innisfail QLD 4860
Email: info@kellysaustralia.com.au
www.kellysaustralia.com.au
ABN: 27 134 889 651

22 Graham Daff Blvd
Braeside VIC 3195
03 9588 0361
www.aquaprep.com.au

14/10/2019

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of Aqua Prep, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Aqua Prep is one of Australia's leading high pressure water jetting contractors that specialises in hydro demolition, cold cutting, paint removal and industrial cleaning.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

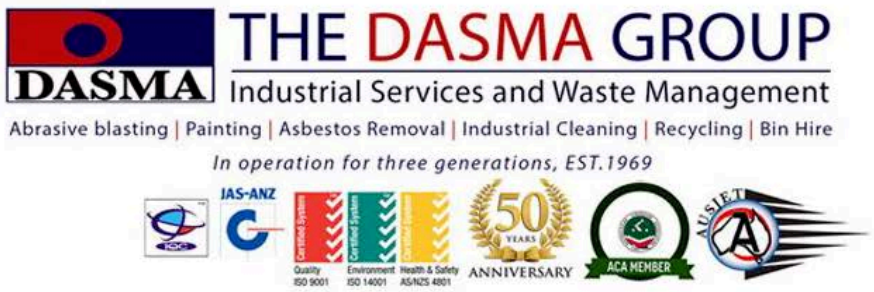
Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on

completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Regards,

Peter Bradford
Managing Director



10/10/2020

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of Dasma Services Pty Ltd, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high-pressure water jetting system.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Regards,

Kind Regards,
Eden Di Sipio | Managing Director
Mob: +61 4 1850 6418
Fax: +61 3 5134 1569
Email: Eden@dasma.com.au
Web: www.dasma.com.au

MTO GROUP

Unlock a Brighter Future
RTO No: 32493
ABN 16 142 642 457

15/10/2020

IBSA Manufacturing

Mark Shaddock

Industry Engagement Partner

Level 11, 176 Wellington Pde

East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of ***MTO Group Pty Ltd***, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high-pressure water jetting system.

We are a Brisbane based Registered Training Organisation (RTO No 32493) that delivers the **MSMWJ30X Operate a high-pressure water jetting system** as part of a Water Jetting Skill Set and as a stand-alone unit of competency. As such we a fully aware of just how hazardous these operations can be.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

MTO GROUP

Unlock a Brighter Future

RTO No: 32493

ABN 16 142 642 457

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high-pressure water jetting system.

Regards,

Yours Sincerely

Warren T Dennis

Chief Executive Officer

Postal Address: PO Box 60, Virginia Mail Centre, QLD 4014
Phone: 1800 271 356 Web: www.mtogroup.com.au

15/10/2020

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of myself, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

I am the Sydney branch manager for Cleanaway and have been in the industry for over 6 years. I have spent 3 of those years as a high pressure water jetting operator.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

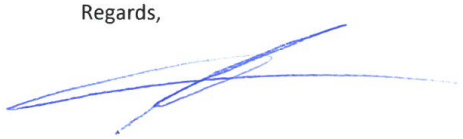
High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system

without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Regards,



Nick Emmett

Branch Manager – Sydney NSW IWS

14/10/2020

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of Orontide, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Regards,

Narayan Lenehan

Project Coordinator

PO Box 297, Edmonton Qld 4869
Ph Laurie: 0407 631188
Ph Accounts: 07 4045 3520
Email: info@tooleyswaterblasting.com.au
www. tooleyswaterblasting.com.au
ABN: 98 636 189 298

15th October 2020

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mr Shaddock

I am writing on behalf of Tooleys Waterblasting Pty Ltd, to provide a letter of support for the proposed 120 hours of practical tool time experience prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

Tooleys Waterblasting have been operating in Cairns since 1991, in the high pressure waterblasting industry. We work with pressures of up to 40,000 psi, making the machines very powerful pieces of equipment. These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course. We believe that these machines should not be used by those that are inexperienced to do so.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

PO Box 297, Edmonton Qld 4869
Ph Laurie: 0407 631188
Ph Accounts: 07 4045 3520
Email: info@tooleyswaterblasting.com.au
www. tooleyswaterblasting.com.au
ABN: 98 636 189 298

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Kind Regards,

Karen Tooley

Karen Tooley

Director

HAMMELMANN

Australia

Grant Inglis
Hammelmann Australia
1/41Paringa Road
Murarrie Queensland 4172
Mobile: 0413 718 637
Email: grant.inglis@hammelmann.com.au
Web: www.hammelmann.com.au

ATTN: Mark Shaddock
IBSA Manufacturing
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

16 October 2020

RE: 120 Hours Experience - MSMWJ30X Operate a high pressure water jetting system

Dear Mark,

I am writing on behalf of Hammelmann Australia, to provide support for the proposed 120 hours of experience using high pressure water jetting in a workplace environment prior, to a Worker being able to complete MSMWJ30X Operate a high pressure water jetting system.

Hammelmann Australia is a leading supplier of class B high pressure water jetting equipment. As part of our commitment to support our customers and the whole industry, we also provide training for class B equipment through a partnership agreement with Into Training Australia (RTO).

High pressure water jetting is an extremely effective tool for maintaining many types of industry e.g. mineral refining, power generation, oil and gas, municipals, and manufacturing. However, the incorrect use of high pressure water jetting applications and failure to identify faulty/damaged equipment can cause significant injury and has caused fatalities in the past.

MSMWJ30X Operate a high pressure water jetting system has been accepted as the unit of competency within the industry for Workers that are assigned some form of responsibility within a high pressure water jetting work team. This requires the Worker to provide instruction and transfer of actual and current workplace knowledge to other members of the work team so high pressure water jetting can be used safely and efficiently within the workplace/s.

It is therefore essential that these Workers can display sufficient current evidence of using high pressure water jetting applications in a workplace environment in addition to the completion of the unit of competency/skill set training.

Hammelmann Australia, many of our customers and the industries that they operate within indorse the requirement of 120 hours (minimum) current experience using high pressure water jetting in a workplace environment prior to a Worker being able to complete MSMWJ30X Operate a high pressure water jetting system.

Please do not hesitate to contact me if you require and further information.

Kind regards,

Grant Inglis
Training

Metrocorp Technologies Est 1989

19 October 2020

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne VIC 3002

Dear Mark,

I am writing on behalf of Metrocorp Technologies in support of the proposed 120 hours of practical tool time experience prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Metrocorp Technologies has been involved in the field of high pressure water jetting (HPWJ)for the past 20 years and provides HPWJ as part of our inhouse rehabilitation projects. Metrocorp works with pressures up to 40,000 psi through hand lances and automated equipment for both surface preparation and hydro demolition activities.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.
- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate were trained to operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Regards,

Paul Smith
Managing Director

PH 9540 3455 FAX 9540 5739
A Division of METROPOLITAN RESTORATIONS PTY LTD LIC No. 708C
PO BOX 2153 51-53 Willarong Rd, TAREN POINT 2229
Email admin@metrocorp.com.au
Visit our Website at - www.metrocorp.com.au
ABN 25 003 733 524

20/10/2020

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of UHP Solutions Pty Ltd, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high-pressure water jetting system.

I Have now been in running my business for 16 years. I work in a wide range of UHP water jetting disciplines including Concrete removal, surface preparation, abrasive cutting, CNC water cutting to name a few.

I **do not** support trainee operators to receive open capabilities when operating this **DANGEROUS** Equipment within 120hrs. In my time as a business owner I have had the opportunity to work with a small handful of potential operators, some gathering a standard of knowledge of competently operating HPW equipment in a reasonably short period of time (400-500hrs) but others taking some time more (I currently have an operator with nearly two years as assistant before deemed competent).
As of now I have been in the industry for 35 years and seen many heartbreaking injuries to good people. I believe it to be my responsibility to pass on my trade knowledge to the next generation of HPW operators. I trust in myself to do this without the fear of potentially contributing a lifelong injury to a person occurring due to my lack of judgment when allowing a potential operator the self-confidence to operate HPW.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances

- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.
Regards,

Name: Anthony Jones
Position: Owner/Operator of UHP Solutions / Water cut Australia

21/10/2019

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of Altrad Australia, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Alltrad provide a Range of Class B water-jetting services across Australia – both on and off shore as well as the delivery of the Accredited MSM training packages through our Registered Training Organisation.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system

without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Regards,

Stewart Rizzi

ALTRAD Skills Centre Manager

M: 0418396005
E: stewart.rizzi@altrad.com
http://training.altradservices-apac.com/

Altrad Services - Asia Pacific
Training Department
14 Orion Road
JANDAKOT, WA 6164
http://www.altrad.com

AUSTRALASIAN HIGH PRESSURE WATER JETTING ASSOCIATION

AUSTRALASIAN DRAIN CLEANING AND VACUUM ASSOCIATION

20/10/2019

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

AUSJET/ADCVA are Australasia's leading industry body representing contractor, suppliers and training organisation involved in the high-pressure water jetting industry. Our association drives the development of both the Australian Standards for high pressure water jetting and the development of the current UOC's and associated skills sets.

AUSJET / ADCVA were the first to offer this training nationally through an agreement we had with IFAP in WA, during our involvement with IFAP 120 hours was mandated. AUSJET / ADCVA have since withdrawn from the training which is now delivered by individual AUSJET/ADCVA member RTO's. AUSJET/ADCVA continue to be the industry voice and provide industry guidance through consultation with our members. Reputable contractors and training organisations have already adopted the 120 hours themselves, having applied it to their business procedures to ensure the highest level of safety and training.

We are writing on behalf of our members, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high-pressure water jetting system.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

AUSJET / ADCVA
PO Box 182
ALBION PARK NSW 2527
AUSTRALIA

PHONE 0430 391 166
EMAIL support@ausjetinc.com.au
WEB SITE www.ausjetinc.com.au

AUSTRALASIAN HIGH PRESSURE WATER JETTING ASSOCIATION

AUSTRALASIAN DRAIN CLEANING AND VACUUM ASSOCIATION

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high-pressure water jetting system.

Regards,

Peter Jones

Chairman
AUSJET / ADCVA

AUSJET / ADCVA
PO Box 182
ALBION PARK NSW 2527
AUSTRALIA

PHONE 0430 391 166
EMAIL suppo@ausjetinc.com.au
WEB SITE www.ausjetinc.com.au

All-Ways Training Services
ABN: 69 147 650 931
16 Redemptora Road
Henderson WA 6166
Tel: (08) 9434 6704

20 October 2020

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of All-Ways Training Services, to provide a letter of support for the proposed 120 hours of practical tool time experience prior to a candidate being able to commence MSMWJ301 Operate a high pressure water jetting system.

We are a niche RTO that is wholly owned by WOMA (Australia) Pty Ltd, who designs, engineers, manufactures and sells High Pressure Water Pumps. We have over 35 years of experience in the industry and have staff recognised as Industry leaders in their fields. As an RTO we specialise in industrial services training with a principal focus on high pressure water training.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of a not yet competent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the High Pressure Water Operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 hours of practical tool time experience, prior to a candidate being able to complete MSMWJ301 Operate a high pressure water jetting system.

Yours sincerely,

20th October 2020

Ian Blevin
Chief Executive Officer

21/10/2019

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of Cleanaway Industrial Solution, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Cleanaway are the Largest Industrial Services company within Australia, we have been undertaking Waterblasting activities for over 20yrs and have proven we are the leaders in this industry with our services being utilised fulltime on customers site like Alcoa, Rio Tinto, BHP, South 32, Caltex, Shell, Viva Energy, Chevron and so on.
I myself have been involved in the industry for 18yrs from the coal face all the way to senior management. I support the 120hr on the tool requirement to ensure our staff get across all aspects of the complex equipment and the tasks we complete on a day to day week to week basis. Our equipment is complex and manufactures by many suppliers which need to be understood for safe and productive operation so is one of the most important parts to the hands on 120hrs.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

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We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.
Regards,

Shaun Roser
National Technical Manager IWS.

20th October 2020

Attention: Mark Shaddock
IBSA Manufacturing
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of Into Training Australia, to provide a letter of support for the industry training practice of having 120 hours of practical experience prior to the candidate being able to undertake MSMWJ301 Operate a High-Pressure Water Jetting System.

Into Training Australia provide training in several fields including High Pressure water jetting.High Pressure Water Jetting has been continually developed over the years to assist in processes including but not limited to Mining, Oil refineries, Gas and Oil, Power generation, Municipal and Manufacturing. Under these processes High-Pressure Water Jetting has the potential to impact on users and operators and cause injuries which can be severe and sometimes fatal. Therefore, the correct use and operation of High-pressure water jetting equipment needs to be trained and developed over time.

We have participated in the discussions regarding the changes to MSMWJ301 Operate a High-Pressure Water Jetting System to be accepted by Industry as the Unit of Competency for workers who require to work autonomously and responsibly within the team. A person with this qualification has some responsibility to supervise and impart high-pressure water jetting knowledge safely to others in the work team. This may not be possible without the 120 hours (minimum) current experience required.

Into Training Australia along with many Industrial Services providers endorse and expect that operators wishing to enrol in training for MSMWJ301 Operate High-Pressure Water Jetting Systems, have a minimum requirement of 120 hours experience in using a high-pressure water jetting system.

Should you require any further information on this request, please do not hesitate to contact Kendra Guy on 1300739881

Regards

Rodger Seaman
Managing Director

Churchill Centre PO Box 233, Kilburn North SA 5084
334 Regency Road, Prospect SA 5082
Phone: 1300 739 881
ABN: 29 086 789 004 RTO Code: 7022
Website: www.intotraining.com.au

Keep Operations Running

20/10/2020

KOR Equipment Solutions Pty Ltd
23A Blackly Row, Cockburn Central WA 6164
P 1300 KORQUIP
E P.JONES@KOR.COM.AU
www.kor.com.au

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I am writing on behalf of KOR Equipment Solutions, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

KOR Equipment Solutions are the leading provider of vacuum trucks and combination units within Australia. Over 80% of our units are fitted with Class B High Pressure Water Jetting Pumps. We are also a distributer for Uraca High pressure pumps with pressures up to 2500 bar (40,000psi).

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Yours sincerely,

Peter Jones

Business Manager WA/SA/NT

20/10/2019

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Solo Resource Recovery

86-88 Chinderah Bay Drive
Chinderah NSW 2487
P.O Box 1427
Kingscliff NSW 2487
AUSTRALIA

Services: 02 6676 7647
Admin: 02 6674 7656
Fax: 02 6674 7657
Email: solorr@solo.com.au
Web: www.solo.com.au

Dear Mark,

I am writing on behalf of Solo Resource Recovery, to provide a letter of support for the proposed 120 hours of practical tool time experience prior, to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Solo Resource Recovery has been operating throughout Australia since 1932. We provide a vast range of waste services, including collection, transport and processing; along with an array of Industrial Services including Vacuum Loading, Drain Cleaning, High Pressure & Ultra High Pressure Water Blasting.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns
- Flex Lances
- Tank Heads
- Cutting Equipment
- Robotics

These applications require a wider range of knowledge and practical experience, than can be reasonably expected to be delivered in a training course.

High pressure water jetting systems in the hands of an incompetent person can be very dangerous, fatalities and serious long-term injuries have occurred.

Completion of this unit of competency allows the HPWJ operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 of practical tool time experience, prior to a candidate being able to complete MSMWJ30X Operate a high pressure water jetting system.

Regards,

Chas Hewson

Manager - WA

WOMA®
Karcher Group

ISO 9001
BUREAU VERITAS
Certification

20 October 2020

IBSA Manufacturing
Mark Shaddock
Industry Engagement Partner
Level 11, 176 Wellington Pde
East Melbourne, VIC 3002

Dear Mark,

I write on behalf of WOMA (Australia) Pty Ltd, a Global original equipment designer, manufacturer and market supplier of High and Ultra High Pressure Water Jetting pumps, accessories and complete systems. It is my intent to provide a letter of support for the proposed 120 hours of practical tool time experience prior to a candidate being able to commence MSMWJ301 Operate a high pressure water jetting system.

WOMA (Australia) Pty Ltd is an industry leader in the Australian and New Zealand markets. We design, engineer, manufacture and sell High Pressure Water Pumps, complete systems and associated accessories, manipulators and robotics. We have over 35 years of experience in the industry and have staff recognised as Industry leaders in their fields.

Class B High pressure water jetting operations utilise motive power units, up to 1100kW with pressures up to 3000 bar (43,500psi) with varying rates of flow.

There is a wide range of application across the use of these pumps.

- Handguns – surface preparation, descale, corrosion control, cold cutting etc..
- Flex Lances – tube, pipe, sewer and drain cleaning.
- Tank and Vessel Heads.
- Cutting Equipment – for concrete, steel and other mediums.
- Manipulators, Remote Controlled, Automatic and Robotic.

These applications require a wider range of knowledge and practical experience – more than that which can be reasonably expected to be delivered in a 'short' training course.

High pressure water jetting systems in the hands of a not yet competent person have the potential for incident and accident which can involve, people, infrastructure and the related environment. Such incidents and accidents can be very dangerous with fatality and serious long-term injury having occurred.

Completion of this unit of competency enables the High Pressure Water Operator to work autonomously on any water jetting task. If a candidate was trained to the Operate a high-pressure water jetting system without 120 hours of practical experience and deemed competent on completion of the course, it is our experienced view that they would not possess the practical experience required to safely operate the equipment.

We therefore support the initiative of 120 hours of practical tool time experience, prior to a candidate being able to complete MSMWJ301 Operate a high pressure water jetting system.

Yours sincerely

20th October 2020.

Ian Blevin
Chief Executive Officer

16 Redemptora Rd
Henderson
WA 6166

Telephone: +61 8 9434 6622
Facsimile: +61 8 9434 6633
Email: hpwater@woma.com.au
website: www.woma.com.au

Attachment G: Quality assurance reports

Training Package Quality Assurance

Quality Report Template

Section 1 – Cover page

Information required	Detail
Training Package title and code	**MSM Manufacturing Training Package Release 7.0**
Number of new qualifications and their titles[1]	Nil
Number of revised qualifications and their titles	1 updated qualification (minor change) • MSM30216 Certificate III in Surface Preparation and Coating Application
Number of new units of competency and their titles	1 new unit of competency: • MSMWJ307 Operate a hydro excavation system
Number of revised units of competency and their titles	4 revised units of competency • MSMWJ202 Use high pressure water jetting equipment • MSMWJ304 Operate a high pressure water jetting system • MSMWJ305 Operate a drain cleaning system • MSMWJ306 Operate a vacuum loading system. **Other components** in submission (non-endorsed) 4 revised skill sets: • MSMSS00017 Use high pressure water jetting equipment • MSMSS00018 Operate a high pressure water jetting system • MSMSS00019 Operate a drain cleaning system • MSMSS00020 Operate a vacuum loading system 1 newly created skill set: • MSMSS00021 Operate a hydro excavation system

[1] When the number of training products is high the *titles can be presented as an attached list.*

Training Package Quality Assurance

Information required	Detail
Confirmation that the panel member is independent of: • the Training Package or Training Package components review ('Yes' or 'No') • development and/or validation activities associated with the Case for Endorsement ('Yes' or 'No') • undertaking the Equity and/or Editorial Reports for the training package products that are the subject of this quality report ('Yes' or 'No')	I confirm that I am independent of: • the Training Package or Training Package components review • development and/or validation activities associated with the Case for Endorsement (CfE) I have not undertaken the Equity and/or Editorial Reports for the MSM training package products covered in this quality report.
Confirmation of the Training Packages or components thereof being compliant with the *Standards for Training Packages 2012*	Yes – the MSM components reviewed in this report are compliant with the *Standards for Training Packages 2012*
Confirmation of the Training Packages or components thereof being compliant with the *Training Package Products Policy*	Yes – the MSM components reviewed in this report comply with the *Training Package Products Policy.*
Confirmation of the Training Packages or components thereof being compliant with the *Training Package Development and Endorsement Process Policy*	Yes – the MSM components reviewed in this report comply with the *Training Package Development and Endorsement Process Policy.*
Panel member's view about whether: • the evidence of consultation and validation process being fit for purpose and commensurate with the scope • estimated impact of the proposed changes is sufficient and convincing	Yes - IBSA Manufacturing on behalf of the Process Manufacturing, Recreational Vehicle and Laboratory IRC has undertaken industry consultation and validation commensurate for the development of two new units.
Name of panel member completing Quality Report	**Sue Hamilton** **Focus on Skills Pty Ltd**
Date of completion of the Quality Report	**9 October 2020**

Training Package Quality Assurance

Section 2 – Compliance with the Standards for Training Packages 2012

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
Standard 1 Training Packages consist of the following: 1. AISC endorsed components: • qualifications • units of competency • assessment requirements (associated with each unit of competency) • credit arrangements 2. One or more quality assured companion volumes	***Yes***	The components in the MSM Manufacturing Training Package Release 7.0 submitted for review meet the requirements of Standard 1. They include: • 1 new unit and 4 revised units of competency and associated assessment requirements • 1 updated qualification – minor change – with additional electives • MSM Companion Volume Implementation Guide Release 7.0 (MSM CVIG 7.0).
Standard 2 Training Package developers comply with the *Training Package Products Policy*	***Yes***	The 5 MSM units are presented in the template specified in the Standards for Training Packages 2012; are coded and titled appropriately and contain equivalence mapping information appropriate for newly created and revised units.

Training Package Quality Assurance

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
Standard 3 Training Package developers comply with the AISC *Training Package Development and Endorsement Process Policy*	***Yes***	The CfE provides information about the industry engagement and consultation undertaken to develop the 5 units and 5 skill sets, including involvement of: • industry subject matter experts from five states and territories for technical advice • industry associations including representatives from the peak industry body, the Australasian High-Pressure Water Jetting Association. Widespread and ongoing communications via the IBSA website and other newsletter channels were undertaken to advise and update industry about the project. The project followed the development process outlined in the policy and included two rounds of public consultation. The process documented in the CfE indicates that open and inclusive consultation and validation commensurate with scope and impact of the components has been undertaken. Issues that were raised relating to the inclusion of practical experience hours in *MSMWJ304 Operate a high pressure water jetting system* were addressed in detail the CfE. The issues register was sighted to confirm the breadth and nature of the issues raised.
Standard 4 Units of competency specify the standards of performance required in the workplace	***Yes***	The units of competency reviewed specify the standard of performance required in the workplace and meet Standard 4.

Training Package Quality Assurance

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
Standard 5 The structure of units of competency complies with the unit of competency template	***Yes***	The 5 units adhere to the required template and are coded appropriately. *MSMWJ304 Operate a high pressure water jetting system* has had a prerequisite unit added to address safety concerns raised by industry. The Equity Report states: *Whilst a prerequisite has been added to one unit MSMWJ304 Operate a high pressure water jetting system, consideration has been given to minimising prerequisites where possible, and the training package has very few throughout, which are clearly listed in the MSM Companion Volume Implementation Guide, Release 7.0* There are no occupational licensing or certification requirements for the units submitted. All units include references to Foundation Skills which are explicit in the performance criteria. Four units clearly indicate equivalence status with previous units. One newly created unit has been developed to address an industry need in hydro excavation.
Standard 6 Assessment requirements specify the evidence and required conditions for assessment	***Yes***	The assessment requirements are clearly written and have consistent breadth and depth. The performance evidence is very succinct and includes volume and frequency requirements. The CfE states that there was considerable feedback about the inclusion of 120 hours of practical experience in the performance evidence of *MSMWJ304 Operate a high pressure water jetting system.* The CfE provides a clear rationale and justification for the inclusion of the practical experience hours. During follow up discussions with IBSA Manufacturing the need for the practical experience requirement and the strong support from industry was stressed. The Assessment Conditions provide flexibility for the practical experience to be completed in a workplace or in a simulated environment that reflects workplace conditions and contingencies.

Training Package Quality Assurance

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
		The knowledge evidence is written using broad terminology which can be tailored to the workplace context and supports the application of the unit in different sectors.
Standard 7 Every unit of competency has associated assessment requirements. The structure of assessment requirements complies with the assessment requirements template	***Yes***	The 5 units of competency have associated assessment requirements, which comply with the assessment requirements template and the Standards for Training Packages 2012.
Standard 8 Qualifications comply with the Australian Qualifications Framework specification for that qualification type	***Yes***	The inclusion of additional elective units in Group D in the updated qualification - *MSM30216 Certificate III in Surface Preparation and Coating Application* has not impacted the AQF specification or qualification packaging rules.
Standard 9 The structure of the information for the Australian Qualifications Framework qualification complies with the qualification template	***Yes***	The structure of the updated qualification - *MSM30216 Certificate III in Surface Preparation and Coating Application* complies with the qualification template.
Standard 10 Credit arrangements existing between Training Package qualifications and Higher Education qualifications are listed in a format that complies with the credit arrangements template	***NA***	Qualification credit arrangements specified in the MSM CVIG 7.0 are unchanged.
Standard 11 A quality assured companion volume implementation guide produced by the Training Package developer is available at the time of endorsement and complies with the companion volume implementation guide template.	***Yes***	The *MSM Manufacturing Companion Volume Implementation Guide – Release 7.0* has been reviewed and quality assured in line with the IBSA Manufacturing SSO internal procedures and via the editorial and equity processes. The MSM CVIG covers many industry sectors and qualifications. It has been updated to include the 5 new and revised units and skill sets. It complies with the Companion Volume Implementation Guide template from the *Standards for Training Packages 2012*.

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
Standard 12 Training Package developers produce other quality assured companion volumes to meet the needs of their stakeholders as required.	***NA***	

Section 3 – Compliance with the training package quality principles

Note: *not all training package quality principles might be applicable to every training package or its components. Please provide a supporting statement/evidence of compliance or non-compliance against each principle.*

Quality principle 1. Reflect identified workforce outcomes

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance/non compliance with the quality principle Please see examples of evidence in the *Training Package Development and Endorsement Process Policy*
Driven by industry's needs	Yes	The CfE clearly outlines the requirements of the Activity Order and the final work completed and submitted for endorsement. Information is provided outlining the need for the revision of four units and the development of one unit to address industry requirements for operating a hydro excavation system. The steps and outcomes of the consultation and validation process described indicate that industry stakeholder feedback and requirements have been reflected and responded to. The issues register was provided and reviewed to gauge the level and type of feedback received.
Compliant and responds to government policy initiatives Training package component responds to the COAG Industry and Skills Council's (CISC) training package-related initiatives or directions, in particular the 2015 training package reforms. Please specify which of the following CISC reforms are relevant to the training product and identify supporting evidence:	Yes	The CfE provides evidence that the work undertaken: • has removed repetitive, obsolete and superfluous content from the revised units • does not duplicate units from other training packages • ensures the broad application of units and skill sets which support the development of transferable skills that may be applied in diverse industry contexts and therefore support the mobility of skilled workers • does not include any requirements that limits the use of the units or skill sets to a particular industry context.

• ensure obsolete and superfluous qualifications are removed from the system • ensure that more information about industry's expectations of training delivery is available to training providers to improve their delivery and to consumers to enable more informed course choices • ensure that the training system better supports individuals to move easily from one related occupation to another • improve the efficiency of the training system by creating units that can be owned and used by multiple industry sectors • foster greater recognition of skill sets		
Reflect contemporary work organisation and job profiles incorporating a future orientation	Yes	The CfE provides evidence that open and inclusive consultation and validation with key industry stakeholders and associations has been conducted to ensure the units and skill sets reflect current industry work requirements.

Quality principle 2: Support portability of skills and competencies including reflecting licensing and regulatory requirements

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the *Training Package Development and Endorsement Process Policy*
Support movement of skills within and across organisations and sectors	Yes	The units and skill sets support application in diverse industry contexts. The CfE states that high-pressure water jetting is used in many sectors such as building and construction, mining, petrochemicals and local government.

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the *Training Package Development and Endorsement Process Policy*
Promote national and international portability	Yes	The units and skill sets support the development of transferable skills that may be applied in diverse industry contexts and therefore support the mobility of skilled workers. The components have national application and were developed with input from stakeholders across six states and territories including from industry, industry associations and RTOs.
Reflect regulatory requirements and licensing	NA	Licensing or certification requirements are not applicable to the units or skill sets in this submission.

Quality principle 3: Reflect national agreement about the core transferable skills and core job-specific skills required for job roles as identified by industry

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the *Training Package Development and Endorsement Process Policy*
Reflect national consensus	Yes	The CfE outlines the national consultation and validation processes and participants involved. At the time of writing, it states that there are no reports by exception and a letter of support from the *Process Manufacturing, Recreational Vehicle and Laboratory IRC* is foreshadowed. Considerable discussion of safety issues and a strong industry supported rationale are provided regarding the inclusion of 120 hours of practical experience in the unit and skill set covering high pressure water jetting system operations (MSMWJ304 and MSMSS00018)
Recognise convergence and connectivity of skills	Yes	The units and skill sets have cross-sector application.

Quality principle 4: Be flexible to meet the diversity of individual and employer needs including the capacity to adapt to changing job roles and workplaces

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the *Training Package Development and Endorsement Process Policy*
Meet the diversity of individual and employer needs	Yes	The units and skills sets allow for application in different contexts. The CfE provides examples of the approach adopted to promote flexibility, including: • ensuring the "*...Performance Evidence requirements are structured to allow for the fact in some industry contexts workers may use high-pressure water jetting skills in a limited range of contexts.*" and • designing the new unit (MSMWJ307 Operate a hydro excavation system) "*... to reflect the needs of workers who only undertake this specific function and who are unable to meet industry requirements for competency in a broader range of water jetting operations*"
Support equitable access and progression of learners	Yes	A prerequisite has been added to *MSMWJ304 Operate a high pressure water jetting system* to address the significant safety issues associated with the high risk work. Learners are able to progress from *MSMWJ202 Use high pressure water jetting equipment* to *MSMWJ304*. Learners who do not need the full range of water jetting skills are able to select associated units which address specific functions, namely drain cleaning, vacuum loading and hydro excavation systems.

Quality principle 5: Facilitate recognition of an individual's skills and knowledge and support movement between the school, vocational education and higher education sectors

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the *Training Package Development and Endorsement Process Policy*
Support learner transition between education sectors	Yes	The MSM CVIG 7.0 provides information on occupational outcomes and career pathways relevant to manufacturing industry sectors. Pathways between VET and higher education qualifications are not relevant to the content being proposed for MSM Release 7.0.

Training Package Quality Assurance

Quality principle 6: Support interpretation by training providers and others through the use of simple, concise language and clear articulation of assessment requirements

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the *Training Package Development and Endorsement Process Policy*
Support implementation across a range of settings	Yes	Industry advice about delivery is provided via the MSM CVIG which is ready for publication at the same time as the new units. A detailed section on high pressure water jetting has been added to the MSM CVIG 7.0.
Support sound assessment practice	Yes	The units of competency and their associated assessment requirements are clearly written. The performance evidence requirements are succinct and reflect reasonable volume/frequency of holistic workplace processes applicable across a range of contexts. The MSM CVIG provides general information and advice about conducting assessments and specific information relating to safety issues associated with high pressure water jetting.
Support implementation	Yes	The 5 units of competency (and 5 skill sets) and the MSM CVIG 7.0 are ready for publication on TGA/National Register.