

# **AUSJET/ADCVA Newsletter**

### October 2022



## **Chairperson's Report**

This is my first occasion writing the Chairpersons report, I would like to start by acknowledging and thanking the outgoing Chair Peter Jones, Peter an Ausjet Emeritus member who has been a member of the board for over 10 years and Chairman of the board for many of those years. Peter's commitment, tenacity, and vision for the industry has built AUSJET / ADCVA to become the peak national industrial services industry representative body with members across Australia and internationally.

I'm very proud to become AUSJET / ADCVA newly elected Chairperson. I am committed to representing the organisation, following through with our visions for tighter safety procedures, updating certified training and education, as well as supporting our members wherever possible.

The inaugural AUSJET22 Conference & Exhibition was a hugely successful week and I thank you all for your participation and enthusiasm.

On behalf of the board, I wish to extend my sincere thanks to our Speakers, our Sponsors: - Platinum Partner: Hammelmann, Gold Partner: KOR, Conference Partner: Cleanaway, Water Sponsor: BlastOne, Coffee Cart Sponsor: Aqua Prep, Lanyard Sponsor: TRHC, and our official Media Partner: Trenchless Australasia, exhibitors, and panel members. Without everyone's contribution and support the conference would not have been the success it was. I would also like to thank Thomas Pewtress for his tiresome work as the conference MC. Thomas did a fantastic job facilitating the panel discussions and presentations, keeping the program moving.

I would also like to give a special mention and thanks to the conference subcommittee, Peter Bradford from Aqua Prep, Peter Jones from KOR, Gabe Wardle from Ausjet / ADCVA and Peter Nicholas from Veolia who facilitated the WMS for the live demonstrations, a lot of work went on in the background to make this event successful.

Lastly to Gary and Zac Fitz-Roy and the entire team at Expertise Events, thanks for putting on a magnificent event and being so flexible to adapt to not only the hurdles we faced during COVID, but during the event with the inclement weather.

This was a great start and we look forward to AUSJET24, being even bigger and better. For all those that attended you will be receiving a survey on your thoughts on the show, we welcome all comments as its important for us to understand the things we did well, the things we did not do so well and ideas you may have on enhancing the event.

Please do follow us on social media, sign up to our newsletter, and get involved in our projects. We are making sure that there is the chance for everyone to be a part of this inspiring and welcoming organisation, I urge you to take these opportunities and get involved.

Now that the conference is finished, over the next twelve months there are a number of focus areas for the board. With an emphasis on the review of AS4233, the implementation of the Safety Forum, Cert II, III and IV developments, along with engaging with our current members and growing our membership base.

Our next general meeting will be held via Zoom on Thursday 1st December, it will be great to get as many people registered as possible. The board has also locked in some meeting locations (which we will need venues) for 2023, this will give the board and members a great chance to catch up and network face to face.

Regards

Lance McKay

AUSJET / ADCVA Chairperson

#### **AUSJET22**



That's a wrap for the first AUSJET22, our water jet, drain cleaning, hydro excavation (ndd) and vacuum loading technology exhibition and conference.

As much of our industry is about the use of water in the industrial services industry, Melbourne lived up to its lovable reputation and gave us just that, lots of rain, but despite this, it was a fantastic two days that we believe injected energy and excitement for "what can be" in the water jetting, drain cleaning and vacuum industry.

Thanks to everyone that dedicated their time in bringing their people, equipment, and most importantly, their love of our great industry to AUSJET22 - without your support, our event and our industry would not be what it is today. Thank you also to all of the speakers that took part in the panel discussions and for thinking "outside of the box" in developing our industry further, not just within the technology, but most importantly, keeping everyone safe on the job.

Thank you to all our sponsors: <u>Hammelmann Australia</u>, <u>Cleanaway</u>, <u>KOR Equipment Solutions</u>, <u>TRHC Pty Ltd</u>, <u>BlastOne International</u>, <u>Aqua Prep Pty Ltd</u>, and <u>Trenchless Australasia</u>. Without your support it just would have never happened.

And, thank you to all who attended. It was great to see you there and like our sponsors, your support is invaluable and will only make this event grow.

Finally, a special mention to <u>Expertise Events</u>, your encouragement, patience, and professionalism has been the pillars supporting the creation of AUSJET22. Bring on AUSJET24!

#### A Message from AUSJET /ADCVA Board Member Peter Jones

I could not be more proud of how the industry came together and supported AUSJET22, I would like to thank all the delegates and visitors that attended, you are the reason we put on the event. It was also great to see we had quite a few international visitors, thanks for your support.

To our Sponsors, Demonstrators and Exhibitors, thanks for putting on such wonderful displays and great demonstrations, you all put on a great show.

The conference sessions were quality thanks for those who presented, or participated in one of the discussion panels and to Thomas Pewtress who did a fantastic job as MC.

To the AUSJET/ADCVA board well done it has been a journey. To Gabe Wardle our administrator thanks for a huge effort over the past two years.

To the other two members of the organizing committee Lance McKay from Cleanaway and Peter Bradford from Aqua Prep Pty Ltd, excellent job guys thanks for your efforts.

Peter Nicholas from Veolia thanks for your work during the event, ensuring the live demonstrations and other activities were conducted safely, and in compliance with all relevant requirements.

Lastly to Gary and Zac Fitz-Roy and the entire team at Expertise Events, thanks for putting on a magnificent event and being so flexible to adapt to not only the hurdles we faced along the way and during COVID, but during the event with the inclement weather. The team did a fantastic job Bravo!

This was a great start we look forward to AUSJET24, being even bigger and better. For all those that attended you will receive a survey on your thoughts on the show, we welcome all comments as its important for us to understand the things we did well, the things we did not do so well and ideas you may have on enhancing the event.

Look forward to seeing everyone again in 2024.

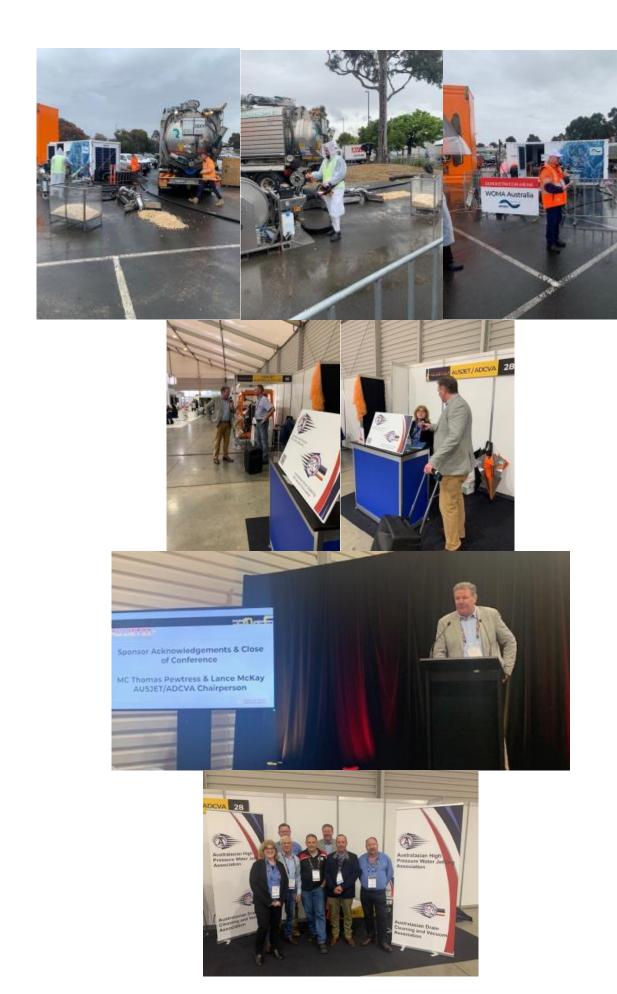
Peter Jones

AUSJET/ADCVA Board Member













Den-Jet Australia would like to congratulate AUSJET for an excellent 2022 conference and exhibition in Melbourne. It was a great pleasure to meetup with new and continuing customers, competitors, and listening to the great inspirational speaker - Steven Bradbury. Den-Jet is delighted to continue its support as the platinum sponsor of the Australian High Pressure Water Jetting Association (AUSJET) for 2022-2023.

The company bought over 4 machines for display at the conference. The CD160, CD50, CEX20 and the 500bar Hot Box. Starting from 25 to 160 Horsepower (Hp) in various configurations and variations of flow and pressure range from 100-3000bar.

A popular High Pressure Water Blaster model is the Den-Jet CD50 series. This is due to its flexibility of pressure and flow with combinations ranging from 230bar to a maximum of 2000bar. The CD50 model is powered by genuine 50Hp Toyota diesel engine and there are 7 powerful models in the range.



One of the largest machines is the Den-Jet CD160 series Water Blaster. It can operate at a maximum of 36,000 psi @ 25 ltr/min with special rotating nozzles. It has a stainless-steel pump-head with an electronic engine controller, feed pump and turbo charged 4- & 6-cylinder engines. The CD160 models are powered by Argo Power aka Massey Feguson engine. The pump can also be set up as CD160-1400 operating at 20000 psi @ 40 ltr/min. A great pump for concrete demolition and general surface prep.



Talk to Den-Jet about your project requirements no matter how big or small. Mention AUSJET22 to us throughout October and November 2022 for a unique promotion.



#### Contact us:

Den-Jet Australia Pty Ltd

24-28 Bowyer Road, Wingfield SA 5013

E: au.sales@denjet.com

P: +61 439 118 776

W: www.denjet.com

## Cert II, III & IV in Industrial Services Proposal

At our recent general meeting we discussed the proposed Cert II, III and IV courses in Industrial Service. This project has been on hold due to changes with the implementation of the 'Landmark VET reforms' which meant that the previous system for training package development and review (Industry Reference Committees and Skills Service Organisations, including IBSA) was to be disbanded at the end of 2022 to be replaced with new Industry Clusters. This change resulted in any new project being deferred until the appointment of new industry clusters for implementation at the start of 2023.

AUSJET/ADCVA have developed draft certificate courses for people working within the industrial services industry, encompassing high pressure water, drain cleaning, vacuum loading, and hydro excavation.

The proposed certificate courses will provide participants a qualification and a train pathway, which may lead to a Cert IV in the future. Certificate courses will also allow employers to access federal and state government training grants/funds.

The following is a list of proposed units and a proposed structure, once a provider is nominated for our industry cluster an announcement is expected this month. IBSA has applied to the provider for our industry cluster, this framework was submitted to IBSA in May 2021, should they be successful they have indicated this project could commence immediately.

Should members have any comment on the proposed structure please forward your comments to <a href="mailto:support@ausjetinc.com.au">support@ausjetinc.com.au</a>

#### **Cert II Mandatory Units (5 Core)**

#### Target Groups: VET Programs, school leavers, industry entrants

- MSMWHS110 Follow emergency response procedures
- MSMWHS200 Work safely
- MSMPER200 Work in accordance with an issued permit
- MSMWJ303 Operate a vacuum loading system
- MSMWJ201- Use high pressure water jetting equipment

#### Elective Units of which 8 needs to be completed.

- RIIWHS202D Enter and work in confined spaces
- MSMWHS217 Gas Test Atmospheres
- MSMWHS216 Operate Breathing Apparatus
- MSMWJ307 Operate a hydro excavation system
- RIICCM202D Identify Locate & Protect Underground Service
- RIIWHS204D Work safely at heights
- RIIHAN301E Operate Elevating Work Platform
- TLILIC2001 Licence to operate a forklift truck

- TLIF3063 Administer the Implementation of Fatigue Management Strategies
- HLTAID003 Provide First Aid
- RIIWHS201D Work Safely and Follow WHS Policies and Procedures
- RIICOM201D Communicate in the Workplace
- RIIWHS302E Implement Traffic Management Plans
- RIIWHS205E Control traffic with Stop-Slow Bat

#### Cert III Mandatory Units (6 Core). Have obtained Cert II in Industrial Services

#### **Target Groups: Operators, Leading Hands, Works Co-ordinators**

- MSMWHS110 Follow emergency response procedures
- MSMWHS200 Work safely
- MSMPER200 Work in accordance with an issued permit
- BSBWHS308Participate in WHS hazard identification, risk assessment and risk control processes

#### Plus, two of the following

- MSMWJ301 Operate a high-pressure water jetting system
- MSMWJ302 Operate a drain cleaning system
- MSMWJ303 Operate a vacuum loading system
- MSMWJ307 Operate a hydro excavation system

#### Elective Units of which 10 need to be completed.

- RIIWHS202D Enter and work in confined spaces
- MSMWHS217 Gas Test Atmospheres
- MSMWHS216 Operate Breathing Apparatus
- RIIWHS204D Work safely at heights
- RIIHAN301E Operate Elevating Work Platform
- TLILIC2001 Licence to operate a forklift truck
- MEM11004B Undertake dogging
- MEM11010B Operate mobile load shifting equipment
- BSBWHS401 Implement and monitor WHS policies, procedures, and programs to meet legislative requirements
- RIIWHS201D Work Safely and Follow WHS Policies and Procedures
- MSMWHS201 Conduct hazard analysis
- MEM15004B Perform inspection

- PUAFER008 Confine small emergencies in a facility
- MEM16013A Operate in a self-directed team
- MEM15024A Apply quality procedures
- MEM14005A Plan a complete activity
- MSMOPS363 Organise on-site work
- MEM13001B Perform emergency first aid
- MEM12024A Perform computations
- MEM16006A Organise and communicate information
- RIICCM202D Identify Locate & Protect Underground Services
- TLIF2010 Apply Fatigue Management Strategies
- HLTAID003 Provide First Aid
- RIICOM201D Communicate in the Workplace
- RIIRIS402D Carry out the risk management process
- RIICWD503E Prepare traffic management plans and traffic guidance schemes.

#### Supervisory Component of which 2 need to be completed.

- BSBFLM303C Contribute to effective workplace relationships
- BSBFLM305C Support operational plan
- BSBFLM306C Provide workplace information and resourcing plans
- BSBFLM312C Contribute to team effectiveness

#### **Certificate IV Industrial Services**

#### **Target Groups: Supervisors, Contract Managers, Project Managers**

#### Cert III Mandatory Units (8 Core). Have obtained Cert III in Industrial services qualifications.

- BSBRSK501- Manage risk
- TLIF3063- Administer the implementation of fatigue management strategies
- BSBMGT406- Plan and monitor continuous improvement
- CPPCMN4002B- Implement and monitor environmentally sustainable work practices
- CPPCMN4004B- Facilitate effective client relationships
- CPPCMN4007A- Manage workplace safety arrangements
- BSBLED401- Develop teams and individuals
- CPPCMN4005A- Facilitate effective teamwork

#### Elective Units of which 10 need to be completed.

- BSBINN301- Promote innovation in a team environment
- BSBFIA402- Report on financial activity
- BSBSLS408- Present, secure and support sales solutions
- BSBITB501A- Establish and maintain a workgroup computer network
- BSBATSIW416- Obtain and manage consultancy services
- BSBFIA302- Process payroll
- BSBHRM402A- Recruit, select and induct staff
- BSBHRM401A- Review human resources functions
- BSBSLS407- Identify and plan sales prospects
- BSBMKG514- Implement and monitor marketing activities
- BSBADM504- Plan and implement administrative systems
- CPPWMT4060A- Apply lean management techniques
- CPPCMN4006A- Facilitate effective workplace relationships
- TAEDEL401 Plan, organise and deliver group-based learning
- TAEDEL301- Provide work skill instruction
- TAEASS401A- Plan assessment activities and processes
- TAEASS402 Assess competence

# AUSJET/ADCVA welcomes new member Total Drain Group Environmental Based in New South Wales

Total Drain Group (TDG) Environmental is a proudly Australian owned and operated company, that specialises in offering cutting-edge solutions to stormwater and sewer assets. With the needs of the customer in mind, TDG works to provide quick, dependable, high-quality services that are affordable and consistently prioritise safety in all endeavours.

TDG can complete projects of any size, from straightforward clogged pipes to maintaining enormous networks of Gross Pollutant Traps, thanks to a combination of cutting-edge technologies, experienced team members, and thorough industry expertise.

We provide a round-the-clock service that includes everything from scheduled and routine maintenance contracts to emergency and sporadic call-out response services. We are able to supply both big and small projects thanks to our fleet of more than 500 trucks and more than 500 personnel.

Through the upkeep of stormwater infrastructure across New South Wales, Victoria, South Australia, Queensland, and New Zealand, TDG is working to ensure a cleaner, greener environment.



For more information about Total Drain Group, visit their website: www.totaldraingroup.com.au

# AUSJET/ADCVA welcomes new member Apex Vac Solutions Pty Ltd Based in South Australia



Apex Vac Solutions is a family-owned company specialising in Non-Destructive Digging and Hydro Excavation. With operations in South Australia and Tasmania, our mission is to provide high quality, efficient and safe hydro excavation services to our customers.

Apex Vac Solutions started in 2016 with a single truck and a sole operator. Since then, we have grown to a staff of 18 with 8 trucks employing the latest technology and we are continually growing.

During our six years of providing hydro excavation services, we have worked on many state and federally funded projects in the civil construction industry.

Our company values are Sustainability, Inclusivity and Ethical Practice. In line with these values, we are proud to announce we are launching *Apex Traffic Management* in Tasmania, as the first female-operated traffic company in the state.

Apex Vac Solutions is proud to support career pathways for women to enter the industry. As such, we actively promote the Civil Contractors Federation Women in Civil initiative, which aims to attract and train women in civil industries and break down barriers to ensure they have access to long term, successful careers.

For more information about Apex Vac Solutions visit: Apex Vac Solutions Pty Ltd | Excavation | Adelaide, SA





For more information about Apex Vac Solutions, visit their website: www.apexvacsolutions.com.au

# **AUSJET/ADCVA** welcomes new member

# Solidsvac Pty Ltd Based in Queensland



Solidsvac are the Australian OEM of an extensive range of patented 100% pneumatic Vacuum Loading Solids Pumps and accessories designed for the rapid capture and transfer of high solids laden slurries. These range from the SV10 – Air Fox Bore Hole Pump through to the highly mobile SV70 series and on to the SV140, 150 and 440 – CVCD units which are the world's only pneumatic Solids Pumps providing Continuous Vacuum and Discharge.

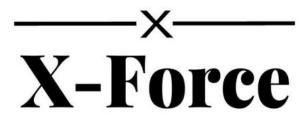
The Solidsvac pumps all feature no internal workings, 316 stainless steel vessels and valves as standard along with their unique ability to be fitted with a range of venturis witch together ensure high performance with very low wear and the correct amount of power to carry out tasks ranging from tailings or effluent pond and sump cleaning through to the capture and transfer of filter media or hazardous acidic waste.

Talk to us today about these mobile, robust and versatile pumps info@solidsvac.com



For more information about Solidsvac Pty Ltd, visit their website: www.solidsvac.com.au

# AUSJET/ADCVA welcomes new member X-Force Building & Construction Based in South Australia



**Building & Construction** 

We are a small-sized, responsive, and versatile company with a reputation for our quality capable delivery. The scalability of X-Force allows for us to meet our clients' needs, accommodating both small and large projects with flexibility, sound knowledge, and experience.

Our priority considering over 30 years of experience has been focusing on the development and implementation of our services within the South Australian perimeter. Due to our focus, X-Force has fostered a solid reputation throughout the region, completing several significant operations over the years and developing strong, ongoing relationships with our clients.

From project inception through to completion, X-Force ensure our work is delivered to our clients with the highest quality outcome each and every time. This document will provide an overview of X-Force's capabilities, skills, and experience throughout the industry. It will also provide insights into our company culture, safety procedures and the capacity of our team's skills and abilities that work together to achieve these quality outcomes and consistently meet client criterion.

#### **Core Capabilities**

Hydro Demolition
Robotic Hydro Demolition
Hydro Demolition Lance
Concrete Structure Services
Concrete Demolition
Concrete Remediation
Concrete Coatings
Surface Preparation
HP & UHP Water blasting
Dry Ice Blasting

Garnet Blasting
Concrete Scabbling
Wet Blasting
Industrial Services
Tank Cleaning
Robotic Tank Cleaning
Rubber Removal
Vacuum Excavation
Pipe Cleaning



For more information about X-Force Building & Construction, visit their website: www.x-force.com.au

# AUSJET/ADCVA welcomes new member Powell Industrial Based in Queensland



Industrial and Hydraulic Hose & Fittings

Powell Industrial is Australia's largest independently owned hose and fittings company. With 13 branches nationally we have a distribution network that caters to any business big or small.

With a wide range of products to support the industrial service sector, our products cover applications including, suction and material handling, sewer cleaning and various ultra-high-pressure applications to name a few. We complement our hose range with numerous combinations of fittings, nozzles and safety devices that make Powell a one-stop shop for all your fluid transfer requirements. These products are stocked throughout our branch network to support the various industries in each geographical area.

The Powell branch network has been built to encompasses the full life cycle of hose assembly, whereby each branch has specific hose manufacturing and testing capabilities to meet the local demands and needs. This includes retesting and certification of assemblies and components, with NATA certification in select branches. The development of a hose management program over many years, give us a mature system and the understanding of best practices in this field. Our "TESSALINK" system can utilize a micro RFID chip on the outside of the hose which can then be scanned by a smartphone and the test certificate can be accessed instantly in the palm of your hand. This eliminates the need for large cumbersome asset management systems.

Powell has been supporting the industrial services industry for well over 20 years and looks forward to working closely with industry stakeholders to help solve any safety or general industry issues.

At Powell Group we have a genuine team of highly skilled and knowledgeable professionals, with industry and technical expertise that is second to none.

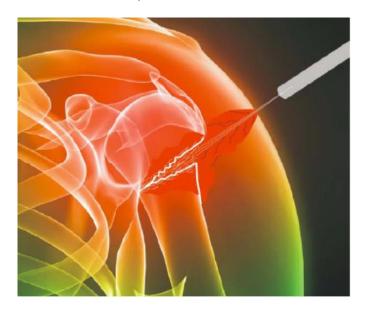


# **High Pressure Water Jetting (HPWJ) Injuries**

HPWJ injuries can vary from a small pin hole to a large open wound with varying degrees of internal damage. Surface damage may appear slight, but a large quantity of water may have entered the body and internal damage could be extensive.

Serious infections can result from dirty water or foreign material being injected into the body.

SEVERE INJURIES (BROKEN BONES, CRUSHING, ETC) MAY BE CAUSED BY IMPACT OF EQUIPMENT.



It is for this reason that the Australian Standard 4233.1 states that; "All operators engaged in commercial and industrial water jetting operations shall carry an immediately accessible, waterproof medical alert card issued by the employer or person conducting a business or undertaking (PCBU)".

#### **Treatment**

If an accident occurs where pressurised water penetrates or appears to have penetrated the skin, medical assistance shall be sought immediately.

#### **Immediate Treatment**

Where medical examination is not immediately possible (e.g. in remote situations), appropriate basic first aid measures shall be applied and the patient observed closely until medical treatment is available.

If you are trained in first aid - The surface wound should be dressed to control bleeding and to prevent further contamination. Where limbs have been injured, it is best to support and immobilise them as you would for a fracture.

#### **Reporting and Investigation**

All incidents, including environmental incidents, accidents, near misses and injuries shall be reported, recorded and investigated.

All AUSJET/ADCVA Members must report through the AUSJET/ADCVA Website.

### **Safety Snippets**

#### **Vacuum Loading Safety Vacuum Breakers**

Air movement through a vacuum hose creates an air velocity in excess of 320 kph. If your hand passes in front of the hose opening while in operation, your hand will be sucked inside by this strong air stream. A force depending on the size of the hose between 170kgs and 360kgs will be holding your arm in the hose. You will not be able to pull your arm out as long as vacuum is not broken. While your arm is stuck in the vacuum hose the differential pressure generated by the vacuum will cause blood and other body liquids to flow into your arm and accumulate there. Your arm will immediately swell, and extensive damage will result.

Keep vacuum tools and hoses away from face and body. Concentrated vacuum on the body, such as through a hose end in full contact can result in severe injuries including blindness.

If any body part is caught by the airflow from the open end of a vacuum hose, the vacuum breaker system should be engaged immediately, and the unit shut down.

An injury caused by vacuum can be serious. The vacuum action must be released as quickly as possible. Seconds matter when the body is subjected to vacuum forces. The ability to activate the vacuum breaker system should always be accessible near the end of the hose or pipe so that it can be quickly activated. It can be one of the following: remote, pendant, E Stop or manual vacuum breaker. The vacuum breaker system is to be checked in accordance with the unit pre-start inspection. The vacuum hose should be always kept away from body parts, hands should not be used to check vacuum. To check vacuum, use a shovel on the end of the vacuum or place the hose end on the ground.



A risk assessment should be completed prior to any vacuum loading task, where the vacuum task is being performed away from the unit; it is recommended that two operators are onsite to ensure the vacuum can be shut down and vented in the event of an emergency.

For more information on Vacuum Loading Safety, please refer to the AUSJET/ADCVA Recommended Practices for the Use of Industrial Vacuum Equipment Workbook. This workbook is available through the Website <a href="https://www.ausjetinc.com.au">https://www.ausjetinc.com.au</a> or by contacting <a href="mailto:support@ausjetinc.com.au">support@ausjetinc.com.au</a>



## **Incident Reporting**

One of the responsibilities of being a member of AUSJET/ADCVA is to report all incidents. It is important we communicate all incidents within our industry to prevent them from reoccurring and to improve industry safety both here in Australia and now globally through the GICC Global Industrial Cleaning Coalition.

All information is kept strictly confidential and can be reported through our website <u>safety/report-an-incident-/</u>, or directly to our administrator Gabe Wardle <u>support@ausjetinc.com.au</u>. In all cases we request the contact details of the person reporting the incident, so we can work with them to develop an industry safety alert.

When developing the industry safety alerts any reference to the company that had the incident, or the location of the incident is removed. Prior to publishing the safety alert, we send a draft of the alert to the reporting person for their approval prior to distributing the alert to our members and on social media.

#### What should be reported?

To truly improve industry safety, we would like to see all incidents involving High Pressure Water Jetting, Vacuum Loading, Drain Cleaning and Hydro Excavation reported including:

- Accidents
- Injuries
- Near Misses
- Environmental Incident

In some circumstances we understand that some incidents may be placed under legal privilege. In these instances if possible we would request that members simply advise AUSJET/ADCVA that an incident has occurred without specific detail, then at the completion of the investigation and the period of privilege, we can then work together to develop a safety alert.

To report an Incident, please go to <a href="mailto:safety/report-an-incident-/">safety/report-an-incident-/</a>

# **Health and Safety Forum**

The object of the Forum is to bring together Health & Safety leaders across the industrial service industries, including high pressure water jetting, drain cleaning, vacuum loading, and hydro excavation; to share incidents and learnings so that participants can drive down injury rates and reduce risks.

The Forum will be responsible for sharing and reviewing incidents within the industry, developing safety alerts based on AS4233 and industry best practice.

The Forum will comprise representatives from (AUSJET), (ADCVA) members representing a cross section of the membership, that either hold or have held a high-level health and safety position within a member contracting organisation or are a director of a member organisation.

It is expected that designated representatives attend at least 75% of the meetings to ensure continuity of Forum deliberations. The inaugural committee will commence in September 2022, with an 18-month term through until March 2024. All Forum members will be required to agree to the terms of the Safety Forum Charter which includes a confidentiality clause.

We look forward to the commencement of the Health and Safety Forum, to drive industry safety awareness and improvements.



# **High-pressure water jetting**

Worksafe is reminding employers and employees of the risks associated with high-pressure water jetting

Published: 14 September 2022

#### **Background**

In the past two years, employees have been seriously injured in two high-pressure water jetting incidents in Victoria.

High-pressure water jetting uses a stream of pressurised water to remove material, debris or other things from surfaces, including drains and pipes. The equipment is often called a high-pressure water cleaner, hydro jetter or drain cleaner.

#### **Safety Issues**

The main risks in high-pressure water jetting are:

- the water jet may pierce the skin
- contaminated material may be injected into the body
- flying debris may hit and injure a person (including eye injuries)
- a flailing hose, an out of control nozzle or a separated hose coupling may hit a person

#### Other hazards may include:

- loud noise exposure
- working in confined spaces
- fall hazards
- respiratory and eye hazards through hazardous chemicals and biological material exposure
- electric shock

#### **Controlling risks**

The Australian Standard for high-pressure water jetting systems (AS4233.1) defines classes of high-pressure water jetting systems. It also gives guidance for maintenance, repair and use of high-pressure water jetting systems and details training for safe operation and personal protection.

Class A high-pressure water jetting systems are systems with an output capability range of 800 to 5600 bar litres per minute.

Class B high-pressure water jetting systems are systems with an output capability of more than 5600 bar litres per minute. Class B systems are readily available and widely used, highly powered systems that present a higher risk to the operator.

#### Summary of AS4233.1 key points

#### Maintenance and repair

Operators that use high-pressure water jetting systems should not modify jetting equipment or its attachments without the manufacturer or other competent person's written approval. Class B equipment should only be modified a competent person with appropriate engineering skills and must be consistent with safety recommendations.

Only the manufacturer, their agent or competent persons should conduct repairs or maintenance on high-pressure water jetting equipment.

#### **Personal Protective Equipment (PPE)**

Employers need to identify hazards and do a risk assessment of the work being carried out to decide what PPE is required for the task. Suitable PPE should always be worn where identified hazards cannot be prevented or suitably controlled. Where PPE is issued, employers must provide instruction and training on its correct use and maintenance.

Personal eye protection should always be worn when an employee is near jetting operations. The employee in direct control of the flow of water should, as a minimum, wear safety glasses and a face shield.

Head protection should be worn where needed.

Leg and body armour made from material that can stand the direct force of the water jet should be worn by water jetting operators where there is risk of injury.

Personal hearing protectors should be worn where noise hazards cannot be controlled.

#### **Training**

- General: Operators should be given training on high-pressure water jetting operations by a competent
  person. The training should include the importance of all parts, fittings and hoses being the right size,
  compatible and rated equal to or more than the equipment's maximum operational pressure. This lowers
  the chance of equipment failures that can cause serious injury.
- Class B: All operators should be trained and assessed as competent to operate Class B equipment. Training
  must be given through a Registered Training Organisation (RTO) and meet the high-pressure water jetting
  units of competency. Trainers must be accredited by an RTO and have at least 5 years' relevant water jetting
  experience.
- Refresher training: Competency or refresher training on high-pressure water jetting operations must be
  done and recorded at least every two years, to ensure operators remain competent. Refresher or extra
  training should be given when using new or more powerful equipment or introducing new technology.

#### **Legal duties**

Employers have duties under the Occupational Health and Safety Act 2004. They must, so far as is reasonably practicable:

• provide and maintain a working environment that is safe and without risks to the health of employees and independent contractors

- provide employees with the necessary information, instruction, training or supervision to enable them to do their work in a way that is safe and without risks to health
- ensure that persons other than employees are not exposed to risks to their health or safety arising from the employer's conduct
- consult with employees and health and safety representatives when identifying or assessing hazards or risks and making decisions about risk control measures

The Occupational Health and Safety Regulations 2017 requires employers to ensure that employees and persons supervising the employees are trained and given information and instruction about hazards related to plant, including:

- the processes for identifying hazards and controlling risk; and
- safety procedures associated with using the plant at the workplace; and
- the use, fit, testing and storage of PPE, if relevant

## **Member Moments - Q&A**

This edition of Member Moments we speak with Dave Maiden, Operations Manager at Vertical Horizonz Australia (VHA), VHA have been an AUSJET/ADCVA member since 2021.

#### Hi Dave and welcome to the AUSJET Newsletter Member Moments. Why don't you tell us a little about yourself?

Hello. I'd like to thank you for the opportunity to introduce myself and Vertical Horizonz Australia (VHA). I have been employed in VHA for over 6 years as the Operations Manager and trainer.

My passion for training spans 30 years, beginning as a trainer in the Royal Australian Airforce. The idea of improving quality outcomes, efficiency and safety has always been a strong focus.

It still amazes me the number of operators who do not or cannot identify the high-risk nature of their work and are surprised when accidents happen. This is evident in high pressure water operations and is great to see the related industries increased focus on safety and the requirement for operational training.

#### Can you tell me bit more about the services Vertical Horizonz offer and the industries you work in?

VHA is an industry tailored health and workplace safety training company that stands by our mission to provide real training that saves lives.

Included with our training, other services we offer are site safety consultancy and advisory allowing us to provide a fully flexible approach when delivering our safety training to our clients

We provide specialized training to industries across industrial services, civil construction, and energy sectors. We are passionate about providing training to high-risk environments, especially those operating in the niche sectors such as wind turbine, trenchless technology, and industrial cleaning services.

A focus area for us has been within industrial cleaning which includes high pressure water jetting, drain cleaning and vacuum loading.

#### How does Vertical Horizonz continually monitor ongoing safety, training and development in the industry?

VHA operate a quality management system and take safety seriously. Prior to training delivery, all VHA trainers complete a site-specific hazard identification and dynamic risk assessment in order to mitigate any site-specific risks. This process is documented as part of each trainer's Project Activity Report (PAR).

VHA believe in industry engagement, and this is one of the reasons we are proud members of the AUSJET/ADCVA association, and our training packages are developed in accordance with Australian Qualification Authority (ASQA) requirements and from industry feedback.

VHA is constantly engaging industry and advisory bodies like AUSJET for advice on the industrial cleaning industries, not only for existing operational processes but also towards emerging technology. As new systems emerge, we need to make sure that our training is meeting the safety and operational requirements of the clients as well as the industry.

Events like the AUSJET22 Conference & Exhibition and the recent No Dig Down Under give us the opportunity to discuss directly with industry experts discussing what the issues are for operators and businesses.

Industry engagement also drives the review and upgrades of the Australian industry training standards. This not only directs the training operational requirements but also the safety requirements for the training package.

# What do you believe have been some of the growth areas of the HPWJ industry over the past five years and what does the next five years look like?

Undoubtedly, technical innovation has influenced the HPWJ industry over the past five years. The ability to operate on large surfaces remotely and efficiently has had an effect on increased productivity. Conversely this creates another dilemma for the industry, training operators to undertake the technical aspects of the operations. Additionally, safety through upgrades in PPE and hand manual equipment is ensuring the worker at the coal face is better protected. Another growth area is training. With the upgrading of units of competencies and skills sets this has forced operators and business to seek training to hold qualifications now being demanded by the sector. The AUSJET/ADCVA association has been integral in this change.

The industries midterm outlook is an exciting one. The recent AUSJET trade show highlighted the entrepreneurial innovation industry members are pursuing. While technical, PPE, and machinery innovation will increase productivity, training in the current and developing skills, also needs to innovate.

An example is with trenchless technology, it is now common to see operators on the sides of roads around Australasia. In turn there is a greater need for the use of high pressure water jetting and vacuum excavation as a preferred option to breakup and remove ground base for horizontal directional drilling and potholing for identifying underground services. This demonstrates a much improved process from trenching through new infrastructure services and manually digging potholes, creating a greater chance of damaging existing services.

Conversely, as the once niche sectors become common place, major projects will require contracted companies to provide proof of the competency of their staff due to the high-risk nature of the environment.

# Will we see you at the next AUSJET Conference and how do you see these industry related conferences being beneficial to the industry and Vertical Horizonz?

VHA will definitely be at the next AUSJET Conference. It presents the opportunity to network with likeminded professionals seeking a safer work environment for their operators.

With access to all levels of the industry, from the suppliers showing new technology through to the operators, it is a chance to discuss issues, opportunities and share stories.

I truly believe that the best way to improve any industry is through listening, learning and responding to the industry directly and this is what AUSJET22 is about.

# Vertical Horizonz have been an AUSJET/ADCVA member since 2021, how have you found it and what are some of the benefits of being a member?

Being an AUSJET member is of great benefit to Vertical Horizonz as a training provider and advisory advocate.

Membership provides access to a wealth of information, not only on the AUSJET/ADCVA website but also through connections to industry. It allows us to develop better safety processes and operational knowledge within our training packages.

At the end of the day, clients want a quality outcome with a safer workplace for their operators. At Vertical Horizonz we aspire to be the pre-eminent training provider for the sector; providing quality service the industry deserves.

Thank you Dave for your insight, it has been a pleasure chatting with you and we look forward to catching up with you and Vertical Horizonz Australia in the future and at AUSJET24.

If you would like to connect with Vertical Horizonz further, please follow this link to their website: <a href="www.verticalhorizonz.com.au">www.verticalhorizonz.com.au</a>



# **Our Industry People**

Do you have an "Industry Icon" you would like to tell us about? Please do so by getting in touch with <a href="mailto:support@ausjetinc.com.au">support@ausjetinc.com.au</a> we would love to hear from you.



#### **Collaborative Development and Promotion of Basic Industrial Cleaning Principles**

The Global Industrial Cleaning Coalition (GICC) is a group of industrial cleaning safety associations, asset owners, contractors, and equipment manufacturers voluntarily coming together to contribute to the creation and adoption of basic industrial cleaning principles around the world.

Our mission is to help national safety associations adopt basic principles in high pressure water jetting, municipal/vacuum truck cleaning, chemical cleaning, and respiratory protection that are easy to implement country by country in consideration of differing workforce, regulatory and economic conditions and without imposing on sovereignty of the existing national organizations.

The purpose of the GICC is to help save lives and reduce injuries in the industrial cleaning industry through the collaborative development and promotion of basic industrial cleaning principles.

"There is no need for unnecessary injures or work-related deaths. Be part of a global shift in mindset that will help save lives."

Kerry Siggins, CEO, StoneAge, Inc.

The GICC will be meeting on Thursday the 3rd of November, this coincides with the WJTA conference in New Orleans. This meeting will be a great opportunity to convey to the other members of the GICC just how successful the AUSJET22 conference was.



Show your support by featuring the GICC badge on your website. Please link to our website to help spread the word about this movement and your affiliation with it.

For more information about the GICC, please visit their website https://www.globalindustrialcleaningcoalition.org/

## **AUSJET / ADCVA Meetings**

General Meeting - Tuesday 11th October 2022 (The evening prior to AUSJET22 Conference and Exhibition)

Was held at the Laurel Hotel, Ascot Vale, Victoria.

To view the recording of this meeting, please follow this link and enter the passcode:

https://us02web.zoom.us/rec/share/2GwXHHY80os0kVE5fBHG9pkEBxr5RMwsNo8keSIm5CV5ZToP1XYqyGkVtnu5gl GF. Zed5zCsfF0EiUb5?startTime=1665467846000

Passcode: pfU6K\*ZG



#### General Meeting - Thursday 1st December 2022 @ 2.00pm AEDT

This meeting will be held via Zoom.

Register in advance for this meeting:

https://us02web.zoom.us/meeting/register/tZMrd-yurzgtGNQ pT1s vOZRzMv5fz53NC4

After registering, you will receive a confirmation email containing information about joining the meeting.

#### General Meeting - Thursday 16th March 2023 @2.00pm AEDT (11.00am AWT)

This meeting is scheduled to be held during the Australian Oil and Gas Trade show - AOG Energy in Perth at the Convention & Exhibition Centre

To register, please email <a href="mailto:support@ausjetinc.com.au">support@ausjetinc.com.au</a> with your interest.

or, alternatively you may attend via Zoom.

Register in advance for this meeting:

https://us02web.zoom.us/meeting/register/tZYrdeqvrD0oHN1C5uWaoHr090GYQa6bHfUX

After registering, you will receive a confirmation email containing information about joining the meeting.

General Meeting - Thursday 22nd June 2023 @ 2.00pm AEST

This meeting is scheduled to be held on the Gold Coast, Queensland.

Further details to be advised.

#### General Meeting, Annual General Meeting and AGM Event - Thursday 24th and Friday 25th August 2023

This meeting and event is scheduled to be held in the Morning Peninsula, Victoria.

The AGM Event will be held on Thursday 24th August 2023 - details to follow

The General Meeting & Annual General Meeting will be held on Friday 25th August 2023. With networking and free time following; this gives your partners a chance to come along as the weekend draws near.

Further details to be advised.

#### General Meeting - Thursday 2nd November 2023 @ 2pm AEDT

This meeting is scheduled to be held in Newcastle, NSW.

Further details to be advised.

## **Newsletter and Website Advertising**

The AUSJET / ADCVA Newsletter is an e-newsletter which is distributed via email across the membership and other Industry groups and individuals throughout Australasia and internationally; as well as the AUSJET website and across Facebook and LinkedIn social media platforms.

Advertising in the Newsletter consists of either an image advertorial and/or an article advertorial which allows your business to get noticed by those with influence in the Water Jetting, Drain Cleaning, Vacuum Loading and Hydro Excavation industries.

The Newsletter is distributed bi-monthly: February, April, June, August, October and End of Year December.

Newsletter - Advertise your business and services in the next Newsletter

Item	Platinum Member	Member	Non-Member
Newsletter	FREE As per Platinum Member Benefit	\$199.00 per Advertorial  OR  \$150.00 ea for four and get two FREE  \$600.00 annually	\$220.00 per Advertorial

**Web Banner** - We encourage members to advertise on the AUSJET / ADCVA website (Web Banner) which is displayed at the bottom of this screen and across every page. The AUSJET / ADCVA website is accessed by members, industry, government and the community.

Item	Member	Non-Member
Web Banner	\$380.50 Financial Yearly	(Members Only Benefit)

If you would like to advertise in the newsletter or on the webpage please email: support@ausjetinc.com.au

## Merchandise

Item	Description	Price
Recommended Practices for the Use of Industrial Drain Cleaning Equipment Booklet	The Australian first edition of the Recommended Practices for the use of Industrial Drain Cleaning Equipment	Members \$19.80
First Edition 2022	Prepared by the Australasian High Pressure Water Jetting Association (AUSJET*)	Non-Members \$27.50
Recommended Practices for the Use of Industrial Drain Cleaning Equipment  Agard by the bandwideright-framer flow ability-shade-field	Members  1 - 10 books \$19.80ea  10 books & above \$16.50ea  Non-Members  1 - 10 books \$27.50  10 books & above \$24.20	
Recommended Practices for the Use of Industrial Vacuum Equipment Booklet First Edition 2020	The Australian first edition of the Recommended Practices for the use of Industrial Vacuum Equipment  Prepared by the Australasian High Pressure Water Jetting Association (AUSJET*)  Members  1 - 10 books \$19.80ea  10 books & above \$16.50ea	Members \$19.80 Non-Members \$27.50

Recommended Practices for the Use of Industrial Vacuum Equipment  **Transport of Transport of Industrial Vacuum Equi	Non-Members  1 - 10 books \$27.50  10 books & above \$24.20	
Guideline notes for safe use of a High Pressure Water Jetter	To download a copy of the guide go to Safe Work Australia website: <u>Safe Work Australia</u>	
Australian Standard AS4223 1 & 2	To purchase AS4233 1&2 go to Standards Australia website: Standards Australia	
MEDICAL ALERT CARD  IN CASE OF EMERGENCY DIAL DOE or contact your Local Emergency Services  FRIST ALD:  1. Involvables the injuried part of the body  2. Cover wound to preven beins of bleed  3. Months: the righted particle beins of bleed  4. Months: the righted particle beins of bleed  5. Months: the righted particle beins of bleed  6. Months: the righted particle	AUSJET Medical Advice Card (wallet size)	\$1.90 each