# Purpose

The purpose of this standard is to provide a framework and guidance for the operation and maintenance of High Pressure Water Jetting equipment to control the risks to our employees, contractors, the community and the environment.

High Pressure Water Jetting (“HPWJ”) covers a class of equipment which use a stream of water to complete a variety of activities within Wannon Water:

* High Pressure Water Drain Cleaning units (Jetter’s) used to unblock sewer mains and house connection branch (“HCB”) lines and for preventative cleaning.
* Hydro Evacuation units (“HydroVacs”) used for service pipe repairs for example as a safer alternative to mechanical excavation of ground.
* Some smaller Class A pressure washers/gurneys are used for other duties (e.g., pressure cleaning activities at depots).

The use of High-Pressure Water Drain Jetting units is one of Wannon Waters high-risk activities which has the potential to cause serious injury to employees (e.g. water jet injection into the skin, being hit by unrestrained hoses or attachments and flying debris).

# Scope

This framework applies to:

* Any employee or contractors using or who maybe impacted by Wannon Water owned and operated Class A Pressure Washers, Class B High Pressure Jetting Units and Class A HydroVac units (refer to Section 6. Definitions).

# Standard requirements

| **Standards** | **Responsibility** | **Accountability[[1]](#footnote-2)** |
| --- | --- | --- |
| Assets and equipment purchased, including safety equipment must comply with Australian Standards[[2]](#footnote-3) and all fittings and connections must be compatible, (e.g., Piranha hose/Piranha fittings).  Where practicable purchase lower pressure units (e.g., Units delivering <800 Bar Litres per minute i.e., not Class A or B). | Maintenance and Operations Managers/Coordinators/Team Leaders  Project/Contract Supervisors | GM Assets & Service Delivery |
| Equipment must be used and maintained (e.g., inspected, serviced and repaired) in line with the manufacturers recommendations as a minimum. | Asset Systems | GM Assets & Service Delivery |
| All Maintenance must be completed by a suitably competent/qualified person and records kept in accordance with Wannon Water maintenance processes. | Maintenance and Operations Managers/Coordinators/Team Leaders | GM Assets & Service Delivery |
| A Hose and Connections Register must be used to identify and trace what components are in use and to manage their effective service life. | Asset Systems/Maintenance and Operations Managers/Coordinators/ Team Leaders | GM Assets & Service Delivery |
| A **Task Risk Assessment (JSA)** or equivalent system[[3]](#footnote-4) must be completed for all HPWJ (Class B Jetter) and HydroVac (Class A) work. | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |
| A **Pre-Start Checklist** must be completed prior to using HPWJ (Class B Jetter) and HydroVac (Class A) equipment every day that the equipment is used. | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |
| Raise a **Hazard Report** for faulty or damaged plant. | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |
| All maintenance and any faulty or damaged plant must be managed in accordance with the **Lock-Out Tag-Out** process. | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |
| If repairs are made to a main hose or mini hose (e.g., re-ending), the work must only be completed using compatible parts and fittings and tested in accordance with the requirements of the manufacturer and AS 4233.  Repaired hoses and connections must be recertified by an accredited service repairer and records kept. | Maintenance and Operations Managers/Coordinators/Team Leaders | GM Assets & Service Delivery |
| PPE suitable for the work being performed must be identified and provided. It MUST be used correctly (e.g., fitted, maintained, cleaned and stored) – according to the standards described in Wannon Water procedures[[4]](#footnote-5)or equivalent system.  Refer to:  ***AS 4233.1 High Pressure Water Jetting Systems; Part 1: Safe Operation and Maintenance***for further details on mandatory PPE requirements. | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |
| Signage and barricades appropriate to the work must be in place for all HPWJ (Class B Jetter) work to create a safe zone to work in. If a member of the public ventures within the work site area all work must cease.  Consider the use of observers where there is a risk of public entry. | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |
| The work area and placement of equipment and hoses must be clean and clear of obstacles. | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |
| When working with water jetting equipment:   * A shroud over the connection between the water gun hand piece and the hose must be used * Anti-ejection devices must be used (e.g., sewer cover plates or rubber mats over openings to HCB’s) * Hose restraints must be fitted where operators are exposed to hose connections outside of anti-ejection devices (Whip checks are NOT to be used) * The use of leader hoses is prohibited by Wannon Water | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |
| A minimum of two operators are required for all HPWJ (Class B Jetter) and HydroVac work. | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |
| Waste materials produced as a result of water jetting activities must be stored, transported and disposed of in accordance with EPA legislative requirements. | Environmental Risk Compliance Officer | GM Assets & Service Delivery |
| All HPWJ (Class B Jetter) and HydroVac (Class A) operators must have their Medical Alert card on their person at all times when conducting the work.  A process must be in place for the management of an emergency e.g., first aid.  Raise an **Incident Report** for any injury sustained due to water jetting activities. | Civil Maintenance and Treatment Operations Team Leaders/Operators | GM Assets & Service Delivery |

# Training and assessment

|  |  |  |
| --- | --- | --- |
| **Standards** | **Responsibility** | **Accountability** |
| Employees taking on a role of working with or supervising work using HPWJ (Class B Jetter) and HydroVac units (Class A) must be made aware of and trained in this standard and supporting documents. | People & Training Coordinator | GM People & Business Services |

| **Role** | **Training requirements** | | **Frequency** |
| --- | --- | --- | --- |
| **Course Code** | **Course or procedure** |
| Maintenance and Operations Managers/Coordinators/Team Leaders  Project/Contract Supervisors | N/A | High Pressure Water Jetting (HPWJ) Standard | Every 3 years |
| Civil Maintenance and Treatment Operations Team Leaders/Operators | N/A | Job Safety Analysis Procedure | Every 3 years |
| N/A | Lockout Tagout Procedure | Every 3 years |
| High Pressure Water Jetting (HPWJ)  (Note: The Class B high pressure jetting guns are prohibited on the drain cleaning HPWJ units) | | | |
| Civil Maintenance Team Leaders/Operators | MSMSS00017 (RTO) | High Pressure Water Jetting Equipment (for trainee operator) | Every 2 years |
| MSMSS00018 (RTO) | * Operate a High-Pressure Water Jetting System (for competent Operator) |
| MSMSS00019 (RTO) | Operate a Drain Cleaning System (for competent Operator) |
| N/A | Safe Work Instruction – High-Pressure Water Jetting (HPWJ) Units | Every 2 years |
| N/A | * Complete a High-Pressure Water Jetting Unit Pre-Start Checklist * Complete a High-Pressure Water Jetting Unit Task Risk Assessment (JSA) | Ongoing – supervisor monitoring |
| HydroVac Units | | | |
| Civil Maintenance Team Leaders/Operators | N/A  (RTO) | Class A Training Certificate | Every 2 years |
| N/A | Safe Work Instruction – Use of HydroVac Units | Every 2 years |
| N/A | * Complete a Hydrovac Unit Pre-Start Checklist * Complete a HydroVac Unit Task Risk Assessment (JSA) | Ongoing – supervisor monitoring |
| Class A Pressure Washing Units | | | |
| Civil Maintenance and Treatment Operations Team Leaders/Operators | N/A | Safe Work Instruction - Use of Class A Pressure Washers e.g., Spit Water | Every 2 years |
| N/A | Familiarity and knowledge of operation manual (with procedure review) | Every 2 years |

# Monitoring

|  |  |  |
| --- | --- | --- |
| **Standards** | **Responsibility** | **Accountability** |
| Verify the compliance with and effectiveness of the risk control measures that are in place at least every 4 years by including periodic audits in the **Audit Program** | Risk, Resilience & Assurance Officer | GM People & Business Services |
| Ensure all records required by this standard are maintained in our records management system – **CM** | Safety Field Officer | GM People & Business Services |

# Definitions

|  |  |
| --- | --- |
| **Term** | **Means** |
| HPWJ – Class A system (Hydrovac or Pressure Washer) | A unit that falls in the range of 800 and 5600 bar litres per minute |
| HPWJ – Class B (drain cleaning jetter units) | A unit that exceeds 5600 bar litres per minute |
| CM | Content Manager |
| HCB | House Connection Branch |
| HPWJ | High Pressure Water Jetting |
| PPE | Personal Protective Equipment |
| SWMS | Safe Work Method Statement |
| Task Risk Assessment (JSA) | Job Safety Analysis Procedure and eForm |

# Governance

|  |  |
| --- | --- |
| **Parent policy/standard** | Zero Harm Policy |
| Associated procedures/standards | * Task Risk Assessment (JSA) eForm * Lock Out Tag Out Procedure * Safe Work Instruction - Use of Class A Pressure Washers e.g., Spit Water * Safe Work Instruction - High Pressure Water Jetting (HPWJ) Units * Safe Work Instruction - Use of HydroVac Units * High Pressure Water Jetting Unit Pre-Start Checklist * HydroVac Unit Pre-start Checklist * Hazard Reporting Procedure * Incident Reporting and Response Procedure |
| **Legislation mandating compliance** | * Victorian Occupational Health & Safety Act 2004 * Environment Protection Act (2017), General Environmental Duty * AS 4233.1: High Pressure Water Jetting Systems; Part 1: Safe Operation and Maintenance * AS 4233.2: High Pressure Water Jetting Systems; Part 2: Construction and Performance |
| **Approval** | Executive Committee |
| **Owner** | GM People & Business Services |
| **Content enquiries** | * Safety Field Officer * Environmental Risk Compliance Officer |

# Document version history

|  |  |
| --- | --- |
| Version | Changes made to document |
| 1 | New document created as part of the new IMS Standard Framework |

1. The Executive are collectively accountable for the standard. The individual GM is the nominated sponsor who will approve any capital/operating expense requests (within the Instrument of Delegation) and any material changes to current Wannon Water work practices to meet requirements of the standard. [↑](#footnote-ref-2)
2. Where equipment is manufactured internationally – the manufacturer or supplier must be consulted for assurance that the item complies with relevant Australian Standards. [↑](#footnote-ref-3)
3. For contractors, an equivalent system (e.g., **Safe Work Procedure**, **JSA**, **SWMS**) must be of equivalent or higher standard. [↑](#footnote-ref-4)
4. Refer to Supporting Documents. [↑](#footnote-ref-5)