## **Course Outline for Candidates**

Course Title	WJA – Tube and Pipe (TP)
Brief Description	This minimum 4hrs session is aimed at:
	<ul> <li>People who clean tubes and pipes using water jetting equipment.</li> </ul>
	A personal copy of the High pressure water jetting "Blue code" is provided for recap
	refreshers or provided during the Safety awareness course, during the course and this
	document is used as a reference throughout.
	<ul> <li>People who manage and design tube and pipe cleaning tasks using water jetting equipment.</li> </ul>
	The Safety Awareness course must be completed prior to attending this course. The Safety Awareness card / certificate is valid for three years before it needs to be renewed for a further three years.
	This course provides knowledge and assists in the understanding of tube and pipe cleaning by means of assessments in: <ul> <li>Theory.</li> </ul>
	Operational skills.
	Understanding and knowledge.
	Safe use of equipment.
	Assessments are a balance of theory in a classroom environment and practical using live water jetting equipment.
	The pressure will exceed 207 bar (3,000 psi) and candidates must be able to comfortably control the jetting accessories, this includes managing reaction force through manual handling.
	The training does <b>NOT</b> cover works that involves confined space entry into chambers, tanks, wet wells, or vessels. To carry out work in these conditions, operatives must have a recognised confined space entry course.
	The WJA's aim is to minimise the hazards and risks involved in tubes and pipes.
Delivery	Classroom theory and practical assessment.
Why?	Assists in the compliance with Health & Safety at Work Act 1974 (HASWA 74).
	High pressure water jetting is very hazardous process; therefore, it is a requirement for anyone
	involved in tube and pipe cleaning using water jetting to have knowledge and understanding of the
	hazards involved in water jetting so they can operate safely.
	This includes typical hazards, Legal requirements, pre-start checklist, safety devices, competent
	teams, water jetting equipment, health concerns and typical controls and PPE.
Timings Who Should Attend	Minimum 4-hour session (subject to class size and other courses)
Who should Attend	<ul> <li>New operational candidates.</li> <li>Water jetting candidates that are refreshing their WJA card which is near its expiry date.</li> </ul>
	<ul> <li>Managers</li> </ul>
	Supervisors
	Site owners
	Permit issuers
	<ul> <li>Health and safety Managers / officers</li> </ul>
Key Features	Facilitated Group discussions.
	Question and Answer sessions
	<ul> <li>Review of accidents in the industry</li> </ul>
	• Use of personal knowledge within the training group which is facilitated by the instructor.

Content – Topics	The training workshop covers the following topics:
covered	1. Introduction to Tube and Pipe
	2. Blue code of Practice
	3. Tube bundles
	4. Jetting machines
	5. Safe systems of work
	6. Pressurising the tube
	7. Anti ejection devices
	8. Nozzle selection
	9. Types of lances
	10. Safe use of foot control valves
	11. Automatic systems
	12. Competent teams
	13. Set up procedures
	14. Examples of poor practice
	15. Accidents and injuries
	16. Preparation for practical assessment
	17. Practical assessment on cleaning tubes and pipes (working with live
	equipment)
Content -	This course will equip delegates with the tools to:
candidate	<ul> <li>Receive a copy of the WJA blue code of practice and review best practice</li> </ul>
outcomes	contained within the code via Safety awareness course or SA recap course.
	• Understand the hazards involved when using tube and pipe cleaning accessories.
	• Cleaning the entry to a tube face / pipe by utilising safe use of a jetting gun.
	<ul> <li>Understand health and safety and the hierarchy of control when applied to a</li> </ul>
	water jetting task.
	• Have knowledge of the potential injury that can be caused by a water jet /
	pressurised system failure.
	• Understand daily checks and identify hazards on equipment prior to start up.
	• Understand what makes a competent team when cleaning high pressure and ultra-
	high-pressure equipment.
	Understanding how to prevent a water jetting injury and action taken as specified
	in the blue code of practice.
	<ul> <li>Understand what we need to do to leave the area safe &amp; secure.</li> </ul>
Pre-Course	To be at least 16 years of age and employed by a company or in a structured training
Requirements	course.
	To be at least 18 years of age if unemployed or not on a structured training course.
	To be able to understand English.
	This course is for candidates who are looking to renew their cards, or new-candidates who
	want to add Surface preparation module to their card.