



## FLAME CUTTING

**RA NO**

**DATE**

<b>H.T.I Score</b>	10	Medium-Regular monitoring, Supervision
<b>Contract</b>		
<b>Persons involved in RA</b>	<b>Name</b>	<b>Signatures</b>
Foreman		
Second Foreman		
Safety Officer		
Representative		

<b>Documentation Required</b>	<b>Training Required</b>	<b>PPE and Safety Equipment Required</b>
OHS Act and Construction Regulations	General induction - all employees	Overalls
Appointment 6(1)	Toolbox talks	Safety Footwear
Appointments Welding Supervisor	First Aider	Flame proof Gloves
Appointment First Aider	Operating Flame Cutting Equipment	Flame proof apron
Competency Welder		Spats
Competency First Aider		Welding Helmet
Flame Cutting Equipment Registers		Fire Extinguisher
Appointment Vessels under Pressure Supt		

<b>Activity Steps</b>		<b>Hazards and Risks</b>	<b>Preventative Measures</b>	<b>Rating</b>
1	Pre-use check	No soap test done may lead to gas escaping, could lead to fires and explosions.	Soap test to be done by a trained and competent person. Findings to be recorded on a register. Defects to be reported to the supervisor and defects to be repaired by a trained and competent person.	11
		Oil based soap used for soap test may result in explosions.	Supervisor to ensure that soap is used which breaks down oil. Test to be done by a trained and competent person.	11
2	Storage of gas cylinders	Gas cylinders left free standing may cause serious injuries and medium property damage.	All cylinders to be stored in a secure position, cylinders to be secured upright.	11

		Cylinders stored in direct sunlight may lead to serious injuries and major property damage.	Cylinders to be stored under cover in a well ventilated gas storage area.	11
		Empty and full cylinders stored together may cause cylinders to ignite and explode.	Empty and full cylinders to be stored in separate areas identified by signs.	11
		Oxygen cylinders stored in oil and grease store may lead to serious injuries/fatalities and major property damage.	No gas cylinders to be stored near or in oil and grease stores. Cylinders to be stored in designated gas storage area.	11
		Gas cylinders stored in a closed up container may lead to pressure build up resulting in fatalities/property damage.	No gas cylinders to be stored in a closed up containers. Storage area must be well ventilated.	11
		Oxygen stored with acetylene may lead to fatalities and property damage.	Cylinders to be stored in designated areas, oxygen and acetylene separately.	11
		No fire fighting equipment may lead to fatalities and major property damage.	A minimum of two (2) 9kg dry chemical powder fire extinguishers to be placed $\pm$ 10m from the gas storage area.	11
		Fire may lead to fatalities. Major property damage major health risk and serious pollution.	All sources of ignition to be removed from the storage area. No smoking, no naked flame signs to be posted at the storage area. Fire extinguishers to serviceable and in a good working condition.	11
3	Use of flame cutting equipment.	Gas cylinders not in a trolley may lead to medical injuries and minor property damage.	Gas cylinders to be place in a trolley. Supervisor to ensure that the cylinders are fitted in a trolley and secure.	8
		No fire extinguisher fitted to the trolley may lead to injuries and property damage.	Supervisor to ensure that a 4,5 kg DCP fire extinguisher is fitted to all gas trolleys. A daily check should be done to ensure compliance. Checklist should be signed off by the supervisor.	11
		Gas cylinders lying flat on the ground	Cylinders to be placed in an upright position in a cylinder trolley and be secured.	8
		No flash back arrestors fitted may lead to fire and explosions.	Flash back arrestors to be fitted on gauges and the torch. Daily checks to be done to ensure compliance.	11

		Hose damage may result in gas leaks which may lead to an explosion.	Daily pre-check and monthly inspection to be done to ensure equipment is in good and safe order. Checklist to be signed off by the supervisor. Inspection to be done by a trained and competent person. Damaged equipment to be replaced.	11
		Damaged gauges can cause a gas leak which may lead to an ignition and explosion.	Daily pre-check and monthly inspection to be done to ensure equipment is in good and safe order. Checklist to be signed off by the supervisor. Inspection to be done by a trained and competent person. Damaged equipment to be replaced.	11
		Damaged torch may cause a flashback which may lead to an explosion	Soap test to be done daily before use. Daily pre use checks and monthly inspections to be done to ensure that the equipment is in good working order. Checklist to be signed off by the supervisor. Inspection to be done by a trained and competent person and damaged equipment to be replaced.	11
		User not making use of PPE may cause serious burns to user.	Only trained and competent person to use flame cutting equipment. Supervisor to ensure that employees are issued with the correct PPE and that they use it correctly.	8
		Fire can cause fatalities, major property damage, serious health risk and ground, water air pollution.	Hot work permit to be obtained and inspection of work area to be done before work starts. All flammable liquids and materials to be removed from the area of work.	12
		Flame cutting done at heights may lead to materials below been ignited, workers been burnt and explosions.	Area below work to be demarcated as a No Go zone. Spotter to be posted at demarcated area and warning signs to be displayed.	8