## **RISK ASSESSMENT FOR ELECTRICAL PRESSURE TESTING**

Activity:		Electrical Pr	essure Testi	ing							RA No.	ABC			
Location:		ABC									Date :	00-00	0-0000		
Equipment	to be used:													Revision Status	
Gas Dictator	r					Pipe wre	nches and p	pipe cutters			Revisi	on No.:	Revised Date:		
Dye testing Pressure gau Repair clam Epoxy putty	uges and props or sleeve	essure testires es (for tempo	ng equipme		es)					d welding i	S		JA	NA	
		Potenti	al Hazards ,	/ Condition	s considered (Tick	Box)							Persons a	at Risk	
Fall Froi	m Height			Falling	of Materials				Subcontra	actors				Public	
Elect	tricity		<	Slips	s/Tripping			20	Employee	!S	$\boxtimes$		,	Visitors	
Personal pro	otective equ	uipment (PF	PE)					Y							
$\boxtimes$	Safety	Helmet	$\boxtimes$		at <mark>ory /</mark> Beratin <mark>g</mark> Apparatus		Glo	ves			Goggles	4		Full Bod	y Safety Harness
$\boxtimes$	Safety	y Boots	$\boxtimes$		Overalls		Ma	sks		Ear Plu	gs/ Defend	ers	3	Ot	hers, if any
Mandatory	HSE require	ements (Ticl	(Вох)												
$\boxtimes$	Safety Inc	duction	$\boxtimes$	P	roper PPE	$\boxtimes$	Work I	Permit	$\boxtimes$		per Tools/ Juipment			·	e & Warning Sign in The ected area
$\boxtimes$	Tool Bo	x Talk	$\boxtimes$	Safe	Work Place	$\boxtimes$	Proper Su	pervision	$\boxtimes$	Pre-Ta	ask Briefing	s		Ot	hers, if any
Risk Level: I	1 (HIGH-Pot	ential to ca	use death o	or permane	n <mark>t in</mark> jury)   M (ME	DIUM -Po	tential to ca	ause loss tir	ne injury)	L (LOW- A	<mark>in injury t</mark> re	e <mark>atabl</mark> e	with First A	id)	
Likeliho	od (L)	:	Severity (S)		Class of risk	(L*S)				RISK M	IATRIX			Note:	
Improb	able		Negligible		High = 15	-25	LIK	5	5	10	15	20	25		nt must be addressed to
Remo	ote		Minor				ELI	4	4	8	12	16	20		e worker in charge before
Proba			Reportable		Medium = 0	07-14		3	3	6	9	12	15	starting a job.	
Occasi	onal		Serious		Low = 01-	06	НО	2	2	4	6	8	10	2. Risk assessme	nt is a continuous process
					LOW - 01-	00	OD	1	1	2	3	4	5	hence to be re	viewed depending on the
							(L)		1	2	3	4	5	activity and ris	sk involved
									SEVERITY (S)						

Sr.	Hazard			ATION		L COMMON MORALES III PRINCE OF TO THE	RE-EVALUATION			Persons responsible for
			С	L	L	implemented	С	L	L	Implementation and Supervision.
		Harm/Consequences	О	i	i		0	i	i	
			n	k	k		n	k	k	
			S	е	е		S	е	е	
			е	- 1	- 1		е	- 1	li	
			q	i	i		q	i	h	
			u	h	h		u	h	0	
			е	О	0		е	О	О	
			n	О	0		n	О	d	
			С	d	d		С	d		
			е				е			
			S				S			



1.	Slip, trip, and fall at a different level	<ul> <li>Physical Injuries: Slip, trip, and fall accidents can result in a range of physical injuries, including sprains, strains, fractures, head injuries, and more. The severity of these injuries can vary, but they can lead to pain, medical expenses, and time off work.</li> <li>Emotional and Psychological Impact</li> <li>Lost Wages</li> <li>Medical Expenses</li> <li>Reduced Quality of Life</li> <li>Decreased Job Performance: Even after returning to work, employees recovering from slip, trip, and fall injuries may experience reduced job performance due to physical limitations, pain, or psychological trauma.</li> <li>Workplace Safety Concerns: Repeated slip, trip, and fall incidents in the workplace can lead to concerns about safety and morale among employees, impacting overall productivity and job satisfaction.</li> <li>Workers' Compensation Claims</li> <li>Potential Legal Actions</li> </ul>	4	4	16	<ul> <li>Before entering high places, make sure they have the necessary collective protections to prevent falls, and if this is not the case, report it to your superior;</li> <li>Make sure the edges of shutter work, gaps, and any different levels are protected with railings, safety nets, fencing with signs or similar;</li> <li>All railings must be rigid, be at least 95 cm. in height, and be provided with an intermediate bar and skirting.</li> <li>Work over 1.8 meters high, use a harness;</li> <li>SCAFFOLDING must:         <ul> <li>Be fixed to prevent undesired movements</li> <li>Checked before use to make sure that it is in optimal state</li> <li>Have railings and skirting for heights of over 1,8 meters</li> <li>Have a separation of 30 cm at most from the facade</li> <li>Have crosses on either side</li> </ul> </li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians
						<ul> <li>Have railings of 95 cm on the working platforms, with intermediate bars and skirting;</li> <li>The workers must follow the Method Statement and the preparation induction.</li> </ul>				

2.	Slip, trip, and fall at the same Level	Physical Injuries: Slip, trip, and fall	4	3	12	- Site induction and wear PPE;  2 3 6 Project Manager/ Project  Engineer/Project Supervisor/Project
	trie same Levei	accidents can result in a range of physical injuries, including sprains, strains, fractures, head injuries, and more. The				- Whenever there is the need to Engineer/Project Supervisor/Project Safety Officer/MEP Technicians
		severity of these injuries can vary, but they can lead to pain, medical expenses				move heavy-weight parts, perform the work with two or more workers;
		they can read to pain, medical expenses				Check the stability of the materials
						before completing the work;
						– Manual handling of loads must be
						performed correctly;
						The maximum manual loading weight
						shall not exceed 25 Kg;
						The workers must follow the Method
		LICE				Statement and the preparation induction;
						– Maintain tidiness and cleanliness in the
						whole of the work area: passages clear
						and areas used for gathering materials;
						Store all materials correctly and in the
						right place.

3.	Falling objects by the collapse	Physical Injuries: Falling objects can cause severe physical injuries, including head injuries, fractures, lacerations, and internal injuries. The severity of injuries can vary depending on the size and weight of the falling object. Fatalities Emotional Trauma Medical Expenses Lost Wages Permanent Disabilities Reduced Quality of Life Workers' Compensation Claims	4	3	12	<ul> <li>Site induction</li> <li>Do not stand under suspended loads.</li> <li>Always ensure hooks with their safety latch.</li> <li>Always check the state of cables, ropes, slings, etc.</li> <li>Make sure materials are stored correctly.</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians
4.	Fall of objects by manipulation	Legal Actions Decreased Morale and Productivity  Physical Injuries: Falling objects can cause severe physical injuries, including head injuries, fractures, lacerations, and internal injuries. The severity of injuries can vary depending on the size and weight of the falling object. Fatalities Emotional Trauma Medical Expenses Lost Wages Permanent Disabilities Reduced Quality of Life Workers' Compensation Claims Legal Actions Decreased Morale and Productivity	4	3	12	<ul> <li>Always ensure hooks with their safety latch.</li> <li>Always check the state of cables, ropes, slings, etc.</li> <li>Do not gather material on the edge of shutter work.</li> <li>Do not leave tools, equipment, or materials in the working platforms of the scaffolding and/or mobile machinery.</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians
5.	Crash against stationary objects	Physical Injuries: Fatalities Emotional Trauma Medical Expenses Lost Wages Permanent Disabilities Reduced Quality of Life Workers' Compensation Claims Legal Actions Decreased Morale and Productivity	4	3	12	<ul> <li>Mobile machinery drivers must have a license</li> <li>corresponding to the machine he/she is using</li> <li>Notice any stationary object properly.</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians

6.	Shock against mobile objects	Physical Injuries: Fatalities Emotional Trauma Medical Expenses Lost Wages Permanent Disabilities Reduced Quality of Life Workers' Compensation Claims Legal Actions Decreased Morale and Productivity	4	3	12	<ul> <li>Vehicle ways will be well-defined and delimited</li> <li>Work areas will be well-lighted.</li> <li>Safety distances about mechanism working ranges will be respected.</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians
7.	Entrapment by/between objects	Physical Injuries: Fatalities Emotional Trauma Medical Expenses Lost Wages Permanent Disabilities Reduced Quality of Life Workers' Compensation Claims Legal Actions Decreased Morale and Productivity	4	3	12	<ul> <li>All the mobile elements of the machines must be protected by the manufacturer.</li> <li>Machinery maintenance works should be done with the engine cut-off.</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians
8.	Entrapment by vehicle rollover	Physical Injuries: Fatalities Emotional Trauma Medical Expenses Lost Wages Permanent Disabilities Reduced Quality of Life Workers' Compensation Claims Legal Actions Decreased Morale and Productivity	4	3	12	<ul> <li>Mobile machinery driver must have the license corresponding to the machine he/she is using</li> <li>All times respect the mobile machinery limits.</li> <li>Respect the speed limit at work.</li> </ul>	2	3	6	
9.	Run-ins or blows with vehicles	Physical Injuries: Fatalities Emotional Trauma Medical Expenses Lost Wages Permanent Disabilities Reduced Quality of Life Workers' Compensation Claims Legal Actions Decreased Morale and Productivity	4	3	12	<ul> <li>Respect all signs, particularly in the areas and routes used for vehicles to pass and those reserved for pedestrians.</li> <li>Enter the site through a defined entrance.</li> <li>Use vehicles only if you are authorized to do so and follow the instructions received for suitable handling.</li> <li>Use reflecting jackets to guarantee correct visibility.</li> <li>Check and respect all vehicle reversing acoustic signals.</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians

10.	Electrical contacts	Electric shocks can lead to muscle	ΙΛ	3	12	It is forbidden to manipulate any electrical	12	3	6	Project Manager/ Project
10.	Liectrical Contacts		"	3	12	connection box	_			Engineer/Project Supervisor/Project
		contractions, burns, cardiac arrhythmias,								Safety Officer/MEP Technicians
		and even cardiac arrest.				Only trained and qualified workers can do				
		Burn Injuries: Electrical contact can cause				electrical work.				
		burns at the point of contact, which can				All worn or peeled wires must be repaired				
		vary in severity. Electrical burns can				immediately.				
		damage skin, muscles, and internal				Any anomaly in an electrical installation				
		organs, potentially leading to				should be reported.				
		complications and long-term scarring.				<ul> <li>Do not use electrical tools with wet hands or</li> </ul>				
		Internal injuries, such as damage to the				wet gloves.				
		nervous system, muscles, and organs.				<ul> <li>If these are being carried out, these should</li> </ul>				
		Cardiac Arrest leads to cardiac arrest.				be announced and notified with their				
		Respiratory Issues lead to breathing				corresponding WP and their special safety				
		difficulties and require respiratory				measures.				
		support.								
		Psychological Trauma includes anxiety,								
		depression, and post-traumatic stress								
		disorder (PTSD), especially if they								
		witnessed a colleague's injury or fatality.								
		Long-Term Health Effects may experience								
		long-term health issues, such as chronic								
		pain, nerve damage, and cognitive								
		impairments.								
		Lost Wages and Work Disruption								
		Workers' Compensation Claims								
		Legal Consequences								
		Ecgai consequences								

11.	Thermal contacts	Burn Injuries. Pain and Suffering Medical Expenses Scarring and Disfigurement Psychological Trauma Loss of Wages Reduced Work Capacity Disability	4	3	12	<ul> <li>Use appropriate personal protection equipment.</li> <li>Do not carry flammable materials (matches, lighters) during welding operations.</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians
12.	Extreme meteorological conditions	Workers' Compensation Claims Legal Actions  Physical Health Risks Injuries and Accidents Respiratory Problems Mental Health Impact Disruption to Daily Routine Financial Impact Job Security Long-Term Health Effects Safety Concerns During Commute	4	3	12	<ul> <li>Avoid working at high wind speeds</li> <li>It is forbidden to work with energized lines on thunderstorms and periods of rain.</li> <li>To mitigate the harm and consequences of extreme meteorological conditions on employees, employers should prioritize safety measures, including:</li> <li>Weather Monitoring</li> <li>Safety Protocols</li> <li>Flexible Work Arrangements</li> <li>Emergency Response Plans</li> <li>Training and Education</li> <li>Protective Gear</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians

13.	Ergonomic and	Ergonomic Risks:	4	3	12	Shifts must be set to ensure that the worker	2	3	6	Project Manager/ Project
	psychosocial risk	Musculoskeletal Disorders (MSDs				rests.				Engineer/Project Supervisor/Project
		Repetitive Strain Injuries (RSIs				Do an annual medical examination for all				Safety Officer/MEP Technicians
		Fatigue and Discomfort				workers.				
		Increased Absenteeism				<ul> <li>Keep good interpersonal and professional</li> </ul>				
		Reduced Job Performance				relationships with the workers.				
		Psychosocial Risks:				<ul> <li>Keep high Qualitative, Environmental, and</li> </ul>				
		Stress				Security levels in the company through ISO				
		Anxiety and Depression				Certificates.				
		Burnout								
		Decreased Morale and Job Satisfaction	A							
		Conflict and Bullying								
		Increased Turnover								
		Impaired Relationships								
14.	Blows/cuts with	Physical Injuries	4	3	12	<ul> <li>Use quality tools according to the type of</li> </ul>	2	3	6	Project Manager/ Project
	objects or tools	Pain and Suffering				work to be carried out.				Engineer/Project Supervisor/Project
		Medical Treatment				<ul> <li>Properly instruct personnel on the use of</li> </ul>				Safety Officer/MEP Technicians
		Lost Wages				each type of tool.				
		Emotional and Psychological Impact				<ul> <li>Use gloves when handling sharp tools.</li> </ul>				
		Reduced Job Performance				<ul> <li>Perform regular maintenance of the tools</li> </ul>				
		Permanent Disability				(repair, sharpening, cleaning, etc.).				
		Safety Concerns				<ul> <li>Periodically check the condition of the</li> </ul>				
		Workers' Compensat <mark>ion Claims</mark>				handles, insulating coatings, etc.				
		Potential Legal Actions				<ul> <li>Store and/or transport the tools in boxes,</li> </ul>				
						tool bags, or appropriate panels, where each				
						tool has its place.				

15.	Fire/explosion	Trauma and Psychological Impact Fatalities Lost Wages and Job Disruption Medical Expenses Long-Term Health Issues Property Loss Legal and Insurance Issues Workplace Morale and Productivity				<ul> <li>It is forbidden to make fire at work</li> <li>It is forbidden to smoke at work</li> <li>Have fire extinguishers available on the site (carbon dioxide fire extinguisher and polyvalent powder);</li> <li>Learn about electrical work procedures if you perform this kind of operation;</li> <li>The workers must follow the Method Statement and the preparation induction.</li> </ul>				Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians
16.	Overexertion	Physical Injuries Musculoskeletal Disorders (MSDs Fatigue and Exhaustion Reduced Productivity Increased Absenteeism Long-Term Health Implications Psychological Stress Workers' Compensation Claims High Turnover Reduced Quality of Life	4	3	12	<ul> <li>Use manual and power tools only for their specific</li> <li>All faulty tools must be put out of use.</li> <li>Do not carry tools in your pockets, but on the specific belts for them.</li> <li>When you are not using them, leave them in places where they cannot cause accidents.</li> <li>Plan de works to be done before starting them to avoid improvisations.</li> <li>Avoid useless efforts, use mechanics tools, and request help when punctually have to move some heavy objects.</li> <li>Keep your back straight, and avoid forced postures and trunk turns.</li> <li>To lift loads, bend the knees without bending the back and lifting them by stretching the knees.</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians

fragm particl		Physical Injuries Eye Injuries Respiratory Issues Hearing Damage Burns and Chemical Exposure Psychological Distress Lost Productivity Medical Expenses Workers' Compensation Claims Decreased Quality of Life	4	3	12	<ul> <li>Site induction &amp; wear PPE;</li> <li>Respect the manufacturer's instructions for the tools and equipment.</li> <li>Replaces tools in poor condition with others that are in perfect condition and installs antiprojections elements always when it is necessary.</li> <li>Do not use compressed air to de-dust or clean clothes or other objects.</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians
18. Exposi radiati	sure to tion	Acute Radiation Sickness Chronic Health Effects Genetic Damage Radiation Burns Skin Damage Eye Damage Psychological Stress Loss of Productivity Workplace Safety Concerns	4	3	12	<ul> <li>Respect all signs indicating RADIATION;-Don't cross barriers with RADIATION signs;</li> <li>Ask the Site Manager, Supervisor, and/or SHEE officer if you doubt RADIATION signs and/or affected areas.</li> <li>To mitigate the harm and consequences of radiation exposure, employers should adhere to strict safety measures, including:</li> <li>Radiation Monitoring</li> <li>Training</li> <li>Protective Equipment</li> <li>Safety Protocols</li> <li>Regulatory Compliance</li> <li>Medical Surveillance</li> </ul>	2	3	6	Project Manager/ Project Engineer/Project Supervisor/Project Safety Officer/MEP Technicians



Assessed by:	Assessed by:											
Name:	Designation:	Date:	Signature:									
Reviewed & Approved By:												
Name:	Designation:	Date:	Signature:									