

	Risk Assessment (For Scaffolding Erection Dismantling and Modification Work)			Page 1 of 11	
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Project:	ABC				
Title of Activity:	Scaffolding Erection Dismantling and Modification Work				
Assessor:		Assessment Date:	00/00/0000	Next Review Date:	
RISK RATING MATRIX					
Probability	Consequences				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
Rare (1)	1	2	3	4	5
Possible (2)	2	4	6	8	10
Likely (3)	3	6	9	12	15
Often (4)	4	8	12	16	20
Frequent/Almost Certain (5)	5	10	15	20	25
15-25	Extreme Risk	Activity or industry should not proceed in the current form			
8-12	High Risk	Unacceptable; Activity or industry to be modified to include remedial planning and action and be subject to a detailed assessment			
4-6	Moderate Risk	Activity or industry can proceed subject to management and/or modification			
1-3	Low Risk	Acceptable without required further action. No action is required unless escalation of risk is possible			
Risk Assessment Prepared By					
Name		Designation	Signature	Date	
Reviewed and Approved By					
Name		Designation	Signature	Date	

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SR	Operation/Issue	Hazard	Risk	L	C	RR	Control Measures to Avoid or Minimise Risk	L	C	RR	Residual Risk
1.	Site preparation	- Poor communication between work parties. - Inexperience persons / lack of safety awareness - Heat stress - Noise - Vehicles Movement	- Loss of assets, personnel injury, back injury. - Bodily Injury - Hand Injury	3	3	9	- ORG. employees shall have mandatory training. - Work permit from the client, with all concurring parties' signatures approval must be obtained prior to start of work and display at site - Safety requirements stated on the work permit must be available on site and strictly followed - Toolbox talk shall be conducted to all personnel on site & documented before start of work. - Appropriate PPE shall be worn by all personnel at site. - Assigned trained dedicated Banks man for job with reflective jacket. - No water no work policy shall be followed. - Work Schedule according to heat Index - Ear protection shall be worn where required. - Noise meter will be made available at site. - Maintenance of equipment on regular basis. - Use of Approved/Trained license drivers.	1	3	3	Lifting engineer, HSE Officer, Lifting Supervisors

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							- Vehicle movements on site shall be controlled by banks man - Appropriate signage to be provided.				
2.	Transportation and shifting materials for the scaffolding by means of various vehicles such as heavy crane, trailer, trucks and pickup, etc.	- Failure of equipment /crane /Trailer/ Pickup/ Truck etc. - Road traffic accident during transportation of Tanks shell plates, pipe spools/ supports and other material. - Body part injury during loading and unloading operation - Pinch point.	- Loss of assets, personnel injury, back injury. - Bodily Injury - Hand Injury - Personnel injury, loss of assets, health impact, body injury.	3	3	9	- Conduct toolbox talk and LMRA prior to start of work at the specific location. - Ensure the condition of equipment, inspected, sticker Placed and for appropriate color code. - All rigging gear shall be certified. - Synthetic belt or nylon sling shall be used instead of steel wire rope for holding of material. - Ensure crane operators and riggers fully understand all work tasks and hazards. - Load shall be secured on the trailer bed to prevent accidental fall. - Crane operator shall have the third party, certified and applicable license. - Use proper tag line during loading /offloading material. - Access route shall be surveyed before transporting the Shell Plates, pipes & support material etc. - Barricade with appropriate sign board on the effective area. Riggers shall be experienced and third party certified. - Use leather gloves for hand protection. - Keep away body parts (hand, feet, head, etc.) from the line of fire (LOF). - Suitable length of trailer shall be arranged according to length of Shell Plates, pipe spools, supports etc.	1	3	3	Lifting engineer, HSE Officer, Lifting Supervisors

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3.	Scaffolding erection dismantling including Material Storage	• Simops • Segregation and Stacking Failure • Incorrect Manual Handling • Pinch point • Eye Injury • Fire • Slips, Trips, and Falls • Lack of knowledge by scaffolds regards correct erection and SWL, wind speeds, scaffold ties incorrect, etc. • Incorrect or no supervision at the worksite • Not up to standard. Do not conform to BS • Not inspected leading to failure. • Injury to persons through incorrect mechanical or manual handling. • Musculoskeletal damage, dropped objects, pinch points. • Lack of competence • Dropped objects	Material fall, injury, property damage, injury crane collapse, injury unhygienic condition, sickness, Loss of assets, personnel injury, back injury Bodily Injury, Hand Injury Personnel injury, health impact,	4	2	8	• Conduct 'TBT' before the start of the activity. • Prepare, develop and conduct toolbox talk based on JSA and specific job site requirements Obtain PTW, review, and communicate to all involved in the task. • Participate and communicate with area management to ensure no adverse interface impact or hazard. • Install correct warning signage and barricading for the observation by other parties • Follow recommended maximum stacking guidelines. • All scaffold materials shall be stacked and segregated safely and by type. • Stacking and storage guidelines shall be prominently signposted in easy visual display. • Shelving/racking shall be stable and appropriate; pallets when used shall be in good condition without defect. • Pipes and/or tubular components shall be adequately chocked. • All scaffold personnel shall have attended and passed project 'Manual Handling' training programs. • Weight and packaging shall be checked and evaluated before handling. • PINCH POINTS shall be identified and hands shall not be placed in the 'Line of Fire' between unsecured items or under loads being raised or landed. • Eye protection shall be worn for dust particle injury.	2	1	2	Lifting engineer, HSE Officer, Lifting Supervisors
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		• Lack of warning to other trades and notification of men working overhead. • People entering the danger zone • Dropped tools, work carried out incorrectly • Lack of experience. • The incorrect sequence of work • Incorrect Couplers used. • Lack of training in manual handling techniques. • Incorrect Couplers used. • Lack of training in manual handling techniques. • Falls through access openings placed centrally without handrails • Incorrect erection procedure • Does not meet SWL or there is a potential for the scaffold to fall over if not tied.				• Eyewash facilities shall be provided and First Aid equipment and personnel shall be available • Scaffold personnel shall be trained in the use of fire extinguishers and/or other firefighting equipment (blankets, etc.). • Emergency numbers and fire hazard signage shall be prominently displayed. • The work areas shall be maintained with good housekeeping. • Access ways and Scaffolds are clear and free of obstruction. • Access Scaffolds shall be confirmed by all personnel as green tagged before use. • All Scaffold personnel above 1.8 meters shall comply with the 100% tie-off requirement and shall wear an approved harness. • Storage areas shall be marked. • Housekeeping within lifting and movement zones shall be in good order. • All personnel shall attend and pass the project 'Work at Height' and 'harness' training. • Determine at PTW and Toolbox talk stage what type of scaffold is required (BASIC, ADVANCED, SUPPORT, DESIGN required) • A supervisor or foreman is present at the work area to oversee the worksite. • Meet all BS/EN requirements. • Are inspected before delivery to site. • All lifting equipment is inspected regularly as per site procedure.				
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		• Potential falls of end-users and scaffolders. • The likelihood scaffold will fall over at the early stages if the height to base ratio is exceeded or if ties are removed • The scaffold has a high potential to fall over Scaffold falling over causes serious injury or asset damage • No design. • No competent person. • Lack of supervision • No experience. • Use of two systems. • Use of incompatible material. • The supporting structure is inadequate. • Use of inferior materials. • Not fit for purpose. • Incorrect couplers used.				• Manual handling techniques, inspected cranes, forklifts, ancillary equipment, etc. • Materials to be stored in a safe manner • Do not stack too high to prevent collapse. • Third-party training. • Ensure all have experienced, and theoretical and practical training before commencing the scaffold work. • Ensure barricades, multi-language warning signs, warning tape, and flagman (where applicable) are in place before the work commences • Ensure Gin Wheel areas are barricaded. • Place correct warning signage 'men working overhead'. • Adequate Gin Wheel and Lifting bag signage are displayed. • A flagman was placed preventing entry to high-risk areas. • PPE shall be worn at all times. • Tools shall be of the correct type and secured with lanyards at height. • Competent scaffolders with knowledge of basic scaffolding. • Ensure the base is adequate to support the scaffold. • Joints in standards to be diagonally opposed with no more than 2 joints per bay. • Ensure correct sequence of erection and that all components meet the BS criteria • Follow the PRL procedure on scaffolds.				
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		• Lack of training in manual techniques. • Incorrect erection procedure. • The likelihood that the scaffold will fall over at an early stage. • Not fit for purpose. • Incorrect couplers used. • Lack of training in manual handling techniques. • Joints in the same bay.					• Ensure correct ladder access is placed with ladders at a 75-degree angle or 1 in 4 • Ensure ties are placed and are not removed throughout the scaffold's 'life'. • Any adaptations (removal of ties) should be undertaken by advanced scaffolders or under the direct supervision of the foreman • Competent scaffolders, Third Party Certified, with knowledge and experience of erecting scaffold towers (mobile and static) • Remove the SCAFFTAG, and bring people off and away from the scaffold. • Full design drawings and calculations are available • Competent scaffolders with knowledge of advanced scaffolding. • Ensure the existing structure is adequate to support the suspended scaffold. • Follow the TG20:2008 and JGC procedure on scaffolds. • Ensure correct fall arrest equipment is used for the particular job e.g., safety harness, inertia reel, and has been inspected and in proper working condition. • Inertia reel to have a valid test certificate and be correctly color-coded. • Follow BS EN requirement, lift to be no more than 2 m vertically. • Ensure ties are placed and are not removed throughout the scaffold's life.				
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							- Any adaptations (removal of ties) should be undertaken by advanced scaffolders or under the direct supervision of the foreman. - Communication between the scaffolding supervisor and the end-user supervisor to ensure the scaffold is fit for the purpose intended. - Ensure the correct sequence of erection and that all components meet the BS EN criteria. - Ensure sleeves are used and staggered. - Joints in different bays at each level of the scaffolding to ensure a 'sound' construction method.				
4.	Confined space entry.	- Lack of Communication - Ventilation. - Damage material - Oxygen deficiency accumulation of toxic gases - Physical hazards - Improper stacking of material - Unauthorized entrant	Electrocution & injury to personnel. Death due to suffocation/lack of oxygen. Slip & trip injury,	3	3	9	- All personnel working in confined space must have confined space training. - PRL confined space procedure shall be followed. - Hole watcher is attentive all the time during confined space activity. Lighting provided in CSE to be 24V. - Easy communication between hole watcher and supervisor is established all the time. - Ensure that passage and transport route is clear during confined space activities. Proper access/agrees should be maintained. - Gas test to be done by AGT prior to entering into the confined space. - A trained and qualified individual should outside the tank with the responsibility of ensuring the safety of authorized entrants (Fabricator, Fitter, Welder e.tc) through the	3	1	3	Lifting engineer, HSE Officer, Lifting Supervisors

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5.	Emergency Procedure / Response	- Poor Communication - Improper Access/ Egress	personnel injury, falling of personnel due to slip & trip,	3	3	9	- Educate the workforce about Emergency Procedure. - All safety sign board shall be displayed properly at site. - In case of any Emergency all work will be stopped, shut down all running equipment & Machineries and reported to Muster Point - Proper Access & Egress shall be available. - All Workforces shall know the Muster Point location. - PRL Emergency Procedure to be followed. - Emergency # 00000000 - PRL Medical # 00000000	2	2	4	Lifting engineer, HSE Officer, Lifting Supervisors
6.	Extended hour/night Works (Actual works will be the same as day work)	Inadequate lighting in and around work areas, causing shadows or poorly lit work areas that could result in unsafe acts and injuries taking place	Stress, unrest, and social life disturbances Lone working. Physical injuries	3	3	9	- Adequate lighting at work area and Access/Egress area. Emergency route to muster point to be clearly illuminated. - Proper cable management - Use clear safety glass for night work for good visibility. - Warning Lights and sign boards. - Trained Flag man for equipment movement provided with signal torch. - Close supervision required while working in night shift.	2	2	4	Lifting engineer, HSE Officer, Lifting Supervisors

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7.	House keeping	• Trips and fall • Sharp Objects • Equipment damage	Physical injuries, contamination with wastewater, chemicals and dust, unhygienic condition	3	3	9	• All waste generated will be contained and disposed of in certain waste skips. • Do now not keep materials/device in the plant place. • Use Proper Personal defensive system for dealing with waste. • All substances will be removed from the web page to a secure garage region immediately after the paintings.	2	2	4	Lifting engineer, HSE Officer, Lifting Supervisors
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