

Works Area & Project Location:		Morfa Coke Ovens - Gas Holder Demolition										Date:			
Project Description:		MCO Gas Holder Demolition					Completed By:		Jubin Johnny.						
Risk Ref:		Job Ref ID:						Structural:							
								Pre-Engineering:							
								Works Area:							
								Contractor:							
STAGE 1												STAGE 2		STAGE 3	
TASK OR ACTIVITY		IDENTIFY THE HAZARDS		WHO COULD BE HARMED?		Severity of Consequence (1-5) x Likelihood (1-5) = Risk Factor				ON SITE REVIEW		REVIEW & ISSUE			
						S of C (1 - 5)		Likelihood (1 - 5)		S of C (1 - 5)		New Likelihood (1 - 5)			
						Risk Factor				New Risk Factor					
						CONTROLS TO BE IN PLACE									
1	Access & Egress - Driving	Vehicle movements. Struck by other vehicles. Struck by plant / equipment / material.		Contractor Visitor Auditor TATA Personnel.		3	3	9	- Follow Highway Code rules at all times. - Vehicles to have current insurance, MOT, tax etc. - Current TSUK vehicle pass to be on display. - Licensed and authorised drivers. - Be aware of other traffic and plant movements. - Observe onsite driving policy and speed limits (20mph). - Do not run red lights or barriers. - Seat belts to be worn. - Mobile phones not to be used, including hands-free. - Park vehicles in designated areas. - Never leave unattended vehicles running. - Remain vigilant at all times.		3	2	6		
2	Access & Egress - Walking	Uneven surfaces. Slips / trips / falls. Struck by plant / equipment / material.		Contractor Visitor Auditor TATA Personnel.		2	5	10	- Fully assess the area beforehand. - Use authorised routes / roads / walkways only. - Be aware of uneven / wet / slippery surfaces. - Be aware of others in the area. - Be aware of traffic / plant / equipment. - Maintain high standard of housekeeping at all times. - Remain vigilant at all times.		2	1	2		
3	Adverse Weather - Cold	Cold. Ice. Hail. Snow		Contractor Visitor Auditor TATA Personnel.		2	5	10	- Check weather reports. - Discuss with TATA Engineers. - If work ongoing, ensure all is made safe and / or watertight before taking breaks. - If visibility or audibility is badly impaired then stop work. - Maintain three points of contact wherever possible. - Protect uncovered areas of body e.g. hands, face. - Take regular breaks. - Appropriate PPE.		2	2	4		
4	Adverse Weather - Heat	Warm weather. Sunshine. Heatstroke. Sunburn. Dehydration.		Contractor Visitor Auditor TATA Personnel.		2	5	10	- Check weather reports. - Discuss with TATA Engineers. - Sun Cream or UV protection to be applied throughout day. - Avoid working in direct sunlight wherever possible. - Drinking water to be available – Re-hydrate as required. - Take regular breaks. - Appropriate PPE.		2	1	2		
5	Adverse Weather - Wind & Storms	High Winds. Storms. Thunder & Lightning.		Contractor Visitor Auditor TATA Personnel.		2	5	10	- Check weather reports. - Discuss with TATA Engineers. - Take anemometer readings and stop work if wind is too high, especially if working at height. - In event of thunderstorm stop work if working with steel, at height, on roof etc. - If work ongoing, ensure all is made safe and / or watertight before taking breaks. - Maintain three points of contact wherever possible. - If visibility or audibility is badly impaired then stop work. - Appropriate PPE. - Helmet chin straps to be worn.		5	2	10		

6	Asbestos - Asbestos Containing Material (ACM's)	Inhalation of asbestos fibres. Contamination of clothes / hair / equipment.	Contractor Visitor Auditor TATA Personnel.	5	4	20	• Refer to and comply with Control of Asbestos Regulations at all times. • Remain vigilant at all times. • If suspicious material discovered – STOP, vacate area and report to supervisor / Project Manager. • Never knowingly disturb potential / known ACM. • Consult Asbestos Register, • Engage a competent ACM watching brief • Consult Works Area Asbestos Coordinator.	5	2	10	
7	Asbestos - Identification	• Air pollution. • Asbestos related disease. • Contamination of area.	Contractor Visitor Auditor TATA Personnel.	5	4	20	• Work carried out by accredited / approved asbestos personnel e.g. ACS PHYSICAL RISK CONTROL. • Restrict access to area. • Barriers and warning signs. • Control limits to be specified. • Air monitoring. • Appropriate PPE. • Correct authorisation to take samples offsite	5	2	10	
8	Asbestos - Removal	• Air pollution. • Asbestos related disease. • Contamination of area.	Contractor Visitor Auditor TATA Personnel.	4	3	12	• Has work been identified as licensed / non-licensed / notifiable non-licensed? • Licensable work to be notified using ASB5. • Work carried out by accredited / approved asbestos personnel. • Restrict access to area. • Barriers and warning signs. • Decontamination Unit (DCU) in place and signed off by Central Safety team. • Enclosures with air / bag locks. • Fine-mist water spray with surfactant. • Designated access / egress routes. • Control limits to be specified. • Air monitoring. • Appropriate PPE. • Correct tools and equipment. • Contaminated waste to be correctly held and disposed of. • Four-stage clearance.	4	1	4	
9	CDM	• Unauthorised access to CDM site. • Fencing collapsing, striking plant or people. • Poor information recording. • Poor H&S management. • Non-compliance with CDM regulations	Contractor Visitor Auditor TATA Personnel.	4	3	12	• Refer to and comply with Construction (Design and Management 2015) Regulations at all times. • Ensure that a Project Specific Risk Assessment (PSRA) has been carried out and cascaded to all stakeholders. • Ensure that a project specific Method Statement has been completed and received by all working parties. • Ensure all personnel and visitors have received project specific CDM induction prior to access. • All members of each working party to individually sign in every time they enter the CDM site and individually sign out every time they leave the CDM site. • Clear / unambiguous demarcation, segregation and signage of the CDM site (HERAS fencing preferred) allowing no possibility of accidental access. • Regular and documented checks of site perimeter fencing. • Ensure fencing is suitably secured to withstand inclement weather and high winds. • Fencing ballast, kentledge and bracing to be clearly visible and not creating a tripping hazard. • Category 0 Temporary Works (usually required for HERAS fencing) to have suitable manufacturer's design, data sheet, drawings etc. or a suitably competent designer's / design readily available. • Ensure the F10 notification is up to date and is visible at all site access locations.	4	1	4	OBRA study to be taken of welfare facilities before their used.

10	Chemicals & Solvents	• Cross contamination. • Chemical reaction. • Uncontrolled environmental release. • Inhalation / absorption / ingestion / injection of a hazardous and / or flammable substance. • Eye damage / irritation / inflammation / blindness. • Irritation. • Skin burns / blistering / ulcers. • Skin disease. • Respiratory damage / irritation / inflammation / infection. • Asphyxiation / fumes. • Explosion / fire / burns. • Loss of consciousness. • Severe injury. • Fatality.	Contractor Visitor Auditor TATA Personnel.	5	3	12	• Refer to and comply with chemical related legislation at all times. • All COSHH considerations apply – See below. • COSHH data sheets to be readily available and all personnel to be made aware of the substances being used and inherent risks. • Substances to be stored properly in line with the manufacturer's instructions. • Drip trays / bunds to be used where necessary and spill kits to be kept nearby to control any spillage. • Store substances safely and do not leave tins / containers open when unattended. • Store all flammable items away from ignition sources. • Read and make sure you understand and adhere to COSHH data sheet and risk assessments for all products in use, ensuring to follow the recommendations included. • Use only in well-ventilated areas. • Use dedicated vacuum / LEV / extraction unit wherever possible. • Refer to Works Area risk assessment – This should indicate the chemicals present in the workplace / area, the activities involving contact and the ways in which personnel could be at harm. • Ensure SWP's are being adhered to at all times. • Works Area to remove all traces of chemicals and area to be thoroughly washed clean prior to work starting • If health / wellbeing is impaired in any way – Stop immediately and re-evaluate. • Operatives to use barrier creams and wear necessary PPE / RPE to prevent illness, including FFP3 disposable masks, tight-fitting safety eyewear, chemical resistant boots, gloves and coveralls etc. • In extreme cases, consider Breathing Apparatus. • Ensure emergency shower locations are known to all members of working party / parties and check that showers are fully functional. • Eyewash stations and mirrors to be readily available and known to all members of each working party. Emergency rinsing solution to be suitable for counteracting the effects of chemicals used. • No exposed skin – Long sleeves and gloves to be worn to avoid skin contact. • Practice good personal hygiene – Wash hands before consuming food / drink, smoking, going to the toilet etc. • Food, drink, cigarettes etc. must be kept away from the working area to avoid contamination. • Wash and sanitise hands regularly. • Avoid hand to mouth / eye / etc. contact. • Ensure any cuts, abrasions or breaks in the skin are cleaned, treated and covered properly. • Carry out regular health checks on personnel. • Ensure materials are disposed of as per the recommendations made by the manufacturer. • Only competent personnel to transport hazardous substances. • Appropriate PPE. • No lone working. • Two-way radio with direct communication to colleagues / supervisor / Works Area. • Emergency evacuation procedures, including emergency exits, Muster Points and Ambulance Points to be made available / known. • Maintain high standard of housekeeping at all times.	5	1	5
11	Collapse of Structure	• Overturning / collapse • Instability of Structures • Failure of Structures • Crushing Injuries / trapping • Falling Objects • Damage to Plant and / or Equipment • Falling from Height • Serious Injury • Fatality	Contractor Visitor Auditor TATA Personnel.	5	4	20	• All Temporary Works considerations apply • Red (Exclusion zone), Amber (Restricted zone) and Green (Safe zone) to be established and clearly communicated to all personnel. • Robust exclusion zones to be implemented beneath / adjacent to area of concern and to be maintained at all times. • Appropriate fencing (HERAS) and signage to be located around exclusion zones. • Strictly no personnel to access immediate drop zone and specific Risk Assessment to be drafted for personnel access into predicted debris areas, buffer area etc. • Job specific rescue plan to be completed before work commences on collapsed structure. • Specialist Rope Access technicians to be consulted / used if access to collapsed areas is necessary. • Demolition sequence to be established for any dismantling works.	5	1	5

12	Control of Substances Hazardous to Health (COSHH)	• Explosion / fire / burns. • Skin disease. • Respiratory infection. • Damage to eyesight. • Serious injury. • Fatality.	Contractor Visitor Auditor TATA Personnel.	5	4	20	• Refer to and comply with Control of Substances Hazardous to Health Regulations at all times. • Conduct COSHH risk assessment. • COSHH data sheets to be readily available and all personnel to be made aware of the substances being used and inherent risks. • Substances to be stored properly in line with the manufacturer's instructions. • Drip trays / bunds to be used where necessary and spill kits to be kept nearby to control any spillage. • Store substances safely and do not leave tins / containers open when unattended. • Store all flammable items away from ignition sources. • Read and make sure you understand and adhere to COSHH data sheet and risk assessments for all products in use, ensuring to follow the recommendations included. • Use only in well-ventilated areas. • Operatives to use barrier creams, cover skin and wear the appropriate PPE and RPE. • Practice good personal hygiene – Wash hands before consuming food / drink, smoking, going to the toilet etc. • Wash and sanitise hands regularly. • Avoid hand to mouth / eye / etc. contact. • Ensure any cuts, abrasions or breaks in the skin are cleaned, treated and covered properly. • Ensure that eye wash station (with mirror), first aid kit and burns kit is readily accessible. • Ensure emergency shower locations are known to all members of working party / parties and check that showers are fully functional. • Use dedicated vacuum / LEV / extraction unit wherever possible. • Carry out regular health checks on personnel. • Ensure materials are disposed of as per the recommendations made by the manufacturer. • Only competent personnel to transport hazardous substances. • Appropriate PPE. • Suitable safety eyewear and gloves to be worn.	5	1	5
13	Hazardous waste, COG and grease products (weight TBC), pyrophoric waste content.	Contact with Skin Reaction of deposits with air - Fire and toxic fumes. Incorrect disposal of products - contamination of land. Collapse of piston into the area below - Serious injury to working parties present.	Contractor Visitor Auditor TATA Personnel.	3	3	9	Removal of waste to be carried out using long arm reach machinery, removal from site in transportable sealed units. Disposal to be carried out using licenced waste disposal company, approved by NRW. Waste transfer documentation to be utilised to record disposal. Removal of products from under the piston to take place using long arm reach machinery.	3	2	6
14	Loss of containment COG main - Toxic / flammable N2 main - High pressure, live service water mains - Isolated breathing air main - HP, live compressed air main - HP live.	Live pipework damaged during demolition process. Burns Toxic release HP release Asphyxiation Serious injury Fatality	Contractor Visitor Auditor TATA Personnel.	5	3	15	All mains are to be removed from the gas holder compound area prior to demolition, and will be positively isolated outside compound in line with HG253. The only service live within the exclusion zone will be fire hydrant water which will be isolated within the compound. Dedicated isolation document to be signed.	5	2	10
15	Electrical hazard - Live power supplies to buildings, gas holder and lift.	Damage to electrical equipment Damage to switches Electrocution Serious injury Fatality	Contractor Visitor Auditor TATA Personnel.	5	3	15	All electrical supplies within the area prior to demolition. Trials to be carried out. Dedicated isolation documents to be signed.	5	2	10
16	Loss of electrical / instrumentation cables, telephone wires located in the ground.	Damage occurring the electrical cables causing disruption in other works areas, potentially causing injuries elsewhere.	Contractor Visitor Auditor TATA Personnel.	4	3	12	All services to be identified prior to demolition works. Alternative supplies to be turned on to cater for failure of primary supplies. Demolition to be controlled fall away from identified cable areas.	4	2	8

17	Loss of signals to plant network, fibre network live and located within adjacent buildings.	Fibre optic damage causing loss of signal on site.	Contractor Visitor Auditor TATA Personnel.	3	3	9	Fibre cubicle to be identified and buried prior to demolition process. Dedicated isolation documents to be signed.	3	2	6	
18	Ejection of asbestos fibres during demolition process.	Contamination of extended area. Serious injury Fatality	Contractor Visitor Auditor TATA Personnel.	5	3	15	Asbestos survey to be carried out on the nearby conveyors and removal to be carried out if deemed necessary by a competent authority,	5	1	5	
19	Trespassers.	Serious injury Fatality	Contractor Visitor Auditor TATA Personnel.	5	4	20	The site will be controlled under CDM regulations, fencing to be in place with appropriate signage and lockable gates to ensure security of the area.	5	2	10	
20	Working at height.	Fall from height Serious injury Fatality	Contractor Visitor Auditor TATA Personnel.	5	4	20	•Avoid if possible. •Assess the risks. •where work at height cannot be easily avoided, prevent falls using either an existing place of work that is already safe or the right type of equipment. •where the risk cannot be eliminated, minimise the distance and consequences of a fall by using the right type of equipment •Collective protection is equipment that does not require the person working at height to act for it to be effective. Examples are: •permanent or temporary guardrails, safety netting, •scissor lifts, tower scaffolds •do as much work as possible from the ground •ensure workers can get safely to and from where they work at height •ensure equipment is suitable, stable and strong enough for the job, maintained and checked regularly •take precautions when working on or near fragile surfaces •provide protection from falling objects •consider emergency evacuation and rescue procedures	5	2	10	
21	Falling items	Serious injury Fatality	Contractor Visitor Auditor TATA Personnel.	5	3	15	- Tool harnesses to be worn by the working party. - Materials to be stored safely and secured correctly. - All walkways / scaffold to have kickboards in place to prevent small items falling.	5	1	5	
22	Hot works	Burns, Serious injury, Fatality.	Contractor Visitor Auditor TATA Personnel.	5	4	20	•Ensure hot work permit is in place and adhered to •Always check area for flammable and combustible materials / vulnerable fixed plant. - Remove / cover with fire blanket and scaffold deck before undertaking any burning activities. Ensure that where necessary, sparks from welding operations are contained by use of fire resistant blankets. Dedicated fire watch required and suitable fire extinguisher to be readily accessible	5	2	10	

23	Process Gases	•Asphyxiation •Overcome by fumes (Death) •Explosion/fires •Irritations.	Contractor Visitor Auditor TATA Personnel.	5	5	•All members of working party to have completed gas awareness training. •Personal gas monitors to be worn by every member of the working party. Clip monitor in the breathing zone and outside of clothing, monitors must be in calibration in good condition, charged and switched on. •Inspect gas monitor to ensure it is in a good state of repair – filters, body, screen, siren port, clip and battery level. Only switch gas monitor on in a clean air environment away from any gas hazards and confirm the correct settings are being shown before entering a gas hazard area. •Evacuate to fresh air should your gas monitor alarm sound and head to the nearest gas safe haven on site.	5	1	5		
24	Working Platforms.	Serious injury Fatality	Contractor Visitor Auditor TATA Personnel.	5	5	•Inspect platform/walkway for obvious signs of damage/deterioration and report any defects immediately. •Housekeeping to maintained for the duration of the task and walkways to be kept clear. •Use recognised access points only. Do not work, climb of stretch outside of the working platform perimeter under any circumstances.	5	2	10		
25	Mobile Plant.	•Crushing •Entrapment •Lacerations •Major trauma	Contractor Visitor Auditor TATA Personnel.	5	4	•Beware of mobile plant and traffic. •Ensure traffic management plan is in place and has been communicated to all stake holders. •Heavy plant has the right of way. •Only use designated walkways/crossing points. •High visibility clothing must be worn.	5		5		
26	Energy.	•Burns. •Lacerations. •Contusions. •Crushing Injuries.	Contractor Visitor Auditor TATA Personnel.	5	4	•Identify machines that may have stored energy. •Before operating a machine that uses hydraulic or water pressure, examine the hoses and fittings for wear. •check for leaks. •Ensure correct isolations are in place before operating/ working near machinery.	5	1	5		
27	Emergency Preparedness.	•Injury to Personnel. •Entrapment.	Contractor Visitor Auditor TATA Personnel.	5	4	•Details of emergency plans are included in staff induction processes. •Risk Assessment •A list of emergency contacts is available to all staff. •Emergency evacuation procedures, including a choice of emergency exits in place. •Emergency exits clearly marked and unobstructed. •An appointed person to make decisions and take charge in an emergency (and a deputy). •An ability to communicate with others and stay updated in a crisis. •Trained first-aiders who might be able to assist any injured persons.	5	1	5		
28	Vermin.	•Exposure / inhalation of droppings. •Attack. •Bacterial infection such as Campylobacter, E.coli, Salmonella, Tetanus, Tularemia. •Viral infection such as Lymphocytic Choriomeningitis, Hantavirus. •Parasitic infection such as Roundworms. •General infection such as Cryptococcosis, Hepatitis, Histoplasmosis, Leptospirosis, Psittacosis.	Contractor Visitor Auditor TATA Personnel.	5	3	•Avoid contact with all droppings and dead animals. •RPE to be worn to protect against inhalation. •Long sleeves and gloves to be worn to avoid skin contact. •Wash and sanitise hands regularly. •Wash hands before consuming food / drink. •Nesting birds can be very protective of nest / area. •Work in known nesting areas may need to be deferred to outside of breeding season i.e. March to August. •Clean away and suitably dispose of all food and drink. •Discuss pest control with TATA Engineers.	5	1	5		
29	Storage – Elevated structures or Roof.	Overloading of structure / roof.	Contractor Visitor Auditor TATA Personnel.	5	5	•Adhere to Temporary Works designs at all times. •Materials / equipment to be fully secured when not in use. •Do not block doorways, walkways etc.	5	1	5		
30	Plant & Traffic.	•Personal injury. •Road traffic accident. •Crushing. •Entrapment. •Death.	Contractor Visitor Auditor TATA Personnel.	5	4	•Follow Highway Code rules at all times. •Be aware of all road users. •Beware of heavy plant movement on roads. •Be aware of rail movements / crossings – Do not run red lights or barriers. •Only use designated walkways, paths and crossings.	5	1	5		

31	Personnel on site.	•Unauthorised access. •Contact with processes. •Injury.	Contractor Visitor Auditor TATA Personnel.	5	4	20	•Minimum training as specified in Cream Book i.e. CCNSG, SSSTS, SMSTS, NEBOSH etc. •Local Area inductions, including 'Stop-specific' inductions. •CDM project inductions. •Are persons trained and competent to be present. •No lone working. •No persons under 18 years of age.	5	1	5		
32	Permits to Work.	•Unauthorised working. •Exposure to process / live services.	Contractor Visitor Auditor TATA Personnel.	5	5	25	•Permit to Work e.g. Pre Briefing Sheet (PBS), CAT1, CAT2, CAT3 etc. required. •Certificates and / or additional permits e.g. COI, EOP, Hot Work, HV, LV, Roof Permit etc. required. •Local Area inductions, including 'Stop-specific' inductions. •CDM project inductions.	5	1	5		
33	Noise.	•Hearing damage. •Deafness. •Reduced awareness of surrounding hazards.	Contractor Visitor Auditor TATA Personnel.	5	4	20	•Suitable hearing protection e.g. ear plugs or ear defenders to be worn for tasks that result in elevated noise levels i.e. over 80dB. •Remain vigilant in noisy environments. •Power tool operators to give warning to others before switching on.	5	2	10		
34	Mobile Phones.	•Lack of concentration. •Slips / trips / falls. •Struck by plant / equipment	Contractor Visitor Auditor TATA Personnel.	5	4	20	•Mobile phones not to be used unless in a designated area, or in the event of emergency. •Mobile phones to be kept safe in pockets unless being used as above. •Mobile phones must not be used when operating vehicles, plant, equipment etc. or undertaking Safety person duties. •Use for taking photographs or filming is forbidden except with prior written permission from the Works Protection department, senior management or where there is a specific recognised job requirement.	5	1	5		
35	Manual Handling.	•Musculoskeletal injury. •Strains / sprains. •Trapping / crushing injury. •Broken bones. •Cuts / abrasions. •Poor lifting technique.	Contractor Visitor Auditor TATA Personnel.	5	4	20	•Avoid manual handling wherever possible. •Use mechanical aids e.g. cranes, telehandlers, hoists, trolleys, pallet trucks, sack trucks wherever possible. •Be aware of limitations – Consider Task, Individual, Load, Environment (TILE) guidelines and personal limitations. •Assess each load with dynamic assessment and POWRA to be conducted for each lift. •Ensure that designated lifting route is checked and kept free of all obstructions, slip / trip hazards. •Wear suitable hand protection and safety footwear. •Where manual handling is unavoidable, maintain good form and best practices when lifting. •Share loads where practical. •Maintain full concentration and spatial awareness.	5	1	5		
36	Ignition Sources – Cigarettes, E-Cigarettes, Lighters.	•Explosion. •Fire. •Ingestion / inhalation of hazardous substance.	Contractor Visitor Auditor TATA Personnel.	5	5	25	•Smoking to comply with TATA policy. •Smoking only permitted in designated areas. •E-Cigarettes, lighters, matches etc. to be stored away from work area and any other flammable substance. •Wash and sanitise hands regularly. •Wash hands before consuming food / drink.	5	1	5		

37	Housekeeping.	•Slips, trips & falls. •Objects falling from height. •Low headroom or projections.	Contractor Visitor Auditor TATA Personnel.	5	4	20	•Check and clear the working area before starting work. •Check area regularly and remove all waste, surplus material etc. •Safely route all cables, hoses, air lines etc. •Ensure no materials, equipment, tools etc. are left in walkways. •Ensure that all trip hazards, projections, obstacles etc. are identified and suitably highlighted to ensure awareness by all persons in the area. •Stack and store materials correctly (Temporary Works?). •Safety Nets (if used) to be emptied / cleaned to avoid build-up of dust / debris. •Check and clear the working area after completing work. •Maintain good housekeeping standard at all times.	5	1	5		
38	Hot Work.	•Burns. •Smoke inhalation. •Damage / loss to plant.	Contractor Visitor Auditor TATA Personnel.	5	5	20	•Can hot work be relocated to a designated hot work area? •Dedicated Hot Work Risk Assessment to be conducted by authorised Works Area representative. •Hot Work permit to be in place prior to starting work. •Isolation / Manual Override of automatic fire detection / protection system. •Identify and communicate escape routes. •Observe and comply with all controls. •Trained Fire-Watcher(s) to be present throughout, at all levels within 11m of hot work and to stay in place for a minimum of 1-hr after hot work has completed. •Check area prior to starting and complete dedicated Fire-Watcher checklist. •Remove all flammable and combustible materials. •Damp down area prior to starting work. •Cover equipment, materials with fire blanket. •Dedicated Hot Work Fire Extinguishers to be provided by Works Area. •Suitable / appropriate fire extinguishers to be in place.	5	2	10		
39	Hot Air Work – Burner & Welding Gun	•Asphyxiation / fumes. •Explosion / fire / burns.	Contractor Visitor Auditor TATA Personnel.	5	5	20	•All Hot Work considerations apply – See below. •Only trained and competent personnel to use. •Only use in well ventilated areas. •Check equipment, hoses, cables, plugs, switches etc. for damage prior to using. •Tuck in all jewellery, loose clothing and tie back long hair. •Point nozzles away from persons at all times. •Switch off when finished and leave to cool down. •Equipment may remain hot after use. •Appropriate PPE.	5	1	5		
40	Head Height Obstructions / Projections.	•Eye injury. •Head injury.	Contractor Visitor Auditor TATA Personnel.	5	4	20	•Be aware of low level obstructions e.g. platforms, stairs, services, scaffold etc. •Safety glasses. •Safety helmet with chin strap. •All obstructions / projections to be suitably highlighted / accentuated e.g. painted hi-viz / reflective, warning tape, wrapped with marking tape, labels, warning signs / notices etc. •Warning signs to be suitably located.	5	1	5		
41	Hand Tools.	•Hand injuries. •Eye injuries. •Slips, trips and falls. •Falling tools. •Vibration.	Contractor Visitor Auditor TATA Personnel.	5	4	20	•Tools to be checked pre-use to ensure fit for purpose and environment – Bin any tools not deemed safe to use. •Tools to be fitted with hand guards, finger savers etc. wherever possible. •Keep hand and fingers free from impact / pinch points. •Tools to be kept clean and free from grease, dirt, moisture etc. •Tools to be kept in safe location e.g. tool bag, bucket etc. when not in use. •Tool lanyards to be fitted to tools used within 3m of open or unguarded edges. •Vibration to be monitored and HAVS records kept as required. •Wear suitable hand and face protection.	5	1	5		
43	Gas Cylinders.	•Asphyxiation / fumes. •Explosion / fire / burns.	Contractor Visitor Auditor TATA Personnel.	5	5	20	•Cylinders to be stored / secured upright. •Never store cylinders lying down / flat. •Close valves when not in use. •Flashback Arrestor to be fitted to all cylinder gauges. •Trolleys required to move cylinders – Do not roll flat. •Certified lifting cages. •Cylinders to be stored in well-ventilated areas and away from flammable materials, heat sources etc. •Only enough cylinders for the task to be kept on site. •Connections to be checked daily. •Suitable fire extinguishers to be available at all times.	5	2	10		

44	Electrical Equipment / Tools.	•Electric shock. •Burns. •Live equipment. •Fire. •Explosion.	Contractor Visitor Auditor TATA Personnel.	5	4	20	•All tools, extension leads etc. to be 110v. •Tools, extension leads etc. to be Portable Appliance Tested (PAT) within last 12-months maximum and be tagged with unique serial / identification number denoting last test date. •Tools and equipment to be checked pre-use to ensure fit for purpose and environment – Quarantine any equipment not deemed safe to use or out of compliance. •Safely route all cables to eliminate trapping, pinching, trip hazards etc. •Treat all cables as "live". •Be aware that cables, extension leads, and especially coiled leads may become hot during use.	5	1	5		
45	Electrical.	•Electric shock. •Burns. •Live equipment. •Fire.	Contractor Visitor Auditor TATA Personnel.	5	5	20	•Refer to HSG85 "Electricity at work: Safe working practices". •CDM Project Specific Risk Assessment to be carried out as part of Pre-Construction and Construction Phase Plan development. •Can services be fully disconnected or moved / re-routed to another area? •Check for and identify all above ground electrical services (LV & HV) in the area, in particular behind steel, cladding, in voids etc. - NOTE: Works Area Electrical Representative to assist. •Site Clearance required to identify all underground services. •Identify all necessary isolations to allow safe working e.g. LV, services to be protected by suitable physical barriers e.g. enclosure, steel members / plates, scaffold, screens etc. •Known services to be suitably highlighted / accentuated e.g. painted hi-viz / reflective, warning tape, wrapped with marking tape, labels, warning signs / notices etc. •Carry out suitable POWRA and Lift Plan (if applicable) when lifting material over / adjacent to cables. •Method Statement to identify all electrical services in the area and how to safely work around them. •Safely route all cables to eliminate trapping, pinching, trip hazards etc. •All members of the working party / parties to be made aware of all services in the area. •Treat all cables as "live". •If in any doubt about electrical services, stop work immediately and consult with the Works Area Electrical Representative. •All tools to be 110v.HV, COI, EOP, LOA etc.. - NOTE: Works Area Electrical Representative to assist. •Confirm whether feed or equipment is isolated. •Confirm that circuit breaker is installed.	5	1	5		
46	Dust and Fine Particles.	•Airborne dust in area. •Eye damage / irritation. •Inhalation.	Contractor Visitor Auditor TATA Personnel.	5	3	15	•Suitable PPE to be worn with tight fitting safety eyewear and minimum P3 dust mask. •Eyewash station and mirror to be readily available. •Maintain good housekeeping. •Safety net installers to wear full-face mask with integrated filter cartridges. •Consider Breathing Apparatus in extreme cases.	5	1	5		
47	Dangerous Atmospheres.	- Asphyxiation / fumes. •Explosion / fire / burns.	Contractor Visitor Auditor TATA Personnel.	5	5	20	•Contact Occupational Hygiene for advice and guidance. •Gas Awareness training. •Working / calibrated gas monitor (minimum 3-in-1) to be switched on and worn near to face / breathing zone. •In event of gas monitor siren activating; immediately move away from area to fresh air area. •In event of Site Gas Alarm activating; immediately head to nearest / designated Gas Safe Haven. •If breathing apparatus to be used :- Breathing Apparatus medical required (within 1-yr). •Face-fit required (within 2-yrs). •No smoking (including e-cigarettes) unless in a designated smoking area. •Stay on green / designated walkways at all times. •If exposed to gas and / or feeling unwell, seek medical assistance.	5	2	10		

48	Cranes – Mobile.	•Overturning of crane. •Falling / release / dropping of load. •Struck by falling objects. •Crushing / trapping. •Striking of live services. •Damage to equipment.	Contractor Visitor Auditor TATA Personnel.	5	5	•All lifting operations to be planned so they are carried out safely with foreseeable risks taken into account. •Temporary Works required for all mobile cranes and must be signed by responsible Temporary Works Coordinator prior to use. •Site Clearance required. •Crane to be sited on firm and level ground. •PICOLO to control all lifting operations. •Refer to crane manufacturer's charts / recommendations for maximum wind speed operations. - NOTE: Generally 12-13 m/s or 28-30mph for crane and 7m/s or 16-17mph for man basket. •Lift Plan to be carried out by competent person and must be in place prior to starting. •Lift Plan must consider all services, scaffold, equipment etc. in the area or on flight path. •Automatic Safe Load Indicator (ASLI) to be used. •Slew restrictor to be used. •Suitable exclusion zones to be in place and secured. •All slinging and rigging activities to be performed by trained and competent persons only. •Guide ropes, tag lines, pull / push sticks etc. to be used at all times – Do not touch load with hands. •Do not enter crane operating area – To be barriered off •Do not walk under suspended loads. •Evacuate all buildings / areas under suspended loads. •Testing of crane and all associated equipment, lifting devices etc. to be strictly in accordance with manufacturer's recommendations, LOLER Regulations etc. •Test Certificates for crane, lifting equipment, man baskets etc. to be presented on request. •Construction Plant Competence Scheme (CPCS) trained operators only. •Safety helmets to have chin straps. •Radio comms and approved hand signals to be used. •Road closure or traffic management.	5	1	5	
49	Forklift Trucks & Telehandlers	• Overturning of Forklift / Telehandler. • Damage to equipment. • Striking of live services. • Falling / release / dropping of load. • Struck by falling objects. • Crushing injuries / trapping. • Falling objects. • Falling from height. • Serious injury. • Fatality	TATA Personnel, Contractors, Pedestrians, Auditors	4	4	• Refer to and comply with HSG136 "Workplace transport safety" and L117 "Rider operated lift trucks" at all times • All lifting operations to be planned so they are carried out safely with all foreseeable risks taken into account. • Temporary Works required for some activities and must be checked and signed by responsible Temporary Works Coordinator prior to use. • Site Clearance required. • Ground Bearing Tests (for soil or made-up ground) or design check (for concrete slab or road) by a suitably qualified Design Engineer to be carried out to determine the ultimate bearing capacity. • Forklift / Telehandler to be sited / operated on firm and level ground. Unfavourable and / or adverse localised ground conditions such as drains, gulleys, manholes, trenches, uncompacted backfill / ground etc. can all lead to overturning. All temporary covers / plates must be verified and be strong enough to withstand the applied pressure. • Avoid rough terrain when driving forklifts / telehandlers. Consider remediation of rough ground first if / as required. • PICOLO to control all lifting operations. • Refer to equipment manufacturer's charts / recommendations for maximum wind speed operations. • Lift Plan to be carried out by competent person and must be in place prior to starting. • Lift Plan must consider all services, scaffold, equipment etc. in the area or on flight path. • Lift Plan must consider weight, centre of gravity, shape etc. and verify against loadbearing capacity and ability of forklift / telehandler. • Do not sling directly off forks – Only recognised and accredited lifting devices to be used for non-palletised loads. • All relevant isolations to be in place to stop additional hazards. • Suitable exclusion zones to be in place and secured. • All slinging and rigging activities to be performed by trained and competent persons only. • Guide ropes, tag lines, pull / push sticks etc. to be used at where applicable– Do not touch load with hands. • Do not enter plant operating area – To be barriered off. • Do not walk under suspended loads.	4	2	6	

							• Evacuate all buildings / areas under suspended loads. • Testing of plant and all associated equipment, lifting devices etc. to be strictly in accordance with manufacturer's recommendations, LOLER Regulations etc. • Test Certificates for forklift / telehandler, lifting equipment etc. to be presented on request. • Safety helmets to have chin straps. • Radio comms and approved hand signals to be used. • Road closure or traffic management. • Maintain 3m rule when near all forklifts / telehandlers and ensure that driver acknowledges you, switches off engine and authorises you to pass safely. • A trained and competent banksman is to be in place at all times. • Licensed and authorised drivers. • Be aware of other traffic and plant movements. • Observe onsite driving policy and speed limits (20mph). • Do not run red lights or barriers. • Seat belts to be worn. • Mobile phones not to be used, including hands-free. • Park vehicles in designated areas. • Never leave unattended vehicles running. • Remain vigilant at all times.				
50	Fuelling Plant & Equipment	• Asset loss. • Uncontrolled environmental release. • Inhalation / absorption / ingestion / injection of a hazardous and / or flammable substance. • Eye / nose damage. • Irritation. • Asphyxiation / fumes. • Explosion / fire / heat / burns. • Smoke inhalation. • Personal injury. • Fatality.	TATA Personnel, Contractors, Pedestrians, Auditors	3	3	9	• All COSHH, Fire and Hot Work considerations apply – See above / below. • Substances to be stored properly in line with the manufacturer's instructions and at a suitable distance away from plant / equipment. • Drip trays / bunds to be used where necessary and spill kits to be kept nearby to control any spillage. • Store materials in accordance with manufacturer recommendations, safety data sheets etc. and do not leave tins / containers open when unattended. • Remove all flammable and combustible materials. • To prevent ignition, no naked flames, exposed wires or any material that can cause static build-up to be present. • Switch off plant / equipment and use suitable funnel when decanting fuel. • Use only in well-ventilated areas. • Operatives to use barrier creams, cover skin and wear the appropriate PPE and RPE. • Practice good personal hygiene – Wash hands before consuming food / drink, smoking, going to the toilet etc. • Wash and sanitise hands regularly. • Avoid hand to mouth / eye / etc. contact.	3	1	3	
51	Contaminated land	Unknown potential contamination (asbestos, oils, chemicals,etc) Toxic materials ingested (by mouth or skin or cuts). Tetanus (all soils)	Contractor Visitor Auditor TATA Personnel.	3	3	9	Wear PPE, including gloves, and adopt good hygiene practice i.e. hand washing before eating or drinking. Use safe arrival procedure. No unaccompanied work normally permitted. Where unanticipated contaminants (especially asbestos) found, stop works, move away from the area and inform Site Manager. Do not continue until the construction staff have an undertaken a risk assessment and implemented appropriate controls.	3	2	6	
52	Demolition using Explosive	Hit by explosive sprinkler Hit by material Noise Disturbance to the ecological Disturbance to the ecological	Contractor Visitor Auditor TATA Personnel.	5	4	20	*Design and maintenance the explosive zone Banlman in place ☐ *Signages in place ☐ Communication channel active " ☐ Prior date/time/ place of explosive to be clearly communicates ☐ Ecological survey should be completed and action mentioned inthre report uncorrespondated in the method of statement it should be follower thre execution .☐ All items should be removed to safe zone before explosion	5	2	10	
53	Accummulation of flammable Material	Poor housekeeing ☐ Poor storage material ☐ Lack of Proper stoage Gas / Exposive materials	Contractor Visitor Auditor TATA Personnel.	4	4	16	All personnel to keep work area tidy, free from excessive combustible material. All bins are to be emptied daily	4	2	8	

54	Environmental - Uncontrolled Release	• Damage (temporary or permanent) to surrounding area. • Damage to flora / fauna / wildlife. • Cross contamination. • Chemical reaction. • Inhalation / absorption / ingestion / injection of a hazardous and / or flammable substance. • Eye / nose damage. • Irritation. • Asphyxiation / fumes. • Enriched / reduced / displaced oxygen. • Explosion / fire / burns. • Loss of consciousness. • Severe injury. • Fatality.	Release into the environment	4	3	12	• All Dangerous Atmospheres, Hot Work, Ignition Sources and Smoking considerations apply – See above / below. • Ensure all dangerous substances and explosive agents have been identified prior to accessing the area. • Where possible remove any and all dangerous substances from the area prior to starting. • Gas Awareness training. • Working / calibrated gas monitor (minimum 3-in-1) to be switched on and worn near to face / breathing zone. • Gas monitor to be in a good state of repair i.e. body, screen, filters, siren port, clip, reference number / sticker etc. in good order with sufficient battery level for the required task(s). Gas monitor to be switched on in a fresh / clean air environment (away from gas) and readings to be checked and confirmed as normal / expected prior to starting work. • Anyone discovered not wearing an operational gas monitor to be challenged and removed from area. • In event of gas monitor siren activating; immediately move away from area to fresh air area. • In event of Site Gas Alarm activating; immediately head to nearest / designated Gas Safe Haven. • If breathing apparatus to be used :- Breathing Apparatus medical required (within 1-yr). Face-fit required (within 2-yrs). Clean-shaven. • Ensure the correct PPE and RPE is used when handling dangerous substances or entering explosive atmosphere areas. Consider anti-static clothes and intrinsically safe equipment / tools. • If exposed to gas and / or feeling unwell, seek medical assistance. • Emergency evacuation procedures, including emergency exits, Muster Points and Ambulance Points to be made available / known. • Ensure that sufficient washing, eyewash stations, fire controls etc. are within close proximity of all working parties. • Practice good personal hygiene – Wash hands before consuming food / drink, smoking, going to the toilet etc. • Food, drink, cigarettes etc. must be kept away from the working area to avoid contamination. • No smoking (including e-cigarettes) unless in a designated smoking area. • To prevent ignition, no naked flames, exposed wires or any material that can cause static build-up to be present. • Maintain high standard of housekeeping at all times • Stay on green / designated walkways at all times. • No lone working. • Two-way radio with direct communication to colleagues / supervisor / Works Area. • Contact HSSE dept and Occupational Hygiene for advice and guidance.	4	1	4
55	Lead	• Inhalation / absorption / ingestion. • Headaches, nausea, vomiting. • High blood pressure. • Joint and muscle pain. • Abdominal pain / muscular weakness / tiredness. • Reduced sperm count / abnormal sperm. • Miscarriage / stillbirths / premature births. • Lead poisoning. • Fatality.	TATA Personnel, Contractors, Pedestrians, Auditors	4	3	12	• Refer to and comply with Control of Lead at Work Regulations at all times • Remain vigilant at all times. • If suspicious material discovered – STOP, vacate area and report to supervisor / Project Manager. • Never knowingly disturb or damage products potentially and / or known to contain lead. • Lead testing to be carried out before any personnel enters the area. • Carry out medical surveillance and regular health checks on personnel. • Barriers and warning signs. • Air monitoring. • Use dedicated vacuum / LEV / extraction unit wherever possible. • Only trained and competent personnel to work with lead containing products. • Operatives to use barrier creams and wear necessary PPE / RPE to prevent illness, including FFP3 disposable masks, safety glasses, safety gloves, disposable coveralls etc. • Powered Air Purifying Respirator (PAPR) to be worn at all times for scraping, wire brushing, cutting, grinding and burning activities. • Long sleeves and gloves to be worn to avoid skin contact. • Practice good personal hygiene – Wash hands before consuming food / drink, smoking, going to the toilet etc. • Wash and sanitise hands regularly. • Avoid hand to mouth / eye / etc. contact. • Ensure any cuts, abrasions or breaks in the skin are cleaned, treated and covered properly. • Store materials correctly and remove all waste, surplus material etc. • Maintain high standard of housekeeping at all times.	4	1	4

56	Lifting & Slings Equipment	• Overloading. • Failure of lifting equipment. • Falling materials. • Struck by load. • Crushing injuries / trapping.	TATA Personnel, Contractors, Pedestrians, Auditors	4	3	12	• Refer to and comply with Lifting Operations and Lifting Equipment Regulations and guidance on planning and organising lifting operations at all times. • All lifting operations to be planned so they are carried out safely with all foreseeable risks taken into account. • All lifting equipment to be inspected by a competent person and must have the current certificate and display the correct colour tag. • Damaged equipment to be removed and placed in quarantine. • Ensure that all equipment is suitably stored away from all sources of contamination and / or damage. • Ensure the lifting equipment's safe working load is not exceeded during lifting activities. If a load is suspected to be larger than the safe working load, it should not be lifted until suitable equipment is provided. • Store lifting equipment as per manufacturer's instructions. • All slinging and rigging activities to be performed by trained and competent persons only. • POWRA to be completed prior to any tasks commencing. • Lift Plan to be carried out by competent person and must be in place prior to starting. • Lift Plan must consider all services, scaffold, equipment etc. in the area or on flight path. • Guide ropes, tag lines, pull / push sticks etc. to be used at all times – Do not touch load with hands. • Do not walk under suspended loads • BS 5975 and LOLER to be adhered to all times.	4	1	4
57	Loading & Unloading	• Overloading. • Failure of lifting equipment. • Falling / release / dropping of load. • Struck by falling objects. • Crushing injuries / trapping. • Striking of live services. • Damage to equipment.	TATA Personnel, Contractors, Pedestrians, Auditors	4	3	12	• Refer to and comply with guidance on loading and unloading at all times. • All Lifting Operation considerations apply – See above. • All Manual Handling considerations apply – See below. • Delivery vehicle to be parked in the designated area with the engine switched off, keys removed, handbrake applied and the driver to be in the designated driver safe haven prior to starting any loading or unloading activity. • Suitable exclusion zones to be in place and secured. • Task specific POWRA to be completed prior to any tasks commencing. • Where practicable, the use of mechanical aids are to be employed for loading / unloading material. • Where access to the vehicle bed is necessary, the condition of the bed is to be fully checked prior to accessing. • When accessing the vehicle bed a suitable means of fall prevention is to be employed e.g. edge protection on the bed, harness and adjustable lanyard, working in fall restraint etc. • Access to / from the vehicle bed to be via recognised and approved methods only e.g. factory fitted rails, steps etc. • When accessing the vehicle bed, appropriate and suitable PPE must be worn, including safety helmet with chin strap, high-viz clothing, safety glasses, safety gloves, safety boots etc. • Do not access vehicle bed unless it is safe to do so. • A trained and competent banksman is to be in place at all times.	4	1	4
58	Mechanical Cutting Demolition Equipment	Use of hydraulic shears, concrete saws, angle grinders, or torch cutters during demolition may lead to: • Lacerations or amputations • Flying debris/injury from sparks or fragments • Fire due to hot work or fuel spills • Noise-induced hearing damage • Equipment malfunction or kickback • Vibration-related injury or fatigue • Entanglement in moving parts • Struck-by or crush from swing radius of shear-equipped excavator	TATA Personnel, Contractors, Pedestrians, Auditors	5	3	15	• Only trained and certified personnel to operate cutting equipment. • Use of appropriate PPE: face shields, gloves, flame-retardant overalls, ear protection, and safety boots. • Define cutting zones and restrict unauthorized access. • Deploy fire watch and fire extinguishers where hot work is being conducted. • Ensure equipment is inspected before each shift. • Fit guards on rotating parts and secure loose clothing. • Provide vibration-dampening handles and enforce breaks. • Secure the item being cut to prevent sudden release or drop. • Establish swing exclusion zone • Two-way radios/spotter traffic-management • Daily plant inspection	5	1	5

59	Moving Machinery	• Entanglement. • Crushing injuries / trapping. • Slips / trips / falls. • Falling from height. • Falling / release / dropping of objects. • Struck by falling objects. • Struck by plant / equipment. • Damage to plant and / or equipment. • Fire / sparks / heat / burns. • Explosion. • Musculoskeletal injury. • Striking of live services. • Electrocutation. • Serious injury. • Fatality.	TATA Personnel, Contractors, Pedestrians, Auditors	5	4	• No access behind guards or barriered areas. • If working directly on or near machinery, ensure the machinery has been isolated and any stored energy has been secured or released. • Working Emergency Stop buttons and / or kill -switches to be in place and be readily accessible – Activate / push / pull in the event of an emergency to stop the operation of the machinery. • Audio and visual alarms before and during machinery movements. • Ensure each person within the area is aware of machinery movements at any time. • Safety person(s) to be positioned as required with the purpose of monitoring movements, controlling access / egress and monitoring for an emergency. • Two-way radio with direct communication to colleagues / supervisor / Works Area. • Stop / go control systems (e.g. lights, gates etc.) for pedestrians and vehicles. • Keep loose clothing and hands away from rotating / moving equipment and pinch points. • Follow designated walkways around machinery. • Do not stand, crawl or work beneath automated machinery. • Wear suitable PPE at all times and be cautious of falling materials when walking beneath automated machinery. • Maintenance and examination / inspection records, certificates etc. to be presented on request.	5	1	5
60	Oxy-Acetylene Torch Burns	• Thermal burns • flash burns during lancing operations	Torch operators, assistants	4	3	• Flame-resistant PPE • Face shields • Torch safety training • Safe procedure for gas handling • Fire watch	4	1	4
61	Noise	• Hearing damage. • Deafness. • Reduced awareness of surrounding hazards.	TATA Personnel, Contractors, Pedestrians, Auditors	4	3	• Refer to and comply with Control of Noise at Work Regulations at all times. • Suitable hearing protection e.g. ear plugs or ear defenders to be worn for tasks that result in elevated noise levels i.e. over 80dB. • Limit exposure to loud environments by using sound barriers, screens and / or mufflers. • Remain vigilant in noisy environments. • Power tool operators to give warning to others before switching on.	4	1	4
61	Oil	• Slips / trips / falls. • Explosion / fire / burns. • Inhalation / absorption / ingestion / injection. • Skin disease. • Respiratory infection. • Damage to eyesight. • Personal injury. • Hydraulic leak • refueling error	TATA Personnel, Contractors, Pedestrians, Auditors	3	4	• All COSHH considerations apply – See above. • COSHH data sheets to be readily available and all personnel to be made aware of the substances being used and inherent risks. • Substances to be stored properly in line with the manufacturer's instructions. • Drip trays / bunds to be used where necessary and spill kits to be kept nearby to control any spillage. • Store substances safely and do not leave tins / containers open when unattended. • Store all flammable items away from ignition sources. • Read and make sure you understand and adhere to COSHH data sheet and risk assessments for all products in use, ensuring to follow the recommendations included. • Use only in well-ventilated areas. • Operatives to use barrier creams, cover skin and wear the appropriate PPE and RPE. • Practice good personal hygiene – Wash hands before consuming food / drink, smoking, going to the toilet etc. • Wash and sanitise hands regularly. • Avoid hand to mouth / eye / etc. contact. • Ensure any cuts, abrasions or breaks in the skin are cleaned, treated and covered properly. • Ensure that eye wash station (with mirror), first aid kit and burns kit is readily accessible. • Ensure emergency shower locations are known to all members of working party / parties and check that showers are fully functional. • Carry out regular health checks on personnel. • Ensure materials are disposed of as per the recommendations for the manufacturer. • Only competent personnel to transport hazardous substances. • Appropriate PPE. • Suitable safety eyewear and gloves to be worn.	3	1	3
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62	PPE	- Inhalation / absorption / ingestion / injection of a hazardous substance. - Struck by falling objects. - Struck by flying particles / objects. - Contact with a corrosive substance. - Excessive noise. - Fire / sparks / heat / burns.	TATA Personnel, Contractors, Pedestrians, Auditors	5	3	15	Refer to and comply with Personal Protective Equipment at Work Regulations at all times - PPE should only be relied upon as a last resort. - Only approved PPE provided via the TSUK PPE supply contract to be worn / used by TSUK personnel. - PPE should fit well, be comfortable to wear and not interfere with other equipment being worn. - PPE should be well maintained and not present the user with additional hazards e.g. impaired vision due to scratched eyewear. - PPE to be worn correctly. - PPE to be removed correctly and in correct order so as to limit opportunity for self contamination. - Eyes to be suitably protected against chemical / metal splash, dust, projectiles, gas / vapour, radiation hazards, for example :- - BS EN ISO 16321 (Eye and face protection) - BS EN 175 (Eye and face protection during welding processes) - Ears to be suitably protected against noise exposure, cold, dust, for example :- - BS EN 352 (Hearing protection) - Head to be suitably protected against bumps and impact from falling / flying objects, for example :- - BS EN 397 (Industrial safety helmets) - BS EN 812 (Industrial bump caps) - Respiratory system to be suitably protected against dust, vapour, oxygen deficient atmospheres, such as :- - BS EN 149 (Respiratory protective devices – Half masks) - BS EN 12941 (Respiratory protective devices – PAPR) - BS EN 12942 (Respiratory protective devices – PAPR) - Hands and arms to be suitably protected against abrasion, cuts, punctures, skin infection / disease, contamination, chemicals, electric shock, temperature extremes, such as :- - BS EN ISO 374 (Protective gloves – Chemical risks) - BS EN 388 (Protective gloves – Mechanical risks) - BS EN 407 (Protective gloves – Thermal risks) - BS EN 511 (Protective gloves – Cold) - BS EN 12477 (Protective gloves – Welders) - Feet and legs to be suitably protected against the wet, electrostatic build-up, slipping, falling objects, abrasion, cuts, punctures, skin infection / disease, contamination, chemical / metal splash, temperature extremes, such as :- - BS EN ISO 20345 (Safety footwear – General) - BS EN ISO 20349 (Safety footwear – Foundries and welding) - Body to be suitably protected against temperature extremes, adverse weather, chemical / metal splash, spray (pressure), impact, penetration, contaminated dust, excessive wear, entanglement, such as :- - BS EN ISO 11611 (Clothing – Welding processes) - BS EN ISO 11612 (Clothing – Heat and flame) - BS EN ISO 20471 (Clothing – High-viz) - BS EN 342 (Clothing – Protection against cold) - BS EN 343 (Clothing – Protection against rain) - BS EN 1149 (Clothing – Electrostatic) - BS EN 13034 (Clothing – Chemicals) - BS EN 14126 (Clothing – Infective agents) - BS EN 14605 (Clothing – Chemicals)	5	1	5
63	Waste Disposal	Improper handling or segregation of demolition waste leading to: - Environmental pollution (soil or water) - Fire hazard from flammable waste - Injury from sharp or hazardous debris - Unauthorized disposal - Obstruction in access routes - Cross-contamination of hazardous and non-hazardous waste	TATA Personnel, Contractors, Pedestrians, Auditors	4	4	16	- Segregate waste at source into hazardous/non-hazardous/metal/inert categories. - Provide labelled and secure skips or containers at designated points. - Appoint a licensed waste carrier for off-site transport. - Complete Waste Transfer Notes (WTNs) for each consignment. - Conduct regular housekeeping to avoid accumulation of debris. - Provide PPE including gloves, masks, and goggles for handlers. - Monitor for spills and clean up immediately.	4	2	8

64	Water & Working over / near Water	• Slips / trips / falls. • Inhalation / absorption / ingestion / injection of a hazardous and / or flammable substance. • Broken bones. • Cuts / abrasions. • Falling from height. • Cold water immersion / shock. • Loss of consciousness. • Drowning. • Fatality. • inadequate guardrails.	TATA Personnel, Contractors, Pedestrians, Auditors	5	5	• All Biological Agents and Vermin considerations apply – See above. • All Working at Height considerations apply – See below. • Establish origin, nature and content of water / liquid. • Consider either draining the water / liquid (either partially or fully) or covering the surface to prevent access. • Provide suitable collective measure fall protection systems, such as guardrails, barriers / fences and personal fall arrest systems if required • Adequate barriers, flags, bunting and signage. • Appropriate measures such as concrete blocks, vehicle barriers, cones, signs etc. to be in place to limit interface between personnel, equipment and water / liquid. • Safety man / men to be in place at all times. • Inspect access / egress ladders and scaffolding before use. • Check and clear the working area before starting work. • Check area regularly and remove all waste, surplus material etc. • Ensure no loose materials, equipment, tools etc. are left in or above open edges and walkways. • Keep walkways maintained and properly illuminated. • Ensure that all trip hazards, projections, obstacles etc. are identified and suitably highlighted to ensure awareness by all persons in the area. • Maintain high standard of housekeeping at all times. • Water pumps, pipes, suitable drainage, sumps etc. to be used. • Inspect perimeter of water / liquid prior to starting work and after any inclement weather for stability / integrity. • Ensure that perimeter is properly supported and sloped / shored to prevent against collapse. • Use proprietary shoring, trench boxes or other suitable protective systems to support perimeter (Temporary Works?) • Provide life jackets to those at risk. Life jackets should always be worn be auto inflating type, designed to support an unconscious person in water and turn them face upwards. Everyone needing a life jacket to be trained and competent in its use. • Ensure a clear and obvious means to raise the alarm in the event of a person falling into water / liquid. Life jackets to have whistles and lights to alert safety personnel and potential rescuers. • Life-saving rings or buoys and brightly coloured floating throw lines (8-12mm diameter) to be located at regular intervals around the perimeter along with instructions on how to use. • Flowing water to have a tensioned grab line downstream of the work site at 45° to the flow, with the end furthest downstream connected to the bank with easiest access / egress allowing the person in the water to be washed to the downstream end as they hit the line. • Suitable rescue boat with a competent operator to be in place to retrieve a person from the water. Boat must be suitable for the work being carried out, type of water, currents etc. • Be aware that persons retrieved from water may suffer from cold water immersion / shock; if this is the case get the casualty to shelter (ideally out of the wind), remove wet clothing and replace with dry clothes. Warm drinks and food may be given to casualty. • If exposed to water and / or feeling unwell, seek medical assistance • Emergency evacuation and rescue plan to be prepared with necessary rescue equipment available. • Rescue Plan to be in place. • Do Fire & Rescue team need to be alerted?	5	2	10
65	Sludge Handling and Disposal	Contact with chemical conditioners - Slips, trips, and falls Fire/explosion risk - Oxygen depletion - Biological contamination, skin/eye irritation, infection - oil and groundwater contamination Confined space entry - Toxic gas exposure Manual handling injuries	TATA Personnel, Contractors, Pedestrians, Auditors	4	3	correct manual handling techniques, team lifting when necessary PPE (gloves, goggles, overalls), hygiene practices (hand washing), vaccination programs, prompt first aid Regular cleaning of walkways, anti-slip surfaces, signage, good lighting, proper drainage. Gas detection systems, ventilation, confined space permit system, breathing apparatus. Spill containment, bunded areas, regular inspection, spill response training and kits.	4	1	4
66	Sludge material	Biological hazards (pathogens, bacteria) - Chemical hazards (heavy metals, solvents, corrosives) - Inhalation of toxic gases (e.g., H ₂ S, methane) - Skin or eye irritation - Slip hazard (wet surfaces) - Potential for exposure to sharps or debris in sludge Container leakage - Spill or splash during movement - Exposure to contaminants - Accidental release into the environment	TATA Personnel, Contractors, Pedestrians, Auditors	4	3	Use of appropriate PPE: gloves, eye protection, overalls, boots, masks/respirators - Perform work in ventilated areas or use fume hoods (for lab settings) - Use mechanical handling tools (avoid direct contact) - Proper hygiene procedures: hand washing, no eating/drinking near task area - Hazard communication: safety signs and labeled containers - Training on handling biological and chemical risks - Availability of spill kits, first aid kit, eyewash stations Follow local hazardous waste disposal regulations - Use licensed contractors for transport and disposal - Maintain waste tracking documentation - Dispose via approved treatment methods (incineration, stabilization, landfilling)	4	1	4