



**DECOMMISSIONING OF THE DELIMARA POWER STATION – PHASE 1
DEMOLITION OF CHIMNEY**

OCCUPATIONAL HEALTH AND SAFETY RISK ASSESSMENT

Version 1 (June 2017)

Report Reference:

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Quality Assurance

Decomissioning of the Delimara Power Station - Phase 1
Occupational Health and Safety Risk Assessment for the demolition of the chimney
- Version 1
June 2017

Report for: General Smontaggi

Revision Schedule

Rev	Date	Details	Prepared by	Reviewed by	Approved by
00	Jun 2017	Submission to Contractor	Steven Treeby Health and Safety Officer	Rachel Xuereb Director	Mario Sabolo Project Manager

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PURPOSE AND SCOPE OF WORKS

This document is the Occupational Health and Safety Risk Assessment for demolition works carried out on the Chimney as part of the Decommissioning of the Delimara Power Station – Phase 1.

Part II Art 6 (1) of the Occupational Health and Safety Authority Act XXVII of 2000 states that *“it shall be the duty of an employer to ensure the health and safety at all times of all persons who may be affected by the work being carried out”*. If *“in pursuance of the foregoing an employer enlists competent services or persons, the employer shall not be discharged from such incumbent duties arising out of this Act and out of regulations made out of this Act.”*

This report has been prepared by En-Sure Ltd for General Smontaggi and is based on the Method Statement prepared by the Contractor (Job ref: DPS-WMS01-Chimney – Revision 3) issued on 31 May 2017, uploaded on the Project’s Google Drive System.

En-Sure Ltd cannot be held liable for any dangers resulting from matters which were not divulged to them during the risk assessment.

The list of identified occupational health and safety hazards is non-exhaustive and includes those hazards that workers might encounter during the course of their work. The listed control measures are intended to minimise and, where possible, eliminate as far as is reasonably practicable the risks posed by the potential hazards.

The Contractor must ensure that the necessary control measures are put in place in order to prevent accidents from occurring and in order to conform to local Occupational Health and Safety legislation.

The recommended control measures are to be considered as a guide for action to be taken into consideration by the Contractor and any Sub-Contractors. However, it is important that professional competent persons are engaged to carry out civil, mechanical and electrical works.

It is imperative that the Contractor explains all hazards identified within this risk assessment to all workers employed on the Project. It is recommended that this risk assessment be reviewed regularly in order to ensure its continued applicability and effectiveness to the work.

All workers are to follow instructions received by the Contractor’s Management during site induction training or any other relevant toolbox talks.

Suitable Personal Protective Equipment shall be worn by all workers at all times.

Good housekeeping and a satisfactory state of cleanliness shall be maintained by all workers in all areas of work as well as public areas surrounding the site.

A stocked first aid kit shall be available for use on site. A trained first aider shall also be present on site at all times during works.

The removal of potentially hazardous substances found at the Delimara Power Station does not fall under the remit of this risk assessment. Specific risk assessments will have to be carried out by the sub-contractor responsible for removal of such hazardous material.

Risk Assessment Form			
1. Project title:		Decommissioning of the Delimara Power Station – Demolition of Chimney	
2. Version number: 01		3. Date: 26/06/2017	4. Location of work: Delimara
5. Duration of work: Refer to Contractor's Method Statement		6. Number of persons involved in work on Site at any one time: 7	
7. Name and contact details of Main Contractor: General Smontaggi SpA Viale dell' Industria, 5, 28060 San Pietro Mosezzo (NO) sabolo@generalsmontaggi.com [REDACTED]		8. Name of Sub-Contractor/s: En-Sure Ltd;	
9. Name and Contact details of PSDS: Malcolm Falzon on behalf of Shield Security Consultants Ltd pscs@shield.com.mt [REDACTED]		10. Name and Contact details of PSCS: Malcolm Falzon on behalf of Shield Security Consultants Ltd pscs@shield.com.mt [REDACTED]	
11. Name and Contact details of Contractor's H&S Site Officer: Steven Treeby obo En-Sure Ltd. steven.treeby@ensure.com.mt [REDACTED]		12. Name and Contact details of Contractor's Site Administrator/Site Foreman: Ermegildo Porzionato porzionato@generalsmontaggi.com [REDACTED]	
13. Name and Contact details of Project Manager: Mario Sabolo sabolo@generalsmontaggi.com [REDACTED]			

14. Safe Works Method Statement

An induction training session will be carried out for all workers who will be involved in some way or another during the demolition of the chimney prior to commencement of works. Site offices, first aid facilities, welfare facilities and fire fighting equipment will be made available prior to commencement of works and shall be accessible at all times. An assembly point will also be designated.

The chimney demolition is performed in three steps:

- The first step involves removing all auxiliary metal frameworks and chimney pipes inserted into the chimney's main body. When works will be allowed to commence, firstly, the two L-shaped horizontal inlet ducting will be removed and cleaned from fly ash. Workers involved in these operations will be required to wear all the mandatory PPE required as per site rules, as well as respiratory and eye protective devices. All utilities and live services close to the steel structure to be demolished will be disconnected or adequately covered. No lone working shall be permitted. Prior to removal, the L-shaped horizontal inlet ducting will be secured to prevent accidental collapse of the structure during works. After that, the holes will be blocked so when the concrete wind shield is being demolished, no dust emanates from these holes. A plastic shield will be used to cover the holes where there were the openings generated by the removal of the L-shaped flues. After that the L-shaped horizontal inlet ducting is removed, the steel flues will be lowered by means of a strand jack system, followed by the removal of insulation and cladding once lowered to the ground. All lifting equipment and attachments shall be certified by a mechanical engineer prior to commencement of any works on Site with lifting machines. Prior to entry inside the chimney, a confined space entry permit shall be issued and signed off by site administrator/foreman for workers who have understood the safe working procedures and who have been authorised by the Contractor to enter a confined space, who have presented a medical certificate and who have undergone health surveillance beforehand. The atmosphere inside the confined space shall be continuously monitored for adequate oxygen content, presence of noxious, flammable or explosive gases, dust levels and for adequate ventilation with

suitable detectors prior to entry and during works. Forced clean air ventilation shall be provided when workers are lowered inside the chimney to ensure that oxygen levels are maintained between 19.5% and 23.5%. A warning mechanism shall be set up to warn workers in the event of failure of the forced ventilation system. All equipment to be used during work in a confined space shall be suitable for use in such environments. No equipment releasing exhaust fumes shall be allowed to operate close to the confined space. A stand-by person shall be posted at the entry point to the confined space at all times during works. If the person is posted at a height, then he should be securely tied so as not to fall off. Good communication shall be maintained between the persons within the confined space and the stand-by person and the workers actually within the confined space. The chimney pipe and the internal metal frameworks will be removed by hot cutting works and lowering each portion at ground level using strandjack. Hot works will only be allowed if a hot work permit is filled in prior to commencement of hot works and the working conditions are deemed safe by the hot work permit issuing supervisor. Barricades and exclusion zones will be set up to prevent workers from accessing areas which could be reached by sparks resulting from hot works carried out above or nearby. No structures shall be allowed to drop but shall be secured and lowered safely to the ground. No persons will be allowed to stand underneath structures that are being dismantled and lowered from above. The work area will be clearly signposted to warn workers and visitors of ongoing demolition works and that no unauthorised access is permitted. Once lowered to the ground, the insulation and cladding will be separated from the metal flue. A certified scaffold shall be erected to remove the top most part of the metal flues. At the end of each working day and once work in a confined space is no longer required and all workers inside the confined space have been retrieved, the site administrator / foreman shall ensure that no persons remain within the confined space, the conditions within the confined space remain safe and any openings leading to the confined space are closed. The confined space entry permit will have to be signed off and closed.

- The second step consists of demolishing the chimney stack from the top up to +30m from the ground level with the top-down technique, using an edge protected platform bound to the chimney. The demolishing technique uses load-bearing elements square lattice towers

supporting the platform, which are entirely made of steel. After reaching the chimney top, the chimney stack will be demolished top-down by using radio controlled mini excavators located on the platform. An anemometer will be fixed at a location close to where demolition works are being carried out and wind speeds monitored regularly. Should wind speeds be of force 4 or greater, demolition work on the external side of the chimney shall be temporarily suspended until wind speeds lower down to acceptable levels. An active blinking emergency light shall be placed at the end of each working day at the top most part of the chimney being demolished. All workers accessing the self elevating platform will have to wear a full body safety harness attached to a safe anchorage point at all times. Demolition of the chimney's concrete structure will be carried out by keeping a safety zone towards the inner side of the chimney. No workers will be allowed to stand within the safety zone. The platform will be dismantled when the chimney will be 30m high, as per assembly and dismantling plan to be prepared by the Contractor.

- The third step will be carried out by using a crawler excavator equipped with a long boom and a hydraulic clamp. Exclusion zones will be set up by erecting barricades and visible signage warning of the presence of demolition work at a safe distance in order to prevent unauthorised access. A banksman shall be posted outside the exclusion zone while work is in progress. Prior to commencement of sheer cutting works, the operator must ensure that plant and equipment used to carry out such tasks is safe to use, is properly balanced, free from any defects, certified by a competent mechanical engineer and a trained operator responsible for carrying out the task. Operators should always keep windows and doors closed during demolition particularly when shearing and breaking to avoid injury from flying debris. Any damaged parts should be replaced as soon as it is practical. The demolition attachment should only be used in the manner for which it was manufactured and should never be used as a bludgeon to break or weaken a structure or to push or pull. Once demolition of the chimney is completed, waste and rubble will be sorted and hauled away to apposite waste management facilities and the Site cleared up.

15. Hazard Identification							
Ref.	Type of OHS Hazard	Present	Absent	Ref.	Type of OHS Hazard	Present	Absent
1	Slips and trips	✓		20	Noise	✓	
2	Moving vehicles and machines	✓		21	Lighting	✓	
3	Moving parts of machinery	✓		22	Electromagnetic fields		✓
4	Objects and parts with dangerous surfaces (sharp, rough, etc)	✓		23	Lifting equipment and related risks	✓	
5	Hot and cold surfaces or materials		✓	24	Third party Contractor / public safety	✓	
6	Hand-held tools	✓		25	Confined spaces	✓	
7	High pressure tools / machinery	✓		26	Works in water or damp conditions	✓	
8	Whole body vibration		✓	27	Adverse weather conditions	✓	
9	Hand-arm vibration	✓		28	Lack of signage	✓	
10	Hot or cold climate	✓		29	Overhead high and low voltage cables		✓
11	Manual handling / ergonomics	✓		30	Lack of first aid arrangements	✓	
12	Environment	✓		31	Lack of Personal Protective Equipment	✓	
13	Falls from heights	✓		32	Excavation / trenching works		✓
14	Falling objects	✓		33	Demolition / dismantling works	✓	
15	Fire	✓		34	Lack of welfare / sanitary facilities	✓	
16	Explosion	✓		35	Smoking / consumption of alcohol	✓	
17	Chemical substances (Hazmat)	✓		36	Assembly, disassembly and use of scaffolding	✓	
18	Lack of security	✓		37	Underground services		✓
19	Electrical installations	✓					

16. Risk assessment guide

		Severity (S)				
		Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Extreme (5)
Probability (P)	Rare (1)	(L) Low	(L) Low	(M) Moderate	(H) High	(H) High
	Unlikely (2)	(L) Low	(L) Low	(M) Moderate	(H) High	(E) Extreme
	Moderate (3)	(L) Low	(M) Moderate	(H) High	(E) Extreme	(E) Extreme
	Likely (4)	(M) Moderate	(H) High	(H) High	(E) Extreme	(E) Extreme
	Certain (5)	(H) High	(H) High	(E) Extreme	(E) Extreme	(E) Extreme

Severity (S) ratings:

Insignificant - Near miss or very minor injuries addressed by in-house first aid treatment. Low financial loss.

Minor - Treatment by a medical doctor or at a hospital (as an out-patient). Medium financial loss.

Moderate - Significant non-permanent injury. Overnight hospitalisation required. High financial loss.

Major - Extensive permanent injury. Extended hospitalisation required.

Extreme - Death. Huge financial loss.

Probability (P) ratings:

Rare - An event that may take place in exceptional circumstances.

Unlikely - An event that is improbable to occur.

Moderate - Possibility that the event may occur at some time.

Likely - High possibility that the event may occur at some time.

Certain - Expected to occur at some time under most circumstances.

Risk ratings (RR):

Low (L) - Low risk to be managed by routine procedures.

Moderate (M) - Moderate risk whereby risk need to be reduced.

High (H) - High risk requiring urgent intervention.

Extreme (E) - Extreme risk requiring immediate intervention.

17. Assessment of risks

Reference	Hazard	Assessment without controls			Control measures	Assessment with Controls		
		P	S	RR		P	S	RR
1	Slips and trips	P3	S2	M	<ul style="list-style-type: none"> All workers must take reasonable care to avoid slipping or falling. All workers are required to give full attention to their surroundings during their work, especially in areas with the potential risk of falling from a height and when required to move close to rotating machinery. All surfaces are to be kept in good condition with minimal obstructions. Any unwanted material shall be removed immediately whilst any needed material shall be stored in designated places, in an orderly and safe manner. No cables, wires or other materials shall be left lying in the way of walkways and passageways without adequate protective covers. Where possible, electrical cords and wiring shall be routed in such a way as to avoid slips, trips and falls. Cables and hoses are to be protected by adequate means, such as cable ramps, against damage from vehicle traffic. Cables shall be routed and fastened so as to rule out the possibility of damage to cables. Where possible C-rails and metal clamps or screw clamps shall be used for heavier cables. All other fastenings shall be executed using insulated wire or cable ties. Designated storage areas shall be decided upon and set up at the beginning of works. Where possible, debris shall be cleared from the site and carted away. All manholes and openings shall be suitably covered and / or surrounded by guardrails. Spills shall be cleaned as soon as is practicable in order to avoid creating a slip hazard. Mobile fuel gas supply facilities must be set up at the workplace or as near to it as practicable, and should where possible be in the employee's field of vision, without creating any supplementary risks. 	P1	S2	L
2	Moving vehicles and machines	P3	S3	H	<ul style="list-style-type: none"> A good communication system between heavy plant operators and vehicle drivers shall be established. Workers shall signal to the vehicle or machine operator before crossing the driver's path. 	P2	S2	L

				<ul style="list-style-type: none"> • Banksmen wearing high visibility clothing shall be used during movement of heavy vehicles. • Operators shall not use mobile phones when operating equipment. • An exclusion zone shall be set up around operating lifting machinery, the large crawler excavator used to demolish the lower parts of the chimney, the self elevating platform's lift area of influence and around the two mini remote-controlled excavators that will be operating on the self elevating platform. • Vehicles shall enter and exit the site through designated driveways. • 'No unauthorised entry' signage shall be posted in visible locations. No persons shall be allowed within the exclusion zone unless adequately protected against potential hazards. • Heavy vehicle drivers shall abide by the general traffic rules during transport of material. • Sufficient clearance must be allowed between vehicle traffic routes and doors, gates, passages for pedestrians, corridors and staircases. • Appropriate management arrangements shall be implemented in order to ensure the smooth circulation of vehicles to and from the site and outside the site, where relevant. • All plant operators shall have sufficient knowledge, training and experience to carry out the role they are assigned to. Plant operators shall be fully aware of their roles and duties. • A works method statement shall be prepared and followed by all workers in order for operations to be safe and successful. • All vehicles and machines used during site operations shall be properly maintained, inspected and serviced regularly. A maintenance and service schedule is to be established and maintained. • The Contractor shall provide suitable machines to be used for the purposes of work on site. All machines shall be fitted with suitable guarding mechanisms, whenever practical. • Machines are to be used properly, in accordance with the manufacturer's instructions. • Workers shall move away and attend at a safe distance from tipper trucks during loading / un-loading procedures. Vehicles used to transport material shall not be overloaded; loads shall be balanced, fully contained and properly secured within the vehicle. • Ground operators shall not pass, stand or work in the operating area of the machine. In particular, the operators of the mini remote-controlled excavators shall stand at a 			
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					<p>safe distance away from the operating machines whilst wearing a full-body safety harness anchored to a fixed anchorage point.</p> <ul style="list-style-type: none"> • All moving vehicles and machinery shall be equipped with automatically activated audible reversing beepers. • Passengers must not be carried on vehicles unless the vehicle is designed for that purpose. • Manoeuvring areas shall be kept segregated and vehicle drivers shall not exceed 10km/hr when driving on Site. • Vehicle engines shall be switched off when not in use or left unattended. • Vehicles and machines shall in no way create additional risks to Site personnel, nor damage or unduly stress any other structure or installation. 			
3	Moving parts of machinery	P3	S3	H	<ul style="list-style-type: none"> • All workers shall keep out of the truck crane's, the sheer cutting crawler machine's and the two mini excavators' jib turning radii. • Machine jibs' turning radii shall be cordoned off if and when required. • All machines shall be fitted with suitable guarding mechanisms, whenever practical. Any equipment with damaged or missing guards shall not be used. • Machines are to be used properly, in accordance with the manufacturer's instructions. • Only trained workers shall operate plant and machinery. • Plant operators will inspect the machine before use and each worker will be responsible for his own health and safety and the health and safety of others whilst operating the heavy machinery. • Heavy lifting equipment shall be mounted on solid ground with outriggers extended as required. Outriggers shall be set up on suitable outrigger pads. 	P2	S2	L
4	Objects and parts with dangerous surfaces (sharp, rough, etc)	P3	S3	H	<ul style="list-style-type: none"> • The area of influence around the chimney during demolition works shall be segregated and only authorised persons shall be allowed to access such areas. • No persons shall be allowed to access exclusion zones during demolition works. • Should dismantled components have dangerous, sharp or rough surfaces, the Contractor shall make the necessary arrangements in order not to put workers at risk of injury. • All tools and equipment loaded onto the self elevating platform, must be securely tied to a safe anchorage point in order to prevent accidental movement of such structures. 	P2	S2	L

6	Hand-held tools	P4	S4	E	<ul style="list-style-type: none"> Non-ferrous tools shall be used in flammable atmospheres, if present, as far as is reasonably practicable. Spark-resistant tools made from aluminium, brass, wood or plastic will provide for safety. Insulated tools shall be used if there is a risk of contact with live electricity. Each and every tool shall be used for its intended purpose. No foul play will be permitted with any hand-held tool used on site. Tools shall be kept in good working condition. Power tools shall never be carried by the cord and never disconnected by pulling on the cord. Tools shall be disconnected when not in use, when being serviced and when changing accessories such as blades, bits, etc. Tool cords shall be kept away from heat, oil and sharp edges. Electric tools shall be stored in a dry place when not in use whilst electric tools shall not be used in wet or damp conditions unless they are approved for that purpose. Plugs, sockets, outlets and couplers shall be of EN 60309 standard and be suitably weather proof. Workers shall ensure that the cords of electric tools do not pose a trip hazard. Workers shall not keep their fingers on the switch-on button of the tool in order to avoid accidentally starting the tool. All hand-held tools shall be inspected by the user prior to use for damaged or faulty wires, plugs, etc. If damaged tools are discovered, the tools shall be reported immediately and must not be used. Under no circumstance shall electrical repairs be carried out by workers not deemed to be a competent electrician. Abnormal body posture shall be avoided. Workers making use of tools are to adopt a safe stance and suitable balance at all times. All personnel required to use equipment shall have the necessary knowledge, training and experience to be able to operate the tools. 	P3	S2	M
7	High pressure tools / machinery	P3	S2	M	<ul style="list-style-type: none"> All pipes, hoses and fittings shall have a rating of the maximum pressure of the air compressor. Hose ends must be secured in order to prevent whipping of the hose if an accidental cut or break occurs. Compressed air shall only be used for its intended purposes. All components shall be maintained in a good state. Damaged components shall be removed and replaced immediately. The air compressor's shut –off valves shall be easily accessible and located as close as possible to the point of operation. 	P2	S1	L

					<ul style="list-style-type: none"> Hoses shall not be allowed to cross walkways and passageways in order to prevent workers from tripping and falling. The air compressor shall be serviced regularly by a competent mechanical engineer and maintenance records kept and available for inspection. Visual checks shall be conducted by the user of the air compressor on all components and connections. Appropriate hearing protection shall be worn in close proximity to the air compressor. Equipment should not become overheated. 			
9	Hand-arm vibration	P3	S2	M	<ul style="list-style-type: none"> Ensure good ergonomics and avoid abnormal or uncomfortable postures. The right tool for the job shall be chosen. Workers shall allow the power tool to do the work by holding it with the slightest grip possible. Ensure correct operation of hand-held pneumatic 'chipping' hammers. Ensure that breaking activities are carried out at an intermittent pace. Job rotation mechanisms shall be considered if and when necessary. Vibrating equipment shall be maintained in good working condition at all times as per manufacturer's instructions. While the use of PPE is to be considered as a last resort, the use of anti-vibration industrial gloves is to be considered as mandatory when exposed to hazardous vibration levels. Legal vibration exposure limit values shall never be exceeded. 	P1	S2	L
10	Hot or cold climate	P3	S2	M	<ul style="list-style-type: none"> Workers exposed to hot temperatures are highly encouraged to drink water frequently and to take frequent, short breaks. In the event of improbable but possible extremely cold weather, workers shall wear suitable clothing with a waterproof outer layer and take proper rest periods. No works are to be carried out if working areas are exposed to bad weather conditions including windy conditions. Sheltering areas and adequate welfare facilities must be available for the workers employed on the Site. All workers shall be notified about any useful emergency contact numbers prior to commencement of works, most importantly 112. 	P1	S2	L
11	Manual handling / ergonomics	P3	S2	M	<ul style="list-style-type: none"> All workers shall be trained on the correct way of lifting heavy loads in accordance with Legal Notice 35 of 2003. Abnormal and uncomfortable body postures shall be avoided. A safe stance and proper body balance shall be maintained at all times. 	P2	S1	L

					<ul style="list-style-type: none"> Workers shall not lift loads beyond their capacity. Workers are encouraged to seek help when a heavy load is to be moved. Precise information about the weight of loads shall be provided to the workers. If possible and reasonably practicable, loads are to be positioned close to the workstation in order to reduce the need to carry heavy loads over long distances. Workers shall ensure that no trip hazards are in the way while handling heavy loads and walking routes shall not be obstructed while carrying heavy loads. Where possible, mechanical assistance shall be provided. Where this is not reasonably practicable, ways of changing the task or spreading the load shall be looked into as an alternative. Workers shall be encouraged to use better manual handling techniques which rely more on the use of legs rather than on back muscles. Job rotation mechanisms shall be allowed. 			
12	Environment	P3	S2	M	<ul style="list-style-type: none"> Areas beyond the site boundaries shall be kept in their original state of cleanliness. All loose dismantled material shall be stored in designated, segregated areas set up on site before such material is carted away off-site. Hazardous material must be stored adequately and labelled properly. Drip trays are to be placed underneath vehicles or any other mechanical plant as an interim measure in case of dripping oils, fluids or fuels. Spill kit material shall be kept on site to be used in the event of an emergency spill. A preventative maintenance approach should be adopted by the Contractor. No discharges at sea, of any type, shall be permitted. Airborne dust shall be minimised as far as is reasonably practicable. The Contractor shall make use of a 'fog cannon' in order to limit airborne dust dispersal. 	P2	S1	L
13	Falls from heights	P3	S4	E	<ul style="list-style-type: none"> A fall prevention system by physical means shall be adopted at all times. Collective fall protection measures, including guard rails, scaffolds, secure work platforms, mobile elevating work platforms (MEWP) or cherry-pickers, safety nets, etc., have priority over individual fall protection measures. If a fall prevention system is defective, workers shall move away immediately, install clear warnings and seek to inform the Contractor's Management immediately for the necessary repairs to be made. All working platforms shall be fully decked. Guard rails, intermediate railings and toe boards shall be installed along all edges where there is a sheer drop height of two metres or greater. Installed edge protection along borders shall be made of suitable and secure material 	P2	S4	H

					<p>which is able to sustain the weight of any person walking close to it.</p> <ul style="list-style-type: none"> • All manholes and openings shall be adequately covered and secured. • Workers shall take a safe stance at all times and never lean too much over unguarded open spaces such as manholes, hatches, etc. • Where workers work on a roof or on surfaces made of potentially fragile and / or unstable material through which it is possible to fall, preventive measures shall be taken in order for workers not to inadvertently walk on such surfaces. • If work equipment is used to lift persons, it shall be examined at least once in every period of six months. • Suitable ladders must be provided to workers to be able to access working platforms. Ladders shall only be used as access/egress routes and not as working stations. Ladders must be of sound material, free from defects and safely secured from the top to the structure and tied from the side rails rather than from the rungs. All ladders must extend by at least one metre above the landing floor. • Safety harnesses with fall restraint / arrest systems anchored to a suitable and secured anchor point are compulsory where works are performed near unprotected sheer drop areas of a height of two metres or more or if work is performed from an elevating platform. Suitable anchorage points, preferably at a height above the drop-off edge shall be chosen in order to reduce the fall distance and the pendulum effect. Workers shall receive prior information on the correct use of individual fall protection equipment. 			
14	Falling objects	P4	S4	E	<ul style="list-style-type: none"> • Lifting components of lifting machinery shall be certified by a competent engineer. • All workers shall move away from overhead suspended objects and shall approach with caution only when it is safe to do so. • No persons shall be allowed to stand underneath the load during manoeuvring or within the designated exclusion zones. • The area around the chimney shall be completely hoarded / fenced and no unauthorised access permitted. • Loads shall be properly secured and moved properly when lifted at a height. Tools used for work carried out at a height shall be tightly secured and tied during use. • Work areas are to be kept clean and tidy at all times. • All material shall be stored at ground level in designated storage areas. • No object shall be lifted along routes below which or close to which live electrical cables are present. When in the slightest doubt, workers are not to move lifted objects on their own initiative but should check and confirm with the Site Foreman that the travelling route is safe and free of hazards. 	P2	S3	M

					<ul style="list-style-type: none"> During the lowering of the metal flue pipes to the ground and demolition of the chimney's reinforced concrete bodywork, access to the chimney's interior shall be completely blocked off and sign posted to prevent unauthorised access and to warn workers and visitors about ongoing demolition work and the potential of falling objects from above. Cleaning of debris from the ground floor of the chimney shall only be allowed when demolition work has been temporarily suspended. A good communication mechanism shall be in place between all workers involved at all times. No persons shall be allowed within the exclusion zone when the shear cutting machine is in operation to demolish the lower concrete bodywork of the chimney. 			
15	Fire	P3	S4	E	<ul style="list-style-type: none"> Workers shall familiarise themselves with emergency response arrangements set up by the Contractor. No smoking shall be allowed in enclosed areas or where flammable material will, or will likely be present. Smoking will only be permitted in designated areas within the Site. Cigarette butts are to be extinguished in designated buckets with lids filled with sand and labelled. A smoking sign shall be posted at the permitted area. A sufficient number of fire fighting equipment depending upon the nature and quantity of combustible material exposed shall be made available on site during works. The fire fighting equipment shall be strategically located and easily accessible. A suitable fire extinguisher must also be available on the self elevating platform. Portable fire extinguishers shall have affixed a certification label and be annually tested by a competent person. A sufficient number of workers present on site shall be trained on the proper use of fire fighting equipment. Records shall be kept for routine fire inspections and the maintenance and testing of fire fighting equipment, if applicable. Temporary electrical systems, if any, must comply with legal standards and shall be protected from weather elements. An electrician shall be appointed to ensure that all necessary precautions have been considered when changes in electrical systems are made. The provision of fire arrangements shall also be considered when such changes are made. No hot works shall be carried out above or close to live electrical cables which could be damaged in the process, unless fire resistant protective screens are used in the appropriate manner. 	P2	S3	M

					<ul style="list-style-type: none"> • Hazardous substances such as fuel are to be stored in designated locations within bunds. • Refuelling of machines and mechanical plant, if any, shall be carried out when such machines are switched off and cold to touch. • Appropriate measures shall be put in place for refuelling such as using a funnel or spout to avoid fuel spillages in the surroundings. An ABC dry powder or CO₂ fire extinguisher shall be readily available during refuelling procedures. • Flammable materials shall be stored in separate areas, protected from sources of ignition. • Oil and solvent-soaked rags shall be stored and disposed of properly to prevent combustion fires. Suitable fire extinguishing equipment shall be maintained close to these storage areas. • No hot works shall be carried out in ventilated ducts, near walls, ceilings or roofs that have a combustible covering or insulation, on walls that can ignite combustible materials on the other side or on pipes or other metallic surfaces that are in contact with combustible walls, partitions, ceilings or roofs or other combustibles which can lead to ignition through conductive heating. • If it is determined that hot work is necessary and the object cannot be relocated to a designated hot work area, the persons requesting and those who will be performing the hot work should contact a Hot Work Permit issuing supervisor (Mr Ermegildo Porzionato) and begin the permit process. • No hot work permits shall be issued unless the hot work permit supervisor visits the proposed hot works area and visually verifies that all permissive conditions of the hot works permit are met. A copy of the issued hot works permit shall be kept with those workers performing the hot works and another copy kept in the health and safety file. • The number of workers per hot work station shall be kept to the minimum and a fire watch present at all times. It is good practice that a fire watch is maintained for thirty minutes after hot work finishes. • Hot works shall be stopped immediately in the event of hazardous or emergency conditions. • The area surrounding and underneath hot work stations reachable by flying sparks shall be suitably hoarded off and considered as an exclusion zone. • Ladders and working platforms to be dismantled from the internal side of the chimney stack shall be securely tied, rendered stable and steady by supporting means before proceeding with hot works and removing the structures. • Gas cylinders must be accompanied by conformity and certification documents 			
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					<p>and/or labels.</p> <ul style="list-style-type: none"> Liquid Petroleum Gas and Acetylene fuel gas supply facilities must be safeguarded against flashback. Flashback arrestors are to be replaced after a flashback or backfire. Hoses are to be purged before lighting the torch in order to remove potential residual explosive gas mixtures. The blow pipe is to be fitted with spring-loaded non-return valves. The correct gas pressure and nozzle size are to be used for the job. Supply hoses are to be checked for defects before use. If any defects are discovered, the damaged supply hoses shall be replaced and disposed off immediately. All gas cylinders, full or empty, shall be secured in the upright position without risk of falling over. Gas cylinder regulators shall be checked prior to use. Empty gas cylinders shall be removed from the work area as soon as practicable. Emergency exit routes shall be kept clear and free from obstruction at all times. An appointed employee on Site shall be responsible for coordination and evacuation from the Site. Designated assembly points shall be situated at ground level and away from the Site. 			
16	Explosion	P2	S5	E	<ul style="list-style-type: none"> Explosion hazards may be derived from but not limited to: <ul style="list-style-type: none"> Petrol; Cellulose-based paints; Aerosols; Diesel fuels; Mineral oil lubricants; Hydrogen flammable atmospheres; Carbon Monoxide. In areas where flammable gases or vapours may arise in hazardous concentrations and their mixture with air could lead to explosions, measures for explosion protection shall be considered. Adequate supervision shall be provided by the Contractor when works are undertaken in potentially explosive environments. Oxy/fuel gas blow pipes shall never be used on a drum, pipe, or tank that has contained, or may have contained flammable material, unless gas tests confirmed that it is gas free and the sub-contractor responsible for removal of hazardous substances confirms that the drum, pipe, or tank is completely substance-free. Where permanent monitoring of air quality and/or combustibility is required within 	P1	S3	M

					<p>a confined space, the Contractor shall provide certified equipment for such monitoring.</p> <ul style="list-style-type: none"> • All explosive zones shall be posted with the applicable warning signs at their entry. Exclusion zones shall be set up and no unauthorised access allowed within in accordance with Annex II of Legal Notice 41 of 2004. • Any generated airborne dust or metal filings shall be removed with vacuums. • Safety data sheets shall always be consulted beforehand and recommended safety measures followed when working in areas where chemical substances or gases are present. • Workers shall be appropriately trained in explosion protection. • Any escape and, or release, whether or not intentional, of flammable gases, vapours, mists or combustible dusts, which may give rise to explosion hazards must be suitably diverted or removed to a safe place or, if that is not practicable, safely contained or rendered safe by some other suitable method. • Prevention of ignition hazards must also take account of electrostatic discharges, where workers or the working environment act as charge carrier or charge producer. Workers must be provided with appropriate working clothes consisting of materials which do not give rise to electrostatic discharges that can ignite explosive atmospheres. • Equipment shall be chosen in respect of the manufacturer's manual in terms of the conditions it is intended to be used for. 			
17	Chemical substances (Hazmat)	P3	S3	H	<ul style="list-style-type: none"> • All hazardous materials present within the areas of works shall be identified prior to demolition and/or dismantling. No demolition or dismantling works shall be carried out in areas unless chemical substances have been completely cleared from these areas. • Safety data sheets must be readily available and shall be followed when handling chemical substances. • Appropriate PPE shall be worn by all workers handling hazardous chemical substances as described in the Safety Data Sheet. • Workers must be aware of the contents of the Safety Data Sheets. • If any dust-creating equipment or process is used, workers shall opt for either dust collection devices or wetting down of material. Wetting down of material is only to be carried out in a safe environment free from electrical hazards. • Disposal of chemical substances and hazardous material is addressed in the Waste Management Plan and HAZMAT reports. Disposal shall be in accordance with these documents. 	P2	S2	L

18	Lack of security	P3	S2	M	<ul style="list-style-type: none"> All workers admitted to the Site shall report to Enemalta's Security Room near the main gate before entering. In this way, a roll call could easily be called out in the event of an emergency. Access to the Site shall be strictly controlled by Enemalta Plc. Sufficiently high temporary hoarding / fencing will be placed around the perimeter of the Chimney area in order to prevent unauthorised access to work areas. Access to staff not directly involved in the work is strictly prohibited. The area around Chimney shall be completely closed off when no works are carried out. 	P1	S2	L
19	Electrical installations	P4	S4	E	<ul style="list-style-type: none"> A thorough survey shall be carried out by Enemalta's engineers in order to identify all electrical distribution systems and that their respective routes are clearly marked and visible on site. Approval shall be obtained by the Contractor from Enemalta before the start of any works in order to ensure that no live electricity remains in areas close to dismantling / demolition works. Enemalta's engineers will be responsible for the cutting of cables and rendering them dead. If electricity routes cannot be cut off, isolated or re-routed, clear and visible warning signs shall be erected by the Contractor. No dismantling or demolition works, including hot works and lifting procedures, are to be carried out close to live electrical cables for any reason. Workers shall ask somebody from the Contractor's Management Representatives if in doubt whether electrical cables are still live or not. If any electricity distribution boxes are used for the duration of works on Site, these shall be kept under the control of authorised persons and kept locked at all times. Distribution panels shall be properly and securely installed in a safe place on Site. Where special tools and equipment require a supply of 240V AC or above, a Residual Current Device (RCD) shall be provided by the Contractor and connected into the circuit. The RCD be checked in compliance with applicable laws. All electricity cables used on site for temporary electrical supplies must be in accordance to local standards and equipped with ELCB protection. Every cable must be in good condition and frequently inspected for cracks / fraying. Under no circumstance shall electrical repairs be carried out by workers not deemed to be a competent electrician. Only suitably qualified electrically skilled personnel shall be employed to work on electricity distribution systems. Generators and electrical equipment present on site, if any, shall be tested regularly. No unauthorised access shall be permitted. 	P2	S3	M

					<ul style="list-style-type: none"> Only trained individuals shall operate generators or other equipment present on site. No equipment shall be plugged in with power on. No cables shall be unplugged with electrical units running. The Contractor shall ensure that the appropriate safety distance from all live conductors is strictly observed by its personnel. Warning signs and exclusion zones shall be set up. 			
20	Noise	P2	S4	H	<ul style="list-style-type: none"> Noise suppressing attachments shall be added to noisy plant, as far as is reasonably practicable. Workers who are exposed to noise levels greater than 80dB shall wear appropriate PPE, such as ear defenders. The use of PPE shall be considered as the last resort when implementing measures to reduce the impact from noisy work environments. 	P2	S2	L
21	Lighting	P2	S2	L	<ul style="list-style-type: none"> The level of light needs to match the demands of the job in hand and its location. Strobe lights or other suitable task lighting shall be used if and when necessary, should natural lighting conditions be low during works. An active blinking emergency light shall be placed at the end of each working day at the top most part of the chimney being demolished. Battery-operated task lighting shall be preferred over temporary or fixed lighting sourced from an industrial electrical distribution box. If the latter source is used, this has to be equipped with a main switch, miniature circuit breakers (MCBs) and Earth Leakage Circuit Breakers (ELCBs). Task lighting shall be securely mounted on a secured stand or wall mounted and must not have any electrical cables trailing on the ground. Lighting fixtures shall be guarded or shielded in order to prevent damage of the lighting fixture or coming into contact with the lighting element. Electrical lighting used on site shall be certified by a competent and qualified electrician and meet the requirements of local legislation. 	P1	S1	L
23	Lifting equipment and related risks	P3	S4	E	<ul style="list-style-type: none"> Machines are to be used properly, in accordance with the manufacturer's instructions. Lifting components of lifting machinery shall be certified by a competent engineer. Cranes and other lifting machinery shall be certified by a competent and warranted mechanical engineer once every twelve months whilst lifting slings, chains, tackles, etc, as well as lifting machines intended to lift persons shall be certified once every six months, as required by local occupational health and safety legislation. Hard copies of such certificates are to be kept by the Contractor on Site in the H&S file. 	P2	S3	M

					<ul style="list-style-type: none"> • The manufacturer's instructions shall be followed in determining the safe working loads of identifiable hooks. The use of open hooks without a safety latch is prohibited. • All lifting equipment must be clearly indicated with the maximum permissible load it is able to carry, at various radii. • All lifting equipment shall be only allowed to work within the required set limits. • Lifting equipment, also including any slings to be used, their fastenings and fittings, shall be inspected daily before use and kept in good working condition. • Heavy mobile lifting equipment shall be mounted on solid ground with outriggers extended as required. Outriggers shall be mounted onto outrigger pads in order to enhance stability, if necessary. • Workers shall not operate lifting equipment unless they are qualified to do so. Crane operators shall be assisted by signallers and slingers at all times. Slingers shall ensure that the load is secured before lifting commences. Signallers shall ensure that no workers are standing underneath overhead lifted loads. • Lifting equipment shall not be used during significantly windy weather conditions (greater than force 4), as instructed by the Site Management. • Tag lines shall be used when moving loads by means of lifting equipment, if possible. • The Contractor shall ensure that the appropriate safety distance from all live conductors is strictly observed by its personnel, particularly with regard to the installation and relocation of scaffolds and cranes, the use of sheer cutting machines and other machinery, and material transport and storage. No object shall be lifted along routes below which or close to which live electrical cables are present. When in the slightest doubt, workers are not to move lifted objects on their own initiative but should check and confirm with the Contractor's Site Management that the travelling route is safe and free of hazards. • No persons shall be allowed to stand underneath the load during manoeuvring. • The self elevating platform's elevator shall be of good mechanical construction, sound material and adequate strength, and be properly maintained. • The elevator shall be examined by a warranted mechanical or electrical engineer upon installation and once every period of six months. • The elevator shall be efficiently protected by a substantial enclosure fitted with gates, being such an enclosure as to prevent, when the gates are shut, any person falling down the lift way or coming into contact with any moving part of the elevator. • The elevator's gate shall be fitted with efficient interlocking or other devices to secure that the gate cannot be opened except when the cage or platform is at the landing floor and that the cage or platform cannot be moved away from the landing 			
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					<p>until the gate is closed.</p> <ul style="list-style-type: none"> An anti-collision device shall be installed to prevent the elevator from colliding with the platform. The elevator shall be so constructed as to prevent any person or any goods carried in the lift being trapped between any part of the elevator and any fixed structure or between the counterbalance weight and any other moving part of the elevator. The elevator shall be marked legibly and indelibly with the following particulars: <ul style="list-style-type: none"> (a) name and address of the installer, (b) the CE marking (for new lifts), (c) the designation of series or type, (d) serial number (if any), (e) the year of construction, (f) the particulars of the responsible person to be contacted in case of a problem, (g) the rated load in kilograms, (h) the maximum number of passengers which may be carried, (i) the date of the last preventive inspection, (j) the date of the next preventive inspection, and (k) any other relevant instructions. 			
24	Third party Contractor / public safety	P3	S3	H	<ul style="list-style-type: none"> No third party contractors shall be affected by the progress of demolition works of the Chimney at the Delimara Power Station. Part of the road closer to the chimney will be closed during the dismantling, according to the corresponding Method Statement. Only access for workers will remain accessible at all times. 	P1	S1	L
25	Confined spaces	P4	S5	E	<ul style="list-style-type: none"> For a space to be considered "confined" it shall meet ALL of the following three criteria: <ol style="list-style-type: none"> Has limited openings for entry or egress; and/or May contain insufficient levels of oxygen; and/or Contain or produce dangerous air contaminants liable to cause a risk to the health and safety of workers who enter such a space. The chimney stack shall be considered as a confined space given that the above-listed conditions are present. All confined spaces shall be identified and posted with a warning sign: "Warning: Confined Space. Entry Only with a Valid Permit to Work" at all times. Entry into a confined space shall be avoided if possible by undertaking work from the external side of the confined space. The site administrator / foreman shall ensure that all conditions have been assessed prior to entry into a confined space. 	P2	S3	M

					<ul style="list-style-type: none"> • If entry into a confined space cannot be avoided such as for work to remove the internal metal flues of the chimney, a safe system of work by the use of confined space entry permits shall be used prior to access into a confined space. • Prior to works being carried out in a confined space, a competent person shall check the atmosphere for suitable oxygen content (allowable range of 19.5% to 23.5%), combustible, reactive or toxic gases. Portable gas detectors shall be carried with persons accessing confined spaces at all times. • Dust emissions inside the chimney stack shall also be monitored during works. • Since natural ventilation within the chimney stack will probably not be sufficient to maintain breathable air quality, forced clean air ventilation shall be provided to ensure that oxygen levels are maintained between 19.5% and 23.5%. A warning mechanism shall also be in place to warn workers in the event of a failure in the forced ventilation system. • All equipment which is used inside a confined space or which is used to enter and / or exit a confined space shall be suitable for the use in a confined space. • No equipment or mobile plant releasing exhaust fumes shall be operated close to confined spaces inside which workers are located. Exhaust fumes shall be directed towards the outside and must be free from obstruction. • Clear audible communications shall be maintained at all times between the stand-by person at the entry of the confined space and the persons actually within the confined space. A designated person shall always be securely posted at the entry location to the confined space and he shall not move away from this location during works in such confined spaces. • A good communication system shall be maintained at all times. • Entry into confined spaces shall be only allowed to competent persons who are authorised by the Contractor under the direction of the Site Foreman. Persons entering confined spaces shall be certified as medically fit and have undergone health surveillance beforehand. • Personal Protective Equipment, including breathing apparatus, shall be worn by workers accessing confined spaces, depending on the conditions of the confined space and the risks within. The use of a safety harness attached to a certified safe rope is to be considered as mandatory when accessing confined spaces. • A safe means of access and egress from a confined space shall be allowed at all times. • Confined spaces shall be allowed to ventilate for at least ten minutes before entry. 			
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26	Works in water or damp conditions	P3	S3	H	<ul style="list-style-type: none"> No electrical equipment shall be used in damp conditions. Insulated tools shall be used at all times. Insulated gloves shall be worn as a precaution when operating electrical equipment. If possible, works shall be carried out in dry locations. If this is not possible, then adequate precautions shall be taken in preventing hazards resulting from works in damp conditions. 	P1	S1	L
27	Adverse weather conditions	P4	S2	H	<ul style="list-style-type: none"> Weather forecasts shall be checked before carrying out any work on site and changes monitored during the day. No works shall be carried out when wind speed is over force 4 and this will be measured through constant monitor of weather forecast and also through an anemometer that will be placed at a height. No works shall be carried out when lightning is present either. Thunder is to be considered as a warning. No dismantling or demolition works are to be carried out when workers are exposed to inclement weather. 	P2	S2	L
28	Signage	P4	S3	H	<ul style="list-style-type: none"> The Contractor shall attach an occupational health and safety sign board for construction sites to designated entry point/s of the work area. All occupational health and safety signs shall be clearly visible as required by Legal Notice 45 of 2002. All workers must abide with all safety signs posted on site. Adequate photo luminescent emergency exit signs shall be fixed at a permissible height. 	P2	S2	L
30	Lack of first aid arrangements	P4	S3	H	<ul style="list-style-type: none"> The Contractor shall ensure that workers have rapid access to first aid whenever needed. Stocked first aid boxes shall be made available in a strategic place on site as required by Legal Notice 11 of 2002. One first aid box shall cater for fifty persons employed on Site and additional first aid boxes provided for every fifty persons further employed. The first aid box shall be well maintained; items replenished or replaced when used or expired respectively and should be water and dust proof. If tap water is not available, the Contractor shall provide a supply of sterile water or sterile normal saline in disposable containers. At least one qualified first aider per fifty employees shall be present on site during works. In exceptional cases when qualified first aiders are not available on site, the Contractor shall nominate a designated person to take charge of emergency 	P2	S2	L

					procedures in the event of an accident.			
31	Lack of Personal Protective Equipment (PPE)	P3	S3	H	<ul style="list-style-type: none"> • Appropriate and suitable PPE shall be provided by the Contractor to all employed workers on the Project, free of charge. • Workers shall wear PPE when required. PPE shall be well-maintained and properly stored. • All PPE must be CE marked and meet all EN standards. • Safety footwear (with mid-sole and toe cap), high visibility clothing and hard hats are to be worn by all workers, excluding divers, at all times. • Task-related PPE is included in the following non-exhaustive list: <ul style="list-style-type: none"> ➢ Safety glasses to be used when cutting material, when working close to cutting operations, when exposed to direct sunlight or when exposed to dusty draught; ➢ Hearing protection to be used in noisy environments, if any; ➢ Safety gloves to be used when handling material and when operating electric tools; ➢ Full face masks to be worn during hot works; ➢ Flame-resistant clothing including heavy, long-sleeved shirt and/or leather aprons and /or leather sleeves for additional protection; ➢ Respiratory Protective Equipment in work environments concentrated with dust, fumes, vapours, fibres or gases; ➢ Impermeable gloves to be worn when working with irritant or corrosive chemicals, if any; and ➢ Full body safety harness to be used when working at height and edge protection cannot be installed or if working inside a confined space. • Legs shall be entirely covered at all times. • PPE is to be used as a last resort and when no other reasonable practicable measure can be taken. 	P2	S3	M
33	Demolition / dismantling works	P5	S5	E	<ul style="list-style-type: none"> • Demolition works shall be carried out in accordance with building standards and codes. • Enemalta Plc's Management will be informed in advance by the Contractor prior to dismantling and demolition works in different areas and / or of different elements. These shall issue official clearance in writing that the area is service cleared and safe 	P3	S3	H

					<p>to work in. The Contractor's structural engineer / architect in charge must ensure and certify that there is no danger of structural instability or collapse of walls to all areas prior to demolition and dismantling works.</p> <ul style="list-style-type: none"> • A bottom-up approach shall be adopted to remove the internal metal flues and other auxiliary metal framework whilst a top-down work approach shall be adopted to demolish the concrete bodywork of the chimney. • In the event of structure deformation or if any unexpected movement is noticed, demolition / dismantling works shall be immediately suspended until the field engineer is consulted and a decision taken on the best way forward. • Floors shall never be overloaded beyond their sustainable weight load capacity. • All services should be identified prior to demolition and dismantling works. • All persons employed to carry out dismantling and demolition works should be competent in the job they are expected to carry out and such works are to be well planned. • Demolition and dismantling works shall be carried out under the supervision of a competent person such as an architect or engineer or site foreman or H&S representative. • A safe access and egress route shall be maintained on Site at all times during demolition works. • No demolition or dismantling works are to be carried out if workers are exposed to inclement weather conditions. • Areas where demolition works are in progress shall be completely hoarded in order to prevent unauthorised access. Preferably, heras fencing is to be used in order to border exclusion zones. • Demolition of the chimney's concrete structure will be carried out by keeping a safety zone towards the inner side of the chimney. No workers will be allowed to stand within the safety zone. Workers shall in any case be equipped with proper anchorage devices and a secondary protection provided to prevent accidental falls of items or equipment. • Signs warning persons about ongoing demolition works shall be posted in various parts of the Site, particularly at the Site entrance. • No lone worker works and situations are permitted. 			
34	Welfare / sanitary facilities	P1	S3	M	<ul style="list-style-type: none"> • A suitable number of toilet, welfare and hygiene facilities shall be provided by the Contractor. • Welfare facilities must include the following: 	P1	S1	L

					<ul style="list-style-type: none"> ➤ Basin/s or sink/s large enough for workers to wash their face, hand and forearms; ➤ A supply of hot or warm and cold running water; ➤ Soap and towels or dryers; ➤ A rest room; and ➤ Mobile toilets. 			
35	Smoking / consumption of alcohol	P2	S3	M	<ul style="list-style-type: none"> • No smoking shall be allowed in enclosed areas or where flammable material will, or will likely be present. • Smoking will only be permitted in designated areas within the Site. • Cigarette butts are to be extinguished in designated buckets with lids filled with sand and labelled. • A smoking sign will be posted at the permitted area. • It is strictly prohibited for employees to enter the Site under the influence of alcohol / drugs. Alcohols and drugs shall not be consumed on Site in any circumstance. 	P2	S1	L
36	Assembly, disassembly and use of scaffolding				<ul style="list-style-type: none"> • All assembled scaffolding on Site shall conform to Legal Notice 281 of 2004 and Legal Notice 293 of 2016. In particular, scaffolds (fixed or mobile) shall be properly designed, constructed and maintained to ensure that it does not collapse or move accidentally. Mobile scaffolds shall be secured in order to prevent spontaneous movements. • Scaffolds shall be properly dimensioned and protected with guardrails, intermediate railings and toe boards in order to reduce the risk of persons falling over. • Scaffolding structures shall be erected only by trained and qualified persons. • No persons shall stand on scaffolds if any of these are being moved. • Scaffolds shall be erected on solid, horizontal ground and inspected by a warranted engineer before being put in service, subsequently at periodic intervals and after any modification period during which scaffolds were not used, following exposure to bad weather or exposed to conditions which could have compromised their stability and strength. • Scaffolding inspection records shall be kept readily available on Site. • Suitable steps and ladders shall connect one platform to the other on different platform levels of the scaffold. • All platform levels shall be fully planked and kept free from slip, trip and fall hazards. • Persons performing works on mobile scaffolds shall wear a safety harness with fall restraint / arrest systems anchored to a suitable and secured anchor point. • The bearing components of scaffolding must be prevented from slipping, whether by attachment to the bearing surface, provision of an anti-slip device or any other means of equivalent effectiveness, and the load-bearing surface must have a sufficient capacity. 			

					<ul style="list-style-type: none"> • The dimensions, form and layout of scaffolding decks must be appropriate to the nature of the work to be performed and suitable for the loads to be carried and permit work and passage in safety. • There must be no dangerous gap between the deck components and the vertical collective safeguards to prevent falls. • When parts of a scaffolding are not ready for use, for example during assembly, dismantling or alteration, they must be marked with general warning signs in accordance with the Work Place (Provision of Health and, or Safety Signs) Regulations, and be suitably delimited by physical means preventing access to the danger zone. • The self elevating platform will be supported by 5 columns secured and anchored to the cement chimney structure. • Upon assembly, the self elevating platform system shall be inspected and certified by a competent person as safe to use. 			
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18: Permits required			19: Training certificates required		
	Yes	No		Yes	No
Confined Space Entry	X		Scaffold	X	
Hot works	X		Fork lift	X	
Excavation		X	Crane operator	X	
Tower crane erection		X	Excavator / Sheer cutting machinery	X	
High voltage equipment		X	Electrician		X
Access riser shafts		X	Welders	X	
Use of harnesses	X		Mobile elevating platform	X	
Permit to access		X	Divers		X
Demolition	X		Others (strandjack)	X	
Works in an occupied building		X			
20: Personal Protective Equipment			21: Further risk assessments required		
	Yes	No		Yes	No
Safety helmet	X		Asbestos	X (if present)	
Safety boots or Protective footwear	X		Hazardous substances	X	
High visibility vest or jacket	X				
Eye protection	X				
Safety gloves	X				
Knee caps		X			
Hearing protection	X				
Full body safety harness	X				
Full face welding mask	X				
Heat resistant gloves	X				
Wet suit		X			

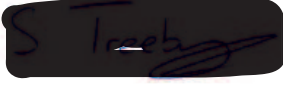

22: Emergency arrangements	
Any first aid measures	Any rescue / security measures required
<p>In case of an injured person, the emergency services must be contacted on 112.</p> <p>A log of all accident and near misses shall be kept at the Site offices by the Contractor.</p> <p>The first aid box is located in the Site offices.</p> <p>A first aider is to be present on Site at all times during works.</p> <p>The name and contact number of the designated first aider/s must be posted on Site in visible locations.</p> <p>The aims of a first aider are:</p> <ul style="list-style-type: none"> • To minimise injury and complications; • To recognise life threatening situations; • To call for medical assistance; • To supply artificial ventilation when required; • To control bleeding; • To prevent infection; and • To comfort the victim 	<p>In case of fire or in the case of an emergency, the emergency services must be contacted on 112.</p> <p>A log of all accident and near misses shall be kept at the Site offices by the Contractor.</p> <p>A suitable amount of fire extinguishers must be kept on Site at all times.</p> <p>In case of a work accident, the following procedure must be followed:</p> <ul style="list-style-type: none"> • Stop working; • Clear the work area and make it safe; • Call for help; • Ensure that the injured person/s are not in further danger; • Ensure that other persons do not interfere with injured persons or rescue services or expose themselves to danger; and • Debriefing and accident reporting.

23: Declaration:

This is to declare that En-Sure Ltd have prepared this occupational health and safety risk assessment for General Smontaggi for their works that will include demolition of the chimney as part of the decommissioning of the Delimara Power Station – Phase 1.

It is the responsibility of General Smontaggi to ensure that all the necessary control measures listed within this Document are implemented.

General Smontaggi must also ensure that the findings of this risk assessment are explained to all workers appointed on the Project, including sub-contractors and authorised third parties that may visit the area of works.

24. Prepared by:	Name: Steven Treeby Health & Safety Officer obo En-Sure Ltd	Signature: 	Date: 26/01/2017
25. Reviewed by:	Name: Rachel Xuereb Director obo En-Sure Ltd	Signature: 	Date: 26/01/2017
26. Contractor's representative:	Name: Mario Sabolo Contractor's representative obo General Smontaggi	Signature:	Date: