



PLANT HAZARD IDENTIFICATION AND ASSESSMENT FORM

Name of Equipment:		GMS20KS												
Manufacturer and / or Supplier:		POWERLINK/GENPOWER AUSTRALIA												
Manufacturer / Supplier References and Serial Numbers:		POWERLINK, GENPOWER REF NUMBER: 32247, GENERATOR SERIAL NUMBER: TBA												
Comments / Notes		GMS20KS C/O GENPOWER AUSTRALIA FOR BAROSSA VALLEY HIRE												
1. IDENTIFY THE HAZARD		2. IDENTIFY THE RISK					3. ANALYSE THE RISK			4. EVALUATE THE RISK		5. TREAT THE RISK		
Hazard	Hazard Description	Risk Description	Likely Cause	Potential Consequence	Current Control	Control Effectiveness	Consequence	Likelihood	Level	Potential Exposure (High / Moderate / Low)	Treatment Required	Priority for Treatment (Immediate / Medium Term / Long term)	Treatment Option (Eliminate / Reduce / Tolerate)	Treatment Action
Entanglement														
Can anyone's hair, clothing, gloves, necktie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of the plant, materials in														
	Entanglement	Loose items or clothing becoming entangled whilst engine is running	Largely ineffective	Partially effective	Substantially effective	Substantially effective	2	B	Low	Low	Radiator Guards Appropriate PPE	Immediate	Reduce	Radiator Gaurds with appropriate PPE
Crushing														
Can anyone be crushed due to:														
- Material falling off the plant?														
	NIL RISK													
- Uncontrolled or unexpected movement of the plant or its load?														
	Automatic Start	Genset can start automatically without warning whilst being maintained or serviced	Substantially effective	Partially effective	Fully effective	Fully effective	3	A	Low	Low	Battery Isolator	Long Term	Eliminate	Isolate battery before servicing
- Lack of capacity for the plant to be slowed, stopped or immobilized?														
	NIL RISK													
-The plant tipping or rolling over?														
	NIL RISK													
- Parts of the plant collapsing?														
	NIL RISK													
- Coming in contact with moving parts of the plant during testing, inspection, use, maintenance, cleaning or repair?														
	Entanglement	Loose items or clothing becoming entangled whilst engine is running. Genset can start automatically during service	Substantially effective	Partially effective	Substantially effective	Substantially effective	3	B	Medium	Low	Radiator Guards, PPE and Battery Isolator	Long Term	Reduce	Radiator Guards, PPE and isolate battery before servicing
- Being thrown off or under the plant?														
	NIL RISK													
- Being trapped between the plant and materials or fixed structures?														
	NIL RISK													
- Other factors?														
	N/A													

Cutting, Stabbing and Puncturing													
- Can anyone be cut, stabbed or punctured due to? - Coming in contact with sharp or flying objects? - Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant? - Plant, parts of the plant or work pieces disintegrating? - Work pieces being ejected? - The mobility of the plant? - Uncontrolled or unexpected movement of the plant? - Other factors?	NIL RISK												
	Entanglement and pinch points	risk of injury from moving parts whilst testing the unit when running	Partially effective	Partially effective	Substantially effective	Substantially effective	2	A	Low	High	GLOVES AND GUARDS	MEDIUM	REDUCE
- Plant, parts of the plant or work pieces disintegrating? - Work pieces being ejected? - The mobility of the plant? - Uncontrolled or unexpected movement of the plant? - Other factors?	NIL RISK												
	Starts automatically	Automatic start up	Largely ineffective	Substantially effective	Fully effective	Fully effective	3	A	Low	Low	Battery Isolator	Immediate	Eliminate
Shearing													
Can anyone's body parts be: - Sheared between two or more parts of the plant, or between a part of the plant and a work piece or structure? - Other factors?	NIL RISK												
Friction (Burning)													
Can anyone be burnt, gain abrasions etc. due to: - Contact with moving parts or surfaces of the plant, or material handled by the plant? - Other factors?	NIL RISK												
Striking (Bruised,													
Can anyone be struck by moving objects due to: - Uncontrolled or unexpected movement of the plant or material handled by the plant? - Plant, parts of the plant or work pieces disintegrating? - Work pieces being ejected? - Mobility of the plant? - Other factors?	NIL RISK												

High Pressure Fluid (Burnt, Scolding)														
Can anyone come into contact with? - Fluids under high pressure in normal use, in the instance of plant failure? - Other factors?	NIL RISK N/A													
Electrical (Shocked, burnt, electrocuted)														
Can anyone be injured by electrical shock or burnt due to: - The plant contacting live electrical conductors? - Plant working close to electrical conductors? - Overload of electrical circuits? - Damaged or poorly maintenance electrical leads or cables? - Damaged electrical switches? - Water near electrical equipment? - Lack of isolation procedures? - Electrocuted due to breach of safety clearances - Other factors?	NIL RISK NIL RISK NIL RISK Damaged leads Damaged switches NIL RISK Lack of isolation Electrocution N/a	Exposed cables Damaged/Faulty switch Electrical shock Electrocution	Largely ineffective Largely ineffective Largely ineffective Largely ineffective	Fully effective Fully effective Fully effective Fully effective	Fully effective Fully effective Fully effective Fully effective	Fully effective Fully effective Fully effective Fully effective	6 6 6 6	A A A A	High High High High	Low Low Low Low	Regular maintenance Regular maintenance Correct isolation procedures Correct safety precautions	Long Term Long Term Immediate Immediate	Eliminate Eliminate Eliminate Eliminate	Regular checks and maintenance Regular checks and maintenance A-class electrician to check and isolate A-class electrician to check and isolate
Explosion (burnt, struck by objects)														
- Gases, vapours, liquids, dusts or other substances triggered by the operation of the plant or by materials handled by the plant? Other factors?	NIL RISK N/A													
Slipping, tripping and Falling														
Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to: - Uneven or slippery work surfaces? - Poor housekeeping, such as shavings in the vicinity of the plant, spillage not cleaned up? - Obstacles being placed in the vicinity of the plant? - Other factors?	NIL RISK NIL RISK Fuel Spillage while Filling Toolbox, Tools N/A	Slipping Trip hazard	Largely ineffective Largely ineffective	Partially effective Partially effective	Fully effective Fully effective	Fully effective Fully effective	2 2	A A	Low Low	Low Low	Regular cleaning Regular checks	Long term Long term	Eliminate Eliminate	Regular cleaning once spillage has occurred Checks on workers equipment being properly stored
High Temperature (Burnt)														
Can anyone: - Come into contact with objects at high temperature? - Be injured by fire? - Other factors?	Burnt Burnt N/A	High temperature from turbo, coolant, engine surfaces and exhaust Fuel Fire	Substantially effective Largely ineffective	Partially effective Fully effective	Substantially effective Substantially effective	Substantially effective Substantially effective	2 6	B A	Low High	Low Low	Canopy Fully contained fuel tank. No smoking and no naked flames	Long Term Long term	Reduce Reduce	Canopied Genset, Exhaust lagging and turbo guard Warning signs and fully contained fuel tank

Temperature and Thermal Comfort														
Can anyone suffer ill-health due to:														
- Exposure to high or low temperatures?	High ambient temperature	Ill-health for worker	Largely ineffective	Substantially effective	Substantially effective	Fully effective	3	A	Low	Low	Hydration, Working below ambient temp. limit, sunscreen and appropriate PPE	Immediate	Reduce	Hydration, Working below ambient temp. limit, sunscreen and appropriate PPE
- Failure of air conditioning equipment?	NIL RISK													
- Other factors?	N/A													
Suffocation														
Can anyone be suffocated due to:														
- Lack of oxygen, or atmospheric contamination?	Exhaust Fumes	Exposure to exhaust fumes	Largely ineffective	Substantially effective	Substantially effective	Substantially effective	3	A	Low	Low	Adequate ventilation	Long Term	Reduce	Adequate ventilation
- Other factors?	N/A													
Ergonomics														
Can anyone be injured due to:														
- Poorly designed seating?	NIL RISK													
- Repetitive body movements?	NIL RISK													
- Constrained body posture or the need for excessive effort?	Constrained body posture	Muscle discomforts	Largely ineffective	Partially effective	Substantially effective	Substantially effective	2	A	Low	Low	Manual handling	Immediate	Reduce	Appropriate manual handling procedures
- Design deficiency causing physical or personal stress?	NIL RISK													
- Inadequate or poorly placed lighting?	NIL RISK													
- Lack of consideration given to human error or human behaviour?	NIL RISK													
- Mismatch of the plant with human traits and natural limitations?	NIL RISK													
- Other factors?	N/A													
Uncontrolled or Inadvertent Movement or Energisation														
Can anyone be injured due to:														
- Uncontrolled movements?	NIL RISK													
- Inadvertent movements?	NIL RISK													
- Uncontrolled Energisation?	NIL RISK													
- Inadvertent Energisation?	NIL RISK													
- Other factors?	N/A													

Mechanical / Electrical Interlocking														
During Maintenance and Operation, can injury or fatality occur as a result of: - Malfunction of electrical interlocking system - Malfunction of mechanical Interlocking - Lack of training on the mechanical / electrical interlocking system	Breaker	System not isolated	Largely ineffective	Fully effective	Fully effective	Fully effective	6	A	High	Low	Regular maintenance	Long Term	Eliminate	Regular maintenance
	E-stop	System not isolated	Largely ineffective	Fully effective	Fully effective	Fully effective	6	A	High	Low	Regular maintenance	Long Term	Eliminate	Regular maintenance
	Lack of training		Largely ineffective	Fully effective	Fully effective	Fully effective	6	A	High	Low	A-class Electrician	Immediate	Reduce	A-class electrician to check and isolate
Training														
Are there any risks in relation to the operation and maintenance of this equipment where an absence of training can result in injury or fatality?	Electrocution	Electrocution	Largely ineffective	Fully effective	Fully effective	Fully effective	6	A	High	Low	A-class Electrician	Immediate	Reduce	A-class electrician to check and isolate
	Moving Parts Injury	Entanglement	Substantially effective	Substantially effective	Fully effective	Fully effective	2	B	Low	Low	Radiator Guards	Immediate	Reduce	Radiator Guards
	Noise													
	Burns	Burns	Substantially effective	Partially effective	Substantially effective	Substantially effective	2	B	Low	Low	Canopy	Long Term	Reduce	Canopied Genset, Exhaust lagging and turbo guard
Other Risks														
Can anyone be injured or suffer ill-health from exposure to: - Chemicals? - Other substances?	Coolant, Oil and Fuel													
	N/A													
Can anyone be injured or suffer ill-health from exposure to: - Toxic gases or vapours? - Fumes?	NIL RISK													
	Exhaust Fumes	Exposure to exhaust fumes	Largely ineffective	Substantially effective	Substantially effective	Substantially effective	3	A	Low	Low	Adequate ventilation	Long Term	Reduce	Adequate ventilation

Can anyone be injured or suffer ill-health from exposure to: - Dust?	Eye Injury	Eye exposed to dust	Largely ineffective	Substantially effective	Fully effective	Fully effective	3	A	Low	Low	Adequate Cleaning	Long term	Reduce	Adequate cleaning during maintenance
Can anyone be injured or suffer ill-health from exposure to: - Noise?	Diesel engine noise	hearing damage	Largely ineffective	Partially effective	Fully effective	Fully effective	1	A	Low	Low	Ear protection	Immediate	Reduce	Ear protection
Can anyone be injured or suffer ill-health from exposure to: - Vibration?	NIL RISK													
Can anyone be injured or suffer ill-health from exposure to: - Radiation?	NIL RISK													
Can anyone be injured or suffer ill-health from exposure to: - Any Other Factors?	N/A													

Additional WHS information

1. Purpose of plant														
	1.1	What has the Plant been designed for	Standby power supply											
	1.2	What is the plant NOT suitable for (here list prohibited uses or restrictions if any – consider misuse)	Not to be used for any other purpose than that stated in operations maintenance manual											
	1.3	Provide all details of registration for the Plant item (e.g. vehicle hoists (design only), lifts (both design and plant itself) Refer to state legislation or DASH-Workplace Services for more details.)	Provided											
2. Transport, handling and storage														
	2.1	What is the weight of the Plant item being manufactured (Breakdown elements into high level components where appropriate)	1.2T											
	2.2	Provide appropriate handling methods (cranes, hydraulic jacks, etc.)	Suitably rated crane, spreader bar and use of provided lifting points											
	2.3	Identify lifting points	x4 lifting points on base of unit											
	2.4	Provide requirements for storage: (Ventilation, moisture, area / volume, footing, etc.)	Provided											
3. Installation and commissioning														
	3.1	What tests that have been carried out on the equipment and include results (or indicate where available)	Pre-delivery and optional final onsite commissioning											
	3.2	What tests to be carried out by ElectraNet (include what /when / how / frequency)												
	3.3	What items that must be inspected by ElectraNet (include what /when / how / frequency)	Visual inspection as per manufacturers operations manual											
	3.4	What competencies required for a person carrying out the inspection and testing of the plant	A-Class electrician											
	3.5	Are there any PPE required for testing or inspection of plant	Boots, safety clothing, hard hat and safety glasses											
	3.6	What elements of the plant requires maintenance? <ul style="list-style-type: none"> • List the • What • frequency of • List safety devices that need to be removed / disabled for 	Battery, Oil filter, Fuel filter, Air filter and coolant level Full annual engine service as per operation of maintenance manual 12-monthly Isolate main breaker and battery											
4. Operation of the plant														
	4.1	Provide manuals for the Plant being manufactured (To allow ElectraNet to understand all parameters for safe maintenance and operation of the plant)	Provided											
	4.2	Are there any residual / operational risks? <ul style="list-style-type: none"> • Provide a list • in appropriate field, e.g. Slips, trips, falls, 	N/A											
	4.3	What control measures are there to treat residual / operational risks? <ul style="list-style-type: none"> • Provide control • Populate as per 												
	4.4	What is the correct method of operation (provide detail)?	Refer to operation of maintenance manual											
	4.5	What are all the safe work procedures applicable to plant?	Isolation and appropriate PPE											
	4.6	What are the safety aspects for change of tools, setup, etc.?												
	4.7	What elements must NOT be removed or disabled to ensure safety during normal operation?	Do not remove operations maintenance manual and do not isolate battery or breaker during normal operation											

		<ul style="list-style-type: none"> Provide a list of items and reasoning 	
	4.8	What are the appropriate isolation procedures for normal operational tasks?	Isolate battery and switch off breaker
	4.9	What are the specific emergency equipment or procedures relating to the plant (e.g. location of emergency stops, appropriate fire fighting medium, etc.)	Emergency stop located on the control panel and on the side of the canopy
	4.1	What clothing items, jewellery, etc. are appropriate / inappropriate during operation?	Correct PPE and no jewellery
	4.1.1	What personal protective items must be worn or be on person for operating plant?	Hi vis shirt, safety glasses and hard hat
	4.1.2	What are the suitable / unsuitable attachments that must be identified during operation?	N/A
	4.1.3	What is the ability or otherwise of the plant to carry passengers (where appropriate)?	N/A
5. De-commissioning, disposal and dismantling	5	Are there any specific requirements for / when De-commissioning, disposal and dismantling e.g. isolation / decontamination procedures	Remove all liquids eg. oil, coolant and fuel.
6. Training	6	where no specific requirements exist the operator should, as a minimum be trained in the following:-	
	6.1	to read and understand operation manual	yes
	6.2	any safety features of the plant	yes
	6.3	location and use of controls	yes
	6.4	correct operation	yes
	6.5	procedures for abnormal conditions eg jamming	yes
	6.6	tasks required of operator	yes
	6.7	any specific requirements unique to the plant / accessories / modifications	yes
	6.8	highlight requirement to not interfere with safety devices	yes
Prepared By			
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Position:	SALES MANAGER	Signature	
Company:	GENPOWER AUSTRALIA		