

# RISK ASSESSMENT

STG Global HDV4500

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## HDV4500 RISK ASSESSMENT

Clients Name: <b>STG Global</b>		Date of assessment: <b>October 2017</b>
Machine Make & Model: <b>STG Global HDV4500</b>		
Capacity Limits: <b>4500 LITRES</b>		
Certification of operator required: Yes		

Is the plant designed to perform the task as outlined in the scope?

Yes ☒ No ☐

Has the plant been modified from the original condition?

Yes ☐ No ☒

All identified action items closed out/addressed?

Yes ☒ No ☐

Is the plant safe to operate?

Yes ☒ No ☐

**If all suggested controls are implemented by the operator and management**

STEP 1: Likelihood of Occurrence	STEP 2: Severity of Result
1. Expected to Occur (once per week)	A Fatality
2. Common (once per month)	B Permanent Disability
3. Sometimes (once per year)	C Lost Time Injury (LTI)
4. Rarely (once in < 20 years)	D Medical Treatment / Damage
5. Highly Unlikely (once in > 20 years)	E First Aid Injury

STEP 3:

	A	B	C	D	E
1	H	H	H	M	M
2	H	H	M	M	L
3	H	M	M	L	L
4	M	M	L	L	L
5	M	L	L	L	L

STEP 4: Hazard Risk Assessment

H = High Risk (INTOLERABLE, significant and urgent actions required- Immediate Action).
M = Medium Risk (ALARP, reduce risk to As Low As Reasonably Practicable).
L = Low Risk (TOLERABLE, monitor and manage risk).

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## HDV4500 RISK ASSESSMENT

### Report Acceptance

#### General Notes

The Owner/Operator of the above Plant/Equipment Must perform an inspection at regular intervals, that all procedures and control methods are maintained to an acceptable level where the level of risk to any person is increased. When any alteration or modification is made to the Plant/Equipment, a review of both Control Methods and Documentation must be made. The Owner/Operator must read, understand, implement, monitor and review all documentation and control measures as per SWMS. A Plant Risk Assessment must be performed by the owner/operator upon acceptance of plant and at regular intervals with a minimum of 12 months between assessments.

#### Confidentiality

Information obtained from **STG Global** during the production of this report will be treated as confidential. It will not be used for any purpose other than to produce this report.

#### Disclaimer

This report has been prepared by Donovan's Construction Services Pty. Ltd. for determining compliance to Work health and safety legislation and standards.

The contents of this report are intended only for use by **STG Global**. Whilst every effort has been made by Donovan's Construction Services Pty. Ltd. to ensure the accuracy of this report. Donovan's Construction Services Pty. Ltd. will not be held responsible, and extends no warranties as to the suitability of such information or for the consequence of its use.

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John Donovan  
Assessor

**THIS RISK ASSESSMENT DOCUMENT IS VALID FOR TWELVE (12) MONTHS FROM THE DATE OF ISSUE**

Consequence (How Bad)		Likelihood (How Often)					Elimination	The complete elimination of the hazard
		A	B	C	D	E		
		Common	Has Happened	Could Happen	Not Likely	Nearly Impossible	Substitution	Replacing the material or process with a less hazardous one
1	Fatality/Catastrophic Environmental Impact	1	2	4	7	11	Redesign	Redesign the equipment or work processes
2	Serious Injury (LTI at > 7 Days) / High Criticality	3	5	8	12	16	Separation	Isolating the hazard by guarding or enclosing it
3	LTI / Moderate Impact	6	9	13	17	20	Administration	Providing controls such as training, procedures, etc
4	Moderate Impact (Non lasting effects)	10	14	18	21	23	PPE	Use properly fitted PPE where other controls are not practicable
5	Minimal Impact / Minor Injury	15	19	22	24	25	Date:	Site/Office:
Completed: <input type="checkbox"/> Yes							Originator:	
<input type="checkbox"/> No – Reason:							Signature:	Date:



## HDV4500 RISK ASSESSMENT

Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>ENTANGLEMENT</b> Can anyone's, hair, clothing, gloves, necktie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of the plant, or materials in motion?	Moving Parts in engine areas, such as belts, wheels and pullies.	Guard Shields installed Warning Decals for Personal (i.e .Do not operate with guards removed etc) Engine covers fitted	8	<ul style="list-style-type: none"> <li>• Trained competent personnel to carry out maintenance operations only.</li> <li>• Guards to be removed by trained personnel only for maintenance and servicing purposes.</li> <li>• Do not remove Guards during operations</li> <li>• Daily inspections to be carried out by personnel trained and competent in plant operations.</li> <li>• Keep hands, feet, hair, and clothing away from moving parts. Contact with a moving mechanism can cause entanglement that can lead dismemberment or death.</li> <li>• Review operators manual</li> </ul>	12	Yes



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<p><b>CRUSHING</b> Can a person be crushed due to :</p> <p><i>Falling, uncontrolled or unexpected movement of plant during pre-inspection, operations and post inspections.</i> <i>Lack of capacity to slow, stop or immobilise the plant</i> <i>Falling, uncontrolled or unexpected movement of plant's load</i> <i>Under or trapped between plant and materials or fixed structure</i> <i>Contact with moving parts during testing, inspection, maintenance, cleaning</i> <i>Tipping or rolling over</i> <i>Parts of plant collapsing</i> <i>Being thrown off</i> <i>Other – specify:</i></p>	<p>Crushing Hazard at tail gate when closing.</p> <p>Uncontrolled movement of the plant</p> <p>Tank uncontrolled drop when been elevated</p>	<p>Emergency stop buttons in place that will shut down all components of the plant.</p> <p>Remote control operations allows for operators to be clear of the machine when in operation and conducting tasks such as disposing of loads.</p> <p>Four hydraulic ramps unlocks the tail gate of the tanks. Two hydraulic ramps open the gate and two hydraulic rams lift the tank to dispose of the materials.</p> <p>Pressure protection valve and Anti Drop Valve fitted.</p> <p>Remote operations protect operator in the event of component failures.</p> <p>Training for all operators of the plant.</p>	<p>8</p>	<ul style="list-style-type: none"> <li>• Ensure the machine is set up on stable level ground with wheels chocked to prevent uncontrolled movements, during Servicing, pre-inspection, operations and post inspections.</li> <li>• Operational checks must be conducted by trained competent personnel only.</li> <li>• The guardrail must be erected to prevent falls from heights.</li> <li>• Ensure all persons stand clear when disposing of materials.</li> <li>• Exclusion Zone of 10m to be established during operations</li> </ul>	<p>12</p>	<p>Yes</p>
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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>CUT,STAB,PUNCTURED</b> Can anyone be cut, stabbed or punctured due to Coming into contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant?  <i>Moving plant or parts</i> <i>Sharp of flying objects</i> <i>Work pieces disintegrated</i> <i>Work pieces ejected</i>  The plant, parts of the plant or work pieces disintegrating? Work pieces being ejected?	Contact with Hydraulic Ramps Whilst in operation  Moving Parts in Engine areas.	Guard Sheilds installed Warning Decals for Personal (i.e .Do not operate with guards removed etc) Engine covers fitted  Maintenance of equipment to be carried out as per manufacturers recommendations  Signage in place on the equipment prohibiting the removal of guards during operations.	13	<ul style="list-style-type: none"> <li>• Remote operations to be used during plant operations. This will prevent contact between the operator and the Hydralic ramps. Do not remove any gurads that Protect moving components, trained Personnel to carry out servicing</li> <li>• Operator to be trained and competent in equipment operation, testing and inspection</li> <li>• Qualified competent personnel to carry out maintenance, cleaning or repair.</li> <li>• PPE to be worn at all times during operations</li> <li>• Refer to the manufactures operator and maintenance manual.</li> <li>• Pre-Start checks to be carried out daily.</li> <li>• Not to be operated with guards removed, or any modification to be made to the equipment.</li> <li>• Exclusion Zone of 10m to be established during operations</li> </ul>	17	Yes

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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>SHEARING</b> Can anyone's body parts be sheared between any two parts of the plant, or between a part of the plant and a work piece or structure?	Crushing Hazard at tail gate when closing.  Uncontrolled movement of the plant  Tank uncontrolled drop when been elevated  Roller Door Slaming Shut when closing.	Use of wireless remote to prevent operator from been in the line of fire.  Signage in place to warn operator not to climb onto the upper platform.  Signage in place to warn operator to isolate plant and equipment prior to climb onto the upper platform.  Handles on storage units Retrievable cords for closing roller shutters	8	<ul style="list-style-type: none"> <li>Isolation of the machine when climbing onto upper platform. This will prevent body parts been sheared due to uncontrolled movement of boom and moving components at the rear of the plant.</li> <li>Wheels to be chocked at all times during operation except in transit.</li> <li>Retreivable cords to be used when closing roller shutters of Engine block</li> <li>Handles of all doors and compartment to be used when opening and closing.</li> <li>Site risk assessment to be conducted prior to the commencement of work. Ensure your operators familiarise themselves with the work location.</li> <li>Exclusion Zone of 10m to be established during operations</li> </ul>	12	YES
Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual; Risk Score	Reasonably Practicable Yes /No
<b>FRICTION/BURN HAZARD</b> Can anyone be burnt due to contact with moving parts or surfaces of the plant, or material handled by the plant?	Suction Hose can become hot during operations  . Vaccum Pump can become hot during operations.  Refuelling	Insulation of hoses Training of operators Do not touch hot fluid or equipment	14	<ul style="list-style-type: none"> <li>Avoid contact with the vacuum pump during or immediately after operation. Operating temperatures can range from near 200oF to over 00oF, depending on the make and model of pump and on the working conditions. Contact with a hot vacuum pump can cause severe burns.</li> <li>Do not touch hot fluid or equipment</li> </ul>	21	





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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
				<ul style="list-style-type: none"> <li>Do not touch exhaust pipe of Truck unless you are a trained professional carrying out maintenance or repairs</li> <li>Refuelling to be carried out in designated areas. Ensure spill kits are available and shutdown valve of the pump is available.</li> <li>Conduct a risk assessment of the refueling station</li> </ul>		
<b>STRIKING</b> Can anyone be struck by moving objects due to: The plant, parts of the plant or work pieces disintegrating?  <i>Plant or work pieces being ejected or disintegrated</i> <i>Uncontrolled or unexpected plant movement</i> <i>Mobility</i> <i>Other – specify:</i>	Striking can occur due to uncontrolled movement from the Truck, Boom, moving engine components and pipe blow out.	Remote control used during operations. Wheels chocked. Signage in place to warn operators Training of operators	8	<ul style="list-style-type: none"> <li>Isolation of plant Prior to climbing onto upper platform.</li> <li>Do not remove guards protecting moving components.</li> <li>Checks to all clamps prior to use to ensure they are in good working order, free of cracks and stresses. Reporting of issues to ensure they are repaired prior to continued use.</li> <li>Maintenance of equipment to be carried out as per manufacturers recommendations.</li> </ul>	12	YES
Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Projected Risk Score	Reasonably Practicable Yes /No
<b>High Pressure Fluid.</b> Can anyone come into contact with fluid	Hydraulic oil	All pipe clamps fitted Pressure protection valves and Anti Drop valves fitted to hydraulic system. High pressure warning decals	5	<ul style="list-style-type: none"> <li>Hydraulic Fluid lines to be inspected daily, cracks, tears and deformed lines must be reported and repaired prior to use.</li> </ul>	12	

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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>Pressurized Aluminium Parts Hazard</b> Use of incompatible fluids	Nil	Only fluids specified in the manufacturers recommendations to be used with this equipment	Nil	<ul style="list-style-type: none"> <li>Any attachments to the Plant and or extra parts added need to be risk assessed to ensure Safety</li> </ul>	Nil	Nil
Hazard Type		Control Methods in Place	Yes / No	Comments / Recommended Improvements/ DESCRIPTION	Projected Risk Score	Reasonably Practicable Yes /No
<b>Thermal Expansion Hazard</b> Fluids subjected to heat in confined spaces, including hoses, can create a rapid rise in pressure due to the thermal expansion. Over-pressurization can result in equipment rupture and serious injury.  Thermal expansion of equipment and hoses		Open valve to relieve the fluid expansion during heating  Replace hoses proactively at regular intervals based on operating conditions				



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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>ELECTRICAL Shock Hazard</b> This equipment must be grounded. Improper grounding, setup, or usage of systems can cause electric shock Can anyone be injured by electrical shock or burn due to: The plant contacting live electrical conductors?  Damaged or poorly maintained electrical leads and cables Damaged electrical switches? Servicing equipment	12 VDC or 24 VDC electrical systems  Static Electricity can be caused from soils and debris been sucked up into the hose.  It can Also be created using the blower  Welding on Equipment with Electronic Controls	All electrical components are to manufacturers recommendations.  All electrical equipment must be maintained, Tested and Tagged every 3 months by Qualified personnel  Prior and post use checks must be carried out by the operator to ensure safe use  Turn off and disconnect power at main switch before disconnecting any cables and before servicing equipment.  Conductive hoses shall provide suitable electrical conductance less than or equal to 1 mega ohm per 100 feet (as determined by the hose manufacturer). Thin walled metallic spiral-wound conductive hoses should not be used because of the potential for electrical discharge through the thin plastic that covers the metal spiral.	13	<ul style="list-style-type: none"> <li>▢ Do not set up near overhead powerlines</li> <li>▢ It is important to ensure Bounding and Grounding of the Plant to reduce the risk of Static Electricity, maintain proper battery usage and damage to the panel</li> <li>▢ Always use the checklist when conducting operations and ensure the operator manual has been read and understood by all persons involved in the operations and works</li> <li>▢ Ensure an Exclusion Zone of 10m</li> <li>▢ Circuit Breakers must be maintained</li> <li>▢ Ensure proper welding procedures are carried out and ensure procedure in the manual are read and understood.</li> <li>▢ Do not ground the welder to electrical components such as the control ground or sensors. Improper grounding can cause damage to electrical components</li> <li>▢ Clamp the ground cable from the welder to the component being welded. Place the clamp as close as possible to the weld to reduce the possibility of damage</li> </ul>	17	YES



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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>FIRE AND EXPLOSION</b> Flammable fumes, such as solvent paint fumes, in the work area can ignite or explode.  During a fire smoke may contain original material in addition to combustion products of varying composition which might be toxic and/or irritating.  Product reacts with water. Reaction may be violent and produce heat and/or gases.	Refuelling Hazard  Smokers  Flammable works been carried out in the workzone  Electrical Ignitions	Fire Extinguisher on the truck  Isolation of the plant and equipment signs in place	7	<ul style="list-style-type: none"> <li>• Use equipment only in well ventilated area</li> <li>• Eliminate all ignition sources such as pilot lights, cigarettes, portable electric lamps and plastic drop cloths (potential static arc)</li> <li>• Keep work area free of debris, including solvent rags and gasoline</li> <li>• Do not plug or unplug power cord, or turn power or light switches on or off when flammable fumes are present</li> <li>• Ensure isolation of the plant and equipment prior to all works including refueling</li> <li>• Ground all equipment in work area (refer to instructions in operator's manuals)</li> <li>• Keep a working fire extinguisher in work area at all times (Water fog or fine spray, foam, carbon dioxide or dry chemical powder.) are suitable.</li> <li>• An appropriate properly fitted respirator, which may include an air supply</li> <li>• Ensure you read the operators manual prior to using the plant</li> <li>• Ensure a risk assessment is carried out of the refueling depot</li> <li>•</li> </ul>	11	YES



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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>SLIP/TRIP/FALL</b> Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to: ♦ Uneven or slippery work surfaces? ♦ Lack of guardrails or suitable edge protection? ♦ Lack of proper stairs or ladders?  <i>The working environment</i> <i>Poor housekeeping</i> <i>Uneven work surfaces</i> <i>Slippery work surfaces</i> <i>Lack of guardrails</i> <i>Other – specify:</i>	Fall from the platform  Falling from the truck  Trip over hoses	Non slip surface Guardrails or suitable edge protection in place  3 point of contact warning decal fitted  Ladder fitted to back of truck	9	<ul style="list-style-type: none"> <li>Also ensure that the plant is isolated to prevent uncontrolled movement of the boom.</li> <li>Three points of contact climbing onto the platform</li> <li>Tidy up as you go</li> <li>Keep hoses and pipe to the side to reduce the chance of tripping over them.</li> <li>Clean footwear of mud and debris prior to climbing onto the platform to reduce slips</li> <li>Do not climb onto the truck when in motion</li> <li>Also read the operators manual prior to using plant</li> </ul>	17	YES



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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>SKIN INJECTION HAZARD</b> High pressure fluid from gun, hose leaks or ruptured components will pierce skin.  <i>This may look like just a cut but it is a serious injury that can result in amputation.</i>  <b>GET IMMEDIATE SURGICAL TREATMENT</b>	Cracks and damaged hoses and piping  Operating gervi/ presurised water hose	Maintenance of equipment  Emergency shut down button Isolator Servicing	7	<ul style="list-style-type: none"> <li>Shut down plant immediately and report fault, do not continue until repaired by qualified personnel Engage trigger lock when not spraying</li> <li>Do not point gun at anyone or any part of the body</li> <li>Do not put your hand over the spray tip</li> <li>Do not stop or deflect leaks with your hand, body or a rag</li> <li>Follow the pressure relief procedure when you stop spraying and before cleaning, checking or servicing equipment</li> <li>Tighten all fluid connections before operating the equipment</li> <li>Ensure correct PPE is worn at all times</li> <li>Check hoses and couplings daily. Replace worn or damaged parts immediately</li> </ul>	11	YES

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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>TOXIC FLUID OR FUMES HAZARD</b> Toxic fluid or fumes can cause serious injury or death if splashed in the eyes or on the skin, inhaled or swallowed	Fumes from plant whilst working in confined space  Sewage and Grains	Isolation of truck during vacuum, blowing and washing operations. Emergency shut down button Isolator Servicing	7	<ul style="list-style-type: none"> <li>▢ Refer to Safety data sheet for safe handling instructions, specific hazard of the fluids and the effects</li> <li>▢ Keep work area well ventilated and wear appropriate PPE (refer to PPE warning in the manual and SDSI)</li> <li>▢ Store hazardous fluid in approved containers and dispose of it accordingly to application guidelines and Environmental management plan</li> <li>▢ Confined Space permit required for all operations conducted with in confined spaces.</li> <li>▢ Risk assessment to be carried out prior to all operations</li> </ul>	11	YES
<b>PERSONNEL PROTECTIVE EQUIPMENT</b> PPE must be worn at all times to protect the operators from the hazardous effects of the task	Refuelling Sewage Confined space Asbestos Fumes Other works in the work area	Signage on the truck to reinstate the importance  PPE stored in the truck	9	<ul style="list-style-type: none"> <li>• An appropriate properly fitted respirator, which may include an air supply</li> <li>• Chemically impermeable gloves</li> <li>• Full body suit including boot covers</li> <li>• Use approved chemical glasses, goggles or face shield</li> <li>• Maintain good hygiene keep area clean and tidy, wash hands regularly.</li> <li>• Work area risk assessment to be conducted by operator prior to commencement of works</li> <li>• Refer to SWMS</li> </ul>	17	YES

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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>SUFFOCATION</b> Can anyone be suffocated due to lack of oxygen or atmospheric contamination, refer to the Confined Spaces Regulations?  <i>Lack of oxygen</i> <i>Atmospheric contamination</i> <i>Other – specify:</i>	Fumes from the Machine in confined Spaces  Dealing with Grain and Sewage	SWMS Operators Manual Emergency shut down button Isolator	2	<ul style="list-style-type: none"> <li>Extra controls such as a gas detector to test air quality</li> <li>Breathing apparatus must be considered</li> <li>A properly fitted respirator, which may include an air supply</li> <li>Where product is being applied in a confined space ensure all work is conducted under a confined space permit</li> <li>Do not operate in any confined space without a permit</li> </ul>	7	YES
<b>UNCONTROLLED SPILLS</b> Spills of fluids on to the ground, Avoid contamination of waterways, drains and sewers	Refueling	Spills kits to be located with the truck at all times including when not in use Emergency shut down button Isolator Servicing	4	<ul style="list-style-type: none"> <li>Spills kits to be located with the truck at all times including when not in use</li> <li>Ensure refueling in designated area</li> <li>Risk assessment to be conducted prior to refueling</li> </ul>	11	YES
Hazard Type	Hazard	Control Methods in Place	Yes / No	Comments / Recommended Improvements/ DESCRIPTION	Projected Risk Score	Reasonably Practicable Yes /No
<b>ERGONOMIC (incl MANUAL HANDLING) – Can anyone be injured due to:</b>  <i>Seating design</i> <i>Repetitive body movement</i> <i>Poor workplace or plant design</i> <i>Excessive effort</i> <i>Poor lighting</i> <i>Other – specify:</i>	Strains to body	Remote control to operate the plant Appropriate adjustable seat fitted Seat Belts in good working order Access areas in good condition Wireless remote been used for operations Lighting to rear of plant	6	<ul style="list-style-type: none"> <li>Use three points of contact when climbing ladder or onto plant</li> <li>Work area risk assessment to be conducted by operator prior to commencement of works.</li> <li>Extra lighting may be required for night works or when there is poor visibility</li> </ul>	17	YES



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Hazard Type	Hazard	Control Methods in Place	Risk	Comments / Recommended Improvements/ DESCRIPTION	Residual Risk Score	Reasonably Practicable Yes /No
<b>Can anyone be injured or suffer ill health from exposure to OTHER HAZARDS:</b> <b>Chemicals</b>  <i>Vibration</i> <i>Toxic gases or vapours</i> <i>Fumes</i> <i>Noise</i> <i>Ionising Radiation</i> <i>Dusts</i> <i>Other – specify:</i>	<b>Noise Exposure due to prolonged periods of time</b>  <b>Persons entering into the tank on the truck</b>	SWMS Operators Manual Emergency stop button Isolation of Plant  Signage in place	5	<ul style="list-style-type: none"> <li>Wear hearing protection that meets 110 dB(A)</li> <li>Do not enter the tank of the machine without a permit to work in confined spaces</li> </ul>	12	YES
<b>DOCUMENTATION</b>		Operator's Manual	N	<b>To be implemented by owner/hirer</b> <b>Must be in cab at all times</b>	L	
		Safety Data Sheet	N	<b>To be implemented by owner/hirer</b> <b>Must be in cab at all times</b>		
		Attachment instructions	N	<b>To be implemented by owner/hirer</b> <b>Must be in cab at all times</b>		
		Plant daily checklist in place	N	<b>To be implemented by owner/hirer</b> <b>Must be in cab at all times</b>		
		Maintenance records up to date	N	<b>To be implemented by owner/hirer</b> <b>Must be in cab at all times</b>		



**Drivers Seat**



**Wheel Nut indicators installed**

## HDV4500 RISK ASSESSMENT



**Emergency Stop Button located in the control panel along with the Isolation switch**



**Emergency Stop Button located at the rear of the machine.**



**Warning High Pressure Air**



**Tank Raised height min 4.3 m**



**Inspection of the tank capacity during operation can be viewed through the glass Elements on the door**



**Remote control for the plant**





**Door sealed using locking mechanism**



**Door opening using Hydraulic Rams**

## HDV4500 RISK ASSESSMENT



**Component used to retrieve roller door on engine block**



**Deflection plate installed inside tank distribute materials evenly within the tank**



**Warning Isolate Plant and Equipment prior to climbing the ladder and platform**



**Handles on the roller door and lock**

## HDV4500 RISK ASSESSMENT



**Do not drink the tank water**



**Warning sign at the rear of the vehicle frequently reversing.**



**Warning Hazard light on the module**



**Warning light at the rear of the vehicle.**





**Warning sign Crush Zone on tail gate of the Tank.**



**Location of fire Extinguisher**





**Fire Aid Kit located in the Cab of the Truck**



**Hydraulic Rams used to lift and tilt tank to empty contents.  
Pressure protection valvue and Anti Drop Value installed to prevent  
uncontrolled movement in the event of a Hydraulic failure**



**Rubber ball to prevent overfill to be inspected daily**



**Tailgate lifted at fully height 3.8 m beaware of overhead powerlines**



## HDV4500 RISK ASSESSMENT

### Acoustic Test Report STG Global HDV4500

The Acoustic Test Report for the STG Global HDV4500 was conducted on the 04/10/17 between 3 pm and 4 pm. The report was conducted in an isolated location with slight gusts of wind and little or no other background noise. The Report was conducted in order to assess the Acoustic decibels been omitted from the STG Global HDV4500.

#### Test Equipment:

The Equipment use for this assessment was a TroTec SL300. The SL300 meets the requirements for sound level meters of accuracy class 2 according to IEC 61672-1 and ANSI S1.4 and is ideally suited for the documentation of machine and environmental noise, for workplace measurements or expert assessments.

#### Test Procedure

The First Reading was taken to assess the Background noise of the environment at the time of testing. Then there were 5 readings taken of the machine running on full revs of 1900 RPM with the pressure washer and vacuum in operation. The readings were taken from 5 Distances as follows:

1. Operators perception
2. 1 Meter from the machine
3. 3 meters from the machine
4. 5 meters from the machine
5. 10 meters from the machine

#### Test Results:

The Chart below shows the Lowest, Medium and highest readings recorded during the assessment from each distance, as shown in the Test set up.

Location	Low	Medium	High
Background Noise	39.9 (dBA)	44.8 (dBA)	54.1 (dBA)
Operations Perspective	96.6 (dBA)	98 (dBA)	102 (dBA)
1 Meter	85.1 (dBA)	89 (dBA)	95 (dBA)
3 Meter	76.1 (dBA)	84.4 (dBA)	90.1 (dBA)
5 Meters	81.2 (dBA)	84.2(dBA)	89 (dBA)
10 Meters	81.5 (dBA)	82.5 (dBA)	83.3 (dBA)

#### Main Sources of Noise:

The main sources of noise is the engine of the STG Global HDV4500. This engine is separate to the engine of the actually truck itself and operates the Vacuum, Blower and Pressure Washer. From the operator perspective is important that they wear hearing protection that defends against noises up to and including (110 dB). This will protect the operator hearing over an eight hour working day.

## Acoustic Test Set up For STG Global HDV4500

