

# Hazard Register



|                      |                        |                    |         |
|----------------------|------------------------|--------------------|---------|
| <b>Type</b>          | ARTICULATED DUMP TRUCK | <b>Location</b>    |         |
| <b>Make</b>          | KOMATSU                | <b>Sale Number</b> | 3027161 |
| <b>Model</b>         | HM300-5                | <b>Lot Number</b>  | 3       |
| <b>Serial Number</b> |                        |                    |         |

| ID        | Hazard Type               | Hazard Description                                                                                                                                                                                                                                                                                 |
|-----------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 140592.1  | Falling                   | Falls may occur while accessing plant due to an inappropriate distance between the bottom of the ladder and the ground (in excess of 400mm). The ladders and platforms are in good condition as per the manufacturers specifications.                                                              |
| 140592.2  | Vibration                 | Operator may be exposed to excessive or whole body vibrations as a result of a poorly maintained seat                                                                                                                                                                                              |
| 140592.3  | Noise                     | Operator exposed to a work environment where noise levels exceed specified maximum levels. e.g. <85dB(A). Sound Pressure Level (SPL) should be conducted at operators work station                                                                                                                 |
| 140592.4  | Plant Operation           | Injury to operator, damage to plant or plant failure may result from operating plant in an area with unstable high walls, low walls, berms or an area without any catch bench                                                                                                                      |
| 140592.5  | Plant Malfunction         | Park brake failure may result from poor maintenance or incorrect operation of plant (Park brake should be capable of holding plant on a 15 degree angle - forward and reverse).                                                                                                                    |
| 140592.6  | Crushing                  | Crush injuries may result to operators from incorrect jacking or supporting of plant. Crush signs are present on this plant.                                                                                                                                                                       |
| 140592.7  | Fire/Explosion            | Failure of service lines (fuel, oil, hydraulic, pneumatic lines should be regularly inspected for any visible signs of damage). Ensure the fire suppression system or the fire extinguishers are inspected as per the State legislative time requirements e.g. fire extinguisher every six months. |
| 140592.8  | High Temperature or Fire  | Operator exposure may result from exposure to excessive heat and dust (regular inspection of plant air conditioning systems and windows seals must be completed)                                                                                                                                   |
| 140592.9  | DAMAGED PLANT             | Damaged to plant may result from incorrect towing, exceeding towing capacity or incorrect direction of towing of plant.                                                                                                                                                                            |
| 140592.10 | Carrying passengers       | Injury to passengers may result from carrying passengers in excessive numbers or in a manner unspecified by the original manufacturers specifications.                                                                                                                                             |
| 140592.11 | Safe Operating Procedures | Injury resulting from unavailability of safe working procedures for maintenance tasks for the plant                                                                                                                                                                                                |
| 140592.12 | Fire/Explosion            | Injury may result from poor handling and storage practices of dangerous goods/hazardous substances (diesel)                                                                                                                                                                                        |
| 140592.13 | Manual Handling           | Strains and sprains may result from incorrect handling of tools, parts and equipment during general maintenance of plant.                                                                                                                                                                          |
| 140592.14 | Plant Operation           | Exceeding the maximum carrying capacity of the plant.                                                                                                                                                                                                                                              |
| 140592.15 | DAMAGED PLANT             | Damage to hoses and lines as a result of missing, damaged or insufficient shields.                                                                                                                                                                                                                 |
| 140592.16 | Plant Operation           | Operator operating plant without wearing sufficient restraint (seatbelt)                                                                                                                                                                                                                           |
| 140592.17 | Emergency Stop            | Identification of emergency stop switches (emergency stop switches should be red mushroom types contrasted by a yellow background). There is an emergency stop button in the cabin of this plant. Ensure that the emergency stop button is regularly tested to ensure correct functioning.         |
| 140592.18 | WorkING AT HEIGHTS        | Falling may result during access or egress from plant or access to engine compartment via ladders or platforms                                                                                                                                                                                     |

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|-----------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 140592.19 | Plant Operation             | Damage to plant or injury to operator resulting from plant being operated by an un-trained/in-experienced operator                                                                                                                                                     |
| 140592.20 | Emergency Stop              | Failure of emergency stop switches (all emergency stop switches should be regularly tested in accordance with the original manufactures specifications).                                                                                                               |
| 140592.21 | Other Hazards               | Unintentional movement of plant during transport. Ensure plant is transported by a sufficiently capable vehicle and is appropriately restrained                                                                                                                        |
| 140592.22 | Plant Operation             | Injury to operat or damage to plant may result from operating plant with insufficient lighting - ensure mobile lighting is provided in low lighting conditions                                                                                                         |
| 140592.23 | Falling                     | Falls may occur while accessing or egressing plant from incorrect mounting/dismounting method used by operator (not maintaining 3 points of contact)                                                                                                                   |
| 140592.24 | Pressure                    | Injury to operator or damage to plant may result from unexpected or unintentional tyre failure. Routine checks required for hydraulic lines and fittings - repair if damaged or worn.                                                                                  |
| 140592.25 | Signage                     | Operator injury may result from illegible or missing warning lables/signage (noise, PPE, operating instructions, hot surfaces, exits, rotating fans etc). Regular inspection and replacement of warning labels is required                                             |
| 140592.26 | High Pressure Fluid         | Uncontrolled or unwanted release of pressure from pressure vessels (hydraulic accumulators)                                                                                                                                                                            |
| 140592.27 | Operator Error              | Injury to operator or damage to plant may result from operator fatigue or stress.                                                                                                                                                                                      |
| 140592.28 | Collision                   | Injury to operator, damage to plant may result from collision with fixed structures, other plant or surroundings (high walls etc). Ensure that there is one audible and one visual warning device on the plant e.g. rotating hazard light and reverse warning devices. |
| 140592.29 | Plant Operation             | Damage to plant may result from incorrect operation of plant braking system (residual braking). No warning device is fitted to alert to residual braking                                                                                                               |
| 140592.30 | Falling                     | Falling through gaps between handrails at the top of the access ladder (hinged or sliding guard rails should be considered).                                                                                                                                           |
| 140592.31 | Plant Operation             | Injury to pedestrians or damage to other plant items from unexpected movement of plant - no pre-start warning system to alert nearby people or plant                                                                                                                   |
| 140592.32 | Working at Heights          | Falls may occur while accessing or egressing plant as a result of a poorly maintained or insufficiently supported vertical flexible ladder.                                                                                                                            |
| 140592.33 | Electrical                  | Electrical injury may result from damaged or defective energy isolation points on plant                                                                                                                                                                                |
| 140592.34 | MODIFICATION                | Modifications to plant other than those specified by the original manufacturer of the plant. A register of all plant modifications should be kept maintained and reviewed                                                                                              |
| 140592.35 | Plant Positioning           | Unwanted or uncontrolled movement of plant (not fundamentally stable). Consider providing wheel chocks for plant                                                                                                                                                       |
| 140592.36 | Plant Maintenance           | Unwanted or uncontrolled failure of wheel rims. Consider a regular inspection and maintenance program                                                                                                                                                                  |
| 140592.37 | High Pressure Fluid         | Damaged to hoses and lines from vibration and pulsation causing friction and damage from cable ties (hoses should be suitably clamped together)                                                                                                                        |
| 140592.38 | Plant Structure & Operation | Plant failure may result from insufficiently or incorrectly maintained (inspection and adjustment) controls, settings or other key operational components                                                                                                              |
| 140592.39 | Burns                       | Burns may result from the removal of the radiator cap while engine is hot                                                                                                                                                                                              |
| 140592.40 | High Pressure Fluid         | Incorrect removal of radiator cap or incorrectly fitted radiator cap may result in operator contact with high temperature fluids under pressure                                                                                                                        |

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|-----------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 140592.41 | Rollover              | Plant rollover may result if incorrectly operated (on unstable ground, slippery surface, unsuitable speed, unsuitable manner or combination of these)                                                                                                                                                      |
| 140592.42 | Guarding              | Plant should not be operated without original manufacturers guards in place or guards which comply with AS 4024 Safety of Machinery (rear drive shaft, alternator, air conditioning compressor, steer tank filler point and muffler)                                                                       |
| 140592.43 | Fire                  | Injury to operator or damage to plant may result from fuel leaking from leaking fuel caps (fuel caps should be non-leaking which are effective irrespective of the operating angle of the plant)                                                                                                           |
| 140592.44 | Pressure              | Annual registration of pressure vessels is to be maintained                                                                                                                                                                                                                                                |
| 140592.45 | Visibility            | Operator has reduced visibility when operating plant which may result in potential collisions with other plant or pedestrians. Rigorous traffic management plans to be implemented.                                                                                                                        |
| 140592.46 | Electrical            | Electrical injury may result from either incorrect or insufficient energy isolation procedures being followed                                                                                                                                                                                              |
| 140592.47 | Burns                 | Injury may result from contact to hot surfaces during general maintenance and inspection of plant. The exhaust outlet does not have any guarding around it to prevent burns.                                                                                                                               |
| 140592.48 | Guarding              | Operator contact to the turbo charger on plant should be restricted as required by AS 4024 Safety of Machinery                                                                                                                                                                                             |
| 140592.49 | Fire                  | Incorrect maintenance or unfitted fire proof hoses for all brake, lubrication and fire suppression services                                                                                                                                                                                                |
| 140592.50 | High Pressure Fluid   | Failure of flexible hoses (hydraulic, pneumatic, fuel or oil lines) resulting in uncontrolled or unwanted release                                                                                                                                                                                          |
| 140592.51 | Fire                  | Failure of fire suppression equipment or insufficient provisions for adequate fire fighting equipment. Fire suppression unit is on this plant. A fire extinguisher is present on this plant. Ensure the fire fighting units are tested AS5062-2006 Fire Protection for Mobile and transportable Equipment. |
| 140592.52 | Plant Malfunction     | Plant malfunction resulting from either electrical, hydraulic, pneumatic systems or mechanical parts not been installed as required by original equipment manufacturer. Ensure all manufacturers design drawings are consulted during maintenance and assembly                                             |
| 140592.53 | Slipping and Tripping | Slipping on walkway surfaces as a result of poor maintenance (cleaning)                                                                                                                                                                                                                                    |
| 140592.54 | Explosion             | Injury to operator or damage to plant may result from operating plant in areas where undetonated explosives may be present. Ensure working area has been assessed prior to commencing work                                                                                                                 |
| 140592.55 | Plant Controls        | Injury to pedestrian or damage to other plant may result from operator not signalling when changing direction or stopping (dual globe direction blinker lights and stopping lights should be mounted on the rear of the plant)                                                                             |
| 140592.56 | Plant Malfunction     | Brake failure may result from lack of comprehensive brake system testing. Testing should not be limited to testing of forces required to operate controls, vehicle stopping distance, brake heat fade, service brake holding ability, secondary brake performance and park brake performance.              |
| 140592.57 | Falling               | Falling while accessing or egressing plant resulting from insufficiently maintained, poorly maintained or missing handrails, ladders, platforms or kickboards                                                                                                                                              |
| 140592.58 | Plant Operation       | Unintended movement of machine due to parts or tools jamming control levers or pedals                                                                                                                                                                                                                      |
| 140592.59 | Plant Operation       | Injury to operator or damage to plant or plant failure may result from operating plant above its maximum working grade or on an unstable surface                                                                                                                                                           |

Health and Safety  
Plant Safety  
Purchaser Information

This plant health and safety information has been prepared by Grays for the purchaser of the plant item as required by National WHS Legislation. Whilst every effort has been made to identify all of the hazards, it should be recognised that all reasonably practicable hazards have been identified given due consideration to:

- state of knowledge about the plant item
- the availability and suitability of ways to eliminate or control the hazards
- the cost of evaluating, eliminating or controlling the hazard

Consequently, if this plant item is being purchased for use at a place of work, the purchaser is reminded of their obligations to involve and consult with employees in identifying foreseeable hazards, assess their risks and to take action to eliminate or control the risks.

In order to assess the risk, it is necessary to consider for all the identified hazards, the chance (likelihood) of something happening that would impact (consequence) on health and safety at the workplace. The following guidelines are provided to assist the purchaser in consistently carrying out an assessment of risk:

| Likelihood                                                                                                                                                                                                                                                                                                                                           | Consequences                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Frequency and duration of exposure</li><li>• Probability of occurrence of hazard or event (including part history of incidents)</li><li>• Possibility to avoid / minimize or limit the damage, impact or harm</li><li>• Reliability and effectiveness of existing / established systems of control</li></ul> | <ul style="list-style-type: none"><li>• Assume “worst case” injury, but also competent follow-up medical and rehabilitation support</li><li>• Consider forces or energy levels, highest belt tensions, size of gears, pulleys or other entrapment points and therefore body parts likely to be injured</li><li>• Consider sharpness of entrapment points, surrounding parts likely to exacerbate injury, and any give in the entrapment point</li><li>• Consider, will entrapment continue until plant is stopped, or can an injured part travel through the entrapment area</li><li>• Are temperatures of plant, or chemicals, likely to further injure entrapped person</li></ul> |

The outcome of the risk assessment will be a prioritised list of risk control strategies and actions consistent with the following ratings:

- Low risk- may be considered acceptable, where the existing controls in place are seen to be effective, requiring periodic monitoring for effectiveness.  
Medium risk- considered to be unacceptable and requiring additional risk controls within medium to long term.  
High risk – considered to be unacceptable and requiring action within the short to medium term.  
Extreme risk – unacceptable, where immediate action required.

In all of these cases employees/operators must be made aware of the risk controls in place to protect them from the hazards.