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| 1. Hazard Management Details – General | | | |
| **Plant/Equipment Item: Outdoor Vacuum Cleaner (Fuel)** | **Make/Model No.:** | | **Serial No.:** |
| **School / Work Location:** | **Region:** | | |
| **Name of Person(s) Conducting Activity:** | | | **Date Conducted:** |
| Outdoor Vacuum Cleaner   http://toolmonger.com/wp-content/uploads/2008/06/ShredderVac450.jpg | | **Description of Use:**  The outdoor vacuum cleaner is self-propelled, petrol powered industrial vacuum cleaner designed for use outdoors.  It can be used to vacuum up a range of debris including leaves,hedge clippings, mulch, broken glass etc. into a removable bag enabling disposal of rubbish. | **Summary of Key Risks:**  **(refer to appropriate subsections)**     * Entanglement * Impact and cutting * Radiation * Noise * Slip/trips/falls * Temperature * Fire and explosion * Other (exhaust fumes and dust) |

Plant and Equipment Risk Management Form

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| 2. Documentation | | |
| **Relevant Legislation/Standards** | **Y / N** | **Comments** |
| **Is plant required to be registered?** | Y  N |  |
| **Is a user license required?** | Y  N |  |
| **Key Reference material** |  | AS/NZS 60335.2.69:Household and similar electrical appliances – Safety – Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use. |
| **Plant Documentation** | **Y / N** | **Comments** |
| **Are operator’s manuals accessible?** | Y  N |  |
| **Is this a restricted use item?** | Y  N |  |
| **Does this item require safe use documents/test?** | Y  N |  |

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| 3. Hazard Identification | |  | | | | |
| **Hazards Inspected** | | **Risk Assessment** | | | **Description of Risk** | **Control Measures** |
|  | | **Cons** | **Like** | **Risk**  **Level** |  |  |
| **ENTANGLEMENT**  Can anyone’s hair, clothing, gloves, cleaning brushes, tools, rags or other materials become entangled with moving parts of the plant or materials? | Y  N | Major | Unlikely | Medium | Loose clothing, long hair, gloves and other material may become entangled with moving parts of the powered vacuum cleaner. | Ensure clothing, gloves, hair or other such items are kept clear of moving parts of the vacuum cleaner whilst in operation or performing maintenance (e.g. overalls can be used to restrict loose clothing, hair tied back etc.). |

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| Hazards Inspected | | Risk Assessment | | | Description of Risk | Control Measures |
|  | | **Cons** | **Like** | **Risk**  **Level** |  |  |
| **IMPACT AND CUTTING INJURIES**  Can anyone be crushed/cut/struck etc. due to: |  |  |  |  | The use of the vacuum cleaner on steep or uneven gradients may cause it to roll over exposing the operator to crushing injuries.  The operator may expose themselves to injury if any attempt to inspect or undertake maintenance occurs whilst the vacuum cleaner is turned on.  The operator may incur an injury if the vacuum cleaner is used with guards removed or hands or feet are placed inside nozzle intake, near debris outlet, or near any moving parts. | Operator to inspect work environment for hazards prior to commencing work.  Ensure guards are in place before operating and ensure hands and feet are not placed inside nozzle intake, near debris outlet, or near any moving parts.  Ensure the vacuum cleaner is not used during high pedestrian traffic periods  Ensure the vacuum cleaner is only operated in suitable conditions and areas.  Ensure the vacuum cleaner is appropriately maintained and serviced regularly in accordance with manufacturer’s instructions.  Ensure that the vacuum cleaner is turned off and the spark plug lead is detached before performing maintenance. |
| * Material falling off the plant? | Y  N |  |  |  |
| * Uncontrolled/unexpected movement of plant/load? | Y  N |  |  |  |
| * Lack of capacity to slow, stop or immobilise plant? | Y  N |  |  |  |
| * The plant tipping or rolling over? | Y  N | Major | Rare | Medium |
| * Parts of the plant disintegrating or collapsing? | Y  N |  |  |  |
| * Contact with moving parts during testing, inspection, operation, maintenance, cleaning or repair? | Y  N | Major | Possible | High |
| * Being thrown off or under the plant? | Y  N |  |  |  |
| * Contact with sharp or flying objects? (e.g. work pieces being ejected) | Y  N |  |  |  |
| * The mobility of the plant? | Y  N |  |  |  |
| * Inappropriate parts and accessories being used? | Y  N |  |  |  |
| * Other | Y  N |  |  |  |

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| Hazards Inspected | | Risk Assessment | | | | Description of Risk | Control Measures |
|  | | **Cons** | **Like** | **Risk**  **Level** |  | |  |
| **SHEARING**  Can anyone’s body parts be sheared between two parts of plant, or between a part of the plant and a work piece or structure? | Y  N |  |  |  |  | |  |
| **PRESSURISED CONTENT**  Can anyone come into contact with fluids or gases under high pressure, due to plant failure or misuse of the plant? | Y  N |  |  |  |  | |  |
| **ELECTRICITY**  Can anyone be injured or burnt due to: |  |  |  |  |  | |  |
| * Live electrical conductors? (*e.g.* exposed wires) | Y  N |  |  |  |
| * Working in close proximity to electrical conductors? | Y  N |  |  |  |
| * Access to electricity? | Y  N |  |  |  |
| * Damaged or poorly maintained electrical leads, cables or switches? | Y  N |  |  |  |
| * Water near electrical equipment? | Y  N |  |  |  |
| * Lack of isolation procedures? | Y  N |  |  |  |
| * Other | Y  N |  |  |  |

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| Hazards Inspected | | Risk Assessment | | | Description of Risk | Control Measures |
|  | | **Cons** | **Like** | **Risk**  **Level** |  |  |
| **ERGONOMICS**  Can anyone be injured due to: |  |  |  |  |  |  |
| * Poorly designed workstation? | Y  N |  |  |  |
| * Repetitive body movement? | Y  N |  |  |  |
| * Constrained body posture or the need for excessive effort? | Y  N |  |  |  |
| * Design deficiency causing psychological stress? | Y  N |  |  |  |
| * Inadequate or poorly placed lighting? | Y  N |  |  |  |
| * Does the plant impact on the surrounding workplace and create potential hazards? (Consider potential impact on the design and layout of the workplace) | Y  N |  |  |  |
| * Is the location of the plant inappropriate? (Consider potential effects due to environmental conditions and terrain) | Y  N |  |  |  |
| * Other | Y  N |  |  |  |

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| Hazards Inspected | | Risk Assessment | | | Description of Risk | Control Measures |
|  | | **Cons** | **Like** | **Risk**  **Level** |  |  |
| **RADIATION**  Can anyone using the plant, or in the vicinity of the plant suffer injury or illness due to exposure to radiation in the form of any of the following:   * infra-red radiation * ultra violet light * microwaves | Y  N | Minor | Possible | Medium | The operator may be exposed to UV radiation (sunlight) whilst operating outdoors. | Ensure the operator wears appropriate PPE (e.g. sunscreen, long sleeve clothing, hat, sunglasses etc.). |
| **NOISE**  Can anyone using the plant, or in the vicinity of the plant, suffer injury due to exposure to noise? | Y  N | Minor | Possible | Medium | Operation of the vacuum cleaner can result in high noise levels. | Ensure appropriate hearing protection is worn whilst operating the vacuum cleaner. |
| **VIBRATION**  Can anyone be injured or suffer ill-health from exposure to vibration? | Y  N |  |  |  |  |  |
| **FRICTION**  Can anyone be burnt due to contact with moving parts, materials or surfaces of the plant? | Y  N |  |  |  |  |  |
| **SUFFOCATION**  Can anyone be suffocated due to lack of oxygen, or atmospheric contamination? | Y  N |  |  |  |  |  |
| **CONDITION**  Is a hazard likely due to the age and condition of the plant? (*Consider how hard the machine has been worked, and whether it is used constantly or rarely).* | Y  N |  |  |  |  |  |
| * Can anyone be injured as a result of the plant not serviced appropriately and/or maintained in line with manufacturer’s recommendations? | Y  N |  |  |  |

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| Hazards Inspected | | Risk Assessment | | | | | Description of Risk | | Control Measures |
|  | | **Cons** | | **Like** | | **Risk**  **Level** |  | |  |
| **SLIPS/TRIPS/FALLS**  Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to: |  |  | |  | |  | The outdoor environment that the vacuum cleaner operates in (e.g. steep slopes, pot holes, rain etc.) may pose a slip trip or fall hazard. | | Operator to inspect work environment for hazards prior to commencing work.  Ensure the vacuum cleaner is only operated in suitable conditions and areas.  Ensure both handlebars are grasped firmly, allowing sufficient leverage to steer the machine.  Ensure appropriate footwear is worn whilst operating the vacuum cleaner. |
| * Uneven, slippery or steep work surfaces? | Y  N | Major | | Rare | | Medium |
| * Poor housekeeping, e.g. spillage in the vicinity? | Y  N |  | |  | |  |
| * Obstacles being placed in the vicinity of the plant? | Y  N |  | |  | |  |
| * Inappropriate or poorly maintained floor or walking surfaces (i.e. lack of a slip-resistant surface, unprotected holes, penetrations or gaps?) | Y  N |  | |  | |  |
| If operating or maintaining plant at height can anyone slip, trip or fall due to: |  |  | |  | |  |
| * Use of work platforms, stairs or ladders? | Y  N |  | |  | |  |
| * Lack of guardrails or other suitable edge protection? | Y  N |  | |  | |  |
| * Other | Y  N |  | |  | |  |
| **Hazards Inspected** | | **Risk Assessment** | | | | | **Description of Risk** | | **Control Measures** |
|  | | **Cons** | | **Like** | **Risk**  **Level** | |  | |  |
| **FIRE AND EXPLOSION**  Can anyone be injured by fire? | Y  N | Major | | Rare | Medium | | The storage and handling of petrol (e.g. refuelling) may pose a risk of fire and explosion to the operator. | | Ensure fuel is appropriately stored (e.g. locked storage area).  Ensure refuelling is conducted in a safe manner (e.g. equipment is switched off, cooled down and away from ignition sources, spark plug lead detached etc.). |
| * Can anyone be injured by explosion of gases, vapours, liquids, dusts, or other substances? | Y  N | Major | | Rare | Medium | |
| **TEMPERATURE/MOISTURE**  Can anyone come into contact with objects athigh or low temperatures? | Y  N | Moderate | | Possible | Medium | | Contact with muffler, cylinder, or cooling fins when hot may cause severe burns. | | Ensure that muffler, cylinder, or cooling fins are not touched when hot. |
| * Can anyone suffer ill-health due to exposure to high or low temperatures? | Y  N |  | |  |  | |
| * Can anyone be injured or suffer ill-health due to exposure to moisture? | Y  N |  | |  |  | |
| **OTHER** Can anyone be injured or suffer ill-health from exposure to: |  |  | |  |  | | Exhaust fumes can be toxic if allowed to accumulate in an enclosed space.  Operation of the vacuum cleaner may cause dust and other debris to become airborne. | | Ensure the vacuum cleaner is not operated in an enclosed space.  Ensure the vacuum cleaner is refuelled in a well-ventilated space.  Ensure appropriate PPE is worn. |
| * Chemicals? | Y  N |  | |  |  | |
| * Toxic gases or vapours? | Y  N | Moderate | | Rare | Low | |
| * Fumes/Dusts? | Y  N | Moderate | | Rare | Low | |
| * Other? (please specify) | Y  N |  | |  |  | |
| **4. Risk Assessment Signoff** | | | | | | | | | |
| Authorised By: | | | Signature: | | | | | Date: | |

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| Consequence - Evaluate the consequences of a risk occurring according to the ratings in the top row  |  |  |  | | --- | --- | --- | | Descriptor | Level | Definition | | **Insignificant** | **1** | No injury | | **Minor** | **2** | Injury/ ill health requiring first aid | | **Moderate** | **3** | Injury/ill health requiring medical attention | | **Major** | **4** | Injury/ill health requiring hospital admission | | **Severe** | **5** | Fatality |   3. Risk level - Calculate the level of risk by finding the intersection between the likelihood and the consequences   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Likelihood | Consequence | | | | | | **Insignificant** | **Minor** | **Moderate** | **Major** | **Severe** | | **Almost Certain** | Medium | High | Extreme | Extreme | Extreme | | **Likely** | Medium | Medium | High | Extreme | Extreme | | **Possible** | Low | Medium | Medium | High | Extreme | | **Unlikely** | Low | Low | Medium | Medium | High | | **Rare** | Low | Low | Low | Medium | Medium | | Likelihood - Evaluate the likelihood of an incident occurring according to the ratings in the left hand column  |  |  |  | | --- | --- | --- | | Descriptor | Level | Definition | | **Rare** | **1** | May occur somewhere, sometime (“once in a life time / once in a hundred years”) | | **Unlikely** | **2** | May occur somewhere within the Department over an extended period of time | | **Possible** | **3** | May occur several times across the Department or a region over a period of time | | **Likely** | **4** | May be anticipated multiple times over a period of time  May occur once every few repetitions of the activity or event | | **Almost Certain** | **5** | Prone to occur regularly  It is anticipated for each repetition of the activity of event |   4. Risk Level/Rating and Actions   |  |  | | --- | --- | | Descriptor | Definition | | **Extreme:** | Notify **Workplace Manager and/or Management OHS Nominee** immediately. Corrective actions should be taken immediately. Cease associated activity. | | **High:** | Notify **Workplace Manager and/or Management OHS Nominee** immediately. Corrective actions should be taken within 48 hours of notification. | | **Medium:** | Notify **Nominated employee, HSR / OHS Committee**. Nominated employee, OHS Representative / OHS Committee is to follow up that corrective action is taken within 7 days. | | **Low** | Notify **Nominated employee, HSR / OHS Committee**. Nominated employee, HSR / OHS Committee is to follow up that corrective action is taken within a reasonable time. | |