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| **Site / Area:** |       | **Date of assessment:**  |  | **Risk Assessment #:** | **113RA** |
| **Completed by (name):** |       | **Signature:** |       |
| **In Consultation with** |       | **Signature:** |       |
| **Identify / describe activity, equipment, area or event you are assessing:**  | **AIR PURIFIERS – recommended for rooms with no or limited natural ventilation. Please adapt risk assessment to the specific****Purifier purchased for your location.**Product Image |
| **In conjunction with this risk assessment, training / education and development of a relevant SOP may be required.** |
| **Step 1:** **Identify the hazard/s:**What do you believe are the hazards?Refer Risk Assessment Guideline (015G) | **Step 2: Assess the risks:**What do you believe are the risks?Refer Risk Assessment Guideline (015G) | **Step 3: Reducing the risk:**What do you believe can be done to reduce the risk?Refer Risk Assessment Guideline (015G) |
| **What could cause harm?** | **What could go wrong?** | **Controls** |
| The Z-3000 is an air purifier that includes a DuPont HEPA filter to capture and remove “pollutants and VOC gases/odours from all directions” and a UV light to kill germs and bacteria that are trapped within the filter.  Most importantly it’s COVID-19 effectiveness has shown to be 99.5% effective – e.g. it removes 99.99% of COVID-19 from the air making it perfect for rooms where people gather.[Quick Start Guide (TruSens Air Purifier 3000)](https://cshwsa.org.au/download/6263/)[Manual (TruSens Air Purifier 3000)](https://cshwsa.org.au/download/6260/) |
| **HAZARDOUS MANUAL TASKS*** Task possibly too strenuous, awkward postures or movements
* Lifting would require the application of high force, potentially leading to musculoskeletal injuries
* doors, stairs and/or other obstructions in the path of travel when moving air purifiers to their point of use.
 | * incorrect lifting, pushing, pulling, holding and restraining
* repetitive or sustained forces
* musculoskeletal injuries
* damage to joints, ligaments and muscles
* sprains, strain, contusions
 | **Pre-Operation / Task:*** Where possible, ensure the supplier delivers the boxes as close as possible to the buildings and in a safe place for unloading/handling boxes.
* Identify two or more workers to move the boxes to a suitable area for placement and unboxing of air purifiers, and to move the air purifiers to the selected location in the worksite.
* Ensure the workers are briefed about the route of travel for the air purifier and are supported to discuss how they will move the air purifiers. For example, workers should:
	+ Consider environmental factors before commencing the move e.g., avoid inclement weather / excessive heat where possible, as this may create additional slip / other hazards.
	+ Consider when the best time is to move the air purifier, taking into consideration student movements and break times if in an education setting.
	+ Ensure planned routes of travel are clear from trip hazards or obstructions (such as mats, cords, closed doors or furniture) prior to moving the air purifier, and consider how to navigate / avoid stairs, potentially slippery surfaces, etc. If needed and available, ask an extra person to help to open doors and clear pathways of travel, or ensure these are cleared / opened ahead or time.
	+ Ensure workers are advised to wear appropriate footwear (i.e., closed toe, non-slip shoes) when air purifiers are moved.

**Operation / Task:** * It is preferable workers can use a hand trolley and/or stair climbing trolley, if available, to assist with moving air purifiers.
* If a trolley is unavailable, use a two-person lift.
* Workers should ensure adequate space is available to place the air purifier in its intended location.
* When moving the air purifier, workers should avoid twisting and turning or sustained awkward body positions.

**Post operation / Task:*** Workers to remove all packaging, box and associated materials and dispose in waste bin
* Retain Product Instruction / Operation Manual and file in an appropriate place
* Provide all key workers with instructions for correct use of the Air Purifier in accordance with the Product Instruction / Operation Manual.

**Movement of air purifiers (to a different location)**Sites may wish to move the air purifiers to different locations, based on risk / need / changes in arrangements. To do this, workers should follow the steps in the ‘Pre-Operation / Task’ section above related to the movement of the air purifiers, including considering environmental factors. When the best time is to move the air purifier, ensuring planned routes of travel are clear from trip hazards or obstructions, wearing appropriate footwear. |
| **ELECTRICAL*** frayed/loose cords
* rattling plugs
* faulty appliances
* water on electrical equipment
* overheating equipment
* overloading power sockets
* damaged power boards
* extension cord chains
* fastening cables with staples or nails
* pulling out equipment from plug
* cutting cords
* electrical short
 | * burns
* fire
* explosion
* contact with exposed wires
* electrical cords across walkways – slips, trips and falls
* collapse
* unconsciousness
* electric shock
* electrocution
* death
 | * all cords should be visually inspected for damage.
* cord covers in use where cords cannot be kept out of walkways etc.
* residual current device (RCD) push button tested according to legislative requirements
* RCD time tested according to legislative requirements
* appropriate documentation maintained
* switch off electricity where possible before working on equipment
* ensure electrical equipment is in good working order (testing and tagging)
* remove damaged, unsafe electrical equipment or cords from the workplace
* ensure tag out and isolation procedures are in place and used
* consider using the timer.
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| **BIOLOGICAL*** micro-organisms
* disease outbreak
* pandemics – covid19
* bacteria
 | * illness
* death
* allergies
 | * filters to be cleaned and / or replaced as per manufacturer’s instructions.
* dirty filters to be disposed of as infectious waste.
* purifier is on a Preventative Maintenance Schedule
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| **OTHER*** Air purifiers placed in wrong position in room
* Air purifiers working inadequately due to windows and doors open in rooms
* Skin or eye damage may result from directly viewing the light produced by the bulb in this apparatus.
 | * Overloading machine
* Skin damage
* Eye damage
 | * Place the air purifiers away from open doors and windows or in areas with low air movement.
* Purifiers draw air in from the front, so you can place them against a wall - you can also place a purifier in a corner with 20-30cm space around the sides and the back
* Air purifiers are portable - move them around as required, to reduce the risk of transmission in your school
* Do not look directly at bulb when machine is running
* Always disconnect power before replacing or servicing.
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| **OTHER*** Incorrect cleaning
* Not on preventative maintenance schedule
 | * Dust
* Bacteria
* Mould
 | * The filtration unit has multiple filters including a washable pre-filter with HEPA filter included, followed by a carbon sheet to remove odours. Follow the manufacturers recommendations on the frequency of washing and / or replacing the filters.
* The HEPA filter has a longer lifespan than the pre-filter and with normal use will last up to 12 - 15 months. There are indicators on the filtration unit for when these all need to be changed.
* The UV light included is an air sanitiser at the last stages of air filtration. It will “deactivate” moulds, viruses and bacteria in the filter.
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| Authorised by: |       | Signature: |       | Date: |       |

**Review hazard/risk assessment if task or circumstances change and at intervals appropriate to the level of risk (minimum 5 years).**

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| **Step 4: Monitor & review:**(Refer to hazard sheet)**Please tick Yes or No** |
| **Were the controls effective?** | **Were there any unforeseen hazards/ incidents?** | **New controls** |
| **Yes** | **[ ]**  | **No** | **[ ]**  | **Yes** | **[ ]**  | **No** | **[ ]**  |
| **DETAILS** | **DETAILS** | **DETAILS** |
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| --- | --- | --- | --- | --- | --- |
| **Name:** |  | **Signature:** |  | **Date:** |  |