1. **Purpose:**

The purpose of this procedure is to prevent illnesses and injuries by identifying, assessing and controlling hazards associated with exposure to contaminants in Department of Education and Early Childhood Development (DEECD) workplaces.

2. **Scope:**

This procedure applies to the management of hygiene related hazards that may be experienced in all DEECD workplaces including schools and central and regional offices. Hygiene related hazards may include:

- Noise;
- Dust;
- Lighting;
- Gases, Vapours and Fumes; and
- Radiation.

3. **References**

- Occupational Health and Safety Act 2004
- Occupational Health and Safety Regulations 2007
- Victorian Code of Practice for Manual Handling 2000
- NIOSH Manual of Analytical Methods
- AS 2985:2009 - Workplace Atmospheres – Method for sampling and gravimetric determination of respirable dust
- AS 3640:2009 - Workplace atmospheres – Method for sampling and gravimetric determination of inhalable dust
- AS 1269:2005 - Occupational Noise Management-Overview and general requirements

4. **Definitions:**

**Absorption:** The uptake of liquid through the layers of the skin.

**Contaminant:** Substances in the environment that have the potential to negatively impact on the health and safety of people e.g. dust, noise, radiation.

**Deputy Health and Safety Representative:** An elected employee responsible for representing employees within a DWG on matters relating to Occupational Health and Safety (OHS) in the absence of the HSR.

**Designated Work Group (DWG):** A group of employees in the workplace who share similar workplace health and safety concerns and conditions.

**Hazard:** Anything with the potential to cause harm, injury, illness or loss.

**Health and Safety:** An elected employee responsible for representing employees within a DWG on matters relating to OHS.
Representative (HSR):

Hygiene: The science that deals with the promotion and preservation of health.

Ingestion: Take something into the body by swallowing or absorbing it.

Inhalation: The drawing of a substance in the form of a vapour, dust or gas into the airways or lungs.

Occupational Exposure Limit: OEL – the actual level of contaminant to which employees are exposed. The OEL is the maximum concentration, which during daily work (except weekends) of 8 hours a day and no more than 40 hours a week, throughout the employee’s entire working career, that would not cause disease or change in the condition of health detectable by modern research methods, both during the periods of work and life span of the present and next generations.

Risk: A description of the likelihood and consequence of a hazard causing injury or illness.

Similar Exposure Groups (SEG): SEG sampling of a member of the group can be deemed as representative of the exposure of the whole group.

Workplace Manager: The Manager or Principal responsible for the school, central office, regional office or other DEECD workplace.

5. Responsibility:

Workplace Managers and/or Management OHS Nominees are responsible for:

- Determining similar exposure groups (SEG);
- Identifying the potential for exposure to contaminants;
- Identifying the types of exposures that may require ongoing monitoring;
- Consulting with HSRs and employees on the implementation of a monitoring program/s;
- Making sure controls are implemented and the OHS Risk Register is reviewed; and
- Complying with legislation relating to exposure to contaminants.

HSRs:
The functions of the HSRs can include:

- Reporting hygiene related hazards;
- Assisting in risk assessments as requested;
- Participating in the identification and implementation of risk controls; and
- Reporting on the use and effectiveness of risk control measures.

Employees are responsible for:

- Reporting hygiene related hazards;
- Assisting with risk assessments; and
- Complying with contaminant monitoring and risk control programs.
6. Procedure:

6.1 Identify Potential Exposures

Workplace Managers and/or Management OHS Nominees, in consultation with HSRs and employees, are to identify all potential contaminants that employees may be exposed to in the workplace. In all instances the Workplace Manager and/or Management OHS Nominee must record the identified contaminants on the OHS Risk Register.

Some examples of contaminants that may be found in the workplace include:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Chemical</th>
<th>Biological</th>
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<tbody>
<tr>
<td>Noise</td>
<td>Vapour</td>
<td>Fungi</td>
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<tr>
<td>Vibration</td>
<td>Gases</td>
<td>Bacteria</td>
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<td>Temperature</td>
<td>Dust</td>
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<td>Light / UV</td>
<td>Mist</td>
<td>Yeasts</td>
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<td>Ventilation</td>
<td>Corrosives</td>
<td>Enzymes</td>
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<tr>
<td>Radiation</td>
<td>Solvents</td>
<td>Body fluids</td>
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Contaminants may be identified when:

- Previous workplace monitoring results are reviewed;
- An incident or illness is reported in the workplace;
- Requested by regulatory authorities or external auditors;
- A new task or chemical is introduced into the workplace;
- The work environment is changed; and
- New or additional information relating to acceptable exposure standards becomes available.

The Workplace Manager and/or Management OHS Nominee should consider all means of exposure when identifying hazards i.e. inhalation, ingestion, absorption and injection.

Identifying SEG

The SEG is a means of effectively allocating limited hygiene monitoring resources. Once the contaminants are known the Workplace Manager and/or Management OHS Nominee should group similarly exposed workers into a SEG. For administrative purposes the exposures and controls for one person are representative of all individuals in the group. A worker may belong to more than one SEG. In consultation with HSRs and employees, the Workplace Manager and/or Management OHS Nominee may decide that the DWG would be the same as the SEG.

6.2 Risk Assessment of Hazards

The Workplace Manager and/or Management OHS Nominee is to conduct a risk assessment for each hazard associated with exposure to contaminants in the workplace. All risk assessments are to be conducted in consultation with:

- HSR;
- Employees; and
Relevant standards, codes of practice or legislation.

The risk assessment is to be completed using the risk matrix contained in OHS Risk Management Procedure and documented in the OHS Risk Register.

For every hazard identified in the OHS Risk Register, the Workplace Manager and/or Management OHS Nominee should detail the initial risk rating, existing controls (e.g. engineering, administrative, personal protective equipment) and any residual risk rating.

In order to accurately determine the level of risk, the Workplace Manager and/or Management OHS Nominee may need to consider specific workplace monitoring and engage the services of an Occupational Hygienist. Specific monitoring will provide results on the actual level of exposure, which can be used as a representative sample to compare against legislated maximum exposure standards.

If monitoring is required the Workplace Manager and/or Management OHS Nominee should ensure that:

- The monitoring is specific to the contaminant and route of exposure (i.e. inhalation would require a different sampling method to ingestion);
- Personal monitoring rather than static monitoring is performed for defining potential exposures. Static monitoring should only be used for measuring exposures when found to be well correlated with personal monitoring;
- Monitoring is conducted and analysed by a competent person; and
- The assessment is representative – neither worst case nor best case scenarios.

If in doubt the Workplace Manager and/or Management OHS Nominee should contact their DEECD Regional OHS/WorkSafe Advisor or the OHS Advisory Service on 1300 074 715. If workplace hygiene monitoring is necessary an external provider may be required, if so, they should be identified and engaged as per the DEECD Contractor Management Procedure.

6.2.1 Contaminant Monitoring and Exposure Limits Findings

Once the monitoring is completed a report detailing the findings should be provided to the Workplace Manager and/or Management OHS Nominee. The Workplace Manager and/or Management OHS Nominee is responsible for implementing the recommendations in the report in order to reduce the risk of exposure to employees.

If only the results of monitoring are provided the Workplace Manager and/or Management OHS Nominee can compare them to the OEL for that specific contaminant to determine the need for corrective actions and follow-up surveillance.

The Workplace Manager and/or Management OHS Nominee should contact their DEECD Regional OHS/WorkSafe Advisor or the OHS Advisory Service on 1300 074 715 or via email at safety@edumail.vic.gov.au if they require assistance to interpret the findings in reports provided.

6.3 Controlling Risks

Where specific hazards have been identified from exposure to contaminants, controls are to be established and implemented by the Workplace Manager and/or Management OHS Nominee in consultation with HSRs and employees. This is to be documented in the OHS Risk Register.
As part of the control process the **Workplace Manager and/or Management OHS Nominee** should ensure that:

- Recommendations for placement of personnel in medical surveillance programs are considered;
- Existing controls are adequate, consider whether additional or alternative controls are needed, and if so, what they should be; and
- Consideration is given to whether periodic monitoring of the contaminant or the controls is required and the nature of such monitoring.

When determining controls to reduce employee exposure, the **Workplace Manager and/or Management OHS Nominee** must follow the hierarchy of control outlined in the *OHS Risk Management Procedure*. As an example, effective controls (from most to least effective) to reduce exposure to noise could include:

- Eliminate the hazard:--Eliminating the noisy machine, task or work process;
- Substitute the hazard with a lesser risk:--Substituting a less-noisy machine for the task;
- Engineering controls:--Separate the noisy process or equipment by installing sound dampening/absorption around the noise source or between the source and the worker;
- Administrative controls:-- Establish hearing protection zones and display “hearing protection” signage; and
- Personal Protective Equipment:--Providing suitable Personal Protective Equipment (PPE) e.g. hearing protection; and
- Implementing a workplace monitoring program e.g., audiometric (hearing) tests.

### 6.3.1 Safe Work Procedures

Some interactions between employees and contaminants (e.g. coaching sport outdoors in the sun) may require the development and implementation of a safe work procedure. Refer to **Safe Work Procedure**.

### 6.3.2 Communication

If workplace monitoring of contaminants is required the **Workplace Manager and/or Management OHS Nominee** should make sure that the results of the monitoring are clearly communicated by:

- Verbally informing employees sampled and SEGs of the results and controls required following the monitoring;
- Including report findings from monitoring conducted on the agenda and minutes of Health and Safety Committee Meetings (if relevant) and/or regular staff meetings; and
- Displaying results of monitoring on all applicable safety noticeboards (see **Consultation and Communication Procedure**).

### 6.4 Reviewing Controls

The **Workplace Managers and/or Management OHS Nominee** is responsible for reviewing the effectiveness of hazard controls in consultation with HSRs and employees. The review of controls is to occur as per the procedure outlined in **OHS Risk Management Procedure**.

In the event that further/ongoing monitoring is required, the **Workplace Manager and/or Management OHS Nominee** should make sure that it occurs as per this procedure.
6.5 OHS Risk Register

The Workplace Manager and/or Management OHS Nominee is to make sure that the OHS Risk Register is kept up to date and is reviewed when hazards associated with exposure to contaminants are identified, assessed, controlled and reviewed.

7. Related Documentation:

- OHS Risk Register
- OHS Risk Management Procedure
- Safe Work Procedure
- Contractor Management Procedure
- Consultation and Communication Procedure

8. Version Control

<table>
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<tr>
<td>2</td>
<td>4, All</td>
<td>Updated inhalation definition and minor wording changes</td>
<td>January 2011</td>
<td>EHU</td>
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</table>
| 3       | All 3           | Updated wording
Updated references to Australian Standards
Update definition of inhalation and other wording changes | April 2011     | EHU    |