

# Curriculum activity risk assessment

## Kilns

clever • skilled • creative

### Activity scope

This document relates to the loading, unloading, operating or firing of Kilns (dependant on kiln type and safety considerations) as a curriculum activity.

This may involve kilns which are high temperature furnaces used to fire clay and ceramic items. Kilns are usually insulated with ceramic fibre material (CFM) or firebricks. They require programming, loading, unloading, cleaning, monitoring and servicing.

Students **must not** be involved in any activities related to kilns. Any learning they undertake in relation to kilns will be from watching qualified adults operate the equipment.



### Risk level

The actual risk level will vary according to the specific circumstances of the activity and these **must** be considered when assessing the inherent risk level and planning the activity. As a starting point, ask the following questions:

- Which students will be involved?
- Where will the students be?
- What will the students be doing?
- Who will be leading the activity?
- What will the students be using?

The risk levels in operating kilns are divided into two categories, depending on the complexity of operation and the degree of associated risk.

Risk level		Action required / approval
<input type="checkbox"/>	Medium	Loading and unloading all kilns <input checked="" type="checkbox"/> Record controls in your planning documents and/or complete this <i>Curriculum Activity Risk Assessment</i> . <input checked="" type="checkbox"/> Consider obtaining parental permission.
<input type="checkbox"/>	High	Programming, setting and firing kilns <input checked="" type="checkbox"/> A <i>Curriculum Activity Risk Assessment</i> must be completed. <input checked="" type="checkbox"/> Principal or delegated Deputy Principal or Head of Program (i.e. HOD, HOSES, HOC) to review and approve risk assessment. <input checked="" type="checkbox"/> Obtaining parental permission is recommended. <input checked="" type="checkbox"/> Once approved, activity details are to be entered into the <i>School Curriculum Activity Register</i> .

Teachers/leaders:

Activity description:

Start date:

Finish date:

No of students (approx.):

Class groups:

Supervision ratio (approx.):

Listed below are the minimum recommendations for this type of activity. For any items ticked 'No', provide further information regarding the additional or alternate controls to be implemented for the safe conduct of the activity.

## Minimum supervision

Adequate adult supervision is to be provided. In determining what is adequate, consider the number of students, their individual needs, and the nature of the activity. If an adult other than a registered teacher is engaged for instruction, a teacher is to be present to take overall responsibility. [Blue Card](#) requirements **must** be adhered to.

- Registered teacher with minimum qualifications as outlined below  
**OR**  
 An adult with minimum qualifications as outlined below, in the presence of a registered teacher

Further information:

## Minimum qualifications

*The qualifications listed in this section are minimums for each type of situation. Leaders are encouraged to seek training to raise their qualification level above the minimum listed.*

- Current first aid qualifications including Cardio Pulmonary Resuscitation (CPR) or ready access to first aid facilities, including qualified personnel.  
 [Blue Card](#) requirements met

**Medium** — Loading and unloading all kilns

### For a registered teacher:

- experience (previous involvement) in kiln usage  
**AND**  
 has viewed 'Art Kiln Information Package for Schools' CD (contact Regional Occupational Health and Safety Consultants for further information)

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks  
 experience (i.e. previous involvement) in undertaking the activity  
 demonstrated ability and/or expertise to undertake the activity  
 possession of qualifications related to the activity.

### For a leader other than a registered teacher:

- competence (demonstrated ability) in kiln usage, if a teacher with the relevant experience is not available

## Minimum qualifications

The qualifications listed in this section are minimums for each type of situation. Leaders are encouraged to seek training to raise their qualification level above the minimum listed.

### High — Programming, setting and firing kilns

#### For a registered teacher:

- competence (demonstrated ability) in kiln usage  
**AND**  
 has viewed 'Art Kiln Information Package for Schools' CD (contact Regional Occupational Health and Safety Consultants for further information)

#### For a leader other than a registered teacher:

- expertise (formal qualifications) in kiln usage with the following: *CUV30103: Certificate III in Visual Arts and Contemporary Craft* (TAFE or equivalent), specialising in ceramics

Further information:

Minimum equipment/facilities <i>If 'No' is ticked, provide further information.</i>	Yes	No
First aid kit suitable for activity	<input type="checkbox"/>	<input type="checkbox"/>
Communication system: <input type="checkbox"/> phone-line at location <input type="checkbox"/> mobile phone <input type="checkbox"/> walkie talkies/UHF radio <input type="checkbox"/> student/adult messenger Other:		
Sun safety equipment (hat, sunscreen, shirt etc)	<input type="checkbox"/>	<input type="checkbox"/>
Drinking water (students should not share drinking containers)	<input type="checkbox"/>	<input type="checkbox"/>
Kiln located in a kiln house or a kiln room	<input type="checkbox"/>	<input type="checkbox"/>
Kiln with the following features: <input type="checkbox"/> adequate insulation on all parts <input type="checkbox"/> a programmable controller <input type="checkbox"/> an automatic cut-off control device <input type="checkbox"/> a door/lid-locking arrangements <input type="checkbox"/> a door/lid power cut-off switch <input type="checkbox"/> an enclosed and lockable control panel <input type="checkbox"/> a red pilot light viewable from the exterior to indicate kiln operation/firing process is continuing <input type="checkbox"/> a safety heat fuse		

Minimum equipment/facilities <i>If 'No' is ticked, provide further information.</i>	Yes	No
An extraction system that operates effectively at all times during the firing cycle	<input type="checkbox"/>	<input type="checkbox"/>
An effective extraction system that vents outside the building, away from populated areas such as walkways and areas where staff and students may congregate	<input type="checkbox"/>	<input type="checkbox"/>
Injury management procedure in place	<input type="checkbox"/>	<input type="checkbox"/>
All who load, fire, unload or clean kilns <b>must</b> wear appropriate personal protective equipment that conforms to Australian standards.		
Further information:		

Governing bodies/associations <i>If 'No' is ticked, provide further information.</i>	Yes	No
Guidelines/codes of practice are established for this activity. See <a href="#">Queensland Art Teachers Association</a> Have these been considered during the planning of this activity? (See 'Important links' on last page.)	<input type="checkbox"/>	<input type="checkbox"/>
Obligations have been established for health and safety requirements for hazardous materials. See <a href="#">Workplace Health and Safety Queensland</a>	<input type="checkbox"/>	<input type="checkbox"/>
Safety considerations are required for this activity. Have you referred to the Occupational Health and Safety consultant in your region?	<input type="checkbox"/>	<input type="checkbox"/>
Further information:		







Hazards/risks	Control measures	Yes	No	Implementation plan / Additional controls
<b>Hazardous substances</b> <ul style="list-style-type: none"> <li>Corrosive chemicals</li> <li>Flammable chemicals</li> <li>Carcinogenic chemicals</li> </ul>	<ul style="list-style-type: none"> <li>Ensure hazardous substances guidelines are adhered to.</li> <li>Note that kerosene and oil drip kilns <b>must not</b> be used in school.</li> <li>Ensure that there are effective ventilation and extraction systems in place to remove toxic and hazardous substances.</li> </ul>	<input type="checkbox"/>   <input type="checkbox"/>   <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>   <input type="checkbox"/>	
<b>Manual handling</b> <ul style="list-style-type: none"> <li>Lifting equipment/materials</li> </ul>	<ul style="list-style-type: none"> <li>Undertake a risk management process in order to prevent or minimise the risk of injuries caused by manual tasks.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Personal hygiene, food</b>	<ul style="list-style-type: none"> <li>Note that food or drink <b>must not</b> be taken into or consumed in classroom, studio or workshop areas.</li> <li>Note that to ensure fibres are not transferred to other areas, hands should be washed: <ul style="list-style-type: none"> <li>BEFORE leaving the classroom, studio or workshop areas</li> <li>BEFORE handling food or drink</li> <li>BEFORE using toilet facilities</li> <li>AFTER using thermal insulating gloves.</li> </ul> </li> </ul>	<input type="checkbox"/>       <input type="checkbox"/>	<input type="checkbox"/>       <input type="checkbox"/>	
<b>Personal protective equipment (PPE)</b>	<ul style="list-style-type: none"> <li>Note that all who load, fire, unload or clean kilns <b>must</b> wear appropriate personal protective equipment (PPE) that conforms to Australian standards.</li> <li>Note that PPE <b>must</b> be worn to prevent: <ul style="list-style-type: none"> <li>respiration of toxic fumes, ceramic fibres, and clay and glaze dust</li> <li>ceramic fibres contacting the skin and eyes</li> <li>burns from handling hot materials and equipment.</li> </ul> </li> <li>Ensure that P2 half-face respirators are used. They prevent respiration of both dust particles and fumes and are available in re-usable and disposable forms.</li> </ul>	<input type="checkbox"/>       <input type="checkbox"/>       <input type="checkbox"/>	<input type="checkbox"/>       <input type="checkbox"/>       <input type="checkbox"/>	



Hazards/risks	Control measures	Yes	No	Implementation plan / Additional controls
<b>Physical contact</b> <ul style="list-style-type: none"> <li>Burns</li> </ul>	<ul style="list-style-type: none"> <li>Provide instruction in rules, safety procedures and prerequisite skills before anyone uses a kiln.</li> <li>Ensure that only the teacher or leader removes spy-hole bungs and kiln seals.</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	
<b>Students</b> <ul style="list-style-type: none"> <li>Student numbers</li> <li>Special needs</li> <li>High risk behaviours</li> <li>Medical conditions</li> </ul>	<p><b><i>Please note that students must not be involved in any activities related to kilns. Their learning will be based on watching qualified adults operate the equipment.</i></b></p> <ul style="list-style-type: none"> <li>Obtain parental permission, including relevant medical information.</li> <li>When students with medical conditions are involved, ensure that relevant medical/emergency plans and medications are readily available (insulin, Ventolin, EpiPen, etc.)</li> <li>Refer to Individual education plan/Educational adjustment plan/Behaviour management plan and other student documents.</li> <li>Where necessary, obtain advice from relevant advisory visiting teachers or specialist teachers.</li> <li>Ensure there is adequate adult supervision.</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	

Additional control measures	
<i>These would relate to the specific student needs, location and conditions in which you are conducting your activity.</i>	
Hazards/Risks	Control Measures

<b>Submitted by:</b>	<b>Date:</b>
List the names of those who were involved in the preparation of this risk assessment.	

Approval	
<input type="checkbox"/>	Approved as submitted
<input type="checkbox"/>	Approved with the following condition(s):
<input type="checkbox"/>	Not approved for the following reason(s):
By:	Designation:
Signed:	Date:
Once approved, activity details should be entered into the <i>School Curriculum Activity Register</i> by administrative staff.	Reference no.

<b>Monitor and review</b> <i>To be completed during and/or after the activity and/or at the completion of the series of activities.</i>	Yes	No
Are the control measures still effective?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any changes?	<input type="checkbox"/>	<input type="checkbox"/>
Are further actions required?	<input type="checkbox"/>	<input type="checkbox"/>
Details:		

## Important links

- HLS-PR-003: First Aid  
<http://education.qld.gov.au/strategic/epr/health/hlspr003/>
- HLS-PR-004: Infection Control and Management of Prescribed Contagious Conditions  
<http://education.qld.gov.au/strategic/epr/health/hlspr004/>
- Infection Control Guideline  
[http://education.qld.gov.au/health/pdfs/healthsafety/infection\\_control\\_guideline.pdf](http://education.qld.gov.au/health/pdfs/healthsafety/infection_control_guideline.pdf)
- HLS-PR-005: Health and Safety Incident Recording and Notification  
<http://education.qld.gov.au/strategic/epr/health/hlspr005/>
- HLS-PR-013: Developing a Sun Safety Strategy  
<http://education.qld.gov.au/strategic/epr/health/hlspr013/>
- HRM-PR-010: Working with Children Check – Blue Cards  
<http://education.qld.gov.au/strategic/epr/hr/hrmpr010/>
- HLS-PR-006: Managing Occupational Risks with Chemicals  
<http://education.qld.gov.au/strategic/epr/health/hlspr006/hs16.pdf>
- Art Kiln Information Package for Schools (Please contact [Regional Occupational Health and Safety Consultants](#) for further information)  
<http://www.education.qld.gov.au/health>
- Queensland Art Teachers Association  
<http://www.qata.qld.edu.au/>

### Further information

For further information on incorporating risk management strategies into curriculum activity planning refer to [HLS-PR-012 Managing Risks in Curriculum Activities](#) and the associated list of [Curriculum Activity Risk Assessment Guidelines](#). (See: <http://education.qld.gov.au/strategic/epr/health/hlspr012/index1.html>)

For further support with risk management training and advice, contact trained staff in schools such as Workplace Health and Safety Officers (WHSOs) and Workplace Health and Safety Representatives (WHSRs), and regional staff such as Senior Health and Safety Consultants.