

## WHS F029 Job Safety Analysis (JSA)

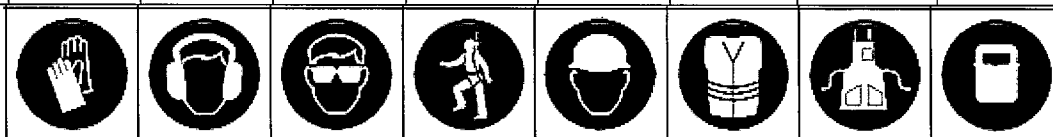
<b>Title</b>	<b>Tetlow Kiln</b>		
<b>School/Business Unit</b>	Environmental and Rural Science	<b>Location</b> (building/lab/workshop if applicable)	W55 ROOM 119

JSA Development Date	26/9/17	JSA Development Team	Paul Lisle
JSA Review Date	26/9/20		

<b>Relevant Australian Standards//Codes of Practice//Legislation</b>
<ul style="list-style-type: none"> <li>Guide for handling Refractory ceramic fibres,2013 Safe work Australia.</li> <li>WH&amp;S in Kiln operations, David Coggins</li> </ul>
<b>Relevant Safety Data Sheets (can be obtained via UNE subscription to ChemWatch)</b>
<ul style="list-style-type: none"> <li>NA</li> </ul>
<b>Plant &amp; Equipment Required</b>
<ul style="list-style-type: none"> <li>NA</li> </ul>
<b>Licenses Required</b>
<ul style="list-style-type: none"> <li>NA</li> </ul>
<b>Competencies Required</b>
<ul style="list-style-type: none"> <li>Induction, Training and Maintenance</li> </ul>
<b>PPE Required</b>



	Dust Mask	Face Shield	Foot Protection	Hair Net	Protective Clothing	Respirator	Sun Protection	Breathing Apparatus
Compulsory	X		X					
As needed		X		X	X	X		



	Hand Protection	Hearing Protection	Safety Glasses	Safety Harness	Safety Helmet	Safety Vest	Apron/Lab Coat	Welding Mask
Compulsory	X		X				X	
As needed								

**Additional PPE/Notes**

Document Reference	Procedure Reference	Version	Effective Date	Review Date	Page Number	Date Printed
WHS F029	WHS OP006	1.1	14/09/2016	14/09/2019	1	29/09/2017


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Job Steps						
Job Step	Potential Hazards	Risk Score*	Controls	Residual Risk*		
<b>Loading kiln:</b> Turn kiln on at mains power this will display current temperature. The kiln must be cooled down completely before loading.	Burns from hot surfaces, crucibles or samples	7	Switch on at mains power to check temperature. Use gloves and dust mask when placing crucibles in the kiln. In case of Emergency press the RED power cut off button near exit door	5		
Load crucibles so they don't fall out when door is opened	Broken crucibles cuts/lacerations hazard, incomplete ashing.	6	Gloves and dust mask	4		
Don't overload kiln	Risk of dropping crucibles while loading the kiln	6	Load kiln with space for easy/safe crucible removal	4		
Exhaust fan must be turned on before operating kiln	Dust from samples and kiln construction materials	7	Exhaust fan on	4		
<b>Unloading Kiln:</b> Set Temperature to 150° C or below, (see kiln control operating instructions) when this temperature is reached the door can be carefully opened to further cool the kiln.	Burns from hot surfaces	7	Turn Energy regulator to zero. Switch kiln off at main power. Gloves and Facemask must be worn when removing crucibles. Place Safety sign on kiln when turned off and still hot.	5		
The kiln must be cooled completely before unloading.	Burns		In case of Emergency press the RED power cut off button near exit door			
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\* The risk score and residual risk is determined by following steps 1-4 below.

STEP 1		STEP 2			
Determine likelihood of occurrence		Determine severity/consequence/cost			
<b>Risk Score Calculator: Definition of Terms</b>					
Rare	Likely to occur here only in very exceptional circumstances	Insignificant	No personal injury; and/or No adverse media attention; and/or Financial cost under \$2000		
Unlikely	Could occur here at some time	Minor	Minor personal injury (first aid treatment); and/or Adverse Local Media Coverage; and/or Cost \$2000-\$50,000		
Possible	May occur here at some time	Moderate	Serious personal injury (medical treatment); and/or Adverse Capital City Media Coverage; and/or Cost \$50,000-\$250,000		
Likely	Will probably occur here (has happened before)	Major	Serious Personal Injury/long term absence; and/or Adverse & Extended National media Coverage; and/or Cost \$250,000 - \$1m		
Almost Certain	Is expected to occur here in most circumstances	Catastrophic	Fatality(ies)/ long term impairment; and/or Government intervention; and/or Financial cost more than \$1million		
<b>STEP 3: Determine Risk Score</b>					
<b>Risk Score Calculator: Matrix</b>					
	Severity/Consequence/Cost				
Likelihood	Insignificant	Minor	Moderate	Major	Catastrophic
Rare	2	3	4	5	6
Unlikely	3	4	5	6	7
Possible	4	5	6	7	8
Likely	5	6	7	8	9
Almost Certain	6	7	8	9	10
<b>STEP 4: Determine Risk Score Response Priority</b>					
Risk Score	Risk Score Response				
9-10	Severe risk. Highest of priorities. Must be rectified immediately.				
8	Very high risk. Requires urgent attention for quick resolution. Temporary controls to be implemented.				
6-7	Moderate to high risk. Prompt planning and resolution required with consultation.				
4-5	Low to moderate risk. Consult and identify controls that are reasonably practicable				
3	Very low risk. Minor issue for monitoring				
2	Insignificant Risk				
<b>STEP 5: Implement the Highest Control Possible</b>					
<b>Hierarchy of Controls</b>					
Eliminate the hazard					
Substitute the hazard with something safer					
Isolate the hazard from people					
Introduce engineering controls					
Implement administrative controls					
Use Personal Protective Equipment (PPE)					

Approval of JSA			
Name	FRANK LEAR	Title	ERS Mgr
Date	3/10/17	Signature	

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## Sign Off

The University shall provide information and training to workers to enable them to perform tasks safely. This section is signed by workers (and supervisors) to indicate their understanding of the Job Safety Analysis and indicates their competence to complete the job in a safe manner as deemed by their supervisor. Workers should always consult with their supervisor where there is concern about the safety of a task that effects themselves or others.

[illegible]

## Records Storage Instructions

*All completed JSAs are to be recorded in TRIM Container A16/3851 utilising a TRIM license in your School/Business Unit. Only the HR Team is able to view records in this container. Completed JSAs are to be published on Safety Hub for ongoing utilisation.*

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WHS F029	WHS OP006	1.1	14/09/2016	14/09/2019	4	29/09/2017